



Laúca-Bita Transmission Line, Angola

Resettlement and Compensation Action Plan

Draft Report

March 2019

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NHID
New Horizons of Infrastructure of Denmark

Laúca-Bita Transmission Line, Angola: *Resettlement and Compensation Action Plan*

Draft Report

March 2019

For and on behalf of
Environmental Resources Management

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Signed: 

Position: Partner

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LIST OF ACRONYMS

Acronym	Full Definition
AAAC	Full Aluminium Alloy
ACSR	Aluminium with a steel core for strength
AC	Alternating Current
Art.	Article
CNIDAH	National Intersectoral Commission for Humanitarian Demining and Assistance
EIA	Environmental Impact Assessment
ERM	Environmental Resource Management
ESIA	Environmental and Social Impact Assessment
E&S /CL	Environmental and Social / Community Liaison Manager
ETA	Estação de Tratamento de Águas
FGD	Focus Group Discussion
GAMEK	Office of Utilization of the Middle Kwanza
ha	Hectares
IFC	International Finance Corporation
INAD	National Demining Institute
IMAS	International Mine Action Standards
ISO	International Organization for Standardization
KII	Key Informant Interview
km	Kilometre
kV	Kilovolt
LAC	Land Acquisition and Compensation Manager
LIDAR	Light Detection and Ranging
LRP	Livelihood Restoration Plans
MINAMB	Ministry of Environment of Angola
MINEA	Ministry of Energy and Water of Angola
MW	Mega Watt
NHID	New Horizons in Infrastructure of Denmark
NGOs	Non-Governmental Organizations
OHTL	Overhead Transmission Line
PAPs	Project-Affected Populations
PS	Performance Standard
RAP	Resettlement Action Plans
RCAP	Resettlement Compensation Action Plan
RCC	Resettlement and Compensation Coordinator
RCG	Resettlement Coordination Groups
RNT	National Electricity Transmission Network Company
RoW	Right of Way
TL	Transmission Line
UN	United Nations
USAID	United States Agency for International Development
USD	United States Dollar

BACKGROUND

Environmental Resources Management (ERM) has developed this Resettlement and Compensation Action Plan (RCAP) on behalf of New Horizons of Infrastructure of Denmark, hereafter referred to as “NHID” or the “Company” for the Láuca-Bita Transmission Line Project (“the Project”) located in Angola.

The Project addresses the need to transport the energy generated in the hydroelectric plant in Láuca (with a production planned capacity of 2 067 MW), to a new substation to be built in Bita, near the Luanda metropolitan consumer area. It will complement and reinforce existing transmission lines as well as other transmission lines that are currently being built within the same 800 m Láuca-Luanda transmission line corridor. Together the transmission lines will provide sufficient capacity to evacuate all the expected energy generated by the Láuca hydropower plant.

NHID has been awarded a contract by the Ministry of Energy and Water of Angola (*Ministerio da Energia e Aguas* - MINEA) for the design, construction and commissioning of the infrastructure. NHID is working in collaboration with *Gabinete de Aproveitamento do Médio Kwanza* (GAMEK) the representative of the MINEA, the Owner, in the Contract. GAMEK with the support of NHID is responsible for the environmental and social management of the Project including the acquisition of land rights and the provision of compensation to affected people⁽¹⁾. Once constructed the Project will be handed over to the National Network of Energy Transmission (*Rede Nacional de Transporte de Electricidade* -RNT) to operate, including any remaining responsibilities related to resettlement and livelihood restoration.

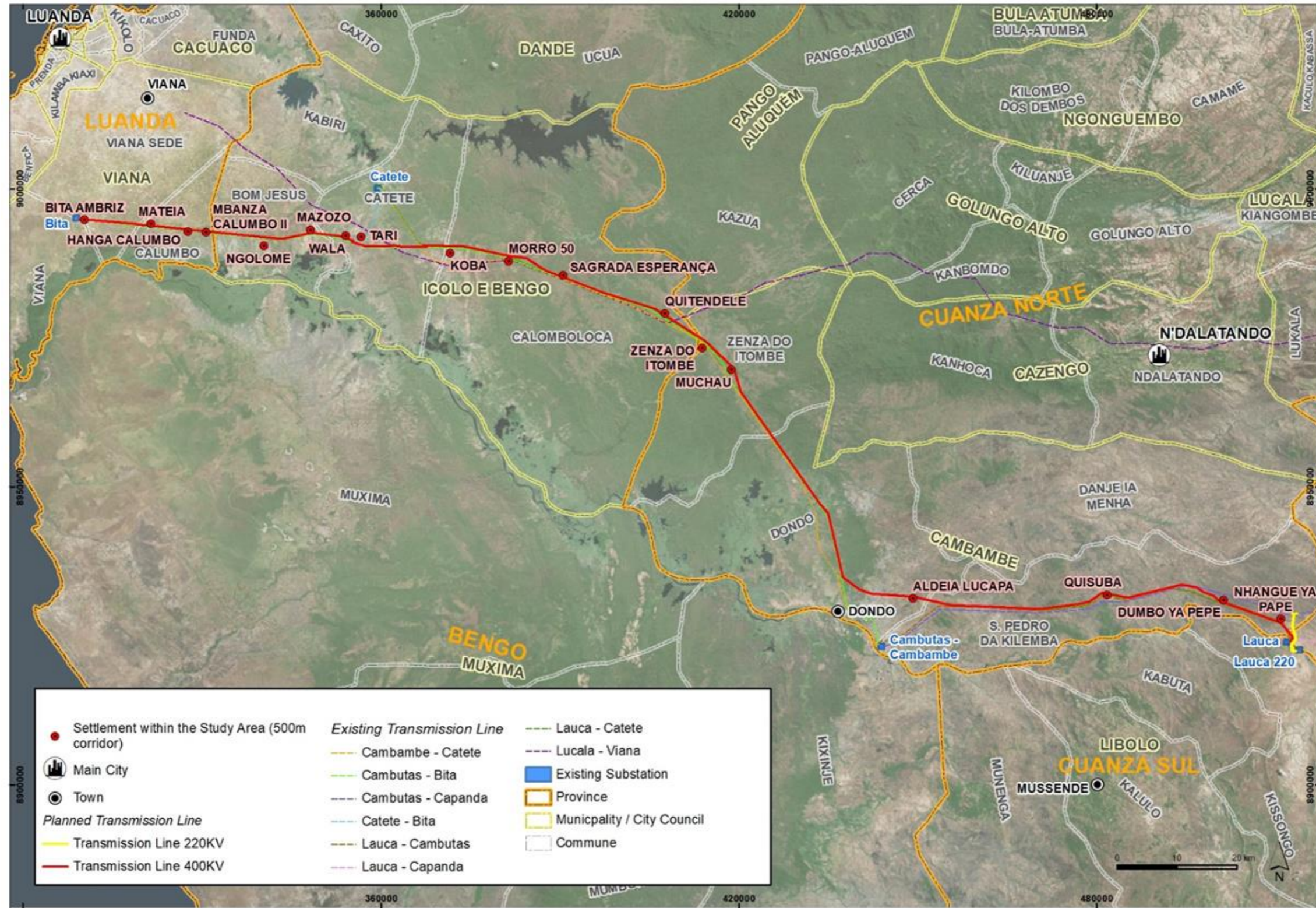
The Project has been through a number of design iterations. In December 2018, the route was finalised and is presented in *Figure 1.1* below. As shown, the Project includes two distinct transmission lines:

- The first corresponds to the 400 kV overhead transmission line (TL) (238 km) that will connect the 400 kV substation of the Láuca hydroelectric power station and dam to a new substation (BITA) to be built close to Luanda; and
- The second part is a 220 kV overhead TL (two parallel lines of 7.5 km) that will connect the 220 kV substation of the Láuca hydroelectric power station to the existing TL Cambutas- Capanda that connects the Capanda

(1) For the purpose of the Lauca-Bita TL Project, GAMEK has agreed that compensation to affected people will be paid directly by NHID.

hydroelectric power station and dam with the Cambambe hydroelectric power station and dam.

Figure 1.1 Project Transmission Line Route



Source: ERM 2018

Under the Angolan environmental regulations high voltage transmission lines are an undertaking for which an Environmental Impact Assessment (EIA) is mandatory. In 2014, MINEA started the process to develop an Environmental and Social Impact Assessment (ESIA) to comply with Angolan requirements. MINEA developed the ESIA of these transmission lines using EDP as subcontractor (2014 ESIA), and the ESIA was presented to *Ministério do Ambiente* (MINAMB) for approval.

NHID has commissioned ERM with the update of the existing 2014 ESIA in order to address changes to the design of the Project. This updated ESIA will be developed by ERM to meet the International Finance Corporation (IFC) Performance Standards (PS) in addition to complying with the requirement to present an Annex to the 2014 Angolan EIA to MINAMB for approval. The updated ESIA report is currently under preparation by ERM.

The Project is also required to develop and implement resettlement planning activities to mitigate adverse socioeconomic impacts from land acquisition or restrictions on affected persons' use of or access to land, including physical displacement in a manner that meets the IFC PS as well as Angola legislation. As a first step, this Resettlement and Compensation Action Plan (RCAP) is being developed. The RCAP outlines the measures that GAMEK with the support of NHID has taken, and will continue to take, to mitigate adverse effects, compensate losses, and provide development benefits to persons and communities affected by the Project.

1.2

PURPOSE OF THE RCAP

The purpose of this RCAP is to provide the foundation for land acquisition and livelihood restoration that seeks to avoid or minimize adverse socioeconomic impacts from project-related land acquisition or restrictions on affected persons' use of or access to land, through sound planning and implementation. At this stage of the Project, a framework document such as this RCAP is most appropriate as the specific locations of the towers and need for access roads have not yet been fully defined. In addition, it is not possible to access land within the corridor due to the risk related to mines.

The RCAP will be updated through specific stand-alone RCAP Annexes for discrete sections of the Project once the Project footprint is finalised and demining activities have been completed, enabling safe access to the land. The preparation of these RCAP Annexes is described in *Section 7*.

It has been confirmed by NHID that routing and siting activities will seek to minimize physical displacement. However, at this stage physical displacement cannot be ruled out. This document therefore considers the possibility of both physical and economic displacement; ensuring that adequate compensation is provided and supplemented by livelihood restoration measures.

This RCAP has been designed to integrate the requirements of Angolan Legislation and the IFC PS (specifically PS 5 on land acquisition and involuntary resettlement) with the aim of:

- mitigating adverse effects of resettlement;
- providing compensation for loss of assets at replacement cost;
- ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected;
- improving or, at a minimum, restoring the livelihoods and standards of living of displaced persons to pre-project levels, so as to facilitate sustainable improvements to socio-economic status; and
- paying particular attention to the needs of vulnerable groups.

1.3

APPROACH AND LIMITATIONS

ERM has developed this report based on review legislation and secondary baseline data, complemented by data collection and consultation with local communities that has been undertaken as part of the ESIA update. ERM has also engaged with NHID and consulted with GAMEK, the Ministry of Agriculture and Forestry, Municipal and Communal Authorities, and community representatives or *sobas*. Data collection activities are elaborated further in *Section 4*.

Given the early stage of resettlement planning, there are many areas of this report that need to be confirmed through engagement with key stakeholders including the informed participation of affected households and their representatives. This report is based on consultation undertaken for the purpose of ESIA process which did not specifically target land affected people but neighbouring communities in general. This report should therefore be considered as a foundation for future work.

Project design information, although available at the time of writing, is subject to slight adjustments resulting from the final topographic surveys (LIDAR, etc.). The identification of structures at risk of being displaced is tentative as it relies primarily on Google Earth satellite imagery which range between Q3/IQ4 2017 to End of 2018 and preliminary identification by NHID. In this regard the number of interferences will be confirmed and finalised by NHID during the topographic survey before the start of construction.

The remainder of the RCAP report is structured as follows:

- Section 2* Outlines the project and various components of it.
- Section 3* Provides the regulatory and administrative framework for resettlement planning including land concession and resettlement process and a comparison to international standards.
- Section 4* Describes the socio-economic profile of the project region and potentially affected people.
- Section 5* Describes the resettlement projects impacts that will be caused by the Project.
- Section 6* Presents suggested criteria for eligibility for compensation and other support and the entitlements for various categories of affected people.
- Section 7* Presents the steps required to complete RCAP planning and implementation including staffing and governance arrangements.
- Section 8* Provides a description of the monitoring and evaluation activities.
- Section 9* Presents a structure for future budget preparation.

2.1 MAIN PROJECT COMPONENTS

2.1.1 Transmission Lines

The criteria adopted for the conceptual design of the transmission line are based on NHID's current standard practice, on studies of recently composed specifications and *in-situ* inspections of existing transmission lines. The main criteria adopted has been to ensure that the various line components are designed in a safe, cost effective and reliable manner.

A brief description of the transmission lines is summarized in *Table 2.1*.

Table 2.1 Main Transmission Lines Components

Project technical Specifications	400 kV Laúca - Bitá	220 kV Laúca - Cambutas / Capanda circuit
Total length of transmission line	238 km in total length, one-circuit, duplex	15 km in total length, double-circuit, simplex
Nominal System Voltage	400 kV	220 kV
Maximum system voltage	420 kV	245 kV
Electrical System	AC	Alternate
Number of Circuits	1 three phases	1 three phases
Number of conductors phase	2 (Dx)	1 (Sx)
Circuit layout	Layer	Layer
Wire	Sorbus (AAAC)	Crow (ACSR)
Ground wire	19No8	19No8
Optical Ground Wire (OPGW)	48 fibres	48 fibres
Transpositions	2	No
Height above the sea level	11 - 870 m	733 - 952 m

Source: ERM 2019

In addition to the elements presented above, the Project design also includes lightning arrestors: aircraft signalling, bird diverters and vibrations dampers.

2.1.2 Temporary Infrastructures

Access roads

Due to the proximity to other power lines, and as the corridor is running in close vicinity of main provincial roads, it is expected that existing access roads can be utilized. Few if any new access roads will be required which will be defined at a later stage.

For existing access roads, the four meter right of way will be cleared and access roads re-established / constructed. For new access roads the servitude will be respected and, once the works are finished, the access will be closed and affected areas restored to the original condition.

Temporary Tower Laydown and Assembly Areas

An area of 40 by 50 meters on each site (an estimated 631 towers to be installed, 583 towers in the 400 kV line and 48 in the 220 kV line) will be demarcated as temporary tower laydown and assembly area.

Contractor Compounds

Up to four existing construction camps will be required for the three different subcontractors - in Laúca dam, Dondo, Maria Teresa and Catete, sized for about 150 workers each. Furthermore a main warehouse / plot for containers near Viana will also be considered.

2.2 LAND REQUIREMENTS BY THE PROJECT

2.2.1 Land Access for Demining

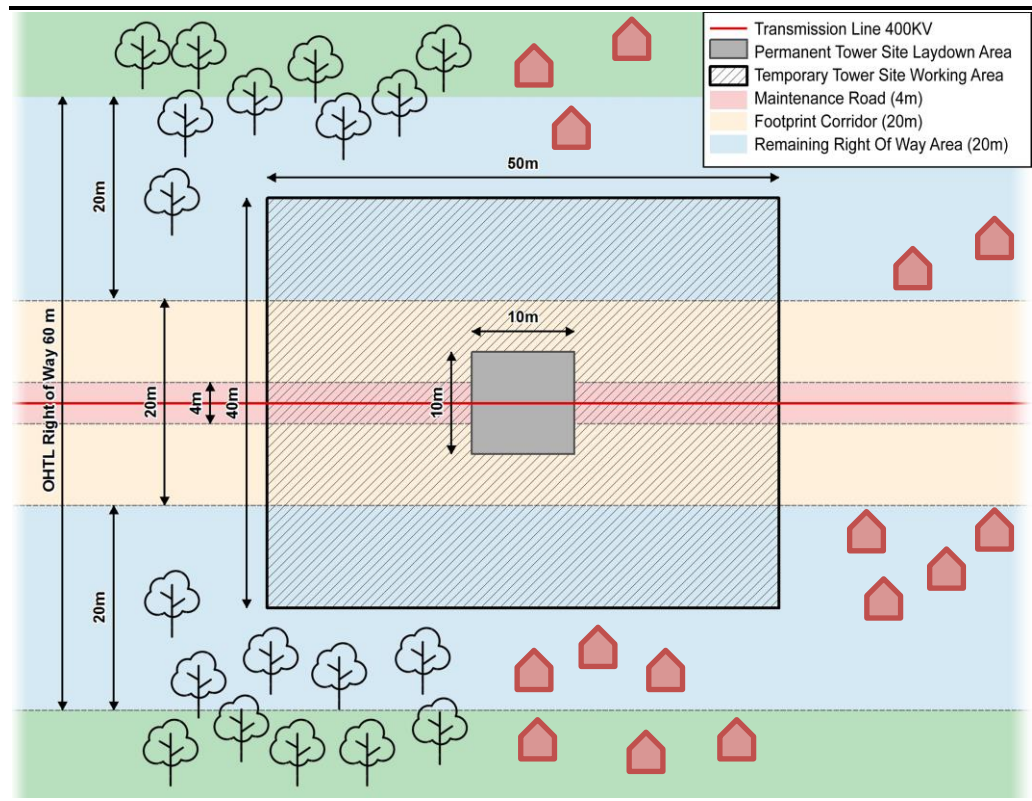
Mine clearance will be conducted during the preliminary phase inside the entire 60 m OHTL RoW. Rights of access to the land inside the RoW for demining activities will be obtained through MINEA (GAMEK), after which GAMEK will notify provincial governors and the municipal administration of the transmission line route and the planned activities.

Demining activities are planned to be undertaken using manual demining (use of metal detectors operated by trained deminers with protection), mechanical demining (using specialised machinery) or trained dog demining (trained dogs to detect the presence of mines). Exceptionally, specific areas that need to be demined with anti-vehicle mines (AVM) could be identified. The technology and methodologies to be used for the demining process will be explicitly detailed in the Demining Plan. The demining activities are planned to occur during an estimated period of seven months. The demining process will start in mid-February 2019 and extend for a six month period.

2.2.2 Land Requirements for Construction and Operation

Restrictions associated with the different components of the transmission line are illustrated in *Figure 2.1* and further described in *Table 2.2* below.

Figure 2.1 Restrictions Considered



Source: ERM 2019

Table 2.2 Summary of Restrictions Considered

Component	Width/Area	Description	Activities	Restrictions	
				Construction Phase - NHID (12-18 months)	Operations Phase- RNT (50 years)
Over Head Transmission Line (OHTL) Right Of Way					
OHTL Right of Way (Faixa Confinata)	60 m (30 m either side)	<ul style="list-style-type: none"> Corridor established for safety & security of high voltage transmission lines as required by Land Law (2004). The Right of Way of 30 m either side. The entire length of the corridor (237+15 km) will be demined. Construction of new houses and structures will not be allowed. <p>This corridor is subdivided into 3 smaller corridors each with different restrictions as follows:</p>			
<ul style="list-style-type: none"> Maintenance Road of 4 m wide (2 m either side) 	4 m (2m either side)	<p>Four meter service / maintenance road under, or close to the line.</p> <p>Routing ongoing to minimize physical resettlement.</p>	<p><u>Construction:</u></p> <ul style="list-style-type: none"> Land clearance. Removal of all trees and crops. Removal of all houses and structures. <p><u>Operation:</u></p> <ul style="list-style-type: none"> Maintenance to keep it free of vegetation (mechanical). Land control / regular patrolling of the line. 	<ul style="list-style-type: none"> No new trees or crops. No new houses / structures. 	<ul style="list-style-type: none"> No new trees or crops. No new houses / structures.
<ul style="list-style-type: none"> OHTL Footprint corridor 	20 m (10m either side)	<p>20 meter safety corridor free of houses and trees. This is to avoid fires and deter potential for encroachment.</p> <p>If needed, routing should be considered to ensure minimization of physical resettlement.</p>	<p><u>Construction:</u></p> <ul style="list-style-type: none"> Removal of all houses and structures. In the case of uninhabited structures, the final decision will be done on a case-by-case basis and after careful assessment including on site verification. Removal of tall trees (over 6-7 m). <p><u>Operation:</u></p> <ul style="list-style-type: none"> Pruning of vegetation. Land control / regular patrolling of the line. 	<ul style="list-style-type: none"> Restrictions to access agricultural areas in the OHTL footprint corridor during demining. The areas undergoing mine clearance will not be accessible during that time. 	<ul style="list-style-type: none"> No construction of new houses or structures. No planting of new trees. Vegetation permitted up to 6-7 meters high.

Component	Width/Area	Description	Activities	Restrictions	
				Construction Phase - NHID (12-18 months)	Operations Phase- RNT (50 years)
<ul style="list-style-type: none"> Remaining OHTL right of way area between the OHTL footprint corridor limits and the limits of the 60 m OHTL RoW. 	2 corridors of 20 m either side of the OHTL Footprint Corridor.	Remaining area of the OHTL right of way where both houses/structures and trees/crops are allowed.	<u>Construction:</u> <ul style="list-style-type: none"> Demining of the entire length of the corridor. Pruning of trees to ensure safe operations radius from the conductors. Existing buildings can remain provided the safety radius from the conductors is maintained. <u>Operation:</u> <ul style="list-style-type: none"> Land control / regular patrolling of the line by RNT 	<ul style="list-style-type: none"> No construction of new houses or structures allowed Vertical clearances to the overhead cabling to be ensured for safe operation: <ul style="list-style-type: none"> <i>Buildings:</i> 8m clearance for 400 kV; 6m to 220 kV <i>Vegetation:</i> 8m clearance for 400 kV; 5m to 220 kV. 	<ul style="list-style-type: none"> No construction of new houses or structures allowed Vertical clearances to the overhead cabling to be ensured for safe operation: <ul style="list-style-type: none"> <i>Buildings:</i> 8m clearance for 400 kV; 6m to 220 kV <i>Vegetation:</i> 8m clearance for 400 kV; 5m to 220 kV
Project Components					
Temporary tower site working areas	Average 40mx50m per site	<ul style="list-style-type: none"> Total of 631 (583+48) tower's sites located inside the OHTL Footprint corridor. Area for storage (short period – 4 days), construction and erection of the towers. Access to the area will be restricted during 12-18 months construction period. 	<u>Construction:</u> <ul style="list-style-type: none"> Total clearance of crops and trees in the tower permanent footprint (average 10x10m per tower). Removal of all crops in remainder of temporary tower site working area. May be able to maintain trees in this area. 	<ul style="list-style-type: none"> No access of unauthorized personnel. No planting or harvesting allowed during the construction period. 	<ul style="list-style-type: none"> No restrictions outside the tower permanent footprint.
Tower permanent footprint	Average 10m x 10m per tower	Total of 631 (583+48) tower sites located inside the OHTL Footprint corridor.	<u>Operation:</u> <ul style="list-style-type: none"> Maintenance to keep permanent tower site laydown areas free of vegetation. 	N/A	<ul style="list-style-type: none"> No trees or crops allowed in the 10x 10 m area.

2.2.3

Summary of Land Restrictions and Land Take by the Project

The anticipated maximum area where temporary land restrictions for the Project will apply is 2 145 ha during the construction phase, reducing to a maximum permanent land take of 107 ha during the operational phase as land required for temporary tower site working areas are released. The maximum temporary land restrictions during the construction phase and the permanent land take during the operation phase are detailed in *Table 2.3*. The different components of land restrictions and land take associated to the transmission line are illustrated in *Figure 2.1*.

Table 2.3 *Anticipated Maximum Land Restrictions and Land Take by the Project*

Component	Unit Size	Land Take Area	Restrictions/Land Take
<i>Temporary land restrictions</i>			
OHTL Right of Way (60 m wide)	252 km (237+15 km) line length	1 512 ha	Restrictions
OHTL Footprint corridor (20 m wide)	252 km (237+15 km) line length	504 ha	Restrictions
Temporary tower site working areas	631 (583+48) tower's sites Average 40mx50m per site	126.2 ha	Temporary Land Take
Total		2 145.4 ha	
<i>Permanent land take</i>			
Permanent tower footprints	631 (583+48) tower's sites Average 10mx10m per site	6.3 ha	Permanent Land Take
Maintenance road (4 m wide)	252 km (237+15 km) line length	101 ha	Permanent Land Take
Total		107.3 ha	

Source: Prepared by ERM based on NHID input (2019).

2.3

PROJECT SCHEDULE AND PHASES

The transmission line and substation schedule includes the following phases:

- *Planning and executive design phase:* This includes line route selection through discussions with MINEA to establish Bend Points for all routes which will be surveyed by the surveyor and on site measurements to accurately determine the route and substation layout. The current schedule has assumed up to 12 months are needed for the complete detailed design stage, development of route and profile design and structure and foundation design. Subsequent to the detailed design, procurement, shipping, clearing and transportation activities will take place to bring the equipment and infrastructure to site. Pre-construction will include a LIDAR survey.
- *Construction phase:* The construction of the transmission line route including; surveying, establishing the site, bush clearing and access road establishment; foundation construction and structure installation; and

energising. This phase is expected to take between 12 to 18 months to complete.

- Due to the fact that NHID is considering creating three independent constructions teams (different subcontractors), this timeframe is expected to be completed over 12 months (1st July 2019 to 30th June 2020). If only two contractors will be used, the construction period is expected to extend to 18 months.
- *Operational phase:* Once commissioned, the transmission line will be transferred by MINEA to RNT for operation. This phase includes operational activities associated with the management, maintenance and control of the transmission line.
- *Decommissioning:* This phase will include measures for complying with the regulatory requirements for rehabilitation and managing environmental impacts in order to render the project area suitable for future use. The design life of the transmission lines is 50 years.

2.4 PROJECT EFFORTS TO REDUCE DISPLACEMENT

2.4.1 Initial Project Layout Process

In 2014, an initial project layout was developed by MINEA consisting of a 238 km corridor averaging 800 m between Capanda and Luanda. An ESA was submitted by the *Gabinete de Aproveitamento do Médio Kwanza* (GAMEK) to the Ministry of Environment (MINAMB) and approved in the same year.

On the same year, MINEA and NHID started the negotiations for the construction of the transmission lines, which included the technical and financial feasibility studies by NHID. Since then the transmission line route has been through various design changes, with a view to minimize impacts to the population, by reducing the high voltage line crossings (that involve energy outages to the population and risk to the workers directly involved in transmission line operations), and minimizing the potential social impacts.

In 2016, NHID concluded a technical and financial feasibility study (TDS-V1), both on the Laúca – Kilamba 400 kV and Capanda – Laúca 220 kV transmission line using the existing project design as well as the approved ESIA (from 2014). Consequently, the revised design (with small changes from with the 2014 inception path) was shared and approved by MINEA.

Subsequently in 2017, motivated by technical reasons regarding the connections with the electricity network and other technical constraints relating to the existing lines (and those under construction), it was necessary to carry out a new study that resulted in a new economic technical proposal (TDS-V2) (also referred as the 2017 route alignment).

Most recently, in 2018, work has been done to prepare the Project for approval by MINEA as well as further minimise the environmental and social impacts of the Project. On the 3rd December 2018, MINEA approved the route alignment (also referred as 2018 route alignment). The Commercial Contract was then enforced, and was considered fully compliant with national regulations and both national and international engineering best practices. The main changes from the 2017 route alignment are summarized in the Project's ESIA Report (ERM, 2019).

Currently, the licensing process is ongoing and the environmental licence for construction of the Laúca-Kilamba transmission line is expected to be received by GAMEK in January 2018. A subsequent meeting will be convened between GAMEK and MINAMB to present the changes in alignment of the Project and confirm whether any further amendments to the environmental licencing process is required.

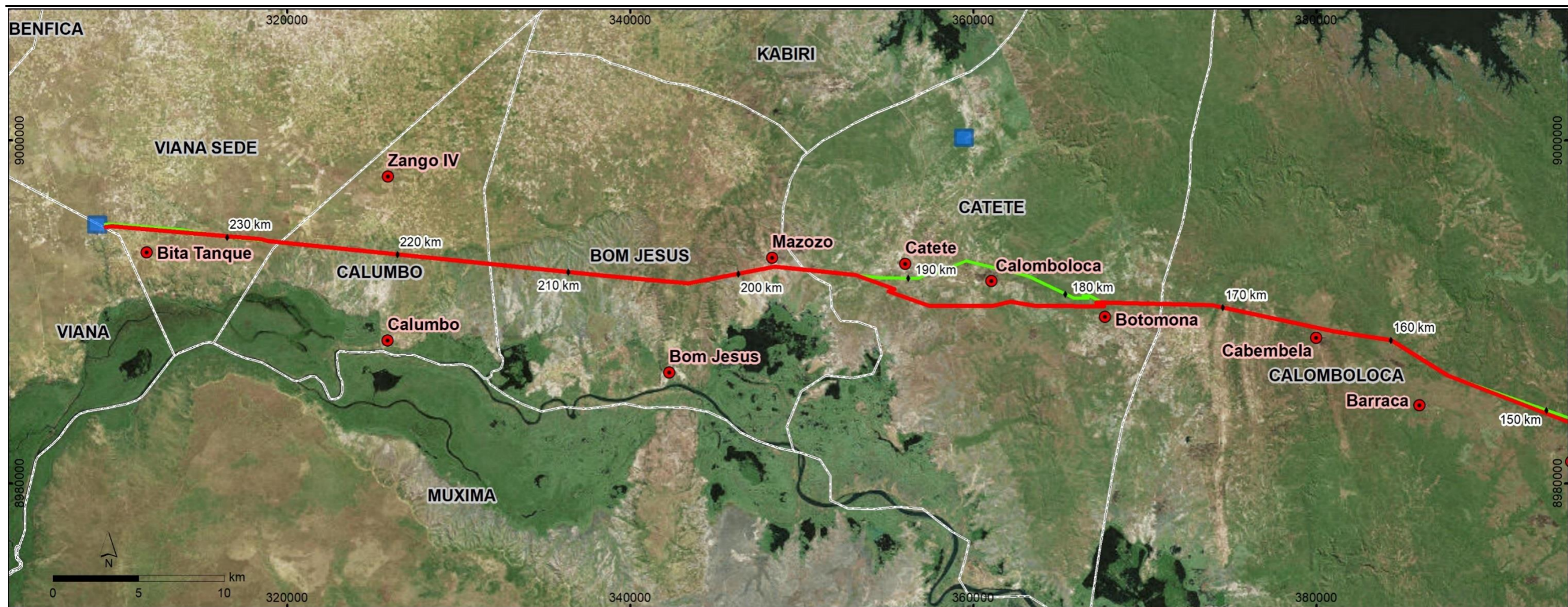
2.4.2 *Ongoing Efforts to Minimise Displacement*

In alignment with the requirements of IFC PS5, NHID considered a series of route and tower footprint modifications to the 2017 route alignment to avoid or minimise displacement as part of its work to prepare the executive project to be presented to MINEA (TDS-V4).⁽¹⁾

The main modifications since 2017 focused on the route alignment in two specific locations namely the settlements of Quisuba (km points 31 to 35) and Muchau (km points 116 to 120). These two re-routings plus some minor additional route alignments have reduced the number of physical structures at risk of displacement inside the 20 m OHTL footprint corridor from 69 to 29 physical structures (see *Section 5.2* and *Annex A* for detailed list of interferences). The comparison between the 2017 and the 2018 routes is presented in the figures below.

(1) TDS-V4 is evaluated in the ESIA currently being completed by ERM.

Figure 2.2 Proposed Route Alignments (2017 and 2018) (km 231 to 150)



- 2018
- Transmission Line 400KV
- 2017
- Transmission Line 400KV
- Existing Substation
- Community within the Study Area (500m Corridor)
- Commune



Source: ERM 2019

Figure 2.3 Proposed Route Alignments (2017 and 2018) (km 140 to km 70)



Source: ERM 2019

Figure 2.4 Proposed Route Alignments (2017 and 2018) (km 80 to km 0)



Source: ERM 2019

3.1 INTRODUCTION

The Project livelihood restoration process will adhere to the legislative requirements of Angola and the International Finance Corporation (IFC) Environmental and Social Performance Standards (PSs) (January, 2012). This section provides the legal background and legislative process in Angola with respect to land acquisition, resettlement and livelihood restoration, and a comparison with relevant international good practice.

3.2 ANGOLAN LEGISLATION

3.2.1 Overview

Angolan law establishes that all land belongs to the Angolan State and that the State may award land titles to individuals or communities and may also expropriate land for public use. As such, national law recognizes the right of individuals and rural communities to hold land under State-awarded titles. In the case of rural communities, it also recognizes customary land rights, which are based on habits or usage. Whether rights are customary or based on title, national law requires that rights-holders be compensated fairly and promptly if this land is expropriated for public use.

Excluding regulations that are administrative in nature, the most relevant legislative requirements related to land acquisition and livelihood restoration and resettlement relevant to this Project are included in the following documents:

- Decree n.º 58/07 of July 13, 2007 (*Regulamento Geral de Concessão de Terrenos - General Regulation Land Concession*).
- Lei das Expropriações n.º 2.030 of June 22, 1948 (*Expropriation Law*).
- Law n.º 9/04 of November 9, 2004 (*Lei de Terras. Land Law*).
- Constitution of the Republic of Angola, 2010.
- Presidential Decree n.º 117/16 of May 30, 2016 (*Regulamento de Operações de Realojamento*) for the Regulation for Resettlement Operations.
- Law n.º 3/04 of June 25, 2004 (*Lei do Ordenamento do Território e do Urbanismo*).
- Decree n.º 43.894 of September 6, 1961 (*Regulamento da Ocupação e Concessão de Terrenos*) for the Regulation for the Occupation and Concession of Land.

- Decree n.º 41/04 of 2 July, 2004 (Regulation for the Licensing and Security of Electric Facilities).
- Decree n.º 46.847 dated 1966 (*Regulamento de Protecção das Linhas de Transmissão de Alta Voltagem*) for the Regulation of the Protection of High Voltage Transmission Lines.

In addition, in 2012 Executive Decree n.º 92/12, Terms of Reference for the Development of Environmental Impact Studies (01/03/2012) was approved requiring project proponents to register the project and to follow a minimum content for the EIA report, including a description of the socioeconomic baseline and potentially affected communities that could be subject to resettlement. Once the EIA is submitted, during the pre-licensing visit to the project site, the Ministry of Environment (MINAMB) can ask the Project Proponent to prepare a resettlement plan when physical displacement is likely to take place. MINAMB can therefore request documentation related to resettlement either through the EIA Terms of Reference or as part of the licensing conditions (which can include additional mitigation and compensation measures). At present the Project has not been requested to submit a resettlement plan.

The main elements of the documents mentioned above are summarized in *Table 3.1*.

Table 3.1 *Summary of Angolan Legal Land Elements*

Reference Document	Summary of Relevance to Resettlement and Livelihood Restoration
<p>Decree n.º 58/07, General Regulation Land Concession (<i>“Regulamento Geral de Concessão de Terrenos”</i>), July 13 2017</p>	<ul style="list-style-type: none"> • Establishes the legal framework for the concession of free lands within Angola. It does not apply for private property lands. • Indicates that where there is expropriation for public use or for temporary requisition of lands, fair and adequate indemnity to the owner and to affected holders of other property rights is always owed. • States that private parties affected by expropriation for public use or by the establishment of administrative authorities may opt for the corresponding fair indemnity or participation, as stockholders, in any mixed economy associations that may be established for the utilization of activities related to the respective reserve. • Establishes the regime for public expropriation for public use including compensation for improvements that the concession holder has made on the expropriated property including being provided with a parcel of land in the same judicial situation, for similar use.
<p>Expropriation Law n.º 2.030 (<i>“Lei das Expropriações”</i>), June 22, 1948</p> <p><i>Note: Whilst an interministerial working group has been set up to formulate a new law, a draft has not yet been prepared. Consequently, the Presidential Decree n.º 58/07 is referred to for land to be expropriated for public utility.</i></p>	<ul style="list-style-type: none"> • States that immovable assets and related rights may be expropriated for public utility purposes as set out in this law and through payment of fair compensation. • Establishes the process for the expropriation and concession of land for public utility. The process includes the following steps (see <i>Section 3.3</i>): <ul style="list-style-type: none"> • Submission of application by the interested party to the Concessionaire. • Information and opinions including other entities that should be consulted on the request. • Temporary demarcation of the land. • Consideration of the application and approval or rejection. • Definitive demarcation. • Concession contract signing. • Concession title granting. • Registration of the right, in favour of the concessionaire, in the land registry. • Establishes the conditions and the process to determine fair compensation to the affected party.

Reference Document	Summary of Relevance to Resettlement and Livelihood Restoration
Law n.º 9/04 Land Law (" <i>Lei de Terras</i> "), 2004	<ul style="list-style-type: none"> • Establishes fundamental land rights principles. • Categorizes State Land as conferrable and non-conferrable.⁽¹⁾ • Defines land rights and interests in land. • States that the State and local authorities may expropriate for public utility purposes. • Establishes that expropriation extinguishes the land rights established on the land and determines its definitive transfer to state assets or local authorities, the latter being responsible for properly compensating the holder land rights. • States that the land of rural communities may be expropriated for public utility or be subject to requisition through fair compensation. • Establishes a Right of Way (<i>faixa confinante</i>) of 30 m safety distance either side of an electric transmission line (art. 27).
Constitution of the Republic of Angola, 2010	<ul style="list-style-type: none"> • Defines that land is originally State property and can be transferred to individuals or legal persons, for their rational and effective use. This shall not prejudice the possibility of expropriation for public use, with fair compensation in accordance with the law as per relevant legislation • Everyone is entitled to private property and its transmission, and the State respects and protects property and other real rights of individual persons, legal persons and local communities, being only allowed the temporary civil requisition and expropriation for public use, through fair and prompt compensation. The payment of compensation is a condition of expropriation. • The Constitution recognizes the agrarian rights of small-scale farmers over land, provided the land is used productively. The area of the land to be granted cannot exceed by one-third the surface area corresponding to the work capacity of the tenant and his or her family. The agrarian rights acquired, transmitted or established under this Law become extinct through their non-utilization or through the non-fulfilment of the useful and effective land use, determined by the State, during three consecutive years or six separated years, irrespective of the reason.
Presidential Decree n.º 117/16 Regulation for Resettlement Operations, (" <i>Regulamento de Operações de Realojamento</i> "), 2016	<ul style="list-style-type: none"> • Regulates and approves resettlement operations in the process of relocation of a group of people living in a given territory, households, residing in areas of requalification and urban reconversion, in accordance with the principles governing the Public Administration, ensuring the continuation of the public interest and the protection of the rights and interests of citizens. • Confirms that: <ul style="list-style-type: none"> ○ authorisation of resettlement is the responsibility of the provincial government; and ○ implementation is the responsibility of the municipal government. • Establishes relocation rights and warranties. • Defines the procedure for relocation and financial compensation. See <i>Section 6</i>.

(1) Conferrable Land. Such land can have its property rights transmitted or constituted in accordance to use, while respecting its protection, environmental issues, and sustainable exploitation. Non-Conferrable Land. Such land cannot be transmitted for private use because of its public use (roads, airports, schools, hospitals, etc.).

Reference Document	Summary of Relevance to Resettlement and Livelihood Restoration
Law n.º 3/04 for the Organisation of the Territory and Urbanism (<i>"Lei do Ordenamento do Território e do Urbanismo"</i>), 2004	<ul style="list-style-type: none"> • Establishes the instruments for urban and rural territorial space management. • Establishes a system for urban and territorial planning and related policies. • Regulates the territorial planning system general framework in coordination with other instruments such as the general regime of defence, occupation and use of land. • Establishes that the land use must comply with municipal and special territorial plans.
Decree n.º43.894 Regulation for the Occupation and Concession of Land. (<i>"Regulamento da Ocupação e Concessão de Terrenos nas Províncias Ultramarinas"</i>), 1961	<ul style="list-style-type: none"> • Indicates that in case of expropriation the land owner should be informed six months in advance • Establishes that compensation should be given for necessary improvements that the concession holder has made on the expropriated property including conceding a parcel of land of similar use, if there is available land.
Decree n.º41/04 Regulation for the Licensing and Security of Electric Facilities (<i>"Regulamento para o Licenciamento e Segurança de Instalações eléctricas"</i>), 2004.	<ul style="list-style-type: none"> • The law requires the project proponent to compensate the owners, tenants and beneficial owners whenever the establishment of power lines results in losses. Losses include the following: <ul style="list-style-type: none"> • <i>Immediate losses</i>: damage to crops, damage caused by the establishment of access roads, damage caused by depositing materials, and the cutting of trees required for the execution of the works. • <i>Permanent losses</i>: damage to forests, aesthetic impacts, loss of productivity of a portion of the soil, decreasing the possibility of building, and radio disturbances (i.e. electromagnetic fields). • <i>Future losses</i>: arising from the operation of the line and the transformation of rural land, near settlements, or roads on lands subject to urbanization.
Decree n.º. 46 847 Regulation of the Protection of High Voltage Transmission Lines (<i>"Regulamento de Protecção das Linhas de Transmissão de Alta Voltagem"</i>),1966	<ul style="list-style-type: none"> • Regulates safety and security of high voltage transmission lines. Restrictions include: ⁽¹⁾ <ul style="list-style-type: none"> ○ houses and structures allowed as long as distance between transmission line axis and the top of the structure is more than 4-5m; ○ crops and trees allowed as long as distance to the transmission line axis is more than 4m.

(1) Note that the restrictions adopted by GAMEK for the Project are in line with international best practice and are explained in *Section 2.2.3*.

3.2.2

Land Classification

- *State Land of the Public Domain:* includes land that the State uses for collective public person. This includes Rural Community Land, land used for public projects (e.g. schools, railways) and Reserved Land of the State (see Box 3.1).
- *State Land of the Private Domain:* a set of land and resources not included in the public domain where the right of surface usage has been leased to individuals or businesses for private projects. The State or Local authorities may or may not have vested ownership interests in such projects. State Land of the Private Domain is classified further into Urban Lands and Rural Lands as presented in Box 3.2 below.

Box 3.1

State Land of the Public Domain

Rural Community Land is defined as “land used by a rural community in accordance with customary land use. This may also include adjacent areas used for shifting agriculture as well as transhumance corridors used by livestock to access water sources, pastures and crossings, and used to access water or roads leading to urban areas”.

Reserved Land are established for the protection of the environment, national defence and security, preservation of historical monuments or sites, etc. It includes inland water bodies, territorial sea, the exclusive economic zone, national airspace, mineral resources, roads and public transportation networks, protected environmental areas, territorial areas reserved for ports, airports or military defence purposes, monuments and buildings of national interest, etc.

Box 3.2

State Land of the Private Domain

Urban land is defined as land located in an area delimited by an urban area and that is destined for urbanisation as defined in the urban plans or equivalent plans. Urban land can be an urbanized area, an area under construction (subject to an approved license), or an area designated for urban development or expansion.

Rural land is defined as land located outside an urban area, and is intended for agricultural, livestock, forestry and mining activities.

3.2.3

Land Rights

The land Law No. 9/04 recognizes different land rights applicable to State Land of the Private Domain. These are described below.

Private Property Rights (urban land)

Property rights refer to the private ownership right conceded to physical or juridical persons. This right only applies for land located in urban centres or in areas included in an urbanization plan or equivalent, and can only be conferred to Angolan national citizens.

Customary Rights

Useful Customary Rights (*Dominio útil consuetudinario*) refer to the collective rights of occupation, possession, management, usage and exploitation that families or households in rural communities enjoy over the Rural Community Land they occupy and exploit. Rural Community Land is managed according to the principles of self-administration and self-management by Traditional Authorities, and must be used for housing or for economic or subsistence activities.

The rights to Rural Community Land can only be transferred (eg to Private Land) with the agreement of the Traditional Authorities. Where this is done alternative land must be granted to the affected customary right holders or, if alternative land cannot be granted, adequate compensation must be provided. The exercise of customary rights is free and rights holders are exempt from payments and fees of any kind. Nevertheless, in accordance with customary rules, rural communities may lose their customary rights over the land if such lands have been freely vacated and are no longer being used/exploited.

Useful Civil Domain

The right of the useful civil domain (*Dominio Útil Civil*) is a right characterized by the use and enjoyment of a parcel of land (urban or rural) by an individual who does not have ownership rights to the parcel but uses it as if it were their own. In this case, the original holder of the ownership right has conceded the right of usage to another person. In this sense, this right is stronger than the leasehold right (described below) and closer to the right of property.

Surface Rights

The “Surface Right” (*Direito de Superfície*), which may also be understood as a form of leasehold right, refers to the right to build a structure or engage in productive activities on a State Land of Private Domain (rural or urban) that belongs to someone else. In other words, it allows the surface of a land plot to be used to build a house or cultivate the land or conduct other relevant activities. This right may be granted to both Angolan nationals and foreigners.

Lease payment is either paid once as a lump-sum or in the form of an annual monetary fee, determined as per the lease contract and calculated according to the criteria established by law, including classification of the land and level of development tied to each territorial district.

Precarious Occupation Rights

The Right to Temporary or “Precarious Occupation” (*Direito de Ocupação Precária*) is the weakest form of land tenure.

It is the right to temporarily occupy State Land or of the Private Domain for a maximum of one year (renewable) for the establishment of non-permanent structures intended to support temporary activities, such as those associated with the construction of permanent buildings, mining activities, scientific investigation, environmental studies, etc.

The occupant is required to pay a single or periodic cash allowance as established in the lease contract, and calculated according to the criteria established by law, and related to the classification of the land.

3.2.4 *Institutional Responsibilities in Government*

Law 13/2016 (*Lei de Bases da Organização Administrativa do Território*), Law 14/2016 (*Lei de Bases da Toponímia*) and Law 16/2016 (*Lei de Bases da Organização Administrativa do Território*) provide information on organizational roles and responsibilities for administering land, including the need to consult with traditional leaders and the rights for information provision.

The authorities responsible for authorizing the transmission or constitution of land rights will vary according to the land category, land rights affected and the size of the area to concede. For the Project it is considered likely that responsibility may remain with municipal and communal authorities and local *Soba*. However, this should be confirmed with GAMEK and the municipal and provincial authorities.

In some instances, depending on the size and scope of the Project, Municipal Commissions (*Comissão Municipal*) may be established at the municipality level to support the Project in coordinating engagement activities and the land acquisition and compensation process with traditional leadership and local communities. The municipal commission is composed of the commune administrators, first rank *sobas*, and municipal technicians or specialists.

Table 3.2 summarizes the institutional responsibilities of the different institutions in the Angolan government related to resettlement and livelihood restoration.

Table 3.2 *Institutional Responsibilities*

Institution	Responsibilities
Ministry of Agriculture and Forestry (<i>Ministério da Agricultura e Florestas</i>)	<ul style="list-style-type: none"> • Defines strategies and propose programs for national development in the fields of agriculture and livestock, forests, food security, rural development, poverty alleviation, and rural community development, promoting and coordinating the necessary actions. • Ensures management of land use for agricultural, livestock, and forest. • Ensures implementation of policies and strategies regarding sustainable management of forestry and fauna resources. • Promotes and executes policies and strategies for constitution and management of food stock.

Institution	Responsibilities
Agriculture Land Management Office (<i>Gabinete de Gestão de Terras</i>) - (Ministry of Agriculture and Forestry)	<ul style="list-style-type: none"> • Manages land use regarding agriculture, livestock and forestry. • Concedes titles, technical reports for agricultural, commercial, and industrial businesses susceptible to influence national development. • Implements various of activities related to land structuring.
National Agriculture Directorate (under the Ministry of Agriculture and Forestry) <i>Direcção Nacional da Agricultura</i>	<ul style="list-style-type: none"> • Proposes policies and development strategies on agriculture and rural engineering. • Proposes measures to protect and rehabilitate degraded agricultural land.
Forestry Development Institute (IDF) <i>Instituto de Desenvolvimento Florestal</i>	<ul style="list-style-type: none"> • Ensures promotion, coordination, and execution of forestry, fauna, rural, and technology transfer policies.
Ministry of Environment (MINAMB) <i>Ministério do Ambiente</i>	<ul style="list-style-type: none"> • Oversees and approves Environmental Impact Studies, including public consultation processes; • Grants environmental licenses after EIA approval.
Ministry of Energy and Water (MINEA) <i>Ministério da Energia e Águas</i>	<ul style="list-style-type: none"> • Propose and promote policy execution in the energy and water sectors; • Establish strategies, promote, and coordinate the profit and rational utilization of energy and water resources, assuring sustainable development.
GAMEK - <i>Gabinete de Aproveitamento do Médio Kwanza</i> (under MINEA)	<ul style="list-style-type: none"> • Oversees the construction of energy infrastructure projects including thermal plants, hydropower dams and transmission lines. • Mandated to carry out resettlement and is responsible for the resettlement process for the Project.
Traditional Leadership (<i>soba</i>)	<ul style="list-style-type: none"> • Local traditional authorities (leaderships) participate in municipal councils (Decree-Law no. 17/10, art. 52/f and 57/e) and coordinate administrative tasks representing traditional communities.
Governor of the Province	<ul style="list-style-type: none"> • Authorization of physical resettlement operations as per Presidential Decree n.º 117/16.
Municipal administrations	<ul style="list-style-type: none"> • To develop physical resettlement operations at the respective Municipalities as per Presidential Decree n.º 117/16.
Municipal Commissions (<i>Comissão Municipal</i>)	<ul style="list-style-type: none"> • To support the Project in coordinating engagement activities and the land acquisition and compensation process with traditional leadership and local communities. These commissions are composed of commune administrators, first rank <i>sobas</i>, and municipal technicians and specialists
Expropriating Entity (Provincial Government)	<ul style="list-style-type: none"> • Proceed to rehousing in cases where physical relocation of populations results from expropriation proceedings as per Presidential Decree n.º 117/16.

Source: ERM 2018

3.3

LAND ACQUISITION AND RESETTLEMENT PROCESS IN ANGOLA

This sections presents the land concession and resettlement process in Angola outlining the steps, responsibilities, and compensation mechanism foreseen in the law.

Land Concession Process

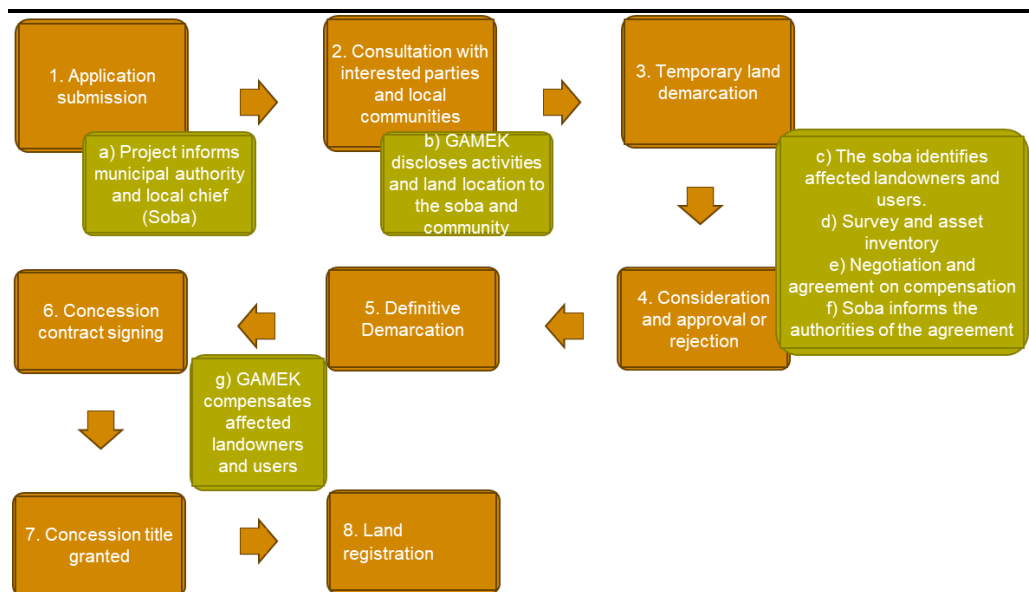
Overview

Land concession in Angola is governed by two processes. One is the formal land concession process documented in the Land Legislation (Law no. 9/04) and Land Concession Regulation (Decree no. 58/07), which generally applies to land with private property, or surface rights (regardless of land size). The other is the informal process, which is undocumented, and applies primarily where acquisition involves parcels of land held with customary land rights or useful civil domain rights. The informal process is generally administered by the *sobas* or commune with support from the municipality as needed.

In the context of the Project, both the formal and informal processes may apply, with the formal process likely to apply mainly in urban and periurban areas, and where businesses are affected. The rights to the land, and therefore the required process, will likely only be confirmed through topographic and asset inventory processes.

The combined steps of the formal and informal process that the Project is expected to follow for land concession is summarized in *Figure 3.1* below.

Figure 3.1 *Phases of the Formal and Informal Land Concession Process*



Note: (*) Orange boxes correspond to the formal process as described in the land legislation and concession regulation (*Lei de Terras No. 9/04 and Regulamento Geral de Concessão de Terras n.º 58/07*), whereas the green boxes present the informal process as documented during the field survey and based on input from local specialists.

Source: Prepared by ERM based on Land Legislation and input from Holísticos, 2018

The formal land concession process starts with the submission of the request by the interested party and is followed by community disclosure and consultation and the provisional demarcation of the land, consideration of the application and approval/rejection, followed by the definitive demarcation,

after which a concession contract is usually signed and the concession title granted. The final step is the registration of the right in the land registry.

The informal process follows very similar steps, the main difference being that the formal process is administered primarily by the Municipal administration in collaboration with the *soba* whereas the informal process is administered mainly by the *soba* himself. The informal process also provides a more detailed description of the compensation process for the loss of crops and assets in rural communities.

The steps are described in more detail in *Section 7* as they will be used as the basis for the implementation of the resettlement and compensation process.

Compensation Process

According to the Expropriation Law, “immovable assets and related rights may be expropriated for public utility purposes through payment of fair compensation”. Fair compensation shall be determined based on the actual value of the expropriated property as determined by a specialised land valuator, always calculated assuming the value of “perfect property” or “perfect ownership”, and including any additional related prejudice or costs.⁽¹⁾ In the event that rights other than the right of “perfect ownership” are expropriated, compensation shall be determined for the prejudice and losses resulting from the deprivation of such rights.

The capital gain resulting from public works or improvements, or any other circumstance initiated by the affected person or third party after the declaration of the expropriation for public utility, shall not be taken into consideration. The declaration is always published in the government gazette or *Diário do Governo*. In fact, the “cut-off” date for compensation is established as soon as the parties are informed that the Project has been approved and is going forward (i.e. during Step 5, final demarcation).

In practice, compensation is paid for crops and trees and physical structures. Compensation rates for loss of agricultural crops, and trees are established by the Ministry of Agriculture and Forestry. Compensation requirements for crops and trees in Angola are discussed in more detail in *Section 6.3.2*. Compensation for physical structures is addressed in *Section 3.3.1* and *Section 6.3.3*.

As for land, compensation for loss of land rights only occurs in the case that affected people have a land ownership title, either as a result of a private ownership right or surface right. In this case, compensation is paid for permanent land take; compensation for temporary loss of access is not considered in the law (see *Section 6.3.4*). Decree n.º 58/07 (Land Concession Expropriation) also states that the expropriating entity may alternatively

(1) Perfect property or ownership right refers to the right to full and exclusive enjoyment of rights of use, fruition and disposition of real estate including the land and resources on it.

concede to the expropriated party a parcel of land in the same judicial situation, appropriate similar use. Compensation in cash or in kind is generally subject to negotiation and agreement between the expropriating entity and the affected party.

In the case of land used under customary rights or useful civil domain rights, individuals do not have formal land titles. As such, these individuals may not be entitled to compensation for the loss of land rights or access to land. Instead, alternative land is usually assigned to the affected households. If land is available within the community, the *soba* will decide on the reallocation. In the absence of available land, the municipal administration may intervene in deciding which alternative land to provide. It should be noted however that the legislation is not clear on compensation for the loss of customary land rights; the issue is therefore open to negotiation.

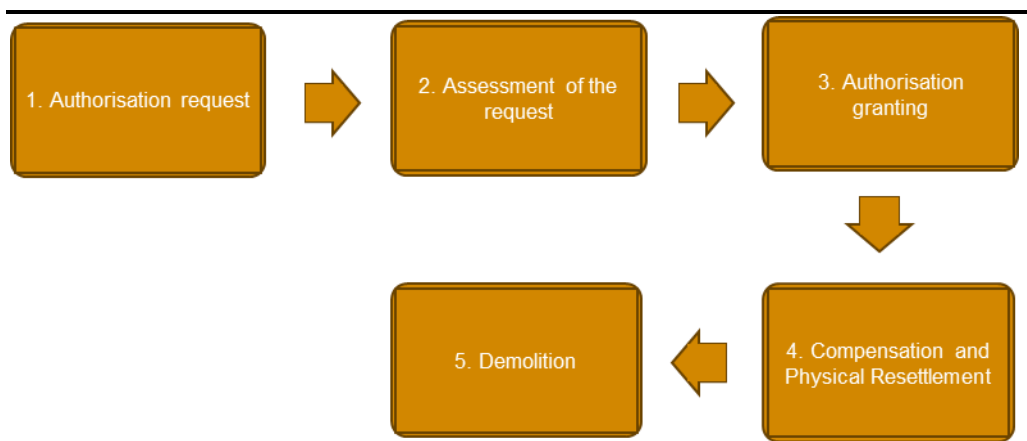
3.3.1 *Physical Resettlement Process (Decree 117/16, 2016)*

Overview

As previously stated in *Table 3.1*, Presidential Decree 117/16 on Regulation of Resettlement Operations (*Regulamento de Operações de Realojamento*), regulates and approves resettlement of resulting from expropriation or land concession proceedings. The steps of the physical resettlement process as per Decree 117/16 are presented in *Figure 3.2* below and discussed in detail in *Section 7.3* as it will serve as the basis for planning and implementation of the resettlement process.

These steps consist mainly in 1) presenting the authorisation request to the provincial authorities; 2) an assessment phase where the municipal administration conducts a site visit and property evaluation in collaboration with the expropriating entity and the *soba* of the affected communities; 3) the granting of the authorization by the provincial authorities based on the findings of the assessment; 4) the provision of compensation and physical resettlement; and finally 5) the demolition of the structures.

Figure 3.2 *Physical Resettlement Process*



Source: Prepared by ERM based on Resettlement Decree and input from Holisticos, 2018

Compensation Process and Requirements for Physical Resettlement

All the costs associated with the physical resettlement of affected households are borne by the Project proponent, including the cost of building new properties on alternative land. The building of new houses has to take into consideration the distance to and from schools, health centres, etc.

The size and number of replacement housing required for each household is determined based on the household size and property type. According to Presidential Decree 117/16, the expropriation entity (ie the municipal administration or provincial government) may also provide a financial compensation to the household as an alternative to a new property. The provision of replacement housing or cash compensation is discussed further in *Section 6.3.3*.

In the context of this Project, which is considered a government Project, the Project proponent will pay the compensation. As identified in the contract between GAMEK and NHID, NHID will pay compensation as commanded by GAMEK staff, consuming a budget that belongs to GAMEK. Should the budget be exceeded, MINEA will be responsible to fund the extra costs.

3.3.2 *Dispute Settlement Mechanism*

According to Article 14 of the Expropriation Law, in the absence of an agreement, the compensation value shall be determined through arbitration made by three arbitrators: one appointed by the expropriating party, one by the expropriated party (affected party), and a third one by the relevant District Court (see *Section 3.3.2* above).

In the result that an agreement is not reached, the Land Law identifies three forms of conflict resolution mechanisms for land rights related conflicts. These are described below.

- *Community justice*: Traditional dispute settlement addressing disputes over community land in accordance with local customs of the communities. If the dispute is not resolved through this mechanism, it is then referred to mediation or conciliation in the courts.
- *Tribunals*: Resolution through mediation or conciliation, where mediation involves the intervention of a third party mediating the resolution process and proposing recommendations and solutions, while conciliation involves a negotiation process with assistance of a third party responsible for helping the conflicting parties reach an agreement.
- *Arbitration tribunal*: Arbitrators acting as judges help resolve the conflict. Usually composed of three arbitrators representing each side and a third one representing the State.

The IFC Performance Standards aim to ensure that projects are implemented according to a clear set of guiding principles that eliminate or minimize the impact to local communities and the environment. The IFC Performance Standards 5 specifically address issues relating to land acquisition resulting in involuntary resettlement.

Involuntary resettlement refers to physical displacement (relocation or loss of shelter) and economic displacement (loss of assets or access to assets that leads to loss of income sources or other means of livelihood) as a result of project-related land acquisition and/or restrictions on land use.

Resettlement is considered involuntary when affected individuals or groups do not have the right to refuse land acquisition or restrictions on land use, which occurs in cases of:

- lawful expropriation or temporary or permanent restrictions on land use; and
- negotiated settlements in which the buyer can resort to expropriation or impose legal restrictions on land use if negotiations with the seller fail.

IFC PS 5 has the following objectives:

- to avoid, and when avoidance is not possible, minimize displacement by exploring alternative project designs;
- to avoid forced eviction;
- to anticipate and avoid, or where avoidance is not possible, minimize adverse social and economic impacts from land acquisition or restrictions on land use by (i) providing compensation for loss of assets at replacement cost, and (ii) ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected;
- to improve, or restore, the livelihoods and standards of living of displaced persons through the provision of adequate housing with security of tenure at resettlement sites (physical displacement) and the improvement, restoration of the livelihoods and standards of living of displaced persons (physical and economic displacement).

Table 3.3 below provides an overview of the key PS 5 requirements pertinent to the Laúca-Bita Transmission Line Project.

Table 3.3 IFC Performance Standard 5 Overview

Requirement	Description
Project Design (para. 8)	Consider feasible alternative project designs to avoid or minimize physical and/or economic displacement, while balancing environmental, social and financial costs and benefits, paying particular attention to impacts on the poor and vulnerable.
Compensation (para. 9)	The client will offer displaced communities and persons compensation for loss of assets at full replacement cost and other assistance. Compensation standards must be transparent and where livelihoods of displaced persons are land-based or where land is collectively owned the client will where feasible offer land based compensation.
Community Engagement (para. 10)	Disclosure of relevant information and participation of Affected Communities and persons will continue during planning, implementation, monitoring and evaluation of compensations payments, livelihood restoration activities and resettlement.
Grievance Mechanism (para. 11)	A grievance mechanism will be established as early as possible, which will allow the client to receive and address specific concerns about compensation and relocation.
Displacement (para. 17)	Displaced persons can be classified as: i. Those who have formal legal rights to land or assets they occupy or use; ii. Those that do not have formal legal rights to land or assets, but have a claim to land that is recognized under national law; or iii. Those that have no recognizable legal right or claim to the land or assets they occupy or use.
Economic Displacement (paras. 25-29)	<p>When the project will result in economic displacement only the client will develop a Livelihoods Restoration Plan (LRP) to compensate affected persons and/or communities and offer other assistance. Entitlements will be established and provided in a transparent, consistent and equitable manner. Mitigation will be complete when affected persons or communities have received compensation according to the LRP and PS.</p> <p>In cases where affected persons have legal rights or claims to land recognizable under national law, replacement property of equal or greater value will be provided, or, where appropriate ⁽¹⁾ cash compensation at full replacement cost.</p> <p>In addition to compensation, economically displaced persons will also be provided opportunities to improve, or at least restore their means of income-earning capacity, production levels and standards of living:</p> <ul style="list-style-type: none"> • For persons whose livelihoods are land-based, replacement land that has a combination of productive potential, locational advantages and other factors at least equivalent to that being lost should be offered. • For persons whose livelihoods are natural resource-based measures will be made to either allow continued access or provide access to alternative resources. • If circumstances prevent the client from providing land or similar resources as described above, alternative income earning opportunities may be provided, such as credit facilities, training, cash, or employment opportunities; Cash compensation alone, however, is frequently insufficient to restore livelihoods.

(1) Payment of cash compensation for lost assets may be appropriate where (i) livelihoods are not land-based; (ii) livelihoods are land-based but the land taken for the project is a small fraction of the affected asset and the residual land is economically viable; or (iii) active markets for land, and labour exist, displaced persons use such markets, and there is sufficient supply of land.

Requirement	Description
	<p>Transitional support should be provided as necessary to all economically displaced persons, based on a reasonable estimate of time required to restore their income-earning capacity, production levels and standards of living.</p> <p>Security of tenure should be provided to all affected households in the event that alternative land is provided as a compensation measure. Security of tenure means that resettled individuals or communities are resettled to a site that they can legally occupy and where they are protected from the risk of eviction.</p>
Vulnerable Groups (para. 8 & 19)	<p>IFC PS 5 includes specific requirements related to vulnerable groups, which are defined as people who may be more adversely affected by displacement than others, and who may be limited in their ability to claim or take advantage of assistance and other related development benefits. The reasons for this are diverse and include gender, politics, religion, economic status and educational ability. According to IFC PS 5, vulnerable groups should be identified at the start of the planning process (see Baseline), and should be offered specially tailored assistance throughout the resettlement process.</p>
Private Sector Responsibilities Under Government-Managed Resettlement (para. 30)	<p>Where land acquisition and resettlement are the responsibility of the government, the client will collaborate with the responsible government agency, to the extent permitted by the agency, to achieve outcomes that are consistent with this Performance Standard. In addition, where government capacity is limited, the client will play an active role during resettlement planning, implementation, and monitoring.</p> <p>In the case of acquisition of land rights or access to land through compulsory means or negotiated settlements involving physical displacement, the client will identify and describe the government resettlement process and measures. If these measures do not meet the relevant requirements of this Performance Standard, the client will prepare a Supplemental Resettlement Plan that will address the relevant requirements of this Performance Standard described above.</p>

Source: ERM 2018

In addition to Performance Standard 5, Performance Standard 1 is also relevant to the Project in terms of the requirements set out for engagement of stakeholders. Performance Standard 1 requires that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected and the establishment of an appropriate grievance mechanism to address land and livelihoods-related community concerns. Specific requirements are made for vulnerable members of the community and the need to ensure that both men and women are able to share their views.

3.5

COMPARATIVE ANALYSIS OF NATIONAL LEGISLATION AND INTERNATIONAL STANDARDS

The Laúca-Bita Transmission Line Project is being taken forward with the objective to be compliant with Angolan legislation and the IFC Performance Standards. A gap analysis has therefore been conducted to understand differences between Angolan law and the IFC Performance Standards with respect to resettlement, economic displacement and livelihood restoration,

and to identify the additional measures required to ensure GAMEK, with the support of NHID, meets both sets of requirements. *Table 3.4* below outlines gaps identified between Angolan legislation and IFC PS 5.

As detailed, the main gaps between Angola legal requirements and IFC standards with respect to resettlement, economic displacement and livelihood restoration include the following:

- The national legal framework does not clearly define what constitutes fair or prompt compensation.
- With respect to compensation values of improvements to the land, Angolan law requires a market cost approach whereas the IFC requires that compensation be provided at replacement value (including transaction costs and excluding depreciation).
- The compensation value provided for land in Angola is generally undervalued and not formally documented.
- Livelihood restoration is not considered within national legislation.
- Resettlement Action Plans (RAPs) are requested on an ad hoc basis by the regulator if likely physical displacement is identified prior to licensing.

The specific measures that will be undertaken to bridge these and other gaps are detailed in *Table 3.4* and brought into the RCAP in subsequent sections.

Table 3.4 Analysis of Variations between Angolan Legislative Requirements and IFC PS 5

Topic	IFC Requirement	Angolan Legislative Requirement	Action to Close Gap
Consultation and Disclosure	<ul style="list-style-type: none"> • Economically displaced persons and their communities (...) are provided with timely and relevant information, consulted on resettlement options, and offered opportunities to participate in planning, implementing, and monitoring resettlement. • Documents to be disclosed will be in a format that is accessible to the affected communities. • It is necessary to undertake and document a process of consultation in a manner that provides the affected communities with opportunities to express their views and allows the project to consider and respond to them. • The consultation process will be undertaken in a manner that is inclusive and culturally appropriate. It is necessary to tailor the consultation process to the language preferences of the affected communities, their decision-making process, and the needs of disadvantaged or vulnerable groups. • For projects with significant adverse impacts on affected communities, the consultation process will ensure their free, prior and informed consultation and facilitate their informed participation. 	<ul style="list-style-type: none"> • Public consultation of the EIA precedes the decision of the Ministry of Environment (MINAMB) regarding Project licensing. • Executive Decree No. 87/12, of February 24, 2012, establishes norms for public consultations of public or private projects, subject to the evaluation of environmental impacts. • The land concession process set out in the Land Law (Lei de Terras No. 9/04) requires that the interested party conduct public consultation meetings to consult the local population through the <i>soba</i> and disclose the application for use and exploitation of the land. Local communities are expected to confirm in writing that the land is vacant and not occupied, nor included within the limits of community land. • No clear consultation mechanisms. 	<ul style="list-style-type: none"> • The socioeconomic surveys will identify and establish appropriate mechanisms to engage with affected households, their representatives and local governmental structures on aspects such as: <ul style="list-style-type: none"> • compensation rates and other entitlements, • agreement on where individuals will move to for land cultivation (economic displacement) and housing/physical infrastructure provision (for physical resettlement), • agreement on other livelihood support measures etc. • The RCAP presents the engagement activities that will be undertaken during the development of the planned RCAP Annexes (<i>Section 7</i>) including the following: <ul style="list-style-type: none"> • disclosure of the RCAP; • data gathering; • identification of Resettlement sites and housing options; • agreements around compensation and livelihood restoration; and • disclosure of the entitlements as defined in the RCAP Annexes.
Develop and Disclose an LRP and/or RAP	<ul style="list-style-type: none"> • Prepare a Livelihood Restoration Plan (LRP) that mitigates the negative impacts of displacement, identifies development opportunities, and establishes the entitlements of all categories of affected persons with particular attention paid to the needs of the poor and the vulnerable. • In the case of physical displacement, a Resettlement Action Plan (RAP) that covers, at a minimum, the applicable requirements of Performance Standard 5, regardless of the number 	<ul style="list-style-type: none"> • Angolan law does not require the development and documentation or consultation of a Livelihood Restoration Plan. • In case the government authorities (i.e. Ministry of Environment and/or provincial government authorities) identifies likely physical displacement, it is the regulator's discretion to request for a Resettlement Action Plan. 	<ul style="list-style-type: none"> • NHID has developed this RCAP which will be supplemented with RCAP Annexes as described in <i>Section 7</i>. GAMEK is responsible to implement the requirements established in this RCAP. NHID will support GAMEK in this process. • If the Ministry of Environment and/or provincial government authorities require any process/documentation related to resettlement, relevant resettlement documents will be

Topic	IFC Requirement	Angolan Legislative Requirement	Action to Close Gap
	<p>of people affected, will be developed. The RAP will be designed to mitigate the negative impacts of displacement, identify development opportunities, develop a resettlement budget and schedule and establish the entitlements of all categories of affected persons (including host communities).</p>	<ul style="list-style-type: none"> • If resettlement aspects are not covered in the EIA, but are identified during the pre-licensing visit, MINAMB can ask GAMEK to address it. • The physical resettlement process is established in Presidential Decree n.º 117/16 (see <i>Section</i>). 	<p>developed, disclosed and consulted upon by GAMEK on behalf of the Project.</p> <ul style="list-style-type: none"> • GAMEK, with support from NHID, will engage relevant stakeholders to consult on the content of the RCAP and collect feedback.
<p>Compensation and livelihood restoration and recognition of customary land rights</p>	<ul style="list-style-type: none"> • Compensation for loss of assets at full replacement cost and other assistance to help the displaced improve or restore their standards of living or livelihoods. • Affected persons with legal rights or claims to land to be provided with replacement property of equal or greater value or cash compensation at full replacement cost. • Where livelihoods are land-based or where land is collectively owned, the client will, where feasible, offer the displaced land-based compensation. • The developer will take possession of the land only after compensation has been made available. • The client will also provide opportunities to displaced communities and persons to derive appropriate development benefits from the project. 	<ul style="list-style-type: none"> • Angolan law does not define compensation guidelines, but requires prompt and fair compensation to be defined by the project proponent. • Compensation rates for crops and agriculture land are established by the Ministry of Agriculture and Forestry (<i>Section 6.3.2</i>) but not for unbuilt land. • For land under concession, there will be expropriation for public utility and payment of just compensation in accordance to article 12 of Law no. 9/04 (Land Law). • Compensation for expropriation is determined based on the “actual value” of the expropriated property and including any additional related prejudice or losses resulting from the deprivation of the relevant land rights (see <i>Section 6.3.3</i>). • For community land and related customary land rights, the land will be disused, which implies that traditional authorities are heard and compensation provided. • In the case of physical displacement, compensation is only an alternative to the provision of alternative land (Decree 117/16, Art. 21). 	<ul style="list-style-type: none"> • The RCAP provides for the following: <ul style="list-style-type: none"> • Security of tenure to people displaced from their land or affected owners without formal documented legal title. For customary right holders, security of tenure is guaranteed through the <i>soba</i>. • Compensation will be calculated at replacement cost (<i>Section 6.3</i>). • The entitlements will provide alternative agricultural land or income-earning opportunities to compensate for loss of land. • GAMEK will not displace land users or commence construction activities until all affected parties have received compensation for lost assets. • The RCAP requires an independent valuation of all assets to ensure compensation at replacement cost. • The RCAP identifies likely impacts and the likely need for the livelihood restoration. These will be verified through the detailed socioeconomic census and assessment surveys.

Topic	IFC Requirement	Angolan Legislative Requirement	Action to Close Gap
Vulnerable Groups and transitional support	<ul style="list-style-type: none"> • Vulnerable groups should be identified from the start and offered specially tailored assistance throughout the resettlement process. • Transitional support should be provided based on reasonable estimates of the time required to restore income earning capacity, productivity levels and associated livelihoods and standards of living. • Additional support should be provided to vulnerable groups as necessary. 	<ul style="list-style-type: none"> • No specific requirements for vulnerable groups 	<ul style="list-style-type: none"> • Highly vulnerable households will be identified based on vulnerability criteria that will be developed based on analysis of the baseline and consultation during preparation of ESIA and RAPs/LRPs. • Highly vulnerable households will be provided with specific support to enable them to restore their standard of living and livelihoods through the livelihood restoration program.
Grievance Mechanism	<ul style="list-style-type: none"> • It is necessary to establish a grievance mechanism to receive and facilitate the resolution of the affected communities' concerns and grievances about the Project's environmental and social performance. • The grievance mechanism should address concerns promptly, using an understandable and transparent process that is culturally appropriate and readily accessible to all segments of the affected communities, and at no cost and without retribution. • It is necessary to inform the affected communities about the mechanism in the course of its community engagement process. 	<ul style="list-style-type: none"> • No specific requirement for a grievance mechanism. • Dispute settlement mechanisms are in place and include community justice, the courts system (mediation/conciliation) and the arbitration system (<i>Section 3.3.2</i>). 	<ul style="list-style-type: none"> • A suitable grievance mechanism has been provided. • Implementation measures will be defined. • NHID, on behalf of GAMEK, will employ Community Liaison Officers (CLOs) who will also have a key role in managing and reporting on grievances. • The grievance mechanism will be disclosed to local communities and suitable mechanisms provided to ensure it can be accessed.
Monitoring	<ul style="list-style-type: none"> • It is necessary to establish procedures to monitor and measure the effectiveness of implementation and use dynamic mechanisms, such as inspections and audits, where relevant, to verify compliance and progress toward the desired outcomes. • It is necessary to retain qualified and experienced external experts to verify monitoring information. • It is necessary to document monitoring results, implement corrective and preventive actions, and follow up on these actions to ensure their effectiveness. 	<ul style="list-style-type: none"> • Follow-up and monitoring, by the government, are required to guarantee that established legal procedures are being followed. • Any specific requirement to establish procedures to monitor and measure, by the Project will be indicated in the installation and operation environmental licenses. 	<ul style="list-style-type: none"> • The resettlement and compensation team will establish procedures to monitor and measure the effectiveness of the resettlement and compensation process, its compliance to legal and regulatory requirements. • Detailed monitoring requirements are included within the RACP (see <i>Section 8</i>) and will be implemented as part of resettlement and compensation monitoring. • RCAP considers monitoring indicators and requires that a census is undertaken during the development of the RCAP Annexes to provide a baseline for monitoring purposes.

4.1

INTRODUCTION

This section provides an overview of the socio-economic conditions in the two provinces in Angola where the Project is located, namely Cuanza Norte and Luanda provinces. The information included within this section is a summary of the Social Baseline Section of the Project Environmental and Social Impact Assessment (ESIA).

The Study Area has been defined to incorporate all the settlements totally or partially within a 500m corridor (250 m on each side of the centreline) along the 236 km Laúca-Bita transmission line route as shown in *Figure 4.1*. The 500 m corridor width was defined as it is considered that most of the land-based impacts will occur within this corridor as most surveyed settlements are located close to the lands they cultivate. It is noted that some settlements located further away from the 500 m corridor may also potentially use the land inside the 500 m corridor. Affected settlements located outside the 500 m corridor, if any, will be identified during the household survey at a later stage as part of the RCAP implementation (see *Section 7*).

In the context of the ESIA, socioeconomic information was gathered from publically available secondary sources along with primary data collection during a field visit to the Study Area in July 2018 from the 18 settlements located inside the 500 m corridor (see *Table 4.1*).

An overview of the Study Area is presented in *Figure 4.1*.

Figure 4.1 Overview of the Study Area



The Study Area crosses central western Angola east to west, and passes through a landscape which is dominated by areas of savannah. The 18 settlements in the Study Area are mostly located along or a short distance from the main road, and present homogeneous characteristics with slight differences from rural to peri-urban areas where urban residential expansion is common due to the proximity of larger centres. The main urban centres along the area of study are Dondo (Cambambe municipality), Catete (Icolo e Bengo municipality), and larger peri-urban areas in the municipalities of Viana and Belas, close to the municipality of Luanda.

Population size differs, with the most populated settlements located in Icolo e Bengo and Viana municipality in the western portion of the line closer to Bitá station while the least populated ones are located in Cambambe municipality in the eastern section close to Lauca station. Main livelihoods are quite homogeneous, with the predominance of subsistence agriculture (including animal herding) along the entire transmission line route, from Lauca to Bitá. Other economic activities including small scale trading and temporary informal jobs (*biscatos*) are found mainly in the settlements located in the municipalities of Viana and Belas, and in the outskirts of Catete commune (Icolo e Bengo municipality). Access to health and education services are limited throughout the transmission line route.

Key sensitive receptors have been identified in the Study Area along the transmission line route, which should be considered as the transmission line route is finalised. These sensitivities have been identified through desk-based review of satellite images, field ground-truthing and stakeholder feedback and encompass specific agricultural land uses (*Section 4.5.2*) as well as infrastructure and isolated buildings and farms inside the 20 m OHTL footprint corridor. These sensitive receptors are discussed in the Displacement Impacts Section (*Section 5.2*).

In the Study Area, and throughout Angola as a whole, landmines are a remnant of four decades of conflict (1975-2002) following independence from the Portuguese, and are prevalent throughout the country, having to date killed or injured an estimated 80 000 people. An extensive demining process has been ongoing and remaining contamination is now predominately located in rural, underdeveloped areas. ⁽¹⁾ Much of the land being released is used for agriculture, which is of critical importance for acutely poor communities reliant on subsistence farming.

(1) Mine Action in Angola Landmine-Free by 2025, Katherine Lawson 2017
<https://www.chathamhouse.org/sites/default/files/events/2017-06-15-landmines-angola-appg.pdf>

The transmission line route passes through the municipalities of Cambambe (Cuanza Norte Province), Icolo e Bengo, Viana, and Belas (Luanda Province). The provinces are governed by Provincial Governors who are appointed by the national government, while municipalities rely on commune administrators to plan and implement policies at the municipal level. Communes are further divided into *bairros*, sectors, and *blocos*. In rural areas, these subdivisions are also called communities (*comunidades*) or *aldeias*, while in peri-urban areas it is most usual to find references to *bairros* (neighbourhoods).

Figure 4.1 above shows the administrative units crossed by the transmission line route.

The list of settlements included in the Study Area and their municipality and commune affiliation is presented in Table 4.1 below. Note that some of the settlements in the Study Area are smaller settlements associated to larger settlements located outside the 500 m corridor Study Area. These “associated settlements” are marked with an asterisk (*) in the table below and the name of the main settlement is also mentioned.

Table 4.1 *Settlements in the Study Area*

Municipality	Commune	Settlement
Cuanza Norte Province		
Cambambe	Zenza do Itombe	<ul style="list-style-type: none"> • Quitendele • Zenza do Itombe • Muchau
	San Pedro da Quilemba	<ul style="list-style-type: none"> • Aldeia Lucapa • Quisuba • Dumbo Ya Pepe • Nhangue Ya Pepe
Luanda Province		
Icolo e Bengo	Bom Jesus	• Ngolome (*) (Bom Jesus)
	Catete	<ul style="list-style-type: none"> • Mazozo • Tari • Wala (*) (Catete)
	Calomboloca	• Koba (*) (Calamboloca)
	Cassoneca	Sagrada Esperança (*) (Barraca)
	Cabembeia	• Morro 50 (*) Cabembeia
Viana	Calumbo	<ul style="list-style-type: none"> • Mbanza Calumbo II • Hanga Calumbo
	Kikuxi	• Mateia
Belas	Quenguela	• Bita Ambriz

Source: ERM 2018

At the community level, traditional leadership plays an important role in local governance. The chief, known as *soba*, is the local governing authority in rural and some peri-urban areas. In peri-urban areas this leadership role is often taken up by community coordinators (*coordenadores*), who work as social mobilizers. There can also be *bairro* coordinators and resident committees (*comissoes de moradores*). Coordinators are appointed by the commune government and are usually chosen from the party local leadership.

The role of the *soba* and community coordinator is to liaise with commune administrators around community issues. In particularly remote rural areas, where the capacity and resources of local government administration is limited, the relationship between traditional leadership and formal government officials (commune and municipal administrators) is critical. Traditionally, the *soba* works together with village elders to address various matters at the local level, including land administration and management. The *soba* is also often supported by a secretary (*secretário*).

Table 4.2 *Main Local Authority Representatives in Study Area Settlements*

Municipality	Settlement	Main Community Authority
<i>Cuanza Norte Province</i>		
Cambambe	Nhangue Ya Pepe	<i>Soba</i>
	Dumbo Ya Pepe	<i>Soba</i>
	Quissuba	<i>Soba</i>
	Aldeia Lucapa	<i>Soba</i>
	Muchau	<i>Soba</i>
	Quitendele	<i>Soba</i>
	Zenza do Itombe	<i>Soba</i>
<i>Luanda Province</i>		
Icolo e Bengo	Sagrada Esperança	<i>Soba</i>
	Mazozo	<i>Soba</i>
	Koba	<i>Soba</i>
	Morro 50	Coordinator
	Tari	Coordinator
	Wala	Coordinator
	Ngolome	Coordinator*
Viana	Hanga Calumbo	Coordinator
	Mbanza Calumbo II	Coordinator
	Mateia	Coordinator**
Belas	Bitá Ambriz	Coordinator

Notes: (*) *Soba* recently died and new *soba* to be appointed; (**) *Soba* is ill, community coordinator is currently the main point of contact.

Source: ERM Social Field Survey (2018)

4.4 DEMOGRAPHICS

4.4.1 Population

Municipal level

The four municipalities in the Study Area, Cambambe (Luanda province), Icolo e Bengo, Viana, and Belas (Luanda province), comprise around 10.7 % of the country's population. During the July 2018 field survey it was observed that settlements in the Study Area within these four municipalities are predominantly rural and dispersed.

The most populated of the four municipalities in the Study Area is Viana located in the far west of the transmission line route with 5.9% of the country's population, followed by Belas (4.1%). Both have a population of over one million inhabitants. Icolo e Bengo and Cambambe have a population of less than 90 000, representing less than 1% of the country's population. The average household size 7.0 in the municipalities of Cuanza Norte province and 4.7 in Luanda province compared to a national average of 4.6.

Table 4.3 shows the profile of the four municipalities, including the percentages of male and female, as well as the percentage in relation to the country and province total population. No official sources for population data at the commune level were identified.

Table 4.3 *Population in the Municipalities in the Area of Study*

Municipality	Total population	% male	% female	% of Provincial population	% of Country population	Demographic density (people/km ²)
Cuanza Norte Province	427 971	49.0%	51%	-	1.6%	21
Cambambe	88 951	49.8%	50.2%	20.8%	0.3%	17
Luanda Province	6 542 944	49%	51%	-	25.3%	347
Icolo e Bengo	74 644	50.8%	49.2%	1.1%	0.3%	24.4
Viana	1 525 711	49%	51%	23.3%	5.9%	2 202
Belas	1 065 106	49%	51%	16.3%	4.1%	1 018
Angola	25 789 024	48%	52%	-	100%	20.7

Source: Census 2014, Final and Preliminary Results

Settlements in the Study Area

As summarized in Table 4.4, the total population within all 18 settlements surveyed during the July 2018 field survey is approximately 19 000 which accounts for around 0.07% of the national population. Field survey findings also show that settlements located closer to larger population centres present a

mix of urban and rural characteristics, whereas settlements located in the east further from municipal centres are more rural. Based on demographic estimates obtained through engagement with village *sobas* and community coordinators, it is assumed that the age profile of surveyed settlements within the Study Area is similar to the national profile with the largest age group represented by children under 15 years of age (40-45%), followed by 16-60 years, and a small number of people over 60.

The most populated settlements along the transmission line are located in the western portion of the transmission line in the municipalities of Icolo e Bengo and Viana while the least populated settlements are located in the municipality of Cambambe in the eastern portion of the line closer to Laúca station. Population estimates for the different settlements in the Study area are presented in *Table 4.4* below.

Table 4.4 *Population in the Study Area Settlements*

Municipality	Commune	Settlement	Population size*	Location/Type
<i>Cuanza Norte Province</i>				
Cambambe	San Pedro da Quilemba	• Aldeia Lucapa	Over 200 residents	rural
		• Quisuba	345 residents	rural
• Dumbo Ya Pepe		54 residents	rural	
• Nhangue Ya Pepe		525 residents	rural	
	Zenza do Itombe	• Quitendele • Zenza do Itombe • Muchau	1 778 residents 800 residents 103 residents	rural rural rural
<i>Luanda Province</i>				
Icolo e Bengo	Bom Jesus	• Ngolome (Bom Jesus)	495 residents	rural
	Catete	• Mazozo	2 600 residents	rural
		• Tari • Wala	4 203 residents 667 residents	peri-urban peri-urban
	Calomboloca	• Koba	1 780	rural
	Cassoneca	• Sagrada Esperança (Barraca)	190 residents	rural
	Cabembeia	• Morro 50	n/a	peri-urban
Viana	Calumbo	• Mbanza Calumbo II	348 residents	rural
		• Hanga Calumbo	1 175 residents	peri-urban
	Kikuxi	• Mateia	3 550 residents	peri-urban
Belas	Quenguela	• Bitá Ambriz	250 residents	peri-urban

Note: (*) As informed by *soba* or community coordinator during social field survey.

Source: ERM (2018).

4.4.2 Migration and Population Change

Internal displacement due to conflict was high during the civil war (1975-2002), when population fled conflict zones towards areas closer to Luanda. Internal displacement nowadays is mainly the result of infrastructure development promoted by the national government or disasters.

No internally displaced people or international refugees were identified in the settlements of the Study Area during the field survey.

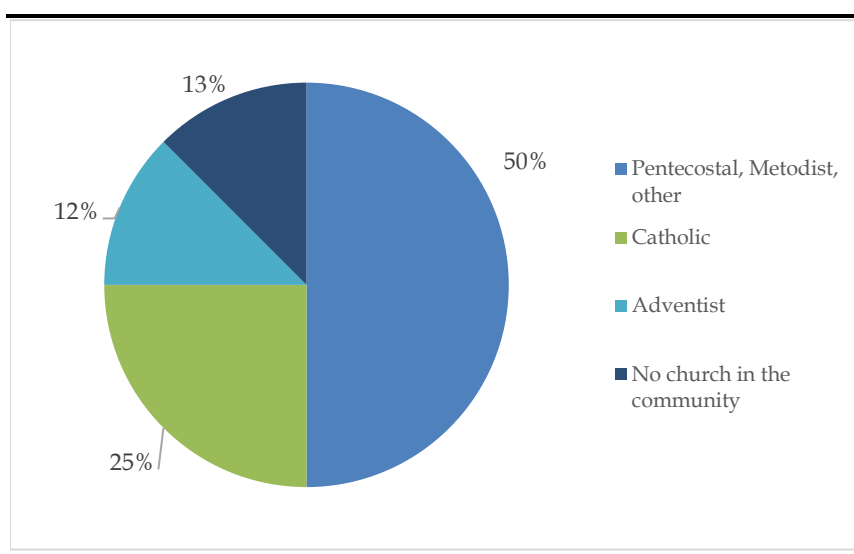
4.4.3 Ethnicity, Language and Religion

The main ethnic groups in the settlements of the Study Area is Quimbundo, followed by Umbundo, Bacongo, and Chokwe. No conflicts or tensions between groups have been reported. Ethnic groups are primarily based on family history and identity with no clear differences between groups.

While the official language is Portuguese, more than 60 different Bantu-group languages are spoken across Angola. In the two provinces of the Study Area, Cuanza Norte and Luanda, Quimbundo is the primary language spoken. However, the field work has shown that Portuguese is widely spoken, including among women.

The population in the settlements surveyed is predominantly Christian. Religion in the settlements of the Study Area is often associated with place of worship.⁽¹⁾ With the exception of Dumbo Ya Pepe (municipality of Cambambe), all surveyed settlements have churches, usually at least one Catholic and one Protestant (or Evangelical). *Figure 4.2* illustrates the distribution of main churches across the settlements.

Figure 4.2 Main Churches along Surveyed Settlements within the Study Area



Source: ERM Social Field Survey (2018)

(1) I. e. When asked about Religion, respondents informed which church they attend

4.4.4 *Education*

In Cuanza Norte, 21% of the population age 6 or above has never attended school; this reduces to 7% in Luanda province.⁽¹⁾ In the Study Area, education attainment level in the surveyed settlements varies between 6th grade (primary school) to 9th grades (first cycle of secondary school), depending on the grade taught in the nearest school facility.

During the field survey, economic factors were reported as an obstacle that limits children's ability to continue schooling beyond primary school (6th grade). Other identified obstacles include the lack of education facilities close to the settlements; the cost of transportation, housing, and school supplies; and the need for children to bring their own benches or chairs to the classroom every day, or otherwise sit on the floor.

4.4.5 *Community Health and Safety*

Health issues identified during the field survey reflect the country's profile. The main issues mentioned in all surveyed settlements included diarrhoea, malaria and respiratory problems. Other issues were also mentioned such as urinary tract infections, typhoid fever, skin problems, and high blood pressure.

There is no maternal care, and unassisted home childbirth is a common practice, both in rural and peri-urban surveyed settlements.

In terms of safety, landmine remnants from the civil war are predominantly located in rural, underdeveloped areas, where much of the land is used for agriculture. The demining process is usually carried out either by the Angolan army or by private demining companies, and is mostly manual using metal detectors. The demining operator is in both cases authorized by the National Intersectorial Commission for Humanitarian Demining and Assistance (CNIDAH) and the National Demining Institute (INAD) to guaranty alignment with the UN International Mine Action Standards (IMAS), including community safety considerations according to ISO9001:2008.⁽²⁾

4.4.6 *Gender Dynamics*

Despite legal dispositions promoting the end of gender-based violence and discrimination against women, of discrimination in terms of women's access to resources and assets remains an issue. One of the main challenges for women in Angola, particularly in rural areas, has to do with the lack of access

(1) 2014 Census. Resultados Definitivos do Recenseamento Geral da População e da Habitação de Angola 2014; Resultados Preliminares do Recenseamento Geral da População e da Habitação de Angola 2014.

(2) Client Information

to education and exclusion from decision-making. Rural women are rarely represented in politics, even by women leaders.⁽¹⁾

With respect to land ownership specifically, traditional succession practices generally establish that family land passes to sons and male relatives of the deceased. Under traditional customary tenure practices, women usually have access to land through their status as a daughter or wife. As the system evolves to more individualized rights, the evolutionary process often omits identifying the land rights of women. As a result, not only do women fail to obtain the benefits of the more individualized rights, they may simultaneously lose their traditional right of access. In some areas, the *sobas* may support the rights of widows to their husbands' land, or the rights of divorced women seeking land from their fathers. In this sense, women's access to land depends more on the active support of the *sobas* rather than principles of customary law.⁽²⁾

4.4.7 *Community Networks*

No strong support systems were identified in the surveyed settlements throughout the Study Area. In a few cases, specifically the settlements of Nhangue Ya Pepe and Dumbo Ya Pepe (eastern portion), and Mateia (western portion), families reported that they receive financial support from relatives who live in larger urban centres such as Dumbo or Luanda. In settlements of the eastern portion, the community coordination offices also offer occasional financial support to the poorest households.

In kind support such as food provision or shared land use is more common than financial support, but is not widespread across the surveyed area. No external support from regional and local governments, nor from non-governmental organisations (NGOs) or local association was identified in the Study Area at the time of the field survey (July 2018).

4.5 *LAND USE AND OWNERSHIP*

4.5.1 *Land Tenure*

The land found in the Study Area belongs primarily to the "useful customary rights domain", which refers to the collective rights of occupation, possession, management, usage and exploitation found in rural communities. As discussed in *Section 3.2.2*, Rural Communal Land is considered part of the "Public Domain" and is therefore not transferrable unless determined otherwise by traditional authorities allowing the alteration and concession of Rural Community Land.

(1) Search For Common Ground. Women's rights in Angola. Access: August, 2018. Available at <https://www.sfcg.org/womens-rights-in-angola/>

(2) USAID. Strengthening land tenure and property rights in Angola: Land Law and Policy. May 31, 2007.

In rural areas, Rural Communal Land is held by the community and managed by the community leader or chief referred to as the *soba*. The *soba* is the main figure responsible for allocating land to individuals and households (taking into account household size and land availability), establishing areas for common use, defining rules regarding accessing communal land and associated resources, and for managing land disputes. The *soba* also oversees land transactions and the inheritance of land. All households are entitled to one parcel of land for individual agricultural use and one parcel for residential use. Inheritance is the main source of access to rural land, which can also be accessed by leasing, borrowing, and sharecropping; all these types of access were identified throughout the Study Area.

In contrast, in urban and peri-urban areas, land access is less dependent on inheritance and allocation by the *soba* and more on the land market. This was found in Mateia and Hanga Calumbo (Viana municipality), and Bitá Ambriz (Belas municipality) where individuals and households looking for an area to live in initially stay with relatives, then rent, and ultimately buy a plot. In urban and peri-urban areas where the *soba* is not the leading traditional authority figure, land matters are overseen by residential committees (*comissao de moradores*), often represented by community coordinators (*coordenadores*). The residential committees in the surveyed settlements work closely with local government institutions when handling land requests.

In relation to land tenure and property rights for women, women do not have equal land access to men. As discussed in *Section 4.4.6*, this is due to the fact that under traditional inheritance practices, land passes to sons and male relatives of the deceased, or other male relatives such as brothers or nephews. This being said, in urban and peri-urban areas where land access does not depend so much on inheritance rights, the field survey has identified cases of land ownership and management lead by women, such as in Hanga Calumbo and Bitá Ambriz, where women (*mamas*) are the main rights holders and managers of farming parcels.

4.5.2 *Land Use*

The growth and expansion of peri-urban and municipal centre boundaries in the municipalities of Belas, Viana and Icolo e Bengo have resulted in progressive changes of the land use patterns, and a gradual change in the occupational and livelihood patterns of people (see *Section 4.6*).

Nevertheless, the land cover along the transmission line route remains mostly rural, composed of savannah and forest, with occasional agricultural areas of seasonal and permanent crop production, and even fewer areas of industrial use. Based on Google Earth satellite imagery and available GIS land cover data, the land inside the 60 m OHTL corridor is composed mostly of forest, savannah, and mosaic vegetation (65.42%), followed by mosaic agriculture and savannah with agricultural patches (31.64%), residential areas (0.14%), and industrial areas (0.12%).

Table 4.5 summarises the size (hectares) and proportion (percentage) of land affected along the 500 m Study Area corridor (250 m each side) and the 60 m OHTL RoW (30 m each side) by land cover type.

Table 4.5 *Area and percentage of land affected in the Study Area and Project Components*

Land cover type	500 m corridor (Study Area)		60 m corridor	
	Area (ha)	%	Area (ha)	%
Bare land	6.3	0.05	0.2	0.02
Forest	2 990.1	24.15	371.6	24.00
Industrial Areas	48.8	0.40	1.9	0.12
Mosaic Agriculture	647.0	5.22	67.0	4.32
Mosaic Vegetation	570.3	4.60	64.9	4.20
Residential Areas	47.5	0.39	2.0	0.14
Savannah	4 529.5	36.58	579.1	37.22
Savannah with agricultural patches	3 476.1	28.07	424.2	27.32
Water	28.3	0.23	36.7	2.38
Wetland	38.5	0.31	3.8	0.28
Total	12 382.4	100.00	1 551.4	100.00

Source: ERM (2018)

Table 4.6 describes the types of land uses found in the different municipalities in the Study Area east to west along the transmission line route. A graphic overview of land uses along the transmission line route is presented in Figure 4.3 below.

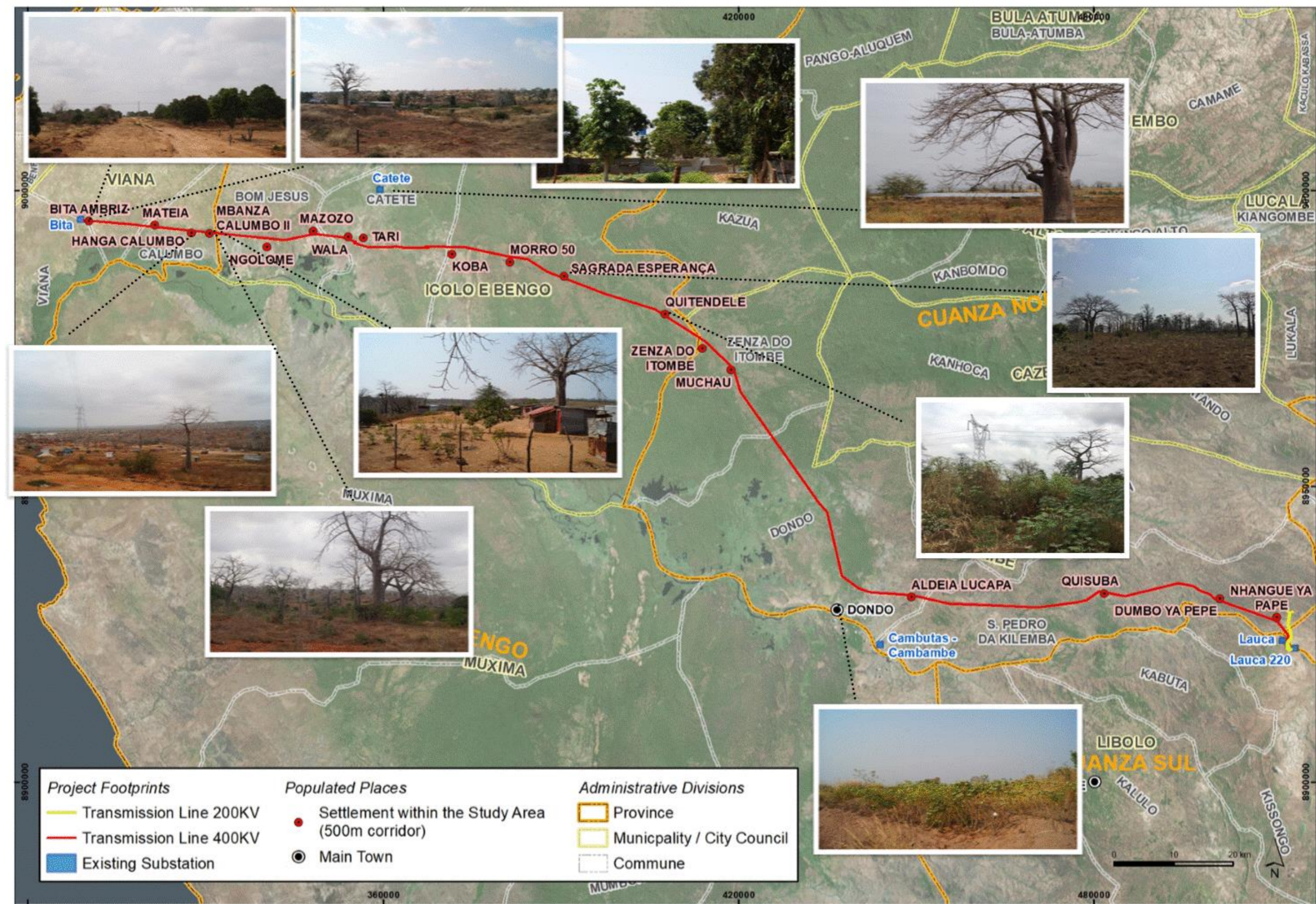
Table 4.6 *Land use by Municipality in the Study Area*

Municipality	Commune	Land uses	Key Sensitivities (*)
Cuanza Norte Province			
Cambambe	São Pedro da Quilemba Dondo Zenza do Itombe	Mixed land use with rural characteristics and predominance of small scale agriculture. Predominance of small scale agriculture of seasonal crops (ie cassava, beans, sweet potato, maize) and few areas with permanent crops. Settlements mostly rural with peri-urban areas close to Dondo and Zenza do Itombe.	All settlements along the transmission line route are rural and dependent on subsistence agriculture.
Luanda Province			

Municipality	Commune	Land uses	Key Sensitivities (*)
Icolo e Bengo	Calomboloca Cassoneca Catete Bom Jesus	Mix land use mostly with rural characteristics near the communes of Calomboloca, Cassoneca and Bom Jesus; and peri-urban characteristics near Catete. Small and large scale agriculture. Rural, peri-urban and urban residential areas. Industrial areas close to Catete.	Poultry farms in Ngolome and Koba, near Project line. Government residential project between Catete and Calomboloca. University campus planned next to poultry farm in Bom Jesus (Ngolome settlement).
Viana	Kikuxi Calumbo	Mixed land use with urban and peri-urban characteristics. Areas of residential expansion and areas of small scale agriculture of seasonal (cassava) and permanent (mango) crops.	Area of residential expansion in Mateia settlement. Large farms along Project line near Mateia settlement.
Belas	Quinguele	Mixed land use with peri-urban characteristics. Areas of residential use with both permanent and weekend houses (including <i>quintas</i>), and areas of small scale agriculture (ie cassava, mango trees).	Area of residential expansion in Bitá Ambriz and 4 de Fevereiro. Weekend <i>quintas</i> and seasonal and permanent crops in Bitá Ambriz.

Notes: (*) Key sensitivities identified along surveyed settlements. May not be fully comprehensive.
Source: ERM Social Field Survey (2018)

Figure 4.3 Land Use in the Study Area



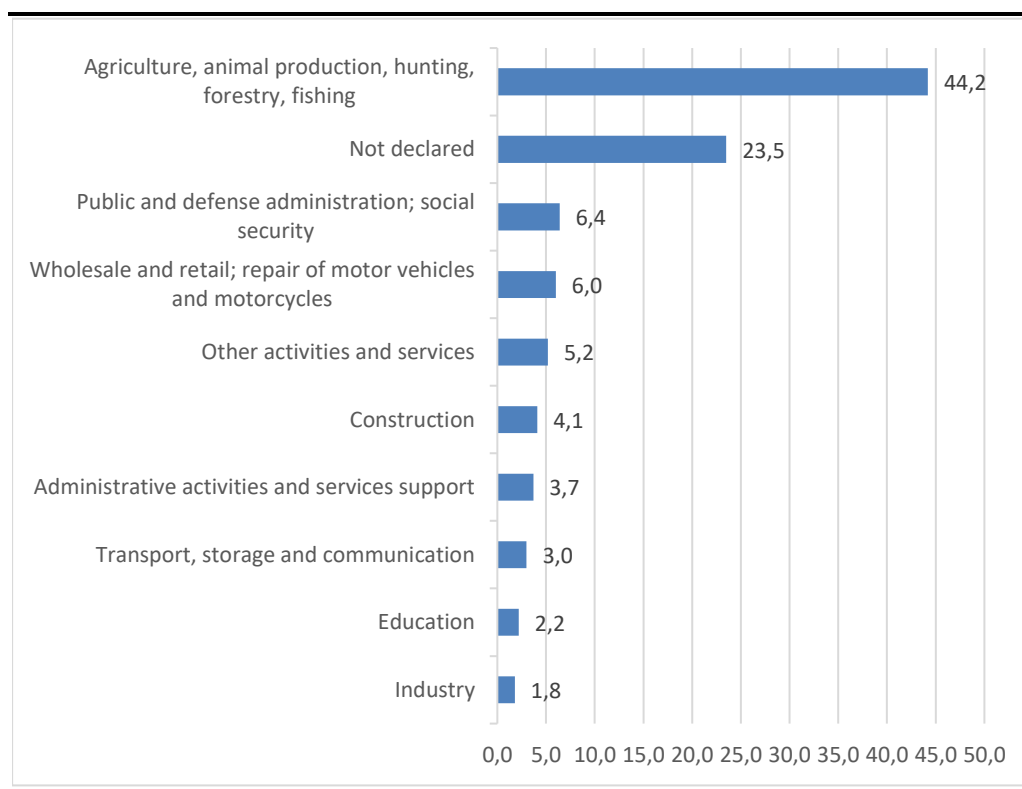
Source: ERM 2018

4.6 ECONOMY AND EMPLOYMENT

4.6.1 Employment

The primary sources /sectors of employment in the municipalities of the Study Area follow the national profile, with the predominance of the agriculture sector and related activities (ie forestry, hunting, animal husbandry, and fishing). As shown in *Figure 4.4* below, 44.2% of employment at national level is related to agriculture.

Figure 4.4 *Employment by Main Activity in Angola (2014)*



Source: 2014 Census (Translated)

Lack of employment was one of the main complaints and challenges identified by interviewees together with access to water, health and education services. This is likely a reflection of the desire for individuals to gain employment beyond subsistence agriculture. There is high expectation from local authorities and community members that projects such as the Lauca-Bita transmission line will create local jobs.

Informal Employment

The informal sector is an important source of employment for the population in Angola and most employment in peri-urban areas is in the informal sector. This sector include domestic work, wholesale and retail commerce, and primary production. Some activities appear to be strongly gendered; typically, female sectors include food manufacturing, services and trade.

Street vending is an important part of informal employment and of urban livelihoods. Street vendors offer a wide range of goods and services, and were mostly found along the Study Area in the municipalities of Viana (Mateia and Hanga Calumbo settlements) and Belas (Bita Ambriz settlement), and in the peri-urban areas of the municipality of Cambambe (Tari, Wala and Morro 50 settlements).

Informal employment is usually referred to *biscatos* (see more in the following section). *Biscatos* include painting, mechanics, smiting, wood and construction work, and agricultural labour. These types of economic activity were not considered 'employment' by the people interviewed during the survey, as for them the word '*employment*' implies a steady source of income.

4.7 INCOME AND LIVELIHOODS

4.7.1 Overview

Agriculture plays an important economic role in this region, especially in the area nearby Lauca (eastern portion) and the central section of the transmission line route, with agricultural production being used mainly for household nutrition. Beyond subsistence agriculture, the main economic activities along the Study Area can be divided into the three different geographic sections as follows, and further discussed in *Section 4.7.3*.

- *Closer to Lauca* in the eastern part, in the municipality of Cambambe, the main economic activities consist of commercialization of agricultural production surplus (e.g. cassava) and of firewood and charcoal; informal temporary jobs (*biscatos*), and small scale trading. Food processing activities are limited and consist primarily in transforming cassava or maize into a powder to make "*kissangua*", a local drink.
- *In the central section*, in the municipality of Icolo e Bengo, there is commercialization of agricultural production surplus (eg. maize, cassava, and sweet potato), complemented by sales of domestic goods; informal temporary jobs, and small scale trading. There is also occasional commercialization of fish and goats.
- *West of Catete commune* (Icolo e Bengo municipality) toward the municipalities of Viana and Belas, job opportunities, in particular temporary jobs, are more available. Such jobs include work on nearby farms, construction related work and cleaning services.

4.7.2 Income

It is estimated that 36.6% of Angolans lived below the poverty line (US\$1.9 per day) in 2008 and more than half of the population live on less than US\$3.2 per

day.⁽¹⁾ The UNDP Multidimensional Poverty Index for Angola in 2015-2016 reported that 30.1% of Angolans lived with less than US\$1.9 per day.⁽²⁾ This suggests a steady decrease in severe poverty levels. This context of low income was observed throughout the settlements visited in the four municipalities (Cambambe, Icolo e Bengo, Viana, and Belas).

4.7.3 *Main Livelihood Activities*

The majority of the settlements surveyed reported that subsistence agriculture (including animal husbandry) is the primary livelihood activity. In addition to agriculture, other livelihood activities reported are:

- fishing;
- hunting;
- forestry (baobab, firewood); and
- informal trade and *biscatos*

As described in *Table 4.7*, all of the surveyed settlements in Cambambe and Icolo e Bengo municipalities reported subsistence agriculture as their primary livelihood activity. In the peri-urban areas of Viana and Belas municipalities, all settlements except for Bitá-Ambriz similarly reported subsistence agriculture as their primary livelihood. For Bitá-Ambriz the primary livelihood was reported to be informal trade and *biscatos*.

Household food consumption is usually dependent on a combination of agriculture, hunting and fishing depending on season and availability of resources. Complementary goods such as salt and oil are bought with money from informal trade and *biscatos* (temporary jobs), and sale of forestry products (e.g. baobab, wood and charcoal).

Table 4.7 *Primary and Secondary Activities in the Settlements of the Study Area*

Municipality	Settlement	Primary Livelihood	Secondary Livelihood	Comments
<i>Cuanza Norte Province</i>				
Cambambe	Nhangue ya Pepe	Agriculture	Fishing, forestry	Mainly subsistence focused on self-consumption with any surplus of agricultural produce commercialized.
	Dumbo ya Pepe	Agriculture	Fishing, forestry	
	Quissuba	Agriculture	Hunting, fishing, forestry	
	Aldeia Lucapa	Agriculture	n/a	
	Muchau	Agriculture and hunting	<i>Biscatos</i>	
	Quitendele	Agriculture	Hunting, forestry	

(1) At 2011 international prices. BTI 2018 Country Report: Angola. Access: August 2018. Available at <http://www.bti-project.org>

(2) UNDP Human Development Report. Available at <http://hdr.undp.org/en/composite/MPI>.

Municipality	Settlement	Primary Livelihood	Secondary Livelihood	Comments
	Zenza do Itombe	Local commerce and agriculture	<i>Biscatos</i> (construction work)	
Luanda province				
Icolo e Bengo	Sagrada Esperança	Agriculture	Hunting, fishing, forestry,	Subsistence and commercialization of agriculture produce along the main road. Some farmers organized in small cooperatives. Most of the produce is commercialized (sold) at the KM 30 market (*)
	Mazozo	Agriculture	Fishing, forestry	
	Morro 50	Agriculture	Informal business, forestry, hunting	
	Tari	Agriculture	Informal trade, forestry, hunting	
	Koba	Agriculture	Informal trade, forestry, hunting	
	Wala	Agriculture	Informal trade, forestry, fishing	
	Ngolome	Agriculture	n/a	
Viana	Hanga Calumbo	Agriculture	Forestry	Subsistence agriculture is the main livelihood.
	Mbanza Calumbo II	Agriculture		Subsistence agriculture is the main livelihood. Farmers organized in small cooperative.
	Mateia	Agriculture	<i>Biscatos</i> (farming, blacksmithing), formal jobs in the public sector	Subsistence agriculture is the main livelihood. Formal jobs and informal trading are also important livelihoods.
Belas	Bitá Ambriz	Informal trade	<i>Biscatos</i> (woodwork, blacksmithing, farming, mechanics)	Small vendors at <i>Praça Progresso</i>

Notes: (*) KM 30 is the name of the main market in the area.

Source: ERM Social Fieldwork (2018)

4.7.4

Agriculture

Agriculture production and commercialisation

The agricultural activities in the surveyed settlements can be broadly characterised into three groups:

- *Subsistence agriculture (self-consumption)* with occasional commercialization of surplus, most common in the eastern and central portions of the line in the settlements closer to Lauca Dam, in the municipality of Cambambe, and in the eastern part of Icolo e Bengo municipality.
- *Agriculture for subsistence (self-consumption) and income generation (commercialization)*, most common in the central section of the transmission line route, in the western part of Cambambe municipality and settlements closer to Catete commune, in the municipality of Icolo e Bengo.

- *Agriculture as a customary practice* where the producer does not rely on the produce for food consumption or income generation.

Agriculture for self-consumption with occasional commercialization of surplus was identified in three settlements in the municipality of Cambambe (Nhangue Ya Pepe, Dumbo Ya Pepe, and Quissuba). In these settlements, agriculture production is the main source of food for the community, and there is rarely any surplus for commercialization. These settlements are the most vulnerable in terms of food security. In the municipalities of Icolo e Bengo (Tari, Wala and Morro 50) and Viana (Hanga Calumbo) subsistence agriculture was reportedly a complementary food source as well as complementary source of income.

Subsistence agriculture and commercialization was identified in six settlements in the Study Area, four of which are organized into cooperatives: Muchau (Cambambe municipality), Mazozo and Ngolome (Icolo e Bengo municipality), and Mbanza Calumbo II (Viana municipality). The produce is sold by the side of the main roads or in local markets and are transported by private vehicles and / or taxi.

In the peri-urban areas of Hanga Calumbo (Viana municipality) and Bitá Ambriz (Belas municipality), agriculture is often undertaken as a customary practice, and is not necessarily an important source of income or food for the family. In Bitá Ambriz, for example, the plots are farmed by elder women known as *mamas* (mothers) who live with their families in the city and, since they are used to work the land, they maintain farming plots of their own or work on other people's plots.

Crops

The main seasonal crops identified along the surveyed settlements are cassava, beans, sweet potato, peanuts, and maize. There are also permanent crops (mainly fruit trees) including mango, lime, papaya, cashew and banana. All crops are for self-consumption and commercialization (in some settlements, see above, they are commercialized only if there are surpluses). In the settlement of Koba (Icolo e Bengo municipality), maize is produced to feed chickens at the nearby chicken farm.

Table 4.8 below lists the main crops reported in each settlement surveyed and *Figure 4.5* presents photos of some of the plots farmed within the Study Area. In addition, *Figure 4.6* shows the potential areas where areas of fruit trees have been identified based on the information collected during the field survey (see *Table 4.8*) and on satellite imagery observation.

Based on Google Earth, the proportion of crop trees along the OHTL RoW seems to be sparsely spread out as shown in *Figure 4.6*. Note that the classification of the trees as crop trees in the figure is only approximate and will be confirmed further during the RAP socioeconomic field surveys.

Some crop trees have also been identified in areas potentially cultivated by the settlements of Cassoalala and Nova Cassoalala both located outside the 500 m corridor of the Study Area. This will be confirmed during the RCAP field surveys.

Table 4.8 *Main Crops Reported in the Settlements of the Study Area*

Municipality	Settlement	Seasonal Crops	Crop Trees
Cambambe	Nhangue ya Pepe	Cassava, beans, sweet potato, maize, yam, kale, onion	None reported
	Dumbo ya Pepe	Cassava, beans, sweet potato, yam, maize, kale, onion, tomato	Mango, cashew, papaya
	Quissuba (*)	Cassava, peanuts, maize, beans, sweet potato, kale, tomato, onion, passionfruit	Orange, mango, papaya, cashew
	Aldeia Lucapa	(not available)	(not available)
	Muchau	cassava, sugar cane, sweet potato, carrot, kale, onion, passionfruit	Lime, banana,
	Quitendele	Cassava, sweet potato, corn	Various fruits
	Zenza do itombe(*)	sweet potato	Lime, banana, orange, tangerine,
Icolo e Bengo	Sagrada Esperança (*)	Cassava, maize, sweet potato, peanuts,	Banana, papaya
	Mazozo(*)	Cassava, beans, sweet potato, yam, maize, kale, onion, tomato, cashew	Mango, cashew, papaya
	Koba	Cassava, corn	None reported
	Morro 50	Cassava, peanut, maize	None reported
	Tari	Maize, sweet potato, tomato, kale, cassava, <i>quissanga</i>	None reported
	Wala	Sweet potato, beans, pumpkin, tomato, pepper, kale, cassava, maize, <i>quissanga</i>	None reported
	Ngolome(*)	Tomato, kale, cassava, sugar cane	Banana
Viana	Hanga Calumbo	Cassava, maize, sweet potato	Mango, cashew
	Mbanza Calumbo II	Cassava, maize, sweet potato, beans	None reported
	Mateia	Cassava, aubergine, sweet potato, passionfruit, maize	Banana
Belas	Bitá Ambriz	Not applicable – agriculture is a customary practice and not the primary source of food or income.	

Notes:

- No information was collected during the field survey for Aldeia Lucapa.
- Settlements marked with an asterisk (*) refer to settlements that have reported cultivating crop trees during the field survey but whose crop tree areas could not be identified inside the OHTL RoW using Google Earth. The location of these crop tree areas will be confirmed during the RAPS field surveys.
- Papaya trees do not tend to exceed 4 m in height and are therefore not exposed to the same restrictions as other trees.

Source: ERM Social Field Work (2018)

Figure 4.5 Farming Activities in the Study Area

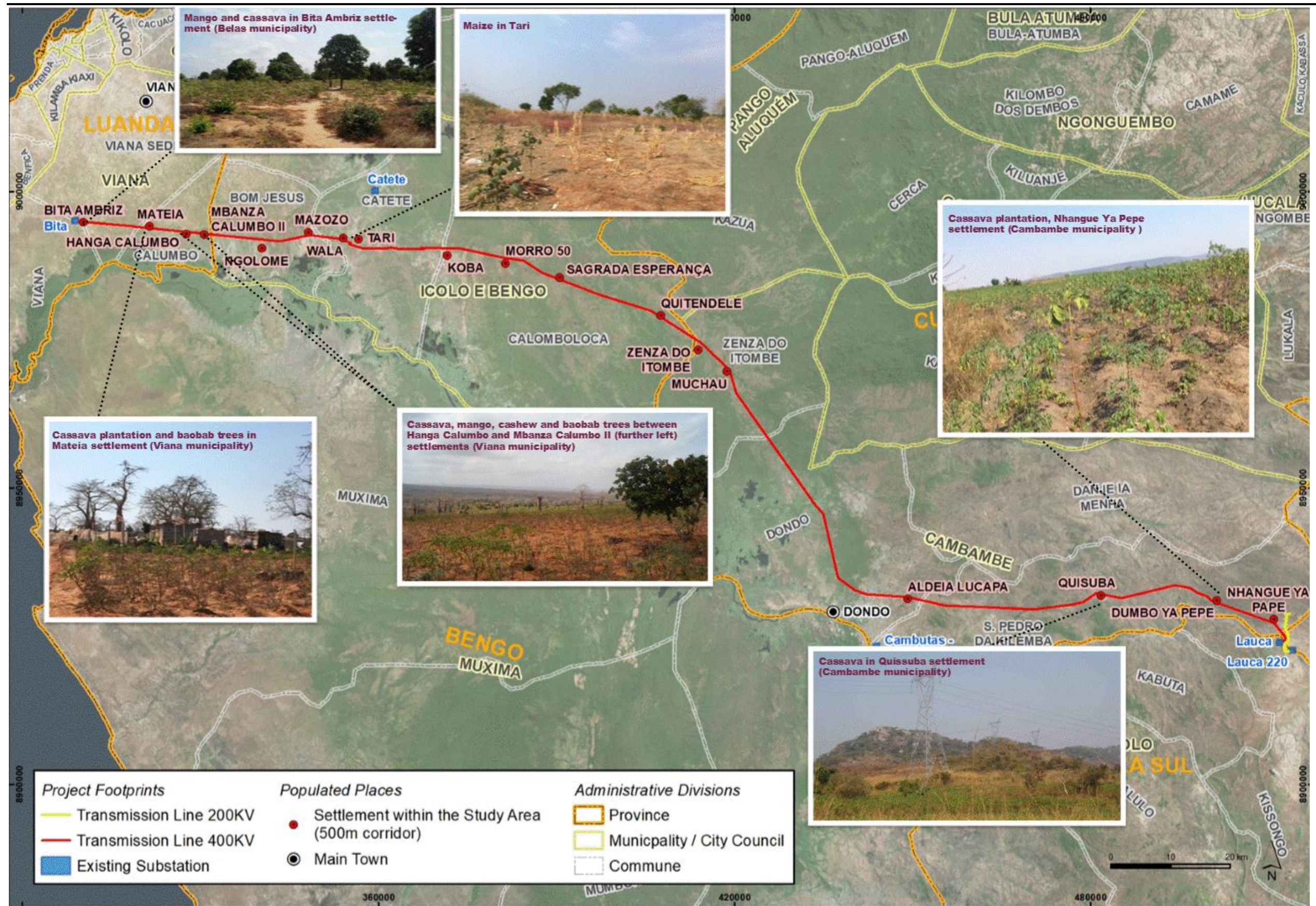
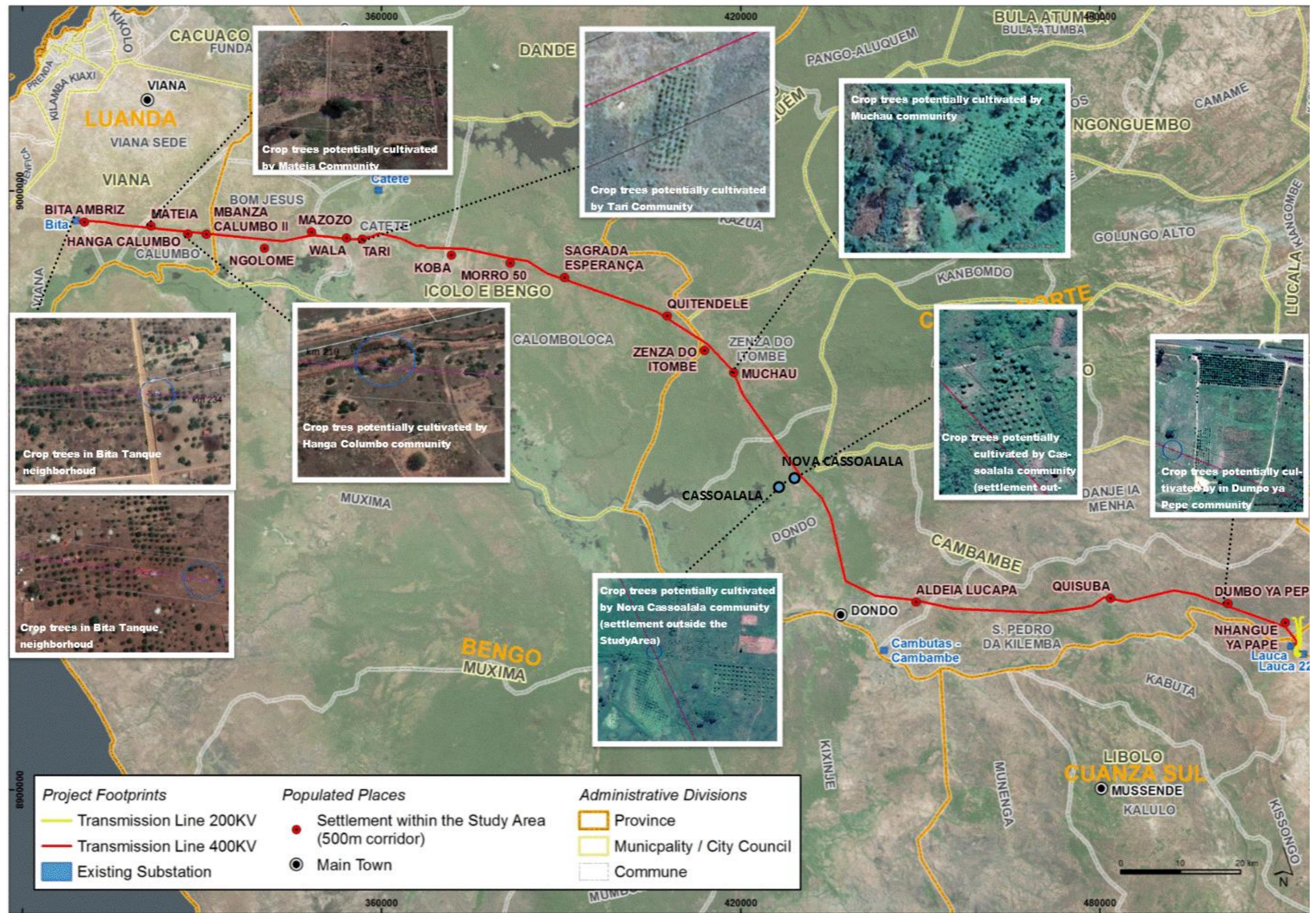


Figure 4.6 Potential Areas of Crop Trees along the RoW



Access to Land

Most surveyed settlements indicated access to farming land through the *soba* or community coordinator. The average size of a household in the surveyed settlement is six persons (seven in Cuanza Norte and 4.7 in Luanda). In rural areas, all households have access to one plot determined by the *soba* which is transferred through inheritance; in case the land holder wants to transfer the land to a third person (not family) she/he needs to ask permission from the *soba*.

The average parcel size was reported to be less than one hectare, although it can vary according to land availability.⁽¹⁾ Households may share the use of different plots to grow different crops, using plots in different areas that have the characteristics required for each type of crop (e.g. soil type, water availability etc.). This practice is often encouraged by the *soba*. When shared, the parcel continues to be 'owned' only by the household that was previously defined by the *soba* as right holder; shared use does not imply shared ownership.

When a particular plot is no longer productive, the land holder will seek an alternative parcel from the *soba*. Regular land rotation is not a common practice and households usually farm in the same plot for around six years, depending on how fast the soil is depleted.

Roles and Responsibilities

Both men and women work the land with women being predominantly responsible for the activity as men are also involved in hunting, fishing, baobab harvesting, and other informal sources of income when available.

Seasonality

Although farming is practised all year round, the rainy season, from September-October to March, is the peak season for agricultural activity. Land preparation starts in late August – early September in the municipalities of Cuanza Norte province (ie Cambambe), and in October in the municipalities of Luanda Province (i.e. Ibolo e Bengo, Viana, and Belas). The types of crops that subsistence farmers choose to cultivate is not always driven by the best use of the land, but is rather related to other aspects such as manpower, seed availability, knowledge, market, etc. Crop harvesting time depends on the crops. Some can be harvested in two to three months while others need six months. In the case of cassava, production is highest 18 to 20 months after planting. Fruit trees will take years to produce fruit and reach maturity.

(1) Average parcel size estimated based on feedback received from community sobas or coordinators and land users interviewed. This estimate is also consistent with observations from similar projects in West African countries.

Challenges

The main challenges related to agriculture in the surveyed settlements are related to sufficiency for subsistence, not enough financial resources to invest in tools that could improve productivity, fertility of the soil and diseases (especially in casaba plantations). In addition, in Sagrada Esperança (Icolo e Bengo municipality), it was reported that elephants destroy great parts of the production during the harvesting period of January to April.

Where production is aimed at commercialization, the main challenge is access to markets due to transportation. Public transportation is non-existent in the surveyed area and transportation costs are high directly impacting the profitability of agricultural goods.

4.7.5 *Animal Husbandry*

Animal husbandry along the surveyed settlements consists mainly of chicken, goats, pork and ducks for subsistence. Most families in rural areas have animals that can free to roam around settlements. Goats are also often seen along the main roads.

The average number of animals per household varies among and within the settlements surveyed in the Study Area. This variation is mainly due to the availability of other food sources (i.e. when there isn't enough crop production for consumption, a higher number of animals are slaughtered).

There are a few chicken farms along the Project line located nearby Koba and Ngolome, both in the municipality of Icolo e Bengo. These farms are not managed by residents of the settlements surveyed.

4.7.6 *Fishing*

Fishing was reported as one of the livelihood activities in six settlements: Nhangue Ya Pepe, Dumbo Ya Pepe and Quissuba (Cambambe), and Sagrada Esperança, Mazozo and Wala (Icolo e Bengo). Although, fishing is an important source of food, agriculture remains the primary livelihood in these settlements.

Only the men fish and the catch is mostly eaten in the home. Although fishing is performed all year round, the main season is from September to December and the main species are tilapia and catfish.

In Quissuba settlement (Cambambe municipality), men go fishing in the Cuanza river for a 3-4 days at time, during which the women are responsible for all farming and animal husbandry activities.

4.7.7

Forest Products and Hunting

Forest products

The harvest of baobab fruit, locally called *múcuca*, is practised extensively along the transmission line route, as well as across the country. These trees mostly grow in savannah and scrubland vegetation. Despite being a common practice, most settlements do not identify it as a main source of income. This could be because it is considered such an intrinsic part of Angola's rural culture that is seen as an economic activity.

Baobab harvesting is performed by men only, and is conducted all year round. The fruit is used for self-consumption in many forms such as fruit, juice and milk, and is commercialized in sacks of 20 or 50kg. The price of baobab varies according to the location and final consumer. In the settlement of Quissuba, for example, a sack of 20kg is sold to people from the settlement or people who drive through the settlement at an average of 2 500 kwanzas. Close to peri-urban areas, a sack of 50kg cost approximately 12 000 kwanzas⁽¹⁾ (e.g. in Mbanza Calumbo II) and can reach higher prices depending on the demand from urban centres where the fruit is used mainly for juice production.

Other forest products are wood and charcoal, both used as important sources of energy, as further detailed in *Section 4.8.5* (Energy and Electricity).

Hunting

Hunting was mentioned in the settlements of Dumbo Ya Pepe, Quissuba, Aldeia Lucapa, Muchau (Cambambe municipality), Sagrada Esperança, Morro 50 and Tari (Icolo e Bengo municipality), as a complementary source of food, and is mostly for household consumption.

It is an activity performed by men only and is in decline due to two main factors: (i) the decrease in number of animals as a result of illegal hunting and methods such as fires that are used; and (ii) it has historically been performed by the elders and has not been taken as a traditional activity by the youth. In Nhangue ya Pepe settlement, it was reported that hunting is no longer performed because of the passing away of all men who used to do it.

The main species mentioned were blue duiker (*seixa*), warthog (*facocero*), bushbuck (*golungo*), cane rat (*paca*), wild cat (*gato do mato*), impala (*gazela*), monkeys, rabbits.

4.7.8

Other

The households in the Study Area generally rely on subsistence activities mentioned above. There are, however, other sources of income that include small vendors and temporary jobs, known as *biscatos*. Formal employment is

(1) Approximately US\$42.

uncommon and unemployment was one of the main complaints/challenges cited during the data collection.

Only in Bitá Ambriz (Belas municipality) were these other sources identified as primary activities. They were mentioned as secondary activities in the following settlements: Muchau and Zenza do Itombe (Cambambe municipality), Mazozo, Morro 50, Tari, Wala and Ngolome (Icolo e Bengo municipality), Hanga Calumbo and Mateia (Viana municipality).

Small informal trade (or small vendors) of garments, groceries and school supplies were identified in settlements located in peri-urban areas: Wala (Icolo e Bengo municipality), Mateia and Hanga Calumbo (Viana municipality), and Bitá Ambriz (Belas municipality). These activities are usually performed by women who buy merchandise in bulk to sell locally or in nearby markets.

Biscatos are temporary jobs, usually performed by men, and consist of painting, mechanics, smithing, wood and construction work, and farm labouring.

4.8 INFRASTRUCTURE AND SERVICES

4.8.1 Healthcare

Data from the National Institute of Statistics (INE) indicates that a greater concentration of health infrastructure and services is available in urban areas, where the general perception is that the distance to the closest health centre varies between 0 and 2 km. In rural areas this distance is sometimes greater than 10 km.

Table 4.9 lists access to health facilities across the surveyed settlements. As shown, Zenza do Itombe (Cambambe municipality) and Mazozo (Icolo e Bengo municipality) are the only settlements surveyed that have a health centre in the settlement, but these reported an insufficient number of staff. The settlement of Nhangue Ya Pepe has a private pharmacy. The settlements of Sagrada Esperança (Icolo e Bengo municipality) and Dumbo Ya Pepe (Cambambe municipality) have the farthest distance to access health services within the Study Area, 15km and 14km respectively.

Table 4.9 *Distribution of health facilities along the Study Area*

Municipality	Settlement	Health Centre (location and/or distance)	Public Hospital (location and/or distance)
<i>Cuanza Norte Province</i>			
Cambambe	Nhangue Ya Pepe	Ngola Ndala, 1km	Dondo
	Dumbo Ya Pepe	Ngola Ndala, 14km	Dondo
	Quissuba	São Pedro da Quilemba	São Pedro da Quilemba, 7km
	Aldeia Lucapa	Dondo	Dondo
	Muchau	Dondo	Dondo
	Quitendele	Maria Tereza, 6 km	Dondo

Municipality	Settlement	Health Centre (location and/or distance)	Public Hospital (location and/or distance)
	Zenza do Itombe	Lucala Demining Unit	Dondo or Catete
Luanda Province			
Icolo e Bengo	Sagrada Esperança	Calomboloca, 15km	Catete, 30km
	Mazozo	In the settlement	Catete, 7km
	Koba	500m from the settlement	Calomboloca
	Morro 50		Calomboloca
	Tari		Catete, 3km
	Wala		Catete, 2km
Viana	Ngolome	In the settlement	
	Hanga Calumbo	Calumbo, 4km or Zango 5km	
	Mbanza Calumbo II	Calumbo 4km	
	Mateia	Zango, 5km	
Belas	Bitá Ambriz	Bitá Tanque, 2km or Kilamba, 5km	

Source: ERM Social Field Survey (2018)

4.8.2 Education Infrastructure

Most of the surveyed settlements (75%) have local education facilities. In two of them (Muchau, municipality of Cambambe; and Hanga Calumbo, municipality of Viana), only private education is offered. *Table 4.10* presents the number and type of education facilities in the four surveyed municipalities along with the location of the schools accessed by each settlement and the highest grades offered.

Table 4.10 Education Facilities in the Study Area

Municipality	Education Facilities in the Municipality	Settlement	Education facility (location and/or distance)	Highest grade offered
Cuanza Norte Province				
Cambambe	1 Secondary school 29 Primary schools	Nhangue Ya Pepe	In the settlement	6 th grade
		Dumbo Ya Pepe	Nhangue Ya Pepe, 14km	6 th grade
		Quissuba	Muquila, 1.5km or Sao Pedro da Quilemba, 7km	6 th grade and 12 th grade
		Aldeia Lucapa	In the settlement	n/a
		Muchau	In the settlement *	n/a
		Quitendele	María Teresa, 7 km	n/a
		Zenza do Itombe	In the settlement	12 th grade
Luanda Province				
Icolo e Bengo	62 schools (various grades - primary and secondary)	Sagrada Esperança	In the settlement, Cassala, Calomboloca or Catete	3 rd grade, 6 th grade, 12 th grade
		Mazozo	In the settlement, Cabiri or Catete	4 th grade, 12 th grade
		Koba	In the settlement	6 th grade

Municipality	Education Facilities in the Municipality	Settlement	Education facility (location and/or distance)	Highest grade offered
<i>Cuanza Norte Province</i>				
		Morro 50	In the settlement	6 th grade
		Tari	In the settlement or Catete	6 th grade, 12 th grade
		Wala	In the settlement or Catete	6 th grade, 12 th grade
		Ngolome	In the settlement or Bom Jesus	6 th grade, 12 th grade
Viana	Various schools with mixed grades, secondary vocational tracks, pre-college, 3 universities and institutes.	Hanga Calumbo	In the settlement*, Calumbo or Zango	2 nd grade, 12 th grade
		Mbanza Calumbo II	Mbanza Calumbo (1.5km)	6 th grade
		Mateia	In the settlement or Zango	12 th grade
Belas	81 schools (various grades - primary and secondary)	Bitá Ambriz	Bitá Tanque, 2km or Kilamba, 5km	6 th grade, 12 th grade

Notes: (*) only private education available, known as 'Explicação'.

Source: ERM Social Field Survey (2018)

4.8.3 Water, Sanitation and Waste Management

Lack of infrastructure, poor maintenance, and long dry seasons are the main difficulties related to water access. Most of the settlements surveyed listed access to clean water as one of three main challenges faced by local households. Within the municipalities of the Study Area, there is only one water treatment plant in Belas (Luanda province), the *Estação de Tratamento de Águas (ETA) do Kikuxi*.

In Cambambe municipality, the main sources of water are rivers, streams, and lagoons, while in the municipalities of Viana and Belas water is mainly supplied through water trucks, public pipes, and community water points. In Icolo e Bengo municipality water sources are mixed. None of the settlements surveyed have in-house running water.

No sanitation or sewage system were present in any of the settlements surveyed, and most households did not have toilets. Few toilets were identified along the Study Area, either in the *soba's* house, or in public areas. In peri-urban areas, where some settlements had toilets serviced by sewage, these drain to septic tanks.

As for waste management, most households burn or bury their waste. In the settlements of Tari (Icolo e Bengo municipality) and Mateia (Viana municipality), there are dump sites or waste containers but waste is still thrown in the open and / or burnt. In some cases, waste is also thrown into nearby waterbodies.

Housing

The houses in the Study Area are divided into two types of use: residential and *casas de lavra*, the latter are small shacks used by farmers as shelters and storage, and are usually located next to farming land.

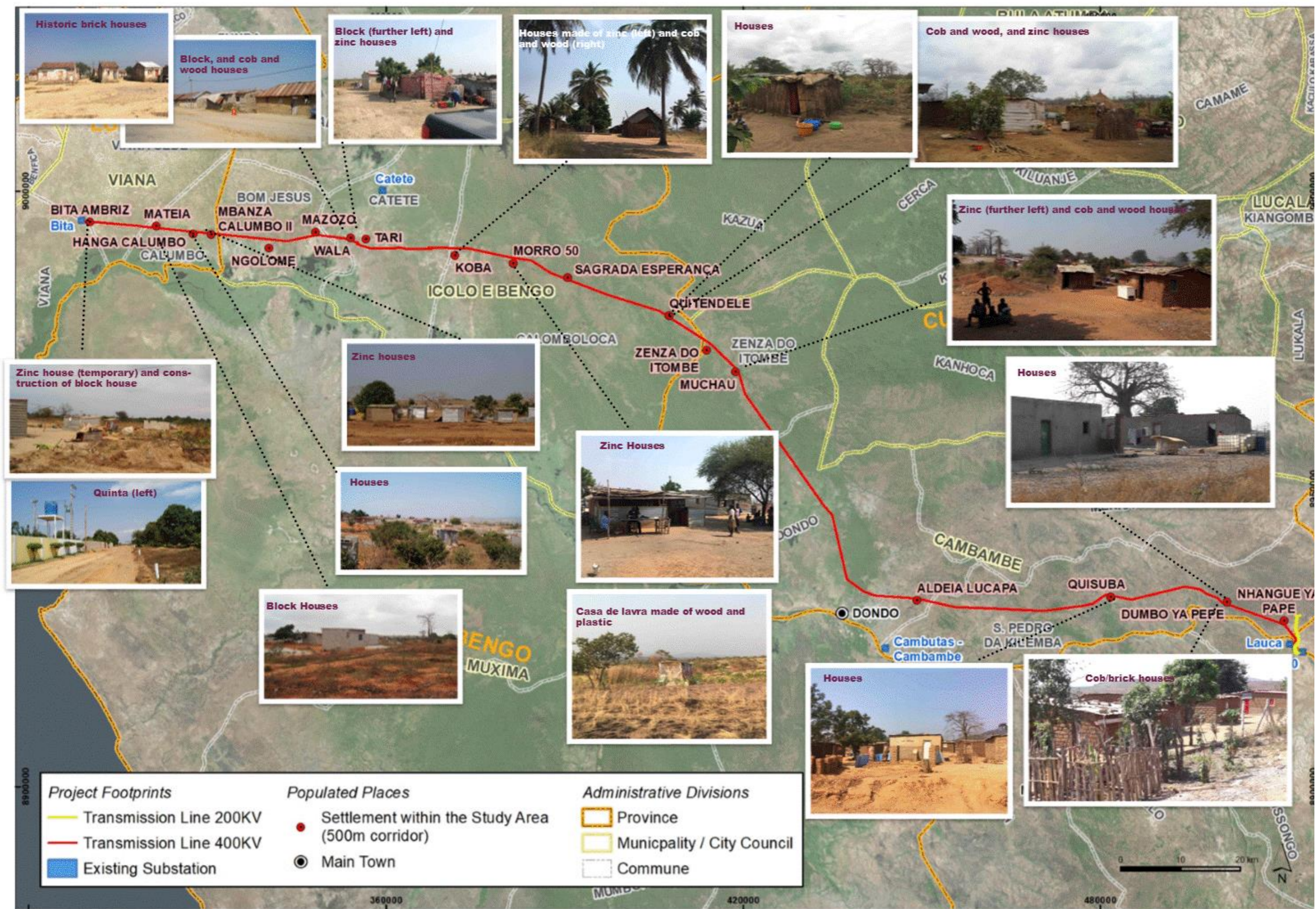
Some of the residential buildings identified in the area are potentially weekend houses (*quintas*) or secondary residences as opposed to primary residences. All of these weekend houses have been identified in the western portion of the line, mostly in the municipality of Belas. Based on feedback collected during the ESIA field survey, weekend houses are believed to belong to individuals residing in urban areas and who use these houses on weekends to work the land. Note that this identification requires further confirmation during the RCAP socioeconomic field surveys.

The average size of residential buildings along the surveyed area is 20 m² divided into one bedroom and one living room. The kitchen is generally located outside the house and most do not have toilet facilities. Five houses with toilets were identified in Sagrada Esperança settlement in the municipality of Icolo e Bengo.

Most houses are made of cob and wood (*pau-a-pique*) and zinc sheets, with fewer being built with brick (red) and block (grey). Zinc sheets are the main material used for roofs, and rocks and tyres are placed on top to keep them from being blown off. Older rural settlements, such as Nhangue Ya Pepe and Quissuba (both in Cambambe municipality) tend to have more houses made of cob and wood; however cob and wood houses were found throughout the surveyed settlements. Although brick and block houses were found in most settlements, their use is predominant in established peri-urban settlements such as Hanga Calumbo and Mateia (Viana municipality).

In addition to being used for *casas de lavra*, zinc is the main material for temporary houses. In Bitá Ambriz (Belas municipality), families live in zinc houses while saving money to buy construction material to build their permanent houses. Zinc houses are also used to indicate that a particular piece of land is already taken.

Figure 4.7 Housing in the Study Area



The presence of zinc houses may also indicate that the population has been relocated previously. This is the case in Mbanza Calumbo II (Viana municipality) which was recently formed due to the previous displacement of households from the area where the national stadium was built. The families were reportedly given zinc sheets and driven to the area that is now Mbanza Calumbo II settlement.

4.8.5 *Energy and Electricity*

Among the settlements of the Study Area, more than half of the settlements do not have access to electricity. Those that do are mostly located in the western portion of the transmission line route. Specifically, Mazozo, Tari, Wala and Ngolome (Icolo e Bengo municipality) are connected to the electricity grid, while Mateia (Viana municipality) and Bita Ambriz (Belas municipality) have access to the grid but most households are not yet connected. Zenza do Itombe (Cambambe municipality), located in the centre portion, and is also connected to the grid.

In the localities without access to electricity, lighting sources are candles, torches, and flashlights. Few generators running on diesel exist, however the cost of fuel is a challenge to using generators on a regular basis.

For cooking, households rely on firewood and/or butane gas. Wood is usually harvested in the settlement's vicinities, and charcoal is produced locally. Butane gas is also used but not as widespread as wood and charcoal due to costs.

Charcoal and wood are the main sources of energy for cooking in Cambambe settlements, while butane is the main source in the municipalities of Icolo e Bengo, Viana, and Belas. The use of butane for cooking is directly related to its price, which is defined according to availability and distance from a large settlement, meaning that it is more expensive in areas located further away from urban centres as transportation costs are added to the final price.

4.8.6 *Roads and Transport*

The road network is the primary transport system. In peri-urban areas it is used by private vehicles and serviced by mini bus taxi. Outside of the peri-urban areas there is little public transport and individuals either walk or rely on private taxis (vans), to reach larger settlements or often hitchhike. Taxis (and buses, where available) are considered expensive and not reliable, and are mostly used only in case of medical emergencies.

The transmission line route runs parallel to the main road, and most of the settlements in the Study Area are located along the road. Those located further away are connected by dirt roads.

Road conditions and lack of public transportation system are the main challenges cited related to access to services such as health and education, as well as access to employment opportunities.

4.9 VULNERABLE GROUPS

Vulnerability is related to the ability of individuals and groups to adapt to socioeconomic or bio-physical change. Vulnerable individuals and groups are therefore more susceptible to negative impacts or have a limited ability to take advantage of positive impacts. Vulnerability is a pre-existing status that is independent of the Project and may be reflected by an existing low level of access to key socio-economic or environmental resources or a lack of access to information and decision making.

In the Study Area, vulnerability has been identified as widespread and linked to the following factors:

- *Crop farmers, particularly households with especially low incomes and high land dependence for food security and income:* Low income households have fewer resources on which to rely and are less likely to have savings and / or access to alternative sources of income. Low income households can be found throughout the Study Area, and are prevalent in the rural settlements where agriculture is the primary livelihood activity and most of the produce is used for subsistence. In the municipality of Cambambe specifically (Nhangué Ya Pepe, Dumbo Ya Pepe, and Quissuba), agriculture production is the main source of food and is rarely sold. These settlements are therefore the most vulnerable in terms of food security. Households may also be reliant on very small agricultural land plots for a significant proportion of their subsistence / income generation and may be more disproportionately affected by any land take and resulting loss of income. This includes those households whose farming seasons are disrupted or who may lose fruit trees or ancillary agricultural structures such as “*casas de lavra*”.
- *Female and / or elderly or child headed households.* These households are likely to have fewer resources on which to rely and are less likely to have savings and / or access to alternative sources of income. They are also likely to have less access to information and decision making and may not understand or be able to exert their rights.
- *Households with disabled household members or high number of dependents.* Those who lack physical mobility or who have mental health issues may be vulnerable to changes and have more difficulties adapting to new contexts. With relation to the transmission line, displacement impacts related to restriction on land access or need to replace housing could be particularly challenging.

- *Households or settlements that have already been displaced.* Displacement directly affects the social and economic dynamics of a community. In the Study Area, the settlement of Mbanza Calumbo II, in Viana municipality, was recently formed due to the previous displacement of households. Further threat or actual displacement will be particularly difficult, including psychologically difficult in this area.

In the Study Area, most affected households will fall into the first category of vulnerability, i.e. they are crop farmers often with low incomes and high land dependence for food security and income. The resettlement process therefore needs to be developed to cater for this underlying high level of vulnerability. Certain households may be especially vulnerable, as they have other vulnerability characteristics that are identified above or other vulnerability characteristics become evident as the resettlement progresses.

4.10

CULTURAL HERITAGE

This section aims to identify archaeological and historical sites located along the Laúca – Bitá transmission line 1000 m corridor (500 m on each side), in particular along the Cuanza River in the areas of Laúca (Cacuso municipality), Calumbo (Viana municipality) and Bom Jesus (Icolo e Bengo municipality). Information provided is based on the review of secondary data from the Angolan National Archive, National Cultural Heritage Institute and other relevant bibliography such as Ervedosa’s archaeological chart (Ervedosa, 1980), along with primary data collected through engagement with local administration and site visits to preselected sites during the ESIA field survey (July 2018).

Based on the information gathered and more recent reports from the Ministry of Culture, it was possible to identify and characterise cultural heritage and archaeological sites located along the Cuanza River in the areas of Láuca and Calumbo-Bom Jesus. These sites are located further away from the proposed transmission line route and thus are unlikely to be affected by the proposed project. In total, in the three provinces, ten cultural heritage sites were identified as follows: ⁽¹⁾

- one cultural landscape site;
- two burial / funerary sites;
- two cultural and archaeological sites; and
- four inventoried cultural sites.

In rural communities, people place considerable importance on ancestral gravesites through which they express their relationship to the land, particularly where local chiefs (*sobas*) are buried. Based on the baseline assessment undertaken, no burial sites have been either observed or confirmed by the people interviewed to be within the 1000 m corridor of the

(1) the location of each of these sites was not verified during the socioeconomic survey.

transmission line. Also during fieldwork activities a variety of potentially locally valuable tangible cultural heritage structures were identified. However these are not located within the proposed transmission line route.

5.1 INTRODUCTION

This section addresses the likely physical and economic displacement impacts caused by acquisition of land inside the 60 m OHTL Right of Way (RoW) including classifying the types and extent of displacement and livelihood impacts based on the limited data collection that has been undertaken to date (see *Section 4*). The following impacts will need to be further understood and quantified through the asset survey inventory and household survey which will be undertaken as part of the Resettlement and Compensation Action Plan (RCAP) implementation (see *Section 7*). At this stage therefore, it is not possible to determine the number of land plots (agricultural, residential, or other) and households that will be affected. However, based on values reported by GAMEK for a different transmission line of similar voltage and length in the area, it can be anticipated that approximately 1 400 plots of land may be affected. This includes agricultural plots, as well as plots where residential and non-residential structures are located.

This section describes the following:

- impacts to physical resources including loss of assets such as housing and non-residential structures;
- impacts to natural resources including loss of access to livelihood resources such as agricultural plots, grazing and foraging land, crops and trees, and forested areas; and
- impacts to social resources including loss of access to social infrastructure and socio-cultural impacts.

5.2 IMPACTS TO PHYSICAL RESOURCES AND RELATED LIVELIHOODS

5.2.1 Overview

During construction and operation of the transmission line, a number of restrictions based on safety-related requirements will apply to houses and other structures located inside the 60 m OHTL RoW. These restrictions are summarized in *Table 5.1* below.

Table 5.1 *Summary of Restrictions to Physical Structures along the OHTL RoW during Construction and Operation*

Component	Construction restrictions	Operations restrictions
60 m OHTL Right of Way		

Component	Construction restrictions	Operations restrictions
Maintenance road 4 m wide (2 m on each side)	<ul style="list-style-type: none"> Removal of all houses and structures. 	<ul style="list-style-type: none"> No new houses/structures allowed
OHTL footprint corridor 20 m wide (10 m on each side) ⁽¹⁾	Removal of all houses and structures. ⁽²⁾	<ul style="list-style-type: none"> No construction of new houses or structures allowed.
Remaining OHTL RoW area (20m either side)	Houses and structures allowed as long as safety distances of 8m and 6m radius from the overhead conductors are respected for 400 kV and 220 kV respectively. ⁽³⁾	<ul style="list-style-type: none"> Houses and structures allowed but with the following clearances to overhead conductors: 8m for 400 kV; 6m to 220 kV.
Tower sites		
Temporary tower site working areas (average 40x50m per site)	<ul style="list-style-type: none"> Removal of houses and structures. 	<ul style="list-style-type: none"> No additional restrictions other than those stated above.
Permanent tower footprint (average 10x10m per site)	<ul style="list-style-type: none"> Included within the tower site working area (same restrictions apply) 	<ul style="list-style-type: none"> No structures allowed.

Note: The summary of restrictions to seasonal crops and trees is presented in a separate table in Section 5.3.1. The combined information on restrictions for physical structures and crops and trees is presented in Table 2.2 of the Project Description Section.

Source: Prepared by ERM based on NHID input (2018).

As discussed in Section 2.4 of the Project Description, in order to minimize the number of structures inside the 20 m OHTL footprint corridor for the construction of the transmission lines,⁽⁴⁾ NHID has updated the transmission line route incorporating re-routings at key locations as well as some minor path changes. The new transmission line has reduced the number of structures at risk of removal inside the 20 m OHTL footprint corridor from approximately 69 (for the 2017 route) to 29. ⁽⁵⁾

The use of the 29 remaining structures that will need to be removed cannot be specified using Google Earth images, however it can be assumed that these structures may include a mix of residential structures and non-residential structures such as farms, animal shelters, factories and commercial buildings / markets. Residential structures may also include weekend houses or *quintas*, which are secondary residences of individuals residing in urban areas and who use these houses on weekends to work the land. The location of the structures is presented in Figure 5.1 below. It should be noted however that although Project design information regarding the transmission line route is

(1) The width of the OHTL footprint corridor is not fixed as it varies based on the type of tower (suspension, multiple angle, etc.). Most common towers are suspension towers with a corridor of 19.6 m (i.e. Approximately 20 m).

(2) Removal of uninhabited structures will be conducted on a case by case basis and after careful assessment including on-site verification.

(3) Safety distance for buildings: 6m radius for the 220kv line, and 8m for the 400kv line.

(4) Constructions with distances to overhead conductors over 8 m high have not been identified at this stage inside the remaining portions of the 60 m OHTL RoW and therefore removal of structures will be limited to the 20 m OHTL footprint corridor. This will be examined in detailed by NHID engineers.

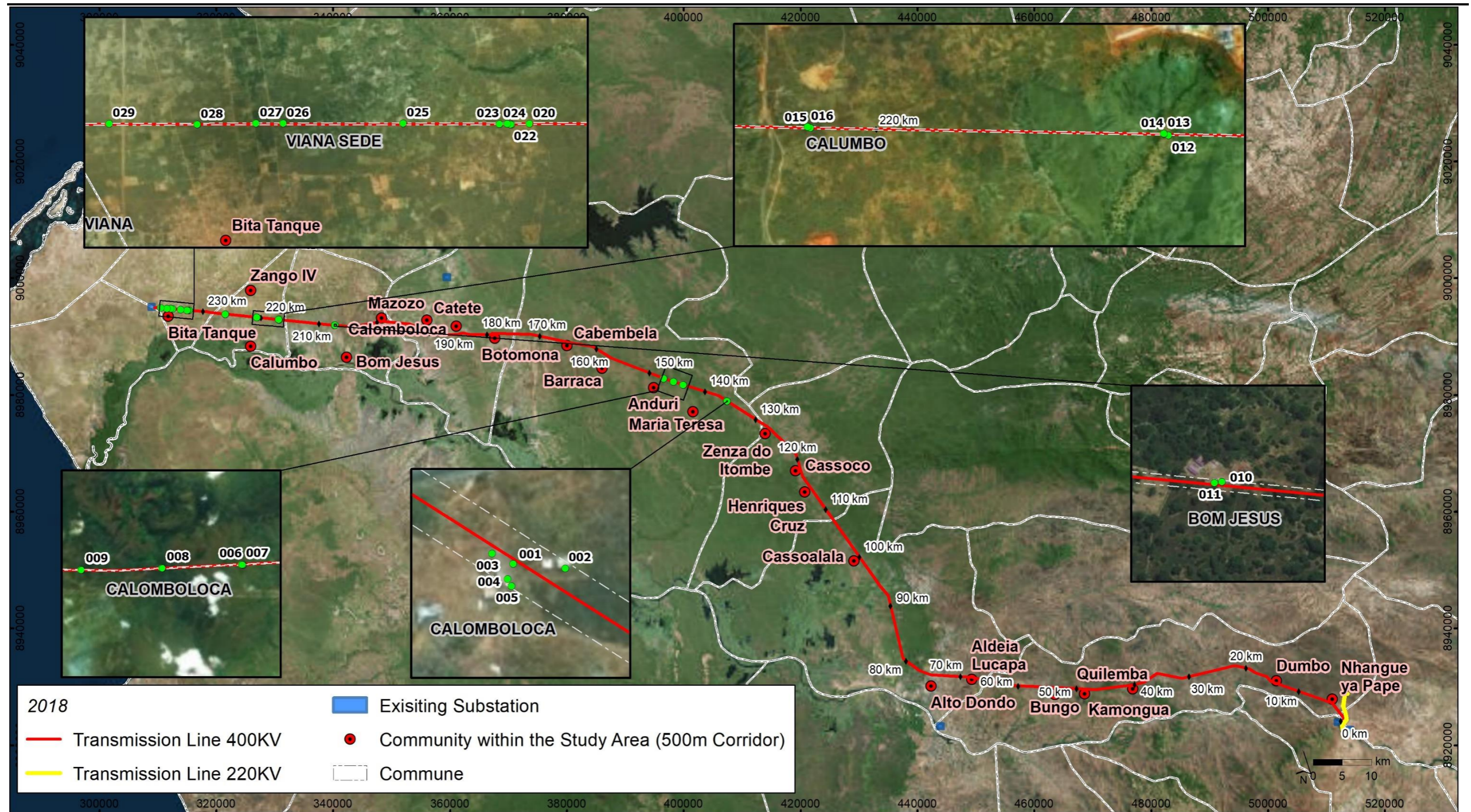
(5) This information is based on images from Google Earth which range between Q3/IQ4 2017 to End of 2018. In this regard the number of interferences will be confirmed and finalised by NHID during the topographic survey before the start of construction.

considered final at the time of writing, it remains subject to minimal changes resulting from the final topographic surveys (LIDAR). The final number of structures to be removed will therefore be confirmed at a later stage before the development and implementation of the RCAP Annexes following this RCAP and as described in *Section 7* on planning and implementation.

The categorization of these 29 remaining structures into different types of structures (residential and non-residential) is not possible at this stage based on Google Earth satellite imagery. This classification will be undertaken at a later stage by NHID during the LIDAR topographic survey. The next subsections provide a high-level analysis of impacts for each category of structure that may potentially be affected.

The full initial list of the 29 structures (proposed route) are presented in *Annex A* including detailed zooms of each interference.

Figure 5.1 Structures at Risk of Removal in the Study Area



Source: ERM 2019

5.2.2 *Loss of Dwellings*

Out of the 29 structures that will need to be removed, as stated above, it is expected that these will include residential structures, some of which may also be potential weekend houses (*quintas*) or secondary residences as opposed to primary residences. Based on feedback collected during the ESIA field survey, weekend houses are believed to belong to individuals residing in urban areas who use these houses on weekends to work the land.

In addition, based on observation during the ESIA field survey, primary residences may also be classified into temporary and permanent structures. Zinc is the main material for temporary houses although it is also used for permanent housing in some settlements. Families live in zinc houses while they save money to buy better quality construction material to build their permanent houses (see *Figure 5.2* below).

Figure 5.2 *Temporary Residential Structures*



Note: Left: Zinc house (temporary) and construction of block house, Bitá Ambriz (Belas).

Right: Zinc houses in Mbanza Calumbo II (Viana).

Source: ERM Field Survey, July 2018

The displacement will consist in the removal of individual structures rather than clusters. As such, GAMEK will seek to replace the lost residential land plots within the same settlements (in-fill resettlement), as *sobas* and community representatives reported that alternative land is available in the affected settlements. Given that households can relocate within existing settlements they should be able to continue to access the same livelihood resources, and no related economic displacement impacts are expected. However, it is noted that there may be circumstances where households decide to move location.

5.2.3 *Loss of Non-Residential Structures*

Loss of Ancillary Agricultural Infrastructure

The construction of the transmission line may also result in the displacement of farms and temporary ancillary structures on agricultural plots as part of the 29 structures identified. These may include small poultry houses and small farming structures referred to as "*casas de lavra*", which are small shacks used by farmers as shelters for animals and grain storage, and are usually located next to farming land.

Loss of Economic Structures and Related Livelihoods

In the event that factories are to be displaced, the owners and employees may experience a temporary loss of income and employment due to removal and relocation of these structures. Should the factories not be relocated close by, then workers may lose their employment. Lack of employment opportunities is an issue throughout the socioeconomic Study Area, so workers may struggle to find alternative employment in the local area.

Similarly, the loss of a local market, if this should be the case, will affect those that use it as a location of trading, and also as a space for social interaction.

5.2.4 *Depreciation of Land and Property Values*

Land in rural areas is mainly communal and falls under customary rights. This land is considered part of the “Public” domain in which land ownership rights are not transferrable (“non-conferrable”) and therefore communal land cannot be sold. As such, impacts from changes to land values post construction will not apply to rural areas along the transmission line route.

In contrast, changing land values in relation to peri-urban or urban land is more likely an issue as land in these areas may be rented or acquired through purchase. Potential impacts on the land values in peri-urban areas will be linked to the health and safety requirements restricting construction of new houses or buildings within the 60 m OHTL RoW.

Peri-urban areas in the Study Area are mostly located in the western portion of the line in the municipalities of Viana, Belas, and Icolo e Bengo where residential housing has been identified including a few weekend houses belonging to individuals residing in urban centres and using these houses on the weekends to cultivate the land. As stated above, access to land in these areas is mostly dependent on the land market. Building and development in these areas will be restricted which may affect long-term urban development planning at the municipality level. In the immediate future, building restrictions will affect local landowners in these municipalities as the value of their land might decrease. Residential areas inside the 60 m RoW represent approximately 0.3% (4.6 ha) of the total area inside the RoW. Residential land in peri-urban areas represents an even smaller area.

The purpose of this section is to flag the potential impact in relation to depreciation of land and property values. The final identification of private lands that are susceptible to depreciation will have to be identified on a case by case basis with the owners.

5.3

IMPACTS TO NATURAL RESOURCES AND RELATED LIVELIHOODS

5.3.1

Overview

During the construction and operation phases of the Project, local landowners and land users will experience a loss of agricultural land, a loss of crops and trees and a loss of access to communal natural resources as a result of the following Project land take and restrictions:

- *Land take requirements:*
 - During the construction phase (12-18 months), the anticipated maximum land take for the Project is approximately 230 ha (i.e. 568 acres). This corresponds to approximately 126 ha of land required for temporary tower site working areas (average 40mx50m per site), and the 101 ha for the 4 m maintenance road.
 - During the operational phase (up to 50 years) the anticipated maximum land take for the Project is 107.3 ha (i.e. 265 acres) including 6.3 ha for the permanent tower footprint areas (10x10m each), and 101 ha for the 4 m maintenance road.
- *Land use restrictions:*
 - Restrictions associated with the different Project components are summarized in *Table 5.2* below.

Table 5.2 *Summary of Restrictions to Agricultural Activities along the OHTL RoW during Construction and Operation*

Component	Construction restrictions	Operations restrictions
60 m OHTL Right of Way		
Maintenance road 4 m wide (2 m on each side)	<ul style="list-style-type: none"> • Land clearance and removal of all trees and crops. 	<ul style="list-style-type: none"> • No new trees or crops allowed.
OHTL footprint corridor 20 m wide (10 m on each side). ⁽¹⁾	<ul style="list-style-type: none"> • Restricted access for cultivation during the demining activities. • Removal of all trees. • Crops of up to 6-7m high are allowed. 	<ul style="list-style-type: none"> • No planting of new trees allowed, only vegetation/crops of up to 6-7 meters high.
Remaining OHTL RoW area (up to 40 m wide, i.e. 15-20m either side)	<ul style="list-style-type: none"> • Restricted access for cultivation during the demining activities. • Crops and trees allowed. • Minimum vegetation overhead clearance to the overhead conductors is 5m and 8m radius for 220 kV and 400 kV respectively. 	<ul style="list-style-type: none"> • Crops and trees allowed but with the following clearances to overhead conductors: 8m for 400 kV; 5m to 220 kV.
Tower sites		

(1) The width of the OHTL footprint corridor is not fixed as it varies based on the type of tower (suspension, multiple angle, etc.). Most common towers are suspension towers with a corridor of 19.6 m (i.e. Approximately 20 m).

Component	Construction restrictions	Operations restrictions
Temporary tower site working areas (average 40x50m per site)	Removal of trees and crops. ⁽¹⁾	<ul style="list-style-type: none"> No additional restrictions above those for the corridor.
Permanent tower footprint (average 10x10m per site)	<ul style="list-style-type: none"> Included within the tower site working area (same restrictions apply) 	<ul style="list-style-type: none"> No trees or crops allowed.

Note: The summary of restrictions to physical structures is presented in a separate table in Section 5.2.1. The combined information on restrictions for physical structures and crops and trees is presented in Table 2.2 of the Project Description Section.

Source: Prepared by ERM based on NHID input (2018).

5.3.2 *Loss of Agricultural Land*

The 60 m OHTL RoW will pass close to settlements and through agricultural areas resulting in the loss of access to agricultural land as follows:

- Permanent loss of access to the 4 m maintenance road (101 ha) of which approximately 8.5% (8.5 ha) is used for agriculture. This translates into the loss of less than 1% of the agricultural land available in the Study Area.
- Temporary loss of access to the 631 temporary tower sites working areas of 40 x 50 m (126 ha) during construction. Assuming that the distribution of agricultural land follows the distribution inside the OHTL RoW, it can be estimated that approximately 11 ha out of the 126 ha are agricultural, which represents approximately 1.2% of the agricultural land available in the Study Area.
- After construction the areas outside the permanent tower footprint areas (average 10x10m per tower) will be reinstated, with a permanent loss of access to 6.3 ha of land. Assuming all this land is agricultural, this corresponds to the permanent loss of less than 1% of the agricultural land inside the Study Area.

Although the agricultural land affected is considered minimal based on GIS data and field observations, the number of agricultural plots and households that will be affected cannot be determined at this stage due to the complexity of land tenure and sharing practices. It is known that sometimes households share plots and partial plots may be affected. It is also noted that some households may only lose partial plots, but the residual plot remaining may not be viable (see Section 6.3.4 on orphaned land).

5.3.3 *Loss of Crops and Trees*

The loss of access to land associated with the 20 m OHTL footprint corridor, temporary tower working areas, and maintenance corridor, will result in the loss of permanent crops (such as fruit trees and cashew trees) and also

(1) May be able to maintain trees in this area, outside of tower footprint and 20 m OHTL footprint corridor. This will be decided on a case-by-case basis.

seasonal crops if households are not given the opportunity to harvest before land clearance for construction.

The loss of crops and crop trees and grazing land relate to the following:

- The permanent loss of seasonal crops and crop trees inside the 4 m maintenance road which is less than 1% (8.5 ha) of the agricultural land available in the Study Area.
- The permanent loss of crop trees inside the 20 m OHTL footprint corridor. Agricultural land (both trees and crops) inside the OHTL footprint corridor represents approximately 4.8% (42.8 ha) of the agricultural land inside the Study Area, the area with crop trees will significantly smaller.
- The loss of seasonal crops inside the temporary tower sites working areas during construction, estimated to be approximately 1.2% (11 ha) of the agricultural land in Study Area.

No further impacts during operations are expected. Pruning of trees will be conducted in the remaining portions of the OHTL RoW outside the OHTL footprint corridor; however this is not expected to affect the productivity of crop trees.

Seasonal crops

The main crops cultivated in the Study Area include cassava, maize, sweet potato, yam, beans and peanuts etc. Other crops also include sugar cane and fruits and vegetables such as passionfruit, kale, tomatoes, onions, aubergines, carrots, pumpkins and peppers.

The loss of seasonal agricultural production for the establishment of the temporary tower sites working areas within the 60 m OHTL RoW will be temporary over a period of 12-18 months, while the loss will be permanent for seasonal crops located inside the footprint of the 4 m maintenance road. This corresponds to a temporary loss of access to 230 ha of land for seasonal crops during construction and a permanent loss of 107.3 ha during operations. Cultivation of seasonal crops will be otherwise allowed in the 20 m footprint corridor (but not in the 4 m maintenance road), outside the tower sites working areas, and after mine clearance.

It is recognised however that the land productivity may take time to fully re-establish and seasonal crops may take three to six months to reach maturity depending on the crop. This means that once the land is reinstated after the construction phase, land users may not experience an immediate return to their initial levels of productivity and income generation.

Crop trees

Crop trees found in the Study Area include fruit trees (mango, lime, banana, and papaya) and cashew trees.⁽¹⁾ Other fruit trees include orange and tangerine.

The loss of crop trees due to the establishment of the temporary tower sites working areas will be temporary. Although NHID have noted that where possible small crop trees may be left, it is currently assumed that there will be permanent loss of trees within the 20 m OHTL footprint corridor (including the 4 m maintenance road) as well as the permanent tower footprint areas. This corresponds to a temporary loss of 633 ha and a permanent loss of area where trees could be re-established of 510 ha.

Considering that all crop trees will be removed during construction inside the 20 m OHTL footprint corridor and tower site working areas, livelihood losses related to crop trees will be long-term. Where households seek to re-establish trees, new trees will take a number of years to reach productive maturity, with fruit trees and cashew trees taking between two to five years to produce fruit and six to ten years to reach full production (13 in the case of citrus trees).

The proportion of agricultural land used for the cultivation of crop trees and the number of affected households is not clear at this stage. However, based on Google Earth satellite imagery, the proportion of crop trees along the OHTL RoW seems to be negligible and sparsely spread out as shown in *Figure 4.6* of the Baseline Section.

5.3.4 *Loss of Access to Communal Natural Resources*

The level of forest and savannah clearance required inside the 20 m OHTL footprint corridor will vary between municipalities, but in total approximately 132 ha of forest (ie 26% of the footprint corridor), and 194 ha of savannah (ie 38%) may need to be cleared permanently resulting in loss of access to 326 ha of communal resources for the settlements in the Study Area.

This loss represents approximately 4.1% of the forest and savannah land cover in the Study Area.

In addition, all trees inside the 40x50m temporary tower sites working areas during construction will need to be cleared, which corresponds to approximately 126 ha (some of which overlaps with the 20 m OHTL footprint corridor). Trimming or pruning of trees inside the remaining OHTL RoW area (up to 40 m wide) will be conducted to maintain clearance to the overhead conductors, however this should not impact access to the resources for communities.

(1) Papaya trees do not tend to exceed 4 m of height and are therefore not subject to the restrictions on other fruit trees in the OHTL RoW.

Some households may lose access to some grazing areas for farm animals during construction due to the establishment of the maintenance road, tower sites working areas and access roads. However, animal grazing is usually undertaken over a wide area; therefore farmers with restricted access should be able to find alternative land.

Also as described in *Section 4.7.7* and *Section 5.3.4*, many households in the Study Area collect firewood and charcoal, both used as important sources of energy and in some cases as an additional source of income. The harvesting of baobab fruits is also widely practiced both for self-consumption and for commercialization. Some bush meat hunting is also performed as a complementary source of food for household consumption but is in decline. Baobab trees specifically are very common and spread out throughout the Study Area. Baobab trees are not planted by anyone and therefore do not belong to a specific person or household unless they are located within a demarcated area assigned by the *soba* to a particular household for cultivation, or within private property land as it may be the case in urban and peri-urban areas. However baobab trees located on cultivated land parcels are not very common as it takes up too much space on a small parcel.

None of these resources are limited to the 20 m OHTL footprint corridor and it is understood they are widely available inside the Study Area. Consequently, while clearance of the 20 m OHTL footprint corridor and temporary tower sites working areas will reduce the resources available for the communities, this is not considered to be significant (the loss represents less than 5% of communal resources). This understanding will be confirmed during the asset inventories and household surveys.

5.4 IMPACTS TO SOCIAL RESOURCES

5.4.1 *Loss of Community Cohesion*

As the assessment process to date has identified that there most likely is sufficient replacement land available in the settlements to undertake an 'in-fill' resettlement, those requiring physical relocation should be able to maintain their existing social ties.

However, effective stakeholder engagement and appropriate house design will be required so as to not impact on social cohesion and create sentiments of unfair treatment.

5.4.2 *Loss of Access to Infrastructure and Services*

There are no communal buildings, schools, health facilities or places of worship in the OHTL 60 m RoW, and thus access to the existing facilities will not be impacted.

5.4.3

Loss of Access to Cultural Heritage Resources

Although some cultural resources such as cultural landscape sites and burial sites have been identified in the vicinity of the transmission line inside a 1000 m corridor (500 m on each side), no cultural resources have been identified inside the 20 m footprint corridor and therefore no disturbance or loss of access to cultural heritage resources are expected.

In addition, it is expected that existing access tracks will be utilized during construction, with few if any new access roads required. The existing road network will be upgraded. Disturbance of access to cultural resources identified in the vicinity of the OHTL RoW is expected to be limited, and restored for the operational phase.

GAMEK with support from NHID will engage with communities to identify and resolve any access concerns and operate a 'chance find' procedure whereby work will be suspended if a new site is identified during construction until appropriate management measures have been determined.

5.5

LEVEL OF DISPLACEMENT IMPACT AT A HOUSEHOLD LEVEL

Each affected household will have an individual set of circumstances that will determine the level of impact experienced from physical and/or economic displacement. The level of displacement impact experienced at a household level will differ depending on a number of variables. These include:

- whether the household is being physically and economically displaced or only economically displaced (noting households that are physically displaced will also be economically displaced);
- the level of reliance on livelihood activities that will be affected by the land acquisition based on existing livelihoods and vulnerabilities;
- the proportion of land lost compared to the household's overall land holding; and
- the level of vulnerability of the household.

On the basis of the information available, the following preliminary characterisations can be made: ⁽¹⁾

- ***Impacted Households due to Physical Displacement:*** An estimated total of nine households are at risk of being physically displaced. This number is only preliminary and will need to be investigated further by NHID during its assessments to finalise Project design and will be confirmed during the

(1) The characterisation of the level of displacement impact per household will be confirmed during the RCAP implementation (RCAP Annexes).

RCAP field surveys in the different sections of the Transmission Line. These households will fall into one of the following categories:

- *Highly Impacted Households due to Physical Displacement of Primary Residence:* These households will lose their primary place of residence and are therefore considered **highly impacted**. All of these households will also lose access to at least a proportion of their agricultural land. Some of these households may also present some additional vulnerabilities due to the presence of household members with disabilities, an elderly head of household, female and children headed households, etc. Previously displaced households from other Projects are also considered particularly vulnerable. These households may be considered to be the most significantly impacted.
- *Moderately Impacted Households due to Physical Displacement of Secondary Residence:* In the case of weekend or secondary houses, the affected households would be **moderately impacted** as they would be able to continue living in their primary residences. The level of impact associated with these weekend houses or “*quintas*” will be assessed on a case-by-case basis taking into account the proportion of agricultural land affected and impact on livelihoods.
- ***Impacted Households due to Economic Displacement:*** These households will be classified into the following categories as information is made available through the asset inventory and household survey during the RCAP implementation process:
 - *Highly impacted households due to Vulnerability:* Households experiencing some form of economic displacement and presenting vulnerability characteristics such as members with disabilities, female or child head of household, elderly head of household, etc.
 - *Highly Impacted Households due to Loss of Livelihood Resources:* Households losing all or a large portion of the land they own or cultivate on and / or are not able to access alternative land.
 - *Moderately Impacted Households due to Loss of Livelihood Resources:* Households losing all or a large portion of the land they own or cultivate but are able to access alternative land.
 - *Moderately to Low Impacted Households:* Households that are only losing a small proportion of the land or land that is not important for their livelihoods.

This level of detail related to economically displaced households is not available at this stage but will be collected through the asset inventory and household survey during the RCAP implementation process. This information will be incorporated into the RCAP Annexes and used as a basis to better understand the likely level of impact at a household level. GAMEK will then

be able to focus monitoring efforts and additional support to those households that are likely to find it more challenging to recover from the shock of displacement.

6.1 INTRODUCTION

This section provides an overview of the criteria for eligibility for compensation and the description of the types of entitlements available within the resettlement and livelihood restoration process. In particular, this section will include:

- a summary of the categories of eligible groups that will be subject to physical and economic displacement along with the eligibility conditions;
- an overview of the principles for the valuation of assets and the determination of compensation required by national legislation and international standards, and how the Project is adhering to these;
- a description of the key entitlement principles that will be considered including the cut-off date for evaluating losses and consideration of 'orphaned' land; and
- the entitlements matrix, which identifies the types of loss resulting from Project-induced physical and economic displacement, and the entitlements provided for each type of loss.

6.2 IDENTIFICATION AND DETERMINATION OF ELIGIBLE GROUPS

6.2.1 Introduction

This section provides an overview of the criteria for eligibility for a compensation and livelihood restoration support for the different groups of affected stakeholders taking into account Angolan law and IFC PS. Where there is a deviation between the two, the more stringent eligibility criteria will be adopted by GAMEK on behalf of the Project.

6.2.2 Eligibility Criteria

Angolan eligibility criteria

As discussed in *Section 3.2.3*, local legislation defines two primary forms of land rights applicable to the Project: (i) private property rights (urban land); and (ii) customary rights (i.e. rural community land). These ownership rights can be held either by physical or juridical persons (i.e. individuals or businesses) in the case of private property rights), or communities in the case of customary rights. Both types of rights are legally recognised, but individuals or households with customary land rights are not entitled to any compensation in cash for the loss of access to the land they occupy. Rather, customary land owners are provided with alternative land.

All land users losing crops or trees due to the Project are eligible for compensation for the loss of crops and trees. Similarly, owners (customary or private right holders) of residential structures are also eligible for the provision of replacement housing or alternatively for compensation in cash. Entitlements according to Angolan legislation are discussed in more detail in *Section 6.3* below.

In addition to customary right holders and private property right holders, individuals or households residing on and/or cultivating land for which they do not hold any customary rights or legal property rights, are not formally recognised as right holders under Angolan law. In practice however, it is understood that they are compensated in the same way as customary right holders, i.e. alternative land and compensation in cash for the loss of assets.

IFC Performance Standards

The IFC PS eligibility criteria broadly align with those defined by the national legislation and Angolan standard practice in the sense that both private and customary right holders and individuals or households who do not have any formal rights are eligible for compensation and IFC PS 5 favours the provision of alternative land to compensation in cash. However within the IFC PS, losses to improvements (including crops, trees and structures) needs to be compensated for at full replacement cost (see *Section 6.3*). The details of the entitlements according to international best practice standards are presented in *Section 6.3*.

Cut-off date

The purpose of the cut-off date is to avoid speculative claims within the Project Area by persons seeking compensation. People moving into the Project Area after the cut-off date are not entitled to assistance. Improvements made to homes or other structures by existing residents after the cut-off date are also not eligible for compensation.⁽¹⁾

According to Angolan legislation⁽²⁾, the cut-off date for eligibility is established after the declaration of the expropriation for public utility, i.e. after the expropriation approval has been made public and affected parties informed. After this date any circumstance initiated by the affected person is not taken into consideration and therefore not eligible for compensation. To align with IFC PS5 requirements and international best practice, the Project will establish the cut-off date for eligibility⁽³⁾ as the last day of the socio-economic surveys in the context of RCAP implementation (see *Section 7*).

(1) If there is a significant time lag between the completion of the socio-economic census and implementation of the RAP, provisions will need to be made for population movements as well as natural population increase and expansion of households, which may include a repeat census.

(2) Expropriation Law n.º 2.030 ("Lei das Expropriações"), June 22, 1948

(3) The Project will accommodate individuals or groups who were not present at the time of registration, but have a legitimate claim to membership in the affected communities

As the Project will engage in multiple resettlement and compensation processes in parallel for the different transmission line sections, these will have different cut-off dates. All affected communities and affected households will be informed of the cut-off date and its purpose during the community consultation and household socio-economic survey prior to the household survey and asset inventory.

If there is a significant time lag between the cut-off date and actual implementation (i.e. more than two years), households may request for a revised asset inventory to take into account any improvements made to the land. Any new crops or trees that may have been planted and are not ready for harvest before the start of construction will also be taken into account. All payments will also be inflated to account for inflation. As far as possible, households will be allowed to harvest their crops before construction and this will not affect their compensation payment.

6.2.3 *Eligible Groups*

Drawing from the socio-economic studies that were undertaken as part of the ESIA preparation, there are seven categories of affected individuals who will be exposed to losses as a consequence of the Project's land acquisition process, and thus will be eligible for compensation and/or other resettlement assistance. It is important to note that whereas it may be an individual asset owner that incurs a loss, IFC PS requires that the standard of living and livelihood of the overall household is considered centrally in designing compensation and livelihood restoration measures

Table 6.1 below presents the categories of affected people that are currently known to exist in the Study Area and the eligibility conditions. Additional groups may be identified during the asset inventory and census, and these will be included in the RCAP Annexes to be developed.

In some cases, one household may fall into more than one category either because one or more individuals in the households suffer more than one loss. For instance, a household member may: (i) be a house owner with customary ownership rights over the residential plot; (ii) hold customary rights over a plot of agricultural land; and (iii) cultivate crops on a land. Accordingly, they would fall into three categories: (i) House Owner with Customary Land Right; (ii) Agricultural Land Owner with Customary Land Right; and (i) Crop Cultivator.

Table 6.1 Categories of Affected People

Primary Category	Secondary Category	Description
House Owners	Category 1: House Owner with Customary Rights (Rural Community Land)	Members of this group currently reside in a house located inside the 20 m footprint corridor and are holders of useful customary rights to the residential plot. These households reside in rural areas where the land is primarily held under the customary land rights regime. Some of these owners will lose their primary place of residence while others will lose secondary residences (i.e. weekend houses or <i>quintas</i>).
	Category 2: House Owner with Private Property Rights	Members of this group currently reside in a house located inside the 20 m footprint corridor and are holders of private property rights for the land and/or property itself, meaning they hold a legal title deed. These household reside primarily in urban areas and sometimes in peri-urban areas closer to urban centres. Some of these owners will lose their primary place of residence while others will lose secondary residences (i.e. weekend houses or <i>quintas</i>).
	Category 3: House owner on State Land of the Public domain with no legally recognised rights.	Members of this group currently reside in a house located inside the 20 m footprint corridor and do not hold any customary rights or private property rights to the residential plot. These households may be found primarily in periurban areas. Some of these owners will lose their primary place of residence while others will lose secondary residences (i.e. weekend houses or <i>quintas</i>).
Land Owners	Category 4: Land Owner with Customary Right (Rural Community Land)	Members of this group are recognised by the community leaders (<i>soba</i>) as holding a useful customary right over the affected agricultural land within the OHTL RoW. This right is granted directly by the <i>soba</i> , who is responsible for safeguarding land in the greater interest of the people and allocates land directly to households and individuals.
	Category 5: Land Owner with Private Property Right	Members of this group hold private property rights for the affected land inside the OHTL RoW, meaning they hold a legal title deed for the land. These private property land owners may potentially reside outside of the OHTL RoW and will be identified accordingly during RCAP implementation.
	Category 6: Land User on State Land of the Public Domain with no legally recognised rights.	Members of this group not hold any customary rights or private property rights for the affected land inside the OHTL RoW.
Farmers / Cultivators (Land Users)	Category 7: Crop / Tree Cultivator with or without legally recognised rights.	Members of this group cultivate crops/trees on the plot(s) along the OHTL RoW,. They may solely use, or share usage of the plot, which they may recognise, or not recognise as their own.

Primary Category	Secondary Category	Description
	Category 8: Crop / Tree Cultivator under Sharecropping Agreement	This group refers to the households that use land for which they have no ownership right to grow crops, generally using plots in different areas that have the characteristics required for each type of crop. This practice is often encouraged by the <i>sobas</i> . When shared, the parcel continues to be 'owned' only by the household that was previously defined by the <i>soba</i> as right holder; shared use does not imply shared customary ownership.
Owners of Non-Residential Moveable Assets	Category 9: Owners of Other (Non-Residential) Moveable Assets	Members of this group own livestock that they use mainly for subsistence. Animal husbandry along the surveyed settlements consists mainly of chicken, goats, pork and ducks. Most families in rural areas have animals that can free to roam around settlements.
Owner of Non-Residential Immoveable Assets	Category 10: Owners of Other (Non-Residential) Physical Assets	Members of this group are individuals who have built structures (eg fences,walls, <i>casas de lavra</i> , etc).
	Category 11: Owners of Affected Economic Structures (ie. cement factories)	Members of this group are owners of businesses such as cement factories that are located inside the 20 m OHTL footprint corridor and that will need to be removed for the construction of the line.
Employees of Affected Economic Structures	Category 12: Employees of Affected Economic Structures (ie cement factories)	Members of this group are the employees of the businesses located inside the 20 m OHTL footprint that will need to be removed for the construction of the line.

Source: ERM 2018

6.3

VALUATION OF ASSETS AND DETERMINATION OF COMPENSATION

6.3.1

Introduction

As discussed in *Section 3.2* of the Legal and Institutional Framework, in practice in Angola, cash compensation is paid for crops and trees and physical structures. In addition, compensation for loss of land rights is also paid to the private landowners who hold a title deed, whereas customary right holders are provided with alternative land.

In order for the Project to adhere to both Angolan national legislation and the requirements of the IFC PS, the following measures will be adopted by GAMEK/NHID: (i) provisions of alternative land for those with customary rights and those that do not hold customary rights but are utilising land at the cut-off and/or compensation in cash for private property right holders, taking into account any improvements made to that land prior to the cut-off date; ii) households will be supported to replace primary residencies; and (iii) land/assets that will be compensated in cash will be valued employing a methodology that calculates full replacement cost.

This section provides an overview of the approach used to value assets and resources that will be lost due to the Project. Each asset type is described, providing the Angolan legislation approach and any adjustments or top-ups that are required to meet international good practice standards and ensure that the asset is adequately replaced or that compensation received is equivalent to the full replacement value of assets lost.

6.3.2 *Crops and Trees*

Angolan legislation approach

Compensation for crops and economic trees is based on the compensation rates established by the Ministry of Agriculture and Forestry. The latest crop rates available were established in 2018 and are presented in *Table 6.2*. These rates are understood to be calculated using current market rates with values provided in US Dollars per hectare of crop. The 2015 version of the government crop rates provides more detailed rates taking into account crop maturity and size as shown in *Table 6.3*.

Table 6.2 *Government Compensation Rates for Crops and Trees (2018)*

No.	Culture / Tree	Production Price (USD) per hectare
1	Corn	424.4
2	Bean	296.4
3	Cassava	375.6
4	Potatoes	449.9
5	Eggplant	388.8
6	Tomato	377.1
7	Pepper	387.3
8	Mango tree	477.3
9	Papaya tree	447.2
10	Banana Tree	447.2
11	Orange Tree	467.6
12	Lemon tree	451.9
13	Pineapple plant	436.1
14	Avocado tree	450.1

Source: Ministry of Agriculture and Forestry (*Ministério da Agricultura e Florestas*), 2018.

Table 6.3 *Compensation Rates for Agricultural Crops and Trees (2015)*

No.	Crops	Price/Tree/Cultivation (USD)
1	Transplant of improved mango tree (nursery)	15 - 17
2	Medium mango tree planted on the land	55
3	Local mango tree in production (i.e. productive tree)	120
4	Improved mango tree planted on the land and producing	160
5	Transplant of cashew tree (nursery)	8
6	Medium cashew tree planted on the land	40
7	Medium cashew tree planted on the land and productive	60
8	Banana tree /nursery (" <i>Soca</i> ")	8

No.	Crops	Price/Tree/Cultivation (USD)
9	Banana tree planted on the land and productive	50
10	Cassava	1 150/ha = 0.115 USD/m ²
11	Sweet potato	980/ha = 0.098 USD/m ²
12	Sugar apple tree or sweetsop tree (i.e. <i>Annona squamosa</i> tree)	30
13	Soursop tree (" <i>Sape-Sapeiro</i> ") (i.e. <i>Annona muricata</i> tree)	30
14	Transplant of papaya tree (nursery)	8
15	Medium papaya tree planted on the land and productive	20
16	Papaya tree in production (ie productive tree)	55
17	Transplant of guava tree (nursery)	8
18	Medium guava tree planted on the land	30
19	Guava tree in production (productive tree)	60
20	Passion fruit tree in production (productive tree)	30/m ²
21	Transplant of avocado tree (nursery)	8
22	Medium avocado tree planted on the land	60
23	Avocado tree in production (productive tree)	160
24	Tamarind tree	30
25	Lemon tree without fruit and in production (*)	35 - 55
26	Lemon tree in production (ie productive tree)	100
27	Transplant of citrus trees (lemon, orange and grapefruit trees)	14 - 16
28	Medium orange tree planted on the land	50
29	Orange tree in production (productive tree)	120
30	Coconut tree in production (productive tree)	80
31	Transplant of the shade trees and ornamental plants (**)	30
32	Medium shadow tree planted on the land	30
33	Big shadow tree planted on the land	80
34	Transplant of pineapple plant	8
35	Pineapple plant, planted in the land and productive	60
36	Tomato plant	5
37	Pomegranate tree	30
38	Eggplant plant	8
39	Okra plant	8
40	Gimboa plant (<i>Jimboa</i>)	5
41	Pumpkin/melon/watermelon	10
42	Palm tree in production	60
43	Sugar apple tree (i.e. <i>Annona squamosal</i>) in production	60
44	Diverse vegetables in production	1 150/ha = 0.115 USD/m ²
45	Soursop tree (i.e. <i>Annona muricata</i>) planted on the land and productive	35 - 70
46	Tamarind tree planted on the land and productive	25 - 40
47	Sugarcane	450/ha = 0.045 USD/m ²
48	Leguminous plants (Peanut, Beans " <i>Feijão Vulgar</i> and <i>Macunde</i> ") in production	600/ha = 0.06 USD/m ²
49	Corn planted on the land and productive	500.00/ha = 0.045 USD/m ²

Notes:

(*) This refers to a productive tree which is not bearing fruit at the time of asset inventory either because the fruits may have already been harvested or because the asset inventory is conducted in a season when the tree does not bear fruit.

(**) Shade trees refer to any tree that does not bear fruits (e.g. baobab, acaia, neem, etc.) and that are not considered ornamental such as palm trees. Such trees as compensated for as part of a communal compensation package which usually consists in a nursery or tree planting campaign for the community.

To comply with IFC PS5, the compensation rates for crops and economic trees are required to reflect full replacement cost, which corresponds to market value plus transaction costs without subtraction of depreciation value.

To meet this requirement, GAMEK with support by NHID will supplement, where necessary, the Government-provided compensation rates with a top-up to ensure that the total amount of cash received is equivalent to the full replacement value of the affected standing crops/trees, at the date of the enumeration.⁽¹⁾ The cash amount will factor in the lost value of any standing crops, but also the time taken for new crops/tree products to be able to be harvested in the new location (and potentially to a comparable volume of harvest as in the old location) and the associated income lost in the interim period compensated. Specifically, this corresponds to the following:

- *Trees*: Replacement value of permanent crops (fruit trees) is determined based on the loss of income in the period between planting of the seedling and the time it reaches a level of productivity equivalent to that of the affected tree, plus cost of maturing the tree (i.e. inputs and labour costs of planting and tending a new tree to relevant level of maturity).
- *Crops*: For seasonal crops, replacement value corresponds to the value of the anticipated harvest calculated based on anticipated production per square metre or hectare of affected mature crops cultivated. This is based on the assumption of a worst case scenario where construction may start before crops are ready for harvest. However it should be noted that given the Project schedule to start construction in July 2019, this scenario may be avoided as harvest season ends between February and March (see *Section 4.7.4*).⁽²⁾ As such, government rates can be maintained as any compensation will be in addition to the harvested crop.

A market valuation study will be required to identify the need for any top-up and these adjusted rates will be used in the RCAP Annexes.

6.3.3 *Physical structures*

Physical structures that will need to be moved and compensated for include residential structures, non-residential ancillary structures associated with agricultural livelihoods (such as small farms or *casas de lavoras*), and non-residential economic structures such as cement factories and markets.

(1) It is noted that NHID will supplement rates if required as GAMEK may not be in a position to do this legally.

(2) Harvest season in Cuanza Norte Province varies between November and December for crops that take 2 to 3 months to harvest such as maize, and February for crops that take up to 6 months such as cassava. In Luanda Province, harvest season is one month later, i.e. December-January and March.

Angolan legislative approach

According to the Expropriation Law (Law No. 2.030), fair compensation shall be determined based on the actual value of the expropriated property as determined by a specialised land valuator and including any additional related prejudice or costs. As stated previously in *Section 6.2.2*, any capital gains resulting from improvements made in the last five years or after the declaration of the expropriation for public utility (i.e. cut-off date) is not taken into consideration.

Specifically, in the context of residential structures and the physical resettlement of households as described in *Section 3.3.1*, the cost of constructing replacement properties on alternative land further away from the 20 m OHTL footprint corridor is born by NHID on behalf of GAMEK. The size and number of replacement housing required for each household is determined based on the household size and property type (assuming two persons per room) as shown in *Table 6.4*. When there are no property types for the household composition, particularly for larger households, the affected household may receive two houses instead of one.

Table 6.4 *Classification of Replacement Housing*

Household composition (number of people)	Property Type (Number of rooms)
2-3	T2
4-6	T3
6-7	T4
8 or more	T5

Source: Presidential Decree 117/16 on Regulation of Resettlement Operations (*“Regulamento de Operações de Realojamento”*).

According to Presidential Decree 117/16, financial compensation may also be provided as an alternative to new structures. For residential structures, financial compensation will be calculated by local valuation experts based on the type of property, also taking into account the construction value by square meter (cost of construction) as well as additional costs after negotiation with the property owner.

It is assumed that the same approach also applies to non-residential structures.

Project compensation for physical structures

The preferred option for this Project, and in line with IFC PS5, is compensation in kind through support to provide their families with fit-for-purpose replacement housing and structures. On urban land, security of tenure (i.e. land property titles) will also be provided.

GAMEK will support households through an assisted self-build process, whereby households will be supported to identify housing construction contractors, to sign off the housing design and ensure building quality. GAMEK/NHID will release funds based on stages of construction.

In kind-compensation for residential housing will be strongly preferred by GAMEK/NHID, whilst compensation for non-residential structures in cash will be provided as an option. However, even for residential structures, there may be situations when cash compensation is more appropriate. A household wishing to receive cash will need to demonstrate that they have an alternative residential property or that they will benefit from moving away from the settlement (e.g. for work purposes) and that they have the capability to provide an alternative home for their household at the alternative location. As such, GAMEK will aim to “offer the choice of replacement property of equal or higher value, with equivalent or better characteristics and advantages of location, or cash compensation at full replacement value where appropriate”. ⁽¹⁾

In the event that some affected households opt for the compensation in cash, GAMEK will provide compensation for both residential and non-residential structures at full replacement cost (without taking depreciation into account). This takes into consideration the following:

- The market value of the structure based on the valuation of a certified valuation expert. This should also cover the cost and time required for building replacement structures on alternative land (including cost of materials and labour costs – see *Section 6.3.6* below).
- Transaction cost associated with acquiring and registering alternative property. This is mostly applicable for non-residential structures such as factories.
- Disturbance allowance for ‘disturbance’ or any other matter not directly based on the loss considered (see *Section 6.3.6* below).
- Loss of associated income resulting from the physical relocation of non-residential economic structures such as factories and markets.

6.3.4

Land

Angolan legislation approach

In Angola, the process for valuation of land or land values themselves are not clearly established by the government. Land values per square metres varies according to location and are determined by the municipal administration in conjunction with the Ministry of Urbanism and Housing. In some areas the value is set at 30 USD/m² while in other areas it may reach up to 300 USD/m².

(1) IFC Performance Standard 5, para. 21.

As described in *Section 3.3.1*, in Angola, compensation for loss of land rights is only legally required in the case that affected people are legal land owners with ownership titles (i.e. private property right or lease right holders). Private property right holders also negotiate to receive a parcel of land for similar use (e.g. in the case of a loss of surface right lease). The choice of compensation is decided through negotiation between the expropriating entity and with the affected household.

In contrast, individuals in rural communities are customary right holders who do not have formal land titles, as they have not paid any surface rights for the land they use or reside on. As such, these individuals are not entitled to monetary compensation for the loss of land rights or access to land as per Angolan law. Instead, alternative land is usually assigned to the affected households. It should be noted however that as the legislation is not fully clear on compensation for the loss of customary land rights, the issue is therefore open to negotiation.

As for individuals or households who do not hold any customary rights or private property rights for the land they reside on or cultivate, standard Angolan practice is to compensate them the same way as customary right holders through provision of alternative land.

Project compensation for agricultural land

In accordance with IFC PS5, and considering the importance of land for subsistence and income generation, the preferred option is to provide for fit-for-purpose alternative land “*that has a combination of productive potential, locational advantages, and other factors at least equivalent to that being lost*”.⁽¹⁾

For rural land under customary ownership, should there be any cases where fit-for-purpose alternative land is not available, GAMEK will need to work individually with the affected household to develop a specific livelihood restoration plan.

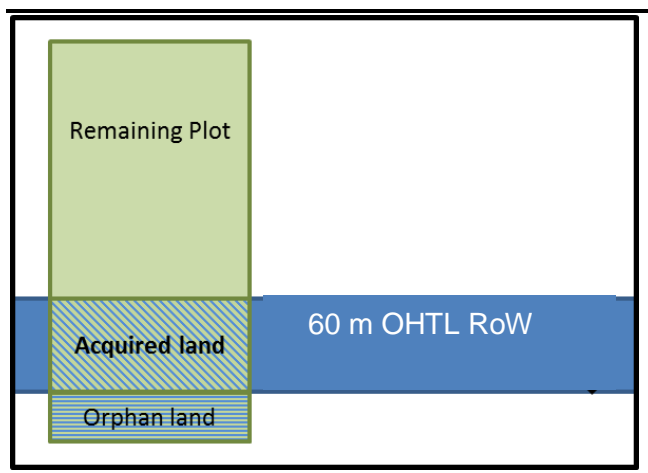
For urban land, compensation in cash households will have the option of selecting cash compensation where they can demonstrate that their livelihoods will not be impacted by the loss of land. In this case, compensation in cash for the permanent loss of land will be provided which will include a disturbance allowance in accordance with international best practice. This is discussed in *Section 6.3.6*.

To minimize displacement impacts as much as possible GAMEK will also consider expropriation and replacement of any orphaned land on a case-by-case basis after completion of the RCAP Annexes socio-economic surveys.

(1) IFC PS 5, 2012

The term “Orphan Land” refers to (usually small) portions of properties that are not to be expropriated because they are not located within the Project corridor, but become uneconomic because: (i) other, larger parts of the same plot are being expropriated; or (ii) an adjacent plot, with which it was aggregated, is being expropriated.

Figure 6.1 *Indicative Illustration of Orphaned Land*



Source: ERM 2018

6.3.5 *Communal Resources*

As discussed in *Section 5.3.4*, many households in the Study Area collect firewood and charcoal, both used as important sources of energy and in some cases as an additional source of income. The harvesting of baobab fruits is also widely practiced both for self-consumption and for commercialization. Baobab trees are not planted by anyone and therefore do not belong to a specific person or household unless they are located within a demarcated area assigned by the *soba* to a particular household for cultivation, or within private property land as it may be the case in urban and peri-urban areas.

Angolan approach

In practice, communal resources such as baobab trees are normally compensated for as part of a communal compensation package which usually consists of a nursery or tree planting campaign for the community.

Project compensation for communal resources

In Angola, common practice is to provide communal compensation in the form of support for the development of a nursery or a replanting initiative. Considering the small percentage of communal resources that will be lost due to the Project (i.e. 326 ha or 4.1% of forest and savannah resources in the Study Area), compensation for the loss of communal resources is not deemed necessary. If affected communities consider these losses important and present any related concerns during the RCAP socioeconomic surveys, GAMEK will commit to replacing the lost trees and providing support for them to mature.

The best approach for doing so will be discussed internally by NHID based on community feedback.

6.3.6 *Additional Compensation Top-Ups*

In addition to the compensation required under local law and the adjustments described in the previous section, GAMEK will provide additional allowances to affected households to provide supplementary assistance during the resettlement process as described below.

Assisted self-build programme

The Project will adopt an Assisted Self-Build approach to replacement housing, whereby households are supported by GAMEK to replace housing on their own with compensation and technical support provided by the Project. This approach is recommended due to the linear nature of the Project and relatively small number of households that require relocation, particularly in any one location. The Assisted Self-Build programme also brings the following advantages:

- The process provides flexibility for households to choose the location of their replacement land. Households will be able to locate and secure in-fill replacement plots in their communities that meet their household requirements in terms of size, location, and proximity to services.
- In-fill replacement plots (as opposed to greenfield developments) will not require infrastructure investments or site development, thereby reducing costs.
- Affected households will also have greater flexibility in the design of their replacement housing. Replacement housing can be designed to meet the requirements of each individual household and within the budget of each household's specific compensation package.
- Contractors/ builders will be contracted directly by the Project-affected household based on their own previous experience and local knowledge. By limiting their direct involvement, the Project will reduce the costs of reconstruction since local contractors and suppliers often charge a premium to large companies.

Once replacement sites have been identified through engagement with the *sobas*, the Resettlement Coordination Groups (see *Section 7.3.3*) and the households, physically displaced households will be supported and supervised directly by the Self-Build Supervisor and Structural Technicians to secure an appropriate residential plot and build a replacement house that is of sound construction and appropriate design for the household.

Each household will choose a plot for their relocation houses within the following guidelines:

- the replacement housing must be built within the alternative land plot identified for the household in their existing community or on land that they already own;
- the location must comply with any settlement planning requirements;
- the location must be accessible to a building contractor; and
- the soil and terrain must be suitable for building.

Beyond support in securing a replacement residential parcel, the self-build support will include:

- assistance with planning, scheduling and budgeting for self-build; and
- technical oversight during implementation / construction to ensure that the replacement houses meet the standards established by Angolan Legislation (see *Table 6.4, Section 6.3.3*) as well as the following criteria as per international best practice:
 - the total internal area should be of the same size or larger than the original house;
 - the minimum size is two rooms of standard size;
 - standard room size will conform to the minimum dimensional standards set by the Angolan Government;
 - windows of at least 50 cm by 50 cm for all rooms; and
 - all building materials will comply with Angolan legislation requirements.

Each affected house owner will receive cash compensation sufficient for households to rebuild “basic modern structures” of an improved quality according to the standards described above. The Self-Build Support Package will be paid in instalments according to specific milestones to ensure that the funds are used appropriately used to establish replacement housing of an acceptable quality.

Disturbance/relocation allowance

In addition to compensation in kind or in cash for loss of land, crops and trees, and physical structures, IFC PS requires that affected households are also provided with a ‘disturbance’ allowance. This is not considered within Angolan Law but the purpose of this allowance is to compensate affected households for the inconvenience associated with resettlement and defray the expenses of a transition to a new locale, such as lost work days.

Based on previous experiences of similar projects in West Africa, a percentage of 10% will be provided in addition to the amount of all cash compensation provided for relocation of houses. For agricultural land a relocation allowance of 100 USD will be provided.

For commercial structures such as factories and markets, a disturbance allowance will be paid to the owner of businesses consisting of six months lost profit based on a review of financial statements or other financial accounting.

For employees of business that are relocated, they will be paid a disturbance allowance of six months lost earnings. This relatively long duration has been applied due to the paucity of income earning opportunities in the Study Area.

Land preparation allowance

Reestablishment of agricultural production on a new land plot after displacement requires land clearing, planting, digging holes, fertilizing, plugging etc. As required by IFC PS5 labour costs should be part of the compensation package. All households needing to utilise new plots of land will be paid a disturbance allowance to cover labour and potential rental of a tractor.

6.4

ENTITLEMENTS

Table 6.5 presents the entitlement matrix, which will be used as a basis for compensation and other entitlements that will be provided to affected households for physical and economic displacement impacts. The table brings together the information detailed above regarding eligibility criteria, categories of eligible groups, and the valuation principles that will need to be followed. Entitlements have been determined based on Angolan law and required top-ups to meet international standards.

Table 6.5 Entitlements Matrix

Ref.	Asset Lost	Eligible Group	Project Compensation provisions Requirement
1	Housing	<p><i>Category 1: House owner with useful customary rights (rural land)</i></p> <p><i>Category 3: House owner on State land of the Public domain with no legally recognised rights.</i></p>	<p><i>In-kind compensation:</i>⁽¹⁾ The principle of replacement will underlie the provisions for loss of housing. GAMEK will provide support for households to replace housing through:</p> <ul style="list-style-type: none"> • an assisted self-build program that results in a house of equivalent or better characteristics and advantages of location (see <i>Section 6.3.3</i> for a discussion on the proposed housing). <p><i>Cash compensation:</i>⁽²⁾ In the event that some affected households are eligible for being compensated in cash, GAMEK will provide compensation at full replacement cost (without taking depreciation into account) including:</p> <ul style="list-style-type: none"> • the market value of the structure as valued by a certified valuation expert; • the cost of and time required for constructing the replacement structures on alternative land including cost of materials, labour costs, etc. (see <i>Section 6.3.3</i>). <p><i>Disturbance allowance:</i></p> <ul style="list-style-type: none"> • A cash amount of 10% of the replacement value of the house will be provided to compensate for the disturbance caused. <i>Note: if a household falls into more than one category, they will only be eligible for one payment of disturbance allowance.</i>
2	Housing	<p><i>Category 2: House owner with private property rights (urban / peri-urban land)</i></p>	<p><i>In-kind compensation:</i> same as above (Ref. 1) and the following:</p> <ul style="list-style-type: none"> • GAMEK will support households to gain security of tenure and obtain private property titles. <p>OR</p> <p><i>Cash compensation:</i> same as above (Ref. 1) and the following:</p> <ul style="list-style-type: none"> • Transaction cost associated with acquiring and registering replacement property. <p><i>Disturbance allowance:</i> same as above (Ref. 1)</p>

(1) It is noted that in-kind compensation is not the standard housing compensation approach for governmental projects in Angola. NHID will ensure best efforts to facilitate and advocate for this form of entitlement

(2) GAMEK will ensure the development of a standard procedure for managing cash disbursements to vulnerable households and households with no access to bank accounts. It is also acknowledged that cash payments to vulnerable households may not be effective in supporting households to restore livelihoods unless training and supervision is provided.

Ref.	Asset Lost	Eligible Group	Project Compensation provisions Requirement
3	Agricultural Land	<p><i>Category 4: Land user with useful customary rights</i></p> <p><i>Category 6: Land user on State Land of the Public Domain with no legally recognised rights.</i></p>	<p><i>In-kind compensation:</i> The principle of replacement will underlie the provisions for loss of agricultural land.</p> <ul style="list-style-type: none"> • Selection and assignation of alternative land will be done through the <i>Soba</i> which will ensure that affected households have customary rights and security of tenure is secured. • GAMEK will oversee the provision of replacement farmland to ensure that it has a combination of productive potential, locational advantages, and other factors at least equivalent to the farmland being lost. <p><i>Relocation assistance:</i></p> <ul style="list-style-type: none"> • Physical assistance with the relocation process or a cash amount of approximately 100 USD to cover the cost of the relocation process will be provided. <p><i>Land preparation allowance:</i> All households needing to utilise new plots of land will be provided with an allowance to cover labour costs.</p> <p><i>Access to the livelihood restoration programme</i> (see Section 6.4.1).</p>
4	Agricultural Land	<p><i>Category 5: Land user with private property rights</i></p>	<p><i>In-kind compensation:</i></p> <ul style="list-style-type: none"> • Provision of a parcel of land in the same judicial situation and of similar use with similar ownership rights. • <i>Relocation assistance:</i> same as above (Ref. 3). • <i>Land preparation allowance:</i> same as above (Ref. 3). • <i>Access to the livelihood restoration programme</i> (see Section 6.4.1) <p>OR</p> <p><i>Cash compensation:</i></p> <ul style="list-style-type: none"> • Cash compensation at replacement rates as defined through a valuer for that locality.
5	Land used for non-agricultural purposes	<p><i>Category 4: Land user with useful customary rights</i></p> <p><i>Category 5: Land user with private property rights</i></p> <p><i>Category 6: Land user on State Land of the Public</i></p>	<p><i>In-kind compensation:</i></p> <ul style="list-style-type: none"> • Provision of a parcel of land in the same judicial situation and of similar use with similar ownership rights. <p>OR</p> <p><i>Cash compensation:</i></p> <ul style="list-style-type: none"> • Cash compensation at replacement rates as defined through a valuer for that locality.

Ref.	Asset Lost	Eligible Group	Project Compensation provisions Requirement
		<i>Domain with no legally recognised rights.</i>	
6	Loss of Property Value	<i>Category 2: House owner with private property rights</i> <i>Category 5: Land user with private property rights</i>	Cash compensation: <ul style="list-style-type: none"> Cash compensation at replacement value to compensate for the loss of value and the reduced opportunities to use the land/property most productively. This applies to the land inside the 20 m OHTL footprint where height restrictions are applied to vegetation, and to structures located in the remaining 30 m portion of the OHTL corridor where height restrictions are applied to physical structures.
7	Crops / trees	<i>Categories 7 and 8: Crop/tree cultivator either with private property rights or customary rights and sharecroppers with no customary rights over the shared land.</i>	Cash compensation: The principle of full replacement will underlie the provisions for loss of standing crops/trees. <ul style="list-style-type: none"> GAMEK will, where necessary, the government crop rates with a top-up to ensure that the total amount of cash received is equivalent to the full replacement value of the standing crops/trees, standing as at the date of the enumeration. This will factor in the lost value of any standing crops, but also the time taken for new crops/tree products to be able to be harvested in the new location (and potentially to a comparable volume of harvest as in the old location) and the associated income lost in the interim period compensated. <p><i>Access to the livelihood restoration programme (see Section 6.4.1)</i></p> <p>Land preparation allowance: same as above (Ref. 3), noting that an individual losing land and crops in one location will only be eligible for one land preparation allowance.</p>
8	Moveable assets (eg livestock)	<i>Category 9: Owner of movable assets on the affected plot regardless of land rights.</i>	Relocation assistance: same as above (Ref. 1).
9	Non-residential immovable structures /assets (i.e. fences, walls, <i>casas de lavra</i> , etc)	<i>Category 10: Owner of other (non-residential) physical structures on the plot regardless of land rights.</i>	Cash compensation: The principle of full replacement (without taking depreciation into account) will underlie the provisions for loss of (non-residential) physical assets. <ul style="list-style-type: none"> Compensation will cover the market value of the structure as valued by a certified valuation expert and the cost of and time required for constructing the replacement structures on alternative land including cost of materials, labour costs, etc. <p>Disturbance allowance: same as above (Ref. 1).</p>

Ref.	Asset Lost	Eligible Group	Project Compensation provisions Requirement
10	Non-residential economic structures (eg cement factories, markets)	Category 11: Owners of Affected Economic Structures (i.e. cement factories)	<p>Cash compensation: The principle of full replacement (without taking depreciation into account) will underlie the provisions for loss of (non-residential) physical assets.</p> <ul style="list-style-type: none"> Market value of the structure as valued by a certified valuation expert and the cost of and time required for constructing the replacement structures on alternative land including cost of materials, labour costs, etc. (see Section 6.3.3). <p>Disturbance allowance:</p> <ul style="list-style-type: none"> A cash amount covering six months lost profit based on a review of financial statements or other financial accounting, as agreed between GAMEK and the affected business owner, and covering the losses between the time of the destruction of the structure and the reestablishment of operations in the alternative location.
11		Category 12: Employees of Affected Economic Structures (i.e. cement factories)	<p>Disturbance allowance:</p> <ul style="list-style-type: none"> Cash amount of six months lost earnings.
12	Community Resources	Category 13: Users of Communal Resources	<p>In-kind compensation: If deemed necessary after community consultation during the RCAP Annex socioeconomic field surveys:</p> <ul style="list-style-type: none"> GAMEK will replace the lost trees and provide support for them to mature. The best approach will be discussed internally by NHID based on community feedback.

The entitlement matrix will be disclosed and finalised during RCAP disclosure. This will include community meetings that can be attended by all affected households to explain entitlements and discuss any areas that require further consideration.

6.4.1 *Livelihood Restoration Support*

Rationale

In devising a livelihood restoration program in the context of physical and / or economic displacement, it is important to consider the context and nature of displacement and the opportunities open to affected households.

In the context of this RCAP, the limited physical resettlement will be mostly 'in-fill' in the settlements of origin. The larger numbers of economically displaced households will be provided with alternative land within their own settlements. In addition, the *sobas* engaged with down the transmission line were broadly confident that sufficient land could be accessed to effectively replace the land lost and enable a continuity of livelihoods. Consequently, it is expected that needs for additional livelihood restoration support will be relatively limited for the vast majority of households.

As agriculture is the primary livelihood activity for affected households, and agriculture is a source of food security for affected households, the focus of the livelihood restoration plan is to support households to quickly re-establish improved agricultural activities. Beyond the main agricultural support program, it is recognised that certain households may require additional tailored assistance. These will include vulnerable households and households that are unable to access adequate alternative agricultural land.

The general program of livelihood restoration and potential additional measures that may be required for specific households are described in the following sections.

General Agricultural Support Program

The general agricultural support program will be based on an "input and supply" programme, which provides all affected households with basic agricultural supplies to help them restore their crops on their new land, or enhance yields on their existing land if they cannot identify new land. Each household will be provided with a choice of improved seeds during individual household sign-off. These improved seed varieties will be distributed to all affected households.

Land affected households will be able to choose provision of seeds for a staple crop, seeds for a supporting vegetable crop rich in protein, and a choice of sapling from trees commonly found in the Project area. The types of crops will be agreed during the detailed data collection that will be undertaken as part of the development of the RCAP annexes (see *Section 7.2.4*).

Households will be able to choose their options during the individual household sign-off process. All seeds provided will be improved seed, and will be agreed with the Ministry of Agriculture and Forestry along with other support such as fertiliser or extension support to enable households to utilise them effectively.

Additional Livelihood Restoration Options

Additional livelihood restoration options will be considered if necessary to support highly impacted and/or vulnerable households that may not otherwise be able to restore their livelihoods. Such options will consider other livelihoods that are practised in target households and provide support to enhance their productivity in order to restore or improve livelihoods at a household level.

Specific activities will be determined through consultation with affected households during the detailed RCAP Annex data collection processes. Meetings will be organised with the Ministry of Agriculture and Forestry and other recommended institutions to assess suitable programmes and opportunities for activities to support livelihood restoration. Measures may include training initiatives to boost the productivity of local trading and small-scale business activities, especially for households located in periurban areas.

The need and applicability of such support will be considered for all households that are not able to secure alternative land or those households who have vulnerability factors that may prevent them from being able to restore their livelihoods.

Transitional Support Allowance

During the detailed RCAP annex data collection process, an assessment will be undertaken of all households to determine which households, if any, may require transitional support. Transitional support will be limited to six months during which tailored livelihood restoration support will be provided.

Local employment opportunities

As discussed in the Project ESIA, the Project intends to fill the majority of positions with Angolan nationals (i.e. mostly from urban centres such as Luanda for skilled and semi-skilled job) as well as from periurban areas close to the transmission line routes for construction workers, and from local communities in the Study Area for low skilled positions such as vegetation clearance, security guards, cooks, cleaning/house-keeping. Although local employment during construction is expected to deliver temporary localised benefits it will not provide the basis for sustainable livelihood restoration.

7.1 INTRODUCTION

This section is divided into two components. *Section 7.2* describes the process that will be followed to complete the resettlement planning and, thereafter, to realize resettlement and livelihood restoration in line with national requirements and international standards. Whilst the national process forms the basis of the approach for land acquisition, resettlement, and compensation, additional activities and process improvements will be needed to meet IFC Performance Standards.

Section 7.3 describes the approach to delivering the resettlement process, taking into account the construction modality and timings being proposed by GANEK/NHID. To meet international standards, it will be necessary for GANEK and NHID to own and drive the process working in close collaboration with provincial and municipal authorities and locally with *Sobas*. The structure of this collaborative working is described in this section.

7.2 PHASES OF THE RESETTLEMENT AND COMPENSATION PROCESS

7.2.1 Overview

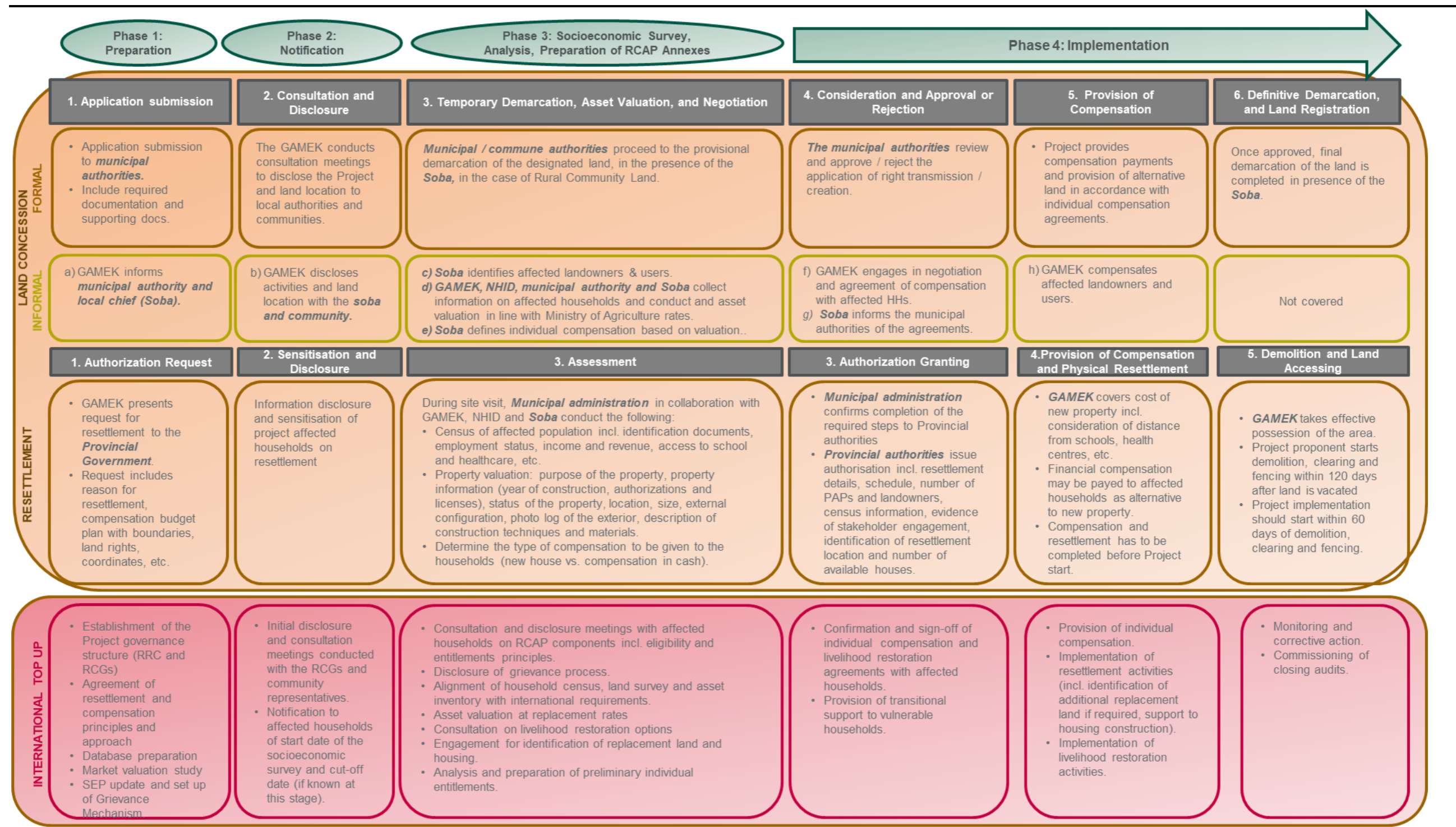
The overall process for completing the planning and then implementing resettlement and compensation is based on the following four primary phases:

- Phase 1: Resettlement and Compensation Preparation;
- Phase 2: Notification;
- Phase 3: Socioeconomic Surveys, Analysis, and Definition of Individual Entitlements; and
- Phase 4: Implementation.

These phases are summarised in *Figure 7.1* showing the steps that are undertaken for physical and economic displacement under national norms (rows in orange colour), along with additional activities required to meet IFC requirements (rows in red colour).

Each activity is described in the following sections. Additional activities to complete the resettlement and compensation process will include the monitoring as well as the commissioning of a close out audit. These activities are described in *Section 8*.

Figure 7.1 Resettlement Planning and Implementation Activities for the Láuca-Bita Transmission Line



Source: ERM, 2018

Phase 1: Resettlement and Compensation Preparation Phase

The objective of the preparation phase is to establish a solid basis for implementation of the land concession, resettlement and compensation process. It will involve ensuring alignment of all actors around a single plan and putting in place the resources and systems required. Success realisation of this phase is critical in laying the foundation for meeting the IFC PS, and to enable that resettlement and compensation process is completed within the six to eight month's timeframe before the start of construction (construction should start in July 2019).

The preparation phase includes the application submission to the relevant authorities, establishing the Project institutional structure and communication/coordination channels with the different stakeholders, and most importantly agreeing the approach and principles for the implementation of the process. This phase also includes setting up a database system to store the data collected for affected households, conducting an initial market valuation study to identify the need for any top-ups to national compensation amounts and a livelihoods study to confirm the approach to livelihood restoration. Additionally a critical step in this phase is the definition of the RCAP implementation plan and identification of resources requirements based on the demining schedule. These activities are described below, indicating which steps are nationally required and which steps are additional to enable alignment with international standards.

Establishment of the project institutional structure (International Step)

As a first step, GAMEK with the support of NHID will establish a resettlement implementation team (see *Section 7.3.2*) to drive the resettlement process and an institutional framework to provide an interface for all stakeholders involved in the resettlement and compensation process, allowing for close cooperation between NHID and GAMEK, provincial, municipal and communal authorities, village *sobas*, and affected households. Specific engagement with these stakeholders will be necessary to set up the institutional framework.

A two-tier governance system will be established as discussed in *Section 7.3.3* below. This includes a high level Resettlement Review Committee (RRC) providing overall guidance and oversight of the resettlement and compensation process, as well as four Resettlement Coordination Groups (RCGs) – one for each affected municipality – comprising those with key roles in the implementation process including members of the government-led Municipal Commissions (*Comissão Municipal*). The RCGs are complementary to the already established Municipal Commissions (*Comissao Municipal*) and will focus on operational aspects of the process. The roles and responsibilities and composition of the RRC and RCGs are described in *Section 7.3.3*.

Once all key members have been identified, the standards underpinning the land concession, resettlement and compensation process, and their key roles

and responsibilities will be discussed and agreed. This will be undertaken during a half-day workshop with the RRC and one-day workshop with each of the RCGs to be organized under the leadership of NHID and GAMEK.

Agreement of resettlement and compensation approach between NHID, GAMEK and Government Authorities (International Step)

The steps and channels to follow for land concession, compensation and resettlement will be discussed and agreed with the Resettlement Review Committee (RRC) at the start of the Preparation Phase. Specifically, the planning and implementation activities described here will be reviewed and the responsible parties and channels for each step of the process will be agreed, from submission of the application to the payment of compensations, to provision of alternative land, and physical resettlement. Key points to agree on are further discussed below.

- *Agreement on the principles of eligibility and entitlements.* A fundamental step during the Preparation Phase is to agree on the principles of eligibility and entitlements, which will form the basis of the compensation and livelihood restoration process. Project eligibility criteria and the entitlements approach are presented in *Section 6* and are based on a combination of Angolan legislation and standard practice, and additional consideration to align with IFC performance standards.
- *Agreement on the valuation approach and valuation team.* NHID/GAMEK will also discuss and agree with the RRC on the valuation approach for land, crops, trees, and residential and non-residential structures, and on the composition of the valuation team. The proposed valuation approach presented in *Section 6.3* is based on a combination of Angolan legislation and standard practice, and any adjustments or top-ups that are required to meet international standards and ensure that the compensation received is equivalent to the full replacement value of assets lost.
- *Agreeing on the valuation approach and validation of the proposed top-ups* and additional allowances is necessary to establish the basis for the activities in the following phases. NHID/GAMEK and the RRC will also agree on the roles and responsibilities of NHID/GAMEK and municipal authorities regarding valuation. The establishment of a consolidated valuation team composed of a municipality valuer and a valuer contracted by GAMEK on behalf of the Project.
- *Agreement on the principles of livelihood restoration.* The principles of livelihood restoration will also be agreed prior to engagement with affected households. International best practice recommends that economically displaced households receive adequate support to restore their livelihoods and improve their standards of living. Considering that physical resettlement will be mostly 'in-fill' in the settlements of origin and that economically displaced households will be provided with alternative land within their own settlements, livelihood restoration measures will be based

on a input and supply agricultural support model plus additional support for vulnerable households. The proposed livelihood restoration options are presented in *Section 6.4.1*. These options will be discussed with the RCGs prior to consultation with affected households.

Confirmation of demining schedule and RCAP planning (International Step)

The demining schedule will determine the schedule for being able to proceed with Phase 2 of the resettlement and compensation process. Once the schedule is available GAMEK and NHID will update the RCAP Implementation Plan schedule including definition of resources required, e.g. number of field teams required to provide land according to the Project timetable whilst respecting the requirements of the RCAP. At the moment it has been assumed that up to three field implementation teams could be required (see *Section 7.3.2*).

Land Concession Application submission and Notification of the Municipality and Soba (National Step)

As discussed in *Section 0*, land concession in Angola is governed by two processes: the formal land concession process and the informal land concession process. In the context of the Project, both the formal and informal processes may apply. The informal process will be followed for parcels of land held with customary land rights, while the formal process will apply for land with private property or surface rights.

As part of the formal land concession process, the expropriating entity must submit an application to the municipal administration for land concession for the Project. ⁽¹⁾ The application must identify the applicant and include specific information such as the location, area, land registry number, purpose of the concession, etc.

For projects of public interest and development of the country, the applicant should include clearly drawn-up maps, as well as a clear work plan including phases of realization and value of the investment to be made. Additional supporting documents may also be required. The full list of required documentation is listed in the Angolan Land Law (*Lei de Terras No. 9/04*).

Considering that the Project is a government Project led by GAMEK, the presentation of a formal application and documentation may not be entirely necessary. The application requirements and process shall be confirmed through discussions with GAMEK in the early stages of preparation.

In the context of the informal land concession process for parcels of land under customary rights, this first step consists primarily in notifying the

(1) The authority responsible for authorizing the transmission or constitution of land rights will vary according to the land category, land rights affected and the size of the area to concede. For the Project it is considered likely that responsibility may remain with municipal and communal authorities and local Soba. However, this should be confirmed with GAMEK and the municipal and provincial authorities.

municipal authorities and the *soba* about the Project and the associated land requirements.

After submission of the application and notification of the municipal authorities and *soba*, a government-led Municipal Commission (*Comissão Municipal*) may be established at the municipality level to support the Project in coordinating engagement activities and the land acquisition and compensation process with traditional leadership and local communities.

These commissions are composed of commune administrators, first rank *sobas*, and municipal technicians and specialists (see *Section 7.3.3*). In August 2018, a Municipal Commission was established for the Municipality of Cambambe in order to support in coordinating and facilitating ESIA engagement for the Project (Provincial Government of Cuanza Norte Decision No. 006/2018).

Resettlement Authorisation Request (National Step)

For the resettlement process, GAMEK along with municipal authorities presents a request for the authorization of physical resettlement to the provincial authorities. The request must include the proposed area for resettlement, justification for physical resettlement, proposed work schedule, and the compensation budget for infrastructure that does not belong to individual households (e.g. churches, schools, etc.). The request should also include a *croquis* showing the relevant Project elements such as boundaries, land rights, geographical coordinates, etc.

Considering that the Project is a government Project led by GAMEK and the extent of displacement very limited, the applicability of the authorisation request and the extent of the documentation to be provided shall be confirmed through discussions with GAMEK in the early stages of preparation.

Resettlement and compensation database preparation (International Step)

As part of the preparation phase, before the start of the socioeconomic surveys and data collection activities (*Section 7.2.4* below), NHID will develop a Resettlement and Compensation Database to collect and store all the data collected during the socioeconomic surveys, along with the records of the different steps or activities conducted throughout the process.

The objective is for the Resettlement Implementation Team (see *Section 7.3.2*) to have a well-established database to record socioeconomic data for the affected households (i.e. socioeconomic household census data, land survey and asset inventory data), to enable data compilation and analysis. The database will support the generation of individual entitlement agreements can be generated, recording of delivery of compensation and livelihood restoration activities at a household level and the basis for future monitoring and evaluation of RCAP outcomes.

The database will be organised around affected households with all the data linked to the corresponding household. For this, a Household ID number will be assigned to each affected household, to which the corresponding information will be linked on the database. To cover for the possibility that one household may own more than one asset (e.g. structure, plot etc.) or a household from outside the community may own a plot in the Project areas, a Plot ID number will also be assigned to the affected plots and linked to an individual Owner ID.

Market valuation study (International Step)

Before the start of the socioeconomic study and the asset valuation, GAMEK on behalf of the Project will conduct or commission a market valuation study for land, agricultural crops and trees to identify the need for any top-ups to national compensation amounts.

This study will aim to provide a better understanding of the costs factored into the compensation rates established by the Ministry of Agriculture and Forestry, and whether these rates reflect the full replacement cost of the assets as understood under IFC Performance Standards 5. The full replacement cost corresponds to market value and transaction costs without consideration of depreciation. This is discussed in more detail in *Section 6.3.2*.

RCAP monitoring plan (International Step)

Before start of data gathering on affected households and field activities, GAMEK on behalf of the Project will develop a detailed Monitoring Plan to ensure systematic collection of information on the impact and effectiveness of the RCAP process and enable adjustments to be made in a timely manner where required. The Monitoring Plan will define key indicators for monitoring compensation and improvements to livelihoods.

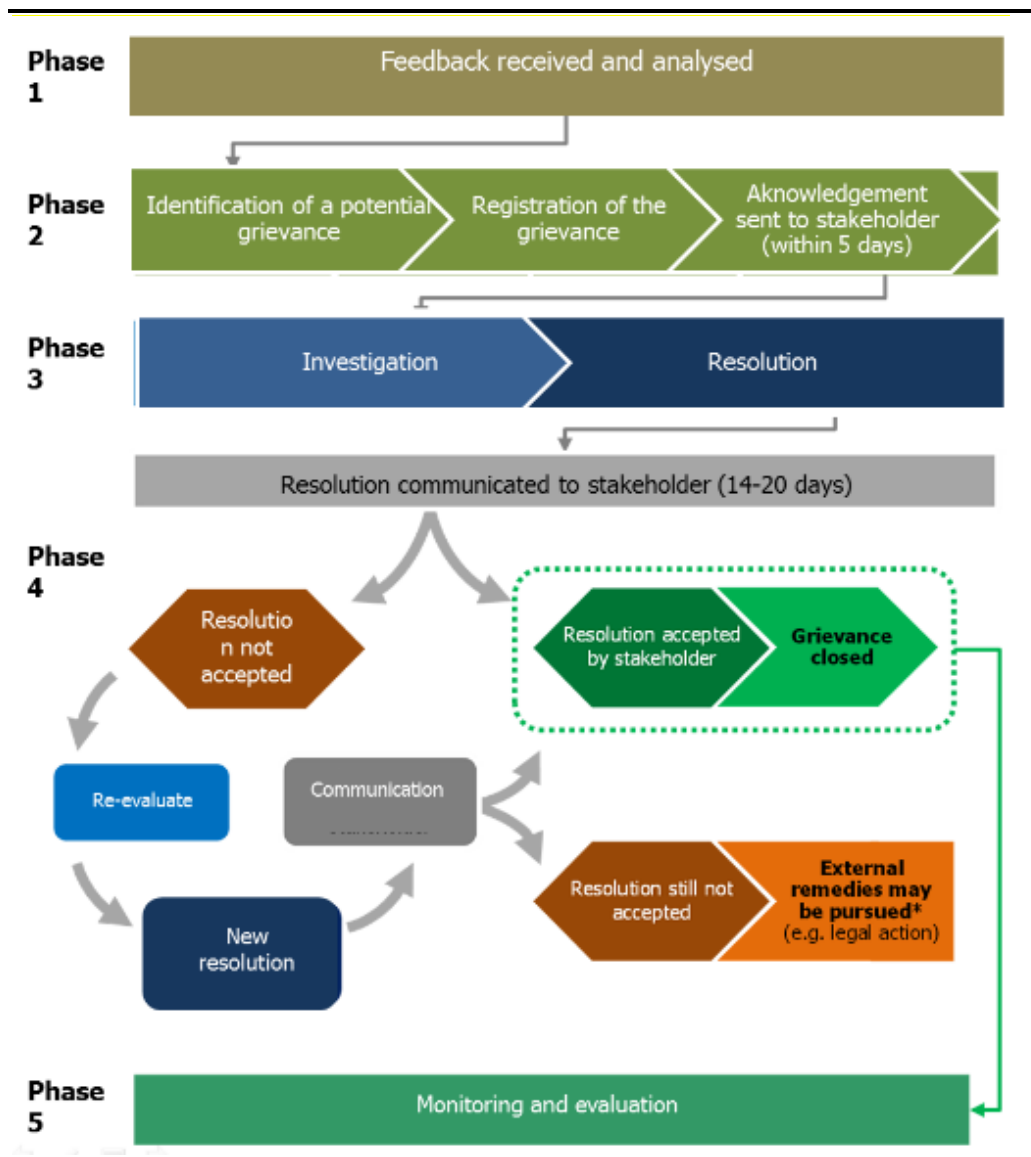
Update of the stakeholder engagement plan and establishment of the grievance mechanism (International Step)

The existing Stakeholder Engagement Plan will be updated to account for learnings through this phase of activities and a detailed plan developed for engagement during phases 2 and 3 to ensure adequate disclosure of information and levels of participation of affected households and their representatives.

NHID on behalf of the Project will hire a team of E&S / Community Liaison Managers who will be the focus for ongoing stakeholder engagement activities with households and communities affected by the Project. These will work both on general Project stakeholder engagement and support RCAP development and implementation. Training will be provided to build capacity in managing and dealing with resettlement and compensation related grievances and reporting on engagement activities. NHID will supervise the process and work closely with all teams on the ground.

The resettlement process will utilise the community grievance mechanism that is set up for the entire project to manage and respond to grievances. The community grievance mechanism enables any stakeholder to make a complaint or a suggestion about the way the Project is being implemented. Grievances may take the form of specific complaints for damages/injury, concerns about routine Project activities, or perceived incidents or impacts. The mechanism that will be followed by NHID during the pre-construction and construction phases of the Project ⁽¹⁾ is described in the SEP and illustrated in Figure 7.2.

Figure 7.2 *Grievance Mechanism during Pre-Construction and Construction Phase*



Source: ERM 2018

(1) Following the Project commissioning, RNT will have the responsibility to implement a grievance mechanism during the operational phase. It is expected that the grievance mechanism structure and its management will change between the construction and operation phase. These changes will be presented to affected stakeholders to ensure a smooth transition between the two phases and that grievances are managed appropriately by RTN.

Phase 2: Notification Phase

The notification phase consists primarily of presenting and discussing the Project and the RCAP with the affected communities, providing an overview of the land concession, resettlement and compensation process, and notifying them of the activities and next steps that will follow as part of the implementation process. Specific activities included in this Phase are described below. The national process for land concession and resettlement is described upfront along with adjustments for alignment to international standards presented in the orange boxes.

Disclosure of the RCAP, and resettlement and compensation process to local stakeholders

GAMEK on behalf of the Project is required to conduct disclosure and consultation meetings with interested parties (i.e. local authorities, local businesses, etc.) and the local communities through the village *sobas*. These meetings are intended to disclose and consult local stakeholders on the Project's land requirements and the land concession and compensation process.

To align with international standards, GAMEK with support from NHID will conduct initial disclosure and consultation engagement with the four Resettlement Coordination Groups (RCGs) in the different municipalities including the *sobas* of affected settlements. Through these engagements, the contents of the RCAP, especially the entitlement matrix and institutional framework, and the overview of the process and steps that will be followed will be disclosed to relevant stakeholders through the RCGs.

At these meetings the start date of the socioeconomic survey and of the cut-off date and its implications will be notified (see *Section 6.3*) and materials will be provided to each *soba* to support their engagement with their communities. This will include posters or flyers that will be distributed and hung up in the affected communities at least two weeks in advance of the socioeconomic survey. If the dates are not yet known, they will be communicated to the *sobas* at the start of the Phase 3: Socioeconomic Survey, Analysis, and Preparation of RCAP Annexes.

Through these initial meetings, local community representatives are required to confirm verbally if the land is vacant and not occupied. In the event that the land is currently in use, the land concession will require the consent of the landowners, including customary landowners. For the Project, it is known that some of the land is used. The consent of the landowners will be achieved through Phases 3 and 4 below.

RCAP disclosure and engagement with affected households (National and International Step)

To complete the engagement required by Angolan requirements within the notification stage and to align with international standards, disclosure and meetings will also be conducted with groups of affected households per community to present and discuss relevant aspects of the RCAP before the start of the census and asset inventory. These meetings will review the key elements of the RCAP such as the eligibility criteria and entitlement matrix

and the steps that will be undertaken to identify and compensate individual affected land users. Visits to any affected businesses will also take place.

These meetings will also be used to publicise the grievance mechanism to local communities and affected households.

The community meetings will be complemented by a series of small scale FGDs with a representative range of potentially impacted households to enable discussion of any key issues raised in the public meetings in more detail. Meetings will also be held with key stakeholders in the provincial and municipal authority. Additionally GAMEK will implement a mechanism for notification to especially vulnerable households and individuals that cannot attend meetings. This mechanism will be implemented with support from Sobas who are the ones that have knowledge of all community members.

As for the physical resettlement process, the municipal administration will conduct a site visit in collaboration with the expropriating entity, GAMEK, and the *soba* of the affected households to explain the resettlement process.

As stated above for the land concession process, this initial engagement on the RCAP and resettlement and compensation process will be done through the four Resettlement Review Committees (RCGs) in the different municipalities including the *sobas* of affected settlements. The participation of provincial authorities will also be required.

7.2.4 *Phase 3: Socioeconomic Survey, Analysis, and Preparation of RCAP Annexes*

This phase describes the data collection process and supporting engagement activities, along with the data analysis and preparation of the specific RCAP Annexes, which together with the RCAP main document, will constitute the specific Livelihood Restoration Plans (LRPs) and Resettlement Action Plans (RAPs) for the transmission line segments. It is expected that several RCAP Annexes will be required depending on the number of sections in which the route is divided and the program of demining. The data collected and results of the analysis will be recorded in the Resettlement and Compensation Database described previously in Phase 1.

Specific activities included in this Phase are described below. Most activities are covered by the national process for land concession and resettlement. These are presented along with adjustments for alignment to international standards presented in the orange boxes. Additional activities to align with international requirements are also presented.

Identification of affected individuals and households (National Step)

The identification of economically and physically displaced individuals and households due to Project activities is prerequisite to starting the socioeconomic surveys. For land held under the customary rights regime, landowners and users of the affected land parcels are identified through the *soba*. Private property rights holders may be identified directly through the municipal administration.

Provisional land demarcation and asset inventory (National Step)

After disclosure of the Project to the *sobas* and affected communities, municipal authorities through the *Instituto Geográfico e Cadastral de Angola* (IGCA) dependent on the provincial administration will proceed to the provisional demarcation of the affected land plots. In the case of Rural Community Land held under customary rights, and as per local requirements, the demarcation will be conducted in the presence of the *soba*. Once the land demarcation is completed, the land surveyor and valuation team in coordination with municipal authorities and the representatives of the *Instituto de Desenvolvimento Agrario* from the Ministry of Agriculture in the presence of the *soba* will conduct an asset inventory with affected landowners and users.

The Land surveyor and valuation team will be composed of a valuation specialist from the municipal or communal administration and a valuer and surveyors appointed by GAMEK on behalf of the Project. The composition, role and responsibilities of the valuation team as well as the valuation approach will be agreed on previously by GAMEK and Government authorities (through the RRC) during the Preparation Phase.

At a minimum, the land demarcation activity will include taking GPS points of the limits of the entire parcel, establishing the parcel size, type of land use, status (i.e. cultivated, land under preparation, fallow, etc.), rights regime, and identifying the owners and users. Each affected parcel will be given a parcel ID number and information collected for this parcel will be recorded in the Resettlement and Compensation Database under this ID number, and linked to Household IDs and Owner IDs as applicable. The asset inventory will be signed off by the land / asset owner who will be provided with a copy for their record. Additional trusted persons and neighbours (i.e. those with adjacent lands) may also need to validate the information in order to avoid complaints and misunderstandings.

The asset inventory will be conducted for all assets located on affected land parcels, including residential and non-residential immovable structures or assets. The assets will be classified into the following categories, as identified in the entitlements matrix (*Section 6.4*):

- Crops and economic trees;
- moveable assets (livestock / farm animals);
- immovable assets (housing);
- immovable assets (ancillary agricultural structures, fences, walls, etc.); and
- immovable assets (economic structures).

For each category, the coordinates of the asset location will be recorded and specific information will be collected. For crops and economic trees, information will include the species or crop type, maturity / height, state (ie cultivated, harvested, land under preparation), number of trees per square metre or dimension of crop area, and the ownership status.

Socioeconomic census (National Step)

In the context of the resettlement process, the municipal administration and GAMEK on behalf of the Project, along with the *soba* in the case of Rural Community Land, will conduct a census of the affected individuals.

To align with international standards, the socioeconomic census will focus on collecting information at the household level and will cover both physically and economically

displaced households. NHID will provide the necessary support to ensure methodologies are adjusted and data is recorded consistently. It will be conducted in parallel to the Land Demarcation and Asset Inventory Activity described above. A household ID will be assigned to each household and include the Owner IDs of any assets owned by individuals in the household. Data collected will include the following:

- Household composition and profile (family demographics);
- vulnerability characteristics (e.g. age, disability etc.);
- range of economic activities and income;
- indicators of standard of living.

The census will be used to identify any particularly vulnerable households that may require transitional support and additional livelihood restoration support.

Property valuation (National Step)

A property valuation is also conducted in parallel to the Asset Inventory to determine the purpose of the property, year of construction, authorizations and licenses, and property characteristics including its current state, location, size, external configuration, construction techniques and materials. This information is also supported by a photo register. The surveyor may either be a communal or municipal expert, or an external expert appointed by GAMEK on behalf of the Project.

The property valuation will also determine compensation for lost income related to any affected businesses and their employees.

The asset valuation will be conducted to reflect full replacement costs as prescribed in the valuation study and as agreed with GAMEK and relevant government authorities during the Preparation Phase. This valuation will be shared and agreed with the affected asset owner through the provision of individual entitlements (see below in Phase 4).

Socioeconomic assessment (International Step)

To complement the household survey, Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs) will be conducted to understand contextual information such as availability of services, availability of replacement land, important markets etc.

A key focus of the focus groups will be to gain a greater understanding of agricultural to tailor the livelihood restoration plan for each particular area. This will include understanding the key crops under production to inform the list of replacement crops being offered, current limitations to agricultural production and potential opportunities for improvement.

The focus groups will also be used to test the livelihood restoration plan including discussion on:

- the distribution of livelihood restoration inputs;

- additional livelihood restoration activities for identified highly vulnerable households; and
- assistance for reestablishment of agricultural activities on alternative land.

Meetings will also be organized by GAMEK with the Ministry of Agriculture and Forestry and other recommended institutions to identify suitable programs and opportunities for extension support for vulnerable households should this be required.

Preparation of RCAP Annexes (International Step)

The information collected during the Socioeconomic Survey Phase will be recorded in the database (see *Section 7.2.2*) and presented in the form of Annexes to the RCAP and proof of engagement documents packaged into separate Annexes to the RCAP. Together the RCAP and the Annexes will constitute the RAPs/LRPs for the different areas. These annexes will include the following:

- the survey results and analysis as to the identification of affected parties and assets;
- identification of households with specific vulnerabilities;
- the definition of preliminary individual entitlements based on the results of the socioeconomic assessment;
- the definition of specific additional measures required to address specific losses, or vulnerabilities not already considered in the RCAP; and
- the resettlement budget and schedule for the area pending negotiation with affected parties in the implementation phase (Phase 4).

The final number of required RCAP Annexes is unknown at this stage as it depends on when land in each area will be accessible after the mine clearance process. This is discussed further in *Section 7.3*.

The RCAP annexes will also serve as a basis to discuss and agree on the needs for new land for agriculture and replacement housing in each location and to establish a timetable for implementation. This will be done through the following engagement activities:

- Meetings with the RRC and RCGs.
- Meeting with the *sobas* to maintain on-going communications and collaboration during implementation.

7.2.5

Phase 4: Implementation

Further to the identification of affected landowners and users and the assessment and valuation of household losses (see *Section 7.2.4* above) the Project will move into the implementation phase. As per national legislation implementation involves a process of negotiation with affected households regarding entitlements and the provision of compensation. The national process is broadly aligned with international requirements, however where

adjustments are required, these are presented in the orange boxes or in separate sections.

This section presents the key resettlement and compensation implementation steps that need to be completed prior to the Project removing access to the land / assets.

Identification of replacement land (International Step)

GAMEK will conduct meetings with village *sobas* to discuss replacement land options for agricultural land and residential property for all affected economically and physically displaced households, including vulnerable households. This engagement will commence during the Socioeconomic Survey and Analysis Phase, and will be ongoing until all options for replacement land have been explored.

For residential housing, the Project team will work with the *soba* to identify plots for replacement residential housing are provide for structural stability are free of risk of flooding and have equal or improved access to services.

For agricultural land, the Project team will work with the *soba* to identify suitable replacement land.

These plots should present “a combination of productive potential, locational advantages, and other factors at least equivalent to that being lost”.⁽¹⁾

Identification of specific livelihood restoration support measures (International Step)

Should any households not be able to access suitable alternative agricultural land, or be identified as specifically vulnerable and requiring additional livelihood restoration support, the Livelihoods Restoration Advisor will assess the support required and prepare a household specific plan taking into consideration the particular context of the affected households.

Disclosure and negotiation of individual entitlements with affected households (National Step)

The first step in the implementation phase is the agreement and negotiation of individual entitlements with affected households. These individual entitlements would have been defined as a result of the socioeconomic assessment (see *Section 7.2.4*). As per national legislation the concerned Municipality through the Land Commission will be in charge of managing such negotiation process at individual level. Records of these negotiations will be saved in the Resettlement and Compensation Database (See Phase 1).

In close coordination with the Land Commission representatives, the Project team through the RCGs will develop individual entitlements (approximately two page document) which will provide detailed account of the losses and the cash and in-kind compensation (i.e. replacement
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(1) IFC PS 5, 2012

land and housing) and livelihood restoration that the household is entitled to. These predetermined forms will be prepared using the database established by GAMEK with support by NHID.

Entitlements will include adjustments and top-ups to the Angolan amounts as well as additional allowances. Households should be provided with the opportunity to review and discuss their individual entitlement.

Individual household sign-off is required to confirm loss of land and assets and the compensation/livelihood restoration packages for each affected household. In the event that the household challenges the restoration package being offered to him/her, the situation will be first considered by the Resettlement Coordination Groups (RCG). This avenue for challenging the quantum of compensation does not prevent affected people from seeking judicial remedy.

Consideration and approval or rejection of land concession by authorities (National Step)

The authorities responsible for authorizing the transmission or constitution of land rights will vary according to the land category, land rights affected and the size of the area to concede. For the Project it is considered likely that responsibility may remain with municipal and communal authorities and local *Soba*. However, this should be confirmed with GAMEK and the municipal and provincial authorities as part of the conversations during the planning and preparation phase (see *Section 7.2.2*). As discussed in the *Overview* section above (See *Figure 7.1* in *Section 7.1*), the process followed will be informal for parcels of land held with customary land rights, while the formal process will apply for land with private property or surface rights.

The formal declaration will be published later in the official gazette once the land concession title is granted and registered by the competent authority.

Authorization for physical resettlement (National Step)

As part of the authorisation process, the municipal administration will first confirm completion of the required steps and will submit the findings to the provincial authorities, including the resettlement details, schedule, number of project affected people and landowners, the census information, evidence of stakeholder engagement, identification of resettlement location, and number of houses to be built in the new location. The provincial governor will then issue the authorization for resettlement to proceed upon confirmation of the required steps.

Provision of compensation (National Step)

Further to the land concession approval and approval of physical resettlement compensation payments for the loss of assets (crops, trees and non-residential structures) and land (only in the case of private property right holders) will be undertaken along with the provision of alternative land. Compensation for the loss of assets is described in more detail in *Section 6.3*.

GAMEK will ensure that cash compensation and allowances is paid and signed for in accordance with individual household agreements. Any compensation regardless of the amount will require the establishment of bank accounts such that funds can be transferred electronically.

Households will be encouraged to establish joint bank account in the name of the head of household and the spouse to ensure that the household, rather than individual that identifies as owning the asset, is able to benefit from the compensation. Should there be a dispute as to who should receive compensation, then the funds will be placed in an ESCROW account until such dispute is resolved.

Payment of compensation will need to occur prior to the start of construction activities and the removal of assets.

Support to housing construction (International Step)

Physically displaced households will be supported and supervised directly by the Self-Build Supervisor and Structural Technicians to secure an appropriate residential plot and build a replacement house that is of sound construction and appropriate design for the household. The standards for construction and process that will be followed are described in *Section 6.3.6*.

Distribution of livelihood restoration inputs (International Step)

Based on the options chosen during individual household sign-off, improved seed varieties and seedlings will be purchased and distributed to all affected households. Other agricultural inputs will be distributed as identified in the RCAP annex for that section and support will be provided to specific vulnerable households as identified by the Livelihood Restoration Advisor.

Definitive demarcation and land registration (National Step)

In the case of the Project, considering that the land required for the Project belongs to the State and that the Project also belongs to the State, no contract signing will be required. Instead, it is understood that the municipal authorities will issue a concession title deed identifying the nature of the land granted, type, and land rights, date, and duration of the contract.

Land rights transferred through the provision of surface user rights are subject to registration in the Land Registry whereas, the recognition title for land under customary is free and therefore not subject to registration. The transmission of rights only enters into force legally after registration in the Land Registry.

Demolition and land access (National Step)

After the compensation and resettlement is complete, NHID on behalf of GAMEK will take effective possession of the area. As per national legislation the demolition, clearing and fencing process (if required) will be implemented

within 120 days after land has been vacated. The law also requires that construction activities should start within 60 days after demolition, clearing and fencing.

7.3 IMPLEMENTATION APPROACH

7.3.1 Overview and Schedule

It is currently envisaged that NHID might work with up to three EPC contractors during the construction phase. Each contractor will be responsible for the construction of a line segment.

The current Project schedule requires that the land acquisition and compensation process is completed before construction starts on 1st July for at least 50% of the land along up to three different transmission line segments. The remaining land acquisition and compensation process for each line segment will need to become available during the following six months.

Table 7.1 below summarises the division of the transmission line route into the three potential construction segments and the municipalities, communes, and settlements concerned with each segment.

Table 7.1 Preliminary Transmission Line Construction Segments

#	Km Point (kp)	Province	Municipality	Commune	Settlements
1	Kp 0 to Kp 80	Cuanza Norte	Cambambe	San Pedro da Quilemba	<ul style="list-style-type: none"> • Aldeia Lucapa • Quisuba • Dumbo Ya Pepe • Nhangue Ya Pepe
2	Kp 80 to Kp 160	Cuanza Norte	Cambambe	Zenza do Itombe	<ul style="list-style-type: none"> • Quitendele • Zenza do Itombe • Muchau
		Luanda	Icolo e Bengo	Cassoneca	<ul style="list-style-type: none"> • Sagrada Esperança
3	Kp 160 to kp 237	Luanda	Icolo e Bengo	Calomboloca	<ul style="list-style-type: none"> • Morro 50
				Calomboloca	<ul style="list-style-type: none"> • Koba
				Catete	<ul style="list-style-type: none"> • Mazozo • Tari • Wala
				Bom Jesus	<ul style="list-style-type: none"> • Ngolom
		Viana	Kikuxi	<ul style="list-style-type: none"> • Mateia 	
			Calumbo	<ul style="list-style-type: none"> • Mbanza Calumbo II • Hanga Calumbo 	
Belas	Quenguela	<ul style="list-style-type: none"> • Bita Ambriz 			

Source: ERM 2018

The demining schedule, which is pre-requisite to Phase 2 of the RCAP implementation, has been preliminary defined and is programmed to

commence in the second week of February 2019 and continue for six months. According to the schedule, 15-20% of the line (entire 60 m corridor) will be demined monthly. Depending on the phasing of the demining and construction at any given location, the Resettlement Implementation Team will need to have between one and three field teams, one for each construction segment.

Each field team will coordinate planning and scheduling of the survey activities with the corresponding EPC contractor to align with the demining and construction schedule, as well as legal and financial requirements. GAMEK with the support of NHID will prepare detailed implementation and resourcing plans as soon as demining schedule is available (see *Section 7.2.2*) which will clearly define timeframes for deployment of field teams as well as resources required.

The sequence of resettlement activities to be implemented by each field team are shown in the high level schedule in *Figure 7.3*. The remaining of this section presents the structure of the implementation team and the institutional governance framework required to deliver the preparation, implementation and monitoring of the resettlement and compensation process.

It is noted that construction in any areas where residential housing is present will need to be scheduled to commence at the tail end of the construction phase to enable affected households to construct replacement housing prior to needing to leave their existing homes. Should this not be possible, acceptable residential housing very close to their existing residences will need to be sought and additional allowances will need to be agreed.

Figure 7.3 High Level RCAP Implementation Schedule

Activities	Step	feb-19		mar-19			apr-19			may-19			jun-19			jul-19			ago-19			sep-19			oct-19						
		w1	w2	W3	W4	w5	w6	w7	w8	w9	w10	w11	w12	w13	w14	w15	w16	w17	w18	w19	w20	w21	w22	w23	w24	w25	w26	w27	w28	w29	w30
Phase 1: Resettlement and Compensation Preparation Phase		★ Start of Demining activities (5 teams)												★ Start of Construction			★ End of Demining activities														
Establishment of Project Institutional Structure (NHID Implementation Team, Resettlement Review Committee (RRC) and the Resettlement Co-ordination Groups (RCG))	International																														
Agreement of resettlement and compensation approach between NHID/GAMEK and Government Authorities	International																														
Confirmation of demining schedule and RCAP planning update	International																														
Land Concession Application Submission and Notification of the Municipality and Soba	National																														
Resettlement Authorisation Request	National																														
Resettlement and compensation database preparation	International																														
Market valuation study	International																														
Preparation of the RCAP monitoring plan	International																														
Update of the stakeholder engagement plan and establishment of the grievance mechanism	International																														
Phase 2: Notification																															
Disclosure of the RCAP, and Resettlement and Compensation Process to Local Stakeholders (RCGs, Sobas)	National																														
RCAP Disclosure and Engagement with Affected Households	National & International																														
Phase 3: Socioeconomic Survey, Analysis, and Definition of Individual Entitlements																															
Identification of Affected Individuals and Households	National																														
Provisional land demarcation and asset inventory	National																														
Socioeconomic census (Survey 1)	National																														
Property valuation (Survey 2)	National																														
Socioeconomic assessment (Survey 3)	International																														
Preparation of RCAP Annexes	International																														
Phase 4: Implementation																															
Identification of replacement land	International																														
Identification of specific livelihood restoration support measures for Affected Households	International																														
Disclosure and negotiation of individual entitlements with Affected Households	National																														
Consideration and approval or rejection of land concession by authorities	National																														
Authorization for physical resettlement	National																														
Provision of compensation for non-housing assets	National																														
Support for housing construction	International																														
Distribution of livelihood restoration inputs	International																														
Definitive demarcation and land registration	National																														
Demolition and land access	National																														

Source: ERM 2019

7.3.2

Project Implementation Team

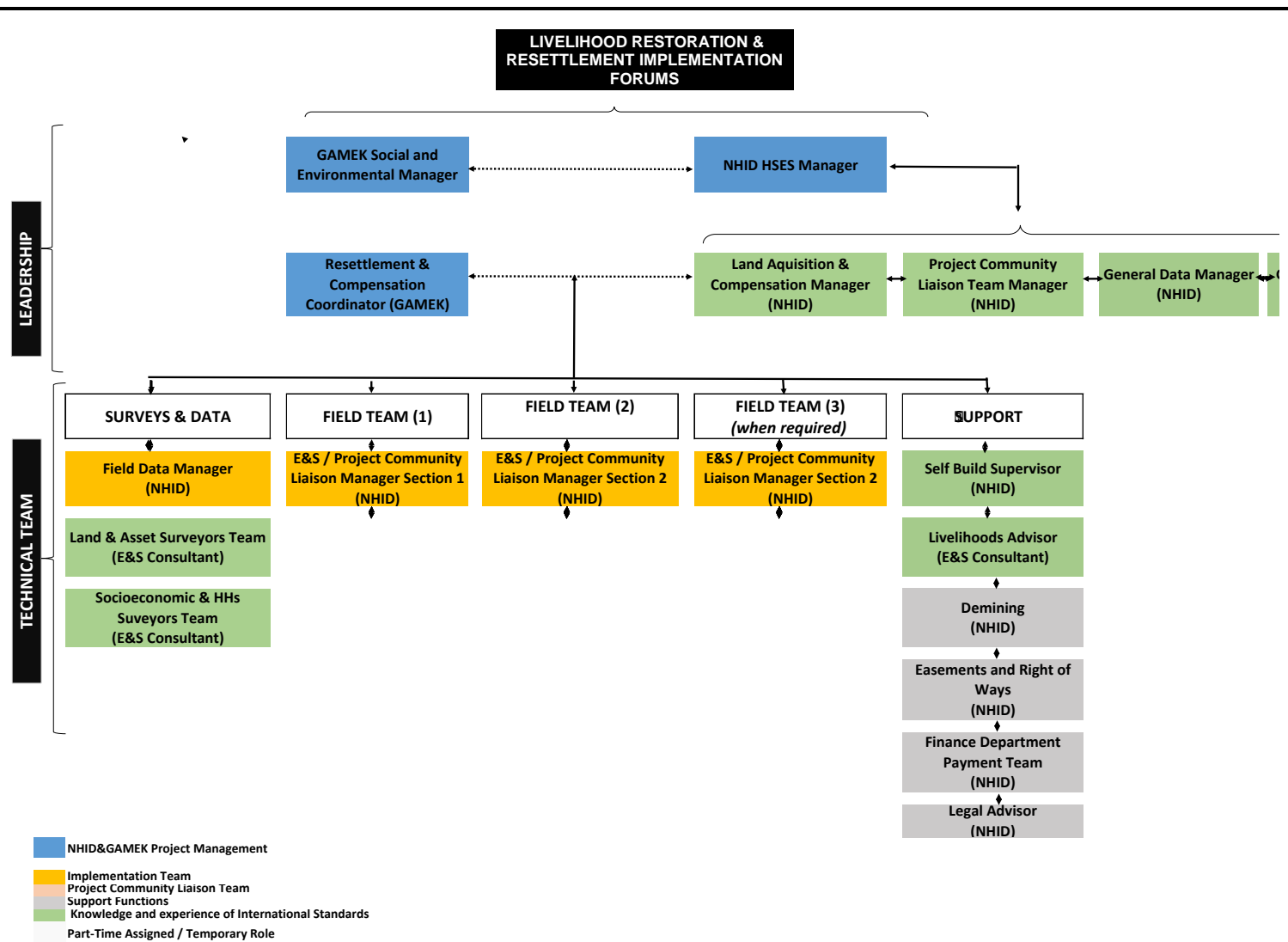
This section presents a detailed structure of the implementation team, including key Project staff, external support and contract staff required to develop and implement the land acquisition, resettlement and compensation process, including their roles and responsibilities. It is noted that the final size and composition of the field implementation team will be flexible in order to accommodate the needs of the Project.

The Implementation Team composition has been discussed between GAMEK and NHID. Both parties have agreed the division of roles and responsibilities and the needs for external support.

The agreed structure for the Project implementation team is illustrated in *Figure 7.4*. These roles are summarised in *Table 7.2* and, as shown, it is envisaged that they will be filled by through:

- GAMEK/NHID staff; and
- External consultants.

Figure 7.4 Implementation Team Structure



Source: ERM 2019

Table 7.2 Implementation Team Roles and Responsibilities

Position	Role and Responsibility	Experience of International Standards	Location/ Timing ⁽¹⁾
GAMEK Social and Environmental Manager (GAMEK)	<p>The GAMEK Social and Environmental Manager (SEM) is responsible on behalf of GAMEK for management of environmental and social aspects with regards to the development of transmission line projects in the area. The GAMEK SEM specifically supervises the land acquisition and compensation processes associated with transmission line projects developed by GAMEK. Its responsibilities also include liaison with NHID and direct support/facilitation of the construction of the Laúca-Bita Transmission Line Project.</p> <p>The GAMEK SEM will specifically:</p> <ul style="list-style-type: none"> • oversee operations (strategic, business and financial) of resettlement and compensation activities; • review and authorise scope changes (in consultation with the RRC) and ensure variations are justified; • assists in securing necessary resources and approvals; and <p>provides oversight as required to ensure that the LRPs/RAPs meets their overall objectives.</p>	No	Luanda/part time role
NHID HSES Manager (NHID)	<p>The NHID HSES Manager will be the person responsible for overseeing the land acquisition, compensation and resettlement process, providing advice and resolving high level issues or concerns.</p> <p>The NHID HSES Manager will specifically be responsible for the following:</p> <ul style="list-style-type: none"> • Supporting the LAC Manager and field team coordinators to engage successfully with GAMEK and government departments; • ensuring the Implementation Team has sufficient resources (internal and contracted) of the right capacity; and • ensuring sufficient budgets and realistic schedules. 	No	Luanda-Madrid /part time role
Resettlement and Compensation Coordinator (RCC) (GAMEK)	<p>The RCC will be directly responsible for ensuring all elements of the process are implemented in accordance with Angolan requirements and international best practice. He/she will work closely with the NHID HSES Manager and NHID LAC Manager and facilitate contact and interaction with local institutions and authorities, in particular municipal authorities and <i>sobas</i> through the Municipal Councils.</p> <p>He/she will also chair the RCG and RRCs.</p>	No	Field and Luanda /Full time role

(1) Timing indicates whether the role is full time ascribed to resettlement and compensation tasks. It is envisaged (refer to Figure 7.4 above) many of the positions will involve other functions.

Position	Role and Responsibility	Experience of International Standards	Location / Timing ⁽¹⁾
Land Acquisition and Compensation (LAC) Manager (NHID)	<p>The LAC Manager will be directly responsible for developing the RCAP Annexes and for ensuring all elements of the process are implemented in accordance with this RCAP. He/she will work closely with the LAC Manager and Community Liaison Team Manager and Field Team E&S/CL Managers. The RCC will work between field based oversight activities and activities in Luanda. The RCC will:</p> <ul style="list-style-type: none"> • interface with GAMEK RCC; • supervise the E&S /CL Manager with regards to resettlement and compensation tasks, including consultant and contract personnel; • supervise and work closely with the field teams and E&S/CL Managers; • oversee all resettlement and compensation activities, including scheduling, resourcing and budget; • co-chair the RCGs and RRC with GAMEK RCC; • actively review grievances; • ensure robust monitoring reporting and identify corrective action; • promoting the participation of all stakeholders and information sharing; • supervise the development of all RCAP Annexes; and • ensure the maintenance of robust monitoring information and timely development of fit for purpose reports to ensure timely information sharing between the RCGs and RRC. 	Yes (implementation consultant role)	Field and Luanda based / full time role through Phase 1 & 2
Community Liaison Team (CLT) Manager (NHID)	<p>The Community Liaison Team (CLT) Manager is responsible for leading and supervising the work of for general Project engagement as well as RCAP engagement and support. The CLT works closely with the RCC to coordinate the work of the E&S/CL Managers in supporting the RCAP implementation process. They report directly to the HSES Manager and NHID management on overall stakeholder engagement activities. Specific responsibilities include:</p> <ul style="list-style-type: none"> • plan the stakeholder engagement activities and ensure they are appropriately implemented by the E&S /CL Managers deployed along the transmission line route; • plan the specific stakeholder engagement activities for RCAP implementation support and coordinate with the LAC Manager; • manage the grievance mechanism and grievance resolution process; • share any relevant issues or concerns regarding the RCAP implementation with the LAC Manager; • supervise/ monitor and coordinate activities with subcontractors to ensure they comply with the SEP; • plan the stakeholder engagement activities and ensure they are appropriately implemented by the three E&S/CL Managers deployed along the TL route; • oversee the grievance resolution process; and • report to HSES manager and NHID management on the stakeholder engagement activities. 	Yes (implementation consultant role)	Field and Luanda based /full time role

Position	Role and Responsibility	Experience of International Standards	Location / Timing ⁽¹⁾
General Data Manager (NHID)	<p>The Data Manager will set up the data management system and monitor its use and effectiveness. The Data Manager will be competent in setting up a resettlement and compensation database in compliance with international best practice. They will also:</p> <ul style="list-style-type: none"> • receive, review and file data as per the data management system; • follow-up with team members where data is not correctly captured; • extract data and prepare reports as required by the Implementation Team; • maintain an up-to-date database for all households affected by the Project; and • log and track grievances. 	Yes (implementation consultant role)	Offsite with in-country visits / part time role
Environmental and Social / Community Liaison Managers (E&S/CL Managers)-NHID	<p>The E&S/CL Managers (three in total) will be responsible for day to day development and implementation of the RCAP activities for the corresponding segment including supporting the work of the survey teams. The E&S/CL Manager reports directly to the NHID HSES Manager and works in close coordination with the CTL Manager and the LAC Manager. E&S /CL Managers will be key in ensuring the smooth development of RCAP Annexes and for supervising the agreement and signature of individual entitlements.</p> <p>Additionally the E&S/CL Managers will be responsible for supporting direct engagements with affected households and dealing with day-to-day community-related issues and concerns and managing the grievance mechanism. In particular they will:</p> <ul style="list-style-type: none"> • hold regular meetings with the community to provide an update on the status of the Project including the RCAP implementation; • convey relevant information to the community; and back to the Community Liaison Team Manager; • produce stakeholder engagement monitoring reports and submit to Community Liaison Team Manager; • keep minutes and attendance registers of all meetings attended; • alert the Resettlement and Compensation Coordinator as soon as sensitive issues are raised or when an issue may escalate into something more significant; • ensure access to the grievance mechanism and work with others in the Implementation Team to resolve grievances at the local level. Escalate grievances that cannot be resolved at the local level to the RCG. • keep records of all interactions, attendance registers and grievances as required; and • provide relevant data to the Field Team Data Manager and update relevant databases and reports for monitoring purposes. 	No	Field based / part time role
Field Data Manager (NHID)	The field team Data Manager will report directly to the General Data Manager and the LAC Manager, both NHID personnel. The Data Manager is responsible for collecting and filing data as per the data management system.	No	Field based / part time role

Position	Role and Responsibility	Experience of International Standards	Location / Timing ⁽¹⁾
Self-Build Supervisor (NHID)	The Self-Build Supervisor will coordinate the assisted self-build programme and the implementation of the self-build support package.	Yes (implementation consultant role)	Field based / part time role
NHID Legal Advisor	Legal matters related to the development and implementation of the RCAP are provided by the Legal Advisor, who is in charge of strategic and high level advice to the process. The Legal Advisor will support the E&S / CL Managers with the preparation and validation of contracts, land access and assistance with legal representation in court cases.	No	Luanda / part time role
Livelihoods Advisor (NHID)	The Livelihood Restoration Advisor will be responsible for ensuring technical performance of compensation payments and livelihood restoration initiatives. In particular, they will be responsible for the following: <ul style="list-style-type: none"> • undertaking the livelihoods study as part of Phase 2; • overseeing the supply options chosen by each household is appropriate to their location; • linking vulnerable households with suitable extension advice; • providing technical knowledge to the RCGs and the LAC implementing team where necessary; • supporting in the development of a robust monitoring plan; • acting as general support to the LAC Manager and providing advice on livelihood restoration issues; • developing status reports to be submitted to the RCG and LAC Manager; and • evaluating livelihood restoration performance and identifying corrective action. 	Yes	Field based / full time initially reducing to part time role once livelihoods programme is underway
NHID Finance Department	The NHID Finance Team will be specifically responsible for paying entitlements to each household, including obtaining household sign-off.	No	Field based / full time up until completion of payment and sign-off
Grievance Manager- NHID	<ul style="list-style-type: none"> • Manage the grievance mechanism and grievance resolution process. • Produce grievance monitoring reports and submit to HSES Manager. 	Yes	Luanda and field / Part time
Survey Teams (Land & Asset and Socioeconomic & HH Assessment)	Two teams of survey specialists will be available to support the three Field Teams. These will be called to undertake specific surveys to support the definition of individual entitlements. These teams will be coordinated by the Resettlement and Compensation Coordinator.	Yes	Field based / full time until completion of surveys

Overview

Successful implementation requires a functioning and effective institutional framework to achieve an efficient land acquisition, compensation and resettlement process. The land acquisition, compensation and resettlement governance institutions are responsible for guiding preparation, implementation and monitoring of the land acquisition, resettlement and compensation process. This institutional framework will outline the interfaces for all stakeholders involved in RCAP implementation allowing for close cooperation between NHID/GAMEK, municipal and provincial authorities, village *sobas*, affected households and implementing partners.

A limited two-tier governance system is proposed comprising the following:

- Four Resettlement Coordination Groups (RCG), one for each municipality affected (Cambambe, Icolo e Bengo, Belas, and Viana), comprising those with key roles in the resettlement and compensation implementation.
- A Resettlement Review Committee (RRC) to review the activities of the RCGs to ensure adequate progress in the correct direction from all parties involved in the resettlement process.

It is likely that experience sharing and capacity building will be required for the community representatives and staff members sitting on the RCG or RRC, in order to ensure that the committees are able to govern the resettlement process to meet international as well as Angolan standards. This may take the form of a workshop, to be facilitated by the implementation consultant and should be conducted soon after establishment of the committees.

Resettlement Coordination Group

The four RCGs will be the main interface between affected people of each corresponding municipality and the resettlement process and will be primarily responsible for ground level coordination of the Resettlement and Compensation Process. Bringing together key members of the Project Implementation Team (see *Section 7.3.1*) with representatives of the government-led Municipal Commissions (*Comissão Municipal*) and community representatives on a regular basis will enable challenges to be quickly identified and for any necessary adjustments to be agreed and implemented.

The RCG will have prime responsibility for:

- coordinating and overseeing the land acquisition and resettlement process in collaboration with the Municipal Commissions;
- interfacing with the Project in relation to options, timing and phasing of the resettlement process;
- overseeing entitlements payments and eligibility criteria;
- considering grievances that cannot be resolved locally;
- conflict resolution and alerting the RRC if there are issues that cannot be resolved or emerging issues and trends;
- discussing the results of compensation and resettlement monitoring and evaluation activities and agreeing modification as required; and
- reporting to the RRC.

It is proposed that the RCGs of Cambambe, Icolo e Bengo, Belas and Viana Municipalities be composed of the following core members:

- Land Acquisition and Compensation (LAC) Manager (GAMEK);
- Land Acquisition and Compensation (LAC) Coordinator (NHID);
- Local leadership (as appropriate):
 - Community Chief / Traditional Leadership (ie *sobas*);
 - Community Coordinators (*coordenadores*) in the absence of the *soba*, generally in peri urban areas;⁽¹⁾
 - Commune Administrators.
- Women representatives (of all affected settlements in the Municipality);
- Municipality representatives (may include the Angolan Institute for Geodesy and Cartography (*Instituto Geográfico e Cadastral de Angola- IGCA*), Land Valuer, Land Officer and a representative from the Municipal Administration Office); and

(1) Table 4.2 in Section 4.3 of the Socioeconomic Baseline Summary lists the local authority representatives for each affected settlement within each municipality. Note that all the settlements of Cambambe municipality are represented by a *soba* as these are mostly rural communities. Leadership in the municipality of Icolo e Bengo is mainly held by community coordinators with only two settlements with *soba* figures. Settlements in Viana and Belas municipalities are all led by community coordinators.

The RCGs will be convened and first meet during Phase 1. They would then meet monthly until three months after the end of all compensation has been paid and physical resettlement is completed. Meeting frequency may then be adjusted to quarterly for the following year and then six monthly until closure of the resettlement programme.

Resettlement Review Committee

The RRC will have a higher level oversight of the resettlement process, and will meet to review progress, and resolve any issues that cannot be resolved by the RCGs. This is the forum where strategic, high-level issues are resolved such as financial or schedule-related issues. The RRC is also responsible for policy-related decision making and compliance with the regulatory framework and financing requirements (as described in *Section 3*) as well as the Project's internal standards and operating procedures.

The main responsibilities of the RRC will include:

- ensuring alignment between NHID, provincial governors, municipal and commune authorities, village leaders (i.e. *sobas* or community coordinators), and affected households with respect to RCAP implementation and payment of compensation;
- providing an advisory role to the RCGs, which includes resolving internal and external land acquisition, compensation, and resettlement issues and monitoring the budget;
- overseeing compliance and governance issues and ensuring the resettlement process is managed fairly and transparently and is free from corruption or bribery, etc.;
- reviewing RCAP monitoring reports to ensure that any issues are addressed in an efficient and effective manner;
- ensuring independent external monitoring and reviews as specified in the RCAP;
- responding to implementation problems identified in internal and external monitoring reports; and
- ensuring adequate information sharing with the RCGs on processes and decisions taken.

There will only be one RRC that sits above all the RCGs. It is proposed that the RRC is composed of the following members:

- NHID Health, Safety, Environment and Social (HSES) Manager ;
- GAMEK Environmental and Social Manager;
- GAMEK Land Acquisition and Compensation Manager;

- NHID Resettlement and Compensation Coordinator;
- Ministry of Energy and Water (MINEA) and Ministry of Finance representatives;
- GAMEK representative;
- Project Community Liaison Team (CLT) Manager;
- Province governors, or representatives of the governor's office;
- Provincial Office for Infrastructures and Technical services representatives;
- Provincial Office for Agriculture, Livestock and Fisheries representative; and
- Province Urban Planning Officers.

Representatives of financing organisations may also be included in the RRC.

It is crucial that GAMEK and the NHID Project Manager and NHID HSES Manager sit on the RRC to:

- *maintain control*: NHID and GAMEK senior management involvement in the RRC will provide an element of control over Project's response to land acquisition, compensation and resettlement issues. This involvement will also ensure that issues receive a unified senior management response. Control of the budget is another reason for close senior management involvement in the RRC. As issues arise that may need a change to the budget, the involvement of senior management can expedite the request as required.
- *keep informed*: if NHID and GAMEK senior management is involved in the RRC, they will be involved as issues arise, giving greater insight into how the land acquisition, compensation and resettlement process is going, and better aware of where improvements are needed. This will help Project senior management be more responsive to issues as they arise.

8.1 OVERVIEW

The objectives of monitoring the land acquisition, compensation and resettlement process will be to:

- to provide feedback on land acquisition, compensation and resettlement implementation in order to allow the timely adjustment of implementation arrangements; and
- to demonstrate that the land acquisition, compensation and resettlement process is being managed in line with objectives and desired outcomes.

The resettlement process will be monitored through:

- an internal monitoring system undertaken by the Resettlement Implementation Team and reported to the Project Management team, Project and reported to the Resettlement Review Committee (RRC) and the Resettlement Coordination Groups (RCG);
- an external monitoring system operated by an independent third party consisting of external audits.

This section provides an introduction to the key elements of the monitoring plan that will be required. A detailed plan will be developed during the preparation phase of the resettlement (see *Section 7.2.2*).

8.2 MONITORING INDICATORS

8.2.1 Performance Monitoring

Performance monitoring is an internal management function to measure physical progress against milestones established in the RCAP. Performance milestones for this Project might include:

- grievance redress procedures in place and functioning to an agreed timeframe;
- RCAP annexes prepared;
- compensation payments disbursed;
- replacement houses constructed;
- replacement land provided;
- livelihood restoration plans for vulnerable households in place;
- acquisition, compensation and resettlement activities completed; and
- identification of emerging issues and potential problems with need to be managed.

Impact Monitoring

Impact monitoring gauges the effectiveness of the RCAP and its implementation in meeting the overall objectives of restoring standard of living and livelihoods of the affected communities. The purpose of impact monitoring is to provide an assessment of the effects of the resettlement process and to identify adjustments required in the RCAP, as required.

As part of impact monitoring the requirements of the RCAP will be tracked against the baseline conditions of the affected households prior to the land acquisition, compensation and resettlement activities. Objectively verifiable indicators for measuring the impact of resettlement on the socio-economic welfare of the affected people and the effectiveness of impact mitigation measures will be established. These impact indicators will be directly associated with the issues and priorities of the land acquisition, compensation and resettlement activities, and will include indicators that measure vulnerability and changes in vulnerability over time.

Indicators will also be informed by consultation with affected communities, and from a review of common concerns raised through the grievance mechanism process. Examples of indicators that are likely to be considered include the following:

- Access to infrastructure as services such as primary house (e.g. size of house), water supply (distance to clean water), access to sanitation (household toilet / improved toilet), etc.
- Access to Change in access to livelihood resources such as agricultural plots (size of plot, fertility), employment (employment positions in the household), etc.
- Overall sense of wellbeing (household food shortage, crime rates, health status).
- Impact monitoring, based on a sample of affected people stratified by eligible group (defined in *Section 6.2.3*), will be used to inform quantitative indicators. The quantitative indicators described above will be supplemented by qualitative indicators, in order to assess the satisfaction of affected people with the resettlement planning and implementation initiatives. The qualitative indicators will be informed by engagement with affected households.

8.3

INTERNAL MONITORING

Internal monitoring will be initiated during the Preparation Phase of the RCAP, and continue until the resettlement is deemed closed in accordance with a third party closure audit. During this period, the intensity of the process will vary; during and immediately after the construction period, monitoring requirements will be higher (e.g. quarterly) than later in the process (e.g. six monthly).

Monitoring reports will be required for internal purposes to ensure that the RCAP finalisation and implementation is on track, to identify and resolve emerging issues and to provide status reports to external groups such as financing partners.

Monitoring reports will be completed by the Resettlement Implementation team and provided to internal Project Management and also to the Resettlement Coordination Groups to review and discuss issues identified and corrective actions. When necessary the RCGs will refer issues raised to the Resettlement Review Committee, either for information or for decision-making as the need may be.

8.4 *EXTERNAL MONITORING*

Immediately after the construction period is finalised, a mid-term audit will be undertaken by an external third party.

A close out audit will be undertaken once all resettlement measures have been completed to confirm that the resettlement activities have been implemented and that livelihoods have been restored. This will include a survey of a sample of the affected people (minimum 25% of affected people as defined in *Section 6.2.3*).

The key objective of these external audits is to determine whether Project efforts to restore / improve the living standards and livelihoods of the affected people have fully executed and their objectives have been met.

Resettlement and livelihood restoration budgeting and costing processes are complex and multifaceted. It requires the translation of numerous Project components, compensation and livelihood restoration into a single and integrated budget and cost control system.

NHID on behalf GAMEK is responsible for the funding of the RCAP process.

Key information required for budgeting purposes, such as the numbers of affected households, and value of affected assets, are not yet known. However this Section provides an estimation of low and high end budget based on a number of assumptions.

The total budget estimated for the RCAP is between USD 1 109 766 and USD 2 610 596. This includes costs for external consulting support, but does not include NHID/GAMEK staffing costs. It has been also assumed that no land compensation will be required. The costs can be broken down as follows:

- USD 349 766 – 1 150 596 to be paid by NHID to cover compensation including top-up compensation to meet international requirements; and
- USD 760 000 – 1 460 000 to cover costs associated with consultancy support to develop the RCAP Annexes including survey team support.

The high and low end budget and the assumptions that underpin the calculations are presented in *Table 9.1*.

Table 9.1 Budget Components and Structure

Item	Lower End Estimate (USD)	Lower End Estimate Assumptions	Higher End Estimate (USD)	Higher End Estimate Assumptions
Compensation and Assistance				
Crop Compensation excluding Trees	10 000	<ul style="list-style-type: none"> Land clearance required on 4 m right of way (101 ha) and 631 construction sites (126 ha). Assume 10% is agricultural aligned with Corine satellite land use mapping. Average compensation rate for annual crops (according to Government compensation rates) approximately USD 450/ha. Government rates assumed to be equal to replacement rates. 	51 000	<ul style="list-style-type: none"> Land clearance required on 4 m right of way (101 ha) and 631 construction sites (126 ha). Assume 25% is agricultural. Average compensation rate for annual crops (according to Government compensation rates) approximately USD 450/ha. Government rates assumed to need a 100% top up.
Compensation for Loss of Trees	30 000	<ul style="list-style-type: none"> Loss of trees in wider 20m corridor (504ha) plus 126 ha construction area. Assume 10% has some tree coverage. Highest Government compensation rate for trees (mangoes) is USD 477/ha. Government rates assumed to be equal to replacement rates. 	150 000	<ul style="list-style-type: none"> Loss of trees in wider 20m corridor (504ha) plus 126 ha construction area. Assume 25% has some tree coverage. Highest Government compensation rate for trees (mangoes) is USD 477/ha. Government rates assumed to need a 100% top up.
Unplanned damage during construction	-	<ul style="list-style-type: none"> Not required 	40 000	<ul style="list-style-type: none"> 20% of planned damage
Building Compensation	145 000	<ul style="list-style-type: none"> Assume all structures (29) are inhabited. USD 5 000 sufficient to enable households to build a 'basic modern structure'. 	290 000	<ul style="list-style-type: none"> Assume all structures (29) are inhabited. USD 10 000 sufficient to enable households to build a 'basic modern structure'.

Item	Lower End Estimate (USD)	Lower End Estimate Assumptions	Higher End Estimate (USD)	Higher End Estimate Assumptions
Compensation and Assistance				
Disturbance Allowance (housing)	14 500	10% of the replacement value of the house	29 000	<ul style="list-style-type: none"> 10% of the replacement value of the house
Relocation Assistance (Agricultural Land)	40 000	<ul style="list-style-type: none"> Area of land with trees / crops assumed to be 27 ha (see Crop Compensation above). Assume plot size of approximately 0.5 ha. With 'patchwork effect' and owners/users on one plot affected HHs assumed to be 400. 100 USD per owner / user to cover the cost of the relocation process will be provided. 	80 000	<ul style="list-style-type: none"> Area of land with trees / crops assumed to be 27 ha (see Crop Compensation above). Assume plot size of approximately 0.5 ha. With 'patchwork effect' and owners/users on one plot affected HHs assumed to be 800. 100 USD per owner / user to cover the cost of the relocation process will be provided.
Land Preparation Allowance (Agricultural Land)	20 000	<ul style="list-style-type: none"> Assume 200 owners entitled to the allowance. Assume an average of 100 USD land preparation allowance to cover labour costs to restart agricultural activities. 	40 000	<ul style="list-style-type: none"> Assumed 400 owners entitled to the allowance. Assume an average of 100 USD land preparation allowance to cover labour costs to restart agricultural activities.
Livelihood Restoration	40 000	<ul style="list-style-type: none"> Assume 400 land owners / users. Assume approximately USD100 per owner / user (eg provision of seeds). 	320 000	<ul style="list-style-type: none"> Assume 800 land owners / users. Assume approximately USD400 per owner / user (eg provision of seeds, fertilise and extension support).
Vulnerable HHs support	50 000	<ul style="list-style-type: none"> Broad lower end estimate based on experience. 	150 000	<ul style="list-style-type: none"> Broad lower end estimate based on experience.
<i>Sub-Total</i>	<i>350 000</i>		<i>1 150 000</i>	
Consultancy Support				
Independent Market Valuation Study	20 000	<ul style="list-style-type: none"> Valuation of crops and trees only. 	40 000	<ul style="list-style-type: none"> Assume private land valuation required.

Item	Lower End Estimate (USD)	Lower End Estimate Assumptions	Higher End Estimate (USD)	Higher End Estimate Assumptions
<i>Compensation and Assistance</i>				
Social & implementation support	700 000	• Assume surveying of 400 households	1 300 000	• Assume surveying of up to 800 households
Bi-annual review	-	Not required	60 000	Four reviews required over two years
Mid-term audit	-	Not required	20 000	Required
Close-out audit	40 000		40 000	
<i>Sub-Totals</i>	560 000		1 460 000	
Totals	1 110 000		2 610 000	

Annex A

Sensitive Receptors

Physical structures identified along the proposed
2018 OHTL route



ID	Coordinates	
	X	Y
Interferences (2018)		
001	407398.172772	8978961.76752
002	407418.383478	8978960.03804
003	407389.943655	8978965.75307
004	407395.969670	8978955.85320
005	407397.475744	8978953.11792
006	399947.070062	8981752.04841
007	399926.101372	8981767.11186
008	398274.652530	8982287.10108
009	396598.025254	8982857.16404
010	340325.622089	8991955.00252
011	340311.992403	8991953.11498
012	330752.959735	8992904.09781
013	330707.776572	8992925.01469
014	330705.360970	8992923.25165
015	327007.438021	8993293.12776
016	326976.872251	8993307.41331
017	321588.214246	8993853.13331
018	321570.553067	8993858.88733
019	321550.668636	8993860.06692
020	315393.162156	8994507.21018
021	315186.640352	8994520.73185
022	315172.540993	8994522.23272
023	315135.332472	8994529.94051
024	315048.536332	8994536.25095
025	313940.566208	8994641.42918
026	312559.430900	8994761.09496
027	312249.012444	8994789.70140
028	311570.429702	8994834.69918
029	310557.695243	8994933.43465

















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