



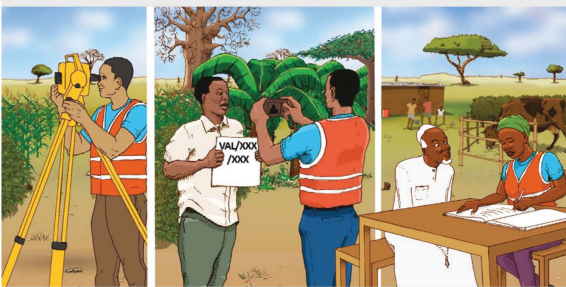
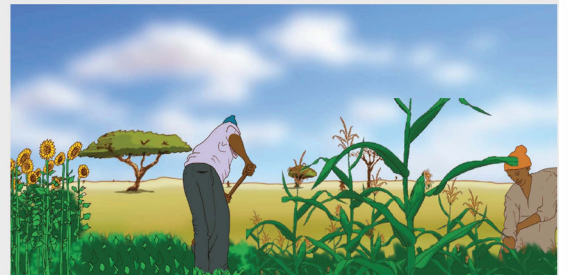
EAST AFRICAN
**CRUDE OIL
PIPELINE**

SOCIAL AND RESETTLEMENT SERVICES FOR THE EAST AFRICAN CRUDE OIL PIPELINE, TANZANIAN SECTION

RESETTLEMENT ACTION PLAN FOR GEITA REGION

TOTAL EAST AFRICA MIDSTREAM BV

MARCH 2021



RAP Contractors





East African Crude Oil Pipeline

Social and Resettlement Services for the East African Crude Oil Pipeline, Tanzanian Section

Resettlement Action Plan for the Geita Region

Total East Africa Midstream B.V.

March 2021



This document has been prepared by Digby Wells Consortium.

Report:	Resettlement Action Plan (RAP) for the Geita Region
Project Name:	Social and Resettlement Services for the East African Crude Oil Pipeline, Tanzanian Section
Project Code:	TOT5212

Versions

Version No.	Revision	Report Date
V1	Draft Final Resettlement Action Plan (RAP) for Pipeline and AGIs in Geita Region issued to Government of Tanzania (GoT) for comments period.	February 2020
V2	Final Disclosed Resettlement Action Plan (RAP) for Pipeline and AGIs in Geita Region.	October 2020
V3	Disclosed RAP for Pipeline and AGIs in Geita Region – amendment of Table 8-18 only.	March 2021

This report is provided solely for the purposes set out in it and may not, in whole or in part, be used for any other purpose without Team B.V. prior written consent.

EXECUTIVE SUMMARY

1. INTRODUCTION

The introductory chapter of the Geita RAP outlines the context, scope and purpose of the document. It lists the partners in the East African Crude Oil Pipeline Project, and the team responsible for planning and producing the Geita RAP. A list of chapters is provided, to assist readers in navigating the document.

The East African Crude Oil Pipeline (EACOP) (the 'Project') involves the construction and operation of a buried pipeline to transport crude oil from the Lake Albert area in Uganda to the eastern coast of Tanzania. The Tanzanian section of the pipeline is 1,147 km long and will traverse eight (8) regions and the land administered by 27 administrative district councils. This document is the Resettlement Action Plan (RAP) for the approximately 169 km long pipeline section crossing the area administered by Chato, Geita, Bukombe and Mbogwe Districts, in the Geita Region. The Geita RAP is one of nine (9) required for the Tanzanian section of the Project.

Three (3) upstream partners hold interests in petroleum resource licenses in Uganda. The Governments of Uganda (GoU) and Tanzania (GoT), with the upstream partners, wish to construct the pipeline and associated infrastructure. Project development is to be led during the initial project planning stage by the Tanzanian company, Total East Africa Midstream B.V. (TEAM B.V.).

The Project follows the laws of the United Republic of Tanzania, the Project standards as set out in the Inter-Governmental Agreement (IGA) and the requirements of International Financial Institutions (IFI). According to these standards, an overarching Resettlement Policy Framework (RPF) has been developed for the Tanzanian section of the Project, and specific RAPs will be generated for the Priority Areas (PAs) and each of the eight (8) Regions traversed by the pipeline according to the principles set out in the RPF.

Scope and Purpose of the Geita RAP

The Project will require access to over 9,884 acres, (or 4,000 hectares (ha)) of land in Tanzania including the Geita Region section of the pipeline. Approximately 90% of the land to be acquired comprises the construction corridor for the pipeline and Above Ground Installations (AGIs). In Mbogwe District there is Pump Station 4 (PS-4) with its associated access road, located in Lubeho Village, Nyakafulu Ward. In addition, two (2) Main Camp and Pipe Yard (MCPY) facilities will be built in Geita Region as part of the Early Works (EW) activities required to support the construction of the pipeline. These include: MCPY-07 situated within Mkungo Village, Bukome Ward of Chato District; and MCPY-08 located in Bukombe Village, Bukombe Ward and Bukombe District. PS-4 forms part of this Geita RAP and the two (2) MCPY facilities form part of the Priority Area (PA) RAP.

The overall pipeline route has been designed to minimize environmental and social impacts, but some physical displacement (loss of shelter) and economic displacement (full or partial loss of livelihoods) for communities is unavoidable. Individuals and households are affected

in varying measure by these impacts. In the area addressed by the Geita RAP, a total of 1,419¹ Project Affected Persons (PAPs), settlements and institutions have been identified, including 1,256 landholders, 124 tenants, two 2 informal users, 32 villages and 5 government institutions.

The Geita RAP describes the policies, principles, procedures, roles and responsibilities for managing displacement impacts caused by Project-related land acquisition in the Chato, Geita, Mbogwe and Bukombe Districts of the Geita Region.

The Geita RAP aims to establish and describe:

- A summary of the legal framework;
- The individuals and households who will experience physical and / or economic displacement, and the communities who will experience impacts associated with the land acquisition process;
- The way that compensation rates for lost assets were determined;
- Eligibility criteria and the entitlements for affected individuals, households and institutions (including in-kind and cash compensation options);
- The process used to identify affected vulnerable individuals and groups;
- Levels of assistance for resettlement of affected households (including vulnerable individuals and groups);;
- Measures to reinstate livelihoods of affected persons and households;
- Roles and responsibilities to undertake and implement the RAP;
- The Project's approach to stakeholder engagement and consultation with PAPs and other interested parties, including the Project grievance management mechanism; and
- Activities required to implement, and monitor land acquisition, compensation and livelihood restoration commitments made within this RAP.

The Geita RAP has been prepared on behalf of and with the support of TEAM B.V. for the EACOP Project Tanzanian section by the Digby Wells Consortium (DWC). The consortium comprises Digby Wells Environmental (DWE) and the Tanzanian firms Whiteknights Real Estate Investment Analysts Co. Ltd. (WK), PaulSam Geo-Engineering and Safety Training and Consulting Limited (STCL).

The Geita RAP has 13 Chapters, each addressing a key component of the resettlement planning process. The sequence of chapters is shown in Figure ES 1-1.

¹ This includes 13 PAPs who have land parcels in multiple villages.

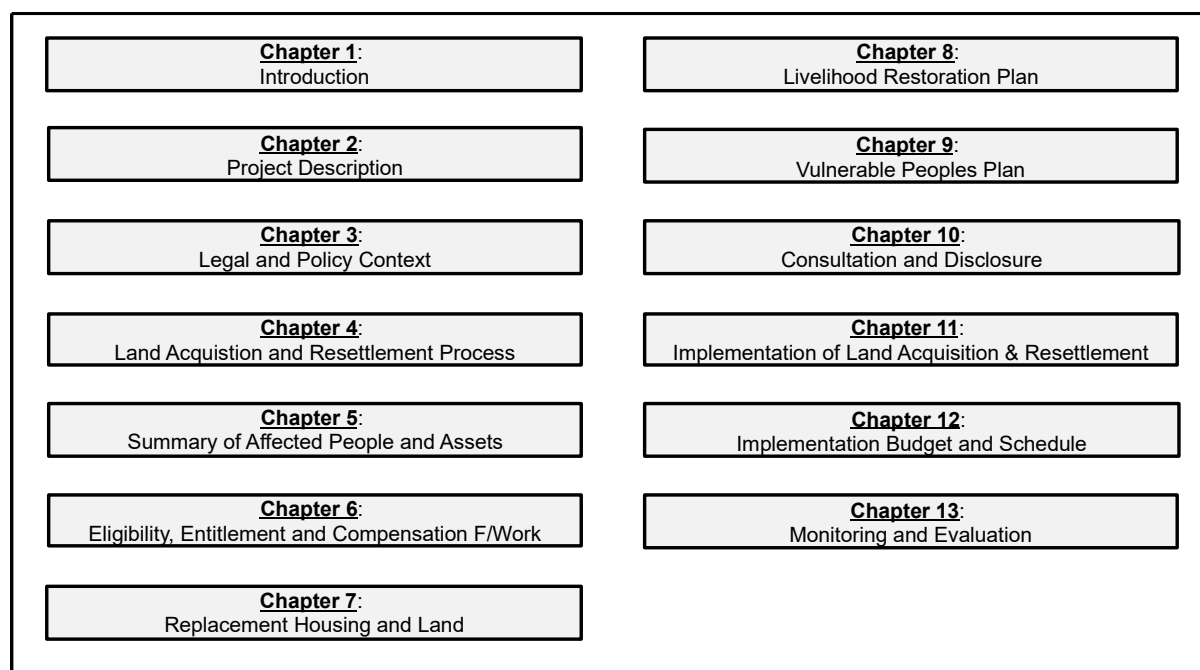


Figure ES 1-1: Geita RAP Chapters

2. PROJECT DESCRIPTION

Chapter 2 describes the East African Crude Oil Pipeline Project, with a specific focus on the Tanzanian section. For the purposes of the Geita RAP, the chapter details Project elements and associated land requirements in the Geita Region and the administrative area of the Chato, Geita, Mbogwe and Bukombe Districts.

The Project comprises a 1,443 km pipeline and associated infrastructure to transport crude oil from the Kabaale Pumping Station in the Hoima District of Uganda to an export facility in the Tanga Region of Tanzania. Some 296 km of the 24-inch buried insulated pipeline will be in Uganda and 1,147 km in Tanzania. The major infrastructure includes six (6) pumping stations (2 in Uganda and 4 in Tanzania), two (2) pressure reduction stations in Tanzania and a marine storage terminal (MST). The pipeline will be buried at a depth of 1.8 - 2 meters.

The pipeline is designed to transport 216,000 barrels of crude oil per day (216 Kbpd). Uganda's crude oil is naturally viscous and waxy. For the oil to be transported effectively a temperature above 50°Celsius is required. Electrical Heat Tracing (EHT) installed along the length of the pipeline will ensure that the required temperature is sustained. The EHT will heat the crude oil during commissioning and during periods of reduced flow. The EACOP will be the longest electrically heated pipeline in the world.

The proposed pipeline route alignment is shown in Figure ES 1-2, in which Project-affected regions and districts are also highlighted.

Project components in Tanzania include EW facilities which must be established before construction can proceed, and components related to the pipeline and infrastructure itself.

The EW components are addressed in the PA RAP, which has been completed. The pipeline and key infrastructure components include:

- A 30 m wide pipeline construction corridor within which is a permanent 10 m wide corridor is required for the safe operation and maintenance of the pipeline;
- AGIs, including the following in Tanzania: four (4) pumping stations and two (2) pressure reduction stations.
- An MST and a Load-out Facility (LOF) for transfer of crude oil to tankers, and a jetty linking the MST and the LOF.

The land acquisition process that will be completed for the facilities and the remainder of the Project has been the subject of discussion between the Project and the Government of Tanzania. Following engagements with the government and review of the Tanzanian land tenure and legal framework, the 30 m corridor and AGI land will be acquired permanently. It is the intention that all Project-required land will be transferred to General Land².

The land required for the 30 m pipeline corridor and AGIs will be acquired by the Government of Tanzania and leased to the Project Company.

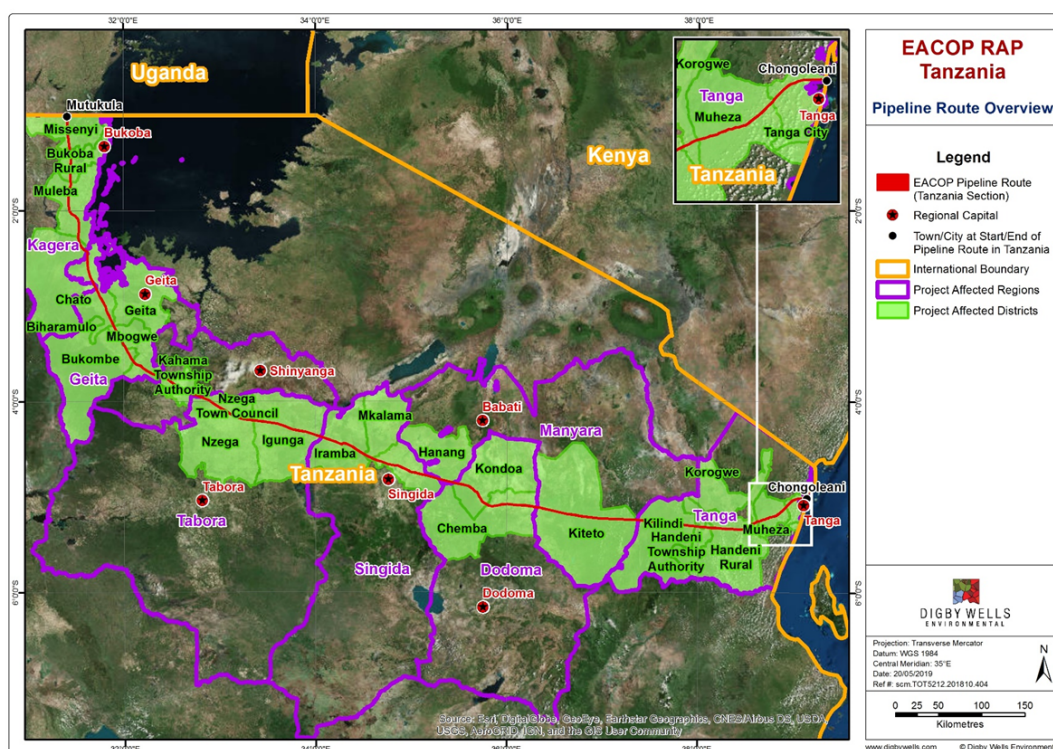


Figure ES 1-2: Pipeline Route and Affected Areas

Project Elements and Land Requirements in the Geita Region

² The potential exception to this may be related to conversion of certain types of infrastructure crossings (e.g. road reserves and powerline wayleaves which will remain). The arrangements for the pipeline crossing of such land shall be determined with the relevant technical agencies and the government of Tanzania.

The Geita RAP focusses on Project elements within areas in the Chato, Geita, Bukombe and Mbogwe districts. These elements will require land access to an area of approximately 1,333.59³ and 1,123.91 acres will be valued and is to be compensated of Village Land (excluding land affected in Biharamulo Game Reserve (96.73 acres affected) and Biharamulo Forest Reserve (101.59 acres) which has been valued by the Project separately).

Key points:

- The pipeline directly impacts 19 of the 91 wards in the region, including 37 villages;
- The section of the pipeline in the Chato, Geita, Mbogwe and Bukombe Districts traverses predominantly Village Land and Reserved Land;
- The Project affects 1,628 compensable land parcels, 108 of which are used by tenants;
- Part of Biharamulo Game Reserve, and Biharamulo Forest Reserve are traversed by the pipeline in Geita Region.
- The pipeline corridor will cross 36 roads, and 14 powerlines, one (1) water pipeline in the overall pipeline corridor area of Chato, Geita, Mbogwe and Bukombe Districts; and
- The pipeline route in the Geita Region will cross an estimated 96 village tracks, 48 cattle tracks, 12 watercourses, various footpaths and one (1) valley.

Table ES 1-1: Distances and Impacted Land along the Pipeline Route

Region	District	Nearest KP		Pipeline Length (km)	Land Cover (Acres) ⁴
		Start	End		
Geita	Chato	463	466.5	3.43	25.85
Kagera	Biharamulo	466.5	467.5	1	7.32
Geita	Chato	467.5	503	35.85	276.58
Kagera	Biharamulo	503	510	6.73	50.83
Geita	Chato	510	554	44.05	339.75
	Geita	554	557.5	3.36	25.73
	Mbogwe	557.5	584	26.87	204.79
	Bukombe	584	605	20.57	158.1
	Mbogwe	605	639.5	34.93	302.79
TOTAL Geita Region				169.06	1 333.59

³ Includes crossings and orphaned land.

⁴ This includes portions of land recorded as "orphaned land" during valuation activities, road and powerline reserves which the Project will not be acquiring

3. LEGAL AND POLICY CONTEXT

Chapter 3 describes the legal and policy context of the Project. It presents a broad spectrum of legislation, policy, standards and guidelines relevant to the Geita RAP. These are drawn from the Tanzanian Regulatory Framework, applicable Project Partner Corporate Standards and International Financing Standards relevant to land acquisition, compensation and resettlement.

The Project is required to meet Tanzanian legislative requirements for land acquisition, compensation and resettlement and has committed to meet the relevant International Financing Standards (IFS) captured in the Equator Principles (EP) III and the Performance Standards (PS) of the International Finance Corporation (IFC).

Tanzanian Regulatory Framework

Tanzania has a suite of laws and policies related to categories of land, land tenure, land acquisition, compensation and resettlement.

Under Tanzanian law, land is categorized as:

- **Reserved Land:** Land set aside for wildlife, forests, marine parks, road reserves and similar;
- **Village Land:** Land within the boundaries of registered villages, where Village Councils and Village Assemblies have land management powers; and
- **General Land:** Land that is neither Reserved Land nor Village Land and is therefore managed by the Commissioner for Lands.

The land affected in the Geita Region is predominantly Village Land and Reserved Land.

Legislation and policy underpinning land acquisition and compensation practice in Tanzania falls into three broad groups:

- **Overarching legislation and guidance:** Including the Constitution of the Republic of Tanzania (1997), the National Land Policy (1997, as amended) and the Petroleum Act (No.8 of 2015);
- **Land legislation:** Including Acts related to land, land acquisition, land regulations, removal and relocation of graves, antiquities, valuation and valuers, forestry, roads management, national and marine parks; and
- **Relevant policies:** Including policies informing human settlements development, forestry, agriculture and livestock and water.

Corporate Environmental and Social Standards and Commitments

The Upstream Partners, Total Exploration and Production (E&P) Uganda B.V. (TEPU), Tullow Uganda Operations Pty Ltd (TUOP) and China National Offshore Oil Corporation (CNOOC) Uganda Limited (CUL) have corporate policies pertaining to aspects of social

responsibility. These responsibilities include practice relating to the environment, health and safety, ethics, biodiversity protection and operations in sensitive environments.

Inter-Governmental Agreement and Host Government Agreements

The IGA was signed by the Governments of Uganda and Tanzania on 26th May 2017. Within the IGA, Article 3 establishes the Project land rights framework.

Host Government Agreements (HGAs) between the Upstream Partners and the GoU and GoT will follow on from the IGA. While the HGAs are under development and have yet to be signed, the Geita RAP has adopted the IGA principles, ensuring compliance with these in processes undertaken to develop the Geita RAP. These include socio-economic and asset surveys, valuation methods and the determination of cash and in-kind compensation.

International Guidance and Standards

In the context of international standards and guidance, the Project and the Geita RAP align with the provisions of the Equator Principles III and the IFC PS:

- The Equator Principles is a tool adopted by many financial institutions to identify, assess and manage environmental and social risks. As the Project may be seeking funding from Equator Principles financial institutions, Equator Principles guidance on land acquisition, compensation and resettlement is relevant and applicable; and
- The IFC PS provide standards and guidance on the management of Project-related social and environmental risks and impacts and the enhancement of development opportunities.

Among the eight (8) IFC PS, four (4) are directly relevant to the Geita RAP in particular:

- **PS1 Assessment and Management of Environmental and Social Risks and Impacts:** PS advises among other things on the effective management of social impacts, risks and opportunities;
- **PS5 Land Acquisition and Involuntary Resettlement:** PS provides systematic guidance on the planning and implementation of activities to minimize resettlement and displacement impacts and to restore or improve livelihoods and standards of living;
- **PS7 Indigenous Peoples:** PS addresses the management of social impacts among groups that have distinct cultures linked, among other things, to traditional lands and natural resources; and
- **PS8 Cultural Heritage:** PS advises on the protection of cultural heritage where this is at risk as a result of social impacts.

As part of the IGA framework, the Project has agreed to address Human Rights Standards at national and international levels, guided by international good practice in general including the United Nations Guiding Principles on Business and Human Rights.

Gap Analysis

A Gap Analysis between Tanzanian legislative requirements and IFC standards has been undertaken. Gaps have been identified in the context of valuation, socio-economic surveys, eligibility and eligibility cut-off dates, compensation, resettlement assistance, vulnerable people and compensation payment timing. Where material discrepancies have been found, the Geita RAP (and all other Project RAPs) will apply the more stringent of the two (2).

4. SUMMARY OF RESETTLEMENT PLANNING, PRINCIPLES AND PROCESSES

Chapter 4 of the Geita RAP details the main elements of the land acquisition and resettlement planning process. Resettlement planning and implementation is complex, requiring a clear and systematic process, with associated activities and outcomes. The process steps are defined and described, and the phased sequence of steps is explained.

Land Acquisition and Resettlement Process

The Geita RAP will follow a carefully designed three-stage process to complete land acquisition and resettlement. The process is outlined in Figure ES 1-3 and elaborated in Figure ES 1-4. Figure ES 1-3 shows process steps embedded in each of the stages.

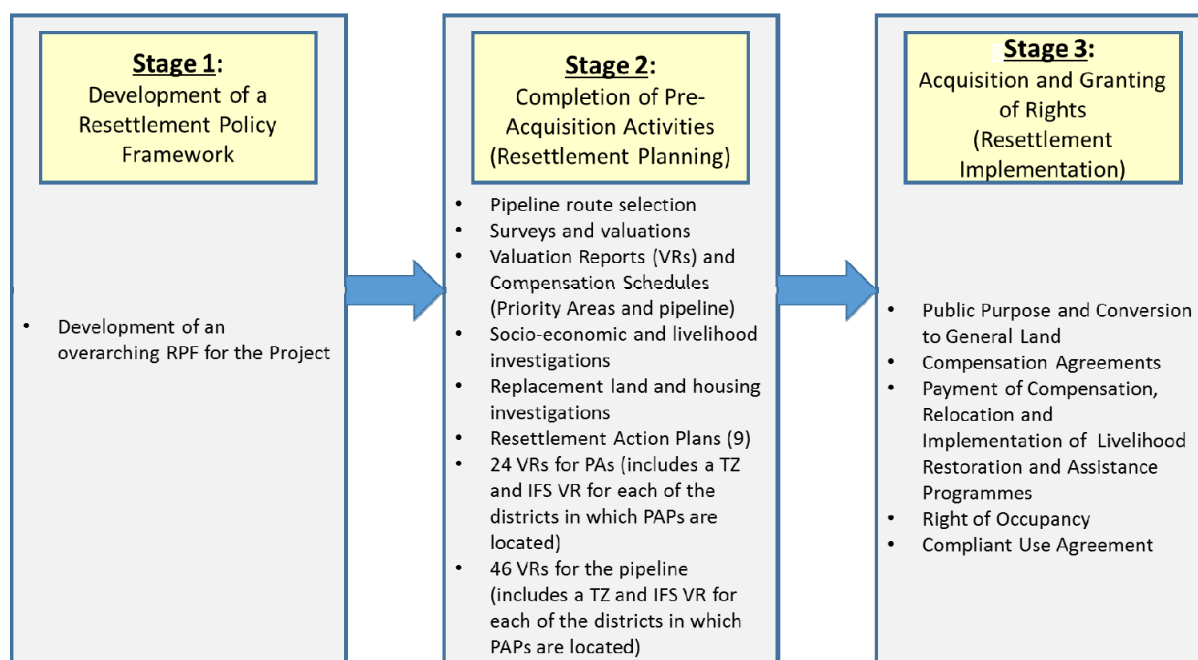


Figure ES 1-3: Summary of the Land Acquisition and Resettlement Process

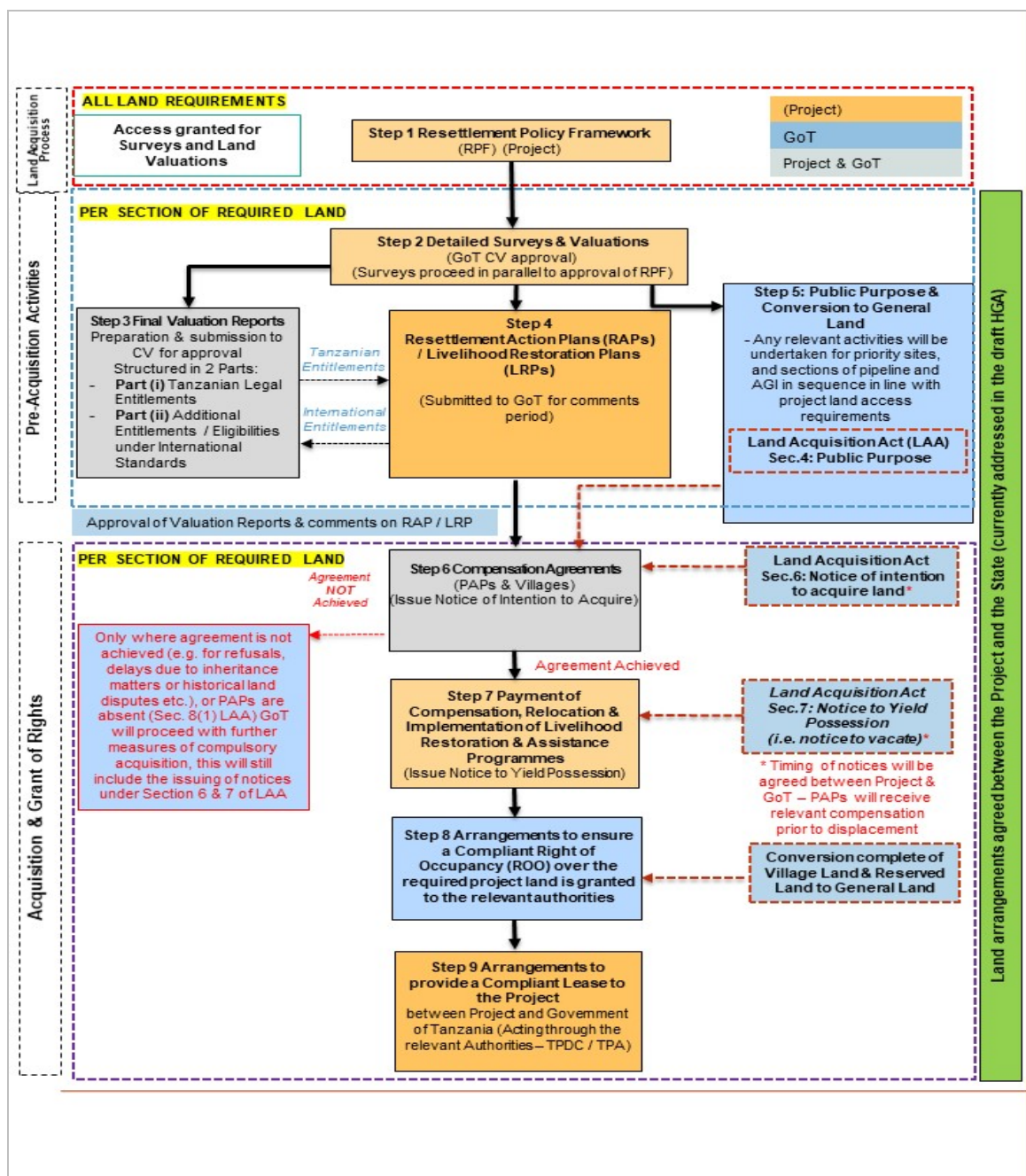


Figure ES 1-4: Land Acquisition Process

The content of the three stages is described below:

Stage 1: Development of the RPF

The RPF defines overarching principles for land access, compensation and resettlement planning and ensures consistency across the Project resettlement planning, including across the nine (9) RAPs and associated Valuation Reports (VRs). The RPF has been drafted and has gone through a comments review period by the GoT which was finalized in September 2018 following receipt of the GoT comments. The RPF was publicly disclosed in October 2018.

Stage 2: Completion of Pre-Acquisition Activities (*Resettlement Planning*)

Table ES 1-1 outlines the context and content of Stage 2 activities and indicates the status (at the time of compiling the Geita RAP).

Table ES 1-2: Stage 2 Activities

Stage 2 Activity	Context and Description
Pipeline Route Selection	The pipeline corridor was defined by the EACOP engineering team working with other discipline teams and contractors. The site selection criteria included technical issues, environmental considerations and matters of socio-economic and cultural heritage importance. Some sensitive areas were avoided (e.g. Internationally Protected Areas), and physical displacement was minimized wherever possible.
Detailed Surveys and Valuations	<p><u>Preparation and Planning</u></p> <p>An extensive survey program served to inform the VRs and the RAP. Preparation and planning included the development of customized survey instruments, training of survey teams, and organization of teams. All survey teams comprised Tanzanian nationals, with specialist inputs according to survey group focus (for example community sensitization, land delineation and asset valuation).</p>
	<p><u>Establishment of Rates</u></p> <p>The Registered Valuers (RV) for the Project undertook market research in Geita Region to establish market values and replacement costs for compensable items. A Rates Report was prepared and submitted to the Chief Valuer (CV) for approval.</p>
	<p><u>Execution of Surveys</u></p> <p>Surveys were mostly conducted in the following order:</p> <ul style="list-style-type: none"> • Community Sensitization, including discussion of surveys with local leadership, community awareness meetings and the announcement of cut-off dates; • Land Delineation and Adjudication, including recording land parcel boundaries, taking photographs, and issuance of a Land Form No. 69 to be signed by the District Land Officer (DLO); • Asset Valuation, including careful recording of information on affected assets and cultural sites, compiling asset inventories, taking photographs and recording locations and securing sign-off by the RV, PAPs and local authority representatives; • Socio-economic Information, including PAH and PAP demographic and socio-economic characteristics; and • Posting of Asset Schedules.
Valuation Reports and Compensation Schedules	<p><u>Asset Validation</u></p> <p>Following the posting of asset schedules, PAPs were given the opportunity to register observations and concerns regarding the asset identification and capture. Amendments were made where necessary, where after the assets were valued and compensation figures determined.</p>
	<p><u>Compilation of Valuation Reports</u></p> <p>When the validation process was completed, the Registered Valuers completed the VR and Compensation documentation for Geita Region per district. The separate VRs and Compensation Schedules were prepared for Tanzanian compensation items and Additional Entitlements under International Financing Standards Requirements.</p>
	<p><u>Disclosure of Compensation Schedules</u></p> <p>Tanzanian law requires disclosure of Compensation Schedules and compensation details to PAPs. A seven (7) day inspection period is included in the disclosure process. For the Geita RAP, the following disclosure steps were adopted:</p>

Stage 2 Activity	Context and Description
	<ul style="list-style-type: none"> • Engagement with government entities to outline the disclosure process; • Meetings with affected villages and PAPs to present valuation findings. It was decided that full details of the Compensation Schedules would be disclosed at an individual level; and • Completing any valuation activities including reviewing concerns as raised by PAPs. The valuations activities undertaken during the disclosure process in the Geita Region marked the date for the valuation of the last person's interest. <p><u>Sign-off, Submission and Verification of VRs</u> Once the VRs and Compensation Schedules have been completed (including responses to PAP concerns) the Final Compensation Schedules must be endorsed by the Field Valuer, the Valuer-in-Charge, the Village Executive Officer, the Ward Officer, the Authorized Land Officer the Authorized Valuer and the District Commissioner. The CV is responsible for final approval, thereafter compensation may proceed.</p>
Socio-economic and Livelihood Investigations (SELI)	<p><u>Preparation and Planning</u> The Geita RAP socio-economic and livelihood investigations provided material to inform many aspects of RAP development, including the status of Vulnerable People, mitigation measures and livelihood restoration options. SELI preparation tasks included project familiarization, research tool development and training, and on-site training.</p> <p><u>Study Execution</u> SELI fieldwork for the Geita RAP was undertaken between 28th March and 23rd May 2019.</p> <p><u>Engagement Methods</u> Engagement took the form of Focus Group Discussions (FGDs) and Key Informant Interviews (KII). The former tools were used mainly in community contexts, and the latter with opinion leaders and local leadership. Follow-up small group meetings allowed FGD participants an opportunity to address issues in a less threatening environment.</p> <p><u>Findings and Reporting</u> Findings of the SELI fieldwork supplemented existing socio-economic data and contributed to the development of the LRP, VPP and provided contextual understanding of potentially vulnerable ethnic groups.</p>
Replacement Land and Housing Investigation	<p>A broad replacement housing investigation has been undertaken in the context of building on that prepared for the Priority Areas RAP, with a view to expanding the work to cover areas affected by the entire pipeline. The following are the key elements of the investigation:</p> <ul style="list-style-type: none"> • A team including registered architects and a quantity surveyor (Tanzanian and international); • Field review of impacted structures to determine (among others) the number of structures, size, layout, materials, use of spaces, number of occupants and availability of services; • Visits to suppliers of building materials; • Development of concept designs; and • Preparation of a concept design report for the eight (8) pipeline-impacted regions.
RAP Preparation	<p>The outcomes and results of Pre-Acquisition (Stage 2) activities are documented in the Geita RAP. The RAP will be submitted to the GoT on completion and the final document will incorporate any GoT comments thereon. An accessible form of the RAP will be made available to Project-affected groups and key stakeholders. The RAP will be disclosed on the EACOP Project website.</p>

Stage 3 (RAP Implementation) is not summarized here but refer to Section 11 of this executive summary for more detail.

5. SUMMARY OF AFFECTED PEOPLE AND ASSETS

Chapter 5 profiles the areas, settlements (villages), households and people affected by the Project in light of Project-related displacement impacts. The work described in Chapter 5 is especially important as a context for further elements of the Geita RAP, including determination of entitlements and compensation, identification of vulnerable people, and setting parameters for monitoring and evaluation.

Chapter 5 presents a summary of affected people and assets in the Geita Region. The chapter itself provides an overview of:

- The Geita Region;
- The Project-affected districts (Chato, Geita, Mbogwe and Bukombe Districts);
- Project-affected communities; and
- Project-affected households.

The structure followed for the socio-economic baseline profiles in Chapter 5 is shown in figure below:



Figure ES 1-5: Structure of Project Affected Areas Discussed in Chapter

Only a summary of the latter group is provided in the Executive Summary. The main displacement impacts (grouped per ward) are shown in Table ES 1-3.

Table ES 1-3: Summary of Displacement Impacts in the Geita Region

District	Ward	Pipeline Length (km)	Land Parcels (No.)	Land Area (acres)	PAPs (No.)	PAHs (No.)	Vulnerable PAHs (No.)	Vulnerable Ethnic Group PAHs (No.)	PAHs Losing Dwellings	Buildings and Structures Affected (No.)			Crops Affected			Economic Trees and Other Trees (No.)	Graves
										Residential Dwellings	Other Structures	Incomplete Structures	Crops Acres	Intercropping Acre	Crops Stems		
Chato	Nyamirembe	2.35	41	17.90	47	46	11	0	0	0	0	0	11.66	0	115	0	0
	Ichwankima	5.28	42	39.67	33	32	14	0	1	1	2	0	21.92	2.46	313	82	9
	Ilemela	7.61	47	57.42	47	47	16	0	0	0	1	0	10.21	0	406	54	1
	Katende	11.21	100	88.37	112	104	25	0	3	3	7	1	24.67	8.56	373	433	1
	Bukome	5.86	52	45.20	56	52	15	0	0	0	1	0	9.68	2.60	212	243	6
	Makurugusi	12.31	156	93.20	136	130	43	0	3	3	4	0	25.35	6.18	723	465	3
	Bwanga	7.30	96	57.03	89	83	24	0	2	2	1	0	27.65	4.42	170	1166	0
Iparamasa	5.21	54	40.13	42	38	14	0	3	5	10	1	2.70	1.03	853	655	2	
Geita	Magenge	3.36	29	25.59	24	22	11	0	1	1	1	0	7.43	0	226	138	3
Mbogwe	Lulembela	7.39	82	55.02	75	70	27	0	1	2	9	0	6.99	2.52	179	573	1
	Ikunguigazi	4.75	69	36.35	58	53	11	0	6	8	7	4	3.79	0.88	310	555	10
	Ikobe	14.73	153	110.49	134	126	53	0	2	4	6	0	8.06	2.22	835	1310	5
	Nyakafulu	14.17	281	144.98	224	200	48	1	9	10	31	14	2.66	0.44	1193	2944	13
	Bukandwe	13.40	157	100.74	120	110	43	0	2	2	6	1	2.14	0.10	739	1019	4
	Nhomolwa	7.36	109	54.86	88	83	37	0	2	2	4	0	0	0	84	196	4
Bukombe	Lyambamgong	5.75	45	43.09	42	41	13	0	0	0	0	0	0	0	21	58	0
	Bukombe	14.82	115	113.88	92	82	30	0	1	1	2	1	3.57	0	1420	630	9
GEITA REGION TOTALS:		142.86	1628	1123.94	1419	1319	425	1	36	44	92	22	168.48	31.41	8172	10521	71

Overview of Project Affected Households

A summary of the PAH's population and household characteristics of PAHs across the affected wards (grouped per district) is provided in Table ES 1-4.

Table ES 1-4: Summary of Project Affected Households per Affected Ward

District	Ward	Number of PAHs	Number of PAPs	Average size of PAH	Proportion of PAC Households Affected (%)	Household Head (%)		% PAHs who reside in the area permanently
						Male	Female	
Chato	Nyamirembe	46	47	9	1.9	78	22	99
	Ichwankima	32	33	12	2.8	81	19	99
	Ilemela	47	47	11	3.9	81	19	100
	Katende	104	112	9	19.1	82	18	99
	Bukome	52	56	10	2.0	85	15	99
	Makurugusi	130	136	10	2.8	88	12	99
	Bwanga	83	89	9	1.3	84	16	100
	Iparamasa	38	42	10	0.8	71	29	100
Geita	Magenge	22	24	13	0.6	91	9	99
Mbogwe	Lulembela	70	75	8	2.3	76	24	100
	Ikunguigazi	53	58	9	4.5	91	9	100
	Ikobe	126	134	9	8.6	82	18	100
	Nyakafulu	200	224	8	4.7	87	13	99
	Bukandwe	110	120	9	6.9	85	15	99
	Nhomolwa	83	88	8	8.5	76	24	100
Bukombe	Lyambamgongo	41	42	10	4.7	85	15	100
	Bukombe	82	92	11	4.8	83	17	100
Total		1 319	1 419	9.7	2.8	83	17	99.5

There are 1,419 PAPs⁵, of which 1,256 are landholders, 124 tenants, and two (2) informal users. An additional 37 PAPs include government institutions and villages. There are 1,319 PAHs - the largest proportion is found in Mbogwe District (642), followed by Chato District (532) and Bukombe District (123). Geita District only has 22 PAHs. Of the PAHs, one (1) is from the Barabaig ethnic group and may self-identify as being an indigenous people. See Section 5.7 for more detailed information on vulnerable ethnic groups.

The most predominant land use amongst valued land parcels is agriculture (1,441 or 81%). This is followed by 184 communal / village land (10%) and 132 residential parcels (7%). The remaining 2% are made up of services / institutions and grazing land. Artisanal mining was reported to be practiced in Ilemela ward (Ilemela village), Makurugusi ward (Musasa and Kasala villages) and Iparamasa ward (Ilelema village). These mining sites are located within one (1) km of the pipeline corridor.

⁵ There are 1,406 PAPs if each of the 13 PAPs who have land parcels in multiple villages. They are double-counted here so that the total aligns with the sum of the numbers of PAPs per village.

The most important livelihood activities of PAHs are the sale of crops (66%), followed by the households engaging in subsistence farming (23%). Other primary livelihood activities that undertaken by PAHs on a smaller scale include small trading, artisanal mining, salaried employment and the sale of livestock products. The high dependency on land-based livelihood activities has resulted in PAHs being vulnerable to food insecurity due to variations in the weather patterns. The secondary livelihood activities of PAH members reveal some level of economic diversity and included of the sale of livestock products (38%), followed by the sale of crops (23%), self-employment (5%), small trading (4%), subsistence farming (3%), undertaking mining activities (2%) and other activities (25%). The most important crops identified by PAH are maize (35% of households), followed by rice (27%). Other noticeable crops are cassava (14%), cotton (9%) and peanuts / groundnuts eight percent (8%).

PAHs access public services either within their own ward or in neighboring wards. The majority of PAHs rely on battery-operated flashlights for lighting. Most PAHs use wood for cooking. Water is sourced from a variety of protected and unprotected water sources. However, during prolonged periods of drought, water sources run dry (for example communal wells in Ikobe Ward, Mbogwe District), leaving PAHs with no other option but to source water from unprotected sources such as charco-dams, dams, rivers and seasonal streams. The majority of PAHs in all four (4) districts make use of pit latrines.

Development Support

PAHs identified access to adequate agricultural inputs as key contributors to food security and economic development. Most of the PAHs do not have the means to access improved seeds, pesticides or fertilizers. Regarding equipment, half of the PAHs indicated that they use leased line plows, and one-third make use of hand hoes. Very few of the PAHs have access to a tractor. Pastoralists identified a lack of cattle dips, access to vaccinations, medication, veterinarian services and lack of grazing land for cattle as key challenges.

In general, water scarcity and distance of water sources for household and for agricultural uses were cited as a challenge. Access to irrigation was regarded as a key development need. Concerns were raised that the Project could contribute to reduced access to water sources.

The majority of PAHs listed improved roads as an important priority for development. Poor road infrastructure was reported to impede access to markets, schools, and medical facilities, impacting on health, education and household income.

Vulnerable Ethnic Groups

Vulnerable ethnic groups, some of whom may self-identify as indigenous people, are defined as a group who are native to an area and who have distinct social and cultural characteristics. These vulnerable ethnic groups have a collective attachment to an area and its natural resources and practice cultural, economic, social, and political customs that are separate from the dominant society.

In the Tanzanian context, four (4) vulnerable ethnic groups have been internationally recognized by the African Commission on Human and People's Rights as indigenous people. These are the Hadzabe, the Maasai, the Barabaig and the Akie. Although the Sandawe along with the Hadzabe were once considered hunter-gatherer groups in

Tanzania, the Sandawe have abandoned their hunter-gatherer lifestyle and adopted the agricultural lifestyle of mainstream society. Today the Hadzabe are recognized as indigenous peoples internationally, while the Sandawe are not⁶. This RAP has adopted a conservative approach by including the Sandawe as a vulnerable ethnic group.

Data from the socio-economic surveys indicates there is only one (1) household in Geita Region who self-identifies as belonging to the Barabaig. The household resides in the Shinyanga A Village (Nyakafulu Ward, Mbogwe District). The household owns one (1) land parcel. The Project will compensate the PAH for 0.089 acres of land, four (4) crop stems and seven (7) economic trees. The land is held under customary tenure (unregistered) and is used for agriculture. The PAH is not physically displaced, but the pipeline corridor affects one (1) of the household's non-residential structures.

Vulnerable Households

Vulnerable people and households may be especially susceptible to Project-induced impacts, including the following: food and cash shortages due to the loss of land to the Project, especially where the PAHs were land poor prior to the Project's arrival; children and relatives making resettlement decisions or agreeing compensation on behalf of elderly PAPs without their consent; and women and children left homeless where the household head absconds with compensation. A total of 425 households are regarded as potentially vulnerable in the Geita Region (32% of all PAHs).

Displacement Impacts

Table ES 1-5 provides a summary of temporary and permanent displacement impacts. Temporary impacts are expected to be short-term (typically lasting only for the duration of the construction phase) and can be successfully mitigated. Permanent impacts are expected to be long-term and last for the entire lifespan of the Project. Some of these cannot be mitigated and therefore PAHs affected by permanent impacts will be compensated according to local Tanzanian legislation and international good practice.

Table ES 1-5: Summary of Impacts

Impact	Management Actions
TEMPORARY IMPACTS	
Loss of footpaths and tracks	Ensure that the EPC contractor is made aware of the locations of all the affected footpaths and other crossings. The contractor will be responsible for communication with PACs in a timely manner regarding the closure of any (foot)paths and crossings and provide people with alternative routes, where required.
Disruption of agricultural activities	To ensure that the agricultural production cycle is minimally disrupted, the will as far as possible Project implement the following management actions during construction: <ul style="list-style-type: none"> • Pay PAH compensation as early as possible so that they have sufficient time to locate and purchase replacement land; • Allow as far as possible PAHs to harvest crops; • Assist PAHs to secure replacement land, where required; • Assist PAHs in clearing and preparing replacement land for

⁶ http://www.africa.kyoto-u.ac.jp/kiroku/asm_normal/abstracts/pdf/36-1/yatsuka.pdf

Impact	Management Actions
	agricultural production, where required; <ul style="list-style-type: none"> • Provide transitional food support.
Land speculation	<ul style="list-style-type: none"> • In partnership with the Land Office set up a help desk dedicated to dealing with PAHs seeking to purchase land; the help desk can also include a database of people willing to sell land to PAHs at the government set land rates. • Consider the findings of the EACOP study on Project-Induced In-Migration Situational Analysis July 2019.
Social impacts on PACs	Refer to mitigation measures identified in the ESIA and Project Provisional Human Rights Impact Assessment.
Loss of access to natural resources	<ul style="list-style-type: none"> • If construction of the pipeline section will take longer than a month in forest reserves, consider allowing community members to harvest natural resources by-weekly for a few hours (where appropriate (i.e. any access would take account of any legal restrictions on access and use of forests)). • Ensure that people continue to have access to the parts of the forest that are not affected through the establishment of designated footpaths and walkways away from the construction zone. • Implement mitigation measures set-out in ESIA. • Ensure that all contractors adhere to terms laid out in EACOP Contractor Management Plans.
PERMANENT IMPACTS	
Loss of land	Compensated / replaced
Loss of structures (residential and non-residential)	Compensated / replaced
Loss of crop stems and economic trees	Compensated.
Disturbance of graves	Relocated.

6. ELIGIBILITY, ENTITLEMENT AND COMPENSATION FRAMEWORK

Chapter 6 presents the Eligibility, Entitlement and Compensation Framework. This defines the eligibility criteria for affected persons to receive compensation and resettlement assistance, outlines the proposed entitlements for each type of displacement impact resulting from the Project, and determines the compensation rates and values applicable.

This Chapter includes discussion on the following:

- **Eligibility:** Identifies and details “who” is eligible to receive compensation and resettlement assistance;
- **Entitlement:** Defines “what” compensation and assistance each category of affected person is entitled to, including livelihood restoration assistance and the entitlements of potentially vulnerable people, both of which are IFS requirements. The section includes a detailed Entitlement Framework; and

- **Valuation and Compensation:** Defines “how” various impacted assets have been valued and the levels and types of compensation that will be offered to affected persons.

Eligibility

The eligibility criteria were determined at the onset of the Project, as outlined in the RPF. The criteria are based on the requirements of IFC PS5 and national legislation. Eligibility categories relevant to the Geita RAP are grouped and summarized below (Chapter 6 of the Geita RAP captures these in more detail):

- Persons who hold rights to land under legal title or customary right of occupancy,
- Persons who own affected buildings and structures such as dwellings, ancillary domestic buildings and agricultural structures;
- Assets affected by the pipeline including land parcels administrated by village councils;
- Institutions who own land and / or buildings and / or public facilities including religious organizations and government authorities;
- Owners of perennial, annual and seasonal (planted and harvested each season) crops;
- Owners of economic trees growing in the affected areas, either on their own land or on the land of others;
- Owners or custodians of cultural heritage assets such as graves;
- Land tenants – i.e. persons who, while not owning the land, have an agreement with landholders to use their land;
- Informal users of land – for example, persons who collect firewood, herbs and medicines, hunters and those who gather other natural resources;
- Informal businesses and petty traders such as market stalls, butchers, crop production facilities (e.g. milling machine shelters), cafés, hairdressers, clothing manufactures, furniture manufactures, kiosks etc.;
- Pastoralists using land for grazing livestock; and
- Vulnerable persons – i.e. persons for whom loss of assets or resources, and / or disruption of access to assets or resources, may have a disproportionate impact on livelihoods, due to their vulnerability and / or livelihood dependency on these activities.

Cut off dates

The cut-off date is determined by the commencement of the socio-economic and asset valuation surveys. Persons occupying or migrating to the Project area after the cut-off date are not eligible for compensation and / or resettlement assistance. The cut-off date has been set for each village affected by the pipeline corridor and are presented in Chapter 4.

Validity of Valuation

In accordance with Section 52(3) of the Valuation and Valuers Registration Act, VRs must be endorsed by the CV within six (6) months from the date of "...valuation of the interest in property of the last person". The VRs are valid for a further two-year period from the date of approval by the CV. The date of valuation "of the interest in property of the last person" for Chato was 30th September 2020, Geita 17th October 2019, Mbogwe 26th October 2019 and Bukombe 23rd October 2019, respectively.

Entitlements

The findings of the socio-economic and asset valuation surveys together with the eligibility criteria have been used to develop an Entitlement Framework. The framework defines the compensation principles and approach by associating compensation entitlements to the type and extent of the impact and the category of the affected person. All entitlement options have been communicated through stakeholder forums.

Chapter 6 presents a detailed Entitlement Framework for the Geita Region (Pipeline and AGIs). For the purpose of the Executive Summary Table ES 1-6 captures the structure and general content of the Geita Region Entitlement Framework.

Table ES 1-6: General Content of the Geita Region Entitlement Framework

Impact	Effect	Entitled Persons	Entitlement ⁷	
			In-kind and / or cash	Livelihood Restoration
Land				
Seven (7) categories of land loss considered (residential and agricultural).	Permanent loss.	Legal and customary holders, institutional owners, acknowledged users.	Mix of replacement and cash measures. Combinations vary across categories dependent on significance of impact.	Mix of livelihood restoration options (including group and individual programs). Combination varies across categories dependent on significance of impact..
Loss of Residence by Owner				
Considers loss of residence and other structures (i.e. dwellings, ancillary structures).	Permanent loss (all or part).	Owners (structures and infrastructure, resident and non-resident), government agencies as owners.	Mix of replacement and cash measures. Combinations vary across categories.	Mix of livelihood restoration options (including group and individual programs). Not applicable in all categories.
Loss of resources providing income in cash or kind				
Loss of community accessed resources such as forests, wetlands and non-economic trees	Permanent and temporary loss (in some community resource cases).	Resource users or persons losing income streams.	Mix of access retention and support measures. Cash measures for loss of communal land and assets.	None.

⁷ Entitlements are very broadly described. For legal and operational reasons, the full entitlement matrix should be consulted for details of entitlement.

Impact	Effect	Entitled Persons	Entitlement ⁷	
			In-kind and / or cash	Livelihood Restoration
Loss of Communal or Institutionally owned structures or land				
Five (5) categories of loss considered (including pasture land, roads, pathways, drainage and electricity mains).	Permanent and temporary loss.	Village owners, institutions (e.g. religious organizations), district and Local Government, utility company.	Mix of cash, support and access / replacement measures. Combinations vary across categories.	
Trees and Crops				
Seven (7) categories of loss considered (including loss of crops, trees and agricultural assets).	Permanent loss, or loss / restriction of access.	Land and crop / tree owners, tree users, tenant farmers, village owners, informal owners.	Mix of cash compensation, allowances and support measures. Combinations vary across categories.	Mix of livelihood restoration options for physically and economically displaced PAPs.
Cultural Assets				
Graves	Permanent loss.	Individuals or groups laying claim to graves.	Formal grave removal and relocation process. Cash compensation in line with legal requirements.	None.

Valuation and Compensation

The Project is obliged to meet Tanzanian legislative requirements for land acquisition, compensation and resettlement as well as applicable international financing standards, including IFC PS5 on Land Acquisition and Involuntary Resettlement. To fulfill these requirements, the valuation process has been completed in three (3) elements (summarized below):

- **Rates Report.** Under the provisions of The Valuation and Valuers (General) Regulations, 2018, the Registered Valuers for the Project undertook market research in Geita. The research aimed at establishing current or up-to-date market values and replacement costs of compensable items.
- **Valuation Report and Compensation Schedules under Tanzanian Legislation.** This Valuation Report (including Compensation Schedules) covers compensable items listed under the national legislative framework. It is presented as cash compensation; and is submitted for the approval of the CV. All aspects of this valuation process are described in detail in Chapter 6 of the Geita RAP. The sign-off and approval of the VR and Compensation Schedule under Tanzanian Legislation will follow the requirements of The Valuation and Valuers Registration (General) Regulations, 2018.
- **Valuation for Compensation for Additional Entitlements under International Financing Standards.** The Valuation Report and Compensation Schedules cover additional entitlements under IFS to achieve full replacement cost and eligibility for in-kind compensation such as replacement land, replacement housing, livelihood restoration and assistance to vulnerable people. These are required to ensure that the Project compensation satisfies additional IFS requirements and obligations. While these items are brought to the attention of the CV, they are not intended for approval by the CV

as they contain Project-specific additional entitlements and compensation options in accordance with IFS requirements.

PAP entitlements across the Geita Region have been recorded and tabulated. Details are presented in Chapter 6.

7. REPLACEMENT HOUSING AND LAND

Chapter 7 of the Geita RAP presents the replacement housing and land strategy that will apply to eligible PAPs and PAHs. The steps underpinning the strategy are described (including a Concept Design Study) and approaches to replacement housing design and replacement land are detailed.

Existing Structures

A Concept Design Study⁸ was undertaken to help identify current housing types and practices for use as the basis for the development of concept designs for replacement houses. The study involved a review of previous reports, background information and socio-economic data prior to targeted field visits by the design team who consisted of the architect and a quantity surveyor. The findings of the fieldwork and background research were drawn on to further develop concept designs which include a range of building configurations and sizes based on locally available materials.

In the Geita Region, there are 36 households (owning 44 residential structures) that will be physically displaced. Of the 44 residential structures there are five (5) cases where the PAH owns two (2) structures with a total combined floor space of less than 25m². In this situation, the PAH is only entitled to one (1) replacement house (25m²) and will be compensated in cash for the second smaller structure.

The floor area of the current houses will inform eligibility for various replacement house designs. The final number of replacement structures constructed will depend on the number of PAPs that choose replacement house(s) in preference to a cash compensation option.

In terms of vulnerable ethnic groups, data from the socio-economic surveys indicates there is only one (1) household in Geita Region who self-identifies as belonging to the Barabaig ethnic group. This PAH is not physically displaced but has land and crops impacted.

The majority of affected structures in Geita are traditional houses constructed from readily available local materials.

Basis for Design

The local architectural style for residential dwellings in Geita Region were considered in the development of the replacement house design. The design strategy considered similarity of floor space / footprint size; functionality and layout; durability and simplicity of construction; minimum floor space to accommodate comfort, health, safety, social and cultural needs.

⁸ Replacement Housing Concept Design Report: Pipeline (2019) (Digby Wells Consortium).

Replacement House and Ancillary Structure Designs

Eight replacement house designs have been developed for the Project. They range in size from the smallest at 25m² (Type A) to the largest at 145m² (Type H). The majority (75%) of structures eligible for replacement in the Geita Region are less than 25m² and are eligible for the Type A house.

Table ES 1-7: Houses Types and Eligible Dwellings in Geita Region

House	Eligible Dwellings in Geita	Floor Space	Sub – Type	Number of Rooms
House Type A	30	25 m ²	A1	2
			A2	3
			A3	3
House Type B	5	33 m ²	B1	3
			B2	4
House Type C	1	39 m ²	C1	3
			C2	4
House Type D	2	47 m ²	D1	4
			D2	5
House Type E	1	58 m ²	E	5
House Type F	0	75 m ²	F	5
House Type G	0	105 m ²	G	6
House Type H	0	145 m ²	H	8

More detail is provided in Chapter 7 and Appendix D which includes designs for all the Project's house designs (Type A to Type H).

Ancillary Structures

For improvement of living conditions for each replacement house, a PAP will be provided with a covered kitchen shelter and a standard single ventilated improved pit (VIP) latrine. Where a PAP is eligible for more than one (1) replacement house, they can elect for either:

- A standard single VIP latrine (with privacy wall at entrance) and a covered kitchen shelter per replacement house structure; or
- One (1) VIP latrine combined with an ablution (shower) structure, and a covered kitchen shelter plus store per homestead.

Designs for ancillary structures are also detailed in Chapter 7 and Appendix D. In summary there are two (2) VIP latrine / ablution types, and two (2) kitchen shelter types:

- VIP latrine / ablution types: Type A – single covered VIP, Type B – covered VIP latrine and shower combination; and
- Kitchen types: Type A – open covered kitchen, Type B – open covered kitchen with an enclosed store.

Replacement Land

PAPs that are eligible for replacement land will be given a choice between Project support to secure replacement land and cash compensation (or a combination of both). The same principle will apply in the case of physical displacement. Eligible PAPs will be given the opportunity to choose between cash compensation and replacement land / housing during the RAP implementation entitlement briefings. Initial replacement land requirements are based on the assumption that PAPs who are eligible for replacement land and / or housing will choose the in-kind option rather than the cash option.

Land for Land Replacement

IFC PS5 notes that where livelihoods are land based, it is preferred that replacement land that is at least equivalent to that being lost in terms of productive potential and locational advantage be offered. Unutilized arable land is relatively scarce in Geita Region (9% to 15%), so consideration of the most appropriate mechanisms to ensure that “land for land” replacement can be achieved is required.

The IFC Draft Good Practice Handbook⁹ suggests that “land for land” replacement can be achieved where households secure their own replacement land (with possible facilitation from the Project and / or local authorities), or where the Project secures land for allocation. Some PAPs may have land available in the same area, preferring to have their replacement house constructed there. Site suitability will have to be assessed.

Replacement Housing and Land Implementation

A more precise determination of land required for replacement housing and land will be made once PAPs have selected their preferred options and signed compensation agreements. The Project will seek to ensure that displaced PAPs move directly into replacement land, with no requirement for temporary accommodation. There may be circumstances where this is not possible, and the Project will work with PAPs and relevant authorities to provide support during this transition period.

As far as possible, the aim is to provide replacement land in the same village or ward as the land previously owned by the PAPs. Replacement plots will often be Village Land under the jurisdiction of the same village. The Project will support the process to secure documents for the PAP to secure the best available security of tenure.

8. LIVELIHOOD RESTORATION PLAN

Chapter 8 of the Geita RAP presents the Project’s approach to livelihood restoration. This is done in the context of a Livelihood Restoration Plan (LRP). The plan considers eligibility for livelihood restoration, the regional context of livelihood strategies, existing livelihood-related programs, eligibility for livelihood support and livelihood options offered.

⁹ IFC. Draft Good Practice Handbook: Land Acquisition and Resettlement (2019).

The LRP focuses on the restoration and potential enhancement of the livelihoods of PAHs. The provisions of the LRP will apply where compensation alone will not guarantee the restoration of the livelihoods of displaced households.

The overall aim of the LRP is to ensure that there is a measurable improvement in the lives and livelihoods of eligible PAHs. This includes:

- Provision of sustainable livelihood packages that enable PAP and PAH to move beyond dependence on external resources;
- Provision of mechanisms to optimize opportunities for those receiving cash compensation;
- Leveraging off existing skills and interests whilst providing an environment for the development and enhancement of new skills; and
- Promotion of self-reliance and socio-economic empowerment.

The principles underpinning the LRP are aligned with requirements and approaches embedded in applicable national laws and IFI standards. The LRP includes a package of livelihood restoration options that will be offered to PAPs and PAHs. Levels of support will be aligned with levels of impact experienced by households as well as their potential vulnerability. Households identified as potentially vulnerable will be engaged, and customized additional support provided as necessary.

LRP Phasing

The LRP will be completed in two phases:

- Phase 1 – Immediate Livelihood Restoration and support. Focus on the immediate restoration of directly impacted livelihoods and the enhancement of food security.
- Phase 2 – Additional Livelihood Enhancement. Additional programs seeking to further enhance and potentially diversify livelihoods.

Geita Region Livelihood Context and Strategies

The LRP recognizes and considers the context in which livelihood restoration initiatives are planned and implemented. Important contextual considerations are the following:

- *Climate.*
- *Cultural characteristics.*
- *Embedded livelihood practices.*
- *Access to and use of markets.*
- *Climate variability, crop yields and adaptation.*

Assessment of Livelihood Impacts

Livelihood impacts have been assessed in the context of the Sustainable Livelihoods Framework of the Department of International Development (DFID). Using the DFID framework, the overarching livelihood impacts which have been identified in the Geita Region are:

- Natural – loss of land, loss of trees, loss of crops;
- Physical – loss of residences, loss of village resources;

- Social – impact on cultural resources and institutional structures;
- Human – impact on vulnerable individuals and groups; and
- Financial – impact on individual and household finances.

The LRP provides a summary of various forms of displacement and their impacts on the livelihood strategies of PAPs and PAHs in the Geita Region.

Eligibility for Livelihood Restoration Support

The Project will offer livelihood restoration assistance depending on the significance of impacts on the livelihoods of PAPs and PAHs, and their resilience and ability to restore livelihoods. From a structured review of impacts on livelihood strategies, criteria have been established to determine the type of livelihood assistance to be offered.

Livelihood restoration is structured around group-level livelihood restoration measures based on the significance of impacts on the PAPs. In addition, some PAPs require access to individual level livelihood restoration support, e.g. physically displaced PAPs and those with vulnerabilities, as they are unable to restore their livelihoods without further assistance due to the degree of Project impact and / or lack of resilience or social standing. Both land and non-land-based measures are contained within the LRP.

Current Livelihood Improvement Programs

Where possible, the Project will look to leverage from and build on livelihood improvement programs being implemented in the area. The livelihoods and related initiatives identified in Geita Region include the following:

- Non-Governmental Organization (NGO) and Non-Profit Organization (NPO) led programs in Chato, Geita, Mbogwe and Bukombe. These include promotion of sustainable farming, promotion of agricultural development and diversification, support to reforestation, community health and education, empowerment and support to vulnerable people in communities (especially women and children), human rights awareness and legal support, promotion of environmental conservation, improvement of governance capacity and providing access to loans.
- The Tanzanian Agricultural Sector Development Strategy. This ambitious strategy seeks to contribute to the Tanzania Development Vision 2025, which envisages raising living standards to middle-income country levels by 2025; and
- Development projects in Chato, Geita, Mbogwe and Bukombe (undertaken by the GoT, or GoT in partnership with others). Many government departments and agencies are active in this context, including those responsible for environment, forestry, health, education, economics and planning, community development and fisheries. Infrastructure projects (water, schools, health care facilities are common), but there are also programs with direct livelihood improvement links, including the development of food processing facilities (e.g. sunflower oil production), construction and improvement of markets and construction of livestock slaughtering facilities.

Livelihood Restoration Plan

Livelihood restoration options available through the Geita LRP are the following:

- LRA 1 - Land preparation and planting of replacement agricultural land;

- LRA 2 – Maize and Rice improvement program;
- LRA 3 - Crop diversification program;
- LRA 4 - Poultry production program;
- LRA 5 - Livestock improved husbandry program;
- LRA 6 - Improved beekeeping practices;
- LRA 7 - Enterprise development; and
- LRA 8 - Household budgeting and money management training.

LRA 2 and LRA 3 is are especially relevant in Geita Region, the former to entrench and support widely practiced livelihood strategies, and the latter to further enhance diversity and to improve resilience to drought and climate change. LRA 1 is necessary where land is replaced, and LRA 7 and LRA 8 are important to build capacity and self-reliance. LRA 6 has the potential to grow beekeeping as a livelihood option already practiced in the region (especially in forested areas).

Implementation Partners

The Project may manage the livelihood restoration programs with the assistance of implementing partners (NGOs, CBOs, service providers, community groups) and relevant government departments and local councils. Some potential partners have been identified, including Tanzanian and international NGOs (the latter where active in Tanzania).

Transitional and Temporary Support

Transitional support will be provided to physically and economically displaced PAPs and PAHs to complement compensation payments and to ensure that households can meet their basic needs and maintain their standard of living once access to land has been lost and until they have had opportunity to restore their livelihood to pre-project levels. These early support components include:

- Transitional support in the form of food baskets (or alternative, such as a voucher system) and other provisions to ensure households are food secure during the transitional period;
- Financial management training for all households receiving cash compensation to provide households with the tools and skills to manage the cash they received; and

Vulnerable and highly impacted households will be monitored closely to ascertain whether the support provided is adequate and to consider any adjustments to the basket of goods. Households will be assessed to determine whether they are eligible to remain on the Transitional Support Program. Assessments will be undertaken at six-monthly intervals of up to 24 months if required.

9. VULNERABLE PEOPLES PLAN

The Geita RAP Vulnerable Peoples Plan (VPP) in **Chapter 9** gives attention to people who are seen to be especially disadvantaged or vulnerable in the context of the resettlement process. It defines vulnerability and vulnerability categories, shows numbers of households per category, outlines possible livelihood restoration strategies for

vulnerable people and addresses modes of engagement with vulnerable groups.

The VPP shows how the Project intends to confirm the vulnerability of potentially vulnerable PAPs, as identified during the survey process, and to address the vulnerabilities noted. This includes ensuring that such PAPs are properly informed of project activities and suitably assisted to address any additional vulnerabilities resulting from Project activities.

The objectives of the VPP are to:

- Ensure that actual and potentially vulnerable people and households are identified and monitored during and after the resettlement process;
- Provide appropriate assistance to households identified as vulnerable to re-establish their livelihoods;
- Identify compensation and restoration packages for vulnerable people that include additional forms of support;
- Assist persons identified as vulnerable to understand their options for resettlement and compensation;
- Carefully consider social networks relating to family and tribal structures and how these can be re-created at resettlement locations; and
- Identify additional measures for vulnerable groups to cope with Project-induced impacts during physical relocation.

Definition and Categorization of Vulnerability

Vulnerability is complex and multi-faceted. In order to capture all aspects and combinations of vulnerability, the Project has developed vulnerability criteria based on factors that might limit the resilience of households to land acquisition and resettlement shocks and impacts.

The criteria were informed by factors such as household head age and gender, education levels of household heads, the presence of physically or mentally disabled household members, dependents and the support resources available, and children out of school. Based on combinations of household vulnerabilities, three categories of vulnerability have been adopted in the Geita RAP:

- **Category 1** (Vulnerable) households will immediately be placed on the Vulnerable Households Register (VHR) and qualify for in-kind assistance and individual level livelihood support;
- **Category 2** (Potentially Vulnerable) households will qualify for in-kind assistance and livelihood support but will need further verification before being placed on the VHR;
- **Category 3** (At-risk) households will be placed on a “watch list” and must be included in any review / survey to monitor the PAPs.

A summary of these PAHs per ward is provided in Table ES 1-8. Note that Chapter 9 of the Geita RAP provides details at ward and village level.

Table ES 1-8: Summary of Households per Vulnerability Category (by ward)

District	Ward	Category 1	Category 2	Category 3
----------	------	------------	------------	------------

District	Ward	Category 1	Category 2	Category 3
Chato	Nyamirembe	2	9	10
	Ichwankima	4	10	8
	Ilemela	3	13	13
	Katende	8	17	14
	Bukome	6	9	8
	Makurugusi	17	26	24
	Bwanga	11	13	20
	Iparamasa	7	7	5
Geita	Magenge	3	8	7
Mbogwe	Lulembela	12	15	16
	Ikunguigazi	5	6	15
	Ikobe	23	30	27
	Nyakafulu	15	33	43
	Bukandwe	8	25	30
	Nhomolwa	21	16	18
Bukombe	Lyambamgongo	8	5	14
	Bukombe	12	18	25
TOTAL		165	260	297

The level and nature of vulnerability will differ from one (1) household to the next, and support responses will be customized on a case-by-case basis.

Specific Vulnerability

As part of the VPP, the specific vulnerabilities of women, elderly households, households including disabled family members and potentially vulnerable ethnic groups were assessed. Table ES 1-9 summarizes the key findings.

Table ES 1-9: Assessment of Specific Vulnerabilities

Vulnerabilities	Dimensions of Vulnerability
Women	<ul style="list-style-type: none"> Access to resources possibly limited by unpaid responsibilities including childcare, preparing food and fetching water and firewood. Responsibilities increased where women are heads of households. May also be excluded from village decision making and engagement structures and processes. Other vulnerabilities may compound the difficulties of female-headed households (e.g. disabled household members and insufficient access to land).
Elderly Households	<ul style="list-style-type: none"> Poverty or lack of cash income. Health issues rendering subsistence and self-care difficult. Less socially integrated and more dependent on the support of children, relatives and neighbors. Limited mobility and access to livelihood sites and social services.
Households with Disabled Members	<ul style="list-style-type: none"> Reduced livelihood security, mobility, and household income. Increased healthcare expenditure.
Vulnerable Ethnic Groups	<ul style="list-style-type: none"> Rights not always recognized by governments. Impact to pastoralist livelihood activities due to displacement. Encroachment onto traditional land by commercial Projects and wildlife reserves. Evidence that school attendance among vulnerable ethnic groups is lower and the drop-out rates higher than among other Tanzanians.

Livelihood Strategies for Vulnerable Households

Most PAHs affected by the pipeline corridor in the Geita Region rely on their land for household subsistence and cash income. Vulnerable households will be especially impacted by the loss of land. Programs to address individual circumstances may include:

- Crop improvement programs;
- Livestock improvement programs and Poultry Production programs, especially poultry which can be farmed intensively in a smaller area and produce greater returns; and
- Non-land-based programs, such as enterprise and skills development.

It is possible that livelihoods are impacted post-displacement, for example, due to climate-related crop failure. The Geita RAP has identified measures to prevent ongoing PAP vulnerability:

- Support and capacity building for improved land preparation and production;
- Training to help PAPs manage their finances / cash received during compensation;
- Monitoring of PAHs post-relocation; and
- Assistance to vulnerable PAH unable to re-establish croplands due to limited access to labor.

Engagement Processes for Vulnerable Groups

A key element of supporting vulnerable groups is ensuring that they have access to engagement processes so that they: are provided with sufficient information about the Project, including the potential impacts and opportunities relevant to them; can respond and provide feedback to help shape processes and activities in which they are involved and the development process fosters full respect for human rights, dignity, aspirations, culture, and natural resource-based livelihoods

In the overarching context of general engagement with PAHs, the Project has been especially careful to ensure access to information and the involvement of women and spouses as well as implementing targeted measures to ensure adequate, equitable and culturally appropriate engagement with vulnerable ethnic groups (who may potentially be vulnerable to Project-related displacement impacts).

Implementation Support for Vulnerable Groups

Different individuals and households will need different levels of support and assistance during resettlement implementation dependent on their specific area of vulnerability. Specific initiatives to protect and support vulnerable groups during implementation may be considered.

The VPP runs parallel to the wider RAP implementation and will only conclude when the livelihoods of vulnerable people have been restored to at least pre-Project levels. The VPP may be updated during the RAP implementation program.

10. CONSULTATION AND DISCLOSURE

Chapter 10 of the Geita RAP describes the manner in which interaction with stakeholders has been undertaken. It addresses the identification of stakeholders, engagement structures, and methods, engagement and consultation already completed.

The Project is committed to meaningful engagement with all of its stakeholders based on principles of open and transparent engagement, promotion of listening and dialogue, empowerment through engagement, timely and proactive information sharing, freedom from manipulation or coercion, effective and accessible engagement and tools, appropriate engagement methods, respect for human rights and gender and culture sensitivity.

Stakeholder Identification

Interested and affected stakeholders most relevant to the Geita RAP have been identified and fall in the following broad categories: Directly affected stakeholders including PAPs and related PAHs, and PACs; Other interested stakeholders including the GoT and IFIs; and civil society organizations including NGOs and CBOs.

Project Engagement Structures

Several key structures are relevant to Geita RAP planning and engagement. These are shown in the figure below.

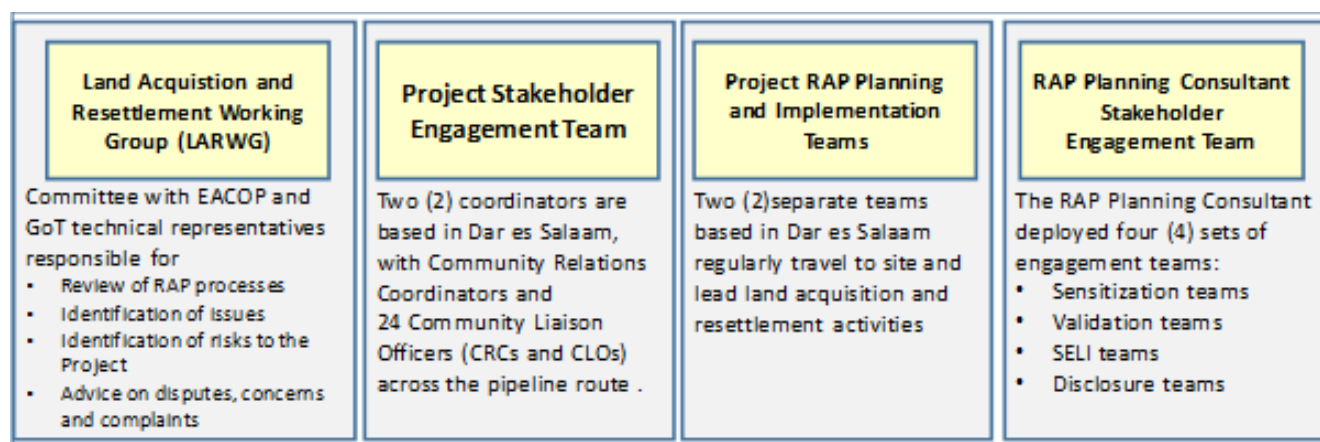


Figure ES 1-6: Project RAP Planning and Implementation Teams

Consultation During the Resettlement Planning Phase

Engagement has been tailored to the needs of different stakeholder groups with consideration of the land acquisition and resettlement phases. Types of meetings included:

- LARWG meetings, meetings with specific government departments, regional government and NGOs;
- District, WDC, VDC and Village Assembly meetings;
- Focus Group Discussions (FGDs) with minority groups / specific groups of stakeholders such as vulnerable ethnic groups, men, women and PAPs / PAHs; and

- Formal and informal one-on-one discussions with PAHs / PAPs including vulnerable ethnic groups.

Meetings were mostly held in English and Kiswahili. Translations to other languages such as Maasai were available where stakeholders did not understand and / or could not speak Kiswahili.

The table below shows the number of formal RAP Planning Phase meetings held (up to the drafting of this RAP) and meeting attendees (excluding Project and RAP planning consultant team members).

Table ES 1-10: Number of Formal Meetings and Number of Attendees

Meeting Type	Sensitization Meeting	Validation Meeting	Forestry Meeting	Housing Meeting	SELI Meeting	Disclosure Related Meeting	TOTAL
Regional Level Meetings	1	3	N / A	N / A	N / A	1	6
District Level Meetings	7	7	2	4	28	4	52
Ward Level Meetings	16	17	N / A	N / A	15	11	59
Village Level Meetings	56	31	N / A	N / A	92	49	228
TOTAL	80	58	2	4	135	66	345
Regional Level Attendees	45	179	N / A	N / A	0	93	317
District Level Attendees	19	23	6	9	70	17	144
Ward Level Attendees	271	261	N / A	N / A	221	177	930
Village Attendees	639	423	N / A	N / A	1 466	380	2 908
Village Assembly Attendees	3 093	N / A	N / A	N / A	N / A	1 119	4 212
TOTAL	4 067	886	6	9	1 757	1 786	8 511

Issues and Grievances

An Issues and Comments register has been compiled. Questions and issues related to land and resettlement during sensitization and validation were focused on the implications of the cut-off date, the rates that would be applied and when compensation would be paid. The key issues during SELI were about payment of compensation and allowances. During disclosure, issues focused on the process to follow in the event that a PAP passed away or could not attend the disclosure meeting, dissatisfaction with land rates, continuation of farming activities in the corridor.

A Project-level Grievance Management procedure and associated documentation have been developed and implemented. A total of twelve (12) land acquisition and resettlement related grievances were received in the Geita Region by the RAP Planning Consultant.

11. IMPLEMENTATION OF LAND ACQUISITION AND RESETTLEMENT

Chapter 11 provides an overview of the key activities and processes required for the implementation of the Geita RAP and the completion of land acquisition and granting of rights. This includes the primary roles and responsibilities of key stakeholders, including both the Project company and the government of Tanzania.

Implementation of the Geita RAP will take place over three phases (listed below). A phased approach will allow for more accurate budgeting and scheduling, inclusive stakeholder engagement, as well as ensuring key activities and processes are completed in a sequential and logical manner.

The three (3) implementation phases are described briefly below (some activities being in parallel and not sequential):

- **RAP Implementation Planning.** During this phase, work will predominantly focus on the legal requirements for land acquisition and conversion. Final engagement will also be undertaken relating to entitlement and compensation determination;
- **Implementation.** This phase will focus on the drafting and signing of the individual household compensation agreements and the subsequent implementation of their requirements including payment of compensation, construction or replacement housing and relocation and transition support; and
- **Project support Activities.** This will include the initiation and ongoing input to the various livelihood restoration activities (as described in Chapter 8) as well as the implementation of the monitoring and evaluation programme (as described in Chapter 13).

Stakeholder engagement and grievance management will continue throughout.

Implementation Roles and Responsibilities

To ensure that the Project maintains ownership and accountability of the overall process, RAP implementation activities under the Land Acquisition Process will be managed by the EACOP Project Pipeline Team (PPT), as well as the GoT. Roles and responsibilities for the Geita RAP Implementation phase are summarized in the table below.

Table ES 1-11: Roles and Responsibilities for the Geita RAP Implementation Phase

Activity	Project Company / PPT (Project) Role	Government of Tanzania Role
[Step 5] Gazettement of Public Purpose, and Conversion of Land to General Land.	<ul style="list-style-type: none"> • Provide maps and information (including a list of affected villages) of required Project land per section. • Review gazettement area and any orders and / or notices prior to publication in the Gazette. 	<ul style="list-style-type: none"> • Prepares, issues and publishes necessary orders and / or notices in Gazette required under the LAA. • Undertakes all necessary steps and actions to meet the provisions of the LAA, including for the gazettement and acquisition of land, and for the conversion of certain land (at

Activity	Project Company / PPT (Project) Role	Government of Tanzania Role
	<ul style="list-style-type: none"> Provide timing to the GoT and input to the wording of notices of intention to acquire if possible. 	timing agreed with Project) to General Land as agreed with the Project ¹⁰ .
[Step 6] Compensation Agreements		
Entitlements and Compensation Briefings.	<ul style="list-style-type: none"> Conduct additional entitlement briefings at village level to explain and discuss the entitlements to PAPs. 	<ul style="list-style-type: none"> Support provided by GoT in addition to district, ward and village authorities.
Drafting and Signing of Compensation Agreements.	<ul style="list-style-type: none"> Lead the engagement with PAPs and communities to reach compensation agreements. Signatories of Compensation Agreements under discussion with GoT. Determine cases where the GoT's further compulsory acquisition powers need to be engaged and facilitate process, where applicable. 	<ul style="list-style-type: none"> Signatories of compensation agreements under discussion with GoT. Provide support should the engagement process continuously fail to gain agreement overcompensation.
[Step 7] Payment of Compensation, Relocation & Implementation of Livelihood Restoration & Assistance Programs		
Payment of Compensation	<ul style="list-style-type: none"> Payment of compensation (The arrangements for payment of Tanzanian regulatory entitlements are a matter of discussion between the GoT and the Project). 	<ul style="list-style-type: none"> Acquiring Authority for land acquisition. (The arrangements for payment of Tanzanian regulatory entitlements are a matter of discussion between the GoT and the Project.) Oversight of compensation and relocation process.
Construction of Replacement Housing.	<ul style="list-style-type: none"> Preparation of replacement plots for construction of replacement houses. Facilitating the registration of replacement land and payment of all charges that will accrue from the process of acquiring the land and constructing replacement housing. 	<ul style="list-style-type: none"> Support with formal land acquisition, transfer and registration as per Tanzanian legislation.
Relocation and Transitional Support.	<ul style="list-style-type: none"> Provide timing and agree modalities of giving PAPs notice to vacate. Provision of transitional support (where required). 	<ul style="list-style-type: none"> Prepares in agreement with the Project Co. / PPT, issues at the precise time requested by the Project Co. / PPT and publishes statutory notices to yield possession (vacate) to PAPs (and affected villages, as required under the LAA)¹¹.

¹⁰ This is expected to include, but not be limited to: all required approvals from village, ward, district, regional and national authorities; resolution of any related planning matters; necessary surveys and reports; and notices as prescribed under the legal framework and the publishing of these, as required, in the Government Gazette. Gazettement of the land for the public purpose and conversion of Village and Reserved Land to General Land is to occur simultaneously.

¹¹ The statutory Notice to Yield Possession may be issued as part of the Notice of Intention to Acquire under the LAA. The Project will work with the government to agree the modalities of giving notice to vacate to PAPs under the IFS.

Activity	Project Company / PPT (Project) Role	Government of Tanzania Role
Implementation of Livelihood Restoration and Assistance Programs.	<ul style="list-style-type: none"> Refinement of livelihood restoration programs and support to PAPs. Discussions and liaison with regional and district officials & technical staff, NGOs and CBOs. Assess locally based service providers who are able to provide training and post training support. Mobilization of the necessary human, financial and material resources. 	<ul style="list-style-type: none"> Support and potential partnerships with District Agricultural Office. Project to liaise with regional and district official and technical staff.
[Step 8] Granting of Rights and [Step 9] Lease to Land.		<ul style="list-style-type: none"> The GoT will undertake all necessary steps to grant to the relevant authority a Granted Right of Occupancy on required land which comply with the principles set out in the IGA.
		<ul style="list-style-type: none"> The relevant authority to then provide a lease to the Project for the required duration which grants land rights to the Project which comply with the principles set out in the IGA (and relevant other agreements in place at that time between State and the PPT).

Stakeholder Engagement during Geita RAP Implementation

Stakeholder engagement is critical during all phases of resettlement planning and implementation. Table ES 1-12 shows the Stakeholder Engagement Execution Plan for the Geita RAP Implementation.

Table ES 1-12: Engagement Execution Plan for Geita RAP Implementation

Stakeholder Group	Task Description	Deliverables
Engagement with regional and district authorities.	Regular feedback and guidance meetings with regional and district authorities to: <ul style="list-style-type: none"> Provide updates on activities completed; Discuss upcoming activities; Seek guidance on regulatory requirements; Provide feedback on grievances received and resolved; and Solicit feedback and adapt plans accordingly. 	Minutes of meetings. Attendance registers. Meeting invitations.
Engagement with the LARWG.	Regular feedback and guidance meetings with the LARWG to: <ul style="list-style-type: none"> Provide updates on activities completed; Discuss upcoming activities; Seek guidance on regulatory requirements; Provide feedback on grievances received and resolved; and Solicit feedback and adapt plans accordingly. 	Minutes of meetings. Attendance registers. Meeting invitations.
Engagement with PAPs (incl. PAHs and PACs).	Engagement will include: <ul style="list-style-type: none"> Disclosure of resettlement agreement information and notification to PAPs and PAHs regarding resettlement options; Regular community meetings with PACs to disclose relevant information and provide guidance to PAPs on resettlement options as well as provide updates on the progress of the resettlement process; Record options / preferences of PAPs / PAHs; Notification to PAPs of key activities in relation to payment of 	Notes / minutes of discussions / meetings. Notifications of meetings. Signed agreements.

Stakeholder Group	Task Description	Deliverables
	compensation and commencement of the construction of replacement housing; <ul style="list-style-type: none"> • Accompanying PAPs to the site / s where replacement housing is being constructed (as per agreed schedule of visits); • One-to-one engagement with PAPs to support understanding of an agreement on compensation / support packages; • Management of complaints and grievances process; • Ongoing monitoring and evaluation related engagement with PAPs, RAP implementation partners and other related stakeholders; and • Discussions and activities related to livelihoods restoration. 	

12. IMPLEMENTATION BUDGET AND SCHEDULE

The Geita RAP implementation budget and schedule are presented in **Chapter 12**. All components considered in budget formulation are described and scheduling considerations are presented.

An estimated budget for RAP implementation has been developed based on the displacement metrics reported in Chapter 6. All cash compensation contained in the VRs and Compensation Schedules has been included in the budget. In-kind and other entitlements will also be monetized for budgeting purposes. The budget is indicative at this stage and will require further refinement. The main budget components are as follows:

- The cost of **land** is a function of the area of land to be acquired by the Project.
- Owners of Project-affected **occupied and complete residential dwellings** have a choice between cash compensation and replacement structures;
- Cash compensation for **crops and economic trees** has been included in the budget, based on valuation amounts determined during the assessment valuation survey;
- **Allowances** have been budgeted for, including a disturbance allowance for physically and economically displaced households and a transport allowance for physically displaced persons;
- Compensation for **relocation of graves**;
- The budget for **livelihood restoration** measures includes three (3) main components, including costs associated with, transitional support; costs associated with individual, and household-level livelihood restoration measures and costs associated with community or village-level livelihood restoration measures;
- Additional assistance required by **vulnerable persons or households**. An allowance will be made in the RAP implementation budget for this additional assistance and will be monitored closely; and
- Budget for the resources required for **RAP implementation**.

Indicative Implementation Schedule

The RAP contains an indicative RAP planning and implementation schedule. It is anticipated that the completion of key RAP implementation activities in the Geita Region will take approximately 21 months from the final investment decision.

In addition to key RAP implementation activities there are a number of initiatives that will run beyond the 21-month period. These include stakeholder engagement, Livelihood Restoration and Assistance Programs, and Monitoring and Evaluation Programs.

13. MONITORING AND EVALUATION

Chapter 13 describes the Monitoring and Evaluation framework and system to be used for the Geita RAP. The chapter defines the purpose of both monitoring and evaluation, describes the nature, objectives and purpose of different types of monitoring and evaluation and shows the reporting requirements linked to the monitoring and evaluation framework.

The Project Monitoring and Evaluation (M&E) system will include internal, external and participatory monitoring and reporting processes to ensure complete and objective information is provided.

Indicators will be selected to measure inputs, outputs, and outcomes for resettlement activities and will aim to provide feedback to the Project as well as to relevant stakeholders on the Geita RAP implementation process. The whole M&E process will be linked to the household level socio-economic and asset surveys undertaken for the development of the Geita RAP.

This process will also confirm the levels of success of livelihood restoration measures and for that reason M&E of the impacts of resettlement will continue for a reasonable period after all resettlement and related development activities have been completed.

Four main types of M&E will be undertaken:

- **Process Monitoring:** This is an internal monitoring activity that tracks the impacts of the resettlement implementation process on the PAPs, PAHs and PACs. Quarterly reporting will be undertaken by the Geita RAP implementation team.
- **Compliance Monitoring:** This form of monitoring will establish whether resettlement implementation is meeting the objectives defined in the Geita RAP. Compliance monitoring should be undertaken quarterly during implementation and for two (2) years following resettlement, after which it will be undertaken bi-annually.
- **Completion Audit:** A completion audit will be conducted by an independent third party to verify that the Geita RAP implementation met the necessary standards and restored or improved the livelihoods of the PAPs. The timing of the completion audit will be influenced by many aspects of implementation, but it is anticipated to be three (3) years after the initiation of the LRP.
- **Ex-post Evaluation / Post-Project Evaluation:** An ex-post evaluation will be undertaken by a qualified independent party, in a timeframe determined by the completion audit.

TABLE OF CONTENTS

1	INTRODUCTION	1
1.1	Background to the Resettlement Action Plan.....	2
1.1.1	<i>Purpose and Scope of the Geita Resettlement Action Plan.....</i>	3
1.1.2	<i>Levels of Institutional Support Provided During RAP Preparation</i>	4
1.2	Summary of the Geita Region Land Context	6
1.3	Content of Plan	10
1.4	Resettlement Planning Team.....	10
2	PROJECT DESCRIPTION	12
2.1	Overall Project Description.....	12
2.2	Overview of Project Elements in the Geita Region	16
2.2.1	<i>Location and Setting of the Project</i>	16
2.2.2	<i>Project Land Requirements in the Geita Region.....</i>	20
2.2.3	<i>Land Context.....</i>	23
2.3	Activities to Avoid or Minimize Displacement.....	25
3	LEGAL AND POLICY CONTEXT.....	26
3.1	Summary of Tanzanian Regulatory Framework.....	26
3.2	Corporate Environmental and Social Commitments	28
3.3	Inter-Governmental Agreement.....	29
3.4	International Guidance and Standards.....	30
3.4.1	<i>Equator Principles.....</i>	30
3.4.2	<i>International Finance Corporation Performance Standards (2012)</i>	30
3.4.3	<i>Human Rights Considerations</i>	35
3.5	Gap Analysis between Tanzanian Legislation and Performance Standard 5	36
4	LAND ACQUISITION AND RESETTLEMENT PROCESS	41
4.1	Introduction	41
4.2	Stage 1: Development of the RPF	43
4.3	Stage 2: Completion of Pre-Acquisition Activities	43
4.3.1	<i>Pipeline Route Selection.....</i>	43
4.3.2	<i>Detailed Surveys and Valuations</i>	45
4.3.3	<i>Valuation Reports and Compensation Schedules.....</i>	51

4.3.4	<i>Conversion to General Land and Relocation</i>	54
4.3.5	<i>Socio-Economic and Livelihood Investigations</i>	55
4.3.6	<i>Replacement Housing and Land</i>	58
4.3.7	<i>RAP Finalization and Disclosure</i>	60
5	SUMMARY OF AFFECTED PEOPLE AND ASSETS	61
5.1	Background and Introduction	61
5.2	Project-Affected Region	65
5.2.1	<i>Population and Household Characteristics</i>	68
5.2.2	<i>Land Use and Tenure</i>	69
5.2.3	<i>Livelihood Activities</i>	70
5.2.4	<i>Access to Services and Public Infrastructure</i>	70
5.3	Project-Affected Districts	71
5.3.1	<i>Population and Household Characteristics</i>	73
5.3.2	<i>Land Use and Tenure</i>	73
5.3.3	<i>Livelihood Activities</i>	74
5.3.4	<i>Access to Services and Public Infrastructure</i>	74
5.4	Project-Affected Communities	75
5.4.1	<i>Population and Household Characteristics</i>	78
5.4.2	<i>Land Use and Tenure</i>	78
5.4.3	<i>Livelihood Activities</i>	78
5.4.4	<i>Access to Services and Public Infrastructure</i>	78
5.5	Project-Affected Households	83
5.5.1	<i>Population and Household Characteristics</i>	83
5.5.2	<i>Land Use and Tenure</i>	85
5.5.3	<i>Livelihood Activities</i>	86
5.5.4	<i>Access to Public Services and Infrastructure</i>	90
5.6	Development Support	95
5.7	Vulnerable Ethnic Groups	96
5.7.1	<i>Overview of Vulnerable Ethnic Groups amongst PAHs in Geita Region</i>	97
5.7.2	<i>Vulnerable Ethnic Group PAH's Affected Land and Assets</i>	97
5.8	Vulnerable Households	98
5.9	Summary of Impacts	100
5.9.1	<i>Temporary Impacts</i>	101

5.9.2	<i>Permanent Impacts</i>	105
6	ELIGIBILITY, ENTITLEMENT AND COMPENSATION FRAMEWORK.....	108
6.1	Introduction	108
6.2	Eligibility	108
6.2.1	<i>Eligibility Categories</i>	109
6.2.2	<i>Cut-off dates</i>	110
6.2.3	<i>Validity of the Valuation</i>	111
6.3	Entitlements	111
6.4	Valuation and Compensation.....	122
6.4.1	<i>Valuation and Compensation under Tanzanian Legislation</i>	122
6.4.2	<i>Valuation for Compensation for Additional Entitlements under International Financing Standards</i>	129
6.5	Summary of Entitlements.....	140
7	REPLACEMENT HOUSING AND LAND	147
7.1	Replacement Housing.....	147
7.1.1	<i>Approach to Replacement Housing Strategy and Design</i>	147
7.1.2	<i>Analysis of Existing Structures Affected in Geita Region</i>	151
7.1.3	<i>Influence of Climate</i>	154
7.1.4	<i>Availability of Building Materials</i>	154
7.1.5	<i>Local Architectural Style Context</i>	154
7.1.6	<i>Concept Design Purpose and Strategy</i>	155
7.1.7	<i>Residential Plot Size</i>	157
7.1.8	<i>Ancillary Structures and Utilities</i>	158
7.1.9	<i>Mitigation of Climatic Conditions</i>	159
7.1.10	<i>Replacement House and Ancillary Structure Designs</i>	159
7.2	Replacement Land.....	170
7.2.1	<i>Land Requirements</i>	170
7.2.2	<i>Availability of Replacement Land</i>	174
7.3	Replacement Housing and Land Implementation	174
8	LIVELIHOOD RESTORATION PLAN	176
8.1	Introduction	176
8.2	Key Principles Underpinning the LRP.....	177
8.3	Phasing of the LRP	178

8.4	Overview of Livelihood Context and Strategies	179
8.4.1	<i>Regional Population and Land Profile</i>	179
8.4.2	<i>Climate</i>	179
8.4.3	<i>Cultural Characteristics</i>	180
8.4.4	<i>Livelihood Zone</i>	180
8.4.5	<i>Livelihood Strategies</i>	185
8.5	Assessment of Livelihood Impacts.....	187
8.5.1	<i>Sustainable Livelihoods Framework</i>	187
8.5.2	<i>Summary of Displacement Impacts in Geita Region</i>	188
8.6	Eligibility for Livelihood Restoration Support.....	189
8.7	Current Livelihood Improvement Programs	194
8.7.1	<i>Overview of Current Livelihood and Related Programs</i>	194
8.7.2	<i>Government Programs Identified</i>	196
8.7.3	<i>Additional Programs in Partnership or by GoT</i>	197
8.8	Livelihood Restoration Plan	199
8.8.1	<i>Livelihood Restoration Themes</i>	200
8.8.2	<i>Livelihood Restoration Activities and Program Options</i>	200
8.9	Overview of Possible Partners for Implementation	210
8.9.1	<i>NGOs and CBOs</i>	210
8.9.2	<i>Process to Appoint Service Providers</i>	212
8.10	Transitional Support Plan.....	213
8.10.1	<i>Transitional Support to Physically and Economically Displaced PAPs</i>	213
8.10.2	<i>Temporary Accommodation</i>	215
8.10.3	<i>Monitoring and Evaluation</i>	215
9	VULNERABLE PEOPLES PLAN	216
9.1	Introduction	216
9.2	Objectives of the Vulnerable Peoples Plan	216
9.3	Definition of Vulnerable People.....	217
9.4	Vulnerability Criteria	217
9.5	Categorization of Vulnerability	218
9.6	Confirming Vulnerability Status	220
9.7	Specific Vulnerabilities	223
9.7.1	<i>Vulnerability Assessment of Women</i>	223

9.7.2	<i>Vulnerability Assessment of Elderly Households</i>	224
9.7.3	<i>Households Inclusive of Disabled Family Members</i>	225
9.7.4	<i>Potentially Vulnerable Indigenous Ethnic Groups</i>	226
9.8	Livelihood Restoration Strategies for Vulnerable Households	227
9.9	Engagement Processes for Vulnerable Groups.....	229
9.9.1	<i>Engagement with Women</i>	229
9.9.2	<i>Engagement with Vulnerable Ethnic Groups</i>	230
9.10	Implementation Support for Vulnerable Groups.....	230
9.11	Implementation and Responsibilities.....	231
10	CONSULTATION AND DISCLOSURE.....	233
10.1	Introduction	233
10.2	Engagement Principles and Objectives	233
10.3	Stakeholder Identification.....	235
10.3.1	<i>Affected Stakeholders</i>	235
10.3.2	<i>Interested Stakeholders</i>	237
10.4	Project Engagement Structures	238
10.4.1	<i>Land Acquisition and Resettlement Working Group</i>	238
10.4.2	<i>Project Stakeholder Engagement Team</i>	239
10.4.3	<i>Project RAP Planning and Implementation Teams</i>	239
10.4.4	<i>RAP Planning Consultant Stakeholder Engagement Team</i>	239
10.5	Engagement Methods	240
10.5.1	<i>Language of Engagement</i>	240
10.5.2	<i>Community Engagement Materials</i>	241
10.5.3	<i>Engagement Methods</i>	241
10.6	Consultation During the Resettlement Planning Phase	243
10.6.1	<i>Land Acquisition and Resettlement Working Group Meetings</i>	243
10.6.2	<i>Government Entities and Regional Meetings</i>	243
10.6.3	<i>Engagement at District, Ward and Village Levels</i>	243
10.7	Engaging Specific Stakeholder Groups	246
10.8	RPF and RAP Disclosure Meetings	247
10.9	Grievances and Grievance Mechanism	248
10.9.1	<i>Overview of the Project's Grievance Management Procedure</i>	248
10.9.2	<i>Summary of Grievances</i>	249

10.9.3	<i>Ongoing Resettlement-related Grievance Management</i>	249
11	IMPLEMENTATION OF LAND ACQUISITION AND RESETTLEMENT	251
11.1	Introduction	251
11.2	Implementation Timing and Approach	251
11.3	RAP Implementation Planning	253
11.3.1	<i>Gazettement of Public Purpose and Conversion to General Land (Step 5)</i>	253
11.3.2	<i>Final Entitlement and Compensation Engagement</i>	253
11.4	Implementation	253
11.4.1	<i>Compensation Agreements (Step 6)</i>	253
11.4.2	<i>Payment of Compensation Relocation & Implementation of Livelihood Restoration & Assistance Programs (Step 7)</i>	254
11.4.3	<i>Granting of Rights (Step 8) and Leasing of Land (Step 9)</i>	256
11.5	Implementation Roles and Responsibilities	256
11.6	Stakeholder Engagement During RAP Implementation	258
12	IMPLEMENTATION BUDGET AND SCHEDULE	261
12.1	Budget Estimate.....	261
12.2	Indicative RAP Implementation Schedule.....	263
13	MONITORING AND EVALUATION	266
13.1	Introduction	266
13.2	Monitoring and Evaluation Process.....	266
13.2.1	<i>Purpose of Monitoring</i>	267
13.2.2	<i>Purpose of Evaluation</i>	267
13.2.3	<i>Monitoring and Evaluation During Construction</i>	271
13.2.4	<i>Types of Monitoring and Evaluation</i>	271
13.3	Reporting	278

Appendices

Appendix A	RAP Survey Forms
Appendix B	Market Survey for Compensation Rates
Appendix C	Record of Consultation & Disclosure
Appendix D	Replacement Housing and Ancillary Structures Designs

LIST OF TABLES

Table 1-1: Summary of PAP Numbers within the Geita Region	6
Table 1-2: RAP Structure Summary	10
Table 2-1: Summary of Pipeline Corridor in Geita Region.....	21
Table 3-1: Project Partners’ Commitments to Social Responsibility	28
Table 3-2: Comparison of Relevant Tanzanian Legislation and IFC PS5.....	36
Table 4-1: Three-stage Process to Complete Land Acquisition and Resettlement.....	41
Table 4-2: Site Selection Criteria	44
Table 4-3: Summary of Survey Team Training Topics	46
Table 4-4: Sensitization and Cut-Off dates for Villages in the Geita Region	49
Table 4-5: Summary of SELI Team Training	56
Table 5-1: Summary of Displacement Impacts in the Geita Region	63
Table 5-2: Summary of Population and Household Characteristics per Project-affected Districts in the Geita Region	73
Table 5-3: Summary of Energy and Water Sources, Sanitation and Access to Public Services in the Project-affected Districts	74
Table 5-4: Summary of Project-Affected Households per Affected Ward.....	84
Table 5-5: Summary of PAH access to public services and infrastructure	91
Table 5-6: Summary of PAHs’ access to health facilities.....	94
Table 5-7: Summary of Vulnerable Households in the Geita Region	98
Table 5-8: Summary of Temporary Impacts	102
Table 5-9: Summary of Permanent Impacts	107
Table 6-1: Entitlement Framework – Geita Region (Pipeline & AGIs)	113
Table 6-2: Land Rates for Relevant Wards in the Geita Region.....	125
Table 6-3: Uplift and Transaction Costs for Land Rates for Relevant Wards in Geita Region	130
Table 6-4: Inflation Rates (2013-2018)	131
Table 6-5: Electricity Supply Right of Way.....	134
Table 6-6: Livelihood Restoration Support Criteria	134
Table 6-7: Land Eligibility Criteria and Entitlements	137
Table 6-8: Standards for Residential Areas-Detached Houses and Maisonettes.....	140
Table 6-9: Overview of PAPs Entitlements in the Chato District.....	141
Table 6-10: Overview of PAPs Entitlements in the Geita District.....	143

Table 6-11: Overview of PAPs Entitlements in the Mbogwe District.....	144
Table 6-12: Overview of PAPs Entitlements in the Bukombe District.....	146
Table 7-1: Eligible Dwellings for Replacement within Geita Region	149
Table 7-2: Key Design Technology (Seismic and Non-Seismic)	156
Table 7-3: Standards for Residential Areas - Detached Houses and Maisonettes	157
Table 7-4: Houses Types and Eligible Dwellings in Geita	160
Table 7-5: Arable Land not Currently Utilized in Geita.....	170
Table 7-6: Summary of Replacement Land in Geita.....	173
Table 8-1: Key Principles Underpinning the LRP.....	177
Table 8-2: Summary of Livelihood Activities in Geita Region per Affected Ward	183
Table 8-3: Replacement Land Entitlements.....	190
Table 8-4: Overview of Livelihood Restoration Eligibility	192
Table 8-5: Livelihood Improvement and Related Programs led by NGOs and CBOs.....	194
Table 8-6: Livelihood Components of the TASAF Support Program	197
Table 8-7: Livelihood Restoration Options.....	201
Table 8-8: Livelihood Restoration Activity 1 (LRA1)	202
Table 8-9: Livelihood Restoration Activity 2 (LRA2)	203
Table 8-10: Livelihood Restoration Activity 3 (LRA3)	204
Table 8-11: Livelihood Restoration Activity 4 (LRA4)	205
Table 8-12: Livelihood Restoration Activity 5 (LRA5)	206
Table 8-13: Livelihood Restoration Activity 6 (LRA6)	207
Table 8-14: Livelihood Restoration Activity 7 (LRA7)	208
Table 8-15: Livelihood Restoration Activity 8 (LRA8)	209
Table 8-16: Potential Livelihood Restoration Partners.....	210
Table 8-17: A Selection of International NGOs Active in Tanzania.....	211
Table 8-18: Transitional Support Entitlements.....	214
Table 9-1: Database Analysis Used to Identify Potentially Vulnerable People	219
Table 9-2: Vulnerable Households by Category in the Geita Region	221
Table 9-3: Female Headed Households Identified across the Geita Region	224
Table 9-4: Elderly Headed Households Identified across the Geita Region	225
Table 10-1: EACOP's Stakeholder Engagement Principles	234
Table 10-2: Project Stakeholder Engagement Objectives	235

Table 10-3: Summary of RAP Engagement Methods and Information Dissemination Tools	242
Table 10-4: LARWG Attendees and Meetings to Date	243
Table 10-5: Number of Formal RAP Planning Phase Meetings.....	245
Table 10-6: Number of Attendees at Formal RAP Planning Phase Meetings	245
Table 10-7: Number of Issues Raised at Ward and Village Level Meetings	246
Table 11-1: Roles and Responsibilities for the RAP Implementation Phase	256
Table 11-2: Stakeholder Engagement Execution Plan for RAP Implementation	260
Table 12-1: Summary of RAP Implementation Budget Components.....	261
Table 12-2: High-level Schedule for RAP Development and Disclosure	264
Table 12-3: High-level Schedule for RAP Implementation.....	265
Table 13-1: OECD Evaluation Criteria	268
Table 13-2: RAP Implementation Evaluation Framework	269
Table 13-3: Monitoring Matrix	272
Table 13-4: Stakeholder Engagement as Part of Monitoring and Evaluation during Resettlement Implementation	276

LIST OF FIGURES

Figure 2-1: The EACOP Pipeline Route	13
Figure 2-2: Location of Pipeline in the Chato and Geita Districts, Geita Region	18
Figure 2-3: Location of Pipeline in the Mbogwe and Bukombe Districts, Geita Region	19
Figure 4-1: Land Acquisition Process	42
Figure 4-2: Sensitization and Engagement Meeting in Ikobe Ward, Ishigamva Village.....	48
Figure 4-3: Land Delineation and Adjudication Surveys in Magenge and Katende Wards....	50
Figure 4-4: Examples of Dwellings and Structures Recorded as part of the Survey Process.	51
Figure 4-5: Validation Meetings in Mwabaruhi and Kidete Villages	52
Figure 5-1: Structure of Project-Affected Areas discussed in Chapter	65
Figure 5-2: Geographical Context of the Geita Region.....	67
Figure 5-3: Pipeline Corridor Route Showing the Project-Affected Districts in the Geita Region.....	72
Figure 5-4: Overview of PACs through the Chato and Geita Districts	76
Figure 5-5: Overview of PACs through the Mbogwe and Bukombe Districts.....	77
Figure 5-6 : Overview of Public Services, Infrastructure and Community Assets in the Chato and Geita Districts.....	79
Figure 5-7 : Overview of Public Services, Infrastructure and Community Assets in the Mbogwe and Bukombe Districts	80
Figure 5-8: Community Access to Natural Resources Along the Pipeline Corridor in the Chato and Geita Districts	81
Figure 5-9: Community Access to Natural Resources Along the Pipeline Corridor in the Mbogwe and Bukombe District	82
Figure 5-10: Artisanal mining in Iparamasa village	86
Figure 5-11: Overview of Primary Livelihood Activities in Affected Wards.....	87
Figure 5-12 : Overview of Secondary Livelihood Activities in Affected Wards.....	87
Figure 5-13: Overview of Crops Cultivated by PAHs by Crop per District	88
Figure 5-14: Crop Production Calendar	89
Figure 5-15: Overview of Food and Cash Shortages in Geita Region	89
Figure 5-16: Cattle grazing in Minkoto ward (Chato District)	90
Figure 5-17: Drinking water in Ilalwe village (Bukombe ward, Bukobe District).....	93
Figure 5-18: Bukombe Auction and Market Grounds (Bukombe District)	94

Figure 5-19: Overview of Development Requirements for PAHs (grouped per district) in the Geita Region	96
Figure 5-20: Summary of Displacement per Project Affected Ward	106
Figure 7-1: Traditional House Constructed from Mud Brick, Mud Mortar and Thatch Roof in Geita District	151
Figure 7-2: Traditional House with Pole and Mud Wall, Thatched Roof in Mbogwe	152
Figure 7-3: Traditional Mud Brick and Mortar House with Modern CIS Roof Mbogwe	152
Figure 7-4: Example of Courtyard Arrangement Geita District.....	153
Figure 7-5: Structures for Communal Activities in Chato and Mbogwe	153
Figure 7-6: Example of an Outdoor Cooking Area in Geita and a Multi-purpose Kitchen / Small Animal Shelter in Mbogwe	154
Figure 7-7: Example of Bathing Areas Found in Mbogwe and a Pit Latrine in Chato	154
Figure 7-8: House Type A1 and A2 layout.....	161
Figure 7-9: House Type A3 layout (contd.)	162
Figure 7-10: House Type B: B1 and B2 layout	163
Figure 7-11: House Type C: C1 and C2 layouts	164
Figure 7-12: House Type D: D1 and D2 layouts	165
Figure 7-13: House Type E.....	166
Figure 7-14: Ancillary Structures: Latrines and Kitchens	169
Figure 7-15 Maximum Area of Replacement Land Requirements in Geita Region (Chato and Geita Districts)	171
Figure 7-16 Maximum Area of Replacement Land Requirements in Geita Region (Bukombe and Mbogwe Districts)	172
Figure 8-1: Phases of the LRP implementation	178
Figure 8-2: Tanzania Livelihood Zones.....	182
Figure 8-3: Impacts categorized using DFID Sustainable Livelihood Framework.....	188
Figure 9-1: Focus Group Discussion with Elders in Musasa Village.....	225
Figure 9-2: Livelihood Strategies for Vulnerable People will Include Crop Improvement Programs	228
Figure 10-1: Kabanga Village, Nhomolwa Ward, Mbogwe District, Focus Group Discussion	234
Figure 10-2: Grievance Management Flowchart.....	250
Figure 11-1: Overview of RAP Implementation Approach and Phasing	252

ACRONYMS AND ABBREVIATIONS

Abbreviations or Acronyms	Meaning
ACHPR	African Commission on Human and Peoples' Rights
ACT	Agricultural Council of Tanzania
AE	Acre equivalent
AFS	Average farm size
AGI	Above Ground Installation
AKDN	Aga Khan Development Network
AQRB	Architects and Quantity Surveyors Registration Board
ATM	Automated Teller Machine
BDF	Bondei Development Forum
BoQ	Bill of Quantities
BRN	Big Results Now
B.V.	Besloten Vennootschap (Dutch for a private company)
CAMFED	Campaign for Female Education
CBO	Community Based Organization
CDO	Community Development Officer
CFSVA	Comprehensive Food Security and Vulnerability Analysis
CIS	Corrugated Iron Sheet
CLO	Community Liaison Officer
CNOOC	China National Offshore Oil Corporation
CRB	Contractors Registration Board of Tanzania
CRC	Community Relations Coordinator
CSO	Civil Society Organization
CUL	CNOOC Uganda Limited
CV	Chief Valuer
CY	Coating Yard
DAS	District Administrative Secretary
DC	District Commissioner
DED	District Executive Director
DFID	Department for International Development
DLO	District Authorized Land Officer
DV	District Valuer
DWC	Digby Wells Consortium
DWE	Digby Wells Environmental
EACOP	East African Crude Oil Pipeline
EGPAF	Elizabeth Glaser Pediatric AIDS Foundation
E&P	Exploration and Production
EHSS	Environmental, Health, Safety and Security
EHT	Electrical Heat Tracing
EIA	Environmental Impact Assessment
EMAYO	Ereto Maasai Youth
EPs	Equator Principles
ERB	Engineers Registration Board of Tanzania

Abbreviations or Acronyms	Meaning
ESIA	Environmental and Social Impact Assessment
EW	Early Works
FAQ	Frequently Asked Questions
FBE	Fusion-bonded epoxy
FDR	Fixed Deposit Reserves
FGD	Focus Group Discussion
FPIC	Free Prior and Informed Consent
GHF	Gift of Hope Foundation
GIS	Geographic Information System
GoT	Government of Tanzania
GoU	Government of Uganda
GPLP	Grain Postharvest Loss Prevention
ha	Hectare
HDPE	High-density polyethylene
HGA	Host Government Agreement
HSE	Health, Safety and Environment
HV	High Voltage
IDBWB	Internal Drainage Basin Water Board
ICP	Informed Consultation and Participation
IFC	International Finance Corporation
IFC PS	International Finance Corporation Performance Standard
IFI	International Financial Institution
IGA	Inter-Governmental Agreement
ILO	International Labor Organization
IP	Indigenous People
ISO	International Organization for Standardization
IUCN	International Union for Conservation of Nature
JV	Joint Venture
Kbpd	Kilo barrels per day
KII	Key Informant Interview
KPA	Key Performance Area
KPI	Key Performance Indicator
km	Kilometer
KP	Kilometer Point
kV	Kilovolt
LAA	Land Acquisition Act
LAFR	Local Authority Forest Reserve
LARWG	Land and Resettlement Working Group
LDBWB	Lake Victoria Basin Water Board
LEAT	Lawyers' Environmental Action Team
LHRC	Legal and Human Rights Center
LIP	Livelihood Improvement Program
LOF	Load-out Facility
LRP	Livelihood Restoration Plan

Abbreviations or Acronyms	Meaning
m	Meter
M&E	Monitoring and Evaluation
MCPY	Main Camp and Pipe Yard
ME	Ministry of Energy
MLHSD	Ministry of Lands, Housing and Human Settlements Development
MLBV	Main Line Block Valves
MM	Ministry of Minerals
MNRT	Ministry of Natural Resources and Tourism
MST	Marine Storage Terminal
MWTC	Ministry of Works, Transportation and Communication
NEMC	National Environment Management Council
NGO	Non-Governmental Organization
NPO	Non-Profit Organization
OEA	Oikos East Africa
PA	Priority Area
PAC	Project Affected Community
PAH	Project Affected Household
PAP	Project Affected Person
PaulSam	PaulSam Geo-Engineering Company Ltd
PINGO	Pastoralists Indigenous Non-Governmental Organizations
PPT	Pipeline Project Team
PRS	Pressure Reduction Station
PS	Performance Standard
PS-6	Pump Station 6
PUF	Polyurethane Foam
QS	Quantity Surveyor
RAP	Resettlement Action Plan
RAS	Regional Administrative Secretary
REA	Rural Energy Agency
ROO	Right of Occupancy
RoW	Right of Way
RPF	Resettlement Policy Framework
SCI	Society of Chemical Industry
Sedit	Socio-economic Development Initiatives
SHIVYAWATA	Shirikisho la Vyama vya Watu wenye Ulemavu
SIDA	Swedish International Development Cooperation Agency
SIDO	Small Industries Development Organization
SNV	Stichting Nederlandse Vrijwilligers (Foundation of Netherlands Volunteers)
STCL	Safety Training & Consulting Limited
TBS	Tanzania Bureau of Standards
TANESCO	Tanzania Electric Supply Company
TANROADS	Tanzanian National Roads Agency
TARURA	Tanzanian Rural Roads Agency
TASAF	Tanzanian Social Action Fund

Abbreviations or Acronyms	Meaning
TAWA	Tanzania Wildlife Management Authority
TB	Tuberculosis
TEAM B.V.	Total East Africa Midstream Besloten Vernootskap
TEPU	Total Exploration and Production Uganda
TFS	Tanzania Forest Services Agency
Total SA	Total Société Anonyme
TPA	Tanzania Ports Authority
TRC	Tanzania Railways Corporation
TPDC	Tanzania Petroleum Development Corporation
TRA	Tanzania Revenue Authority
TSP	Transitional Support Program
TTCL	Tanzania Telecommunication Company Limited
TUOP	Tullow Uganda Operations Pty Ltd
TV	Television
UK	United Kingdom
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNGC	United Nations Global Compact
UWASA	Urban Water and Sanitation Authority
VAM	Vulnerability Analysis and Mapping
VDC	Village Development Council
VEG	Vulnerable Ethnic Group
VEO	Village Executive Officer
VETA	Vocational Education and Training Authority
VIP	Ventilated Improved Pit
VP	Vulnerable People
VPP	Vulnerable Peoples Plan
VPSHR	Voluntary Principles on Security and Human Rights
VR	Valuation Report
WAT	Wax Appearance Temperature
WC	Water closet
WDC	Ward Development Council
WEO	Ward Executive Officer
WK	Whiteknights Real Estate and Investment Analysts Co. Ltd.

GLOSSARY

Term	Definition
Acres per hectare	One acre is equivalent to 0.4 hectares (ha).
Acres Equivalent	A measure of the relative productivity of arable land in a Project-affected district. It is the ratio of two numbers: (a) the number of acres of land that a household in a district needs to sustain itself (taking into account staple crops and their prevalence in that district, as well as district-specific crop yields and average household size); and (b) the average number of acres of land per household across all Project-affected districts (2.57 acres, as reported in 2007 / 2008 agricultural census data).
Average Farm Size	The average agricultural (crop) land holding per household in a district, as reported in 2007 / 2008 agricultural census data.
Asset survey	A survey undertaken to identify and assess all assets by owner and / or rights holder.
Census	A survey of all persons who will be displaced by a project that captures all appropriate socio-economic baseline data of affected persons and their households and records their assets to determine eligibility for compensation and other support.
Coating Yard	A demarcated area where pipeline sections are treated with an insulation coating.
Compensation	Payment in cash or in-kind for an asset such as land and improvements on land, or a resource that is acquired or affected by a project.
Compulsory Acquisition / Expropriation	The power of government to acquire land rights or right in land in the public interest without the willing consent of the owner or occupant.
Construction access road	An access road that links with the existing road network to provide access to construction facilities and the pipeline construction corridor.
Construction Corridor	A corridor used as workspace within which to construct the pipeline.
Construction facilities	Facilities that will be required to facilitate construction of the Project, including construction and coating camps, lay-down areas, construction access roads and other facilities required for storage of equipment.
Contractor	Any or all Contractors that provide services or materials to execute the Project pursuant to a contract established by and between Contractor and Developer.
Crude oil	Oil that is extracted from the ground before it is refined into usable products, such as gasoline / petroleum.
Cut-off date	In Tanzania the date of the commencement of the valuation of assets of persons affected by the Project. Persons occupying the Project area after the cut-off date are not eligible for compensation and / or resettlement assistance. Similarly, fixed assets (such as built structures, crops, fruit trees and woodlots) established after the cut-off date will not be valued or compensated.
Describing flow direction in a pipeline	When describing the direction of travel of product in a pipeline, "downstream" (with the current) means "from the source to an outlet". Conversely, the direction of travel from the outlet to the source is against the current, or "upstream".
Displacement	The physical, economic, social and / or cultural uprooting of a person, household, social group or community as a result of the Project.
District	The second-highest administrative division of Tanzania. Each region is subdivided into districts. As of 2012 there are 169 districts. These include rural districts (District Councils) and urban districts (Town Councils, Municipal Councils and City Councils).
Downstream Sector	The downstream (oil and gas) sector is responsible for the refining of crude oil, the processing and purifying of raw natural gas, as well as the marketing and distribution of products derived from crude oil and natural gas.
Economic Displacement	Loss of assets (including land), or loss of access to assets, leading to loss of income or means of livelihood as a result of project-related land acquisition or restriction of access to natural resources. People or enterprises that may be economically displaced with or without experiencing physical displacement.

Term	Definition
Eligibility	Entitlement to compensation and assistance due displacement impacts resulting from Project required land acquisition, revocation of rights and / or the expropriation of property.
Encroachment	The unauthorized use of land in a project land footprint in violation of the terms by which project land was established. Encroachers include people settling and / or using land after a cut-off date has been instated.
Entitlements	Compensation offered to persons, households, groups and / or communities physical and / or economically displaced by the Project. This includes (but is not limited to): financial compensation; the right to participate in livelihood restoration programs; housing, service provision, transport assistance, and other short-term assistance required to move from one site to another.
Entitlement Framework	Describes compensation for both physical and economic losses due to resettlement or displacement and identifies categories of people who will be eligible to receive compensation as a result of these losses.
Equator Principles (EPs)	A risk management tool adopted by 94 financial institutions in 37 countries for identifying, assessing and managing environmental and social risks. The EPs are largely based on International Finance Corporation's (IFC) Performance Standards (PS) (2012) with some additional requirements.
Excavation	Any operation involving movement of earth, rock or other materials below surface level, to include digging, blasting, boring, tunneling and backfilling.
Fallow Land	Arable land left uncultivated for a period of time in order to restore its fertility.
Final Investment Decision (FID)	The Project partners' final decision on whether or not the Project is financially worthwhile as part of their long-term corporate finance decisions. In general, the FID is taken after the completion of certain studies and obtaining of permits as the Project is readied for construction.
Focus Groups	A qualitative data collection methodology involving small groups of people to discuss selected points of interest.
Geographic Information System (GIS)	A combination of computer hardware, software and data that is used to capture, maintain, analyze and display information related to the geographic location of features and facilities.
Good International Industry Practice	Practices applied to the Project to achieve the best possible results when managing social and environmental impacts.
Grievance	A matter considered by a Project Affected Person (PAP) / community member to be unjust or unfair as a result of Project activities that causes distress.
Hamlet	In rural areas in Tanzania, a hamlet represents the smallest administrative division of a village.
Helipad	A clearly marked landing area or platform for helicopters and powered lift aircraft.
Host Community	Communities that live in or around areas where physically displaced people will be resettled to or where replacement agricultural land is allocated, and who, in turn, may then be affected by the resettlement. Resettlement may in certain instances give rise to impacts on host communities - for instance, through increased pressure on land, water or other resources, or through changes in local socio-economic dynamics.
Household	A group of persons who may or may not be related, but who share a home or living space, who aggregate and share their incomes, and evidenced by the fact that they regularly take meals together.
Hydrostatic testing	A controlled process to confirm the threshold measurement for the safe operation of the pipeline. Sections of the pipeline are filled with water and pressurized for a certain time to allow for the identification of defects or leaks. It is usually performed following new pipeline construction before the actual product (e.g. crude oil) is introduced into the system.
International Finance Corporation (IFC) Performance Standards (PSs)	The global benchmark for environmental and social risk management in the private sector.

Term	Definition
IFC PS5	The IFC's performance standard for dealing with Land Acquisition and Involuntary Resettlement.
Indigenous People	Social groups with a social and cultural identity distinct from the dominant society rendering them potentially vulnerable to becoming disadvantaged in the development process.
Involuntary Resettlement	Resettlement is considered involuntary when affected individuals or communities do not have the right to refuse land acquisition that will result in displacement. This occurs in cases of lawful compulsory acquisition or restrictions on land use based on eminent domain; and in cases of negotiated settlements in which the buyer can resort to compulsory acquisition or impose legal restrictions on land use if negotiations with the seller fail.
Land Acquisition	Land acquisition includes both outright purchases of property and purchases of access rights, such as rights-of-way.
Land Acquisition and Resettlement Working Group (LARWG)	The overall governing body and management committee through whom the national government collaborate and interact with the Project on matters related to land acquisition, compensation and resettlement. This national-level body comprises representatives of the Ministry of Energy (ME), Tanzania Petroleum Development Corporation (TPDC), Ministry of Lands, Housing and Human Settlements Development (MLHSD), Pipeline Project Team (PPT) and the resettlement consultants.
Light imaging Detection and Ranging (LiDAR)	A remote sensing method that uses light in the form of a pulsed laser to measure ranges (variable distances) to the Earth.
Line Markers	Surface beacons / markers, installed above the pipeline, to indicate the approximate pipeline route.
Livelihood	A livelihood comprises the capabilities, assets and activities required for a person to make a living such as: wages from employment; cash income earned through an enterprise or through sale of produce, goods, handicrafts or services; rental income from land or premises; income from a harvest or animal husbandry; share of a harvest (such as various sharecropping arrangements) or livestock production; self-produced goods or produce used for exchange or barter; self-consumed goods or produce, food, materials, fuel and goods for personal or household use or trade derived from natural or common resources; pensions; various types of government allowances (child allowances, special assistance for the very poor); and remittances from family or relatives.
Livelihood Restoration Plan (LRP)	A plan intended to set out how to replace or restore livelihoods lost or reduced as a result of a project. The plan aims to restore, or if possible, improve, the quality of life and standard of living of affected parties and ensure food security through the provision of economic opportunities and income generating activities of affected property owners and their households.
Load-out Facility (LOF)	Located offshore, the LOF is used to transfer product from the MST onto marine tankers for shipment to end users.
Main Line Block Valve Stations (MLBV)	A mechanical device (valve) installed in a pipeline that can be closed to block the flow of product (crude oil) through the pipeline. MLBVs are located at major crossing points and are used to stop the flow of product through the pipeline and isolate a segment of the pipeline system or a component of the system.
Main Camp and Pipe Yard (MCPY)	An area of approximately 17.5 ha consisting of temporary housing, offices, pipe yard kitchen, dining hall and recreation areas. Each camp will be able to house up to 1,000 people. The adjoining pipe yard is where coated pipeline sections are stored before being transported to the construction corridor.
Maintenance	The process of maintaining property or equipment, including pipelines, to preserve them and prevent them from failure and ensure that they will continue to perform their intended function.
Marine Storage Terminal (MST)	An area close to the coast consisting of a number of external floating roof tanks with discharge pumps and support systems where product will be stored before it is transported to the end user via the offshore LOF.
Marshaling Yards	A support facility used for the delivery, storage and load-out of pipe, plant and equipment.

Term	Definition
Midstream Sector	The midstream (oil and gas) sector involving the transportation, e.g. by pipeline, storage and wholesale marketing, of crude or refined petroleum products.
Mtaa / Mitaa	Mtaa / Mitaa is the Swahili term for a street or streets. Administratively, Mtaa / Mitaa are local subdivisions in urban wards. Mitaa is the plural of mtaa.
Murram	A form of laterite (a material containing clay) used for road surfaces.
Non-Governmental Organization (NGO)	Any not-for-profit, non-governmental and voluntary citizens group organized on a local, national or international level. It can perform a variety of public service and humanitarian functions and is often guided by a specific mission.
Notice of intention to acquire	An official written notice issued to people who will be displaced by the Project, informing them that their land will be acquired (and / or property expropriated) for purposes of the Project.
Notice to vacate / yield possession	A written notice issued to owners and occupants of land acquired by the Project, informing them to leave the premises within a specified time frame.
Operator	An entity that owns or operates the Project infrastructure to be established.
Orphaned Land	A term to describe land dissected by the pipeline corridor and other facilities leaving portions of the original field no longer viable to cultivate / use. The determination of orphaned land follows a set procedure. Where the remainder of the land is 20% or less of a Project-Affected Person's (PAP) land parcel, the remainder of the land has been proposed to be acquired but only where the landowner agrees to relinquishing the orphaned land. Land parcels less than 0.5 acres will be acquired under the Land Acquisition Act (LAA) (which under Section 10 of the LAA, 1967 is the maximum orphaned land size permissible under Tanzanian Law outside a city, municipality or township), Orphaned Land in excess of 0.5 acres is valued for additional entitlements under International Financial Institutions' (IFI) requirements.
Physical Displacement	Loss of permanently occupied house / apartment, dwelling or shelter as a result of Project-related land acquisition that requires the affected person(s) to move to another location.
Pipe Yard	An area where coated pipeline sections are stored during construction before being transported to the construction corridor.
Pipeline	Includes all parts of those physical facilities through which oil moves in transportation. It includes but is not limited to: line pipe, valves and other appurtenances attached to the pipe, pumping / compressor units and associated fabricated units, metering, regulating and delivery stations, and holders and fabricated assemblies located therein, and breakout tanks.
Pipeline Component	Some feature or part of a pipeline, such as pipe, valves, fittings and flanges.
Pipeline Corridor	A linear area where a pipeline is placed.
Pour point	The temperature of liquid is such that it loses its flow characteristics. In crude oil a high pour point is generally associated with a high paraffin content.
Pressure Reduction Station (PRS)	Used to regulate the pressure in the pipeline to allow for the continued flow of the crude oil, and to ensure that the maximum allowable operating pressure is not exceeded when oil transfers from the pipeline to storage tanks.
Pressure Relief Valve	A mechanical safety device designed to protect pressurized equipment, such as a pipeline. It relieves pressure by allowing pressurized fluid to flow from an auxiliary passage out of the system and designed or set to open at a predetermined set pressure.
Priority Areas (PAs)	Collective term used in this document for construction camps, coating yard, pipe yards, marshaling yards and construction access roads. These facilities need to be established before other construction activities can proceed; hence land access to PAs will be required some months earlier than for the remainder of the project footprint.
Project	Activities from design, engineering, procurement, construction, commissioning, operating, maintaining and closure.
Project Affected Household (PAH)	All members of a household, whether related or not, operating as a single economic unit, who are affected by a project.

Term	Definition
Project Affected Person (PAP)	Any individual who, as a result of the land acquisition required for the Project, loses the right to own, use, or otherwise benefit from a built structure, land (residential, agricultural, pasture or undeveloped / unused land), annual or perennial crops and trees, or any other fixed or moveable asset, either in full or in part, permanently or temporarily.
Project Developer	The party responsible for the funding, planning, implementation and operations and maintenance of a Project.
Project Finance	The financing of long-term infrastructure, industrial projects and public services based upon a non- or limited recourse financial structure, in which project debt and equity used to finance the project are paid back from the cash flow generated by the project. Project financing is a loan structure that relies primarily on the project's cash flow for repayment, with the project's assets, rights and interests held as secondary security or collateral. Project finance is especially attractive to the private sector because companies can fund major projects off a balance sheet.
Project Financier	A person, company, organization etc. that provides the money / financing for a project.
Project Land Requirements	The area that has to be acquired for the purpose of establishing the on-shore Project infrastructure, including construction facilities and the operational facilities, namely the export pipeline and permanent above-ground installations.
Protective Coating	A substance or material applied to the exterior of the pipe or a pipeline to prevent contact between the pipe and the outside environment. Protective coating is generally applied to prevent corrosion of the pipe. Many types of protective coatings are used on pipelines, including coal tar, tape wraps, and fusion-bonded epoxy compounds.
Pumping Station	A facility that houses the pumping infrastructure used to push oil along through a pipeline from the source to the outlet.
Ramsar Convention	An Inter-Governmental Treaty which provides for a framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. The treaty was signed in 1971 in Ramsar, Iran.
Region	The highest administrative division of Tanzania. Tanzania is divided into thirty-one regions (2016), each of which is further subdivided into districts.
Regulatory Framework	The system of regulations and the means to enforce them, usually established by a government to regulate a specific activity.
Resettlement	The displacement or relocation of an affected population from one location to another within the national territory, and the restructuring or creation of comparable living conditions.
Resettlement assistance	Support provided to people who are displaced by a project. Assistance may include transportation, food, shelter, and social services that are provided to affected people during their relocation. Assistance may also include cash allowances that compensate affected people for the inconvenience associated with resettlement.
Resettlement Action Plan (RAP)	A plan that provides a comprehensive set of actions for addressing impacts related to physical and economic displacement. It describes the procedures and activities that will be taken to compensate for losses, mitigate adverse project impacts, and provide development benefits to those who will be resettled or displaced as a result of a project.
Resettlement Policy Framework (RPF)	A requirement for projects with sub-projects or multiple components that cannot be identified before project approval. The framework clarifies resettlement principles, organizational arrangements, and design criteria to be applied to sub-projects to be prepared during project implementation.
Responsible Party	Assigned individual(s) who has the authority or expertise to define and take corrective action to resolve a grievance.
Socio-economic Baseline	A baseline record of land use activities within the Project footprint as well as the socio-economic characteristics of individuals and communities dependent on the land prior to the commencement of the land acquisition process, as well as host communities that will potentially be impacted by the Project.
Spread	On pipeline projects of this magnitude, construction typically takes place concurrently at several locations along the pipeline route, with a construction team at each location moving progressively along the route. The area covered by each individual construction team is referred to as a "spread".

Term	Definition
Stakeholder	Individual or groups of people who are directly or indirectly affected by a project, as well as those who may have interests in a project. They may have the ability to influence the outcome of the project, either positively or negatively.
Substation	Forms part of the electrical generation and distribution system by transforming voltage from high to low, for use on the electrically heat traced (EHT) system.
Trench (to bury pipes in)	A long narrow ditch dug into the ground and embanked with its own soil and used for concealment and protection of the pipeline. Trenches are usually dug by a specialized digging machine.
Trestle	A frame that will support the crude oil transfer lines from the Marine Storage Terminal (MST) to the Load-out Facility (LOF).
Upstream Industry	The upstream (oil and gas) industry is sometimes known as the exploration and production (E&P) sector. It refers to the exploration for, and recovery and production of, products such as crude oil and natural gas.
Upstream Partners	Total E&P Uganda B.V. (TEPU), Tullow Uganda Operations Pty Ltd. (TUOP) and CNOOC Uganda Limited (CUL) are referred to as the Upstream Partners.
Valuation	The valuation of Project-affected land and assets according to set compensation rates and schedules.
Village	A group of people / households who interact with each other and share an environment within well-defined cultural and geographic margins. In rural areas in Tanzania, villages constitute the second-smallest administrative division (the smallest being hamlets).
Vulnerable Ethnic Group	Vulnerable Ethnic Groups some of whom may self-identify as Indigenous People (IPs) are defined as a group of people who are native to an area and who have distinct social and cultural characteristics. They self-identify as being a member of a distinct cultural group as well as being identifiable by others as belonging to a specific group. These Vulnerable Ethnic Groups have a collective attachment to an area and its natural resources and practice cultural, economic, social and political customs that are separate from the dominant society.
Vulnerable Persons	People who, by virtue of gender, ethnicity, age, physical or mental disability, economic disadvantage or social status in the context of the project, may be more adversely affected by displacement than others and who may be limited in their ability to re-establish themselves or take advantage of resettlement assistance and related development benefits. This group may include people living below the poverty line, the landless, the elderly, women- and children-headed households, ethnic minorities, communities dependent on natural resources or other displaced persons who may not be protected through national land compensation or land titling legislation.
Ward	A lower-level administrative subdivision of Tanzania. In rural areas, each ward generally comprises several villages.

1 INTRODUCTION

The East African Crude Oil Pipeline (EACOP) (the ‘Project’) involves the construction and operation of a buried, cross-border pipeline to transport crude oil from the Lake Albert area in Uganda to the eastern coast of Tanzania for export to international markets. The pipeline will run from Kabaale in Hoima District, Uganda, to a Marine Storage Terminal (MST) at Chongoleani, Tanga Region, in Tanzania, on the East African coast. The length of the pipeline is nearly 1,443 kilometers (km), of which 1,147 km will be in Tanzania. Here, the pipeline will traverse eight (8) regions and the land administered by 27 administrative district councils¹².

This Resettlement Action Plan (RAP) details the management approach for land acquisition for the section of pipeline corridor (169.06 km) traversing the Geita Region; the area where the pipeline is located is administered by the Chato, Geita, Mbogwe and Bukombe Districts. In Mbogwe District there is one (1) Above Ground Installation (AGI)—namely, Pump Station 4 (PS-4) with its associated access road, located in Lubeho Village, Nyakafulu Ward. The access road exits the PS-4 on the north-east side and then runs west and south-west around the facility. There will be a temporary worksite within the PS-4 footprint and helipad to the north-east of the facility. In addition, two (2) Main Camp and Pipe Yard (MCPY) facilities will be built in Geita Region as part of the Early Works (EW) activities required to support the construction of the pipeline. These include:

- MCPY-07 situated within Mkungu Village, Bukome Ward of Chato District; and
- MCPY-08 located in Bukombe Village, Bukombe Ward and Bukombe District.

PS-4 forms part of this Geita RAP and the two (2) MCPY facilities form part of the Priority Area (PA) RAP.

Total Exploration and Production Uganda (TEPU) Besloten Vennootschap (B.V.), Tullow Uganda Operations Pty Ltd. (TUOP) and China National Offshore Oil Corporation (CNOOC) Uganda Limited (CUL) (‘Upstream Partners’) hold interests in petroleum resource licenses near Lake Albert, Uganda. The Government of Uganda (GoU) and the Government of Tanzania (GoT), combined with the Upstream Partners, wish to construct this cross-border export pipeline, related facilities and infrastructure.

During the initial Project planning stage, a Tanzanian company, Total East Africa Midstream B.V. (TEAM B.V.) has been established to perform the functions of the Project Developer and the TEAM B.V. Pipeline Project Team (PPT) (*also referred to as ‘EACOP’*) has undertaken the preliminary planning work. Their contact details are as follows:

¹² This comprises: one (1) city council, four (4) town councils and 22 district councils; therefore, a total of 27 administrative district councils.

Name of Developer	Named Key Contact	Telephone
Total East Africa Midstream B.V.	Land and Social Manager, EACOP Project.	+ 255 (0) 800 780 068 (toll free)

1.1 Background to the Resettlement Action Plan

The Project requires access to more than 9,884 acres, or approximately 4,000 hectares (ha), of land in Tanzania. Approximately 90% of the land to be acquired comprises the construction corridor for the export pipeline and AGIs, with the remainder required for temporary construction facilities and access roads. The current estimated land requirements¹³ of the Project include the following:

- Construction facilities (approximately 641.5 acres)¹⁴;
- Access roads (approximately 182.9 acres) and
- Operational facilities (approximately 9,238 acres)¹⁵.

Land acquisition and resettlement for the Project will comply with the following governing structures:

- Laws of the United Republic of Tanzania;
- The Project standards as set out in the Inter-Governmental Agreement (IGA); and
- The requirements of International Financial Institutions (IFIs).

The Project will address the land acquisition and resettlement planning process through the following documents¹⁶:

- An overarching Resettlement Policy Framework (RPF);
- Valuation reports (VRs); and
- Resettlement Action Plans (RAPs).

¹³ All land areas for Project components presented in this Resettlement Action Plan (RAP) are produced using the EACOP Project Coordinate System (Transverse Mercator projection with a WGS 1984 datum and central meridian of 35° East) (EACOP TM35).

¹⁴ Including a coating yard (CY) in Tanzania totaling 98.84 acres (40 ha); two (2) main construction camps with marshaling yards of 43.44 acres (17.6 ha) and 45.61 acres (18.5 ha) totaling 89.05 acres (36.1 ha); ten (10) main camps and pipe yards (MCPYs) (comprising 11 sites as one (1) MCPY is split across two (2) sites) totaling approximately 453 acres (183.5 ha).

¹⁵ Including: (i) export pipeline on a 30 m wide corridor (construction and operations) totaling approximately 8,503 acres (3,441 ha); additional temporary construction workspace along corridor totaling approximately 403 acres (163 ha); and (ii) permanent AGIs including a marine storage terminal totaling approximately 178 acres (72 ha), four (4) pumping stations totaling approximately 138 acres (56 ha); two (2) pressure reduction stations totaling approximately 16 acres (6.6 ha); hydro test water storage to be confirmed; main line valves stations and electrical sub-stations / heat tracing relay sub-stations constructed within pipeline corridor.

¹⁶ Additional documents and specialist reports (e.g. for fisheries and artisanal mining) may be developed as part of further planning and implementation).

The overarching RPF for the Tanzanian section of the Project has already been completed and sets out the principles (e.g. eligibility criteria, approach to valuation and proposed compensation options etc.), according to which the RAPs will be developed.

In addition, a series of VRs listing the compensation due to each Project Affected Person (PAP), as prescribed by Tanzanian Law and the international standards, has been completed for the PA valuations and is currently being completed for each of the 24 districts (which includes four (4) town councils¹⁷) impacted by the Project land acquisition process.

Finally, a series of RAPs will be developed for each of the geographical areas impacted by the Project land acquisition process and will include:

- One (1) RAP for the PAs¹⁸ – already completed;
- Eight (8) RAPs for the pipeline corridor and AGIs – divided in terms of regional administrative geographical areas¹⁹; and
- One Supplementary Plan for the MST site.

Elements of the VRs are generally incorporated into the relevant RAPs.

These three (3) levels of documents collectively comply with national, Project and international requirements relating to land acquisition and resettlement.

1.1.1 Purpose and Scope of the Geita Resettlement Action Plan

This RAP is for the pipeline corridor traversing the Chato, Geita, Mbogwe and Bukombe districts of the Geita Region of Tanzania and adopts the principles and processes set out in the EACOP Project RPF²⁰.

Although the pipeline route has been designed to minimize environmental and social impacts, some physical displacement (loss of shelter) and economic displacement (loss / interruption of access to land or other livelihood resources) for communities, households and individuals are unavoidable to access the land required for various Project components²¹. In this RAP the most directly impacted stakeholders are:

¹⁷ The 24 districts include 27 administrative authorities: 22 district councils, one (1) city council and four (4) town councils. (One of the districts is relatively recent and certain village boundaries are in the process of being resolved. Therefore there are 23 District Valuation Reports with the villagers whose land which now may be within the newer district's administrative boundary being included with their Village in the original District. Direction on this matter was sort with the relevant local government authorities).

¹⁸ These sites are located along the pipeline route and need to be constructed in the early stages of the Project's program to enable the development of other Project components.

¹⁹ These regional administrative geographical areas are Kagera, Geita, Shinyanga, Singida, Manyara, Tabora, Dodoma and Tanga.

²⁰ The RPF (September 2018) has been disclosed on the EACOP Project website <http://eacop.com/information-centre/publications/>.

²¹ Including the construction and operation of the pipeline and the establishment of construction camps, pipe yards, various permanent AGIs and access roads as summarised in Section 2.1.

- **Project Affected Persons (PAPs)** which includes any individual who, as a result of the land acquisition required for the Project, loses the right to own, use, or otherwise benefit from a built structure, land (residential, agricultural, pasture or undeveloped / unused land), annual or perennial crops and trees, or any other fixed or moveable asset, either in full or in part, permanently or temporarily; and
- **Project Affected Households (PAHs)** which includes members of a household, whether related or not, operating as a single economic unit, who are affected by the Project.

It describes the processes followed, or those that will be followed, to comply with relevant Tanzanian laws and IFI requirements for land access. In particular the International Finance Corporation (IFC) Performance Standard 5 (PS5) on Land Acquisition and Involuntary Resettlement (2012).

The RAP aims to establish and describe:

- A summary of the legal framework;
- The individuals and households who will experience physical and / or economic displacement, and the communities who will experience impacts associated with the land acquisition process;
- The way that compensation rates for lost assets were determined;
- Eligibility criteria and the entitlements for affected individuals, households and institutions (including in-kind and cash compensation options);
- The process used to identify affected vulnerable individuals and groups;
- Levels of assistance for resettlement of affected households (including for vulnerable individuals and groups);
- Measures to reinstate livelihoods of affected persons and households;
- Roles and responsibilities to undertake and implement the RAP;
- The Project's approach to stakeholder engagement and consultation with PAPs and other interested parties, including the Project grievance management mechanism; and
- Activities required to implement, and monitor land acquisition, compensation and livelihood restoration commitments made within this RAP.

1.1.2 Levels of Institutional Support Provided During RAP Preparation

Various levels of the GoT²² supported and contributed to the processes required to develop this RAP and they will continue to be involved with its implementation. These include:

²² All references to "State", "Government of Tanzania", "GoT" and / or the "government" shall be construed as references to the State and / or to the appropriate State Authority, as applicable.

- **Central Government** with various mandated authorities e.g.:
 - Tanzania Petroleum Development Corporation (TPDC);
 - Ministry of Lands, Housing and Human Settlements Development (MLHSD);
 - Ministry of Energy (ME);
 - Ministry of Minerals (MM);
 - Ministry of Natural Resources and Tourism (MNRT)
 - Tanzanian Rural Roads Agency (TARURA);
 - Tanzanian National Roads Agency (TANROADS);
 - Tanzania Electric Supply Company Limited (TANESCO);
 - Tanzania Wildlife Management Authority (TAWA);
 - Tanzanian Forest Services Agency (TFS);
 - Rural Energy Agency (REA);
 - Regional Commissioner's (RC) office;
 - District Commissioner's (DC) Offices; and
 - Water Basins Office.
- **Local Government** within the Project-affected region including the following representatives of District Councils:
 - District Executive Director's (DEDs) Office²³ ;
 - Ward Development Councils (WDCs); and
 - Village Development Councils (VDCs)²⁴.

Although the GoT provides support in various locations across the Project area the main forum for collaboration is the Land and Resettlement Working Group (LARWG), which includes representatives of the Project, TPDC, ME, Tanzania Ports Authority (TPA) and MLHSD.

The LARWG was convened in March 2018 and meets on a regular basis to provide updates on the land acquisition and resettlement process and discusses issues and the future planning of the program. More details on the LARWG and its activities are provided in Chapter 10.

²³ The District Executive Director's (DED) office was specifically in an oversight position to the land and asset valuation process.

²⁴ Village Development Councils (VDC) representatives participated in Project community sensitization and disclosure meetings, mobilized affected households and provided feedback to affected persons on Project related issues, participated in identification of affected persons and households and witnessed the land and asset valuation exercise.

1.2 Summary of the Geita Region Land Context

The following table summarizes the PAPs within the Geita Region. There are 13 PAPs within the Geita Region who occupy land parcels in more than one (1) village and are therefore included in more than one (1) village summary. In Table 1-1, these PAPs have been intentionally double counted to ensure that the numbers of PAPs per village (reported in Chapter 5) correlate with the district totals²⁵. There are also four (4) PAPs who occupy land in PS-4 and the pipeline corridor in Lubeho Village.

Table 1-1: Summary of PAP Numbers within the Geita Region

Description	PAPs (No.)	Landholders (No.)	Tenants (No.)	Informal Users (No.)	Villages ²⁶ (No.)	Government Institutions ²⁷ (No.)
Chato District						
Total PAPs including those included in multiple villages	562	460	87	0	13	2
PAPs with land parcels in multiple villages	3	3	0	0	0	0
Geita District						
Total PAPs including those included in multiple villages	24	23	0	0	1	0
PAPs with land parcels in multiple villages	0	0	0	0	0	0
Mbogwe District						
Total PAPs including those included in multiple villages (PAPs with land in the pipeline corridor and PS-4 are only counted once).	699	648	34	2	13	2
PAPs with land parcels in multiple villages	5	9	2	0	0	0
PAPs with land parcels in the pipeline corridor and PS-4	4	4	0	0	0	0
Bukombe District						
Total PAPs including those included in multiple villages	134	125	3	0	5	1
PAPs with land parcels in multiple villages	3	3	0	0	0	0
Total PAPs (Geita Region) (including 13 PAPs with multiple land parcels in different villages).	1419	1256	124	2	32	5
Total PAPs (Geita Region) (counting PAPs with multiple land parcels in different villages)	1406	1245	122	2	32	5

²⁵ The total number of PAPs per district, as reflected in the last row of Table 1-1, counts the PAPs with land parcels in multiple villages as single persons. A PAP with two (2) land parcels is therefore counted once only. For example, if one (1) PAP has land in Bukandwe and Kanegere villages, the land parcels are counted as belonging to one (1) PAP.

²⁶ Numbers reflect only those villages that lose land and / or other assets such as trees or structures on Village Land that is administrated by the Village Council. A PAP village is counted only once although more than one land parcel and / or asset of the village may be affected.

²⁷ Institutions that are not owned by government are included as landholders or tenant PAPs, for example churches.

and PAPs with land parcels in the pipeline corridor and PS-4 once only).						
--	--	--	--	--	--	--

The main land acquisition and resettlement related impacts associated with the 169.06 km pipeline section traversing the Chato, Geita, Mbogwe and Bukombe Districts of the Geita Region include:

- Chato District:
 - Ten (10) of the 23 wards in the district (Bwongera, Ichwankima, Nyamirembe, Ilemela, Katende, Bukome, Makurugusi, Bwanga, Butengorumasa and Iparamasa), of which Biharamulo GR is located in Bwongera and Ichwankima Wards and Biharamulo FR is situated in Bwanga, Butengorumasa and Iparamasa Wards;
 - Seventeen (17) of the 115 villages (Nyambiti, Busalala, Ilemela, Nyambogo, Nyagh'omango, Chabulongo, Katende, Mwabaruhi, Mkungo, Makurugusi, Kasala, Musasa, Kamanga, Minkoto, Ilemea, Iparamasa and Imalabupina);
- Geita District:
 - One (1) of the 37 wards (Magenge);
 - One (1) of the 145 villages (Igando);
- Mbogwe District:
 - Six (6) of the 14 wards (Lulembela, Ikunguigazi, Ikobe, Nyakafulu, Bukandwe and Nhomolwa);
 - Fourteen (14) of 87 villages (Nykonga, Lulembela, Ikunguigazi, Ibambula, Kashelo, Kagongo, Ikobe, Ishigamva, Lubeho, Shinyanga B, Shinyanga A, Bukandwe, Kanegere and Kabanga);
- Bukombe District:
 - Two (2) of the 17 wards (Lyambamgongo and Bukombe);
 - Five (5) of 52 villages (Kagwe, Kidete, Bukombe, Ilalwe and Nasihukulu);
- A total of 1,406 PAPs counting only once the 13 PAPs in multiple villages whom have more than one (1) land parcel in different villages as per Table 1-1, generally with customary land tenure. This includes:
 - In Chato District, a total of 562 PAPs²⁸ with 460 landholders, 87 tenants, 13 villages and two (2) other government institutions recorded as affected PAPs;
 - In Geita District, a total of 24 PAPs with 23 landholders, and one (1) village recorded as affected PAPs;

²⁸ A PAP is defined as a person (natural or legal) who, at the time of the asset registration, was identified as having rights to one (1) or more displaced assets.

- In Mbogwe District, a total of 699 PAPs with 648 landholders, 34 tenants, two (2) informal users, 13 villages and two (2) other government institutions recorded as affected PAPs; and
- In Bukombe District, a total of 134 PAPs with 125 landholders, three (3) tenants, five (5) villages and one (1) other government institution recorded as affected PAPs.
- Of the 1,419 PAPs, 13 PAPs have land parcels in multiple. PS-4 affects 11 PAPs, all of whom are landholders (with four (4) also having land parcels in other villages in the district);
- The majority of PAPs will experience some level of economic displacement in the form of crops, trees and loss of grazing land;
- Of the total; 12 PAPs in Chato, one (1) PAP in Geita, 22 PAPs in Mbogwe and one (1) PAP in Bukombe, will experience some degree of physical displacement;
- A total of 42 structures will be compensated for in Chato, two (2) in Geita, 110 in Mbogwe, and four (4) in Bukombe, including:
 - Forty-four (42) residential dwelling structures;
 - Ninety-two (92) other structures (could include grain storages, livestock kraals and latrines) including one structure at PS-4; and
 - Twenty-two (22) incomplete structures.
- The Project will value and compensate²⁹ approximately 1,123.91 acres of land in the 32 affected villages (including orphaned land but excluding land affected in Biharamulo Game Reserve (96.73 acres affected) and Biharamulo Forest Reserve (101.59 acres)³⁰) in Geita Region;
- The Project will cover 1,333.59 acres of land (including infrastructure crossings which will remain and orphaned³¹ land) in the Geita Region of which approximately 1123.95 acres has been valued in the 32 affected villages:
 - In Chato District, the pipeline corridor will cover 642.18 acres of land of which a total of 438.92 acres has been valued in the Chato District Valuation Report;
 - In Geita District, the pipeline corridor will cover 25.73 acres of land of which a total of approximately 25.59 acres has been valued in the Geita District Valuation Report;

²⁹ Not all land covered by the pipeline corridor will be acquired, valued and compensated. For example, road reserves and powerline wayleaves will not be acquired.

³⁰ Land and assets affected in the Biharamulo Game Reserve and Biharamulo Forest Reserve have been valued in a separate report to the District Valuation Reports which cover land and assets affected per District.

³¹ Orphaned land is explained in the glossary

- In Mbogwe District, the pipeline corridor will cover 507.59 acres of land of which a total of 502.43 acres has been valued in the Mbogwe District Valuation Report;
- In Bukombe District, the pipeline corridor will cover 158.09 acres of land of which a total of 156.97 acres has been valued in the Bukombe District Valuation Report;
- Included in the 507.59 acres in Mbogwe District affected by the pipeline and AGIs are 39.19 acres that will be affected at PS-4, which includes an access road, a temporary worksite, and PS-4;
- The pipeline corridor passes through the Biharamulo Game Reserve for a distance of 12.83 km through Bwongera (3.43 km) and Ichwankima wards (9.40 km) of Chato District, affecting approximately 96.73 acres, of the game reserve(excluding the portion of the game reserve in the Biharamulo District of Kagera Region).
- The pipeline corridor also crosses the Biharamulo Forest Reserve for a distance of 13.37 km through Bwanga (4.55 km), Butengorumasa (2.77 km) and Iparamasa (6.05 km) wards, affecting 101.59 acres;
- A total of 199.89 acres of cropland (including 31.41 acres of intercropped land) were recorded during the valuation as affected by the pipeline and AGIs: 159.09 acres in Chato District, 7.43 acres in Geita District, 29.8 acres in Mbogwe District, and 3.57 acres in Bukombe District;
- A total of 10,521 economic trees³² and other trees will be affected: 3,098 in Chato District, 138 in Geita District, 6,597 in Mbogwe District, of which 345 are in PS-4, and 688 trees in Bukombe District;
- A total of 71 graves will be affected: 22 in Chato District, three (3) in Geita District, 37 in Mbogwe and nine (9) in Bukombe District;
- The pipeline corridor in Geita Region affects land used by Mkungo Primary School, llelema Primary School, Kambarage Primary School and Kanegere Primary School. No school structures are affected though.
- The pipeline will cross a number of existing roads, powerlines and water pipelines, including:
 - Thirty-six (36) roads, of which 27 are under TARURA, and nine (9) are under TANROADS jurisdiction;
 - Fourteen (14) powerlines under TANESCO; and
 - One water pipeline.
- The pipeline corridor in Geita Region will cross an estimated 96 village tracks³³, 48 cattle tracks, six (6) seasonal rivers, six (6) streams, and one (1) valley as well as a number of local footpaths.

³² Inclusive of economic trees listed in the 2012 Crop & Tree Rates Schedule, trees included in the additional list of tree rates agreed with the Chief Valuer (CV) in 2018, additional rates presented by the Project to the CV.

The figures provided are accurate at the time of issuing this RAP, however, modifications to figures may occur if PAPs query their valuations and amendments are made. Any changes will be captured in a separate register of changes.

1.3 Content of Plan

Table 1-2 summarizes the structure of the remaining chapters of this RAP.

Table 1-2: RAP Structure Summary

Chapter	Content
Chapter 2	Project description focusing on the Geita Region describing the steps taken to avoid or minimize displacement.
Chapter 3	Regulatory framework including Tanzanian laws relating to land acquisition, compensation and resettlement; company standards of the Upstream Partners; applicable international guidelines and standards; and an analysis of the gaps between Tanzanian and international standards for land acquisition and involuntary resettlement.
Chapter 4	Principles and processes adopted for land acquisition, resettlement and compensation for the Project including identification of vulnerable individuals and groups.
Chapter 5	Overview of the socio-economic context of the region, district and Project-affected wards and villages, in the Geita Region and the physical and economic displacement impacts of the land acquisition.
Chapter 6	Entitlement and compensation framework, including eligibility criteria, compensation options, the valuation methodology for land and assets, and the entitlements to be offered to PAPs to meet Tanzanian regulatory requirements and international standards.
Chapter 7	Replacement housing and replacement land.
Chapter 8	Livelihood Restoration Plan (LRP) describing the approach to be adopted by the Project to restore, or improve where possible, the livelihoods and standard of living of persons displaced.
Chapter 9	Vulnerable Peoples Plan.
Chapter 10	Describes the approach to stakeholder engagement, consultation and information disclosure related to the land acquisition program. A summary of engagement activities during the RAP planning is presented, along with more details in a supporting appendix (Appendix C).
Chapter 11	Describes the arrangements for the implementation of the RAP and related stakeholder engagement.
Chapter 12	Describes the budget and schedule associated with the implementation of the RAP.
Chapter 13	Describes the planned monitoring and evaluation of the land acquisition and resettlement program.

1.4 Resettlement Planning Team

The RAP has been prepared on behalf of and with the support of TEAM B.V. for the EACOP Project by the RAP Planning Consulting team, Digby Wells Consortium (DWC), which comprises:

- The international environmental and social consulting firm, Digby Wells Environmental (DWE);

³³Tracks range from one (1) to two (2) meters in width and have no associated reserves and are utilized by people; and cattle tracks are up to three (3) meters in width and utilized by community and livestock and also have no associated reserves.

- The Tanzanian firms PaulSam Geo-Engineering and Safety Training & Consulting Limited (STCL); and
- The Tanzanian registered valuation firm, Whiteknights Real Estate and Investment Analysts Co. Ltd. (WK)³⁴.

The DWC team included:

- Project Managers with expertise in resettlement planning;
- Senior and junior registered Tanzanian valuers;
- Senior and junior registered Tanzanian land surveyors;
- Stakeholder engagement resources;
- Health Safety and Environment (HSE) teams;
- Logistical support teams;
- Town planner;
- Registered Tanzanian architect;
- Internationally registered architect;
- Registered Tanzanian structural engineer;
- Registered Tanzanian quantity surveyor;
- Agronomists;
- Forest specialist;
- Environmental specialists; and
- Social specialists.

³⁴ It is a legal requirement in Tanzania that the valuation of assets for the purposes of compensation and land acquisition be undertaken by a registered valuer.

2 PROJECT DESCRIPTION

2.1 Overall Project Description

The Project entails the construction and operation of a 24-inch in diameter insulated, electrically trace heated, buried pipeline to transport crude oil from the inlet flange at Kabaale Pumping Station in the Hoima District of Uganda (in the area of the Lake Albert Development) to an export facility at a MST in the Tanga Region of Tanzania. The proposed pipeline route alignment through Tanzania is reflected in Figure 2-1.

The pipeline will be buried at an average depth of between 1.8 and 2 m and the length is approximately 1,443 km, of which approximately 1,147 km is in Tanzania.

The design flow rate of the pipeline will make it capable of transporting 216,000 barrels of crude oil per day (216 Kbpd). A key element of the design is temperature management to maintain the crude oil above pour point³⁵ and as much as possible above wax appearance temperature (WAT). The project components responsible for this task are:

- Electrical Heat Tracing (EHT);
- Pumping station bulk heaters (later in Project life); and
- MST bulk heaters.

The pipeline will be buried, thermally insulated with polyurethane foam (PUF) and EHT will be installed for the entire length of the pipeline. EHT is a heating system used to raise and / or maintain the temperature of the pipe by an electrical heating element that runs in physical contact along the length of the pipeline. During pipeline commissioning, the EHT will heat the crude oil to keep it above 50°C. At plateau production, pipeline insulation will maintain crude temperature above 50°C without any additional heat supply.

During the operational phase the EHT will provide heating during periods of reduced flow rates, shutdowns or when maintenance is required. This EHT system will require electrical power, which will be in the form of an underground cable that will be installed parallel to the pipeline trench. The power required for the EHT will be acquired from generators at the pumping stations and converted to the required voltage via step-down sub-stations located along the pipeline route.

³⁵ The temperature at which a liquid becomes semisolid and loses its flowing characteristics.

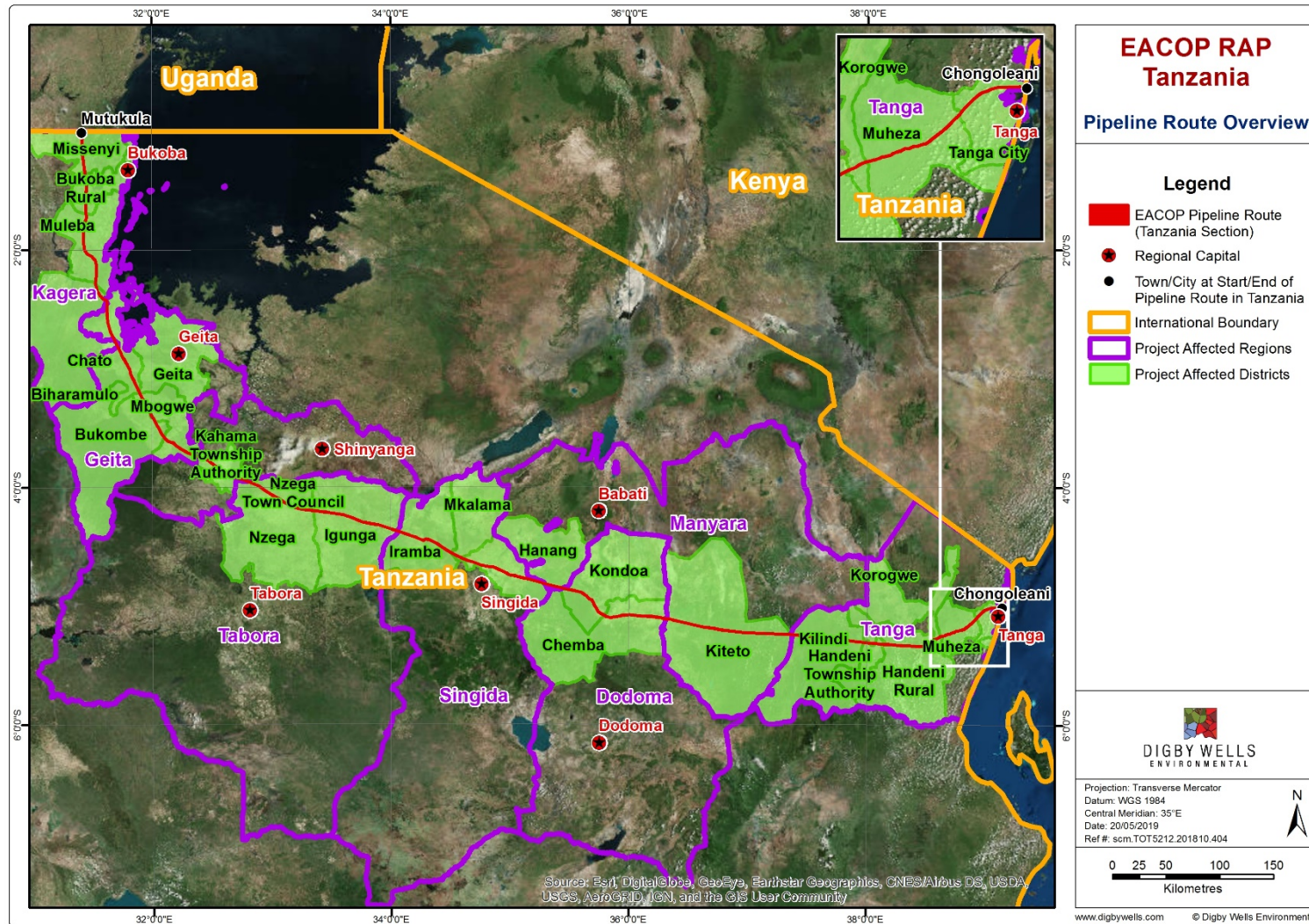


Figure 2-1: The EACOP Pipeline Route

The main Project components in Tanzania include the following:

Priority Area Facilities for Construction

Early Works (EW) facilities (Project components) must be established before construction activities can proceed. These are collectively referred to as PAs and include the following components:

- Coating Yards (CY)³⁶;
- Twelve (12) Main Camps and Pipe Yards (MCPYs³⁷); and
- Construction access roads³⁸.

The resettlement process related to land acquisition for these components has been addressed in the Priority Area (PA) RAP that is already completed³⁹.

Other Project Components

These include:

- Pipeline construction corridor: A 30 m wide corridor will be utilized during construction. The corridor might be wider in certain areas, depending on the local environment and construction requirements (such as stream / river crossings, road reserves and powerline wayleaves for example). The corridor will be rehabilitated⁴⁰ once construction is complete;
- Export pipeline: Following construction, a permanent 10 m wide corridor is required for the safe operation and maintenance of the pipeline set within the 30 m construction corridor⁴¹. During operation, this corridor will be kept clear from deep-rooting vegetation and permanent structures to ensure the safe operation of, and easy access to, the pipeline for maintenance purposes. However, the operation of the

³⁶ The pipe will be imported in sections with a fusion-bonded epoxy coating already applied. A CY facility will be constructed in Tanzania for these sections of pipe to then have insulation applied.

³⁷ These camps will consist of temporary housing, offices, a kitchen, a dining hall and recreation areas and will be located at reasonable intervals along the construction corridor. Each camp will also house a pipe yard, a sewerage treatment facility and waste management area, driveways within the facility and, in some cases, a helipad. One (1) of these facilities will be split across two (2) sites, a main camp (MC-13) and a pipe yard to store pipes (PY-13). At least two (2) of these camps (MCPY-08 and MCPY-16) will be used as marshaling yards for distribution of the pipes.

³⁸ These access routes will link up to the existing road network and will provide access to certain construction facilities and the pipeline construction corridor. The intention is these accesses will be built by the Project. Only a few of the PAs require new access roads to be constructed with others simply requiring very short entrance driveways into the facility from the existing road network to be built.

³⁹ Digby Wells Consortium (2018). EACOP Priority Areas Resettlement Action Plan.

⁴⁰ In areas categorized as Village Land prior to the Project, the 30 m wide corridor will be restored to grassland. In areas previously categorized as Reserved Land and designated as a protected and / or designated area (e.g. Forest Reserve, Game Reserve, Wildlife Management Area, Game Controlled Area and Open Area) land cover will be restored and land use managed to achieve equivalent biological capacity.

⁴¹ Following engagements with the Government and review of the Tanzanian land tenure and legal framework, the 30 m construction corridor will be acquired permanently and converted to General Land. The Right of Occupancy (ROO) for the pipeline corridor will be granted to the TPDC and a lease for the full 30 m corridor provided to the Project Company.

pipeline will not present a barrier to people and livestock. Once the pipeline is buried, markers planted at regular intervals will be visible along the corridor; and

- Hydro test water storage facilities: These facilities are used to perform hydrostatic testing on the pipeline prior to commissioning to confirm the threshold measurement for the safe operation of the pipeline.

Above-Ground Installations

- Sub-station: The EHT system will require electrical power, in the form of an underground cable that will be installed parallel to the pipeline trench. The power required for the EHT will be acquired from generators at two (2) of the pumping stations and converted to the required voltage via step-down sub-stations located at intervals along the pipeline route; and
- Main Line Block Valves (MLBVs): MLBVs are required primarily to isolate a section of the pipeline in the event of a rupture (which is very unlikely, and the pipeline design includes a leak detection system (fiber optic cable) for the entire pipeline). MLBVs will be located at major crossing points, active seismic areas and at each of the pumping stations and pressure reduction sections.
- Pumping stations: Four (4) pumping stations in Tanzania are located at strategic intervals along the pipeline and are used to monitor the flow in the pipeline and to boost the pipeline's internal pressure and flow (if required) to ensure safe operating limits. Pump Station 4 (PS-4), is located in Lubeho Village, Nyakafulu Ward in Geita Region; and
- Pressure reduction stations: Two (2) pressure reduction stations in Tanzania will regulate the pressure in the pipeline to ensure continued flow and that the maximum allowable operating pressure is not exceeded when the oil exits the pipeline and enters the storage tanks. There will be an additional pressure reduction station at the MST.

Marine Storage Terminal and Load-out Facility

- MST: The crude oil will be stored at the MST before it is moved to the offshore load-out facility from where it is transported to the end user. The MST consists of floating roof tanks, discharge pumps and associated support systems, and a trestle with transfer lines that connects the MST to the load-out facility;
- Load-out facility (LOF): From the MST, crude oil is discharged through pipelines to offshore LOF where it is loaded onto marine tankers for shipment to end users. A LOF will be constructed, including a jetty, to transfer crude oil to vessels (i.e. ships) at a sheltered deep-water site offshore; and
- Jetty: A jetty of approximately 2 km in length will connect the MST with the LOF.

The GoT will acquire all land required for the Project on a permanent basis. The government will provide a lease to the Project which will comply with the principles set out in the IGA (see Section 3.3). For the PAs a short-term lease of sufficient duration to support the construction, pipeline commissioning and construction facilities' decommissioning, will be secured for the Project. On expiry of the lease, land will revert to the Government.

Access restrictions to Project land during construction and operation will be determined on the basis of health and safety considerations. The PA coating yards, main camps and marshaling and pipe storage yards will be fenced. Access to these facilities will be strictly controlled.

The AGIs (including PS-4) will be fenced and access strictly controlled by the Project. The pipeline corridor will be unfenced, except where health and safety considerations require access restrictions. Existing vehicle crossings will be maintained. Where certain restrictions are unavoidable (e.g. during construction in specific areas), provisions will be made for crossings of the pipeline route by people, vehicles and livestock near the restricted zone. More details on the proposed land use restrictions for the pipeline corridor and other Project installations are contained within the RPF⁴².

2.2 Overview of Project Elements in the Geita Region

This RAP focuses on the Project elements to be constructed in the areas within the Chato, Geita, Mbogwe and Bukombe Districts of the Geita Region, namely; a pipeline construction corridor, export pipeline and associated AGIs. This section describes the:

- Location and setting of the Project;
- Land requirements; and
- Land context.

2.2.1 Location and Setting of the Project

The land area, for the Project within the Geita Region, valued (in the District Valuation Reports) and to be compensated is approximately 1,123.94 acres including orphaned land: 438.92 acres in Chato District, 25.59 acres in Geita District, 502.43 acres in Mbogwe District, 156.97 acres in Bukombe District. This represents approximately 0.025% of the four (4) districts' total land area. The pipeline corridor also crosses through in Chato District the Biharamulo Game Reserve for a distance of 12.83 km affecting approximately 96.73 acres and through Biharamulo Forest Reserve for a distance of 13.37 km affecting 101.59 acres.

The pipeline directly impacts 19 of the 91 wards within the four (4) Project-affected Districts in the Geita Region including 37 villages.

Figure 2-2 illustrates the route of the pipeline through Chato and Geita Districts. Figure 2-3 illustrates the route of the pipeline through Mbogwe and Bukombe Districts.

It should be noted that the currently available Tanzanian Geographic Information System (GIS) dataset for administrative boundaries does not always align with data collected in the

⁴² Digby Wells Consortium (2018). East African Crude Oil Pipeline (EACOP), Tanzania Section: Resettlement Policy Framework (RPF) (October 2018). (Digby Wells Environmental; PaulSam Consultants; Whiteknights Real Estate and Investment Analysts Company Ltd.).

field. The differences between the available Tanzanian GIS data and the field data confirmed with local authorities for the Geita Region are summarized below:

- During the valuation timeframe Minkoto Ward in Chato District was divided into two wards: Bwanga Ward and Minkoto Ward. The pipeline corridor crosses the area covered in the new administrative boundaries of Bwanga Ward; and
- According to the available Tanzanian GIS data the pipeline corridor will pass through the Kaseme Ward within the Geita District, however, according to the field data this section of the pipeline corridor passes through Magenge Ward and not the Kaseme Ward.

The available GIS World Database on Protected Areas 2017 shows the pipeline crossing the Uyovu Forest Reserve between 550.5 and 557.5 in Chato and Geita district. However, from field data and engagement with the District authorities and TFS it has been confirmed that Uyovu is administered as a Local Authority Forest Reserve (GN number 553 of 1958) and is not within these Districts or traversed by the pipeline corridor in the Geita Region.

The pipeline enters Geita Region in the west from the Kagera Region (nearest Kilometer Point (KP) 463) and traverses approximately 167 km⁴³ across the four (4) districts to the western border with Shinyanga Region (nearest KP 639.5). The section through each district including the nearest KP at the start and end of each section is outlined:

- Chato District KP 463 to KP 466.5 (total 3.43 km);
- Exits Chato District into the Biharamulo District of Kagera Region KP 466.5 to KP 467.5 (total approximately 1.00 km);
- Re-enters Chato District at KP 467.5 to KP 503 (total 35.85 km);
- Exits Chato District of Geita Region back into the Biharamulo District of Kagera Region KP 503 to KP 510 (total 6.73 km);
- Re-enters Chato District KP 510 to KP 554 (total 44.05 km);
- Enters the Geita District KP 554 until KP 557.5 (total 3.36 km);
- Then enters the Mbogwe District KP 557.5 to KP 584 (total 26.87 km), it then exits Mbogwe District and enters Bukombe District;
- Pipeline corridor traverses Bukombe District KP 584 to KP 605 (total 20.57 km); and
- Pipeline corridor exits Bukombe District and re-enters Mbogwe District KP 605 to KP 639.5 (total 34.93 km).

Within the Geita Region, Pump Station 4 (PS-4), is located in Lubeho Village (KP 610), Nyakafulu Ward which will be permanently fenced. The access road (approx. 760 m in length) which is also located in Lubeho Village, exits the facility on the north-east side and runs west and south-west around the facility. Further information is provided in Section 2.2.2.

⁴³ Excludes 7.73 km of the pipeline which crosses into the Biharamulo District of Kagera Region

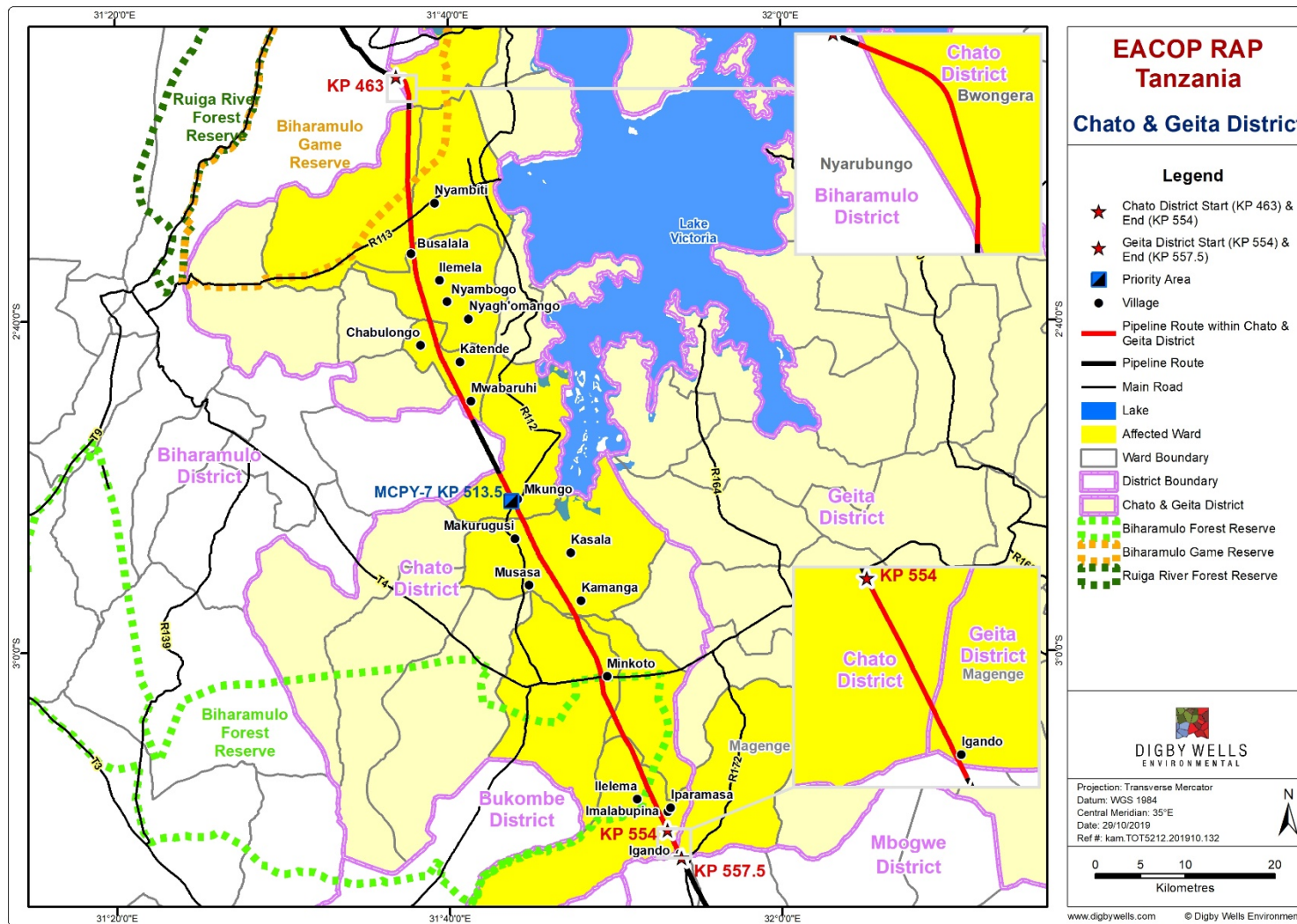


Figure 2-2: Location of Pipeline in the Chato and Geita Districts, Geita Region

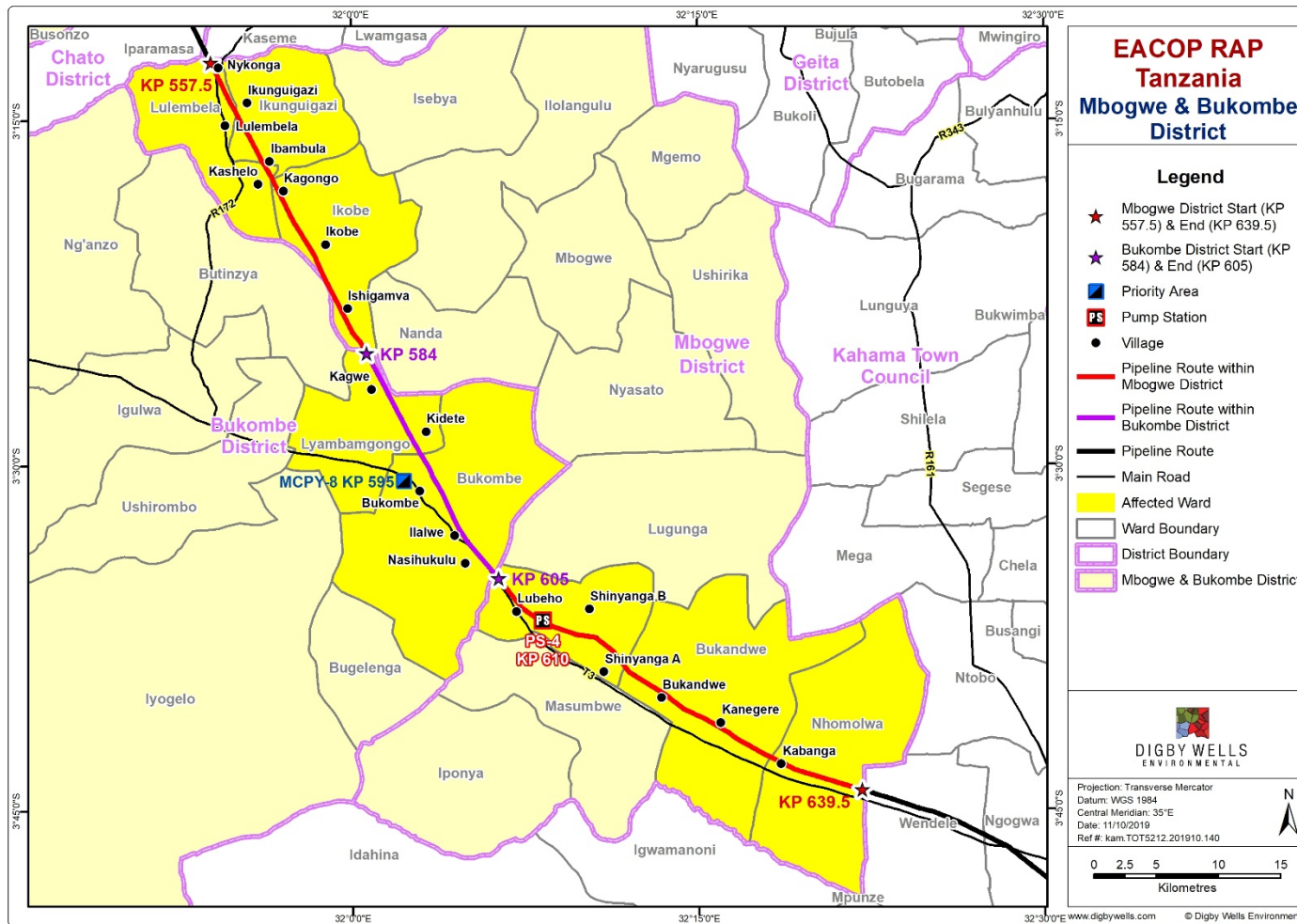


Figure 2-3: Location of Pipeline in the Mbogwe and Bukombe Districts, Geita Region

2.2.2 Project Land Requirements in the Geita Region

Table 2-1 summarizes the length of the pipeline that crosses the relevant wards and villages in the Chato, Geita, Mbogwe and Bukombe Districts and the size of land impacted within each. It also includes sections of the pipeline that cross into the Kagera Region.

Table 2-1: Summary of Pipeline Corridor in Geita Region

Region	District	Ward	Village / Reserve	Nearest KP Point		Pipeline Length (km)	Land Cover Area (Acres)
				Start	End		
Geita	Chato	Bwongera	Biharamulo Game Reserve	463	466.5	3.43	25.85
<i>Kagera⁴⁴</i>	<i>Biharamulo</i>	<i>Nyarubungo</i>	<i>Biharamulo Game Reserve</i>	<i>466.5</i>	<i>467.5</i>	<i>1.00</i>	<i>7.32</i>
Geita	Chato	Ichwankima	Biharamulo Game Reserve	467.5	476.5	9.40	70.88
		Nyamirembe	Nyambiti Village	476.5	479	2.35	17.90
		Ichwankima	Busalala Village	479	484.5	5.28	40.39
		Ilemela	Ilemela Village	484.5	488	3.72	28.54
			Nyambogo Village	488	491	2.84	21.09
			Nyagh'omango Village	491	492	1.05	8.62
		Katende	Chabulongo Village	492	495	3.04	24.30
			Katende Village	495	499	4.25	35.38
			Mwabaruhi Village	499	503	3.92	29.48
<i>Kagera</i>	<i>Biharamulo</i>	<i>Nyamigogo</i>	<i>Nyamigogo Village</i>	<i>503</i>	<i>504.5</i>	<i>1.17</i>	<i>8.82</i>
			<i>Kasozibakaya Village</i>	<i>504.5</i>	<i>510</i>	<i>5.56</i>	<i>42.01</i>
	Chato	Bukome	Mkungo Village	510	515.5	5.86	46.42
		Makurugusi	Makurugusi Village	515.5	519	3.06	22.85
			Kasala Village	519	521	2.27	17.48
			Musasa Village	521	526	4.73	36.16
			Kamanga Village	526	528	2.25	17.11
		Bwanga ⁴⁵	Minkoto Village	528	535.5	7.30	57.53
			Biharamulo Forest Reserve	535.5	540	4.55	34.09
		Butengorumasa	Biharamulo Forest Reserve	540	542.5	2.77	20.70
		Iparamasa	Biharamulo Forest Reserve	542.5	548.5	6.05	46.80
			Ilelema Village	548.5	551	2.18	17.37
Iparamasa Village	551		552	1.11	8.74		

⁴⁴ The corridor crosses from Geita Region into the Kagera Region including two sections of the Biharamulo Game Reserve and the villages of Nyamigogo and Kasozibakaya

⁴⁵ During the valuation process Minkoto Ward in Chato District was divided into two wards : Bwanga Ward and Minkoto Ward. From engagement and field data the area that the pipeline corridor crosses is included in the new administrative boundaries of Bwanga Ward.

Region	District	Ward	Village / Reserve	Nearest KP Point		Pipeline Length (km)	Land Cover Area (Acres)	
				Start	End			
Geita			Imalabupina Village	552	553	0.88	6.87	
			Iparamasa Village	553	553.5	0.55	4.09	
			Imalabupina Village	553.5	554	0.49	3.54	
	Geita	Magenge	Igando Village	554	557.5	3.36	25.73	
	Mbogwe	Lulembela	Nykonga Village	557.5	561.5	4.37	33.19	
			Lulembela Village	561.5	562.5	0.93	7.03	
		Ikunguigazi	Ikunguigazi Village	562.5	564.5	1.71	13.44	
			Ibambula Village	564.5	567.5	3.04	23.26	
		Lulembela	Kashelo Village	567.5	568.5	1.00	7.90	
		Ikobe	Kagongo Village	568.5	569.5	1.11	8.59	
		Lulembela	Kashelo Village	569.5	570	0.45	3.28	
		Ikobe	Kagongo Village	570	571	0.87	6.63	
		Lulembela	Kashelo Village	571	571.5	0.64	4.78	
		Ikobe	Ikobe Village	571.5	579	7.34	55.85	
			Ishigamva Village	579	584	5.41	40.85	
	Bukombe	Lyambamgongo	Kagwe Village	584	590	5.75	43.72	
		Bukombe	Kidete Village	590	592.5	2.77	21.03	
			Bukombe Village	592.5	596.5	3.88	30.15	
			Ilalwe Village	596.5	601	4.54	35.47	
			Nasihukulu Village	601	605	3.63	27.72	
	Mbogwe	Nyakafulu	Lubeho Village (includes PS-4 at KP 610)	605	612	7.22	92.55	
			Shinyanga B Village	612	614.5	2.59	20.37	
			Shinyanga A Village	614.5	619	4.36	33.04	
		Bukandwe	Bukandwe Village	619	623	4.07	31.15	
			Kanegere Village	623	632.5	9.33	70.43	
		Nhomolwa	Kabanga Village	632.5	639.5	7.36	55.25	
		GEITA REGION TOTALS⁴⁶						169.06

⁴⁶ Excludes 7.73 km section of pipeline in Kagera Region covering 58.15 acres of impacted land.

2.2.3 Land Context

This section of the pipeline corridor traverses three (3) land types being:

- Village Land;
- General Land; and
- Reserved Land associated with specific infrastructure crossings of the pipeline corridor (e.g. roads and powerlines) as well as forest reserves and game reserves.

The affected land in the villages is predominantly under unregistered customary tenure and used for agriculture. The intention, subsequent to acquiring the Village Land affected by the pipeline corridor and AGIs, is that the Village Land will be converted to General Land and leased to the Project. The Project affects approximately a total of 1,628 land parcels (inclusive of PS-4) including

- 588 land parcels in Chato District;
- 29 land parcels in Geita District;
- 851 land parcels in Mbogwe District; and
- 160 land parcels in Bukombe District.

Tenants are present on 108⁴⁷ of these 1,628 land parcels through various agreements with the landholders. Land associated with road reserves and powerline wayleaves will not be converted into General Land. The Project will establish appropriate crossing agreements with the relevant government agencies.

Biharamulo Game Reserve

The pipeline traverses in Chato District the Biharamulo Game Reserve through Bwongera and Ichwankima wards affecting approximately 97 acres of the GR within the Chato District. The affected land in the game reserve is Reserved Land under the jurisdiction of Tanzania Wildlife Authority (TAWA).

Biharamulo Forest Reserve: This forest reserve is located in Chato District and the Project will impact 101.59 acres. The corridor passes through the Biharamulo Forest Reserve in Bwanga, Butengorumasa and Iparamasa wards. The affected land in the Biharamulo Forest Reserve is Reserved Land under the jurisdiction of Tanzania Forest Services Agency (TFS).

Infrastructure and Other Crossings:

- Within the Chato District the pipeline will cross thirteen (13) roads in total, including eight (8) roads under the jurisdiction of TARURA with associated reserves and five (5) roads under the jurisdiction of TANROADS with associated reserves.

⁴⁷ With tenants present on 79 land parcels in Chato, no parcels with tenants in Geita, 24 tenants present on land parcels in Mbogwe, and 3 tenants present on land parcels in Bukombe District. These figures differ from the total number of tenants (104) shown in Table 1-1 as some parcels have more than one (1) tenant.

- There are no roads under the jurisdiction of TARURA or TANROADS crossed in the Geita District.
- Within Mbogwe District the pipeline will cross 20 roads in total, including 16 roads under the jurisdiction of TARURA with associated reserves and four (4) roads under the jurisdiction of TANROADS with associated reserves.
- Within Bukombe District the pipeline will cross three (3) roads which are all under the jurisdiction of TARURA with associated reserves.
- The pipeline crosses a total of 14 power lines with associated wayleaves (under jurisdiction of TANESCO) within Geita Region (including eight (8) in Chato, five (5) in Mbogwe, and one (1) in Bukombe).
- These crossings (and associated reserves and wayleaves) will not be acquired. They will remain under the jurisdiction of the relevant agencies (e.g. TANROADS, TARURA, TANESCO, etc.).

Community Tracks, Cattle Tracks, Streams and other crossings⁴⁸: The pipeline corridor will cross a number of tracks including:

- 33 village tracks and nine (9) cattle tracks in Chato District;
- Two (2) village tracks in Geita District;
- 49 village tracks and 39 cattle tracks in Mbogwe District;
- 12 village tracks and six (6) cattle tracks in Bukombe District; and
- Various footpaths in Geita region.

The land associated with these crossings is Village Land.

Under the jurisdiction of LDBWB there is one (1) seasonal river Geita District, two (2) seasonal rivers in Mbogwe District, and three (3) seasonal rivers in Bukombe District which the pipeline will cross. In addition to one (1) stream in Mbogwe, five (5) streams in Chato, and one (1) valley in Mbogwe that will be crossed. One (1) underground water pipeline will be crossed by the pipeline corridor in Chato District and Mbogwe.

During construction, the construction contractor will be required to maintain and / or provide alternative temporary crossing points to allow safe passage across the corridor at all times.

⁴⁸ Tracks range from one (1) to two (2) meters in width and have no associated reserves and are utilized by people. Cattle tracks are up to three (3) meters in width and utilized by community and livestock and also have no associated reserves.

2.3 Activities to Avoid or Minimize Displacement

International good practice requires that displacement be avoided or minimized wherever feasible through the assessment of alternative Project and engineering designs and the application of various criteria.

Several alternative pipeline routes were identified during the early stages of the development of the Project. The routing process began with the identification of regional areas of interest. This was followed by numerous screening studies to evaluate environmental, social, geo-hazards, constructability and terrain (including river crossings and slopes) constraints for pipeline routing at a broad scale.

This work culminated in the selection of eleven 50 km wide corridor combinations for more detailed evaluation. Secondary information was used to assess the potential corridors using a geographic information system (GIS) and three (3) corridor options were identified for further evaluation, two (2) through Kenya (northern and southern corridors) and one (1) through Tanzania.

Using higher-resolution satellite imagery the corridors were refined through further analysis of the constraints identified above. Following this work, the Uganda-Tanzania route was selected. Subsequently, the route corridor was reduced to two (2) kilometers in width in 2016 and 2017 to 100 m wide. During 2018 the route corridor was reduced to a 30 m wide corridor within which, the construction and operational pipeline corridor will be located.

In the site selection for these sites; technical, environmental, socio-economic and cultural heritage criteria were considered including the following overriding requirements to:

- Minimize land acquisition and physical displacement specifically;
- Minimize distances from the main road network where applicable;
- Avoid populated areas and nationally protected areas of biodiversity value; and
- Take cognizance of the terrain type and topography.

Further details on the pipeline route selection and minimization of impacts are detailed in the EACOP Project ESIA⁴⁹.

The Project is continuing to review the findings of the land acquisition, socio-economic household surveys and SELI surveys alongside the design to identify locations where physical and economic displacement impacts could be further avoided, reduced and / or minimized. This is an ongoing process and is being further informed by the engagement programme with PAPs, PACs and other stakeholders.

⁴⁹ East African Crude Oil Pipeline ESIA, 2018.

3 LEGAL AND POLICY CONTEXT

This section draws from the legal context described in the Resettlement Policy Framework (RPF⁵⁰), which is applicable to all Project RAPs and summarizes the legislative and policy requirements that the Project must meet to acquire land, compensate for assets and complete resettlement, including:

- Relevant Tanzanian legislation, regulations and policy (Section 3.1);
- Corporate standards of the Upstream Partners (Section 3.2);
- Inter-governmental Agreement (IGA) and (Section 3.3);
- The applicable International Financing Standards (Section 3.4) adopted by the Project in particular:
 - The Equator Principles (EPs);
 - IFC PS1 (Assessment and Management of Environmental and Social Risks and Impacts);
 - PS5 (Land Acquisition and Involuntary Resettlement);
 - PS7 (Indigenous Peoples);
 - PS8 (Cultural Heritage);
 - The applicable international conventions, specifically, the International Labor Organization (ILO)'s C169 (Indigenous and Tribal People's Convention), the African Commission on Human and Peoples' Rights (ACHPR); and the United Nations (UN) Declaration on the Rights of Indigenous Peoples; and
 - A gap analysis of national legislation and International Financing Standards, and a way forward approach to address any gaps identified (Section 3.5).

3.1 Summary of Tanzanian Regulatory Framework

Tanzania has a range of laws and policies related to categories of land, land tenure, land acquisition, compensation and resettlement. Under Tanzanian law, land is categorized as follows:

- **Reserved Land:** Land set aside for special purposes including wildlife reserves, forest reserves, marine parks, road reserves and land reserved for public utilities and highways. Specific legal regimes govern these lands under the laws used to establish the various forms of Reserved Land such as the Forests Act, National Parks Act, Wildlife Conservation Act, and Land Acquisition Act;

⁵⁰ A detailed regulatory framework can be found in Chapter 3 and Appendix A of the EACOP RPF (September 2018).

- **Village Land:** Includes all land inside the boundaries of registered villages, where the VDCs and Village Assemblies are given powers to manage land. The Village Land Act (1999 as amended from time to time) specifies how this is to be achieved; and
- **General Land:** Is defined in The Land Act, 1999 as “all public land which is not Reserved Land or Village Land and includes unoccupied or unused village land” and is managed by the Commissioner for Lands.

The land affected in the Geita Region is predominantly Village Land and Reserved Land.

The key legislation for land acquisition and compensation in Tanzania is listed below and discussed in detail in the RPF⁵¹:

Overarching Laws and Guidance:

- Constitution of the United Republic of Tanzania, 1977;
- The National Land Policy, 1997; and
- Petroleum Act No.8, 2015.

Other Relevant Acts and Regulations:

- The Land Act, 1999, Cap 113 R.E. 2018 (as amended from time to time);
- The Land Acquisition Act, 1967, Cap 118 R.E. 2018 (as amended from time to time);
- The Village Land Act, 1999, Cap 114 R.E. 2018 (as amended from time to time);
- The Village Land Regulations, 2001;
- The Graves (Removal) Act, 1969;
- The Antiquities Act, 1964, and Antiquities (Amendment) Act, 1979;
- The Land Disputes Courts Act, 2002;
- The Valuation and Valuers Registration Act, 2016;
- The Valuation and Valuers (General) Regulations, 2018;
- The Forest Act, 2002;
- The Roads Management Regulations, 2009;
- The National Parks Act, 2002;
- The Wildlife Conservation Act, 2013;
- The Marine Parks and Reserves Act, 1994;
- The Urban Planning Act, 2007;

⁵¹ East African Crude Oil Pipeline – Resettlement Policy Framework RPF, 2018

- The Water Resources Management Act, 2009;
- The Environmental Management Act, 2004;
- The Mining Act, 2017;
- The Road Act, 2007; and
- The Electricity Act, 2008.

Other Relevant Policies:

- The National Human Settlements Development Policy, 2000;
- Forest Policy, 1998;
- Water Policy, 2002;
- Agricultural and Livestock Policy, 1997; and
- Tanzania Women and Gender Policy, 2000.

3.2 Corporate Environmental and Social Commitments

The Upstream Partners each have corporate policies that include Environment, Health and Safety policies, Ethics Charters, commitments to the protection of biodiversity and strategies for operating in sensitive environments. The relevant social commitments, including stakeholder engagement, are summarized for each partner in the table below.

In the absence of EACOP Project-specific standards, and in advance of the pipeline company developing its standards, EACOP is applying some of Total SA standards to the Project including:

- Code of Conduct;
- Health, Safety and Environment (HSE) Charter;
- Security Charter;
- Charter of Principles and Guidelines on Indigenous and Tribal Peoples;
- Business Integrity Guide; and
- Human Rights Guide.

Summaries of the three (3) Partners' commitments to social responsibility are presented in Table 3-1.

Table 3-1: Project Partners' Commitments to Social Responsibility

Company	Policies
Total E&P Uganda B.V. (TEPU).	<p>TEPU commits, among others, to:</p> <ul style="list-style-type: none"> • Developing transparent, constructive relationships with all of its stakeholders; • Reducing negative socio-economic impacts related to its operations; • Participating in the economic diversification of host communities and countries by supporting local initiatives; • Contributing to human development by emphasizing education and the strengthening

Company	Policies
	<p>of local skills and capacities; and</p> <ul style="list-style-type: none"> • Enhancing the value of the historical, natural and cultural heritage of local communities. <p>In their HSE Charter, the Company commits itself to comply with applicable Tanzanian laws and regulations, international standards, as well as Total Group policies in the fields of HSE. In matters of safety, health, environment and quality, the Company further adopts a constructive attitude based on open dialogue with stakeholders and outside parties. Through its social commitment, it focuses on developing its activities in harmony with the neighboring communities. In its Ethics Charter, Company commits to contributing to the social and economic development of the countries in which it operates, in compliance with local legislation and regulation. It is committed to protecting the environment and respecting local cultures.</p>
CNOOC Uganda Limited (CUL)	<p>CUL, in its social policies, is committed to contributing to the economic development of the country and ensuring that the communities where CUL operates benefit from their operations. CUL will operate in compliance with Tanzanian laws and regulations and pursue high standards of business ethics and corporate governance and implement advanced standards and industry best practice. It is committed to pursuing a win-win relationship with stakeholders, and to respect the rights and interests of stakeholders, by supporting local communities in the development of education, and contributing to poverty alleviation, among others.</p>
Tullow Uganda Operations Pty Ltd (TUOP)	<p>In its Environment and Social Performance Standard, TUOP states that it will comply with the requirements of all applicable host country laws and regulations and apply their standard where their requirements are more stringent than host country laws. The standard requires that a robust stakeholder engagement process is followed, which is well-planned and coordinated, including the identification of potential stakeholders and the participation of Project impacted people to discuss and contribute to project design, scope, impacts and mitigation measures prior to the start of project activities.</p> <p>In its policy statement on human rights, TUOP commits to human rights due diligence from the start of a potential project and to actively engage employees and contractors with appropriate cultural awareness training. TUOP will undertake all its operations in conformity with the Voluntary Principles on Security and Human Rights (VPSHR).</p>

3.3 Inter-Governmental Agreement

The IGA was signed by the Governments of Uganda and Tanzania on 26th May 2017. Within the IGA, Article 3 establishes the land rights framework. This framework addresses:

- Fair, transparent, legally enforceable and clear terms in favor of the Project;
- Availability of land rights and integrity of the pipeline system including;
 - Clearly identifiable, registrable title;
 - Free from third party encumbrances, rights or claims;
 - Strongest available title (or for temporary land, an appropriate title / right);
 - Duration for the entirety of the Project (or for temporary land, as long as needed by the Project);
 - Uninhibited implementation of the Project;
 - The enabling of full ownership of all Project facilities;
 - IFIs' right to legal, valid and enforceable first priority security; and
- Compliance with Environmental Health, Safety and Security (EHSS) and Human Rights Standards at a national and international level.

In comments received from the GoT on the RPF, the GoT noted ‘the Government has confirmed to the investors that land taking will be based on the perspective of local and international standards’ (reference is made to Article 3 of the IGA).

The HGAs for the Project between the Upstream Partners and the Governments will follow on from the IGA and will cover, in their remit, agreement over land rights. The HGA is currently under development and discussion between the Upstream Partners and the GoT and is yet to be signed. However, the Project will adopt the IGA principles above and these are reflected in the processes undertaken to develop the RAP including socio-economic and asset surveys, valuation methods and the determination of cash and in-kind compensation.

3.4 International Guidance and Standards

3.4.1 Equator Principles

The Equator Principles are a risk management tool adopted by numerous financial institutions in 37 countries to identify, assess and manage environmental and social risks. The Equator Principles are largely based on the IFC’s PSs with some additional requirements for lenders who have adopted the Equator Principles. As the Project may be seeking funding from Equator Principle financial institutions, the process for land acquisition, compensation and resettlement must recognize the applicable international standards within the Equator Principles.

3.4.2 International Finance Corporation Performance Standards (2012)

The IFC, a member of the World Bank Group, has adopted a suite of PSs on social and environmental sustainability. The IFC applies these PSs’ to manage project-related social and environmental risks and impacts, and to enhance development opportunities in its private sector financing. The specific PSs considered applicable to the RAPs are summarized below:

Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts

PS1 establishes the importance of:

- An integrated assessment to identify the environmental and social impacts, risks, and opportunities of projects;
- Effective community engagement through disclosure of project-related information and consultation with local communities on matters that directly affect them; and
- The client’s management of environmental and social performance throughout the life of the Project.

The specific objectives of PS1 are:

- To identify and assess social and environmental impacts, both adverse and beneficial, in the Project’s area of influence;

- To avoid, or (where avoidance is not possible,) minimize, mitigate, or compensate for adverse impacts on workers, affected communities, and the environment;
- To ensure that affected communities are appropriately engaged on issues that could potentially affect them; and
- To promote improved social and environmental performance of companies through the effective use of management systems.

Performance Standard 5: Land Acquisition and Involuntary Resettlement

The Project will require the involuntary resettlement of all households and assets located within the Project footprints thereby making PS5 applicable. The main objectives of PS5 are:

- 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 and / or restrictions on land use by, (i) providing compensation for loss of assets at replacement cost⁵² and (ii) ensuring that all 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; and
- To improve living conditions among physically displaced persons through the provision of adequate housing with security of tenure⁵³ at resettlement sites.

According to IFC PS5, displaced persons may be classified as persons:

- Who have formal legal rights to the land or assets they occupy or use;
- Who do not have formal legal rights to land or assets, but have a claim to land that is recognized or recognizable under national law; or
- Who have no recognizable legal right or claim to the land or assets they use / occupy.

PS5 also includes the following requirements:

⁵² Replacement cost is defined as the market value of the assets plus transaction costs. In applying this method of valuation, depreciation of structures and assets should not be taken into account. Market value is defined as the value required to allow Project-Affected Communities (PAC) and persons to replace lost assets with assets of similar value. The valuation method for determining replacement cost should be documented and included in applicable Resettlement and / or Livelihood Restoration Plan (LRP).

⁵³ 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.

- Provide opportunities to displaced people to derive appropriate development benefits from the Project; and
- Where land is collectively owned, land-based compensation should be offered, where possible.

Involuntary resettlement refers both to physical displacement (resettlement or loss of shelter) and economic displacement (loss of assets, or access to assets, that leads to loss of income sources and / 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 persons or communities do not have the right to refuse land acquisition and restrictions on land use that result in physical or economic displacement. This occurs in cases of lawful expropriation, or restrictions on land use, or in negotiated settlements in which the buyer / developer can resort to expropriation or impose legal restrictions on land use if negotiations with the seller fail⁵⁴.

PS5 applies to all physical and / or economic displacement resulting from the following types of land-related transactions:

- Land rights, or land use rights, acquired through expropriation or other compulsory procedures in accordance with the legal system of the host country;
- Land rights, or land use rights, acquired through negotiated settlements with property owners or those with legal rights to the land if failure to reach a negotiated settlement would have resulted in expropriation or other compulsory procedures;
- Project situations where involuntary restrictions on land use and existing access to natural resources cause a community, or groups within a community, to lose access to resource usage where they have traditional or recognizable usage rights;
- Certain Project situations requiring evictions of people occupying land without formal, traditional, or recognizable usage rights; and
- Restriction on access to land or use of other resources including communal property and natural resources.

When displacement cannot be avoided, the Project sponsor will offer displaced persons and communities' compensation for the loss of all assets at full replacement cost, as well as other assistance as provided in PS5, to help them improve or restore their standards of living and livelihoods. Compensation standards shall be transparent and applied consistently to all the communities and persons affected by the displacement.

Replacement cost is defined as the market value of affected assets plus transaction costs. In applying this method of valuation, depreciation of structures and assets should not be taken

⁵⁴ IFC PS5 does not apply to resettlement resulting from voluntary land transactions (i.e., market transactions in which the seller is not obliged to sell, and the buyer cannot resort to expropriation or other compulsory procedures sanctioned by the legal system of the host country if negotiations fail).

into account. Market value is defined as the value that is required to enable affected persons and communities to replace lost assets with new assets of similar value or utility. Security of tenure must be provided at the resettlement site, meaning that resettled individuals or communities are resettled to a site that they can legally occupy without the risk of eviction.

According to IFC PS5, preference should be given to land-based resettlement strategies for displaced persons whose livelihoods are land-based. Strategies may include resettlement on public land with the agreement of government, or on private land acquired or purchased for resettlement. Whenever replacement land is offered, it should provide for land that is at least equivalent to that of the old site.

Where physical displacement occurs, PS5 further requires that a RAP shall be developed and implemented. The RAP must provide a comprehensive action plan for addressing resettlement impacts. It should describe the procedures and activities that will be taken to mitigate adverse project impacts, compensate for all losses, and provide development benefits to those who will be resettled or displaced as a result of the Project. The Project sponsor shall be fully responsible for the resettlement process.

In order to comply with the above requirements, the Project sponsor will carry out a census with appropriate socio-economic baseline data to identify all persons who will be displaced by the Project, and to determine who will be eligible for compensation and / or resettlement assistance and to discourage the inflow of people who are ineligible for these. A cut-off date for eligibility under the proposed Project should also be established. Information on the cut-off date shall be well documented and disseminated throughout the Project area.

PS5 requires that the RAP is disclosed to the relevant authorities and affected parties prior to implementing resettlement. Provision of compensation and restoration of livelihoods of those affected by the Project shall be ensured prior to any actual resettlement. Possession of land for project activities should take place only after compensation has been paid, or alternatively, if suitable guarantees of compensation have been made to the affected parties' satisfaction. Replacement housing and related public infrastructure and services and moving allowances must be provided to affected persons in accordance with the RAP provisions.

PS5 further requires that particular attention be given to the needs of vulnerable persons and groups. These are defined as those below a defined poverty line, the landless, the elderly, women and children, indigenous groups and ethnic minorities, the disabled, orphans, and otherwise disadvantaged persons. In particular, the RAP must provide:

- Additional targeted assistance (for example credit facilities, training and employment) and opportunities to restore, and preferably improve, their income-earning capacity, production levels and standards of living to displaced persons whose livelihoods or income levels are adversely affected; and
- Transitional support to economically displaced persons where necessary, based on a reasonable estimate of time required to restore income-earning capacity, production levels, and standards of living.

Performance Standard 7: Indigenous Peoples

Many Indigenous Peoples' (IPs) cultures and identities are inextricably linked to the lands on which they live and the natural resources on which they depend. In many cases, their cultures, identities, traditional knowledge, and oral histories are connected to, and maintained through the use of, and through relationships with, these lands and natural resources, thus, Project impacts on lands, forests, water, wildlife, and other natural resources may affect their institutions, livelihoods, economic development, and their ability to maintain and develop their identities and cultures. PS7 sets out specific requirements when projects affect these IPs and relationships.

In this Performance Standard, the term "Indigenous Peoples" is used to refer to a distinct social and cultural group exhibiting the following characteristics:

- Self-identification as members of a distinct indigenous cultural group and recognition of this identity by others;
- Collective attachment to geographically distinct habitats or ancestral territories and to the natural resources in these habitats and territories;
- Customary cultural, economic, social, or political institutions that are separate from those of the mainstream society or culture; or
- A distinct language or dialect, often different to the official language or languages of the country or region within which they reside.

The applicability of PS7 should be established during a project's environmental and social risks and impacts the identification process.

The specific objectives of PS7 are:

- To ensure that the development process fosters full respect for the human rights, dignity, aspirations, culture, and natural resource-based livelihoods of IPs;
- To anticipate and avoid adverse impacts of projects on communities of IPs, or when avoidance is not possible, to minimize and / or compensate for such impacts;
- To promote sustainable development benefits and opportunities for IPs in a culturally appropriate manner;
- To establish and maintain an ongoing relationship based on Informed Consultation and Participation (ICP) with the IPs affected by a project throughout the project's lifecycle;
- To ensure the Free, Prior and Informed Consent (FPIC) of the Affected Communities of IPs when the circumstances described in the Performance Standard are present; and
- To respect and preserve the culture, knowledge, and practices of IPs.

This PS is relevant for the approach to resettlement on the Project and is described here. In the Tanzanian context, four (4) Vulnerable Ethnic Groups have been internationally recognized, and some might self-identify as indigenous people. Among these are the Barabaig ethnic group. One (1) Geita PAH is from the Barabaig group who may self-identify

as indigenous people (see Chapter 5 for further discussion) and this PAH will be monitored for vulnerability to livelihood restoration and the ability to adapt to changed circumstances..

Performance Standard 8: Cultural Heritage

PS8 recognizes the importance of cultural heritage for current and future generations. The specific objectives of PS8 are to:

- Protect cultural heritage from the adverse impacts of project activities and support its preservation; and
- Promote the equitable sharing of benefits from the use of cultural heritage.

In the selection of the chosen pipeline route, the location and proximity to culturally sensitive and potentially sensitive sites were considered. More detailed identification and assessment of potentially affected sites have also been undertaken in the Project ESIA⁵⁵ as well as monitoring undertaken during the geophysical and geotechnical surveys. The protection and management of known and chance finds during construction will be addressed through construction management plans, including site monitoring and management during construction, and use of the Project's Chance Finds Procedure. In the Geita Region 71 graves were identified within the corridor during the valuation process. These graves will be removed and reinterred in accordance with the Graves (Removal) Act, 1969. In addition to the graves, 3 spiritual sites of significance were identified during the RAP surveys in Geita Region. Land and assets associated with these sites has been valued. Impacts on affected spiritual sites will be managed by the Project under the Cultural Heritage Management Plan, including liaison with communities over supporting ceremonies etc.

3.4.3 Human Rights Considerations

As set out in the IGA framework, the Project has agreed to address Human Rights Standards at a national and international level. The UN norms acknowledge the universality, indivisibility, interdependence, and interrelatedness of human rights, including the right to development, which entitles every person to participate in, contribute to and enjoy economic, social, cultural and political development in which human rights and fundamental freedoms can be realized.

The protection of basic human rights is primarily the responsibility of the state. However, in terms of international good practice, private companies are required to respect human rights and avoid infringing on the human rights of others. The United Nations Global Compact (UNGC) initiative challenges businesses to embrace and enact basic principles with respect to human rights. The UN Guiding Principles on Business and Human Rights (2011) set out the corporate responsibility to respect human rights; avoid, prevent and mitigate adverse impacts; and establish operational level grievance mechanisms for individuals or communities who may be adversely impacted, in order to facilitate remediation.

⁵⁵ East African Crude Oil Pipeline -ESIA, 2019

The IFC PSs provide further insight into how initiatives like the UNGC can improve the human rights performance of project sponsors. The IFC Good Practice Note on the Design of Grievance Mechanisms (Guidance Note 7 of 2009), establishes that credible and effective grievance mechanisms are part of a broader framework for companies to address human rights issues in their business operations.

The IFC PSs' furthermore require that the dignity, human rights and welfare of communities affected by development projects are protected.

The Project has commissioned a human rights impact assessment, which reviewed potential human rights impacts related to resettlement and potential vulnerable groups, including women and vulnerable ethnic groups that may self-identify as IPs. Further human rights review and guidance are being implemented to further assess the potential impacts that are relevant to the RAP in Geita Region and other areas.

3.5 Gap Analysis between Tanzanian Legislation and Performance Standard 5

Table 3-2 provides an overview of the Tanzanian legislative requirements and IFC PS5 with regard to resettlement and compensation. Any significant gaps between the two (2) sets of requirements are identified and a way forward is outlined to be adopted during the resettlement planning and implementation.

This RAP presents an updated gap analysis to the one presented in the RPF. The agreed way forward for all the gaps has been adopted in the RAP planning and associated activities.

This RAP confirms that, where a discrepancy exists between IFI requirements (e.g. IFC PS5) and national legislation, the more stringent of the two (2) will be used and / or applied.

Table 3-2: Comparison of Relevant Tanzanian Legislation and IFC PS5

Tanzanian Legislation	IFC PS5	Way Forward
Valuation of Land and Assets		
<ul style="list-style-type: none"> Market rates for land; Replacement cost for structures; Rates for crops and trees based on extensive research and published by the Chief Valuer (CV) (valid for up to five (5) years); and Crops in abandoned field to receive 50% of designated market value. 	<ul style="list-style-type: none"> Replacement cost not taking depreciation into account; All affected land eligible for compensation; Rates to be current; and Transaction costs to be made over as compensation. 	<p>Valuation Reports and Compensation Schedules shall introduce:</p> <ul style="list-style-type: none"> Tanzanian Entitlements (to be approved by CV) (also referred to as Part I); Additional Project-specific entitlements and / or compensation options to meet International Financing Standards (for the information of the CV) (also referred to as Part II); and Affected persons will be informed of additional entitlements offered by the Project. <p>Valuation Methodology:</p> <ul style="list-style-type: none"> Rates agreed with CV; Full replacement cost without taking depreciation into account; and Valuation of entitlements under Tanzanian law presented in a separate report from entitlements to

Tanzanian Legislation	IFC PS5	Way Forward
		meet International Financing Standards of the Compensation Schedules ⁵⁶ .
Socio-Economic Surveys		
<ul style="list-style-type: none"> • Not required. 	<ul style="list-style-type: none"> • Requires socio-economic survey. 	<ul style="list-style-type: none"> • Project will undertake socio-economic surveys of Project-Affected Households (PAHs)⁵⁷; and • Data will be used to inform the livelihood restoration and in-kind compensation options⁵⁸.
Cut-off Date for Eligibility		
<ul style="list-style-type: none"> • Cut-off date set as commencement of valuation. 	<ul style="list-style-type: none"> • Cut-off date to be established by Project. 	<ul style="list-style-type: none"> • Cut-off date triggered by valuation, in line with Tanzanian law.
Eligibility of PAP – without formal rights or claims to land / informal occupiers		
<ul style="list-style-type: none"> • Only people with recognized land use / owner rights (including customary) qualify for compensation; and • Informal occupiers do not qualify for compensation. 	<ul style="list-style-type: none"> • Informal occupiers compensated for improvements on land (i.e. for loss of assets other than land) present at the cut-off date for eligibility; • A choice of options to relocate them with security of tenure without the risk of facing forced eviction; and • Resettlement assistance to restore livelihoods. 	<ul style="list-style-type: none"> • Recognize and appropriately compensate PAPs with formal and informal land rights and those with no recognizable right or claim; • Not required to compensate those who encroach on the Project area after the cut-off date for eligibility; and • Compensation for PAPs not considered eligible under the Tanzanian legal requirements would be included within the separate Valuation Report and Compensation Schedules on additional entitlements for International Financing Standards (IFS).
In-kind Compensation Options and Resettlement Assistance		
<ul style="list-style-type: none"> • Provision of replacement land generally not offered. Regulations allow provision of a comparable plot of land or building(s); practice generally is cash⁵⁹; and 	<ul style="list-style-type: none"> • Cash compensation for land-based livelihoods is considered appropriate where the land taken is a small fraction of the 	<ul style="list-style-type: none"> • Eligibility for in-kind compensation options will be related to significance of impacts on livelihoods: <ul style="list-style-type: none"> – Persons losing only a small fraction of their land (with the remainder being economically viable⁶⁰) receive cash compensation for that land; and – In cases of significant impact⁶¹, offer eligible PAPs a

⁵⁶ It should be noted that, the valuation conducted according to Tanzanian law outlined in the Valuation Report for Geita Region is to be approved by the CV of the GoT as per Regulation 11 of the Valuation and Valuers (General) Regulations, 2018. The valuation for additional entitlements and compensation options under IFI standards as defined in IFC PS5 on Land Acquisition and Involuntary Resettlement is presented separately. Specific measures to meet these requirements in the context of this Project were also set out in the RPF developed for the overall Project and are presented in this RAP in more detail. It is understood that the additional entitlements required to meet IFC PS5 do not require the approval of the CV of the GoT but will nevertheless be shared with the CV.

⁵⁷ Findings of socio-economic studies including living standards and the livelihoods of PACs are presented in Chapter 5. The outcomes of housing studies undertaken in relation to replacement housing design are outlined in Chapter 7;

⁵⁸ Livelihood restoration and in-kind options to address IFC PS5.

⁵⁹ The Land (Compensation Claims) Regulation 2010 allows, at the option of the government, provision of 'A plot of land of comparable quality, extent and productive potential to land lost; A building or buildings of comparable quality, extent and use to the building or buildings lost.' The provision of replacement land and / or housing is

Tanzanian Legislation	IFC PS5	Way Forward
<ul style="list-style-type: none"> Range of support allowances including disturbance, transport and accommodation allowances, and loss of profits, for eligible PAPs. 	<p>affected asset and the residual land is economically viable;</p> <ul style="list-style-type: none"> Otherwise, requires choice of replacement land / housing or cash or combination; and Relocation support allowances such as for; disturbance, vulnerability, transportation and temporary accommodation. 	<p>choice between cash or replacement land / housing (i.e. in-kind compensation) or a combination of cash and in-kind compensation; and resettlement assistance.</p> <ul style="list-style-type: none"> VRs will distinguish between the standard Tanzanian entitlements of cash and the additional in-kind compensation options offered for IFS; and In-kind compensation options and additional resettlement assistance for IFS would be contained within (Part II) the additional entitlements for IFS VRs and Compensation Schedules.
Vulnerable Individuals and Groups		
<ul style="list-style-type: none"> No special support required for vulnerable groups. 	<ul style="list-style-type: none"> Additional attention and support measures to vulnerable groups. 	<ul style="list-style-type: none"> Identify vulnerable groups and provide special attention and support measures.
Timing of Compensation Payments		
<ul style="list-style-type: none"> Valuation valid for a two (2)-year period but payment within six (6) months of approval of VR by the CV, and if payment is delayed it is subject to interest. 	<ul style="list-style-type: none"> Payment prior to possession of land. 	<ul style="list-style-type: none"> Project responsible for payment of cash compensation and delivery of in-kind compensation entitlements and resettlement assistance; Compensation paid in line with Tanzanian law; Project would only seek land access after: <ul style="list-style-type: none"> Reasonable notice to vacate / yield possession has occurred (minimum of six (6) weeks); All cash compensation has been paid and eligible physically displaced PAPs have been offered and moved to permanent replacement housing⁶² (where selected and eligible) while relevant other in-kind compensation / and resettlement assistance is in process; and Required land transfer, provision of ROO to TPDC, Project lease and other arrangements are in place with relevant GoT agency.
Livelihoods Restoration		

not generally provided in practice via this regulation; rather, Tanzanian RAPs reviewed offer this through application of International Financing Standards.

⁶⁰ Assessment of the economic viability of the remaining portions of land will include consideration of other unaffected land available to the PAP, as well as this land, is sufficiently productive to ensure livelihoods can be maintained or restored to at least pre-displacement levels.

⁶¹ "Significant impact" comprises physical displacement as well as loss of all or most land available to the PAP.

⁶² The Project intends to construct replacement houses in a time frame that physically displaced PAPs affected by the pipeline corridor will move straight into replacement housing and will not need to be moved into temporary accommodation. However, there may be instances where this is required, such as where the PAPs elect to have a replacement dwellings structure constructed on their existing homestead and for safety reasons it is not considered appropriate for these households to remain living on the homestead during this construction. In such instances the Project will work closely with PAPs and relevant authorities to secure appropriate temporary accommodation and support the PAPs during this transition period.

Tanzanian Legislation	IFC PS5	Way Forward
<ul style="list-style-type: none"> Does not generally require livelihood restoration support; and Regulations allow that compensation can include plants and seedlings; regular supplies of grain and other basic foodstuffs for a specified period⁶³. 	<ul style="list-style-type: none"> Requires livelihood restoration support. 	<ul style="list-style-type: none"> Livelihood restoration entitlements committed to within the (Part II) Additional Entitlements for IFS VRs and Compensation Schedules and further detailed in the RAP as additional Project-specific entitlements to meet international financing requirements; and An LRP is presented in this RAP in Chapter 8, outlining the approach to livelihood restoration to be adopted during the resettlement process.
Land Acquisition and Resettlement Documentation		
<ul style="list-style-type: none"> VRs required; RAPs not required⁶⁴; and National Environment Management Council (NEMC) request RAPs as part of Environmental Impact Assessment (EIA) submissions. 	<ul style="list-style-type: none"> RAPs where there is physical displacement; LRPs where there is only economic displacement; and Required prior to taking possession of land. 	<ul style="list-style-type: none"> VRs (structured in two parts as noted above). The (Part I) Valuation Report for compensation under Tanzanian law will be submitted for approval to the CV. The (Part II) Valuation Report for additional entitlements under IFS will be provided to the CV for information; Project RAPs will be prepared by the Project and submitted for information and for a comments period to the relevant agencies in Tanzania⁶⁵; and As required under IFS, RAPs will be publicly disclosed, including on the EACOP Project website.
Disclosure, Consultation and Informed Participation		
<ul style="list-style-type: none"> Some disclosure is required, including on compensation rates; PAPs are given the opportunity to inspect compensation schedules following valuation; and No negotiation of compensation options. 	<ul style="list-style-type: none"> Disclosure of rates, entitlements, options and participation during resettlement phases; and Negotiation on content of compensation package⁶⁶. 	<ul style="list-style-type: none"> Disclosure of relevant information (including on rates and entitlements); Entitlement Briefings in which PAPs' valuation and compensation options are explained and PAPs are given the opportunity to select preferred options; Engagement and participation of affected persons, households and affected communities during resettlement phases; and Allow negotiation about selection of compensation options, resettlement allowance and livelihood restoration options (in terms of cash and in-kind combinations).
Grievance Mechanisms		
<ul style="list-style-type: none"> No requirement for a Project dispute resolution mechanism beyond those legal remedies. 	<ul style="list-style-type: none"> Establishment of dedicated, easily accessible, and no-cost grievance management mechanism. 	<ul style="list-style-type: none"> Establish a dedicated grievance management mechanism, at no-cost to affected people; and Complainants will still be able to seek legal remedies in accordance with the laws and regulations of Tanzania.

⁶³ Compensation for Loss of Profits is provided for in The Valuation and Valuers Registration Act, 2016. Such compensation is viewed as a form of livelihood restoration support. Further, Section 10 Land (Compensation Claims) Regulations 2010 provide that compensation shall take the form of monetary compensation, but may also include the following; plants and seedlings; and regular supplies of grain and other basic foodstuffs for a specified period. Again, such compensation is viewed as a form of livelihood restoration support.

⁶⁴ Certain licenses include the condition for a relocation plan e.g. Mining Licenses.

⁶⁵ These may include ME, TPDC, MLHSD, NEMC (and relevant ministry) and other agencies as requested.

⁶⁶ Input from PAPs and PAHs on cash vs. in-kind or combination, available resettlement support options and livelihood restoration options.

Tanzanian Legislation	IFC PS5	Way Forward
Monitoring and Evaluation		
<ul style="list-style-type: none">• No monitoring and evaluation requirement.	<ul style="list-style-type: none">• Require monitoring and evaluation.	<ul style="list-style-type: none">• Conduct process and outcome monitoring during and upon completion of RAP implementation.

4 LAND ACQUISITION AND RESETTLEMENT PROCESS

4.1 Introduction

This section describes the three-stage process (summarized in Table 4-1 and illustrated in Figure 4-1 below) that is being followed to complete land acquisition and resettlement:

Table 4-1: Three-stage Process to Complete Land Acquisition and Resettlement

Stage 1	Development of a Resettlement Policy Framework (RPF) (Described in Chapter 4, Section 4.2).
Stage 2	<p>Completion of Pre-Acquisition Activities also known as Resettlement Planning. (Described in Chapter 4, Section 4.3) including:</p> <ul style="list-style-type: none"> • Pipeline route selection; • Detailed surveys and valuations; • VRs and Compensation Schedules; • Socio-economic and livelihood investigation activities; • Replacement land and housing; and • RAPs.
Stage 3	<p>Completion of Acquisition and Granting of Rights also known as Resettlement Implementation. (Described in Chapter 11) including:</p> <ul style="list-style-type: none"> • Public purpose and conversion to General Land; • Compensation agreements; • Payment of compensation, relocation and implementation of livelihood restoration and assistance programs; • Land rights acquired by Government of Tanzania; and • Provision of compliant lease to Project for required land

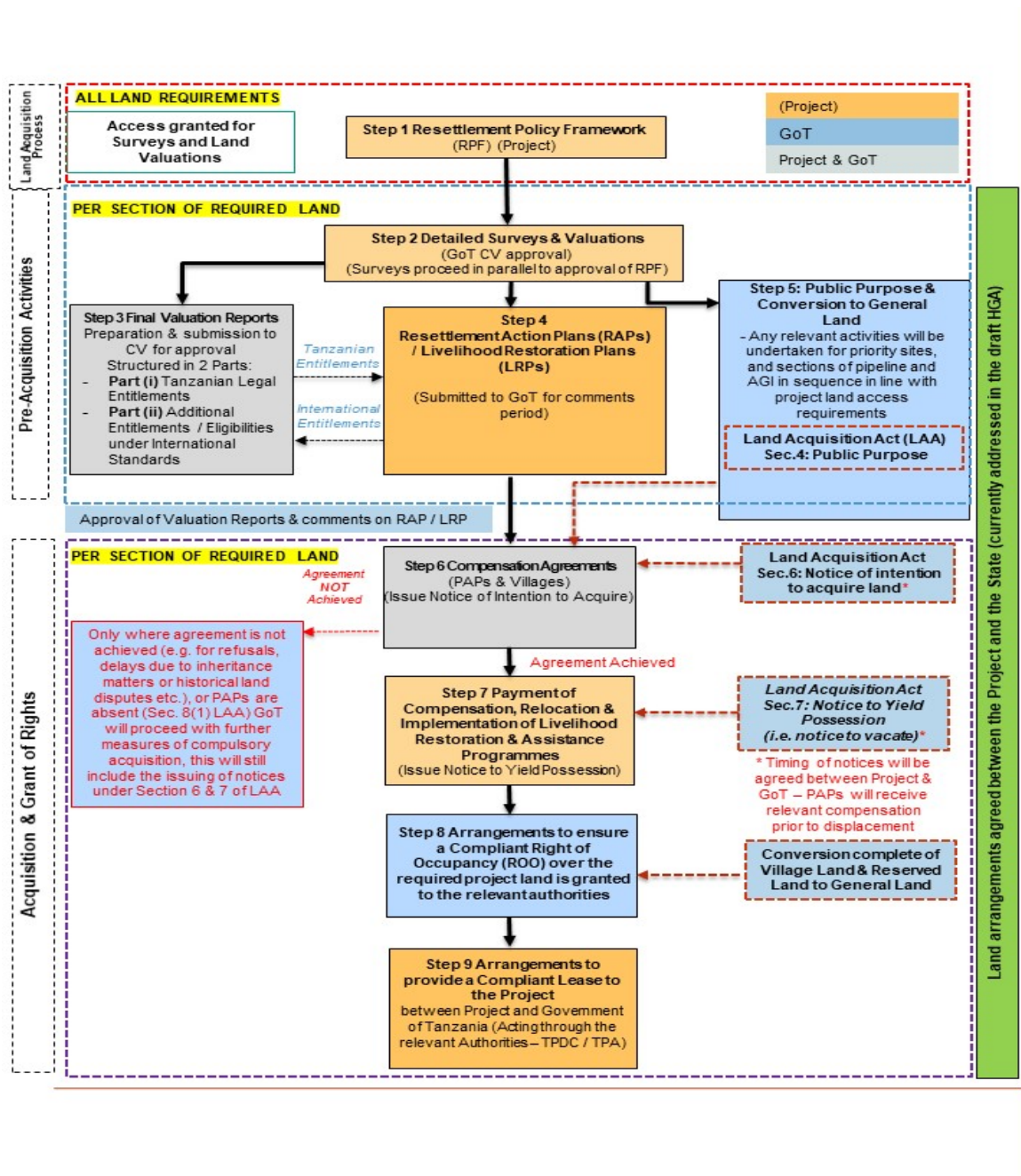


Figure 4-1: Land Acquisition Process⁶⁷

⁶⁷ All references to "State", "Government of Tanzania", "GoT" and / or the "Government" shall be construed as references to the State and / or to the appropriate State Authority, as applicable. All references to "Project" shall be construed as references to the appropriate Project vehicle, which until the full establishment of the Project Company, shall be TEAM B.V.

4.2 Stage 1: Development of the RPF

Due to the difference in size and timing of access to land that will be required, the Project decided to write nine (9) separate, but interlinked RAPs one supplemental plan and associated VRs.

These include:

- The PA RAP (already completed and disclosed);
- One (1) RAP per regional administrative geographical area being Kagera, Geita, Shinyanga, Singida, Manyara, Tabora, Dodoma and Tanga;
- One (1) Supplementary Plan for the MST site in Chongoleani, Tanga;
- Twelve (12) VRs for each district containing PAs to cover eligible assets under Tanzanian legislation and twelve (12) VRs to cover additional entitlements under IFS requirements (twenty-four (24) VRs in total for the PAs); and
- Twenty-three (23) VRs for eligible assets under Tanzanian legislation – one (1) for each administrative district council along the pipeline – and twenty-three (23) for additional entitlements under IFS requirements (46 in total for the pipeline)⁶⁸.

To guide the various components in terms of principles, approach and implementation arrangements in the land acquisition process and ensure consistency across the nine (9) individual RAPs an overarching RPF was developed.

The RPF defines the overarching principles for land access, compensation and resettlement planning, and is the precursor to the detailed RAPs and / or Livelihood Restoration Plans (LRPs) for individual Project components.

The RPF has been drafted, passed through a comments review period by the GoT and been finalized following receipt of the GoT comments. The RPF was publicly disclosed in October 2018.

4.3 Stage 2: Completion of Pre-Acquisition Activities

4.3.1 Pipeline Route Selection

The EACOP engineering team, working with additional EACOP discipline teams and contractors, was responsible for defining the corridor and AGIs footprints, including accesses and driveways, as well as the times at which land access to various footprints will be required.

Criteria used for selecting the pipeline route included those listed in Table 4-2. Some criteria resulted in certain areas being strictly avoided for these sites (e.g. internationally protected

⁶⁸ These Valuation Reports cover all Project-affected land and assets within the 27 Administrative District Councils which comprise: One (1) City Council, four (4) Town Councils and 22 District Councils. Where applicable, city councils and town councils have been combined into one report.

areas, etc.). Consideration was also given to avoid as far as possible physical displacement and, where it was not avoidable, to minimize this (Section 2.3).

Although priority was given to avoidance of sensitive areas, in selecting the final route, consideration was also given to logistics and infrastructure requirements. Close proximity to roads, railways and bridges necessary to support the construction process and long-term operation of the pipeline were taken into account.

Table 4-2: Site Selection Criteria

Topic	Criteria
Technical	<ul style="list-style-type: none"> • Steep slopes; • Wetlands (permanent and seasonal) and water bodies; • Flooding hazards; • Landslide hazards; • Karsts / Tunnels / Mines (settlement hazards); • Seismic zone with liquefaction risk and earthquake zone; • Geological features; and • Infill land and waste disposal sites, including those contaminated by disease, radioactivity or chemicals.
Environmental	<ul style="list-style-type: none"> • Internationally protected areas⁶⁹ (these areas were excluded from consideration); • Nationally protected areas⁷⁰; • Internationally designated protected areas⁷¹; • Internationally and nationally designated protected areas⁷²; • Critical habitats⁷³; and • Natural habitats⁷⁴.

⁶⁹ These included Ramsar sites / United Nations Environmental, Social and Cultural Organization (UNESCO) World Heritage Sites.

⁷⁰ These included national parks, wildlife reserves, wildlife sanctuaries, forest reserves, community wildlife management areas and high biodiversity wilderness areas.

⁷¹ These included International Union Conservation of Nature (IUCN), Category Ia, Ib and II.

⁷² These included International Union Conservation of Nature (IUCN), Category III, IV, V and VI.

⁷³ Including: Areas with high biodiversity value; habitat required for the survival of critically endangered or endangered species; areas having special significance for endemic or restricted-range species; sites critical for the survival of migratory species; areas supporting globally significant concentrations or numbers of individuals of congregator species; areas with unique assemblages of species or which are associated with key evolutionary processes or provide key ecosystem services; and areas having biodiversity of significant social, economic or cultural importance to local communities.

⁷⁴ Including: Undesignated forest / woodland areas, wetlands; land and water areas where the biological communities are formed largely by native plant and animal species, and where human activity has not essentially modified the area's primary ecological functions; and other notable biodiversity areas.

Topic	Criteria
Socio-economic / cultural heritage	<ul style="list-style-type: none"> • Industrial areas (mines, factories, power plants) (no go); • Social and community infrastructure (including places of worship); • Right-of-way (RoW) of existing or planned linear facilities; • Transport infrastructure; • Settlements (urban area, town, village); • Grazing / grass land; • Crop land / cultivated land; • Trees / timber forest; • Cash crop (e.g. tea, coffee plantation, sisal, sugar cane, banana) shrub land; • Water points / sources / wells; • Cultural heritage sites; and • Tourism facilities / sites.

4.3.2 Detailed Surveys and Valuations

As part of the survey program (that also includes the valuation process) several activities were undertaken to ultimately inform the Chato, Geita, Mbogwe and Bukombe (Geita Region) VRs and this RAP. These activities were not necessarily undertaken sequentially, with some occurring in parallel, including:

- Preparation and planning including:
 - Questionnaires and Frequently Asked Questions (FAQs);
 - Training; and
 - Team structure.
- Execution of surveys and valuations including:
 - Sensitization (announcement of surveys, valuations and cut-off dates);
 - Land delineation and adjudication surveys that includes asset verification and inspection;
 - Asset valuation surveys;
 - Socio-economic surveys; and
 - Sharing of Compensation Schedules.

Preparation and Planning

Questionnaires and Frequently Asked Questions

Preparation for the surveys included the development of customized survey questionnaires and forms (Appendix A) which were then transferred to electronic tablets and used in the field to capture survey data.

A story board and a FAQs document were also developed to provide guidance to field teams in responding to stakeholder questions on the purpose, nature and survey process.

Training

The survey teams underwent intensive five (5) day training in Dar es Salaam in May 2018. Training covered the topics described in Table 4-3.

Table 4-3: Summary of Survey Team Training Topics

Training Topic	Sub-Topics
General.	<ul style="list-style-type: none"> • General protocols and procedures (e.g. grievance management, conduct, etc.); • Survey schedule; • Health and Safety; • Use of electronic tablet technology; and • Key messaging and storyboarding.
Community Sensitization.	<ul style="list-style-type: none"> • Content for presentation to authorities and PAPs; and • Procedures to announce cut-off date.
Land Delineation & Adjudication.	<ul style="list-style-type: none"> • Land delineation methodology, quality control and data management procedures; • Identification and registration of PAPs including the roles of neighbors, local government and leaders and numbering of assets; • Application of orphaned land criteria; and • PAP refusals and absenteeism.
Asset Valuation.	<ul style="list-style-type: none"> • Valuation methodology, quality control and data management procedures; • Valuation law; • Asset Survey Forms and Asset Inspection Procedures; • PAP refusals and absenteeism; and • Validation of preliminary valuation schedules.
Socio-Economic.	<ul style="list-style-type: none"> • Survey methodology, quality control and data management procedures; and • Socio-economic survey form.

DWC and the PPT worked with the ME and MLHHS to obtain approval to undertake the valuation surveys.

The survey plan, key messages shared with local-level stakeholders, and valuation approach, were presented and discussed with the GoT representatives, including the ME, TPDC, MLHHS and other GoT stakeholders, on an ongoing basis, at the Land and Resettlement Working Group (LARWG) meetings (see Chapter 10).

Team Structure

Each survey team consisted of only Tanzanian nationals and included the following resources:

- Group leader;
- Coordinator;
- Data management team leader;
- Data management support;
- Health and Safety operative;
- First aid providers;
- Stakeholder engagement (community sensitization) team including:
 - Senior engagement resource; and
 - Engagement assistant.
- Land delineation and adjudication group including:

- Land surveyor; and
- Assistant land surveyor.
- Asset valuation group including:
 - Senior valuer;
 - Valuer; and
 - Assistant valuer.
- Socio-economic group including:
 - Team leader;
 - Supervisor; and
 - Enumerators.

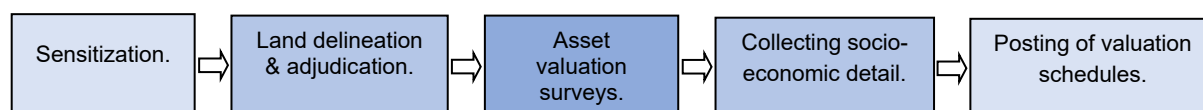
Each team was accompanied by a member of either ME, TPDC or MLHSD and an EACOP stakeholder engagement team member .

Establishment of Rates

Under the provisions of The Valuation and Valuers (General) Regulations, 2018, Whiteknights (Registered Valuers for the Project) undertook market research in the Geita Region. The research aimed at establishing current or up-to-date market values and replacement costs of compensable items. Land rates in accordance with the Market Survey presented in Appendix B: Summary of Rates Approved by the Chief Valuer as part of the Social and Resettlement Services for the EACOP, Tanzanian Section. This was submitted for approval to the Chief Valuer in May 2019 by Whiteknights Real Estate Investment Analysts Company Limited. New land rates in Chato District were approved by the MLHSD on the 23 September 2020 for use in this Valuation Report and the rates report was revised in accordance with this approval. These rates were reviewed by WK regarding meeting full replacement cost as required under International Financing Standards (see Chapter 6).⁷⁵

Execution of Surveys

The surveys were mostly conducted in the following order:



⁷⁵ Land rates in accordance with the Market Survey presented in Appendix B: Summary of Rates Approved by the Chief Valuer as part of the Social and Resettlement Services for the EACOP, Tanzanian Section. This was submitted for approval to the Chief Valuer in May 2019 by Whiteknights Real Estate Investment Analysts Company Limited. New land rates in Chato District were approved by the MLHSD on the 23 September 2020 for use in this Valuation Report and the rates report was revised in accordance with this approval.

Survey teams were accompanied by at least two (2) of the following local government officials: The district development officer, and representatives from the Village Development Council (VDC), or Village Executive Officer (VEO).

Sensitization

This step involved:

- Confirmation of survey plans and schedule with regional, district, ward and village authorities via notification letters and meetings;
- Conducting community awareness meetings in PACs to explain the nature, purpose and timing of the planned surveys;
- Announcing cut-off dates⁷⁶ to local authorities and households;
- Authorized District Land Officers (DLOs) (with support from the survey team) communicated the intent of the asset valuation survey and registration process, procedures involved; and
- PAPs⁷⁷ were identified and arrangements made to enable them to be present during survey activities.



Figure 4-2: Sensitization and Engagement Meeting in Ikobe Ward, Ishigamva Village

The timing of the above actions, for each village is set out in Table 4-4, which also includes key fieldwork and cut-off dates.

⁷⁶ The cut-off date in Tanzania coincides with the start of the asset valuation process (which includes community sensitization). The cut-off date and its implications were communicated to affected households and local authorities.

⁷⁷ PAPs include owners and / or users of affected land, houses, economic trees, other improvements on land, crops and other assets.

Table 4-4: Sensitization and Cut-Off dates for Villages in the Geita Region

Ward	Village	Date of Sensitization Meetings	Valuation Cut-Off Date
Chato			
Nyamilembe	Nyambiti	21-May-18	21-May-18
Ichwankima	Busalala	17-May-18	17-May-18
Ilemela	Ilemela	24-May-18	24-May-18
	Nyambogo	28-May-18	28-May-18
	Nyagh'omango	29-May-18	29-May-18
Katende	Chabulongo	01-Jun-18	01-Jun-18
	Katende	04-Jun-18	04-Jun-18
	Mwabaruhi	05-Jun-18	05-Jun-18
Bukome	Mkungo	08-Jun-18	08-Jun-18
Makurugusi	Makurugusi	11-Jun-18	11-Jun-18
	Kasala	12-Jun-18	12-Jun-18
	Musasa	17-Jun-18	17-Jun-18
	Kamanga	13-Jun-18	13-Jun-18
Bwanga/Minkoto	Minkoto	14-Jun-18	14-Jun-18
Iparamasa	Ilelema	23-Jun-18	23-Jun-18
	Iparamasa	22-Jun-18	22-Jun-18
	Imarabupina	21-Jun-18	21-Jun-18
Geita			
Magenge	Igando	30-Jun-18	30-Jun-18
Mbogwe			
Lulembela	Nyikonga	09-Jul-18	09-Jul-18
	Lulembela	11-Jul-18	11-Jul-18
Ikungigazi	Ikungigazi	12-Jul-18	12-Jul-18
	Ibambula	13-Jul-18	13-Jul-18
Lulembela	Kashelo	19-Jul-18	19-Jul-18
Ikobe	Kagongo	16-Jul-18	16-Jul-18
	Ikobe	18-Jul-18	18-Jul-18
	Ishigamva	17-Jul-18	17-Jul-18
Nyakafulu	Lubeho	30-Jul-18	30-Jul-18
	Shinyanga B	30-Jul-18	30-Jul-18
	Shinyanga A	31-Jul-18	31-Jul-18
Bukandwe	Bukandwe	01-Aug-18	01-Aug-18
	Kanegere	31-Jul-18	31-Jul-18
Ng'omolwa	Kabanga	01 Aug 18	01 Aug 18
Bukombe			
Lyambamgongo	Kagwe	20-Jul-18	20-Jul-18
Bukombe	Kidete	24-Jul-18	24-Jul-18
	Bukombe	24-Jul-18	24-Jul-18
	Ilalwe	25-Jul-18	25-Jul-18
	Nasihukulu	25-Jul-18	25-Jul-18

Land Delineation and Adjudication Surveys

This involved:

- Adjudication of land parcels;
- Recording the boundaries of affected land parcels as well as data on land users - in most cases this included the participation of neighbors to confirm their respective boundaries;
- Collecting data on each PAP and assigning a valuation number;
- Taking a photograph of each PAP where possible;
- In cases where land parcels partially overlapped with the Project footprint, information was collected to identify orphaned land⁷⁸ that will have to be acquired; and
- Issuance of a Land Form No. 69 signed by the DLO for the particular district.

The Land Delineation and Adjudication Survey groups were accompanied by at least two (2) of the following local government officials: The DLO, representatives of the VDC, the VEO and neighbors to confirm boundaries.



Figure 4-3: Land Delineation and Adjudication Surveys in Magenge and Katende Wards

Asset Valuation Surveys

The asset valuation surveys were undertaken by Tanzanian valuers and included the following:

- Recording information on affected buildings and structures, businesses, land parcels, crops, economic trees and graves;
- Compiling an asset inventory for each PAP or tenant⁷⁹ where relevant;
- Recording geographical coordinates of each asset, except trees, crops and land;

⁷⁸ Orphaned land is unaffected land that, due to its size, shape, access and / or economic value, is no longer enough for its former use. Where the remnant of land is less than 0.5 acres outside a city, municipality or township the Tanzanian legislation defines it as being subject to acquisition in its entirety, alongside the rest of the land required.

⁷⁹ Where a PAP owned or used assets (e.g. growing crops and trees) without accompanying land rights (e.g. customary ROO) a separate 'Tenant' asset survey was completed.

- Photographing buildings and other structures (see Figure 4-4);
- Completing sign-off of each complete asset inventory by the registered valuer, PAP and local authority representative;
- Issuing Land Valuation Form No. 3 to each PAP; and
- Recording communal assets (e.g. wells, places of worship, markets, etc.) and collecting sign-off from the relevant village authorities.

Asset valuation teams were accompanied by at least two (2) of the following local government officials: The District Valuer (DV), VDC representatives and the VEO.



Figure 4-4: Examples of Dwellings and Structures Recorded as part of the Survey Process.

Socio-Economic Surveys

These surveys involved the collection of demographic and socio-economic information⁸⁰ about PAHs, including all PAPs, through interviews with an adult household member.

Posting of Valuation Asset Schedules

Immediately after the surveys, field teams posted the summary of contents of Valuation Form No.3 in asset schedules i.e. inventories of all assets for each PAP that would be considered for compensation in each affected village.

4.3.3 Valuation Reports and Compensation Schedules

This section describes:

- Validation of assets;
- Compilation of VRs and compensation schedules;
- Disclosure of compensation schedules; and
- Sign-off, submission and verification of VRs.

Validation of Assets

⁸⁰ The socio-economic survey data has been used to assist in the identification of livelihood restoration options. It also forms the baseline against which monitoring of livelihood re-establishment will be done during the RAP implementation period.

The posting of asset schedules on village notice boards described above was followed by an asset validation exercise whereby PAPs were given an opportunity to express observations and / or concerns in respect of the valuation exercise and to point out any deficiencies and / or inconsistencies in the asset identification and capture. These were then addressed and corrected where needed after which, assets were valued, and compensation figures determined. The approach to calculating compensation can be found in Chapter 6 and a summary of assets is provided in Chapter 7.

During the validation process PAPs were also informed of any modification in land requirements that may have resulted from an internal assessment of provisional survey findings, and associated implications for final valuation.



Figure 4-5: Validation Meetings in Mwabaruhi and Kidete Villages

Compilation of Valuation Reports

Following the completion of the validation process, Whiteknights prepared the VRs, for submission to the CV. The final VRs and Compensation Schedules addressed the following:

- **Tanzanian Entitlement items** which are in accordance with the national legislative procedure, presented as cash compensation, and submitted for approval by the CV (also referred to as Part I); and
- **Additional Entitlements for items under IFS** required to ensure that the PAPs compensation satisfies additional international financing standards obligations (also referred to as Part II). These items are appended to the compensation schedules and have been made known to the CV but are not signed off by the CV, to avoid creating a precedent for future government-led projects. Some of the additional entitlements take the form of in-kind compensation options and livelihood restoration. These aspects are outlined in detail in Chapter 6 of this RAP.

Disclosure of Compensation Schedules

Once a VR and Compensation Schedule is prepared, disclosure of the Compensation Schedules is carried out in accordance with Regulation 64(f) (iii) of the Valuation Regulations, 2018.

The particular Regulation states that a "...compensation schedule which shall contain names of Project-affected persons, valuation identity number and photograph, compensable items,

amount, allowances and the same shall be available for inspection by all PAPs for a period of not more than seven (7) days from the day of disclosure."

The process to be followed will include:

- Prior engagement with government entities⁸¹ to provide an update on the status of the Project and the purpose of the planned disclosure exercise;
- These meetings will be followed by meetings in each of the affected villages with individual PAPs, to present the findings of the asset valuation process. This includes the disclosure of:
 - Property sizes;
 - Identified assets;
 - Applicable entitlements to each PAP; and
 - Proposed compensation amounts.

In the interest of safety and security (especially for vulnerable households), it was decided, in agreement with the CV, that the full compensation schedules should not be displayed in public but that compensation schedules will be made available to individuals for a maximum duration of seven (7) days at a public location within the relevant ward. Grievances lodged by PAPs during the disclosure process will be recorded in writing.

The valuations activities undertaken during the disclosure process in the Geita Region marked the date for the valuation of the last person's interest. The date for the valuation of the last person's interest for Chato was 30th September 2020, Geita 17th October 2019, Mbogwe 26th October 2019 and Bukombe 23rd October 2019, respectively. The VR for each district has to be approved by the CV within six (6) months from the "Date of Valuation of the last person's interest"⁸².

Sign-off, Submission and Verification of Valuation Reports

Once preparation of the VR and compensation schedule has been concluded (including addressing all necessary changes e.g. responses to PAP grievances and / or concerns), the final compensation schedule must be endorsed in the following sequence:

1. Field valuer;
2. Valuer in-charge;
3. Village Executive Officer;
4. Ward Executive Officer;
5. Authorized Land Officer;

⁸¹ The following individuals are generally consulted prior to the PAP engagement: RC, DC; DED; DLO; DV; Ward Executive Officer (WEO); VDC; and VEO.

⁸² The Valuation Act, 2016 and Valuation Regulations, 2018.

6. Authorized Valuer ; and
7. District Commissioner.

Once the compensation schedule has been endorsed by the above-mentioned officials, both the VR and compensation schedule are submitted to the CV for approval. Each VR will be supported with the following:

- A transmittal letter;
- Valuation Form 5 (submission of VRs for compensation purposes); and
- Exchequer receipt for the valuation approval fee.

The CV's office, as per Section 51 of the Valuation and Valuers (General) Regulations, 2018, may initiate a verification process.

The PAP compensation agreement signoffs and compensation payments can only be undertaken after the CV approval of the VRs. This is covered in Chapter 11: Implementation of Land Acquisition and Resettlement.

After approval of the VR and compensation schedule by the CV, compensation must be paid within six (6) months from the date of approval otherwise the compensation amount attracts interest charges. The validity period for valuations for compensation is two (2) years from the date of approval of the VR and compensation schedule by the CV.

After the two (2) years, the VR and Compensation Schedule are no longer valid, and a new VR and Compensation Schedule needs be prepared in addition to the land and assets surveys having to be redone.

4.3.4 Conversion to General Land and Relocation

Land for the Project will be acquired on the basis that it is required for the public interest. The majority of land acquired for the Project will be converted into general land by the GoT.

At the time requested by the Project, the GoT in coordination with the Project shall issue (publish in the Gazette and serve, as required by Tanzanian Law) the Notice of Intention to Acquire (Section 6 LAA)⁸³ to PAPs identified by the Project. It is envisaged this would occur generally after approval of the VRs by the CV and prior to the meetings with the PAPs and affected communities regarding compensation agreements.

Entitlement briefings will be conducted at village level and will involve presenting entitlements to PAPs (including the PAP and spouse where appropriate) and discussing entitlement options with them. PAPs will be given the opportunity to make informed decisions regarding the compensation and livelihood restoration options they select.

⁸³ The GoT will undertake the necessary steps, in collaboration as appropriate with the Project, for the Notice of Intention to Acquire to be issued in accordance with the LAA. This is expected to include, but not be limited to: All required approvals from village, ward, district, regional and national authorities; resolution of any related planning matters; necessary surveys and reports; notices as prescribed under the legal framework and the publishing of these, as required, in the Government Gazette. The Project shall provide necessary resources to assist the GoT in the delivery of the notices of intention to acquire in line with the LAA, including the approach for absent owners (Sec. 8(1) LAA).

Once eligible PAPs have selected their preferred compensation and livelihood restoration options, the compensation agreements will be signed by the PAPs and witnessed. The compensation agreements will include a spousal consent (where appropriate). At the time of writing discussions are still underway between the GoT and the Project on the modalities and signing arrangements for the compensation agreements.

Once agreement on compensation is reached, compensation will be paid (or, as applicable, relevant amounts will be placed in escrow). Cash compensation payments will be deposited directly into the bank account of the beneficiary and spouse (if married).

The Project will undertake necessary actions and support PAPs to ensure security of tenure for replacement land. PAPs eligible for in-kind compensation and livelihoods restoration will be assisted in accordance with this RAP, the Project objectives and the compensation agreements.

4.3.5 Socio-Economic and Livelihood Investigations

Understanding the socio-economic profile and livelihood systems of PACs, PAHs and PAPs, including Vulnerable People (VP), that allow appropriate mitigation measures and livelihood restoration to be developed, form a critical part of this RAP.

The research and collation of information to complete this task was the responsibility of the Socio-economic and Livelihood Investigations (SELI) team and this section provides a summary of this team's work in the Geita Region. The main objectives of the study included:

- Undertaking an assessment of pre-resettlement livelihood activities as a basis for developing effective and sustainable livelihood restoration strategies. This allowed the development of a detailed understanding of the following:
 - Prevailing types of cropping land tenure, other proprietorial arrangements such as sharecropping, and any underlying customary land allocation arrangements;
 - Types and varieties of crops grown (annual, perennial, tree crops);
 - Level of inputs (fertilizer, pesticides, etc.) and use of improved varieties;
 - Typical household landholding / cultivated area;
 - Typical yields achievable in the study area;
 - Calendar of agricultural activities;
 - Crop cycles and fallow periods (this required the assessment to be done over two (2) seasons (winter and summer);
 - Relative importance of subsistence versus cash cropping;
 - Importance and role of bush land;
 - Labor inputs / amount of time invested in agriculture versus other activities;
 - Access to markets;
 - Access to agricultural expertise and extension services;
 - Availability of farm extension services (NGOs, government); and

- Market dynamics (traders).
- Gathering socio-economic baseline data on the PACs to augment the findings of the socio-economic surveys discussed in Section 4.3.2;
- Collecting data on primary and secondary livelihoods and natural resource use;
- Assessing the impacts that the Project could have on livelihoods; and
- Developing an LRP that gives PAPs and PAHs the opportunity to restore and improve their livelihoods.

Preparation and Planning

The SELI team for the Geita Region included a:

- Senior international consultant;
- Senior Tanzanian socio-economic consultant; and
- Junior Tanzanian socio-economic consultant.

The Geita Region SELI team underwent training from 8th – 13th October 2018. The table below lists the training received.

Table 4-5: Summary of SELI Team Training

Activities	Themes and Topics Covered
Workshop and Project familiarization.	<ul style="list-style-type: none"> • Introduction of team members and presentation on recent organogram distributed; • Discussion on the allocation of teams to regions; • Discussion on delivery dates for VRs and RAPs and compiling of team members rotations and schedule; • Overview of deliverables and responsibilities; and • Expected inputs into the RAP.
Training and research tool development.	<ul style="list-style-type: none"> • Qualitative research tools; • Research methods included Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs); • Interview approach (including role plays); • Stakeholder engagement approach and deliverables; • Livelihood restoration concepts; • Value-chain analysis; • Host communities (issues, risks, benefits); • Mapping of social and community services and assets; • Baseline surveys; • Vulnerable groups and sensitive receptors; • Key risks – influx, transitional support; • Identification of livelihood programs; • Identification and capacity of partners (CBOs; Govt); • Monitoring and evaluation; • Ad hoc activities; and • HSE, conduct, reporting.
On-the-job, or in-field, training.	<ul style="list-style-type: none"> • All of the above.

Execution of the Study

The SELI team undertook the fieldwork research and engagement in Geita Region from 28th March to 23rd May 2019.

The SELI team focused on gathering qualitative socio-economic data through a series of FGDs, KIs, household case studies, and observations in each of the PACs. This included:

- FGDs with PAPs, non-PAPs, members of WDCs and VDCs during which techniques were employed such as word association and storytelling;
- One-to-one meetings with opinion leaders, VEOs, executive officers and government officers to gather additional information and / or to validate specific information shared at FGDs;
- Where appropriate, additional and tailored engagement with potentially Vulnerable Ethnic Groups;
- One-to-one meetings and small group meetings with PAP during corridor walks during which land use activities were observed;
- One-to-one meetings to discuss any issues and questions FGD participants may have had but did not want to raise in the group; and
- Household case studies to understand the range of livelihood mixes, ethnic backgrounds and production levels. Factors examined as part of case studies included (but were not limited to):
 - Arrangements for access to land / criteria for selecting cropping locations;
 - Land succession versus land from communal pool;
 - Total household land resources;
 - Calendar of livelihood and agricultural activities;
 - Tree and crop varieties and cultivation techniques;
 - Level of inputs (labor, fertilizers, pesticides, etc.);
 - Crop rotation and use of fallow land;
 - Gender roles and division of labor;
 - Agricultural risks and coping strategies (e.g. drought, bush fire, insect attack, theft, losses to rodents);
 - Methods of crop handling and storage;
 - Any secondary processing that occurs within the household;
 - Relative importance of subsistence activities versus cash earning;
 - Modes of transportation (and costs);
 - Markets where produce is sold;
 - Buyers of produce and pricing arrangements;
 - Strategies for managing in times of hardship;
 - Access to common property resources (e.g. bush land) – any customary rules or limitations;
 - Household uses and resources derived common property; and

- Participation in any cooperatives, farmers' organizations, other networks for support.

In addition, the SELI team gathered and captured Project related issues and concerns raised by the participants, which were fed into the Issues Register and referred to relevant specialists. GPS coordinates of social and public services and infrastructure in each of the Project-affected wards and communities were collected and mapped.

Overall, the SELI team engaged 1,757 participants across the Geita Region.

Analysis of Existing Data and Literature

In addition to fieldwork research and engagement, as described in Section 4.3.5, the study also included an analysis of existing literature and data. This analysis included:

- Defining a relevant legislative and institutional framework associated with agriculture, agricultural land acquisition and agricultural livelihood restoration including the following:
 - Identification of government institutions responsible for agricultural administration that could contribute to the livelihood restoration planning process; and
 - Identifying any farmers' associations or Civil Society Organizations (CSOs) (universities, technical or research institutes, NGOs etc.) that may have an interest in the Project area.
- Reviewing existing reports and studies to identify any lessons learned, possible livelihood diversification and improvement options.

Findings and Reporting

The findings and recommendations of the work completed by the SELI team have supplemented existing socio-economic data, and have contributed to the development of the following areas of the RAP:

- Socio-economic conditions in the Geita Region and within the PACs (see Chapter 5);
- Identification and contextual understanding of potential vulnerable ethnic groups in the Geita Region (Chapters 5, 8, 9 and 10);
- The LRP (see Chapter 8); and
- The Vulnerable Peoples Plan (VPP) (see Chapter 9).

4.3.6 Replacement Housing and Land

Both Tanzanian legislation and IFC PS5 accommodates for (i) replacement land and (ii) replacement housing. However, in practice this is not often offered as an option in Tanzania. The replacement housing investigation is briefly outlined below and further discussed in relation to housing design and land in Chapter 7. Replacement land eligibility is detailed in Chapter 6.

Replacement Housing Investigation

This section briefly explains the field work that supported the replacement housing study completed in support of Project RAPs.

The field team responsible for the replacement housing study included:

- Registered Tanzanian architect;
- Registered Tanzanian structural engineer;
- Internationally registered architect; and
- Registered Tanzanian quantity surveyor.

The field investigations were completed following the baseline work undertaken for the concept housing designs in the PA Replacement Housing - Concept Design Report⁸⁴ with a view of expanding the work to cover the whole pipeline. An overall objective of the study across the eight (8) regions is to identify any notable differences that may impact housing needs and design such as different climatic conditions, functional and cultural norms.

For each region a list of structures to be impacted was compiled to ensure a cross section of structures across the various wards and villages was assessed. During the visit of selected impacted dwellings, the team considered:

- Size and layout of existing structures;
- Number of habitable structures in a homestead;
- Construction type and style;
- Cultural practices and traditions of potential vulnerable ethnic groups;
- Materials used in the construction;
- Use and functionality of spaces (habitation, storage);
- Use and type of ancillary, including kitchen structures and latrines;
- Number of occupants of each dwelling; and
- Other general observations including the availability of services (power, water, etc.).

In addition, the team visited hardware shops and suppliers of building materials in each region and neighboring area(s) to check the availability, quality and prices for construction materials. In particular, potential suppliers or fabrication centers for metal casement windows and grills, concrete blocks, timber, cement and concrete were targeted. These details were used in the development of costings to determine overall cost and details for inclusion in a bill of quantity for the various house types.

The findings from the field work were used as a basis for continued development and refinement of concept designs initially prepared for the PAs to confirm a set for the pipeline. The designs included prudent selection of materials to ensure that each element is durable,

⁸⁴ Replacement Housing Concept Design Report: Pipeline (2019) (Digby Wells Consortium).

fit for purpose, and generic throughout (i.e. includes standardized sizing for fittings such as doors, windows, handles etc.).

The design and selection of building materials continued from those developed for the PAs. The overall design philosophy is to provide simple, compact, and cost-effective structures that will provide an overall improvement in the standard of construction not significantly different in configuration to existing structures observed in Geita.

The designs address basic building standards and issues of comfort, health and safety including essentials such as adequate lighting and ventilation. Cultural norms and specific requirements of the PAPs, including potential vulnerable ethnic groups, such as siting and use of ablution facilities were also considered. The final position and siting of structures will address local weather conditions, i.e. prevailing wind direction and use of materials resilient to such conditions of the various localities.

An overall concept design report for the eight (8) regions has been developed. The report will include the findings of the field investigations including an analysis of local architectural styles and use of building materials, building functionality, behavioral and cultural practices, ancillary building use and design, an assessment of factors influencing the availability of building materials and costs of materials for each region including Geita. A summary of the existing dwellings and structures within Geita Region are included in Chapter 7.

4.3.7 RAP Finalization and Disclosure

The outcomes and results of all these activities are documented in this RAP.

The final draft of this RAP will be submitted to the GoT on completion, including ME, TPDC and the MLHSD, for a 30-day review and comments period prior to finalization then disclosure. The final RAP will address GoT comments received. Public disclosure of the RAP is required to meet international financing standards.

The RAP will be made available in an accessible form to Project-affected groups and other stakeholders. Future resettlement planning and implementation will account for comments made. Comments will be recorded along with any actions taken to address them.

Any changes of a material nature will be discussed with relevant GoT authorities and stakeholders and disclosed to PAPs.

A series of district meetings will be conducted to present the RAP within the affected areas.

A summary of the RAP will be provided in an appropriate format.

5 SUMMARY OF AFFECTED PEOPLE AND ASSETS

5.1 Background and Introduction

The objective of this chapter is to present a summary of the people and assets that will be physically and economically displaced by the pipeline through the Geita Region. The chapter is structured as follows:

- Section 5.2: A general overview of the Geita Region as the overall host region;
- Section 5.3: A general overview of the four (4) Project-affected Districts, namely the Chato, Geita, Mbogwe and Bukombe Districts;
- Section 5.4: A general overview of the Project-Affected Communities (PACs);
- Section 5.5: A detailed description of PAHs within the context of affected wards (and associated villages);
- Section 5.6: An overview of PAHs' requirements in terms of development support;
- Section 5.7: An overview of vulnerable ethnic groups in the Geita Region, the PACs and households affected by the Project;
- Section 5.8: An overview of vulnerable households⁸⁵; and
- Section 5.9: A summary of resettlement-related impacts.

The baseline information presented in this chapter was derived from the following sources:

- National Bureau of Statistics Tanzania (March 2013). National Population and Housing Census 2012: Population Distribution by Administrative Areas;
- Geita Region, Basic Demographic and Socio-economic Profile (2016) (based on 2012 Population and Housing Census);
- Chato District Socio-economic Profile (2014);
- Geita District Socio-economic Profile (2014);
- Mbogwe District Socio-economic Profile (2018, but based on 2012 census data);
- Bukombe District Socio-economic Profile (2017);
- Results of the RAP Socio-economic Survey undertaken by DWC (2018);
- Results of the SELI undertaken in the Geita Region by DWC (2018 / 2019);
- Tanzania ESIA Vol 1, Section 6: Environmental and Social Baseline Conditions (November 2018);

⁸⁵ Additional detail on potentially vulnerable households is provided in Chapter 9.

- Valuation Report for Compensation for Additional Entitlements under International Financing Standards for the Chato District (30 September 2020);
- Valuation Report for Compensation for Additional Entitlements under International Financing Standards for the Geita District (31st October 2019);
- Valuation Report for Compensation for Additional Entitlements under International Financing Standards for the Mbogwe District (31st October 2019); and
- Valuation Report for Compensation for Additional Entitlements under International Financing Standards for the Bukombe District (31st October 2019).

A summary of displacement impacts resulting from Project-related land restrictions in the Geita Region is provided in Table 5-1. The information presented follows the pipeline corridor from west to east.

Table 5-1: Summary of Displacement Impacts in the Geita Region

District	Ward	Village	Pipeline Length (km)	Land Parcels (No.)	Land Area (acres) ⁸⁶	PAPs (No.)	PAHs (No.) ⁸⁷	Vulnerable PAHs (No.)	Vulnerable Ethnic Group PAHs (No.)	PAHs Losing Dwellings	Buildings and Structures (No.)			Crops Affected			Economic Trees and other trees (No.)	Graves
											Residential Dwellings	Other Structures	Incomplete Structures	Crops Acres	Crops Stems	Intercropping Acre		
Chato ⁸⁸	Nyamirembe	Nyambiti Village	2.35	41	17.90	47	46	11	0	0	0	0	0	11.66	115	0.00	0	0
	Ichwankima	Busalala Village	5.28	42	39.67	33	32	14	0	1	1	2	0	21.92	313	2.46	82	9
	Ilemela	Ilemela Village	3.72	14	27.71	15	15	7	0	0	0	1	0	8.08	149	0.00	28	1
		Nyambogo Village	2.84	15	21.09	14	14	4	0	0	0	0	0	2.13	244	0.00	23	0
		Nyagh'omango Village	1.05	18	8.62	18	18	5	0	0	0	0	0	0.00	13	0.00	3	0
	Katende	Chabulongo Village	3.04	20	24.19	23	20	6	0	0	0	0	0	5.28	4	0.00	23	0
		Katende Village	4.25	51	35.06	50	47	9	0	1	1	6	1	8.22	263	3.83	285	0
		Mwabarui Village	3.92	29	29.12	39	37	10	0	2	2	1	0	11.17	106	4.73	125	1
	Bukome	Mkungo Village	5.86	52	45.20	56	52	15	0	0	0	1	0	9.68	212	2.60	243	6
	Makurugusi	Makurugusi Village	3.06	36	22.85	32	30	6	0	1	1	1	0	11.00	218	0.00	29	0
		Kasala Village	2.27	34	17.48	30	29	10	0	1	1	1	0	3.28	27	1.11	100	0
		Musasa Village	4.73	58	35.76	50	48	17	0	1	1	2	0	9.06	193	3.10	214	0
		Kamanga Village	2.25	28	17.11	24	23	10	0	0	0	0	0	2.01	285	1.97	122	3
	Bwanga	Minkoto Village	7.30	96	57.03	89	83	24	0	2	2	1	0	27.65	170	4.42	1 166	0
	Iparamasa	Ilelema Village	2.18	23	17.07	21	19	8	0	3	5	9	1	0.96	359	0.06	335	2
Iparamasa Village		1.66	21	12.84	13	12	4	0	0	0	0	0	1.29	255	0.32	217	0	
Imalabupina Village		1.37	10	10.22	8	7	2	0	0	0	1	0	0.45	239	0.65	103	0	
Subtotal: Chato District			57.13	588	438.92	562	532	162	0	12	14	26	2	133.84	3 165	25.25	3 098	22
Geita	Magenge	Igando Village	3.36	29	25.59	24	22	11	0	1	1	1	0	7.43	226	0.00	138	3
Subtotal: Geita District			3.36	29	25.59	24	22	11	0	1	1	1	0	7.43	226	0	138	3
Mbogwe	Lulembela	Nykonga Village	4.37	52	32.26	41	40	12	0	1	2	6	0	5.00	98	0.79	355	0
		Lulembela Village	0.93	9	6.94	15	12	7	0	0	0	0	0	0.42	0	1.23	71	1
		Kashelo Village	2.09	21	15.82	19	18	8	0	0	0	3	0	1.57	81	0.50	147	0
	Ikunguigazi	Ikunguigazi Village	1.71	30	13.35	29	27	6	0	5	7	2	4	1.91	124	0.00	117	5
		Ibambula Village	3.04	39	23.00	29	26	5	0	1	1	5	0	1.88	186	0.88	438	5
	Ikobe	Kagongo Village	1.98	26	14.53	28	26	14	0	2	4	3	0	3.34	17	1.85	172	0
		Ikobe Village	7.34	59	55.66	51	48	23	0	0	0	1	0	2.89	372	0.37	872	3

⁸⁶ Land area valued and compensated in each village/mtaa excluding some infrastructure crossings, such as road reserves and powerline wayleaves, which will remain.

⁸⁷ Determined from PAHs who participated in the Socio-Economic Household survey and excludes Villages/Mitaa authorities and other Government institutional PAPs, as well as individual PAPs who did not participate in the socio-economic survey.

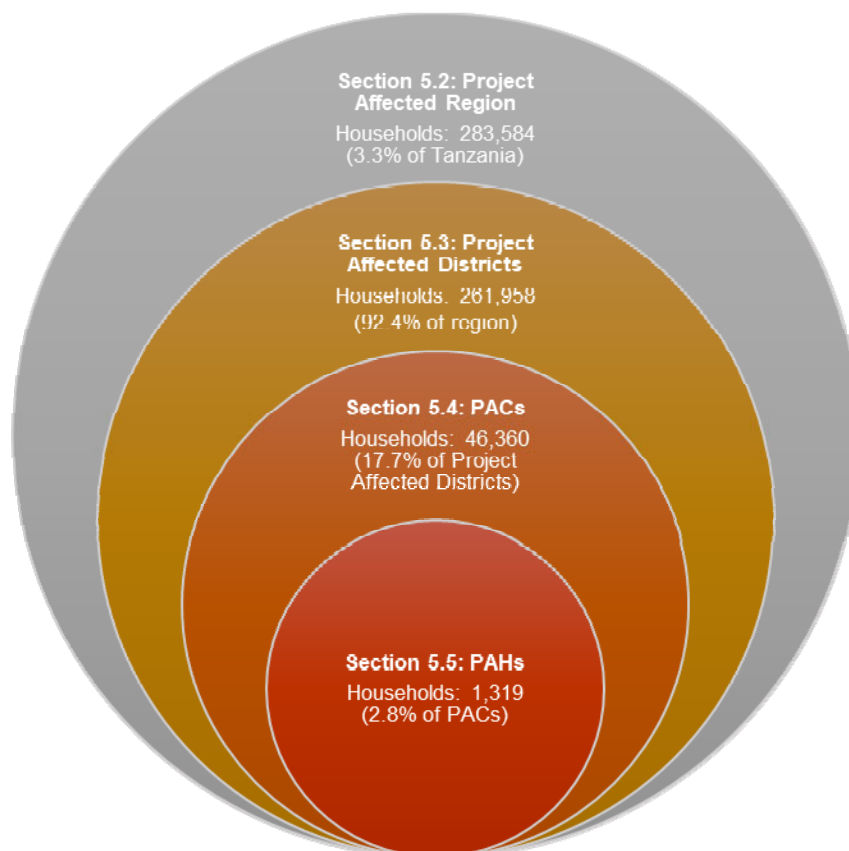
⁸⁸ This table excludes impacts of the pipeline corridor in Chato District in: Biharamulo Game Reserve – 3.43 km & 25.85 acres in Bwongera Ward and 9.40 km & 70.88 acres in Ichankima Ward; and Biharamulo Forest Reserve – 4.55 km & 34.09 acres in Bwanga Ward, 2.77 km & 20.70 acres in Butengorumasa and 6.05 km & 46.80 acres in Iparamasa Ward.

District	Ward	Village	Pipeline Length (km)	Land Parcels (No.)	Land Area (acres) ⁸⁶	PAPs (No.)	PAHs (No.) ⁸⁷	Vulnerable PAHs (No.)	Vulnerable Ethnic Group PAHs (No.)	PAHs Losing Dwellings	Buildings and Structures (No.)			Crops Affected			Economic Trees and other trees (No.)	Graves
											Residential Dwellings	Other Structures	Incomplete Structures	Crops Acres	Crops Stems	Intercropping Acre		
		Ishigamva Village	5.41	68	40.29	55	52	16	0	0	0	2	0	1.83	446	0.00	266	2
	Nyakafulu	Lubeho Village	7.22	73	53.21	51	50	14	0	0	0	3	1	1.46	344	0.23	1 497	5
		Lubeho Village PS-4	-	18	39.19	11	11	2	0	0	0	1	0	0.00	140	0.00	345	0
		Shinyanga B Village	2.59	94	20.10	82	75	16	0	3	4	10	5	1.20	366	0.21	163	5
		Shinyanga A Village	4.36	96	32.48	80	64	16	1	6	6	17	8	0.00	343	0.00	939	3
	Bukandwe	Bukandwe Village	4.07	46	30.99	37	32	10	0	1	1	0	0	0.08	358	0.10	131	0
		Kanegere Village	9.33	111	69.75	83	78	23	0	1	1	6	1	2.06	381	0.00	888	4
	Nhomolwa	Kabanga Village	7.36	109	54.86	88	83	37	0	2	2	4	0	0.00	84	0.00	196	4
Subtotal: Mbogwe District			61.80	851	502.43	699	642	209	1	22	28	63	19	23.64	3 340	6.16	6 597	37
Bukombe	Lyambamgongo	Kagwe Village	5.75	45	43.09	42	41	13	0	0	0	0	0	0.00	21	0.00	58	0
	Bukombe	Kidete Village	2.77	20	20.95	16	14	4	0	0	0	1	0	0.81	185	0.00	95	3
		Bukombe Village	3.88	53	29.73	45	42	12	0	0	0	1	0	1.83	920	0.00	252	1
		Ilalwe Village	4.54	39	35.48	28	25	14	0	1	1	0	1	0.93	315	0.00	254	5
		Nasihukulu Village	3.63	3	27.72	3	1	0	0	0	0	0	0	0.00	0	0.00	29	0
Subtotal: Bukombe District			20.57	160	156.97	134	123	43	0	1	1	2	1	3.57	1 441	0.00	688	9
TOTAL: GEITA REGION			142.86⁸⁹	1 628	1 123.91	1 419⁹⁰	1 319	425	1	36	44⁹¹	92	22	168.48	8 172	31.41	10 521	71

⁸⁹ This excludes the 12.83 km of the pipeline that traverses the Biharamulo Game Reserve and the 13.37 km that traverses the Biharamulo Forest Reserve in Chato District. When included, the total pipeline length across the Geita Region is 169.06 km.

⁹⁰ This includes 13 PAPs with land parcels in multiple villages.

⁹¹ Of these, 38 PAHs are eligible for replacement housing. See Chapter 7 for more detail.



The structure followed for the socio-economic baseline profiles is shown in Figure 5-1. .

Figure 5-1: Structure of Project-Affected Areas discussed in Chapter

5.2 Project-Affected Region

The Geita Region is located in the northern parts of Tanzania. It is bordered by the Kagera Region to the northwest, Lake Victoria to the north, Mwanza region to the east, Shinyanga Region to the southeast, Tabora Region to the south and Kigoma Region to the southwest. Prior to 2012, Geita was part of Kagera, Mwanza and Shinyanga regions. The region had an annual population growth rate of around 2.6% between 2002 and 2012, which is similar to the national population growth rate of 2.6% per annum.

The region is divided into five (5) districts, namely Chato, Geita, Nyang'hwale, Mbogwe and Bukombe Districts. Of these, only the Nyang'hwale District is not affected by the Project. The Geita Region within the broader context of surrounding regions is shown in Figure 5-2.

Unless otherwise specified, the baseline profile for the Geita Region was based on publicly available secondary data obtained from the Geita Region's Basic Demographic and Socio-economic Profile⁹².

⁹² United Republic of Tanzania (2016). Geita Region: Basic Demographic and Socio-economic Profile (based on 2012 Population and Housing Census).

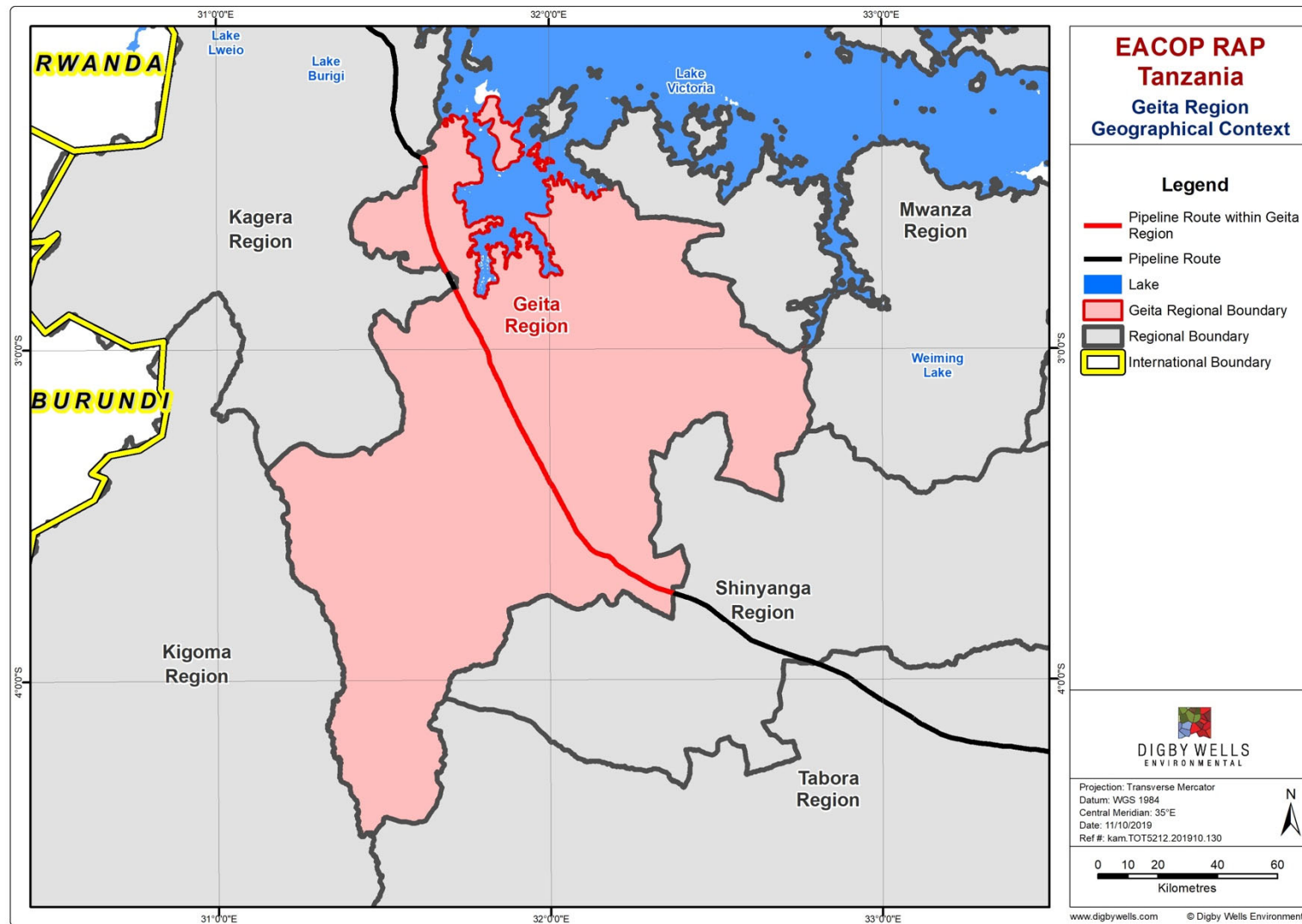


Figure 5-2: Geographical Context of the Geita Region

5.2.1 Population and Household Characteristics

Population

Geita region covers a surface area of 20,054 km² (4,955,451 acres), which accounts for around 2% of Tanzania's total land surface. In 2012, the region had a population of 1,337,718 people. Population projections put the population size in 2018 at 1,739,530 people. Most of the region's population (84%) lived in rural areas.

The region had an almost equal gender split, with females in a very slight majority (50.5%). Half (50%) of the population in 2012 were within the working age group (i.e. the ages between 15-64).

Households

In 2012, the region had a total of 283,584 households with an average household size of 5 persons per household. Most households (72%) were male headed. The average number of persons per female-headed household was more than double that of male-headed households (10.8 vs 4.2). The 2011 / 12 Tanzania Household Budget Survey (mentioned in the Geita Region's socio-economic profile) found that poverty rates increased with household size, which implied that female-headed households were more likely to be poor and therefore more vulnerable than male-headed households.

Literacy and Education

Over half (59%) of the region's population aged five (5) years and older were literate at the time of the 2012 census. The literacy rate was higher amongst males (63%) than females (59%). The literacy rate was highest amongst those aged between ten (10) and 49 (ranging between 62 and 69%). The literacy rate in urban areas was significantly higher (77%) than in rural areas (56%). The adult literacy (i.e. the literacy rate for persons aged 15 years and older) stood at 68% in 2012 and again was higher in urban areas (84%) than rural areas (65%). The overall adult literacy rate was higher amongst males (78%) than females (61%).

Ethnic Groups

The predominant ethnic groups in the region included the Sukuma and Sumbwa who were mostly concentrated in the Geita, Bukombe and Mbogwe Districts. Other important groups found in the region included the Haya, Bazinza and Nyamwezi.

In addition to these groups, there are also other ethnic groups in smaller numbers, including groups that are internationally recognized as indigenous peoples. The GoT does not officially recognize indigenous peoples. However, as will be elaborated in Section 5.7, there is clear evidence that these groups might be more vulnerable than others to displacement and other Project-induced impacts. This vulnerability stems from their semi-nomadic lifestyle and marginalization within Tanzanian society. For this reason, the term "vulnerable ethnic group" has been adopted in this RAP to refer to these groups. The four (4) vulnerable ethnic groups who self-identify as indigenous peoples are:

- The Hadzabe, who are considered indigenous to Shinyanga, Singida and Dodoma regions, have an estimated population size of around 3,000. Hadzabe reliance on hunting and gathering remains high, despite efforts from Government to introduce

agriculturally based livelihoods. They speak a language that appears to be unrelated to any other language, which is suggestive of very ancient origins;

- The Maasai, originally Nilotic pastoralists who migrated into Tanzania along the course of the Nile from southern Sudan. The range of the Maasai is divided between Tanzania and Kenya. They are the biggest indigenous group with an estimated population size of around 450,000. Within the Project-affected area, they are mostly found in Manyara, Singida and Dodoma;
- The Barabaig, with a total estimated population size of around 75,000, are traditionally similar to the Maasai groups in that they are semi-nomadic and herd cattle. In recent years, many have become agro-pastoralists and they farm maize, beans and millet.⁹³ The Barabaig are sometimes referred to by the derogatory term "Mang'ati.", but due to the derogatory nature of this term, it is not used in this RAP. Within the Project-affected area, they are mostly found in the Manyara and Dodoma regions. The Datooga (also known as the Taturu) is a Barabaig tribe and numbers around 90,000. They mostly reside in the Manyara, Arusha, Mara and Singida Regions; and
- The Akie, with a population size of around 5,000, are traditionally a hunter-gatherer people living mostly in the Arusha and Manyara regions. Besides hunting, beekeeping constitutes an important livelihood for many Akie. The Akie are sometimes referred to by the term "Dorobo / Ndorobo", but due to the derogatory nature of this term, it is not used in this RAP. Within the Project-affected area, they are found in the Manyara region.

Although the Sandawe along with the Hadzabe were once considered hunter-gatherer groups in Tanzania, the Sandawe have largely abandoned their hunter-gatherer lifestyle and adopted the agricultural lifestyle of mainstream society. Today the Hadzabe are recognized as indigenous peoples internationally, while the Sandawe are not⁹⁴. This RAP has adopted a conservative approach by including the Sandawe as a vulnerable ethnic group, even though they do not have general international recognition as indigenous people. The Sandawe mostly inhabits the Dodoma Region and has a total estimated population size of around 40,000.

Although vulnerable ethnic groups are not widespread in the region, one (1) PAH in the Geita region self-identifies as Barabaig, suggesting that isolated household from vulnerable ethnic groups live in the region. This is discussed in more detail in Section 5.7.

5.2.2 Land Use and Tenure

In 2012, around a third of households (31%) had no title deeds / documentation over the land where their main dwelling was built, while around 5% of households had a title deed.

⁹³ MRGI (2016). World Directory of Minorities and Indigenous Peoples. Minority Rights Group International website, URL: <http://minorityrights.org>.

⁹⁴ http://www.africa.kyoto-u.ac.jp/kiroku/asm_normal/abstracts/pdf/36-1/yatsuka.pdf

Most of the ownership of land was customary (56%). About 17% of households in urban areas had title deeds for the land where their houses were located, compared to 3% in rural areas.

The Geita Region Investment Profile (2013)⁹⁵ estimated that the region had 3,464,417 acres (1,402,000 ha) of arable land of which around 47% was under crop production. Of this, only about 50,420 acres (20,405 ha) were under irrigated farming. Natural resource land uses in the region included forestry, fisheries, beekeeping and wildlife.

Geita's natural forests covered around 14% of the region's land area and contributed approximately seven percent (7%) to the region's regional economy through carpentry, charcoal production, firewood, construction materials and beekeeping. Water bodies constituted 480,867 acres of the region (9.6% of the region's total surface area)) where mostly traditional fishing activities were carried out using planked boats and a variety of nets and hooks. Geita was also a prominent producer of honey with the main production area located in the Bukombe District.

Geita Region is also a gold-rich region, with resources mainly exploited by both large scale and small-scale miners.

5.2.3 Livelihood Activities

Approximately 68% of the adult population were employed in agriculture, followed by domestic services seven percent (7%), trade and commerce (6%), and mining and quarrying (5%).

Most households in the region (79%) were engaged in agricultural activities. Major food crops included maize (grown by 97% of households engaged in agriculture), cassava (69%), rice (60%) and banana (12%). Most households grew more than one type of crop.

Livestock, including poultry, played an important role in agricultural households' economy as it served as both a source of income and determined the household's social status in the community. Around 44% of the region's households kept at least one type of livestock—most of these (92%) were in rural areas. Male headed households were more likely to keep livestock than female-headed households.

5.2.4 Access to Services and Public Infrastructure

Overall, two-thirds (67%) of households used non-improved drinking water sources. More households in rural areas (71%) than in urban areas (48%) used non-improved water sources. In 2012, around 10% of households in Geita used piped water as their main source for drinking water.

The use of modern energy sources for cooking in the region in 2012 was very low, with around two percent (2%) of households in urban areas who used electricity as main energy source. Instead, households predominantly relied on firewood (67%) and charcoal (31%). In 2012, about one (1) in every ten (10) households (10%) in the region used electricity as their

95 United Republic of Tanzania: Regional administration and local government (2013). Geita Investment Profile.

main source of energy for lighting – instead households used kerosene (53%) and flashlights / rechargeable lamps (31%).

Most households (80%) used non-improved toilet facilities in 2012. These included pit latrines without washable slabs and open pits. More households in rural areas (88%) used non-improved facilities than household in urban areas (45%). Households in urban areas in 2012 used improved facilities (55%) which included flush systems and pit latrines with washable slabs and lids.

The regular collection of refuse was not very common in the region, with only 3% of households in 2012 who reported this as their main means of refuse disposal.

5.3 Project-Affected Districts

An overview of the pipeline route through the four (4) Project-affected districts is shown in Figure 5-3, followed by more detailed discussion of these districts. Unless otherwise stated, the baseline profile of the Project-affected districts was derived from the following sources:

- Chato District Socio-economic Profile (2014);
- Geita District Socio-economic Profile (2014);
- Mbogwe District Socio-economic Profile (2018, but based on 2012 census data);
and
- Bukombe District Socio-economic Profile (2017).

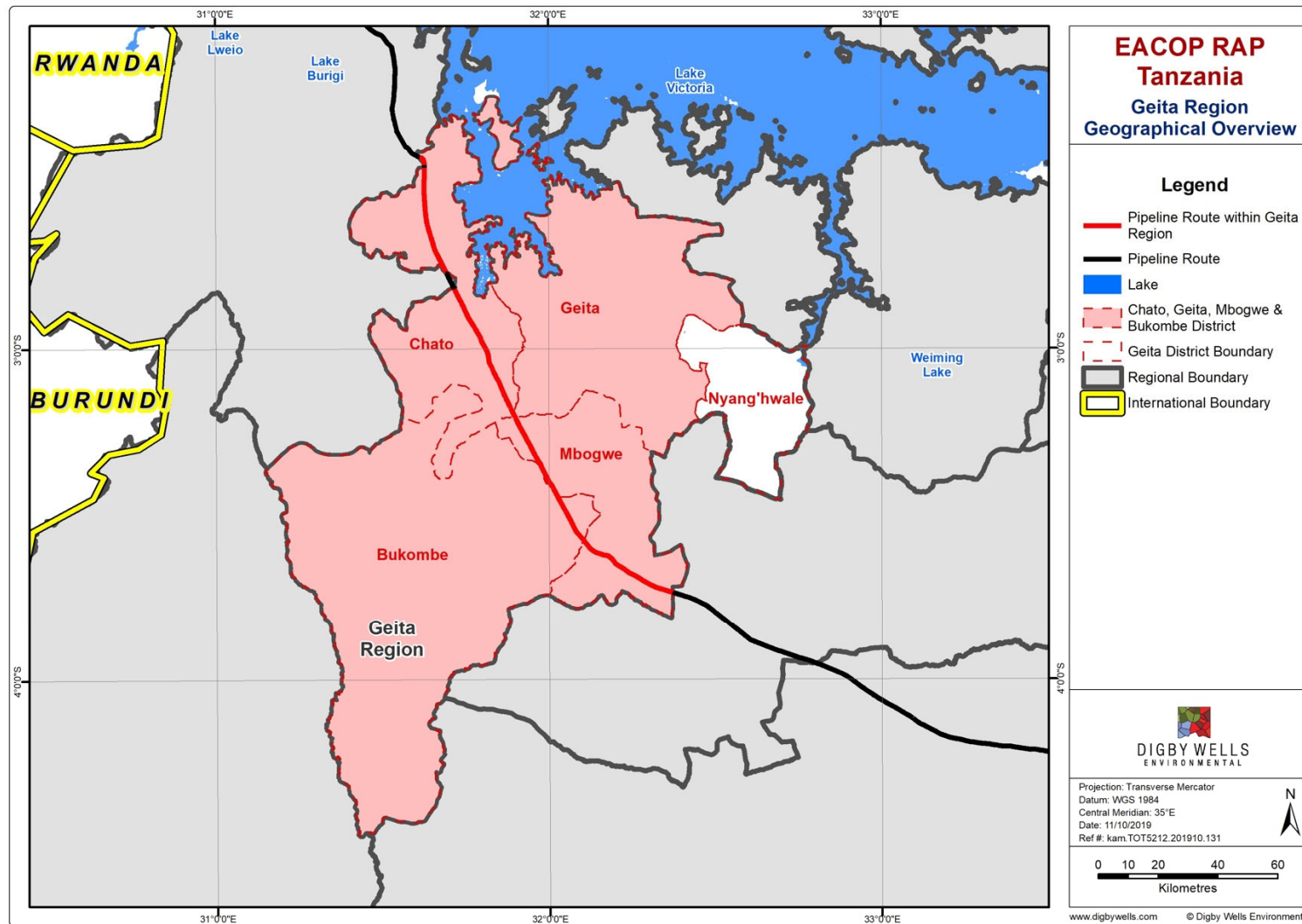


Figure 5-3: Pipeline Corridor Route Showing the Project-Affected Districts in the Geita Region

5.3.1 Population and Household Characteristics

A summary of the population per affected district is shown in Table 5-2.

Table 5-2: Summary of Population and Household Characteristics per Project-affected Districts in the Geita Region

District	Surface area (km ²)	Population	Population Density (per km ²)	Gender split (%)		Number of Households	Average Household Size	Adult Literacy Rate (%)
				Male	Female			
Chato	3 074	365 127	118.8	50	50	59 891	6.1	66
Geita	4 707	807 619	171.6	50	50	134 608	6.0	70
Mbogwe	2 281	193 922	85	49	51	29 799	6.5	64
Bukombe	8 056	224 542	27.9	49	51	37 660	6.0	66
TOTAL	18 118	1 591 210	87.8	49.5	50.5	261 958	6.1	66.5

The Sukuma were reported to be the major ethnic group in all the Project-affected districts. In-migration might have influenced the prevalence of certain ethnic groups, specifically the Sukuma in the Chato and Bukombe Districts were reported to originate from neighboring Shinyanga Region. The Sumbwa were also present in the Geita and Mbogwe Districts⁹⁶. As indicated previously, one (1) PAH in Shinyanga A village self-identifies as Barabaig, suggesting that isolated households belong to vulnerable ethnic groups reside in the Mbogwe District.

5.3.2 Land Use and Tenure

Most of the landowners across all the Project-affected districts have customary rights to unregistered land (which is not surveyed) and had no title deeds/documentation for their land.

Chato District covers a surface area of 759,601 acres (307,399 ha) of which 244,938 acres (99,123 ha or 32%) were under cultivation and 1,532 acres (620 ha or 0.2%) were used for grazing. Chato has two (2) forests; the Biharamulo Game Reserve (395,369 acres) and the Biharamulo Forest Reserve (177,915 acres), both of which are transected by the Project footprint.

The Geita District's Socio-economic profile did not contain extensive information on land tenure and land use in the district. This was ascribed to the fact that land in the Geita District had not been fully surveyed in 2012 and therefore had no updated map on its administrative boundaries or a formal land use plan.

⁹⁶ Information on ethnic groups in Project-affected districts sourced from the ESIA, Appendix A11: Socio-economic and Health Baseline Report (November 2018),

Mbogwe District has a surface area of 563,647 acres (228,100 ha) which, in 2012, was divided into three (3) main land uses: forest reserves, arable land and 'other' land uses that consisted of a variety of land uses such as settlements, roads and areas covered by outcrops. Grazing land was not formally demarcated and overlapped with arable land and land uses within the 'other' category.

Around two-thirds (60%) of Bukombe District's 1,990,681 acres (805,600 ha) was covered by forest reserves. A further 22% (437,950 acres or 177,232 ha) was used for settlements, agriculture and livestock keeping.

5.3.3 Livelihood Activities

Across the Project-affected districts, on average 77% of the labor force relied on agriculture as their main livelihood. This included crop cultivation and livestock keeping. Other livelihood activities practiced in smaller numbers included fishing, small-scale mining, and small businesses.

Major food crops in the districts included cassava, maize, sweet potatoes and beans, whereas cash crops included cotton, groundnuts and pineapples. Tobacco was also grown as a cash crop in the Mbogwe and Bukombe Districts along with watermelons, onions, tomatoes and a variety of other vegetables.

5.3.4 Access to Services and Public Infrastructure

Table 5-3 provides a summary of households' predominant access to services and public infrastructure in the Project-affected districts as at the 2012 census.

Table 5-3: Summary of Energy and Water Sources, Sanitation and Access to Public Services in the Project-affected Districts

District	Main Source of Energy for Lighting	Main Source of Energy for Cooking	Main Water Source	Main Type of Sanitation	Health Facilities	Schools (No.)
Chato	Kerosene (wick lamps) (52%)	Firewood (68%)	Non-improved (57%)	Bucket (42%) Pit latrine without slab (34%)	1 hospital 9 health centers 54 dispensaries	131 primary 24 secondary
Geita	Kerosene (wick lamps) (44%) Flashlights (21%)	Firewood (64%)	Non-improved (72%)	Bucket (39%) Pit latrine without slab (27%)	1 hospital 9 health centers 54 dispensaries	300 primary 46 secondary
Mbogwe	Flashlights (58%)	Firewood (77%)	Non-improved (51%)	Bucket (37%) Pit latrine without slab (28%)	2 health centers 14 dispensaries	81 primary 13 secondary
Bukombe	Flashlights (41%) Kerosene (wick lamps) (30%)	Firewood (55%) Charcoal (42%)	Non-improved (58%)	Bucket (34%) Pit latrine without slab (32%)	1 district hospital 3 health centers 6 dispensaries	78 primary 14 secondary

5.4 Project-Affected Communities

For this RAP, PACs were defined as the population of any ward overlapping with the Project footprint; it thus encompassed PAHs and PAPs, and also included households that resided in those wards but would not be physically or economically displaced by the Project.

Theoretically, PACs would also include host communities (communities residing in or using the land to which displaced PAHs will be relocated). However, the Project intends to relocate PAHs to nearby sites within the same village or at least the same ward, therefore avoiding the creation of separate host communities. Thus, PACs were limited to the communities within which PAHs currently resided.

This section provides a high-level overview of the PACs (grouped per ward) within the Geita Region, based on national census data (2012) and information gathered through the SELI. For a more detailed discussion on PAHs, refer to Section 5.5, which is based on primary data gathered during the SELI and household socio-economic survey.

An overview of the pipeline corridor through the Project-affected wards (grouped per district) is shown in the two figures below.

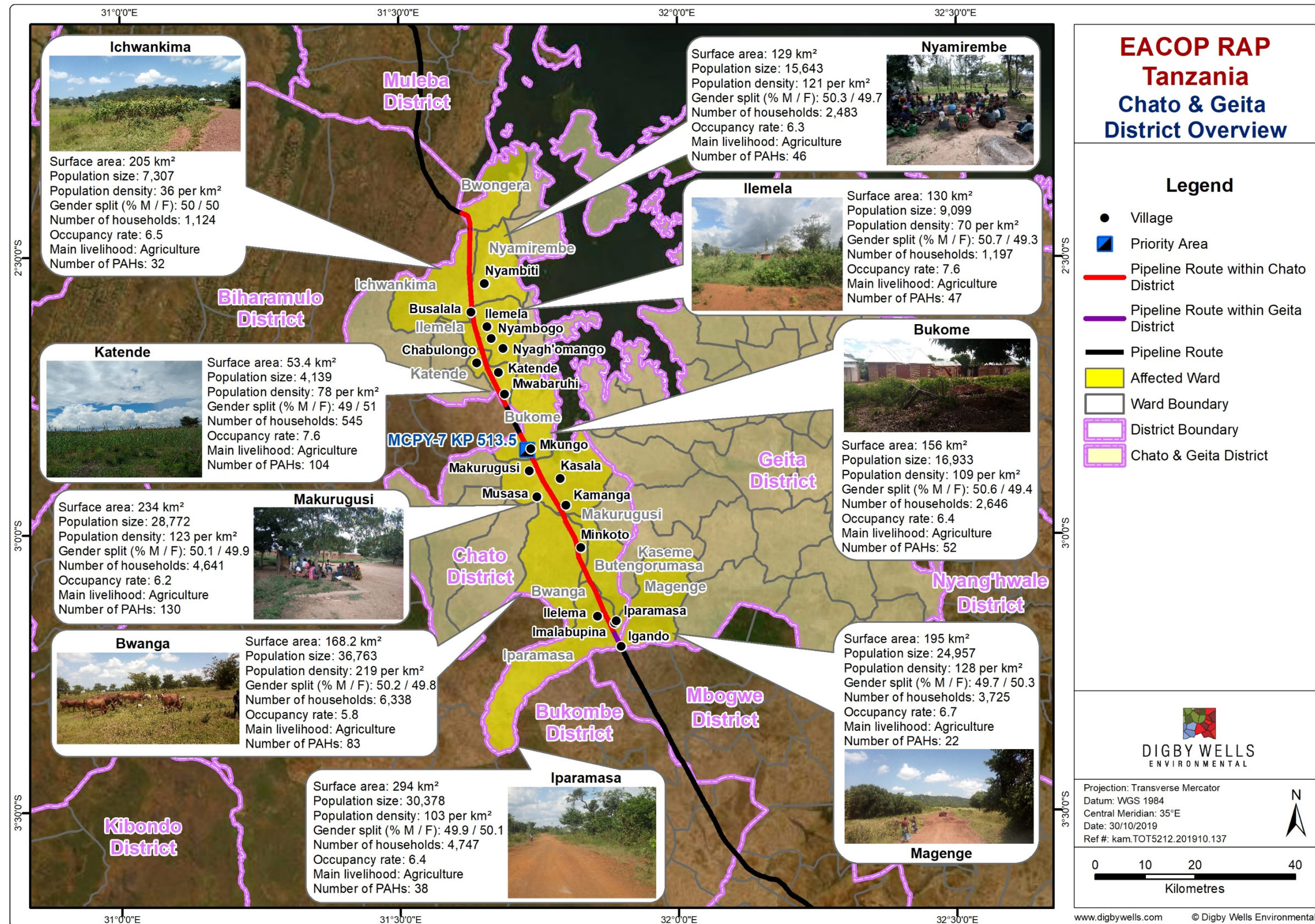


Figure 5-4: Overview of PACs through the Chato and Geita Districts

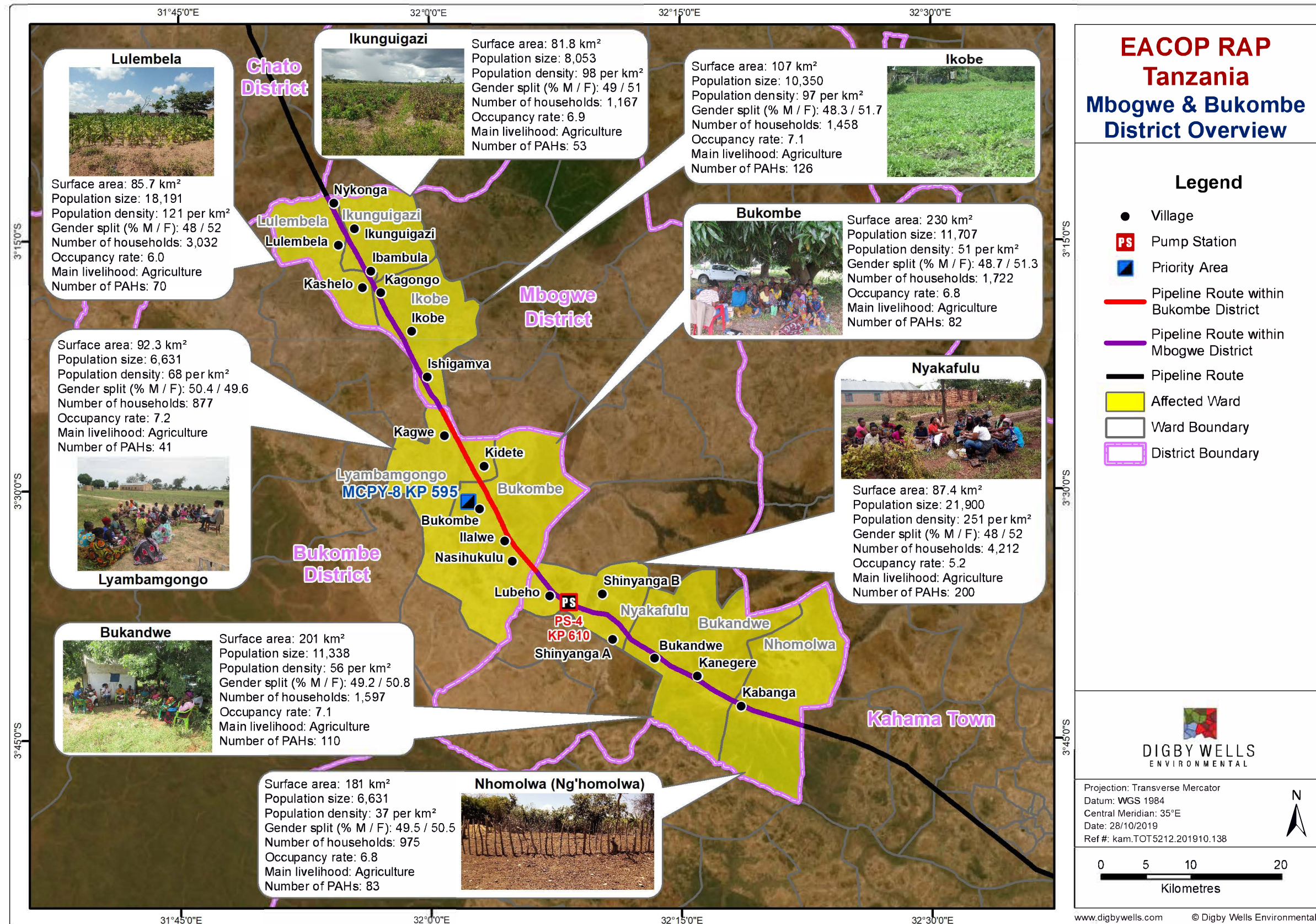


Figure 5-5: Overview of PACs through the Mbogwe and Bukombe Districts

5.4.1 Population and Household Characteristics

The surface area covered by the PACs is an estimated 2,865 km² (707,957 acres) and, in 2012, had a total population of 293,906 people. The average population density was around 102.6 persons per km². There was an almost equal split between males and females with females in a slight majority at 50.4%. The PACs consisted of 46,360 households with an average household size of six (6) persons per household.

The predominant ethnic group in the PACs is the Sukuma.

5.4.2 Land Use and Tenure

Land is largely held under customary tenure (unregistered) and used for crop production and livestock keeping.

Community Forests⁹⁷ provide PACs with construction materials like timber and poles, traditional medicines and herbs, firewood and charcoal as a source of energy for domestic use and honey as they provide habitats for bees. In some cases, the Biharamulo Forest Reserve is also used for cultural rites. A permit is required to use resources in Biharamulo Forest Reserve, but most people use it without a permit.

5.4.3 Livelihood Activities

The predominant livelihood activities in the PACs are crop farming and livestock keeping. This is in line with the livelihood activities of the region and districts, as well as PAHs.

The Sukuma are agro-pastoralists and focus on livestock keeping, rice, maize and cotton farming. Cattle are used to assist with plowing, although hand plows are also used. Sukuma households tend to have herds of cattle. Donkeys are kept mostly by the Sukuma. Donkeys, like cattle, help with transport and plowing. The Sukuma also keep goats, sheep and chicken in large numbers.

5.4.4 Access to Services and Public Infrastructure

Figure 5-6 and Figure 5-7 show the location of public services, infrastructure, and community assets for the PACs in each of the Project-affected districts, while Figure 5-8 to Figure 5-9 show the natural resources used by PACs, grouped per Project-affected district.

Data for these maps were obtained from EACOP based on information gathered informally by the field-based stakeholder engagement team.

⁹⁷ The available GIS World Database on Protected Areas 2017 shows the pipeline crossing the Uyovu Forest Reserve between 550.5 and 557.5 in Chato and Geita district. However, from field data and engagement with the District authorities and TFS it has been confirmed that Uyovu is administered as a Local Authority Forest Reserve (GN number 553 of 1958) and is not within these Districts or traversed by the pipeline corridor in the Geita Region.

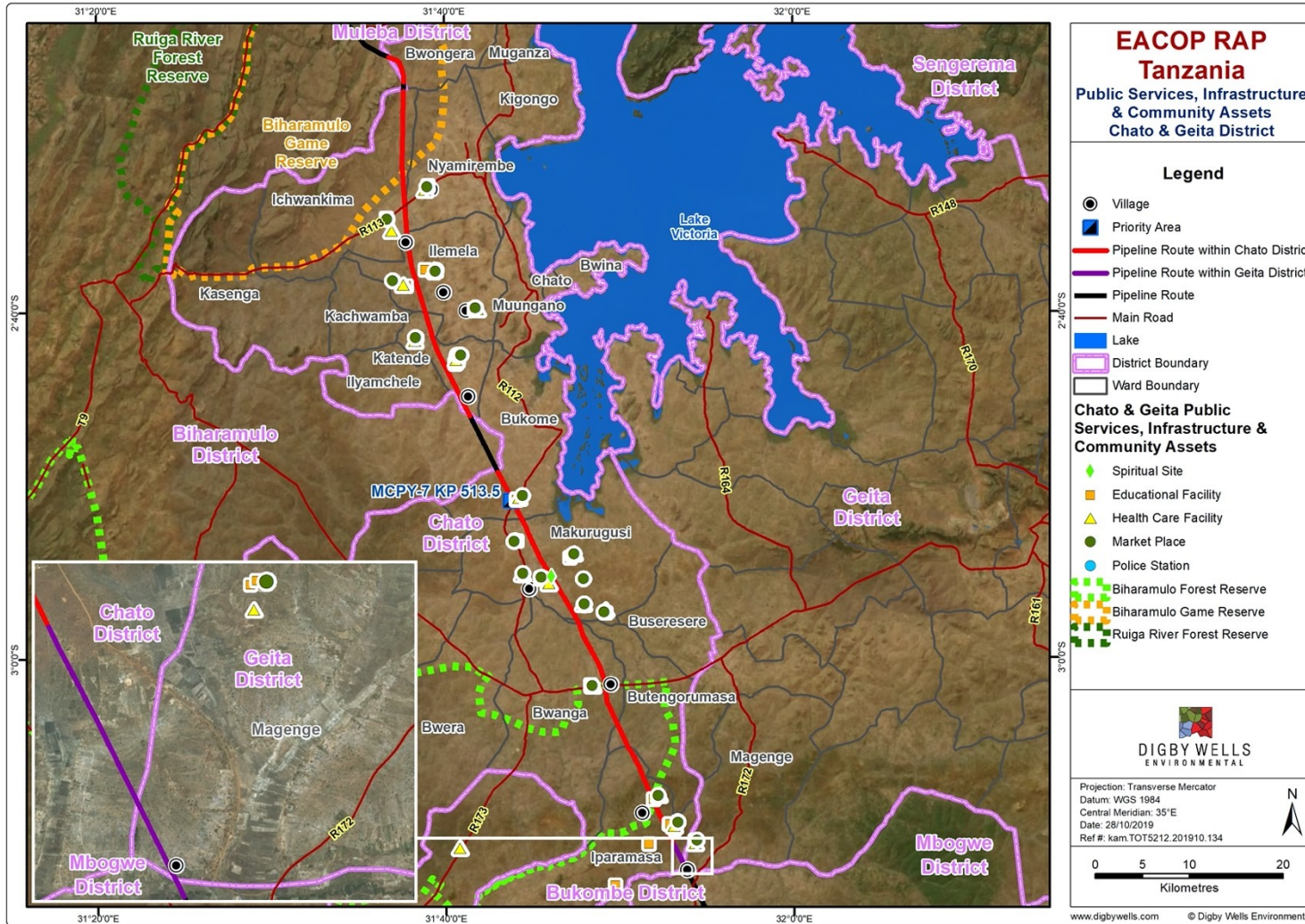


Figure 5-6 : Overview of Public Services, Infrastructure and Community Assets in the Chato and Geita Districts

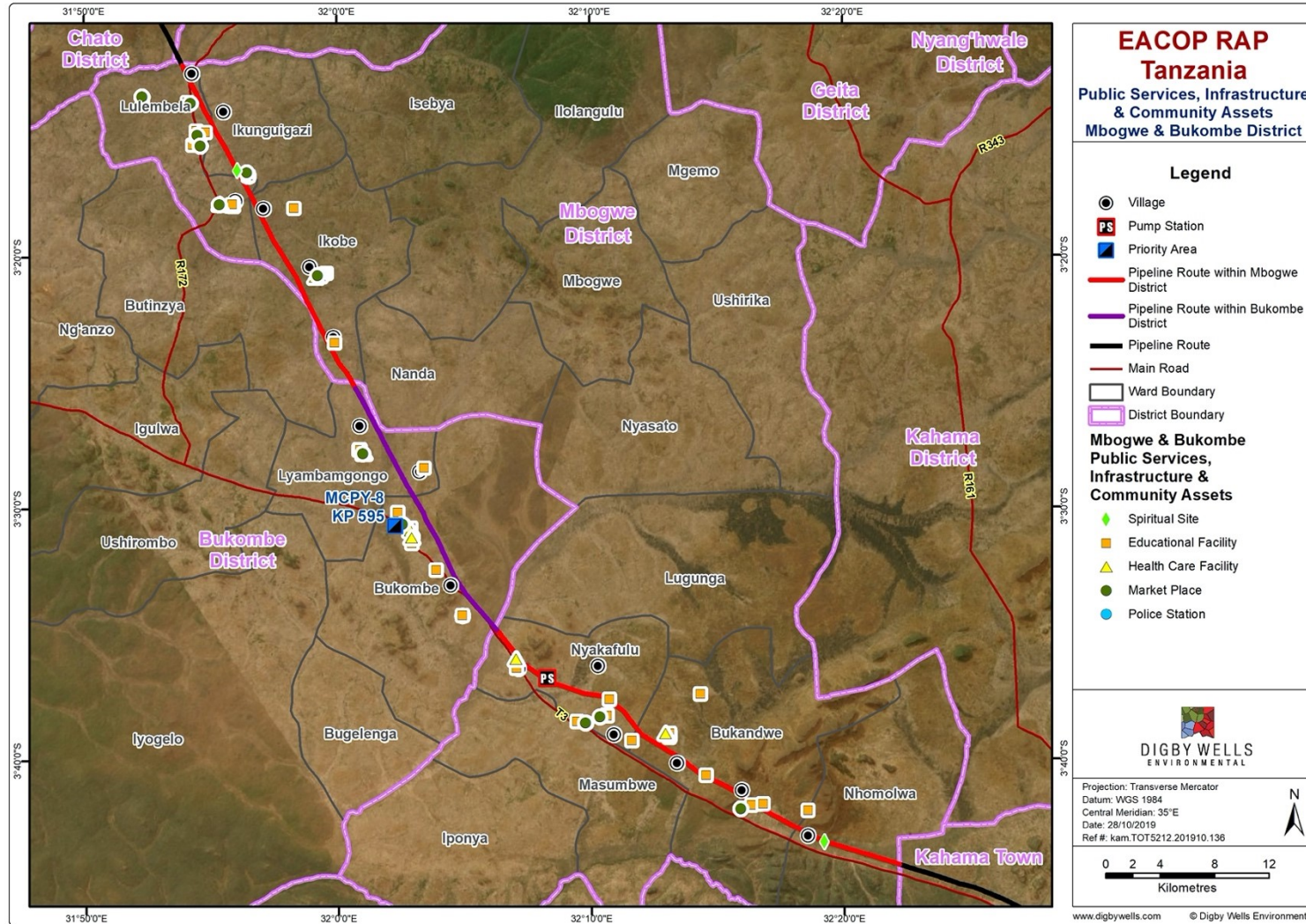


Figure 5-7 : Overview of Public Services, Infrastructure and Community Assets in the Mbogwe and Bukombe Districts

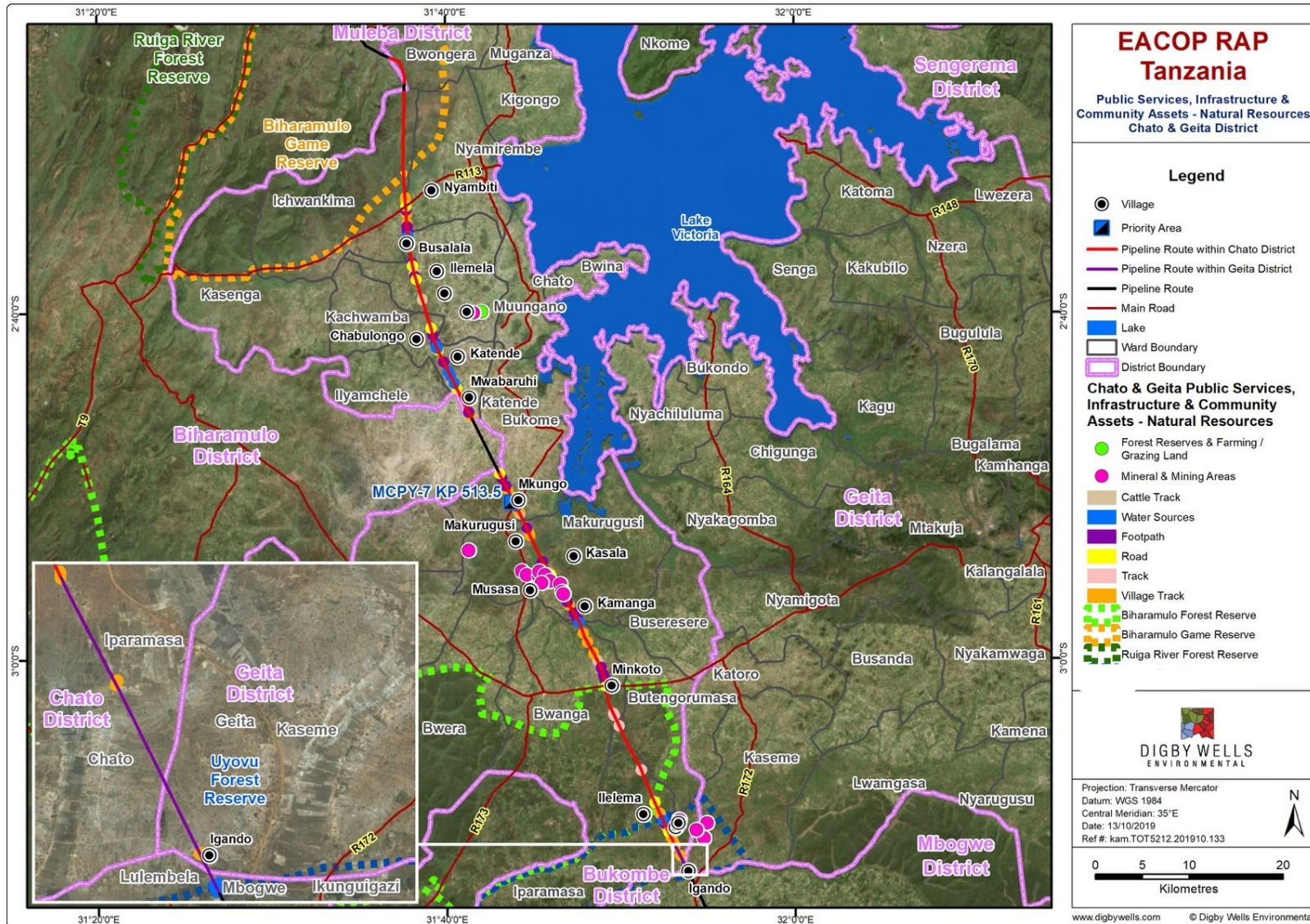


Figure 5-8: Community Access to Natural Resources Along the Pipeline Corridor in the Chato and Geita Districts

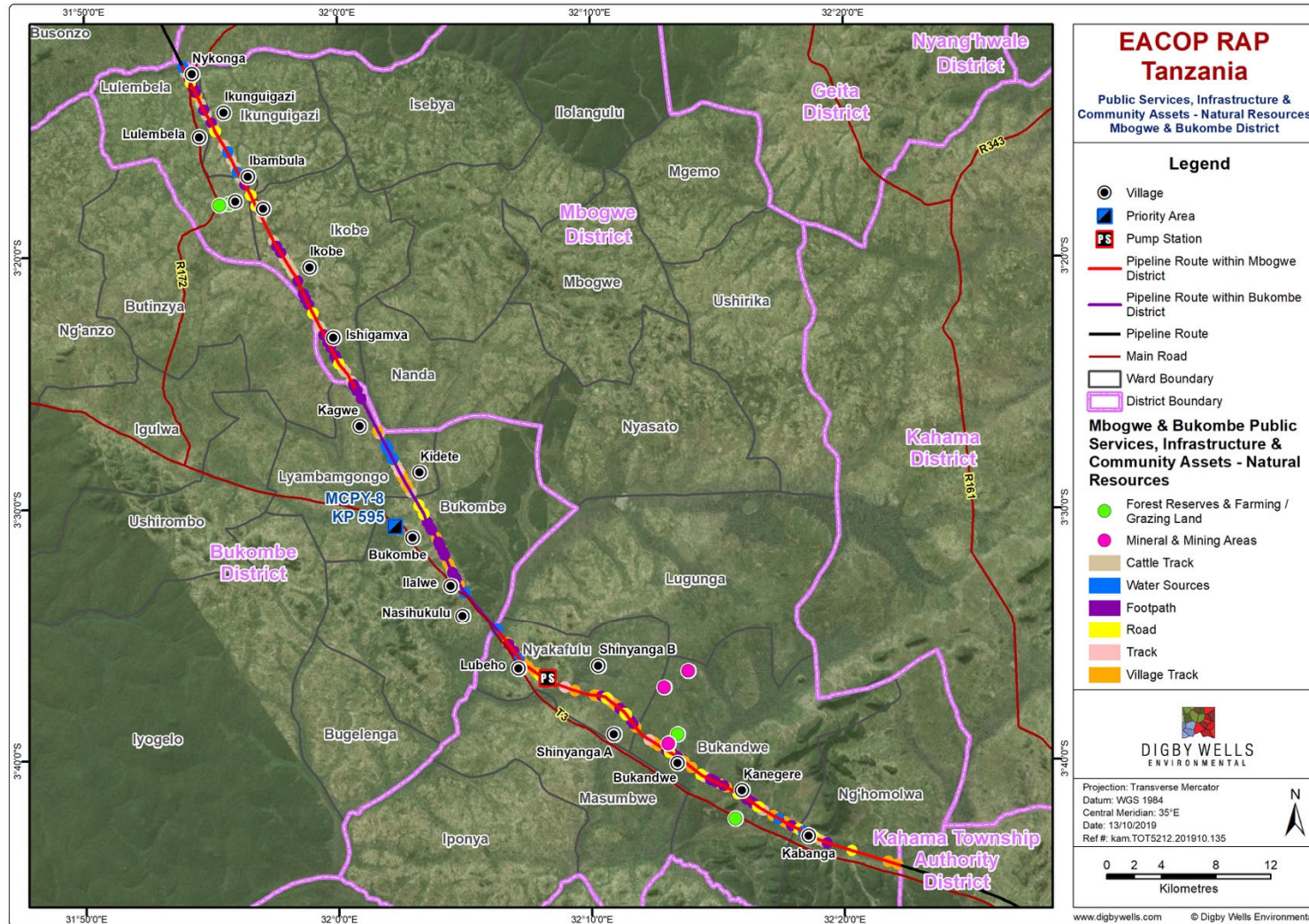


Figure 5-9: Community Access to Natural Resources Along the Pipeline Corridor in the Mbogwe and Bukombe District

5.5 Project-Affected Households

This section presents an integrated socio-economic baseline profile for PAHs within the Project-affected wards in Geita Region. The profiles have been grouped under each of the Project-affected districts, and where significant trends are evident, these have been highlighted. As with the preceding sections, the section focuses on:

- Population and household characteristics;
- Land use and tenure;
- Livelihood practices; and
- Access to services and public infrastructure.

Unless otherwise indicated, this section was based on the results of the RAP Socio-economic survey (2018) and the SELI (2018 / 19) undertaken by DWC.

5.5.1 Population and Household Characteristics

A summary of the population and household characteristics of PAHs across the affected wards (grouped per district) is provided in Table 5-4.

Table 5-4: Summary of Project-Affected Households per Affected Ward

District	Ward	Number of PAHs	Number of PAPs	Average size of PAH	Proportion of PAC Households Affected (%)	Household Head (%)		% PAHs who reside in the area permanently
						Male	Female	
Chato	Nyamirembe	46	47	9	1.9	78	22	99
	Ichwankima	32	33	12	2.8	81	19	99
	Ilemela	47	47	11	3.9	81	19	100
	Katende	104	112	9	19.1	82	18	99
	Bukome	52	56	10	2.0	85	15	99
	Makurugusi	130	136	10	2.8	88	12	99
	Bwanga	83	89	9	1.3	84	16	100
	Iparamasa	38	42	10	0.8	71	29	100
Geita	Magenge	22	24	13	0.6	91	9	99
Mbogwe	Lulembela	70	75	8	2.3	76	24	100
	Ikunguigazi	53	58	9	4.5	91	9	100
	Ikobe	126	134	9	8.6	82	18	100
	Nyakafulu	200	224	8	4.7	87	13	99
	Bukandwe	110	120	9	6.9	85	15	99
	Nhomolwa	83	88	8	8.5	76	24	100
Bukombe	Lyambamgongo	41	42	10	4.7	85	15	100
	Bukombe	82	92	11	4.8	83	17	100
Total		1 319	1 419	9.7	2.8	83	17	99.5

There are 1,419 PAPs⁹⁸, of which 1,256 are landholders, 124 tenants, and 2 informal users. An additional 37 PAPs include government institutions and villages. There are 1,319 PAHs - the largest proportion is found in Mbogwe District (642), followed by Chato District (532) and Bukombe District (123). Geita District only has 22 PAHs. Of the PAHs, one (1) is from the Barabaig ethnic group and may self-identify as being an indigenous people. See Section 5.7 for more detailed information on vulnerable ethnic groups.

The average household size across the Project-affected wards is around 10 persons per household. Across all wards, PAH members mostly (99.5%) reside in the area on a permanent basis.

⁹⁸ As indicated in Table 1-1, there are 1,407 PAPs if each of the 17 PAPs who have land parcels in multiple villages, and at the four (4) PAPs with land in PS-4 and in the pipeline corridor, are counted once only. They are double-counted here so that the total aligns with the sum of the numbers of PAPs per village.

5.5.2 Land Use and Tenure

A total of 1,879 valuations were carried out in the Geita Region⁹⁹. Of the number of valuations the predominant majority (>90%) are held under customary land tenure (unregistered), 23 under customary land tenure (registered), and 137 under tenancy.

The most predominant land use amongst valued land parcels is agriculture (1,441 or 81%). This is followed by 184 communal / village land (10%) and 132 residential parcels (7%). The remaining 2% are made up of services / institutions and grazing land.

Land is primarily held under customary tenure arrangements. WDC and VDC members as well as PAPs mentioned that land is scarce, and people rarely sell their land. Households only sell land when faced with an urgent need for money and in most cases related to the issues of sickness and food insecurity. Most of the arable areas cultivated or used for livestock grazing.

Artisanal mining was reported to be practiced in Ilemela ward (Ilemela village), Makurugusi ward (Musasa and Kasala villages) and Iparamasa ward (Ilelema village). An example of an artisanal mining site is depicted in Figure 5-10. These mining sites are located within 1 km of the pipeline corridor. The mining sites range between 2 acres and 30 acres depending on the number of land owners involved. Mining activity involves digging an initial pit of around 10 m depth. With continued use, the pit develops into shafts of up to 20 m (mostly seen at the site in Musasa. The sites in Iparamasa were mostly shallow and interconnected with short tunnels).

The key role-players in the ASM process are:

- Pit owners who finance the mining activities and provide equipment as well as the workforce/miners;
- Crushers, who are individuals from the community who crush the rocks at the mining sites before it's sent for grinding, processing and gold recovery;
- Grinders and processors, who are responsible for grinding and treatment of the materials with mercury for the recovery of gold;
- Local brokers that act as agents for the licensed brokers who purchase gold pebbles at mining sites; and
- Licensed brokers who sell the gold to national and international brokers and jewelers.

⁹⁹ Total valuations include all valuations of affected and orphaned land. A land parcel can contain a single landowner plus one or more tenants, (i.e. multiple PAPs) and therefore one land parcel can have more than one valuation. The figures reflected here are consistent with the number of **valuations**, and not the number of affected land parcels.

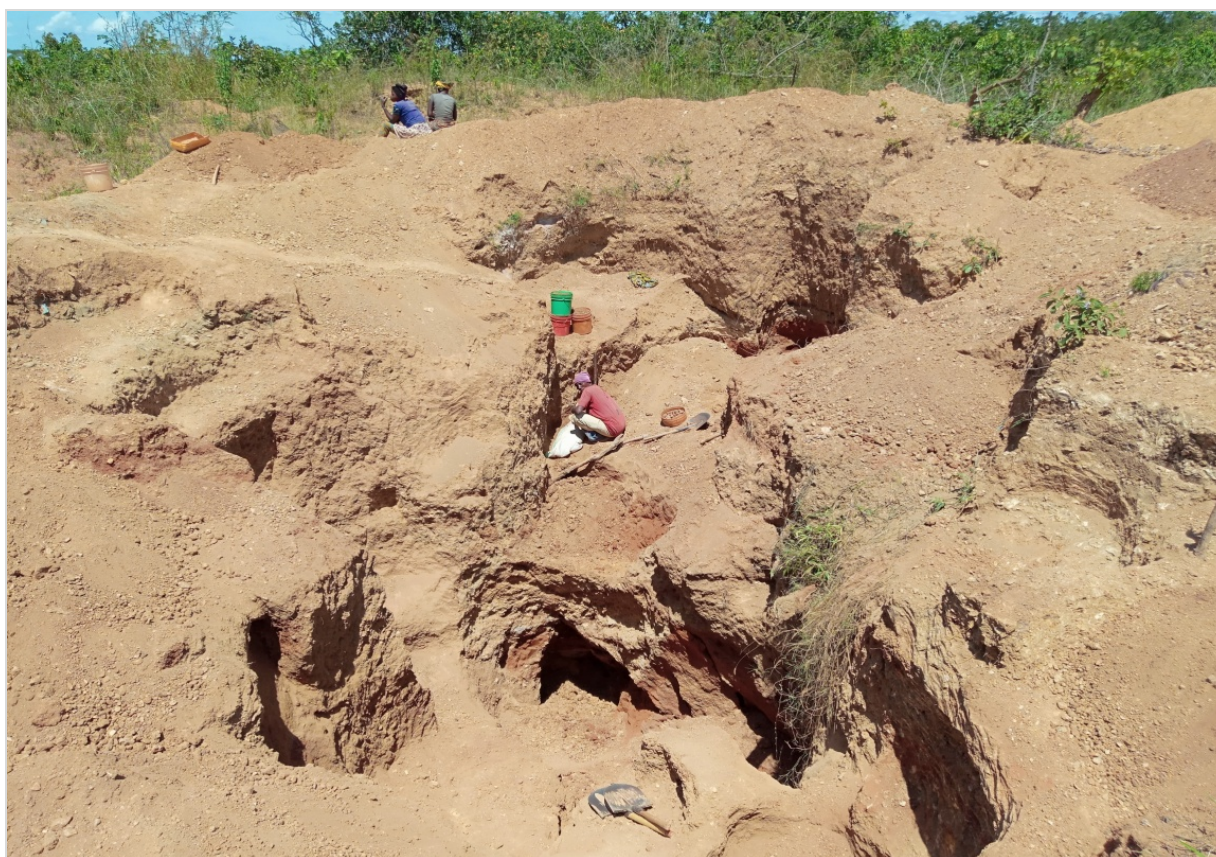


Figure 5-10: Artisanal mining in Iparamasa village

5.5.3 Livelihood Activities

PAHs' livelihood activities are discussed in detail in the following subsections. Unless otherwise indicated, the data reflected in this subsection was sourced from the RAP Socio-economic Survey and the SELI.

Primary Livelihood Activities

The most important livelihood activities of PAHs are the sale of crops (66%), followed by the households engaging in subsistence farming (23%). Other primary livelihood activities that undertaken by PAHs on a smaller scale include small trading, artisanal mining, salaried employment and the sale of livestock products. The high dependency on land-based livelihood activities has resulted in PAHs being vulnerable to food insecurity due to variations in the weather patterns. A summary of PAHs' primary livelihood activities is presented in the figure below.

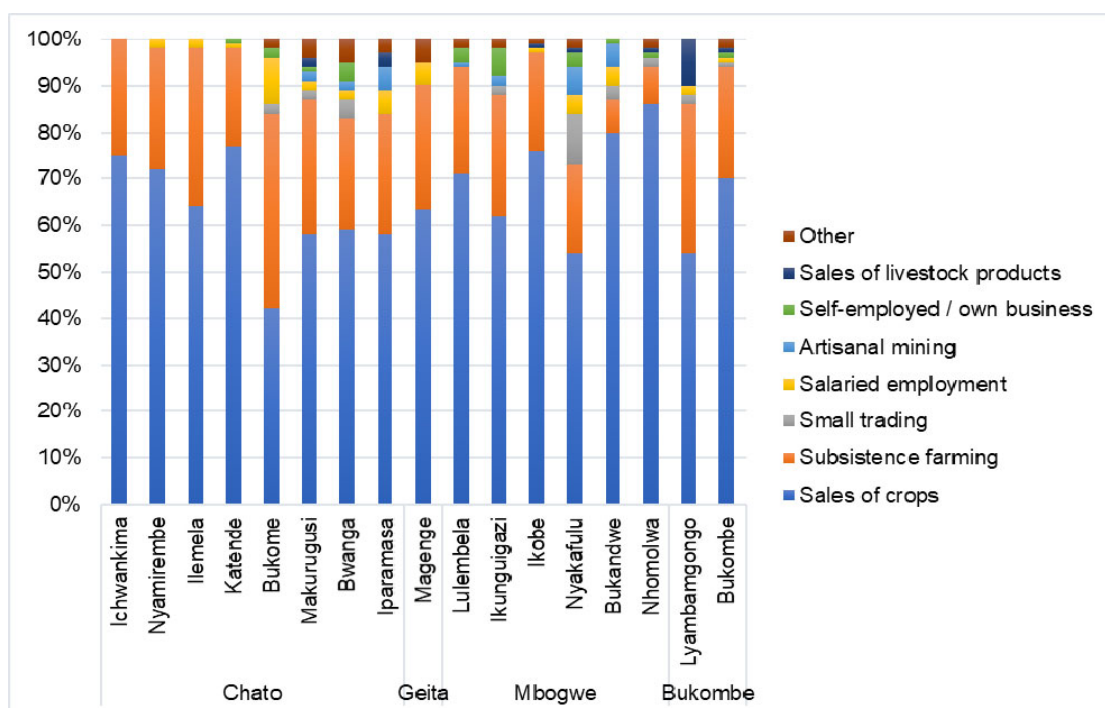


Figure 5-11: Overview of Primary Livelihood Activities in Affected Wards

Secondary Livelihood Activities

The secondary livelihood activities of PAH members reveal some level of economic diversity. The secondary livelihood activities of households comprise of the sale of livestock products (38%), followed by the sale of crops (23%), self-employment (5%), small trading (4%), subsistence farming (3%), undertaking mining activities (2%) and other activities (25%) as shown in the figure below.

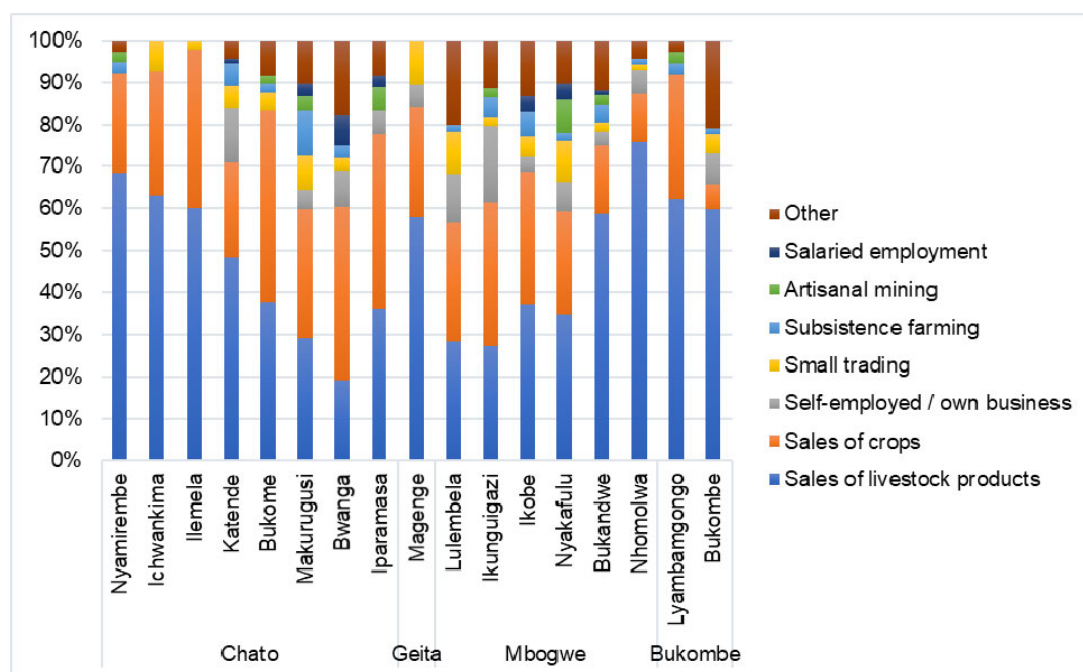


Figure 5-12 : Overview of Secondary Livelihood Activities in Affected Wards

Other livelihood activities identified during the SELI and listed in the socio-economic survey include the sale of vegetables and cooked foods (in village centers, schools, health care facilities and market areas), motorcycle taxis (boda-boda), charcoal and firewood sales, tailoring, sale of fish and traditional healing. The income is used to purchase supplementary food for the household, pay children's school fees, and purchase clothing and other household necessities.

Crop Farming

Crop farming and crop sales serve as the primary source of food and cash income for the PAHs. The most important crops identified by PAH are maize (35% of households), followed by rice (27%). Other noticeable crops are cassava (14%), cotton (9%) and peanuts / groundnuts eight percent (8%). A summary of the most important crops is shown in figure below.

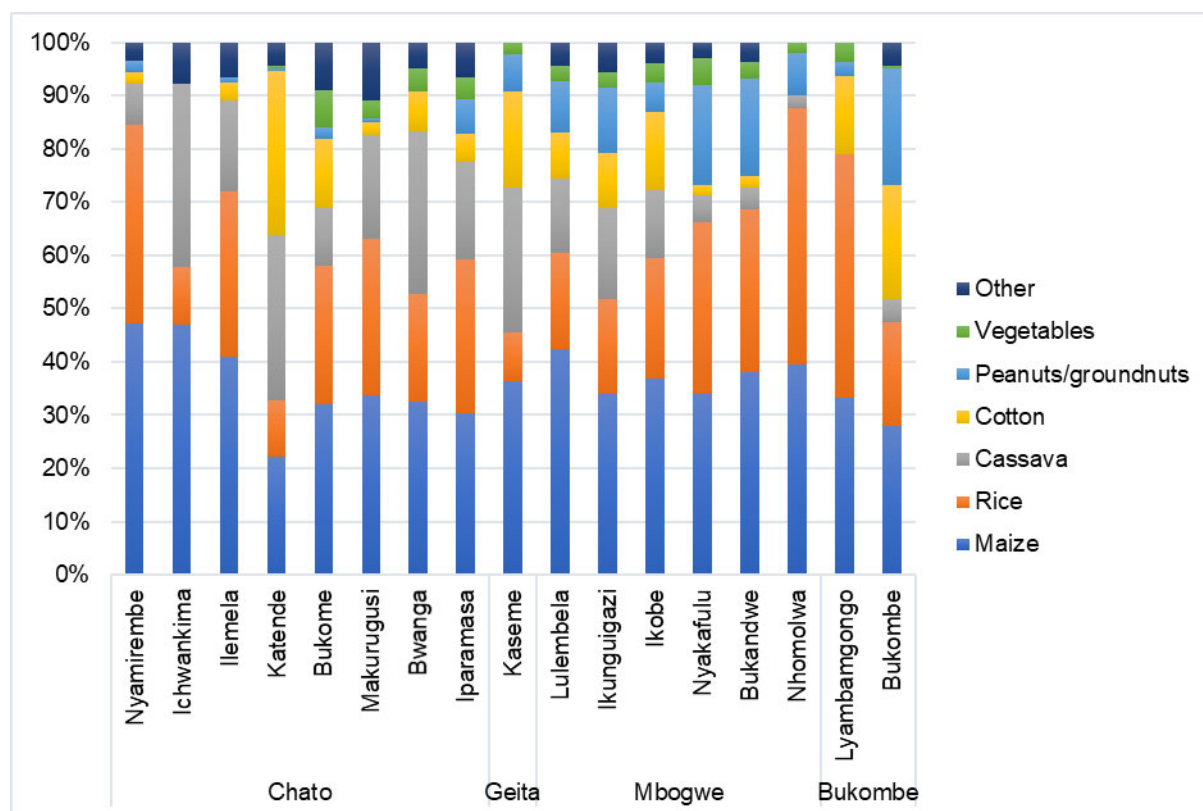


Figure 5-13: Overview of Crops Cultivated by PAHs by Crop per District

Geita Region is in the bimodal rainfall zone with long and short rains. The long rains (also known as Masika) occur between February and May, whilst the short rains (also known as Vuli) occur between in October to December. Land preparation often occurs a month before the start of each rainy season or immediately after the first rains. Traditionally, all household members are involved in farming activities, from land preparation to harvesting. The commonly used methods of land preparation are hand hoes and plows drawn by oxen / cattle with only a few households using fertilizer and pesticides. Fertilizer and pesticides are subsidized by the government but mostly only used for cotton. The planting and harvesting season for crop cultivation is indicated in Figure 5-14.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Rainy season		Long rains (Masika)									Short rains (Vuli)		
Land prep													
Maize			H	H	H					P	P		
Rice		P			H	H							
Cassava				H	H	H	H		P	P			
Cotton					H	H					P	P	
Sunflowers	H	H	P			H				P			
Vegetables / other crops	Depends on vegetable / crop type but planted and harvested throughout the year												
Hunger months													

P = Planted / H = Harvesting

Figure 5-14: Crop Production Calendar

Most of the households depend on farming for food and cash, hence there is a correlation between the households’ food and cash shortages during the year, which reaches its peak from the months of September to November (see Figure 5-15). A total of 86% of PAHs experienced food shortages during the previous year, whilst 91% experienced cash shortages. The food and cash shortage months coincide with the planting season, with most households reportedly surviving on food reserves from the previous cropping season. In some cases, households survive on a single meal a day as they wait for the harvesting season. Most of the crops are harvested from mid-March to May or June depending on when planting was done, which coincides with the months when fewer households experience food and cash shortages.

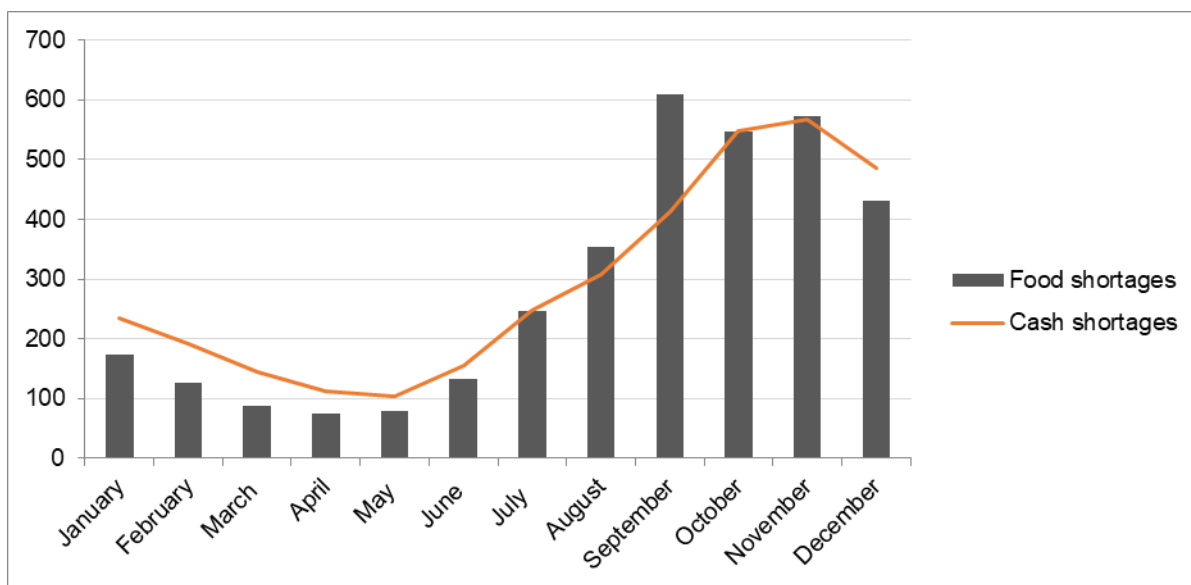


Figure 5-15: Overview of Food and Cash Shortages in Geita Region

PAHs reported change in the rain patterns, the impact of drought on production, lack of agricultural inputs, pests and diseases and sale of crops for cash as major reasons attributing to food shortages. Some PAHs also mentioned not having access to storage facilities, which leads to post-harvest losses. To minimize this, PAHs reported selling their crops immediately after harvest to intermediaries and agents.

Livestock Keeping

PAHs own cattle, goats, sheep, pigs, donkeys, poultry, pigeons and guinea fowl. Cattle, goats and poultry are the most commonly owned livestock. Livestock acts as a source of food and income - cattle (especially bulls) are used for plowing and donkeys as a means of transportation and for carrying loads. PAHs also sell livestock in the periods of food shortages to obtain cash to buy food and for other household needs.

Culturally, livestock, especially cattle, symbolizes wealth among the Sukuma communities. The Sukuma, therefore, only slaughter or consume livestock for traditional ceremonies, weddings, funerals, or when the animal is ill. Most households tend only to sell livestock products such as milk, manure and eggs. Livestock and its associated products are sold at weekly and monthly local markets to both local and regional buyers and intermediaries. The major livestock markets and / or auctions in the PACs include Bukombe market in Bukombe District (every Monday) and Buzirayombo market in Chato (every Wednesday). Some PAHs in Chato, Geita and some parts of Mbogwe Districts attend the livestock markets in Katoro Township in Geita District, which operates every Monday.



Figure 5-16: Cattle grazing in Minkoto ward (Chato District)

5.5.4 Access to Public Services and Infrastructure

PAHs' access to public services and infrastructure is summarized in Table 5-5.

Table 5-5: Summary of PAH access to public services and infrastructure

District	Ward	Lighting	Cooking	Water Sources	Sanitation	Markets used	Schools used
Chato	Nyamirembe	Flashlights (67%)	Firewood (91%)	Communal well (76%)	Pit latrines (98%)	Kondoa Town (39%) Mtriyangwi (33%)	Primary in Mtriyangwi (48%) Secondary in Hondomairo (51%)
	Ichwankima	Flashlights (53%)	Firewood (100%)	Communal well (56%)	Pit latrines (94%)	Kondoa Town (39%) Mtriyangwi (33%)	Primary in Mtriyangwi (48%) Secondary in Hondomairo (51%)
	Ilemela	Flashlights (64%)	Firewood (94%)	Communal well (77%)	Pit latrine (83%)	Kondoa Town (39%) Mtriyangwi (33%)	Primary in Mtriyangwi (48%) Secondary in Hondomairo (51%)
	Katende	Flashlights (70%)	Firewood (96%)	Communal well (50%) Government (45%)	Pit latrines (90%)	Kondoa Town (39%) Mtriyangwi (33%)	Primary in Mtriyangwi (48%) Secondary in Hondomairo (51%)
	Bukome	Flashlights (58%) Solar panels (31%)	Firewood (94%)	Communal well (46%) Government (42%)	Pit latrines (88%)	Kondoa Town (39%) Mtriyangwi (33%)	Primary in Mtriyangwi (48%) Secondary in Hondomairo (51%)
	Makurugusi	Flashlights (59%) Solar panels (35%)	Firewood (93%)	Communal well (72%)	Pit latrines (92%)	Kondoa Town (39%) Mtriyangwi (33%)	Primary in Mtriyangwi (48%) Secondary in Hondomairo (51%)
	Bwanga	Flashlights (53%) Solar Panels (30%)	Firewood (90%)	Communal well (59%) Government (21%)	Pit latrines (83%)	Kondoa Town (39%) Mtriyangwi (33%)	Primary in Mtriyangwi (48%) Secondary in Hondomairo (51%)
	Iparamasa	Flashlights (66%)	Firewood (87%)	Communal well (63%)	Pit latrines (92%)	Kondoa Town (39%) Mtriyangwi (33%)	Primary in Mtriyangwi (48%) Secondary in Hondomairo (51%)
Geita	Magenge	Flashlights (68%)	Firewood (100%)	Communal well	Pit latrines	Iparamase (65%)	Primary in Igango (88%)

District	Ward	Lighting	Cooking	Water Sources	Sanitation	Markets used	Schools used
				(86%)	(100%)		Secondary in Kaseme (47%) and Iparamasa (35%)
Mbogwe	Lulembela	Flashlights (70%)	Firewood (93%)	Government (63%)	Pit latrines (90%)	Kishelo (50%)	Primary in Kishelo (87%) Secondary in Lulembela (100%)
	Ikunguigazi	Flashlights (66%)	Firewood (98%)	Government (57%)	Pit latrines (94%)	Lulembela (67%)	Primary in Lulembela (67%) Secondary in Lulembela (68%)
	Ikobe	Flashlights (72%)	Firewood (94%)	Communal well (39%) Government (32%)	Pit latrines (98%)	Ikobe (42%) Katome (23%)	Primary in Ikobe (74%) Secondary in Ikobe (85%)
	Nyakafulu	Solar (40%) Flashlights (36%)	Firewood (59%)	Communal wells (37%) Individual boreholes (37%)	Pit latrines (85%)	Masumbwe (91%)	Primary in Masumbwe (37%) and Lubeho (28%) Secondary in Masumbwe (75%)
	Bukandwe	Flashlights (53%)	Firewood (89%)	Communal wells (53%)	Pit latrines (91%)	Masumbwe (85%)	Primary in Kanegere (65%) Secondary in Kanegere (70%)
	Nhomolwa	Flashlights (59%)	Firewood (95%)	Communal wells (71%)	Pit latrines (92%)	Masumbwe (91%)	Primary in Kababga (97%) Secondary in Kabanga (67%)
Bukombe	Lyambamgongo	Flashlights (54%) Solar (32%)	Firewood (83%)	Individual boreholes (41%) Communal well (37%)	Pit latrines (88%)	Bukombe (74%)	Primary in Kagwe (93%) Secondary in Lyambamgongo, Kagwe and Bukombe (33% each)
	Bukombe	Flashlights (55%) Solar (32%)	Firewood (85%)	Communal well (57%)	Pit latrines (88%)	Ikobe, Kagwe and Kilimahewa (33% each)	Primary in Kagwe (40%) and Kidete (30%) Secondary in Lyambamgongo (40%)

PAHs access public services either within their own ward or in neighboring wards. The majority of PAHs rely on battery-operated flashlights for lighting. Most PAHs use wood for cooking. Water is sourced from a variety of protected and unprotected water sources. However, during prolonged periods of drought, water sources run dry (for example communal wells in Ikobe Ward, Mbogwe District), leaving PAHs with no other option but to source water from unprotected sources such as charco-dams¹⁰⁰, dams, rivers and seasonal streams. The majority of PAHs in all four (4) districts make use of pit latrines.

Figure 5-17 shows drinking water sourced from an unprotected community well in Bukombe ward.



Figure 5-17: Drinking water in Ilalwe village (Bukombe ward, Bukobe District)

PAHs have access to their local general markets, which operate on a daily or weekly basis. Auctions mostly take place once a week or once a month. PAHs in Masege Ward, Geita District access markets in Lulembela Ward, Mbogwe District as it is the closest to their homesteads. However, the households do not have resources to transport large quantities of produce to and from the markets. As such, many sell their produce to intermediaries who come directly to their farms to collect the produce often at a reduced rate.

¹⁰⁰ A Charco dam is a hemispherical earth dam in flat land, usually located next to roads due to its shape and to allow for maximum water collection



Figure 5-18: Bukombe Auction and Market Grounds (Bukombe District)

Most PAHs have access to primary schools within their villages with some of them accessing schools in the neighboring villages. PAHs also access secondary schools within their wards despite their limitations and failure to meet learners' requirements. In some villages, the schools are located far away from the homesteads and children have to walk long distances to reach the closest school. This often discourages children from attending school hence contributing to increase in school dropouts.

The pipeline corridor in Geita Region affects land used by Mkungo Primary School, Ilelema Primary School, Kambarage Primary School and Kanegere Primary School. No school structures are affected though.

PAHs obtain healthcare services from the locally based dispensaries and visit district hospitals for more advanced health care services if these are unavailable at the dispensaries. A summary of PAHs' access to health facilities is shown in Table 5-6.

Table 5-6: Summary of PAHs' access to health facilities

District	Ward	Avg. time to health facility (minutes)	Health Facility used			
			District hospital	Public health centre	Private sector health facility	Traditional healer
Chato	Ichwankima	67	25%	75%	0%	0%
	Nyamirembe	36	11%	87%	2%	0%
	Ilemela	47	13%	85%	2%	0%
	Katende	60	5%	94%	1%	0%
	Bukome	42	4%	96%	0%	0%
	Makurugusi	66	7%	91%	2%	0%

District	Ward	Avg. time to health facility (minutes)	Health Facility used			
			District hospital	Public health centre	Private sector health facility	Traditional healer
	Bwanga	58	2%	95%	2%	0%
	Iparamasa	79	5%	95%	0%	0%
Geita	Magenge	84	9%	86%	0%	5%
Mbogwe	Lulembela	46	0%	97%	0%	3%
	Ikunguigazi	44	2%	98%	0%	0%
	Ikobe	87	1%	96%	2%	2%
	Nyakafulu	34	19%	79%	1%	1%
	Bukandwe	49	20%	78%	2%	0%
	Nhomolwa	47	24%	75%	1%	0%
Bukombe	Lyambamgongo	77	20%	78%	2%	0%
	Bukombe	40	5%	95%	0%	0%

5.6 Development Support

During the socio-economic survey, PAHs were asked to identify their households' most important developmental requirements. In addition, during the SELI, ward and village leaders, as well as PAPs and members of PACs were asked to identify the development challenges that households in the affected wards face.

Figure 5-19 shows the percentage of PAHs per ward who identified various development support requirements as their top priorities. Development needs that were relevant to inform the LRP are discussed in more detail following the overview graph (see Chapter 8 for more information on the LRP).

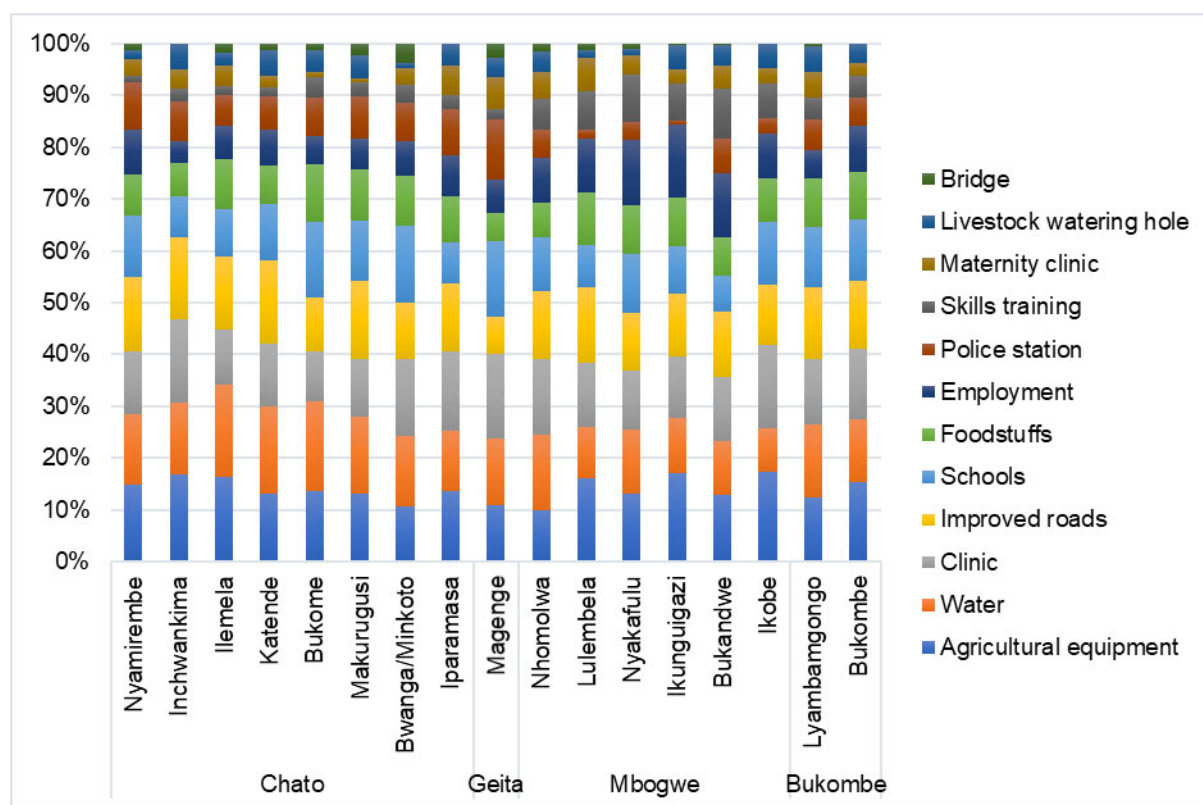


Figure 5-19: Overview of Development Requirements for PAHs (grouped per district) in the Geita Region

PAHs identified access to adequate agricultural inputs as key contributors to food security and economic development. Most of the PAHs do not have the means to access improved seeds, pesticides or fertilizers. Regarding equipment, half of the PAHs indicated that they use leased line plows, and one-third make use of hand hoes. Very few of the PAHs have access to a tractor. Pastoralists identified a lack of cattle dips, access to vaccinations, medication, veterinarian services and lack of grazing land for cattle as key challenges.

In general, water scarcity and distance of water sources for household and for agricultural uses were cited as a challenge. Access to irrigation was regarded as a key development need. Concerns were raised that the Project could contribute to reduced access to water sources.

The majority of PAHs listed improved roads as an important priority for development. Poor road infrastructure was reported to impede access to markets, schools, and medical facilities, impacting on health, education and household income.

5.7 Vulnerable Ethnic Groups

Vulnerable ethnic groups, some of whom may self-identify as indigenous people, are defined as a group who are native to an area and who have distinct social and cultural characteristics. They self-identify as being a member of a distinct cultural group as well as being identifiable by others as belonging to a specific group. These vulnerable ethnic groups have a collective attachment to an area and its natural resources and practice cultural, economic, social, and political customs that are separate from the dominant society. Vulnerable ethnic groups might include pastoralists and hunter / gatherer groups who may

be nomadic or semi-nomadic and who may have strong attachment to and reliance upon the local environment for food (e.g. hunting or trapping animals and gathering plant foods).

The fact that many of these groups are migratory and reliant on land and natural resources for their livelihoods, combined with a lack of recognition of the vulnerabilities associated with their cultural traditions and way of life, renders them potentially vulnerable to Project-induced displacement. Historical cases of such groups in Tanzania being subjected to various forms of discrimination and marginalization such as eviction from ancestral lands to make way for large-scale crop cultivation have also been referred to in some studies¹⁰¹ This may predispose vulnerable ethnic groups to respond negatively to the prospect of Project-related land acquisition.

5.7.1 Overview of Vulnerable Ethnic Groups amongst PAHs in Geita Region

Data from the socio-economic surveys indicates there is only one (1) household in Geita Region who self-identifies as belonging to the Barabaig ethnic group. The household resides in the Shinyanga A Village (Nyakafulu Ward, Mbogwe District),

5.7.2 Vulnerable Ethnic Group PAH's Affected Land and Assets

The household owns one (1) land parcel. The Project will compensate the PAH for 0.089 acres of land, four (4) crop stems and seven (7) economic trees. The land is held under customary tenure (unregistered) and is used for agriculture. The PAH is not physically displaced, but the pipeline corridor affects one (1) of the household's non-residential structures.

The Barabaig PAH consists of seven (7) members (compared to an average of 9.1 for other PAHs in the region). This household compares favorably with other PAHs in the region in terms of most socio-economic indicators: All adults are literate (compared to 68% for other PAHs); all children between 6 and 14 years are in school (compared to 81% for other PAHs); the household has experienced food shortages in the past year (as have 86% of other PAHs), but not cash shortage (reported by 91% of other PAHs). The household's primary source of livelihood is salaried employment in the local police force.

Where additional support to vulnerable ethnic groups is required, these are discussed in more detail in Chapter 9.

¹⁰¹ Coalition of Indigenous Pastoralist and Hunter Gatherer Organizations (2011). *Shadow Report Concerning the Situation of Economic Social and Cultural Rights of Indigenous Pastoralists and Hunter Gatherers of The United Republic of Tanzania*. Submission to the 48th Session of the United Nations Committee on Economic Social and Cultural Rights.

5.8 Vulnerable Households

Based on socio-economic and demographic information obtained during the household surveys, vulnerable PAHs have been divided into three categories¹⁰², namely:

- Category 1: PAHs will be placed on the Vulnerable Household Register and qualify for in-kind assistance and livelihood support in addition to appropriate support corresponding to their specific vulnerability;
- Category 2: PAHs will qualify for in-kind assistance and livelihood support but will require further verification before being placed on the Vulnerable Household Register; and
- Category 3: PAHs are considered “at-risk” and will be monitored. They are not currently classified as vulnerable as far as in-kind assistance is concerned but will qualify for livelihood support.

PAHs within categories 1 and 2 are regarded as potentially vulnerable households, i.e. 425 households are regarded as potentially vulnerable in the Geita Region (32% of all PAHs). During RAP implementation, the remaining 297 PAHs in category 3 will be monitored and if warranted, moved to category 1 or 2.

A summary of vulnerable PAHs per category per village is provided in the table below.

Table 5-7: Summary of Vulnerable Households in the Geita Region

District	Ward	Village	Vulnerable PAHs			Category 3 (at-risk)	
			Category 1	Category 2	Total		
Chato	Nyamirembe	Nyambiti	2	9	11	10	
	Ichwankima	Busalala	4	10	14	8	
	Ilemela	Ilemela	Ilemela	2	5	7	3
			Nyambogo	0	4	4	5
			Nyagh'omango	1	4	5	5
	Katende	Katende	Chabulongo	1	5	6	3
			Katende	5	4	9	6
			Mwabaruhi	2	8	10	5
	Bukome	Mkungo	6	9	15	8	
	Makurugusi	Makurugusi	Makurugusi	1	5	6	3
			Kasala	2	8	10	7
			Musasa	7	10	17	11
			Kamanga	7	3	10	3
	Bwanga	Minkoto	11	13	24	20	

¹⁰² See Chapter 9 for more information on the classification criteria used to identify and categorize vulnerable households.

District	Ward	Village	Vulnerable PAHs			Category 3 (at-risk)
			Category 1	Category 2	Total	
	Iparamasa	Ilelema	3	5	8	2
		Iparamasa	3	1	4	3
		Imalabupina	1	1	2	0
Geita	Magenge	Igando	3	8	11	7
Mbogwe	Lulembela	Nykonga	6	6	12	12
		Lulembela	3	4	7	1
		Kashelo	3	5	8	3
	Ikunguigazi	Ikunguigazi	2	4	6	8
		Ibambula	3	2	5	7
	Ikobe	Kagongo	7	7	14	5
		Ikobe	11	12	23	10
		Ishigamva	5	11	16	12
	Nyakafulu	Lubebo	5	9	14	9
		Luhebo (PS-4)	0	2	2	3
		Shinyanga B	2	14	16	16
		Shinyanga A	8	8	16	15
	Bukandwe	Bukandwe	1	9	10	8
		Kanegere	7	16	23	22
	Nhomolwa	Kabanga	21	16	37	18
Bukombe	Lyambamgongo	Kagwe	8	5	13	14
	Bukombe	Kidete	2	2	4	4
		Bukombe	4	8	12	15
		Ilalwe	6	8	14	6
		Nasihukulu	0	0	0	0
Total			165	260	425	297

Vulnerable households could experience the following impacts in addition to those identified in Section 5.9:

- Food and cash shortages at the household level due to the loss of land to the Project; especially for PAHs who were land-poor prior to the Project's arrival;
- For the elderly, their adult children and relatives may make decisions on their behalf without their consent, including relocating the elders to the homes of their children, having power of attorney on the financials of the elderly PAPs and possibly mismanaging the compensation they have received; and
- Women and children are at risk of being left homeless if the head of the household absconds with compensation without constructing a permanent dwelling for the household.

Refer to Chapter 9 for more detail on Vulnerable People and the management actions proposed to minimize the Project impacts on this group of people.

5.9 Summary of Impacts

This section summarizes the impacts associated with land acquisition, land use restrictions and relocation of households. It is divided into two subsections, dealing with temporary impacts and permanent impacts, respectively.

All land required for the Project in Tanzania will be acquired on a permanent basis by the Government of Tanzania, even for the construction corridor for the pipeline, and then provided for use to the Project under a lease arrangement.

During the construction phase, construction activity will mostly be kept within the 30 m pipeline corridor, except for areas where additional temporary workspace is required, such as at existing infrastructure crossings. During operations, the corridor for the pipeline will be retained as 30 m. Additional land is required for the AGIs that will also remain operational over the lifespan of the Project, after which, these facilities will be decommissioned. After the end of the operation lease of the corridor and the AGIs, the land will be returned to the government.

In areas categorized as Village Land prior to the Project, all 30 m of the corridor will (after the end of relevant construction activities) be restored by the Project to grassland. No development of structures, planting of deep-rooted trees or agricultural activities (e.g. crop production) will be allowed within the pipeline corridor except for grazing of wildlife and livestock crossing the corridor.

Where the 30 m wide corridor transects areas previously categorized as Reserved Land and designated as a protected and / or designated area, including, Forest Reserves, Game Reserves and Game Controlled Areas, the Project will be allowed to restore the land cover and manage the land use to achieve equivalent biological capacity. No development of structures or agricultural activities (e.g. crop production) will be allowed in the corridor apart from grazing of wildlife and livestock crossing the corridor. Deep-rooted trees will not be planted on the 10 m wide strip above the pipeline.

The Project will always require access to the pipeline corridor during operation for inspection, maintenance and repair. The pipeline corridor will not generally be fenced; pedestrian and livestock crossings will be generally allowed, while vehicle crossings will be limited to the existing road and infrastructure crossing arrangements. AGIs will be fenced and access to these facilities will be under the strict control of the Project and public access to them will not be allowed without the Project's permission.

PS-4 is located in the Geita Region. A total of 39.19 acres will be required for PS-4 and its associated access road. The land required for PS-4 will be permanently acquired and fenced.

This section discusses the impacts associated with the aforementioned land acquisition, land use restrictions and relocation of households. It is divided into two subsections, dealing with temporary impacts and permanent impacts, respectively.

5.9.1 Temporary Impacts

Temporary impacts are expected to be short-term (typically lasting only for the duration of the construction phase) and can be successfully mitigated.

A summary of temporary impacts and associated management actions is reflected in Table 5-8.

Table 5-8: Summary of Temporary Impacts

Impact	Description	Management Actions
Loss of footpaths and tracks ¹⁰³	<p>In the Chato District the pipeline crosses nine (9) cattle tracks, a number of footpaths, five (5) streams, 33 village tracks, one (1) water pipeline .</p> <p>In the Geita District it crosses two (2) village tracks, one (1) seasonal river.</p> <p>The pipeline corridor in the Mbogwe District crosses 39 cattle tracks, six (6) footpaths, two (2) seasonal rivers, one (1) stream, 49 tracks, a number of footpaths, one (1) valley, two (2) seasonal rivers and one (1) stream.</p> <p>In Bukombe District it crosses six (6) cattle tracks, three (3) seasonal rivers and 12 village tracks.</p> <p>The land associated with these crossings is Village Land and valued in the Valuation reports for the respective districts.</p> <p>Temporary disruption of footpaths and tracks could force people to take longer alternative routes, thus increasing traveling time and cost. In case of access to small businesses, the disruptions may cause loss of income to business owners and may affect livestock crossings which they use to access markets, graze and water sources. The main cattle routes to livestock markets are not known and may include certain areas crossed by the pipeline. If this were to occur, it would increase the time it takes people to reach these markets and increase the vulnerability of animals and herd boys if they have to find alternative, unknown routes and have to leave for the markets a few days before the intended market day.</p>	<p>Ensure that the EPC contractor is made aware of the locations of all the affected footpaths and other crossings. The contractor will be responsible for communication with PACs in a timeous manner regarding the closure of any (foot)paths and crossings and provide people with alternative routes, where required.</p>
Disruption of agricultural activities	<p>The agricultural activities of PAHs who lose agricultural land to the Project will be temporarily disrupted when PAHs are required to vacate the Project-affected land. PAHs who lose a significant portion of land to the Project must acquire replacement land and</p>	<p>To ensure that the agricultural production cycle is minimally disrupted, the will as far as possible Project implement the following management actions during construction:</p> <ul style="list-style-type: none"> • Pay PAH compensation as early as possible so that

¹⁰³ Footpaths are generally less than one (1) meter in width and have no associated reserves; tracks generally range from one (1) to two (2) meters in width and have no associated reserves and are utilized by people; and cattle tracks are up to three (3) meters and used by community and also have no associated reserves.

Impact	Description	Management Actions
	<p>resume the cultivation of crops on the replacement land. Given that agricultural production is the primary livelihood activity for the PAHs in Geita Region, both in terms of food security and household income, this impact, if not adequately managed, may have a significantly adverse impact on PAHs.</p> <p>(Note that not all PAPs are eligible for replacement land—see Chapter 6).</p>	<p>they have sufficient time to locate and purchase replacement land;</p> <ul style="list-style-type: none"> • Allow as far as possible PAHs to harvest crops; • Assist PAHs to secure replacement land, where required; • Assist PAHs in clearing and preparing replacement land for agricultural production, where required; • Provide transitional food support. <p>(Also see Chapter 8 on Livelihood Restoration and Chapter 9 for information on targeted support for vulnerable persons).</p>
Land speculation	<p>Land speculation occurs when people buy land with the expectation of reselling it at higher prices during a land boom. For instance, during resettlement planning, people with availability of land may choose to place it out for sale, however, inflate the prices beyond the gazette land rates for the area in anticipation of profits as PAHs will be requiring replacement land. Land speculation not associated with the Project is already happening in the Project-affected Districts. Land speculation is expected to cease once the resettlement process is complete, prior to pipeline construction.</p>	<ul style="list-style-type: none"> • In partnership with the Land Office set up a help desk dedicated to dealing with PAHs seeking to purchase land; the help desk can also include a database of people willing to sell land to PAHs at the government set land rates for per District Council. • Consider the findings of the EACOP Project-Induced In-Migration Situational Analysis July 2019.
Social impacts on PACs	<p>Some of the potential impacts on the PACs include:</p> <ul style="list-style-type: none"> • Road safety risks associated with increased Project traffic between people, livestock and project vehicles; • Health and safety impacts during the construction phase; • Increased health risks from elevated noise and dust levels along the roads that will be used by Project vehicles as well as at work sites; • Increased incidence of sexually transmitted infections, including HIV, associated with the Project workforce and in-migration; • Increased incidences of crime, and violence between the Project workforce, in-migrants and locals over women, natural resources and loss of assets; • Potential tension and conflict may arise between the Project and local people over unmet expectations associated with 	<p>Refer to mitigation measures identified in the ESIA and Project Provisional Human Rights Impact Assessment.</p>

Impact	Description	Management Actions
	<p>economic benefits, including jobs and procurement opportunities; and</p> <ul style="list-style-type: none"> • Potential impacts on the human rights of affected stakeholders and particularly on vulnerable groups. 	
Loss of access to natural resources	<p>The pipeline traverses the Biharamulo Game Reserve and Biharamulo Forest Reserves.</p> <p>The community utilize community forests to collect natural resources such as medicinal plants, firewood, timber for construction, as well as some tree leaves that are used to feed livestock during dry season (whilst it is accepted there are some restrictions under the law on such activities). Community members may not be able to access the inner sections of the forest during construction for health and safety reasons, which might lead to overharvesting of resources on the edges of the forest. The intensity of the impact depends on the length of construction spreads and the duration of construction activities, and households may be forced to collect resources in other community villages, thus extending the impact outside of the Project designated area (i.e. 30 m corridor).</p>	<ul style="list-style-type: none"> • If construction of the pipeline section will take longer than a month in forest reserves, consider allowing community members to harvest natural resources by-weekly for a few hours, where appropriate (i.e. any access would take account of any legal restrictions on access and use of forests). • Ensure that people continue to have access to the parts of the forest that are not affected through the establishment of designated footpaths and walkways away from the construction zone. • Implement mitigation measures set out in ESIA. • Ensure that all contractors adhere to terms laid out in EACOP Contractor Management Plans.

5.9.2 Permanent Impacts

Permanent impacts refer to physical and economic displacements that cannot be mitigated and must, therefore, be compensated for in accordance with local Tanzanian legislation and international good practice (see Chapter 6).

The permanent impacts for PAPs / PAHs include:

- **Physical Displacement**—the loss of residential structures will result in the physical displacement of some PAPs / PAHs. The compensation options for PAPs / PAHs that will be physically displaced are described in Chapters 6 and 7;
- **Economic Displacement**—the loss of assets such as land, non-residential structures, economic trees, and / or crops constitutes economic displacement. The compensation measures for PAPs / PAHs that are physically and economically displaced is described in Chapters 6 and 7, along with the Livelihood Restoration Plan in Chapter 8;
- **Cultural Heritage Disturbances**—graves that are located on Project-affected land will have to be relocated to other areas. Grave relocation will be undertaken in consultation with affected households and in accordance with Tanzanian legislation (see Chapter 6); and
- **Loss of Common Property Resources**—communal / public forests, grazing land, water sources and/ roads. These impacts are discussed in Chapter 6.

A summary of displacement impacts across all Project-affected villages is shown in Figure 5-20, followed by a summary of permanent impacts and associated management actions in Table 5-9. In addition, any impacts identified on the human rights of PAPs and particularly on vulnerable groups will be addressed through additional engagement and agreed mitigation measures.

District	Ward	Pipeline Length (km)	Land Parcels (No.)	Land Area (acres)	PAPs (No.)	PAHs (No.)	Vulnerable PAHs (No.)	Vulnerable Ethnic Group PAHs (No.)	PAHs Losing Dwellings	Buildings and Structures Affected (No.)			Crops Affected			Economic Trees and Other Trees (No.)	Graves
										Residential Dwellings	Other Structures	Incomplete Structures	Crops Acres	Intercropping Acre	Crops Stems		
Chato	Nyamirembe	2.35	41	17.90	47	46	11	0	0	0	0	0	11.66	0	115	0	0
	Ichwankima	5.28	42	39.67	33	32	14	0	1	1	2	0	21.92	2.46	313	82	9
	Ilemela	7.61	47	57.42	47	47	16	0	0	0	1	0	10.21	0	406	54	1
	Katende	11.21	100	88.37	112	104	25	0	3	3	7	1	24.67	8.56	373	433	1
	Bukome	5.86	52	45.20	56	52	15	0	0	0	1	0	9.68	2.60	212	243	6
	Makurugusi	12.31	156	93.20	136	130	43	0	3	3	4	0	25.35	6.18	723	465	3
	Bwanga	7.30	96	57.03	89	83	24	0	2	2	1	0	27.65	4.42	170	1166	0
Ipamasa	5.21	54	40.13	42	38	14	0	3	5	10	1	2.70	1.03	853	655	2	
Geita	Magenge	3.36	29	25.59	24	22	11	0	1	1	1	0	7.43	0	226	138	3
Mbogwe	Lulembela	7.39	82	55.02	75	70	27	0	1	2	9	0	6.99	2.52	179	573	1
	Ikunguigazi	4.75	69	36.35	58	53	11	0	6	8	7	4	3.79	0.88	310	555	10
	Ikobe	14.73	153	110.49	134	126	53	0	2	4	6	0	8.06	2.22	835	1310	5
	Nyakafulu	14.17	281	144.98	224	200	48	1	9	10	31	14	2.66	0.44	1193	2944	13
	Bukandwe	13.40	157	100.74	120	110	43	0	2	2	6	1	2.14	0.10	739	1019	4
	Nhomolwa	7.36	109	54.86	88	83	37	0	2	2	4	0	0	0	84	196	4
Bukombe	Lyambangong	5.75	45	43.09	42	41	13	0	0	0	0	0	0	0	21	58	0
	Bukombe	14.82	115	113.88	92	82	30	0	1	1	2	1	3.57	0	1420	630	9
GEITA REGION TOTALS:		142.86	1628	1123.94	1419	1319	425	1	36	44	92	22	168.48	31.41	8172	10521	71

Figure 5-20: Summary of Displacement per Project Affected Ward¹⁰⁴

¹⁰⁴ This table excludes impacts of the pipeline corridor in Chato District in: Biharamulo Game Reserve – 3.43 km & 25.85 acres in Bwongera Ward and 9.40 km & 70.88 acres in Ichankima Ward; and Biharamulo Forest Reserve – 4.55 km & 34.09 acres in Bwanga Ward, 2.77 km & 20.70 acres in Butengorumsa and 6.05 km & 46.80 acres in Ipamasa Ward.

Table 5-9: Summary of Permanent Impacts

Impact	Description	Management Actions
Loss of land	<p>The pipeline corridor traverses the Geita Region over 169.06 km (this includes 12.83 km in the Biharamulo Game Reserve and 13.37 km in the Biharamulo Forest Reserve), affecting 1,628 land parcels, 18 of these are located at PS-4.</p> <p>A total of 1,333.59 acres of land will be directly affected by the Project with 1,123.94 affected and valued within the villages: of which at the time of valuation 168.48 acres was crop land plus 31.41 acres of intercropping. A total of 39.19 acres of this is located at PS-4, none of which was recorded as crop land during the valuation.</p> <p>The pipeline corridor and land area for PS-4 will be permanently acquired.</p>	See Chapter 6 for compensation measures.
Loss of structures	<p>A total of 36 PAHs of the 1,319 PAHs will lose their residential dwellings.</p> <p>Of the structures impacted, 44 are residential structures¹⁰⁵, 92 non-residential structures and 22 incomplete structures. Only one (1) non-residential structure is located at PS-4.</p>	See Chapter 6 for compensation measures.
Loss of crop stems and economic trees	<p>A total of 8,172 crop stems and 10,521 economic and other trees were recorded during the valuation and will be directly affected due to the land acquisition for the Project. Of these 140 crop stems and 345 economic and other trees are located at PS-4.</p>	See Chapter 6 for compensation measures.
Disturbance of graves	<p>A total of 71 graves will have to be relocated to areas outside the pipeline corridor and associated installations. None of these graves are located at PS-4.</p>	See Chapter 6 for grave relocation procedures.

¹⁰⁵ A total of 38 residential structures are eligible for a replacement house. See Chapter 7 for more detail.

6 ELIGIBILITY, ENTITLEMENT AND COMPENSATION FRAMEWORK

6.1 Introduction

The Eligibility, Entitlement and Compensation Framework defines the eligibility criteria for affected persons to receive compensation and resettlement assistance, outlines the proposed entitlements for each type of displacement impact resulting from the Project, and determines the compensation rates and values applicable. This Chapter includes discussion on the following:

- **Eligibility:** Identifies and details “who” is eligible to receive compensation and resettlement assistance;
- **Entitlement:** Defines “what” type of compensation and assistance each category of affected person is entitled to, including livelihood restoration assistance and the entitlements of potentially vulnerable people, both of which are IFS requirements. The section includes a detailed Entitlement Framework; and
- **Valuation and Compensation:** Defines “how” various impacted assets have been valued and the levels and types of compensation that will be offered to affected persons. This includes a) the methodologies used in determining valuation and compensation under both Tanzanian Regulations and b) the IFS requirements to value losses in the absence of established guidelines or prescribed compensation. As mentioned, entitlements for livelihood restoration and vulnerable people are a specific IFS requirement, hence are included in this section.

6.2 Eligibility

As per the IFC’s definition, eligibility is “...entitlement to compensation and assistance granted to persons, groups of persons, families, or institutions due to subjection to displacement resulting from land acquisition, the revocation of rights, and / or the expropriation of property as a direct result of the Project”.

A primary requirement for eligibility is that affected persons and assets are enumerated during the resettlement asset valuation process. In other words, eligibility applies only to land and assets that were established prior to the cut-off date (see section 6.2.2). The early formulation and dissemination of eligibility criteria, together with the implementation of cut-off dates, assist in managing opportunistic claims and settlement.

The eligibility criteria applied in this RAP were determined at the onset of the Project, as outlined in the RPF, and are based on the requirements of both the IFC PS5 and national legislation. IFC PS5 defines three (3) categories of persons who are eligible for compensation:

- Displaced persons who have formal legal rights to land and / or the assets they occupy. This includes persons with properties that are formally registered in cadastral land registers;
- Those who do not have formal legal rights to lands but do have a claim to land which is recognized under national law. This category includes persons with customary ownership / rights of occupancy of land: as set out in Section 3(1)(g) of the Land Act and Section 3(1)(h) of the Village Land Act, persons with legal rights to land include those with "...right of occupancy or recognized long-standing occupation or customary use of land" and the Village Land Regulations state that any villager occupying the affected land under a customary right of occupancy, including an unregistered right, is entitled to compensation; and
- Those who have no recognizable legal right or claim to land and / or the assets they occupy or use. This category would typically include persons who have constructed buildings or have cultivated crops on land owned by others, without approval and /or knowledge of the landowner. This also includes informal users on reserved land or general land. Such persons may not be entitled to compensation for land, as they do not hold the formal rights to it; however, they would be entitled to compensation for assets that they own – for example, the replacement value of buildings, structures, crops, and economic trees. Eligibility for compensation does not create or confer a right where none previously existed – it does not legitimize the illegal occupation of land. The purpose of compensation is to ensure that people affected by the Project do not end up worse off as a result of displacement.

6.2.1 Eligibility Categories

The eligibility categories listed below refer to categories of affected parties and PAPs who will potentially experience various types of displacement-induced loss or increased vulnerability as a result of physical and / or economic displacement arising from the Project required land acquisition for the pipeline and AGIs in the Geita Region.

The eligibility categories relevant to this RAP are as follows:

- Persons who hold the rights to land under legal title and the customary right of occupancy of land;
- Persons who own affected buildings and structures, such as dwellings, ancillary domestic buildings and agricultural structures;
- Assets affected by the pipeline including land parcels administrated by village councils;
- Institutions who own land and / or buildings and / or public facilities, including religious organizations and government authorities (assets belonging to such institutions may include schools, health facilities, roads, reserved land, protected areas, etc.);
- Owners of perennial and annual agricultural crops;

- Owners of seasonal (planted and harvested each season) crops;
- Owners of economic trees growing in the affected areas, either on their own land or on the land of others;
- Owners or custodians of cultural heritage assets such as graves, graveyards, etc.;
- Land tenants – i.e. persons who, while not owning the land, have an agreement with landholders to use their land;
- Informal users of land – for example, persons who collect firewood, herbs and medicines, hunters and those who gather other natural resources;
- Informal businesses / petty traders such as market stalls, butchers, crop production facilities (e.g. milling machine shelters), cafés, hairdressers, clothing manufacturers, furniture manufacturers, kiosks etc.;
- Pastoralists using land for grazing livestock; and
- Vulnerable persons – i.e. persons for whom loss of assets or resources, and / or disruption of access to assets or resources, may have a disproportionate impact on livelihoods, due to their vulnerability and / or livelihood dependency on these activities.

It is recognized that a PAP may fall into more than one eligibility category (e.g. for land, structures and / or crops). The socio-economic and asset valuation surveys coupled with the Valuation Reports (VRs) determine the eligibility categories, and associated entitlements, that apply to each identified PAP. In addition to individual PAPs who form part of PAHs there are also a few institutions, village councils (who administer communal land and assets) and other government agencies whose assets are affected.

6.2.2 Cut-off dates

A cut-off date is an important component when defining eligibility and entitlement. The cut-off date is determined by the commencement of the asset valuation surveys. Persons occupying or migrating to the Project area after the cut-off date are not eligible for compensation and / or resettlement assistance. Similarly, fixed assets (such as structures, crops and trees) established after the cut-off date will not be compensated.

A cut-off date not only helps with the management of encroachment and opportunistic settlement, but it is also important to establish a fixed quantification of affected people and assets to assist with the planning and budgeting for the resettlement implementation.

For the Geita Region, the cut-off dates¹⁰⁶ were determined by the commencement of the asset valuation surveys as prescribed under the Valuation & Valuers Registration Act, 2016.

¹⁰⁶ This process was guided by the requirements of the Valuation and Valuers Registration Act, 2016.

The cut-off date for this valuation has been set for each village affected by the pipeline corridor. These dates, as detailed in Chapter 4 and the VR, were communicated to the PAPs in each village.

6.2.3 Validity of the Valuation

The cut-off date is representative of a 'snapshot' in time when the asset valuation surveys are undertaken. It is assumed that 'organic' change related to on-going development over time, whether planned or unplanned, will continue after the cut-off date. It is recognized that PAPs cannot be expected to put life and development plans on hold indefinitely, and it is therefore necessary to set a validity period for the cut-off date. This is also established within the Tanzania legal framework.

In accordance with Section 52(3) of the Valuation and Valuers Registration Act, VRs must be endorsed by the CV within six (6) months from the date of "...valuation of the interest in property of the last person". The VRs are valid for a further two-year period from the date of approval by the CV.

The date of valuation "of the interest in property of the last person" for Chato was 30th September 2020, Geita 17th October 2019, Mbogwe 26th October 2019 and Bukombe 23rd October 2019 respectively.

6.3 Entitlements

The findings of the socio-economic and asset valuation surveys together with the eligibility criteria have been used to develop an Entitlement Framework (Table 6-1). The framework defines the compensation principles and approach by associating compensation entitlements to the type and extent of the impact and the category of the affected person.

All entitlement options were communicated at various stakeholder forums as detailed in Chapter 10, Section 10.6. The objectives of the entitlement framework are to identify:

- All categories of affected people, including property owners and land right holders, tenants, informal users, sharecroppers, grazers, nomadic pastoralists and other natural resource users, shopkeepers, vendors and other service providers, communities, and vulnerable groups;
- All types of loss associated with each category, including loss of physical assets; loss of access to physical assets; loss of wages, rental or sales earnings; loss of public infrastructure, and elements of cultural significance; and
- All types of compensation and assistance to which each category is entitled, including; compensation for or replacement of land and natural resources; compensation for structures, assets, rental income etc.; moving assistance and post-resettlement livelihood restoration support.

The Entitlement Framework, presented in Table 6-1, has been based on the outline entitlement framework developed as a component of the RPF. As the nature and extent of impacts differ in each region, this entitlement framework only contains the entitlements for pipeline and AGIs land acquisition impacts identified for the Geita Region¹⁰⁷. The numbering of eligibility categories outlined in the RPF was retained for continuity purposes.

¹⁰⁷ If additional displacement impacts, not covered with in the scope of this RAP's Entitlement Framework, are identified during further Project development then the Entitlements Matrix included in the RPF would be referred for eligibility and entitlements.

Table 6-1: Entitlement Framework – Geita Region (Pipeline & AGIs)

Impact	Effect	Entitled Persons	Entitlement		
			In-kind and / or cash compensation	Livelihood Restoration ¹⁰⁸¹⁰⁹	
Land					
A1	Loss of Land with dwelling – entire plot acquired (because it falls wholly ¹¹⁰ in the Project footprint or because remaining land classified as orphaned land and impacts of PAPs total land holding is likely to impact livelihoods).	Acquisition (permanent loss).	Legal holder of land. Customary holder of land. Institutional owners.	<p>In-kind Option 1:</p> <ul style="list-style-type: none"> Replacement land of equivalent size to land lost (provided land is available in the ward), with security of tenure as per IFC PS5; Payment of all transaction costs¹¹¹; Disturbance allowance;¹¹² and Other allowances as applicable. <p>In-kind Option 2:</p> <ul style="list-style-type: none"> Replacement land of residential plot (as a minimum) at a suitable location, with security of tenure as per IFC PS5 for construction of replacement housing (if eligible under B1 / B2 and replacement house option selected); Cash compensation for land affected and not replaced (if entitled); Project support to find replacement land; Disturbance allowance; and Other allowances as applicable. <p>OR</p> <p>Cash Option:</p> <ul style="list-style-type: none"> Compensation (if entitled) for permanently 	<p>G1</p> <ul style="list-style-type: none"> Land and Non-land-based group level livelihood restoration programs; and Individual level livelihood restoration program. <p>Where replacement agricultural land is not available in the ward an additional alternative livelihoods program will be offered to the PAP.</p>
A2	Loss of land with dwelling – only part of plot acquired (with remaining portion viable for economic use).				

¹⁰⁸ See Table 6-6 for further information.

¹⁰⁹ Livelihood restoration entitlements are linked to PAPs and will have a cumulative value for PAPs with multiple affected land and / or assets.

¹¹⁰ Dwelling structures are on affected land within Project footprint or on land determined to be orphaned. PAP may have additional farm / other land outside the Project footprint still considered to be viable.

¹¹¹ For transaction or registration costs real figures will be established from the local authorities.

¹¹² See Section 6.4.1.5.

Impact		Effect	Entitled Persons	Entitlement	
				In-kind and / or cash compensation	Livelihood Restoration ¹⁰⁸¹⁰⁹
				lost land at market rates as defined by the Registered Valuer plus 10% for transaction costs ^{113 114} ; and <ul style="list-style-type: none"> • Allowances as above. 	
A3 & A4	Permanent loss of agricultural (crop) land where entire plot affected or remaining portion not viable (orphaned land) and impacts PAPs total land holding is likely to impact livelihoods. or Permanent loss of agricultural (crop) land where only part of plot acquired with remaining portion (or PAP remaining landholding) still viable to support livelihoods activities ¹¹⁵ or where the prior use of the land can continue post-construction).	Acquisition (permanent loss).	Legal holder of land Customary holder of land (PAP loses <AE OR >AFS) ¹¹⁶ .	<ul style="list-style-type: none"> • Compensation (if entitled) for permanently lost land at market rates as defined by the Registered Valuer plus 10% for transaction costs. 	<p>G4</p> <ul style="list-style-type: none"> • Group level land-based and non-land-based livelihood restoration program(s). <p>Should the PAP be deemed vulnerable, additional entitlement will include:</p> <p>G2</p> <ul style="list-style-type: none"> • Individual level livelihood restoration program(s) (as appropriate to vulnerability factors of PAP).
			Legal holder of land. Customary holder of land. (PAP will lose >AE BUT <AFS) and PAP not vulnerable.	<ul style="list-style-type: none"> • Cash compensation (if entitled) for permanently lost land at market rates as defined by the Registered Valuer plus 10% for transaction costs; and • Assistance in formalizing appropriate tenure to alternative land within in the ward (where requested and land being self-identified by PAP). 	<p>G4</p> <ul style="list-style-type: none"> • Group level land-based and non-land-based livelihood restoration program(s)
			Legal holder of	In-kind Option:	G3

¹¹³ Where applicable, mortgage is deducted from pay-out and paid to lending institution. This principle applies to all assets that are encumbered with a mortgage.

¹¹⁴ Market land rates defined by Registered Valuer are submitted to the Chief Valuer (MLHSD) for approval. Only approved land rates are then used in the valuations.

¹¹⁵ Assumes Project Livelihood Restoration Program in place.

¹¹⁶ Acre Equivalent (AE): A measure of the relative productivity of arable land in a Project-affected district. It is the ratio of two numbers: (a) the number of acres of land that a household in a district needs to sustain itself (taking into account staple crops and their prevalence in that district, as well as district-specific crop yields and average household size); and (b) the average number of acres of land per household across all Project affected districts (as reported in 2007 / 2008 agricultural census data).
Average Farm Size (AFS): The average agricultural (crop) land holding per household in a district, as reported in 2007 / 2008 agricultural census data (refer to Section 6.4.2 for additional detail).

Impact	Effect	Entitled Persons	Entitlement	
			In-kind and / or cash compensation	Livelihood Restoration ¹⁰⁸¹⁰⁹
		land. Customary holder of land. (PAP will lose >AE BUT <AFS) and PAP is vulnerable.	<ul style="list-style-type: none"> Replacement land of equivalent size to land lost (provided land is available in the ward), with security of tenure as per IFC PS5; Payment of all transaction costs¹¹⁷; Disturbance allowance¹¹⁸; and Other allowances as applicable. OR Cash Option: <ul style="list-style-type: none"> Compensation (if entitled) for permanently lost land at market rates as defined by the Registered Valuer plus 10% for transaction costs^{119 120}; and Allowances as above. 	<ul style="list-style-type: none"> Group level land-based and non-land-based livelihood restoration program(s); and Individual level livelihood restoration program(s) (as appropriate to vulnerability factors of PAP). Where replacement agricultural land is not available in the ward an additional alternative livelihoods program will be offered to the PAP.
A5	Permanent loss of agricultural (crop) land.	Acquisition (permanent loss). Acknowledged users but not owners (incl. tenants by occupancy) ¹²¹ . Persons with informal occupancy ¹²² .	<ul style="list-style-type: none"> No land entitlement. 	G5¹²³ <ul style="list-style-type: none"> Non-land-based group level livelihood restoration (i.e. Money Management and Entrepreneurial Training); and Where tenant PAPs have lost >AE and have self-identified and secured / have access to alternative land to farm they may be offered access to Group level livelihood program.

¹¹⁷ For transaction or registration costs real figures will be established from the local authorities.

¹¹⁸ See Section 6.4.1.

¹¹⁹ Where applicable, mortgage is deducted from pay-out and paid to lending institution. This principle applies to all assets that are encumbered with a mortgage.

¹²⁰ Market land rates defined by Registered Valuer are submitted to the Chief Valuer (MLHSD) for approval. Only approved land rates are then used in the valuations.

¹²¹ This applies to land individually owned or possessed and rented to a third party. Tenants are recognised as having an interest, but not ownership of land under The Valuation and Valuers (General) Regulations, 2018. For land communally held and used see H5 and H6.

¹²² Informal occupiers have a presence on the property that is deemed to be permanent or semi-permanent and that precludes other competing interests.

¹²³ Tenants whose total compensation is less than T.Shs. 100,000 will not be eligible for livelihood restoration program support.

Impact		Effect	Entitled Persons	Entitlement	
				In-kind and / or cash compensation	Livelihood Restoration ¹⁰⁸¹⁰⁹
A6	Permanent loss of grazing land.	Acquisition (permanent loss).	Legal holder of land. Customary holder of land.	<ul style="list-style-type: none"> Cash compensation for the value of the land lost at market value as defined by the Registered Valuer plus 10% transaction costs and relevant allowances. 	G4 <ul style="list-style-type: none"> Group level land-based and non-land-based livelihood restoration program(s).
	A7	Permanent loss of bare farmland / vacant land ¹²⁴ .	Legal holder of land Customary holder of land.	<ul style="list-style-type: none"> Cash compensation for the farmland / vacant land at market value plus 10% for transaction costs. 	
Loss of Residence by Owner¹²⁵					
B1	Loss of primary residence and associated secondary dwellings for wives or family members (subject to criteria) – houses must be occupied and in regular use and complete at time of valuation survey ¹²⁶ .	Permanent Loss of full structures or if partial where remainder unable to be occupied.	Structure owner and occupier irrespective of legal right of occupation including "Certificate of Occupancy".	In-kind Option: <ul style="list-style-type: none"> Structure owners will receive replacement housing (and certain ancillary domestic structures) with standard house design¹²⁷. The design will comply with Tanzanian regulations and standards, and be of an equivalent or adequate standard than the existing houses and comply with all relevant building and planning standards; Transaction Costs; Cost of transportation for the removal of household goods and reusable and transportable construction materials to replacement location; Disturbance Allowance; and Other allowances as applicable. 	G1 <ul style="list-style-type: none"> Land and non-land-based group level livelihood restoration programs; and Individual level livelihood restoration program.

¹²⁴ Vacant land implies land that is held and is currently unused (fallow), even if not operational at the time of the survey but does not include obviously abandoned land.

¹²⁵ Entitled PAPs will be allowed, prior to providing vacant possession to the Project, to remove all building and other materials from their existing structures (and other assets), many of which are not permanently affixed to the land.

¹²⁶ Secondary residential structures and ancillary immovable homestead structures will be assessed based on functional, locational and cultural factors – refer to Chapter 7 for full definition and context.

¹²⁷ Each replacement house will be provided with a standard single ventilated improved pit (VIP) latrine and a covered kitchen shelter.

Impact		Effect	Entitled Persons	Entitlement	
				In-kind and / or cash compensation	Livelihood Restoration ¹⁰⁸¹⁰⁹
				<p>OR Cash Option:</p> <ul style="list-style-type: none"> Replacement cost for structure in entirety; Where applicable, mortgage is deducted from pay out and paid to lending institution; Disturbance Allowance; and Other allowances as applicable. 	
B3	Ancillary structures and outbuildings, livestock kraals, wells / boreholes, septic systems, soak-aways, storehouses, perimeter walls, steps, verandas, non- tarmac access points, and the like - including incomplete structures	Permanent loss of other and ancillary structures	Owner of infrastructure - note that this may not be the same as owner of plot	<ul style="list-style-type: none"> Replacement cost for entire structure, if no longer viable; Incomplete structures to be valued at Replacement Cost considering the level of completion of the structures; Disturbance Allowance; and Cost of transportation for the removal of household goods and reusable and transportable construction materials to replacement location. 	N/A
B4	Sanitation facilities.	Loss of sanitation facilities.	Owners of residential, commercial and other buildings. Government agencies as owners of communal facilities.	<ul style="list-style-type: none"> Replacement cost for facility / structure; Disturbance allowance; and Other allowances as applicable. <p>Where a PAP loses dwelling structures (and is eligible under Category B1) then each replacement house will be provided with a standard single ventilated improved pit (VIP) latrine. Where a PAP is eligible for more than one (1) replacement house, they can elect for either:</p> <ul style="list-style-type: none"> A standard single VIP latrine (with privacy wall at entrance) per replacement house structure; or One (1) combined VIP latrine / ablution structure, per homestead. 	N/A.
Loss of resources providing income in cash or in kind					

Impact		Effect	Entitled Persons	Entitlement	
				In-kind and / or cash compensation	Livelihood Restoration ¹⁰⁸¹⁰⁹
G1	Loss of community accessed resources such as forests, wetlands and non-economic trees.	Permanent and temporary loss but does not impact on access to remaining area.	Resource users or any persons losing an income stream associated with land alienated and including seasonal natural resource users (IFC PS5 GN 8).	<ul style="list-style-type: none"> Community level access would be maintained. Any communal land and other assets administered by the village councils directly affected by the Project are eligible for cash compensation a full replacement cost (i.e. market value plus 10% transaction costs). 	N/A
Loss of Communal or Institutionally owned structures or land					
H1	Structures and / or land owned by community or institutions. These include community centers not built by government, churches, mosques and other places of worship, market stalls, private schools, private clinics etc.	Permanent loss or loss of access temporarily.	Owner of building and infrastructure.	<p>For Permanent Loss: Cash Compensation¹²⁸OR Cash Option:</p> <ul style="list-style-type: none"> Replacement cost for land and structures; Disturbance Allowance; and Other allowances as applicable. <p>Temporary loss of access:</p> <ul style="list-style-type: none"> Project assistance to maintain access on a case by case basis. 	None.
H2	Government developed and owned structures and / or land.	Permanent Loss	Government as owner.	<p>In-kind Option:</p> <ul style="list-style-type: none"> Replacement of structures in consultation with relevant Government Authority¹²⁹. <p>OR Cash Option:</p> <ul style="list-style-type: none"> Compensation on a case by case basis as per agreement with government. 	None.

¹²⁸ Land / structures belonging to a government, community or private institutions generally do not qualify for replacement land / structures, with the exception of churches and schools which are subject to discussion.

¹²⁹ This includes impacted land in the Biharmulo Game Reserve and the Biharmulo Forest Reserve. The affected land in the Biharmulo Game Reserve is Reserved Land under the jurisdiction of Tanzania Wildlife Authority (TAWA). Tanzania Forest Services (TFS) is the management authority for the Biharmulo Forest Reserve.

Impact		Effect	Entitled Persons	Entitlement	
				In-kind and / or cash compensation	Livelihood Restoration ¹⁰⁸¹⁰⁹
H4	Land used for communal purposes; particularly pastoral land used for collective grazing.	Permanent Loss	Communal owner.	<ul style="list-style-type: none"> Cash for permanent land acquired value based on market rates and cash paid to pastoralist community (entity to be nominated by the community) or if Village land to Village Council); Allowances as applicable; and Corridor not fenced 	None.
H5	Land used for communal purposes; particularly pastoral land used for collective grazing.	Temporary loss of access.	Communal owner.	<ul style="list-style-type: none"> Project assistance in maintaining some access or alternative arrangements during the construction period; and Corridor not fenced. 	None.
H6	Roads, pathways, drainage, and electricity mains.	Permanent loss of infrastructure.	District and local government, communities, or utility company.	<ul style="list-style-type: none"> Project will have crossing agreements for the pipeline corridor with relevant authorities for roads, electricity and other such infrastructure; Any Project required works to roads within communities will be discussed and agreed with the relevant authorities and done to national road safety standards including drainage and safety crossings where required; Any diversion of services and infrastructure in conformity with national standards; and Rerouting of community pathways around project infrastructure based on assessment of loss of access. 	None.
Trees and Crops					
I1 & I2	Loss of crops – seasonal and perennial ¹³⁰ .	Permanent loss or restriction of access.	Owner of Crops or Trees of Economic Value.	<ul style="list-style-type: none"> All PAPs who lose crops and trees of economic value as recorded on the day of valuation (i.e. present at the cut-off date) are eligible for: cash compensation for level of maturity at date of valuation of lost crops and 	<p>For landholders and physically displaced PAPs Livelihood Restoration program as described above under A to F.</p> <p>For Tenants who lose crops & trees where there is no</p>

¹³⁰ Impacted trees within the Biharamulo Game and Forest Reserves are valued using the royalty method because these natural forests are not typically sold.

Impact		Effect	Entitled Persons	Entitlement	
				In-kind and / or cash compensation	Livelihood Restoration ¹⁰⁸¹⁰⁹
I3	Loss of crops – seasonal and perennial.	Permanent loss or restriction of access.	Tenant farmer.	<p>trees of economic value adjusted to reflect the market value for the year of valuation (i.e. 2018);</p> <ul style="list-style-type: none"> Disturbance allowance and other allowances as applicable. (As per IFS crops and trees have had an inflation adjustment added in the IFS valuations see section 6.4.2 below). 	<p>loss of land or dwellings: Should the value of compensation be T.Shs. 100,000 or more, the following will apply:</p> <p>G6</p> <ul style="list-style-type: none"> Non-land-based or non-crop-based livelihood restoration programs (i.e. Money Management and Entrepreneurial Training, livestock program, beekeeping program); and Livelihood program will be commensurate to assets lost. <p>For Tenant PAP who lose >AE of crops and / or trees, (but are not compensated for land):</p> <p>G5</p> <ul style="list-style-type: none"> Land-based and non-land-based group level livelihood restoration programs (i.e. Money Management and Entrepreneurial Training). <p>Group Level livelihood program – where tenant PAPs have lost >AE and secured / have access to alternative land to farm.</p>
	I4 & I5	Loss of fruit trees of economic value including fruit and timber trees.	Permanent loss or restriction of access.		
I6		Loss of fruit or timber trees.	Permanent loss or restriction of access.		
I7	Loss of agricultural assets.	Permanent loss of access.	Informal owner of all categories of crops and trees.	<ul style="list-style-type: none"> Same as I1 to I6 addressed on a case by case basis to ensure PAPs do not end up worse off as a result of Project induced displacement. 	
Cultural Assets					
J2	Graves	Permanent	Individuals or groups laying claim to grave	<ul style="list-style-type: none"> Relocation or sealing of grave in consultation with claimant or representative of claimants. (The Project has developed a Grave Relocation Procedure. Relevant Municipal / District Health Officers are expected to oversee grave removal and relocation in conformity with health requirements. The procedure follows relevant legal requirements); and Compensation limited to the reasonable expenses incurred in the removal, 	N / A

Impact	Effect	Entitled Persons	Entitlement		
			In-kind and / or cash compensation	Livelihood Restoration ¹⁰⁸¹⁰⁹	
			transportation, reinstatement and re-interment of the grave and any placatory or expiatory rites or other ceremony ¹³¹ .		
Vulnerable Individuals and Groups					
K1	Supplementary program of social support for vulnerable people entitled to any of the above benefits	Permanent or Temporary Loss	Households who are physically or economically displaced by the Project. A household will be categorized as potentially vulnerable as per the criteria detailed in Section 6.4.2.	<ul style="list-style-type: none"> Designated assistance as assessed on a case by case basis to ensure that vulnerable people have access to intended compensation and protection afforded them by the conditions of the RAP; Legal assistance, financial assistance and practical assistance as determined applicable on a case by case basis. 	<p>Participation in relevant livelihood restoration programs as explained in Section 6.4.2 and 8 below, i.e. depending on significance of project impact and appropriate to vulnerability factors of PAP:</p> <p>Access to group level land-based and non-land-based livelihood restoration program(s)</p> <p>AND (as appropriate)</p> <p>Individual level livelihood restoration program(s)</p>
Financial Transition					
L1	Cash windfalls	Inability of households to manage sudden cash windfalls and misallocation of funds for items other than intended ends.	All persons receiving a form of cash compensation identified through final census surveys	<ul style="list-style-type: none"> Assistance with the opening of bank accounts¹³². 	Money management training will be provided (which will be relative to cash compensation amount);

¹³¹ Refer to Section 6.4.1.

¹³² For very small compensation payments, the Project is evaluating other payment methods for secure provision of such funds to PAPs. These would include PAPs whose total cash value of compensation of < T.Shs. 100,000. However, the minimum trigger amount for such 'very small compensation' payments is subject to ongoing analysis and discussion with potential banking partners.

6.4 Valuation and Compensation

As described in Chapter 3, the Project is obliged to meet Tanzanian legislative requirements for land acquisition, compensation and resettlement as well as applicable international financing standards, including IFC PS5 on Land Acquisition and Involuntary Resettlement. To fulfill these requirements, the valuation process has been completed in parts:

- **Rates Report.** Under the provisions of The Valuation and Valuers (General) Regulations, 2018, WK (Registered Valuers for the Project) undertook market research in Geita. The research aimed at establishing current or up-to-date market values and replacement costs of compensable items. WK prepared and submitted a Rates Report (Whiteknights, 2019) to the CV of the Government for endorsement outlining the results of the research including the rates established for the Project in Geita. New land rates in Chato District were approved by the MLHSD on the 23 September 2020 for use in the Project Valuations and the rates report was revised in accordance with this approval (Appendix B).
- **Valuation and Compensation under Tanzanian Legislation.** This report covers compensable items under the national legislative framework; is presented as cash compensation; and is submitted for the sign-off and approval by the CV. The sign-off and approval of the VR and Compensation Schedule under Tanzanian legislation will follow the requirements of the Valuation Regulations, 2018. For a complete overview of the valuation process, it is important that this valuation report is read in conjunction with the valuation report outlining in-kind and additional entitlements under the IFS.
- **Valuation for Additional Entitlements under International Financing Standards (IFS) Requirements.** This report covers entitlements and eligibility for in-kind compensation such as replacement land, replacement housing, livelihood restoration and assistance to vulnerable people. Uplifts to certain approved Ward land rates have been applied in the valuation for IFS to ensure compensations meet replacement cost. These are required to ensure that the schedule of compensation satisfies additional IFS requirements and obligations. While these items are brought to the attention of the CV, they are not intended for approval by the CV as they contain Project-specific additional entitlements and compensation options in accordance with international financing requirements.

6.4.1 Valuation and Compensation under Tanzanian Legislation

To determine compensation WK completed a valuation exercise¹³³ to calculate the value of the land parcels and unexhausted improvements / assets that are affected by the pipeline corridor within the Geita Region and specifically Chato, Geita, Mbogwe and Bukombe Districts.

¹³³ This process is prescribed in the Land Act No. 4 of 1999, Village Land Act No. 5 of 1999, Land Acquisition Act of 1967, Land Regulations of 2001, the Land (Compensation Claims) Regulations, 2001, Valuation and Valuers Registration Act of 2016, Valuation and Valuers (General) Regulations of 2018, and Graves (Removal) Act of 1969.

This valuation process considered:

- Rates issued by the CV¹³⁴;
- Relevant legislation;
- Information collected as part of the field activities summarized in Section 4.3 including a market rates survey; and
- A confirmation process in coordination with the relevant DVs.

Rates issued by the CV include compensation rates for:

- Land¹³⁵; and
- Crops and economic trees¹³⁶.

During the valuation process, base rates were adjusted according to the professional opinion of the registered valuer who further considered location-specific factors and observations. Adapted rates are then validated by the relevant DVs prior to submission to the CV for approval.

The process of establishing compensation rates for the Project commenced in 2017 when compensation rates were determined for the PA sites. This included field visits and a workshop attended by DWC, government valuers from the MLHSD and DVs. The rates for the PAs were then approved by the CV on 11th April 2018. This process focused on providing rates for the PA VRs and provided valuable benchmark information for the pipeline valuations.

The process of determining compensation rates for the pipeline corridor continued with a market asset survey along the entire length of the pipeline route. The survey was conducted by certified valuers between 16th May and 20th September 2018 and aimed to establish market related compensation rates for:

- Land;
- Land titling costs;
- Buildings and structures;
- Crops and trees;
- Naturally occurring trees;
- Disturbance allowance;

¹³⁴ The base rates for land are indicative, however, the rates for crops and trees and additional approved rates relevant to the Project are prescriptive.

¹³⁵ The rates for land are published on a regular basis by MLHSD and are based on a national survey of land rates which considers factors such as location and accessibility. The land base rates are specific for regions, districts and wards.

¹³⁶ The rates for crops and economic trees are also published on a regular basis by MLHSD in consultation with the Ministry of Agriculture, Food Security and Cooperatives.

- Accommodation (rental) allowance;
- Transport costs;
- Loss of profit; and
- Graves.

A team of senior valuers from WK visited the various impacted areas in Chato, Geita, Mbogwe and Bukomba to confirm the established rates and consult with the DV who validated the established rates. WK subsequently compiled the Geita rates which were submitted and approved by the CV.

Land¹³⁷

A set protocol for ascertaining the market value of land which lies within the Project footprint was adopted. Unit land rates were established using 2016 Base Land Rates obtained from the office of the CV and through additional research specific to the Project¹³⁸. The 2016 Land Rates stipulate land rates at ward and village levels. Subsequently, consultations were made with the district valuer after she / he visited the Project area to acquaint him / herself with the nature of the land in question. Information obtained from the district valuer was augmented with market research conducted with village authorities on local land rates. Market research included obtaining information on typical land prices per acre for undeveloped land and reviewing actual agricultural land sales which had taken place recently in a given village. Data on village land rates was subsequently aggregated to arrive at the ward level Market Land Rate. These consultative processes and the market research enabled Whiteknights to ascertain applicable Market Land Rates for the various wards that will be affected by the pipeline corridor and AGI¹³⁹ components of the Project, in the Chato, Geita, Mbogwe and Bukombe Districts.

In compliance with Regulations 8, 9 and 55(4) of the Valuation Regulations, 2018, the Comparative Method of Valuation was used to establish ward land value rates from actual land transactions carried out in villages in respective wards within the Chato, Geita, Mbogwe and Bukombe Districts. The Land Rates were submitted to the CV for the wards in Chato, Geita, Mbogwe and Bukombe Districts in May, 2019 and approved. New land rates were then approved by MLHSD in September 2020 for certain wards in Chato District and the rates report updated accordingly (Appendix B). The MLHSD approved land rates applied in the Valuation Reports prepared under Tanzanian legislation are presented in Table 6-2.

¹³⁷ Additional costs for subdivision of titles, including surveying, as a result of the land acquisition process for the pipeline corridor will be dealt with during RAP implementation and at the Project cost.

¹³⁸ Land Value Rates research undertaken along the pipeline corridor adopted a mixed research method using the quantitative approach where statistical inferences were made. These statistical analyses were augmented with qualitative approach which was mainly founded on deductive reasoning. For more information see Appendix B.

¹³⁹ Pumping Station 4 (PS-4) is located within Lubeho Village, Nyakafulu Ward, Mbogwe District. Main Camp and Pipe Yard Number 07 (MCPY-07) is located within the Mkungo Village, within Bukombe Ward, Chato District and Main Camp and Pipe Yard Number 08 (MCPY-08) is located within the Bukombe Village, within Bukombe Ward, Bukombe District. Both MCPY-07 and MCPY-08 will be built as part of the early works activities required to support the construction of the pipeline.

Table 6-2: Land Rates for Relevant Wards in the Geita Region¹⁴⁰

Region	District	Ward	Rate per m ² for Building Plots (T.Shs.)	Rate per Acre for Agricultural Land (T.Shs.)
	Chato ¹⁴¹	Ichwankima	N / A	483 000
		Nyamirembe	N / A	435 000
		Ilemela	N / A	435 000
		Katende	N / A	500 000
		Bukome	N / A	454 000
		Makurugusi	N / A	411 000
		Bwanga/Mikonto ¹⁴²	N / A	604 000
		Butengorumasa	N / A	386 000
		Iparamasa	N / A	459 000
	Geita	Magenge	N / A	700 000
	Mbogwe	Lulembela	N / A	1 300 000
		Ikunguigazi	N / A	1 000 000
		Ikobe	N / A	900 000
		Nyakafulu	N / A	1 600 000
		Bukandwe	N / A	1 000 000
		Ng'homolwa	N / A	1 000 000
	Bukombe	Lyambamgongo	N / A	650,000
		Bukombe	N / A	800,000

Orphaned Land

Orphaned land is the portion of a land parcel which remains unaffected by the Project footprint and is determined to be economically unviable. Orphaned land was identified by applying the following criteria:

- Where the remainder of the PAPs land parcel is 20% or less a proposal is made to acquire the orphaned land (only where the landowner agrees to relinquish it);
- Land fragments less than 0.5 acres which are located outside of city, municipality or township administrative boundaries will be acquired under the Land Acquisition Act, 1967 which under Section 10 stipulates that 0.5 acres is the maximum orphaned land size permissible under Tanzanian law outside a city, municipality or township.

Buildings and Structures

¹⁴⁰ Land rates in accordance with the Market Survey for Compensation Rates Report – (May 2019). This was submitted for approval to the CV by WK and approved in May 2019. New land rates in Chato District were approved by the MLHSD on the 23 September 2020 for use in this Valuation Report and the rates report was revised in accordance with this approval.

¹⁴¹ The pipeline also runs through Bwongera Ward in Chato District for 3.43 km. This short section is through the Biharamulo Game Reserve which is not valued in the main Valuation Reports – see footnote 30 for further details.

¹⁴² During the valuation process Minkoto Ward in Chato District was divided into two wards : Bwnaga Ward and Minkoto Ward. From engagement and field data the area that the pipeline corridor crosses is included in the new administrative boundaries of Bwanga Ward.

The Contractor's Test (Replacement Cost) Method of Valuation has been used for valuation of buildings and structures in this valuation. This is compliant with Regulation 55(3), which requires the valuer, in assessing building (structure) value rates, to take into account the cost of replacing a building or structure of similar nature, quality of construction levels of completion in works-in-progress, and size based on local market prices of materials and labor charges.

In the course of pipeline asset valuation, four (4) basic types of building / structure rates had to be established and used.

Firstly, Construction Rates categories for broad, relatively homogeneous groups of buildings or structures which share the same type of construction materials, quality and workmanship. Seven categories of buildings were designated (using codes BA to BF) as is detailed in Appendix B). The different rates categories applicable to different types of structures and their building materials that are reflected in Appendix B are identified by codes such as BA.1 or BE.4 etc., all of which constitute the full (100%) value rates categories. Similarly, there are structures or other land developments like fencing, boundary or foundation walls, furrows, trenches etc., whose units of measurements are in running meters and utilize the same approach to rate fixation. For these types of structures, the applicable construction rates have also been categorized and coded as SI.1 or SJ.2 or SK.3 etc.

Secondly, there are a set of rates that have been individually adjusted from the above determined Construction Rates categories for specific buildings / structures. These rates are used for buildings / structures which would have otherwise been assigned to one of the above described construction rates categories but were in an incomplete state of construction at the time of valuation, and / or missing certain structural elements. This rates adjustment has been determined by deducting a cost / value proportion of the proposed full category rate (the B or S codes as reflected in Appendix B), expressed as a percentage, of a given Construction Rate category. For example, where an adjusted rate is 75% of BE.4 Construction Rate category the building or structure has a 25% shortfall in meeting the expected completion level in terms of visible labor and works conducted at the time of valuation. which would be considered 100% complete.

Thirdly, there are Flat Construction Rates which are considered as full unit cost rates, applicable to structures that are relatively smaller and simpler with lower costs or values. These are clustered into specific flat rate groups, generally categorized as large, medium and small sizes. These rates are normally applicable to simple and small structures like kitchens, toilets or pit latrines, animal kraals, chicken coops, wells, ponds, kitchens, bath / shower rooms, etc. The Flat Construction Rates consider the use or purpose of the structure, how basic or rudimentary the construction is, construction standards, materials used as well as size (large, medium or small).

Fourthly, structures that are unique in terms of construction materials, shape or design and do not fall in any of the previously described categories. These structures require a different valuation approach. that determines a cost itemization based on building materials and labor used, as informed by the structure size, design and construction standards. In these cases, each building or structure is treated and valued separately based on a construction rate which is unique and specific to the building or structure.

Building and Structure Construction Rates are presented in Appendix B.

Crops and Trees

The market value of crops and trees depends on the type of crop / trees, age and growth stage and quantity of the particular crop or tree. The valuation team used the Lake Zone Crop Rates, 2012 issued by the CV.

Previously "unlisted" crops and trees (i.e. those not on the Lake Zone Crop Rates, 2012) are found in the list of approved compensation rates (ungazetted) for additional crops and trees issued by the CV for the Project in August, 2018¹⁴³.

The compensation rates for such crops and trees is based on either: i) proposed compensation rates which were provided to WK by district valuers or; ii) estimates of compensation rates for trees and crops made by considering compensation rates for generic crops and trees found in the 2012 compensation schedule and making allowance for inflation between 2012 and 2018¹⁴⁴.

The Lake Zone Crop Rates, 2012 and the subsequently approved rates are presented in Appendix B.

Disturbance Allowance

Regulation 15 of The Valuation and Valuers (General) Regulations, 2018 requires disturbance allowances to be calculated by "multiplying (the) value of the interest in land by the average percentage rate of interest offered by the Central Bank on fixed deposits for 12 months at the time of loss of interest in land".

Information provided by the Bank of Tanzania indicated that the Central Bank does not offer interest on fixed deposit reserves rather it provides information on interest rates which it charges commercial banks when borrowing from the Central Bank or when investors sell government financial instruments to the Central Bank. This rate is known as the discount rate. The relevant current discount rate is 7%) which has been effective from August 2018.

In view of the prevailing disparity between the Valuation and Valuers (General) Regulations 2018 and the deposits offered by the Central Bank consultations were undertaken with the MLHSD. Following this consultation an interest rate of (7%) was adopted for the valuations for the pipeline and AGIs for the Project.

Accommodation Allowance

Accommodation Allowance is the market monthly rental charge per building for 36 months as per Regulation 13 of Supplement No.11, 2018 Subsidiary Legislation to the Valuation Act, 2016. Under Regulation 12(2) of the Valuation Regulations, 2018, the owner of a property

¹⁴³ Letter Reference No: BA.391/466/01/58 of 15th August 2018

¹⁴⁴ The intercropping rate is calculated based on the underlying assumption that intercropping of the various crops is fairly distributed across the land parcel. To arrive at the inter-cropping rate, for each of the crops, the compensation rate for the individual crop is multiplied by the measured crop area and maturity level of the crop. Rates derived for the individual crops are subsequently added up and the sum of the rates is divided by the total intercropped area to arrive at the per acre intercropping rate. Where only a consolidated area for intercropping is available, the intercropping rate is calculated based on the assumption of equal weighting of individual crop areas.

shall be entitled to accommodation allowance, only when the house built on his land is in use at the time of valuation. Market monthly rental rates are provided in Appendix B.

Transport Costs

Transport Costs are calculated by considering the actual cost of transporting 12 tons of luggage by rail or road within 20 kms from the point of displacement as per Regulation 16 of Supplement No. 11, 2018 Subsidiary Legislation to the Valuation Act, 2016. This has been calculated to be Three Hundred Thousand Tanzanian Shillings (T.Shs. 300,000). Under Regulation 12(2) of the Valuation Regulations, 2018, the owner of a property shall be entitled to transport allowance only when the house built on his land is in use at the time of valuation¹⁴⁵.

Loss of Profit

Loss of Profit is assessed by establishing net profit per month evidenced by audited accounts where necessary and applicable or returns evidenced by the Tanzania Revenue Authority (TRA) multiplied by 36 (i.e. Loss of Profit = Net Profit / month x 36). No eligible loss of business or business-related assets exists in the pipeline corridor or AGI footprints in Chato, Geita, Mbogwe and Bukombe hence, in this valuation, this item is not applicable.

Graves

Compensation rates for graves were estimated as per the requirements of the Graves (Removal) Act, 1969. Section 9 of the Act states:

"The compensation payable under this section shall be limited to the reasonable expenses incurred in the removal, transportation, reinstatement and re-interment of the grave or dead body and any placatory or expiatory rites or other ceremony accompanying such removal and re-interment".

Accordingly, Whiteknights made an item by item estimate of costs related to grave removal and re-burial, depending on whether the grave has a construction around it. In general, the amount which is payable to the family in relation to "placatory or expiatory rites or other ceremony accompanying such removal and re-interment" is T.Shs. 300,000. In addition, the amount which would be paid to the District Medical Officer (DMO) or contractor who would engage the DMO is T.Shs. 200,000 per grave for an ordinary grave. For a grave with a construction, an additional T.Shs. 200,000 is required to construct the grave, making the total budget for grave removal T.Shs. 400,000, excluding T.Shs. 300,000 which is payable to the family of the deceased or custodian of the grave.

Government Land and Assets

Village Land and Associated Assets Administered by the Village/Mtaa Council

¹⁴⁵ Regulation 12(2) of The Valuation and Valuers (General) Regulations, 2018.

Village Land and associated assets administered by the village council have been valued according to the valuation methodology outlined in Tanzanian law and recorded separately in the Valuation Report.

Other Government Land and Associated Assets

Other Government land and associated assets have been valued according to the valuation methodology outlined in Tanzanian law (e.g. land at market rates researched by the Project valuers and agreed with the CV), and recorded separately in the VRs, as a record of the size and value of the land and assets affected by the Project.

6.4.2 Valuation for Compensation for Additional Entitlements under International Financing Standards

The VRs for additional entitlements under IFS and their associated Compensation Schedules covers the valuation for additional entitlements, eligibility criteria for in-kind compensation (e.g. livelihood restoration, replacement housing etc.) and compensation options developed to meet these standards. While these items are brought to the attention of the CV, they are not intended for approval by the CV as they contain Project specific additional entitlements and compensation options in accordance with IFS requirements. These comprise the following items that are further described below:

- Ten percent (10%) transaction cost to the market value of land¹⁴⁶;
- For Chato District wards only an uplift on approved land rates (September 2020) plus 10% transaction costs on the uplift has been applied so they align with full replacement cost under IFS;
- Inflation rate of 45.44% for crops and trees valued using the 2012 crops rates¹⁴⁷ schedule;
- Disturbance allowance of seven percent (7%) to all relevant additional entitlement's compensable items¹⁴⁸;
- Orphaned land;
- Assets (i.e. crops and trees) contained within the road reserve, powerline wayleaves etc. (proven not speculative and where they meet the eligibility criteria presented below);
- Livelihood restoration entitlements;

¹⁴⁶ 10% Transactions cost is applied to the value of the land as determined under Tanzanian law.

¹⁴⁷ The 2012 list of Crops Rates are provided by the Government of Tanzania.

¹⁴⁸ The 7% interest rate applied for Disturbance Allowance is as per the Tanzanian Valuation Report. As with Tanzanian law this interest rate is applied to any land / assets / additional entitlements provided for under IFC standards.

- Entitlements for vulnerable PAPs / households (i.e. this is limited to in-kind assistance and support and not additional cash compensation);
- Compensation options of replacement land and replacement housing for certain eligible PAPs; and
- Specific land and assets not eligible under Tanzanian law but eligible under the IFS.

IFS Uplift and Transaction Costs Associated with Land

IFC PS5 requires loss of assets to be compensated at replacement cost. PS5 defines replacement cost as the “Market Value of the assets plus transaction costs”. Market value is the value required to allow affected communities and persons to replace lost assets with assets of similar value. A 10% transaction cost associated with acquired land will be compensated under IFS and is contained within the Valuation Report for additional entitlements under IFS. All approved land rates used in the Tanzanian valuations were reviewed to confirm they met full replacement cost. Uplifts have been applied in the IFS Valuation Report to certain wards so they meet this IFS requirement, as indicated below.

Table 6-3: Uplift and Transaction Costs for Land Rates for Relevant Wards in Geita Region ¹⁴⁹

District	Ward	Rate per Acre for Agricultural Land (T.Shs.) (Tanzanian Valuations)	IFS Uplift per Acre for Agricultural Land (T.Shs.) (IFS Valuations)	Rate plus IFS Uplift per Acre for Agricultural Land (T.Shs.)	10% Transaction Cost (T.Shs.)	Rate per Acre for Agricultural Land plus Transaction Cost (T.Shs.) ¹⁵⁰
Chato	Ichwankima	483,000	517,000	1,000,000	100,000	1,100,000
	Nyamirembe	435,000	465,000	900,000	90,000	990,000
	Ilemela	435,000	465,000	900,000	90,000	990,000
	Katende	500,000	535,000	1,035,000	103,500	1,138,500
	Bukome	454,000	486,000	940,000	94,000	1,034,000
	Makurugusi	411,000	439,000	850,000	85,000	935,000
	Bwanga/Mikonto ¹⁵¹	604,000	646,000	1,250,000	125,000	1,375,000
	Butengorumasa	386,000	414,000	800,000	80,000	880,000
Ipamasa	459,000	491,000	950,000	95,000	1,045,000	
Geita	Magenge	700 000	-	-	70 000	770 000

¹⁴⁹ For Chato District wards only an uplift on approved new land rates (September 2020) has been applied so they align with full replacement cost under IFS.

¹⁵⁰ The amount represents the replacement value of the land.

¹⁵¹ During the valuation process Minkoto Ward in Chato District was divided into two wards : Bwanga Ward and Minkoto Ward. From engagement and field data the area that the pipeline corridor crosses is included in the new administrative boundaries of Bwanga Ward.

District	Ward	Rate per Acre for Agricultural Land (T.Shs.) (Tanzanian Valuations)	IFS Uplift per Acre for Agricultural Land (T.Shs.) (IFS Valuations)	Rate plus IFS Uplift per Acre for Agricultural Land (T.Shs.)	10% Transaction Cost (T.Shs.)	Rate per Acre for Agricultural Land plus Transaction Cost (T.Shs.) ¹⁵⁰
Mbogwe	Lulembela	1 300 000	-	-	130 000	1 430 000
	Ikunguigazi	1 000 000	-	-	100 000	1 100 000
	Ikobe	900 000	-	-	90 000	990 000
	Nyakafulu	1 600 000	-	-	160 000	1 760 000
	Bukandwe	1 000 000	-	-	100 000	1 100 000
	Ng'homolwa	1 000 000	-	-	100 000	1 100 000
Bukombe	Lyambamgongo	650 000	-	-	65 000	715 000
	Bukombe	800 000	-	-	80 000	880 000

Inflation Adjustment for 2012 Crop / Tree Rate

IFC PS5 - Land Acquisition and Involuntary Resettlement requires the loss of assets to be compensated at replacement cost. It defines Replacement Cost as the Market Value of the assets plus transaction costs. Market Value is the value required to allow affected communities and persons to replace lost assets, with assets of similar value. In order to meet this standard and provide for replacement cost for loss of crops and trees, the 2012 Crop Compensation Schedule values have been increased using compounded inflation rates from 2013 to October 2018. Inflation rates are shown in Table 6-4. The compounded or cumulative inflation rate for the years 2013 to October-2018 is 45.44%. This inflation adjustment is applied in the IFS Compensation Schedules.

Table 6-4: Inflation Rates (2013-2018)¹⁵²

Year	Annual Inflation Rate (%)
2013	12.00
2014	5.75
2015	4.75
2016	6.25
2017	6.50
January - October 2018	3.6
Compounded Inflation (2013-2018)	45.44

Disturbance Allowance

¹⁵² Monthly Inflation rates for the year 2018 are as follows: January (4.0%), February (4.1%), March (3.9%), April (3.8%), May (3.6%), June (3.4%), July (3.3%), August (3.3%), September (3.4%) and October (3.2%). The average inflation rate for the period January to October, 2018 is therefore 3.6%. Source: National Bureau of Statistics. Corresponding inflation rates for 2013 to 2018 are: 2013 (12.0%), 2014 (5.75%), 2015 (4.75%), 2016 (6.25%) and 2017 (6.5%). The compounded cumulative inflation factor for 2013 to October 2018 is, therefore, 45.44%.

The disturbance allowance (as calculated under the Tanzanian legislative framework) has been applied on the value of land and assets valued under additional entitlement under the IFS on the same basis as for land and assets under Tanzanian law. A rate of 7% has been utilized for this allowance.

Orphaned Land

Orphaned land is the portion of a land parcel which remains unaffected by the Project footprint and is determined to be economically unviable. As per Section 6.4.1.2, land fragments less than 0.5 acres which are located outside of city, municipality or township administrative boundaries¹⁵³ will be acquired under the Land Acquisition Act. Orphaned land outside of these parameters will be compensated under IFS as follows:

- Where the remainder of the PAPs land parcel is 20% or less of the total land size, a proposal is made to acquire the orphaned land (only where the landowner agrees to relinquish it); and
- Where the orphaned land exceeds 0.5 acres and / or is within a municipality or township administrative boundary.¹⁵⁴

Pipeline Crossings

The pipeline corridor within Chato, Geita, Mbogwe and Bukombe Districts will cross a total of 35 roads with associated reserves, 14 powerlines with wayleaves, one (1) Halotel fiber cable, six (6) seasonal rivers under LVBWB, and two (2) water pipelines. These crossings will not be converted into General Land and this land will not be leased to the Project and remain in the jurisdiction of the relevant agencies (e.g. TANROADS, TARURA, TANESCO etc.). The Project is working with the relevant agencies to agree crossing arrangements for the pipeline of this infrastructure. The valuation methodology applied to these crossings is summarized below.

Trunk and Regional Roads

It is understood that the width of trunk and regional road reserves were previously extended by the road's authority from 20 / 22.5 m to 30 m either side of the centerline to accord with the current regulations. Clarification of the status of the strip of land affected by this extension (whether this has been surveyed and compensated for by the relevant authority) was sought during the field validation process with relevant agencies.

The existing road reserves that overlap with the pipeline corridor have been surveyed to inform the valuations. The eligibility principles outlined below guide the valuation of land and assets associated with the roads that cross the pipeline corridor:

- Only where the Roads Agency (TANROADS/TARURA) communicates in writing within the valuation timeframe, that the land within any part of the reserve (i.e. a strip

¹⁵³ Land Acquisition Act, 1967 section 10-2 stipulates that the provision to acquire land of less than half an acre under section 10-1 will not apply within any city, municipality or township administrative boundaries.

¹⁵⁴ In the Land Acquisition Act, 1967, Section 10 stipulates that 0.5 acres is the maximum orphaned land size permissible under Tanzanian law outside a city, municipality or township.

between a historic and current regulated road reserve) has not been compensated may eligible land and immovable assets be placed in the VR under Tanzanian law;

- Where a PAP's land parcel and other assets (e.g. crops) fall in the road reserve and the relevant agency has not confirmed within the valuation timeframe that the full reserve has been compensated then land (within the relevant strip only), and assets can be placed in the VR for additional entitlements under IFS. However, land would only be placed under additional entitlements under IFS where the survey findings justify this; and
- Where the relevant agency (i.e. TANROADS/TARURA) confirms in writing within the valuation timeframe that the road reserve has been compensated then immovable assets only (e.g. crops and trees) (not land), will be valued under additional entitlements under IFS. It is expected that the majority of roads will fall under this principle.

Other Roads – Collector, Feeder and Community Roads

Where the pipeline overlaps with collector, feeder and community road reserves¹⁵⁵, it is understood that these road reserves have generally been surveyed and / or compensated previously by the relevant authorities. In these cases, the same principles will be applied as for land in regional road reserves that has been surveyed and compensated – i.e. immovable assets only (e.g. crops and trees, not land), where they are not proven speculative, will be valued under additional entitlements under IFS. Assets that are proven speculative are not paid compensation.

General Principles for All Roads

Where no clear guidance from the relevant agency is available within the valuation timeframe as to the reserve width to apply, the larger of the two reserves has been applied and the difference captured under additional entitlements under IFS. For all instances, assets in reserves that are proven speculative are not eligible for compensation.

Powerlines

There are two (2) agencies with responsibility for powerlines in Tanzania, TANESCO and the Rural Energy Agency (REA). It is understood for lines under the jurisdiction of TANESCO that these wayleaves are generally already compensated. For these wayleaves' immovable assets only (e.g. crops and trees) (not land), where they are not proven speculative, have been valued under additional entitlements under IFS. Assets that are proven speculative not paid.

Wayleaves that have not been compensated, or where specific survey findings indicate that PAPs are making claims for land compensation within the wayleave, have been reviewed on a case by case basis. In these instances, if the claim is considered to be valid (and not speculative) the principles for the valuation approach applied for Trunk and Road Reserves will be adopted and in line with any communications received from the relevant agency (i.e.

¹⁵⁵ Collector roads – 40 m reserve (i.e. 20 m either side of the center line), feeder road – 30 m reserve (15 m either side of the center line) and community roads - 25 m reserve (i.e. 12.5 m on either side of the center line).

TANESCO or REA). The varying dimensions for powerline wayleaves are provided for in the Urban Planning (Planning Space Standards), Regulations, 2018 as contained in Table 6-5.

Table 6-5: Electricity Supply Right of Way

Type of electricity supply lines in kilovolts (KV)	Right of Way in meters (ROW) / Powerline wayleave	Distance from Center Line in meters (CW)
11	5.0	2.5
33	10.0	5.0
66	20.0	10.0
132	40.0	20.0
220	60.0	30.0
400	60.0	30.0

Forest and Game Reserves

The pipeline corridor within the Chato District crosses the Biharamulo Game Reserve and the Biharamulo Forest Reserve. Biharamulo Game Reserve is under the jurisdiction of Tanzania Wildlife Authority (TAWA). The Biharamulo Game Reserve borders on the Ruiga River Forest Reserve¹⁵⁶. To the south-east of the Biharamulo Game Reserve is the Biharamulo Forest Reserve. Tanzania Forest Services (TFS) is the management authority for Biharamulo Forest Reserve.

Government forests are typically valued using the royalty method because these natural forests are not typically sold. The royalty charge is the foregone revenue to the Government if deprived of the trees / forest. A separate forestry valuation report has been prepared by the Projects for land and assets affected within the forest and game reserves.

Livelihood Restoration Entitlement

The Project will offer livelihood restoration assistance, depending on the significance of impacts experienced by PAHs / PAPs, as per the requirements of IFS. These livelihood restoration entitlements are linked to PAPs and will have a cumulative value for PAPs with multiple affected land parcels. The criteria for livelihood restoration support are outlined in Table 6-6 and detailed in Chapter 8.

Table 6-6: Livelihood Restoration Support Criteria

Group	Replacement Land Eligibility Category ¹⁵⁷	Criteria	Type of Livelihood Restoration Support
G1	0	PAP will permanently lose access to his / her residential dwelling(s).	<ul style="list-style-type: none"> Land and non-land-based group level livelihood restoration programs; and Individual level livelihood restoration program.
G2	1a	PAP will permanently lose access to his / her land and is identified as	<ul style="list-style-type: none"> Group level land-based and non-land-based livelihood restoration program(s); and

¹⁵⁶ The Ruiga River Forest Reserve is located in the Kagera Region.

¹⁵⁷ See section below on replacement land.

Group	Replacement Land Eligibility Category ¹⁵⁷	Criteria	Type of Livelihood Restoration Support
		vulnerable.	<ul style="list-style-type: none"> Individual level livelihood restoration program(s) (as appropriate to vulnerability factors of PAP).
G3	2a	PAP loses > AE (more than an Acre Equivalent of land) but < AFS ^{158 159} (less than the average farm size) for the district and is identified as vulnerable.	<ul style="list-style-type: none"> Group level land-based and non-land-based livelihood restoration program(s); and Individual level livelihood restoration program(s) (as appropriate to vulnerability factors of PAP).
G4	1 and 2	PAP will permanently lose access to his / her land in part or whole.	<ul style="list-style-type: none"> Group level land-based and non-land-based livelihood restoration program(s).
G5	2b	Tenant PAP will lose > AE of crops and / or trees, but not be compensated for land.	<ul style="list-style-type: none"> Land-based and non-land-based group level livelihood restoration programs (i.e. Money Management and Entrepreneurial Training); and Group level livelihood program – where tenant PAPs have lost > AE and have self-identified and secured alternative land.
G6	3	PAP compensated for crops, trees and other assets including other non-residential structures) valued at T.Shs. 100,000 or more.	<ul style="list-style-type: none"> Non-land-based or non-crop-based livelihood restoration programs (i.e. Money Management and Entrepreneurial Training, livestock program, beekeeping program); and Livelihood program will be commensurate to assets lost.
(G7) PAP with a total cash value of compensation of < T.Shs. 100,000 or who receive compensation for graves only, will not be eligible for livelihood restoration programs.			

Entitlements to Vulnerable Persons

Additional resettlement assistance will be offered to vulnerable households who are physically or economically displaced by the Project. Acknowledging that no single factor / criteria automatically renders a household vulnerable, the following contributing factors were identified ¹⁶⁰ as impeding the resilience of households to withstand external shocks / impacts, hence making them potentially vulnerable due to impacts of the land acquisition associated with the Project:

- Age of household head (including child-headed households);
- Gender of household head;
- Education level of household head;

¹⁵⁸ Acre Equivalent (AE): A measure of the relative productivity of arable land in a Project-affected district. It is the ratio of two numbers: (a) the number of acres of land that a household in a district needs to sustain itself (taking into account staple crops and their prevalence in that district, as well as district-specific crop yields and average household size); and (b) the average number of acres of land per household across all Project affected districts (as reported in 2007 / 2008 agricultural census data). Average Farm Size (AFS): The average agricultural (crop) land holding per household in a district, as reported in 2007 / 2008 agricultural census.

¹⁵⁹ The Acre Equivalent (AE) and Average Farm Size (AFS) for Chato are 0.51 acres and 2.72 acres, for Geita 1.36 acres and 2.21 acres, for Mbogwe 2.00 acres and 6.97 acres and Bukombe 1.31 acres and 6.97 acres (refer to Section 6.4.2 for additional information).

¹⁶⁰ United Nations World Food Programme, "Comprehensive Food Security & Vulnerability Analysis (CFSVA), Tanzania, 2010" and United Nations World Food Programme, "Comprehensive Food Security & Vulnerability Analysis (CFSVA), Tanzania, 2012.

- Household caring for one or more disabled persons¹⁶¹;
- Percentage of household expenditure on food;
- Number of household dependents and resources to support those dependents;
- Number of children between 6-14 years not attending school; and
- A cumulative impact of one or more of the above.

Households have been categorized as vulnerable if after an accumulative analysis of the factors contributing to vulnerability, they have been identified as being potentially vulnerable. Any analysis on vulnerability also needs to recognize that vulnerability is not an absolute but rather a graded scale between destitute and varying degrees of “at risk”.

To incorporate this variability, three categories of vulnerability are provided:

- **Category 1 (Vulnerable)** households will immediately be placed on the Vulnerable Household Register (VHR) and qualify for in-kind assistance and livelihood support, in addition to appropriate additional support commensurate with their respective vulnerability;
- **Category 2 (Potentially Vulnerable)** households will qualify for in-kind assistance and livelihood support but will need further verification before being placed on the VHR; and
- **Category 3 (At-risk)** households will be listed as “at-risk” and must be included in any review / survey to monitor the PAPs, they will not be classified as vulnerable in terms of in-kind assistance but will qualify for livelihood support.

Chapter 9 describes the Vulnerable Persons Plan (VPP) and further details on the identification of vulnerable persons and assistance to be offered to them.

Compensation Options

In compliance with IFC PS5, only eligible households will be offered options to select between cash compensation or in-kind compensation (such as replacement housing and / or land).

Where an eligible PAP selects replacement housing and / or replacement land, the relevant cash compensation amount for the affected structures and / or land to be replaced at the Project’s cost will be deducted from the PAP’s cash compensation amount presented in the VR under Tanzanian Law of the Compensation Schedule. The additional entitlements under IFS Compensation Schedule contain a summary of the “Total Residual Cash Compensation” if a PAP selects replacement structures and / or land.

A general principle to emphasize throughout the options outlined below and included in the Entitlement Framework is that the Project’s preference is to offer, where applicable due to Project impacts on land-based livelihoods, like-for-like compensation for affected land and assets in line with IFC PS5.

¹⁶¹ Disability is the loss or limitation of opportunities to take part in the normal life of the community on an equal level with others due to physical, mental or social factors. It is an umbrella term, covering impairments, activity limitation, and participation restrictions. National Disability Policy of 2004.

Replacement Land¹⁶²

The availability of land and the productivity of the land along the pipeline corridor was considered when determining both the eligibility criteria for replacement land and in assessing vulnerability, as this will affect the area of land required to produce sufficient food to sustain the PAH's. This area differs across the pipeline-affected districts and regions based on the yields achievable for staple food crops and the average number of household members which need to be supported. From a technical analysis undertaken by DWC a minimum area needed in a district to support an average sized local household above the poverty food line, as determined by the World Food Program¹⁶³ was determined. This has been termed a District Acre Equivalent Coefficient (DAEC) or AE¹⁶⁴.

The Acre Equivalent (AE) and Average Farm Size (AFS) for Chato, Geita, Mbogwe and Bukombe are as follows:

- Chato: AE = 0.51 acres and AFS = 2.72 acres.
- Geita: AE = 1.36 acres and AFS = 2.21 acres.
- Mbogwe: AE = 2.00 acres and AFS = 6.97 acres
- Bukombe: AE = 1.31 acres and AFS = 6.97 acres

The criteria detailed in

Table 6-7 were then applied to determine eligibility for being offered the option of cash compensation or replacement agricultural land¹⁶⁵.

Table 6-7: Land Eligibility Criteria and Entitlements

Replacement Land Eligibility Category	Criteria	Replacement Land Entitlements	Livelihood Restoration Support Entitlements
0	Physically displaced PAP whose dwelling affected and eligible for replacement housing.	<ul style="list-style-type: none"> • To be offered cash compensation option or in-kind replacement of land option (provided land is available in the ward), otherwise an alternative livelihood program (with cash compensation); and • Where PAP selects replacement house they will be provided with as a minimum a Residential Plot only. 	<ul style="list-style-type: none"> • Land and Non-land-based group level livelihood restoration programs; and • Individual level livelihood restoration program (G1).

¹⁶² Village land and land belonging to a government or private institution does not qualify for replacement land with the exception of churches and schools which are reviewed on a case-by-case basis.

¹⁶³ World Food Program, 2012. Comprehensive Food Security and Vulnerability Analysis. Tanzania

¹⁶⁴ For additional information, refer to the Technical Note: Eligibility Criteria for the EACOP Pipeline, February 2019

¹⁶⁵ Land used for communal purposes, particularly grazing land used collectively will be compensated cash for the permanent loss of land acquired based on market rates plus 10% for transaction costs and compensation paid to pastoralist community (entity to be nominated by community or if village land to village/mtaa Council). Project assistance in maintaining some access or alternative arrangements during the construction period.

Replacement Land Eligibility Category	Criteria	Replacement Land Entitlements	Livelihood Restoration Support Entitlements
1	PAP loses <AE ¹⁶⁶ OR >AFS ¹⁶⁷ (average farm size).	<ul style="list-style-type: none"> • Cash compensation for the land. 	<ul style="list-style-type: none"> • Group level land-based and non-land-based livelihood restoration program(s) (G4).
1a	PAP will lose <AE and is identified as vulnerable.	<ul style="list-style-type: none"> • Cash compensation for the land. 	<ul style="list-style-type: none"> • Group level land-based and non-land-based livelihood restoration program(s); and • Individual level livelihood restoration program(s) (as appropriate to vulnerability factors of PAP) (G2).
2	PAP will lose >AE BUT <AFS	<ul style="list-style-type: none"> • Cash compensation for the land; and • Assistance in formalizing appropriate tenure to alternative land within in the ward (where requested and land being self-identified by PAP). 	<ul style="list-style-type: none"> • Group level land-based and non-land-based livelihood restoration program(s) (G4).
2a	PAP will lose >AE BUT <AFS and is identified as vulnerable	<ul style="list-style-type: none"> • To be offered cash compensation option or In-kind replacement of land option (provided land is available in the ward), otherwise an alternative livelihood program (with cash compensation). 	<ul style="list-style-type: none"> • A group level livelihood program; or • An individual level livelihood program (G3).
2b	Tenant PAP on acquired land parcels >AE who will lose crops, trees or other assets >T.Shs. 100,000 in value, but not land or residential dwellings.	<ul style="list-style-type: none"> • No land entitlement. 	<ul style="list-style-type: none"> • Non-land-based group level livelihood restoration (i.e. Money Management and Entrepreneurial Training); and • Group Level livelihood program – where tenant PAPs have lost >AE and have self-identified and secured / have access to alternative land to farm (G5).
3	PAP compensated for crops, trees and other assets including other non-residential structures) valued at T.Shs. 100,000 or more.	<ul style="list-style-type: none"> • No land entitlement. 	<ul style="list-style-type: none"> • Non-land-based or non-crop-based livelihood restoration programs (i.e. Money Management and Entrepreneurial Training, livestock program, beekeeping program); and • Livelihood program will be commensurate to assets lost (G6).
3a	PAP will lose crops, trees or other assets, but not land or residential dwellings and total	<ul style="list-style-type: none"> • No land entitlement. 	<ul style="list-style-type: none"> • Not eligible for livelihood restoration programs (G7).

¹⁶⁶ An Acre Equivalent (AE) which takes into account the productivity of the land in the district and the average number of household members for households in the district.

¹⁶⁷ AFS – Average Farm Size for the district.

Replacement Land Eligibility Category	Criteria	Replacement Land Entitlements	Livelihood Restoration Support Entitlements
	cash value of compensation is less than T.Shs. 100 000.		

Replacement Housing

The following criteria were applied to determine eligibility for being offered the option of cash compensation or replacement housing (refer to Chapter 7 for additional detail):

- A household will permanently lose access to its residential and associated dwellings.

The type of replacement house will depend on the size of the residential dwelling it replaces. The following procedure will be applied to select the type of replacement house:

- The minimum replacement house is a unit of 25 m² (Type A). All units less than or equal to 25 m², irrespective of number of rooms, will be replaced by a Type A house. If the combined footprint of any two houses of a PAP is less than or equal to 25 m², the PAP would be offered for these two houses one replacement Type A house and cash compensation for the smallest house;
- Type B (33 m²) will replace all residential dwellings greater than 25 m² but less than or equal to 33 m²;
- Type C (39 m²) will replace all residential dwellings greater than 33 m² but less than or equal to 39 m²;
- Type D (47 m²) will replace all residential dwellings greater than 39 m² but less than or equal to 47 m²;
- Type E (58 m²) will replace all residential dwellings greater than 47 m² but less than or equal to 58 m²;
- Type F (75 m²) will replace all residential dwellings greater than 58 m² but less than or equal to 75 m²;
- Type G (105 m²) will replace all residential dwellings greater than 75 m² but less than or equal to 105 m²; and
- Type H (145 m²) will replace all residential dwellings greater than 105 m² but less than or equal to 145 m².

Note: Floor areas exclude external living spaces / verandas.

For each replacement house, a PAP will be provided with a standard single improved latrine and a covered kitchen shelter.

Where a PAP is eligible for more than one (1) replacement house structure, they may elect for either:

- A standard single improved latrine and a covered kitchen shelter per replacement house structure; or
- One (1) ventilation improved pit ablution / latrine structure and a covered kitchen shelter plus store per homestead.

Structures not replaced will be eligible for cash compensation.

Note: Residential dwellings must be completed buildings and must be in regular use and not abandoned by the PAP to be eligible for replacement housing option.

The land (residential plot) associated with the replacement of residential dwellings proposed for the Project is defined in The Urban Planning (Planning Space Standards) Regulations, 2018, as outlined in Table 6-8. The average plot size to be applied for the Project is 1,000 m² the midpoint of low-density residential areas. The plot size will be amended in keeping with the pre-existing condition of the housing to be replaced (i.e. high-density housing = 300 to 600 m²). A standard residential plot size will be allocated in line with the Tanzanian Town Planning Regulations of 2016 where a PAP selects the in-kind replacement housing option¹⁶⁸.

Table 6-8: Standards for Residential Areas-Detached Houses and Maisonettes

No.	Type	Plot Size in per-urban area	Max. No. of household	Max. No. of Buildings	Max. Plot coverage %
i.	Special area and unplanned settlements (special case)	90 – 300 m ²	1	1	80
ii.	High density	301 – 600 m ²	1	2	60
iii.	Medium density	601 – 800 m ²	1	2	55
iv.	Low density	801 – 1,200 m ²	1	2	50
v.	Super Low density	1201 – 2,000 m ²	1	2	45

6.5 Summary of Entitlements

Tables 6-9 – 6-12 provide a breakdown of the PAPs entitlements across the Geita Region. This includes entitlement to both livelihood restoration and additional support to potentially vulnerable people.

¹⁶⁸ However, the residential plot will form part of the PAPs replacement land allocation (i.e. not additional to it). Where a physically displaced PAP loses less than the residential plot size they will still be eligible to be provided as a minimum with a residential plot.

Table 6-9: Overview of PAPs Entitlements in the Chato District

Ward	Village	Landholders (No.)	Tenants (No.)	Other Government Owned Structures and / or Land	Village Owned Structures and / or Land Parcels	Forest and Game Reserves	PAHs Losing Dwellings	Buildings and Structures			Crops Acres	Crops Stems	Economic Trees (2012 Crop & Tree Rates schedule) and other trees (No.) ¹⁶⁹	Graves (No.)	Vulnerability			Livelihood Restoration						
								Residential Dwellings	Other Structures	Incomplete Structures					CAT1	CAT2	CAT3	G1	G2	G3	G4	G5	G6	G7
Entitlement Category		A1 – A7	H2	G1/ H1, H4, H5			B1 – B5			I1 – I7			J2	CAT1	CAT2	CAT3	G1	G2	G3	G4	G5	G6	G7	
(as per Table 6-1)							CHATO																	
Nyamirembe	Nyambiti Village	37	9	0	1	0	0	0	0	0	11.66	115	0	0	2	9	10	0	4	4	27	1	8	2
Bwongera	-	0	0	0	0	1 ¹⁷⁰	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ichwankima	Busalala Village	32	0	0	5		1	1	2	0	21.92	313	82	9	4	10	8	1	2	8	20	0	0	1
Ilemela	Ilemela Village	11	4	0	0	0	0	0	1	0	8.08	149	28	1	2	5	3	0	1	1	9	2	1	1
	Nyambogo Village	14	0	0	0	0	0	0	0	0	2.13	244	23	0	0	4	5	0	2	1	9	0	0	2
	Nyagh'omango Village	18	0	0	0	0	0	0	0	0	0.00	13	3	0	1	4	5	0	2	3	13	0	0	0
Katende	Chabulongo Village	17	5	0	1	0	0	0	0	0	5.28	4	23	0	1	5	3	0	1	4	12	2	3	0
	Katende Village	41	8	0	3	0	1	1	6	1	8.22	263	285	0	5	4	6	1	6	1	33	2	4	2
	Mwabarui Village	27	11	0	1	0	2	2	1	0	11.17	106	125	1	2	8	5	2	2	3	19	7	3	2

¹⁶⁹ Includes trees where rates agreed with the Chief Valuer's Office in 2018 as well as additional rates approved as presented in Appendix B.

¹⁷⁰ Biharamulo Game Reserve (located in both Bwongera and Ichwankima Wards). Figures within this table exclude trees affected within the game reserve and valued using the royalty method.

Ward	Village	Landholders (No.)	Tenants (No.)	Other Government Owned Structures and / or Land	Village Owned Structures and / or Land Parcels	Forest and Game Reserves	PAHs Losing Dwellings	Buildings and Structures			Crops Acres	Crops Stems	Economic Trees (2012 Crop & Tree Rates schedule) and other trees (No.) ¹⁶⁸	Graves (No.)	Vulnerability			Livelihood Restoration						
								Residential Dwellings	Other Structures	Incomplete Structures					CAT1	CAT2	CAT3	G1	G2	G3	G4	G5	G6	G7
Entitlement Category		A1 – A7	H2	G1/ H1, H4, H5			B1 – B5				I1 – I7			J2				G1	G2	G3	G4	G5	G6	G7
(as per Table 6-1)																								
Bukome	Mkungo Village	38	16	1	10	0	0	0	1	0	9.68	212	243	6	6	9	8	0	3	7	26	1	11	6
Makurugusi	Makurugusi Village	26	5	0	8	0	1	1	1	0	11.00	218	29	0	1	5	3	1	0	6	17	1	4	2
	Kasala Village	28	2	0	0	0	1	1	1	0	3.28	27	100	0	2	8	7	1	3	5	18	0	1	2
	Musasa Village	43	6	0	7	0	1	1	2	0	9.06	193	214	0	7	10	11	1	6	7	28	0	4	3
	Kamanga Village	21	2	0	5	0	0	0	0	0	2.01	285	122	3	7	3	3	0	4	1	15	1	0	2
Bwanga	Minkoto Village	72	16	0	7	1 ¹⁷¹	2	2	1	0	27.65	170	1166	0	11	13	20	2	10	10	47	5	8	6
Iparamasa	Ilelema Village	16	3	1	2		3	5	9	1	0.96	359	335	2	3	5	2	3	1	3	10	0	1	1
	Iparamasa Village	12	0	0	8	0	0	0	0	1.29	255	217	0	3	1	3	0	1	3	8	0	0	0	
	Imalabupina Village	7	0	0	2	0	0	0	1	0	0.45	239	103	0	1	1	0	0	0	2	5	0	0	0
TOTALS		460	87	2	60	2	12	14	26	2	133.84	3165	3098	22	58	104	102	12	48	69	316	22	48	32

¹⁷¹ Biharamulo Forest Reserve (located in Bwanga, Butengorumasa and Iparamasa Wards). Figures within this table exclude trees affected within the forest reserve and valued using the royalty method.

Table 6-10: Overview of PAPs Entitlements in the Geita District

Ward	Village	Landholders (No.)	Tenants (No.)	Other Government Owned Structures and / or Land	Village Owned Structures and / or Land Parcels	Forest and Game Reserves	PAHs Losing Dwellings	Buildings and Structures			Crops Acres	Crops Stems	Economic Trees (2012 Crop & Tree Rates schedule) and other trees (No.) ¹⁷²	Graves (No.)	Vulnerability			Livelihood Restoration							
								Residential Dwellings	Other Structures	Incomplete Structures					CAT1	CAT2	CAT3	G1	G2	G3	G4	G5	G6	G7	
Entitlement Category (as per Table 6-1)		A1 – A7	H2	G1/H1, H4, H5			B1 – B5			I1 – I7			J2												
GEITA																									
Magenge	Igando Village	23	0	0	2	0	1	1	1	0	7.43	226	138	3	3	8	7	1	11	0	10	0	0	0	1
TOTALS		23	0	0	2	0	1	1	1	0	7.43	226	138	3	3	8	7	1	11	0	10	0	0	0	1

¹⁷² Includes trees where rates agreed with the Chief Valuer's Office in 2018 as well as additional rates approved as presented in Appendix B.

Table 6-11: Overview of PAPs Entitlements in the Mbogwe District

Ward	Village	Landholders (No.)	Tenants (No.)	Other Government Owned Structures and / or Land	Village Owned Structures and / or Land Parcels	Forest and Game Reserves	PAHs Losing Dwellings	Buildings and Structures			Crops Acres	Crops Stems	Economic Trees (2012 Crop & Tree Rates schedule) and other trees (No.) ¹⁷³	Graves (No.)	Vulnerability			Livelihood Restoration						
								Residential Dwellings	Other Structures	Incomplete Structures					CAT1	CAT2	CAT3	G1	G2	G3	G4	G5	G6	G7
Entitlement Category		A1 – A7	H2	G1/H1, H4, H5	B1 – B5			I1 – I7			J	K	L	M	N	O	P	Q	R	S	T	U	V	W
(as per Table 6-1)																								
MBOGWE																								
Lulembela	Nykonga Village	39	1	0	7	0	1	2	6	0	5.00	98	355	0	6	6	12	1	10	0	27	0	1	2
	Lulembela Village	8	6	0	1	0	0	0	0	0	0.42	0	71	1	3	4	1	0	3	1	3	0	0	7
Ikunguigazi	Ikunguigazi Village	26	2	0	3	0	5	7	2	4	1.91	124	117	5	2	4	8	4	3	0	16	0	0	5
	Ibambula Village	26	2	0	5	0	1	1	5	0	1.88	186	438	5	3	2	7	1	4	0	20	0	0	3
Lulembela	Kashelo Village	17	1	0	2	0	0	0	3	0	1.57	81	147	0	3	5	3	0	6	0	9	0	0	2
Ikobe	Kagongo Village	22	4	0	0	0	2	4	3	0	3.34	17	172	0	7	7	5	2	11	0	7	0	2	6
	Ikobe Village	47	3	0	7	0	0	0	1	0	2.89	372	872	3	11	12	10	0	17	1	23	0	1	8
	Ishigamva Village	51	3	0	10	0	0	0	2	0	1.83	446	266	2	5	11	12	0	14	2	33	0	1	3
Nyakafulu	Lubeho Village	60	1	0	16	0	0	0	4	1	1.46	484	1842	5	5	11	12	0	13	2	44	0	0	1

¹⁷³ Includes trees where rates agreed with the Chief Valuer's Office in 2018 as well as additional rates approved as presented in Appendix B.

Ward	Village	Landholders (No.)	Tenants (No.)	Other Government Owned Structures and / or Land	Village Owned Structures and / or Land Parcels	Forest and Game Reserves	PAHs Losing Dwellings	Buildings and Structures			Crops Acres	Crops Stems	Economic Trees (2012 Crop & Tree Rates schedule) and other trees (No.) ¹⁷³	Graves (No.)	Vulnerability			Livelihood Restoration						
								Residential Dwellings	Other Structures	Incomplete Structures					J	CAT1	CAT2	CAT3	G1	G2	G3	G4	G5	G6
Entitlement Category		A1 – A7	H2	G1/H1, H4, H5			B1 – B5				I1 – I7			J	CAT1	CAT2	CAT3	G1	G2	G3	G4	G5	G6	G7
(as per Table 6-1)																								
	Shinyanga B Village	77	4	0	7	0	3	4	10	5	1.20	366	163	5	2	14	16	3	12	0	44	0	3	20
	Shinyanga A Village	77	2	0	11	0	6	6	17	8	0.00	343	939	3	8	8	15	5	14	0	43	0	0	15
Bukandwe	Bukandwe Village	34	2	0	6	0	1	1	0	0	0.08	358	131	0	1	9	8	1	8	0	19	0	1	6
	Kanegere Village	78	2	2	17	0	1	1	6	1	2.06	381	888	4	7	16	22	1	19	2	53	0	0	4
Nhomolwa	Kabanga Village	86	1	0	6	0	2	2	4	0	0.00	84	196	4	21	16	18	2	32	1	44	0	0	8
TOTALS		648	34	2	98	0	22	28	63	19	23.64	3340	6597	37	84	125	149	20	166	9	385	0	9	90

Table 6-12: Overview of PAPs Entitlements in the Bukombe District

Ward	Village	Landholders (No.)	Tenants (No.)	Other Government Owned Structures and / or Land	Village Owned Structures and / or Land Parcels	Forest and Game Reserves	PAHs Losing Dwellings	Buildings and Structures			Crops Acres	Crops Stems	Economic Trees (2012 Crop & Tree Rates schedule) and other trees (No.) ¹⁷⁴	Graves (No.)	Vulnerability			Livelihood Restoration						
								Residential Dwellings	Other Structures	Incomplete Structures					CAT1	CAT2	CAT3	G1	G2	G3	G4	G5	G6	G7
Entitlement Category (as per Table 6-1)		A1 – A7	H2	G1/H1, H4, H5			B1 – B5			I1 – I7	J2	CAT1	CAT2	CAT3	G1	G2	G3	G4	G5	G6	G7			
BUKOMBE																								
Lyambamgongo	Kagwe Village	41	0	0	1	0	0	0	0	0	0.00	21	58	0	8	5	14	0	11	1	28	0	0	1
Bukombe	Kidete Village	15	0	0	5	0	0	0	1	0	0.81	185	95	3	2	2	4	0	2	2	11	0	0	0
	Bukombe Village	44	0	0	2	0	0	0	1	0	1.83	920	252	1	4	8	15	0	10	0	31	0	0	4
	Ilalwe Village	24	3	0	13	0	1	1	0	1	0.93	315	254	5	6	8	6	1	10	3	11	0	0	2
	Nasihukulu Village	1	0	1	1	0	0	0	0	0	0.00	0	29	0	0	0	0	0	0	0	0	1	0	0
TOTALS		125	3	1	22	0	1	1	2	1	3.57	1441	688	9	20	23	39	1	33	6	82	0	0	7

¹⁷⁴ Includes trees where rates agreed with the Chief Valuer's Office in 2018 as well as additional rates approved as presented in Appendix B.

7 REPLACEMENT HOUSING AND LAND

7.1 Replacement Housing

This section provides an overview of the replacement housing strategy including an analysis of existing structures in the Geita Region, existing structures identified as eligible for replacement housing, and the design strategy developed for the Geita Region. The designs for all house types and ancillary structures are presented in Appendix D.

7.1.1 Approach to Replacement Housing Strategy and Design

A Concept Design Study¹⁷⁵ was undertaken to help identify current housing types and practices for use as the basis for the development of concept designs for replacement houses. Based on the outcomes of the Concept Design Study, detailed designs were then prepared including designs for seismic and non-seismic conditions.

The study involved a review of previous reports, background information and socio-economic data, as well as targeted field visits by the design team, which consisted of an architect and a quantity surveyor. The field visit included the identification and assessment of existing structures, semi-structured surveys and interviews, and an overall analysis of affected dwelling types, building materials, climate and vegetation. Cultural needs and practices around the design and location of dwellings and ancillary buildings were also determined.

The findings of the fieldwork and background research were drawn on to further develop concept designs, which include a range of building configurations and sizes based on locally available materials. Across the pipeline, houses range in size, and to accommodate this, eight (8) sizes have been adopted to provide incremental increases reflective of current house stocks. The designs have been developed to enable further discussion and refinement as the Project progresses.

Eligible Residential Structures

As discussed in Chapter 6, Section 6.3, a household that will permanently lose its residential and associated dwellings (or access to them), is eligible to choose from either cash compensation or replacement housing. To be eligible for a replacement housing option, dwellings must be completed and must be in regular use and not abandoned by the PAP. The type of replacement house that a PAP is entitled to depends on the size of the residential dwelling(s) it replaces. The general rule is that, of the eight (8) replacement house sizes that have been adopted, a household is eligible for the smallest size house type that has a footprint equal to or larger than the footprint of its current residential dwelling(s), excluding external living spaces / verandas. The exception is where a PAP has two (2) or more residential dwellings affected and the combined footprint of any two houses is less than or equal to 25 m². In such cases, the PAP would be offered for these two (2) houses

¹⁷⁵ Replacement Housing Concept Design Report: Pipeline (2019) (Digby Wells Consortium).

one (1) replacement house of the smallest available size (Type A, which has a footprint of 25 m²) and cash compensation for the smallest house.

In the Geita Region, there are 36 households (owning 44 residential structures) that will be physically displaced. Of the 44 residential structures there are five (5) cases where the PAH owns two structures with a total combined floor space of less than 25m². In this situation, the PAH is only entitled to one (1) replacement house (25m²) and will be compensated for the second smaller structure. Table 7-1 provides a summary of the number of PAPs losing dwellings, as well as the total number of eligible residential dwellings and the range of sizes by district and village.

The majority (30 of the 39), residential structures eligible for replacement in the Geita Region are smaller than 25 m². The final number of replacement houses that will be constructed depends on the number of PAPs who choose a replacement house(s) option in preference to accepting cash compensation.

Ancillary Structure Eligibility

Table 7-1 also shows the number of other structures (including kitchens, bathrooms, kraals, and incomplete structures) that will be affected. In terms of the entitlement framework (Chapter 6), these structures will not be replaced; PAPs will be compensated for them in cash. However, for improvement of living conditions for each replacement house, a PAP will be provided with a standard single improved latrine and a covered kitchen shelter. Where a PAP is eligible for more than one (1) replacement house structure, they may elect for either:

- A standard single improved latrine and a covered kitchen shelter per replacement house structure; OR
- One improved VIP ablution / latrine structure and a covered kitchen shelter plus store per homestead.

These latrine and kitchen structures are offered to meet the objectives and requirements within IFC PS5 relating to improving the standards of living of displaced persons. As discussed, entitlement is not linked to the PAP's existing ancillary structures that will be lost (which will be compensated for in cash) but provided per replacement house / homestead.

Table 7-1: Eligible Dwellings for Replacement within Geita Region

District	Ward	Village / Reserve	PAPs Losing Eligible Dwellings	Residential Dwellings Impacted	Residential Dwellings Eligible for Replacement	Eligible Dwellings for Replacement								Other Structures	Incomplete Structures	
						House Type A 25 m ² ¹⁷⁶	House Type B 33 m ²	House Type C 39 m ²	House Type D 47 m ²	House Type E 58 m ² E	House Type F 75 m ²	House Type G 105 m ²	House Type H 145 m ²			
Chato	Nyamirembe	Nyambiti Village														
	Ichwankima	Busalala Village	1	1	1	1								2		
	Ilemela	Ilemela Village													1	
		Nyambogo Village														
		Nyagh'omango Village														
	Katende	Chabulongo Village														
		Katende Village	1	1	1	1									6	1
		Mwabaruhi Village	2	2	2	2									1	
	Bukome	Mkungo Village													1	
	Makurugusi	Makurugusi Village	1	1	1	1									1	
		Kasala Village	1	1	1	1									1	
		Musasa Village	1	1	1	1									2	
		Kamanga Village														
	Bwanga	Minkoto Village	2	2	2	2									1	
Iparamasa	Ilelema Village	3	5	3	3									9	1	
	Iparamasa Village		0													
	Imalabupina Village		0											1		
Chato District Subtotal			12	14	12	12								26	2	
Geita	Magenge	Igando Village	1	1	1	1								1		
Geita District Subtotal			1	1	1	1								1	-	
Mbogwe	Lulembela	Nykonga Village	1	2	2	1	1							6		
		Lulembela Village														

¹⁷⁶ Floor areas exclude external living spaces / verandas

District	Ward	Village / Reserve	PAPs Losing Eligible Dwellings	Residential Dwellings Impacted	Residential Dwellings Eligible for Replacement	Eligible Dwellings for Replacement								Other Structures	Incomplete Structures
						House Type A 25 m ² /76	House Type B 33 m ²	House Type C 39 m ²	House Type D 47 m ²	House Type E 58 m ² E	House Type F 75 m ²	House Type G 105 m ²	House Type H 145 m ²		
		Kashelo Village												3	
	Ikunguigazi	Ikunguigazi Village	5	7	6	4	2							2	4
		Ibambula Village	1	1	1	1								5	
	Ikobe	Kagongo Village	2	4	3	3								3	
		Ikobe Village												1	
		Ishigamva Village												2	
	Nyakafulu	Lubeho Village												3	1
		Lubeho Village PS-4												1	
		Shinyanga B Village	3	4	3	1	1		1					10	5
		Shinyanga A Village	6	6	6	3	1	1	1					17	8
	Bukandwe	Bukandwe Village	1	1	1	1									
		Kanegere Village	1	1	1	1								6	1
	Nhomolwa	Kabanga Village	2	2	2	1				1				4	
Mbogwe District Subtotal			22	28	25	16	5	1	2	1	0	0	0	63	19
Bukombe	Lyambamgongo	Kagwe Village													
		Kidete Village												1	
		Bukombe Village												1	
		Ilalwe Village	1	1	1	1									1
		Nasihukulu Village													
Bukombe District Subtotal			1	1	1	1	-	-	-	-	-	-	-	2	1
GEITA REGION TOTAL			36	44	39	30	5	1	2	1	0	0	0	92	22

7.1.2 Analysis of Existing Structures Affected in Geita Region

Homesteads and Dwellings

In addition to the range of dwelling types and sizes identified across the region, the field visits also assessed the cultural needs and practices, numbers of occupants, uses of residential structures and other factors influencing the design, location and use of ancillary buildings.

In terms of layout, affected households range from single dwelling structures to homesteads with multiple dwelling structures positioned around shared facilities such as kitchens, storage areas and ablutions.

The majority of residential structures in the Geita region are “traditional houses” constructed from readily available local materials. These materials include, mud, poles, unburnt bricks, rammed (tamped) earth flooring, and roofing made from thatch. Traditional houses are generally less durable than modern structures, although materials can often be obtained without cash and therefore more easily maintained or replaced. Some traditional dwellings have been modernized by the owners to accommodate their needs and means. Such modernizing improvements include the replacement of thatched roofs with iron roofing material and window frames filled in with glazing.

Examples of traditional houses constructed from mud brick and thatch roofs in Geita and Mbogwe Districts are shown in Figure 7-1 and Figure 7-2 respectively. A mud brick house with a modern CIS roof from Mbogwe is shown in Figure 7-3.



Figure 7-1: Traditional House Constructed from Mud Brick, Mud Mortar and Thatch Roof in Geita District



Figure 7-2: Traditional House with Pole and Mud Wall, Thatched Roof in Mbogwe



Figure 7-3: Traditional Mud Brick and Mortar House with Modern CIS Roof Mbogwe

Structures combined with shrubs and vegetation are used to create protected spaces within the homestead. Proximity and visibility from the surrounding residential structures also improves security and deters wild animals (livestock predators). The open space within the homestead often also has vegetation to provide shade and shelter as shown in Figure 7-4 and areas used for communal activities are shown in Figure 7-5.



Figure 7-4: Example of Courtyard Arrangement Geita District



Figure 7-5: Structures for Communal Activities in Chato and Mbogwe

A more detailed analysis, including additional examples of houses (both traditional and modern), has been undertaken as part of the concept design development and is presented in the Concept Design Report for the Project (for the Priority Areas and Pipeline).

Ancillary Structures

For the concept design development, an analysis of the functional areas including sleeping, kitchen, toilet and ablution spaces was undertaken (and is outlined in the Concept Design Report). Of the 36 physically displaced households with structures eligible for replacement, eight (8) latrine / toilet structures that will be impacted; and six (6) of the physically displaced households have a kitchen structure which will be impacted. The structures are generally of poor-quality mud / wattle construction with thatch roofing (shown in Figure 7-6 and Figure 7-7). Most households do not have separate kitchens and PAPs cook and sleep in the same space. The total number of other structures in Geita Region (which includes kitchens and toilets) is provided in Table 7-1.



Figure 7-6: Example of an Outdoor Cooking Area in Geita and a Multi-purpose Kitchen / Small Animal Shelter in Mbogwe



Figure 7-7: Example of Bathing Areas Found in Mbogwe and a Pit Latrine in Chato

7.1.3 Influence of Climate

The Geita Region is in the Lake Victoria Basin climatological zone of Tanzania with a mean average rainfall of 1,128 mm. Rainfall is bimodal with peaks in November and April. Average maximum temperatures experienced in September are (29°C) and average minimum temperatures (15.4°C) experienced in July.

Traditionally, local materials and design have been used to manage indoor temperatures within structures. Traditional houses often have a thatched roof and are finished with mud to help to control heat. Wind direction is also taken into account when orienting structures to protect against prevailing winds.

7.1.4 Availability of Building Materials

There are a range of building materials available. Local shops, hardware suppliers and artisans were visited to identify, cost and gauge the availability and general suitability of building materials. Staff or owners were interviewed about materials, in order to establish availability and indicative prices. To improve the quality of the replacement houses, the design, specifications and materials used will be standardized across all structures where practical. Appointed contractors also will be encouraged to make use of local labor as is practical.

7.1.5 Local Architectural Style Context

The local architectural style for residential structures in Geita was considered in the development of the designs for the replacement houses. The design and layout of structures

reflect traditional norms and cultural practices coupled with climatic conditions and availability of materials. As discussed in Chapter 5, there is only one (1) PAH in the region who has been identified from a vulnerable ethnic group (Barabaig) in Mbogwe District. This PAH will not lose any residential structures.

As shown in Figure 7-1 to Figure 7-3, traditional housing practices across the region are common and the size and design are similar to those found along the corridor .

The courtyard system / homestead layout is commonly seen across the region. Structures are arranged to create protected enclosed spaces which are multi-functional enabling various activities (Figure 7-4).

7.1.6 Concept Design Purpose and Strategy

The main purpose of developing the concept designs for replacement houses was to provide a clear methodology of fairly compensating and allocating replacement houses based on the types and designs of the existing household structures encountered.

The adopted design strategy for the proposed housing units is based on the following:

- The similarity of floor space / housing footprint sizes following the like-for-like approach for homesteads;
- Functionality and layout of the house;
- Durability and simplicity of construction;
- Minimum floor space to accommodate comfort, health, safety, social and cultural needs; and
- Provision of improved latrine and cooking facilities.

These are based on good construction practice and documented standards and technical specifications as provided for by accredited institutions and bodies, including, but not limited to, the Tanzania Bureau of Standards (TBS), British Standards, and the International Organization for Standardization (ISO).

Geotechnical Considerations

Two (2) basic construction approaches have been developed for seismic and non-seismic zones. A registered structural engineer has prepared detailed designs for both seismic and non-seismic areas which are outlined in Table 7-2.

In addition to considering and developing appropriate designs for seismic zones, the district engineer was consulted regarding the replacement housing including issues relating to the suitability of building materials, availability and building approval processes.

Based on the Geological Survey of Tanzania, the Geita Region is not within a seismic zone. As the exact locations for the replacement houses in Geita have not yet been agreed, further consideration and / or geotechnical investigations may be required when the sites are secured to determine which design is most appropriate. The key design features for non-seismic structures are described in Table 7-2 in addition to the seismic requirements.

Table 7-2: Key Design Technology (Seismic and Non-Seismic)

Type	Structural Element	Proposed Technology ¹⁷⁷
Seismic	Substructure	<ul style="list-style-type: none"> - 200 mm deep x 500 mm wide reinforced concrete strip foundation, and foundation depth is 600 mm deep from ground level based on the assumption that the minimum soil bearing capacity is 100 KPA; - 230 mm concrete block foundation wall of 7N / mm² bonded in class (iii) mortar with T10 reinforcement (every 3rd course); - Compacted selected and approved earth fill; - 230 mm x 200 mm reinforced ground beam; and - 100 mm reinforced concrete floor slab.
	Superstructure	<ul style="list-style-type: none"> - 125 mm concrete block wall reinforced wall for external walls and internal walls with T10 reinforcement (every 3rd course); - 125 mm x 200 mm reinforced concrete ring beam at 2,100 mm height on both external and internal walls; and - 125 mm x 150 mm reinforced concrete lintel above door opening where there is no ring beam.
	Roof	<ul style="list-style-type: none"> - 100 mm x 50 mm rafters - treated pressure impregnated softwood; - 75 mm x 50 mm struts - treated pressure impregnated softwood; - 100 mm x 50 mm tie beam - treated pressure impregnated softwood; - 50 mm x 50 mm purlin - treated pressure impregnated softwood; - 100 mm x 50 mm wall plate - treated pressure impregnated standard; and - 28 gauge galvanized corrugated iron sheets.
Non-Seismic	Substructure	<ul style="list-style-type: none"> - 200 mm deep x 500 mm wide plain concrete strip foundation (no reinforcement), and foundation depth is 600 mm deep from ground level based on the assumption that the minimum soil bearing capacity is 100 KPA; - 230 mm concrete block foundation wall of 7N / mm² bonded in class (iii) mortar; - Compacted selected and approved earth fill; - 230 mm x 200 mm reinforced ground beam; and - 100 mm plain concrete floor slab.
	Superstructure	<ul style="list-style-type: none"> - 125 mm concrete block wall for external walls and internal walls; - 125 mm x 200 mm reinforced concrete ring beam at 2,100 mm height; and - 125 mm x 150 mm reinforced concrete lintel above door opening where there is no ring beam.
	Roof	<ul style="list-style-type: none"> - 100 mm x 50 mm rafters - treated pressure impregnated softwood; - 75 mm x 50 mm struts - treated pressure impregnated softwood; - 100 mm x 50 mm tie beam - treated pressure impregnated softwood; - 50 mm x 50 mm purlin - treated pressure impregnated softwood; and - 28 gauge galvanized corrugated iron sheets.

¹⁷⁷ Final structural designs may vary slightly in some cases to accommodate specific site conditions, building approval conditions, material availability etc.

Building Materials and Finishes

The main materials that will be used and surface finishes are summarized as follows:

- All external and internal walls will be constructed from concrete blocks (with sand-cement plaster on both sides);
- A precast concrete windowsill will be laid underneath a metal window casement fitted with glass and security bars;
- There will be a reinforced continuous ring beam cast in-situ connecting all external walls and some internal walls;
- The roof structure will be constructed of treated softwood (pressure impregnated) and covered with corrugated iron sheets; and
- All rooms will have cement screed floor finish, gypsum ceiling and painted walls.

7.1.7 Residential Plot Size

The land (residential plot) associated with the replacement of residential dwellings proposed for the Project is defined in The Urban Planning (Planning Space Standards) Regulations, 2018, as outlined in Table 7-3. The average plot size is likely to be 1,000 m² at the midpoint of low-density residential areas. The plot size will be determined by the context of the areas the housing will be constructed (for example may be in higher-density areas). Plot sizes will be finalized when locations have been discussed and confirmed. A standard residential plot size will be allocated in line with the Tanzanian Town Planning Regulations of 2016 where a PAP selects the in-kind replacement housing option¹⁷⁸.

Table 7-3: Standards for Residential Areas - Detached Houses and Maisonettes

No	Type	Plot Size in per-Urban Area	Max. No. of Households	Max. No. of Buildings	Max. Plot Coverage %
i.	Special area and unplanned settlements (special case)	90 – 300 m ²	1	1	80
ii.	High density	301 – 600 m ²	1	2	60
iii.	Medium density	601 – 800 m ²	1	2	55
iv.	Low-density	801 – 1200 m ²	1	2	50
v.	Super Low-density	1201 – 2000 m ²	1	2	45

Once the location of residential plots has been confirmed, the residential plot sizes will be finalized, depending on location and further engagement. Consideration will be given to PAPs' specific circumstances and individual choices to be finalized during the entitlement briefings phase. Factors to be considered include:

¹⁷⁸ However, the residential plot will form part of the PAPs replacement land allocation (i.e. not additional to it). Where a physically displaced PAP loses less than the residential plot size they will still be eligible to be provided as a minimum with a residential plot.

- PAPs may have existing suitable land outside the corridor within the ward on which to build their replacement house. The site would be subject to technical checks by the Project and need to be within the area etc.;
- The distance of residential plots to existing and (where relevant) replacement farmlands; and
- Given the relatively small number of replacement houses required in Geita Region, it is likely there will be a mix of land which will be utilized including infill development and vacant land adjacent to existing urban areas and / or PAP homesteads in more rural areas.

7.1.8 Ancillary Structures and Utilities

Kitchen Structures

A standard entitlement per replacement house includes a covered kitchen (open) structure with a raised cooking platform and fireplace with a metal flue. The key considerations in the development of these designs were:

- The provision of a safe, roof-covered cooking space at a safe height (where children cannot be injured), in a well-ventilated space with safe means of escape;
- Reduce the risk of fire emanating from uncontrolled flames under a timber roof structure by providing a fireplace with a metal hood and flue;
- Managing the spread of fire to outside vegetation, sheltering from cold winds, a secure space to store cooking utensils, and convenience, which were stated by PAPs as the main reasons for cooking indoors; and
- Providing a separate safe covered space for PAPs to cook, to reduce the risks associated with cooking fires being moved inside housing structures.

Households eligible for more than one (1) replacement house can select a covered kitchen structure with an enclosed storeroom per homestead instead of the standard entitlement of a covered kitchen (open) structure per replacement house.

Latrine / Ablution Structures

The key considerations in the development of latrine designs were:

- The improvement of living conditions and welfare of households;
- The provision of a facility which is durable and safe, and can be maintained; and
- Cultural considerations.

Households eligible for more than one (1) replacement house can select the improved VIP ablation / latrine structure instead of the standard entitlement of a single VIP latrine.

Water

Rainwater will be harvested on all house roofs with a series of PVC gutters and downpipes. It will be stored in 1,000 liter tanks supported on block work platforms approximately 50 cm above ground level to allow adequate clearance for a bucket to be placed under the tap. Due

to climatic variation with a notable dry season, rainwater collection will only be effective during the rainy season.

Electricity

Each replacement house will be provided with a simple solar panel to provide sufficient power for basic lighting, television (TV), and USB ports. A minimum of 400-Watt solar panel with one (1) battery and solar inverter of 500 VA will be adequate for lighting nine (9) bulbs and one (1) socket for TV and two (2) USBs for charging mobile phones.

7.1.9 Mitigation of Climatic Conditions

When positioning structures on the selected resettlement plots, the following will be considered to mitigate against adverse climatic conditions:

- The orientation of the building to ensure minimal impacts that may be caused by prevailing wind directions and rainfall impacts;
- Selection of appropriate construction materials and adopting appropriate construction technology to avoid dampness and structural damage; and
- Installing gutters and tanks to collect rainwater.

7.1.10 Replacement House and Ancillary Structure Designs

House Designs

Eight (8) replacement house designs have been developed to accommodate the full range of houses that may be replaced across the pipeline. They range in size from the smallest at 25 m² (Type A) to the largest houses at 145 m² (Type H).

Table 7-4 provides details on the floor space and rooms for each type. The four smallest houses (Types A, B, C and D) have alternative floor layouts to allow a choice of floor plans for the PAP. The smallest house (Type A) has three (3) layouts and Type B, C and D have two (2) alternative floor plans. The third layout for the Type A house has a small separate room with an external door to allow small livestock to be kept indoors but separate from living spaces. This alternative design for the 25m² structure will provide protection for livestock whilst providing clear separation from sleeping areas within the structure.

Table 7-4: Houses Types and Eligible Dwellings in Geita

House	Eligible Dwellings in Geita Region	Floor Space	Sub – Type	Number of Rooms
House Type A	30	25 m ²	A1	2
			A2	3
			A3	3
House Type B	5	33 m ²	B1	3
			B2	4
House Type C	1	39 m ²	C1	3
			C2	4
House Type D	2	47 m ²	D1	4
			D2	5
House Type E	1	58 m ²	E	5
House Type F	0	75 m ²	F	5
House Type G	0	105 m ²	G	6
House Type H	0	145 m ²	H	8

As shown above, there are five (5) types of houses that PAPs are eligible for in Geita. The majority (30) of the 39 residential structures eligible for replacement qualify for a Type A (25m²) house, as they have floor spaces that are less than 25 m².

A full description including floor plans, elevations and three (3) dimensional views of all eight (8) house types (A-H) available across the pipeline including the alternative floor plans are provided in Appendix D. The five (5) structure types for which PAPs are eligible in Geita (Types A to E) including the alternative floor plans for each, are presented in Figure 7-8 to Figure 7-13.

In some circumstances, specific solutions may need to be developed to ensure that impacts on dwellings are managed appropriately. This includes those cases where multiple residential structures and / or the layout of a homestead will significantly change as a result of the Project. Specific solutions may also need to be developed for those structures which, although are not connected to an operational water and sewerage system, have made provision for internal bathrooms and may require further consideration.


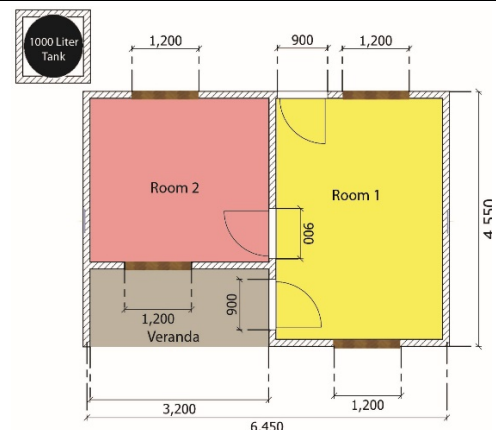
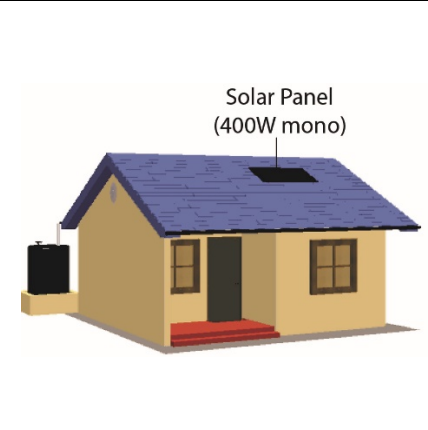

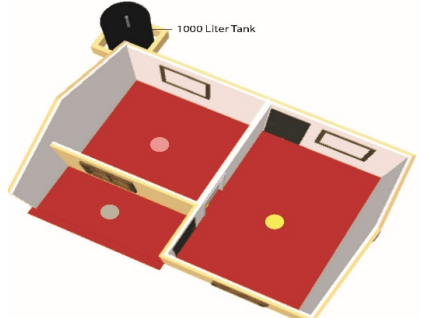
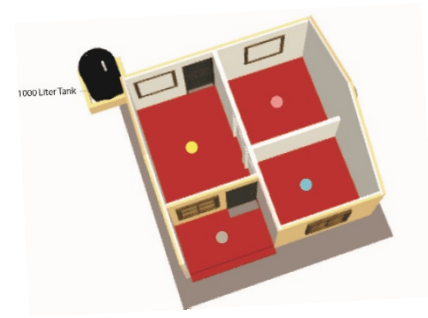
House Type A (There are thirty (30) structures that are eligible for Type A replacement houses in Geita Region)																	
<p>Description: Type A is the smallest of the house types at 25 m². This house is well lit with natural light through four (4) windows which allows for good cross ventilation, two (2) external doors and a small covered veranda. Type A1 has two rooms and A2 has three rooms as shown below.</p>																	
<p>Eligibility: Replaces all units less than or equal to 25 m² irrespective of the number of rooms. If the combined footprint of any two houses of a PAP is less than or equal to 25 m² (House Type A) the PAP would be offered for these two (2) houses one (1) replacement House Type A and cash compensation for the smallest house.</p>																	
<p>Alternative: An eligible PAP can choose from one of three (3) floor plans. House Type A1 has two rooms and House Type A2 and A3 has the same floor area at 25 m² with three (3) rooms.</p>																	
A1 – 25m ² (2 Rooms)		A2 - 25m ² (3 Rooms)															
																	
	<p style="text-align: center;">Areas</p> <table border="0"> <tr> <td>Room 1</td> <td>14.33 m²</td> </tr> <tr> <td>Room 2</td> <td>10.64 m²</td> </tr> <tr> <td>Veranda</td> <td>3.55 m²</td> </tr> </table>	Room 1	14.33 m ²	Room 2	10.64 m ²	Veranda	3.55 m ²		<p style="text-align: center;">Areas</p> <table border="0"> <tr> <td>Room 1</td> <td>9.2 m²</td> </tr> <tr> <td>Room 2</td> <td>8.0 m²</td> </tr> <tr> <td>Room 3</td> <td>8.0 m²</td> </tr> <tr> <td>Veranda</td> <td>3.6 m²</td> </tr> </table>	Room 1	9.2 m ²	Room 2	8.0 m ²	Room 3	8.0 m ²	Veranda	3.6 m ²
Room 1	14.33 m ²																
Room 2	10.64 m ²																
Veranda	3.55 m ²																
Room 1	9.2 m ²																
Room 2	8.0 m ²																
Room 3	8.0 m ²																
Veranda	3.6 m ²																

Figure 7-8: House Type A1 and A2 layout

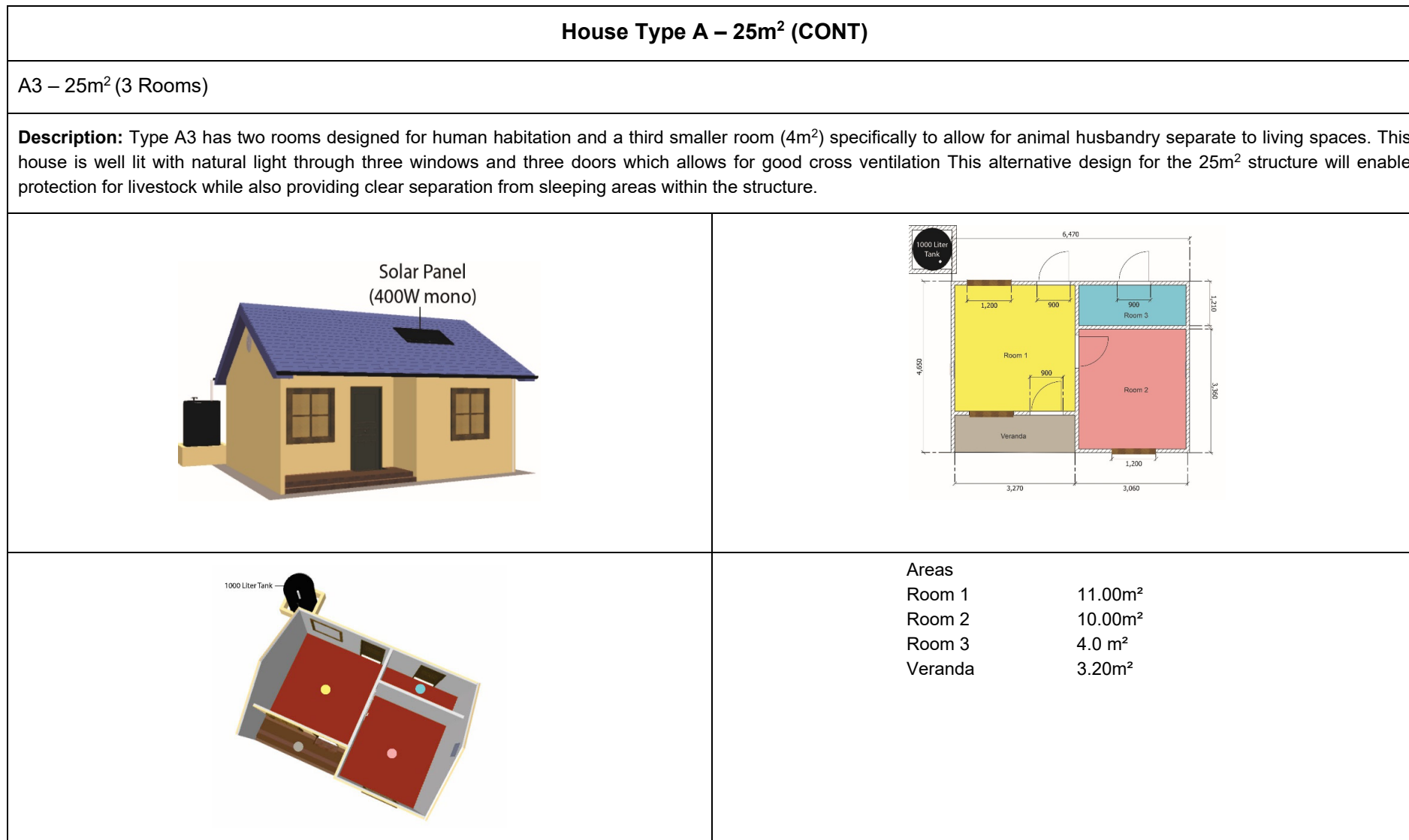


Figure 7-9: House Type A3 layout (contd.)

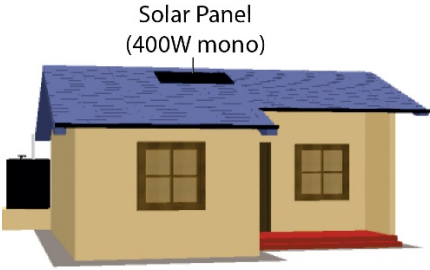

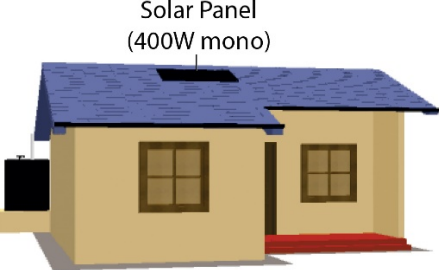
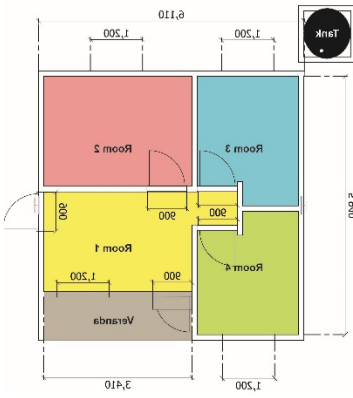
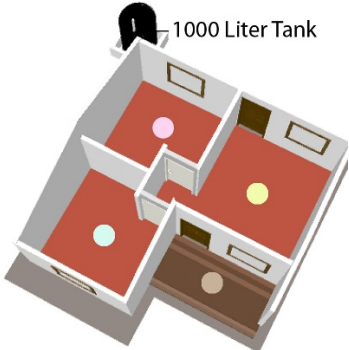
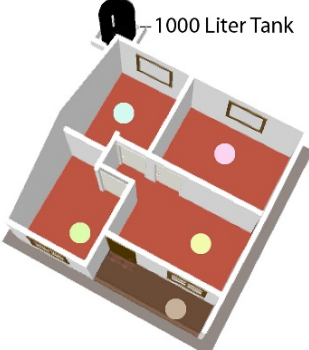
House Type B (There are five (5) structures eligible for a Type B replacement house in Geita Region)																					
<p>Description: Type B is a 33m² house which is well lit with natural light through four (4) windows which also allows for good cross ventilation, two (2) external doors and a small covered veranda. Type B1 has three (3) rooms and 'B2' has four (4) rooms as shown below.</p> <p>Eligibility: Replaces all residential dwellings greater than 25.1 m² but less than or equal to 33 m².</p> <p>Alternative: Like the smaller Type A dwelling, there are two alternative floor plans that an eligible PAP can choose from including House Type B1 which has three (3) rooms and House Type B2 which has four (4) rooms.</p>																					
B1 – 33 m ² (3 Rooms)		B2 – 33 m ² (4 Rooms)																			
 <p>Solar Panel (400W mono)</p>		 <p>Solar Panel (400W mono)</p>																			
 <p>1000 Liter Tank</p>	<p>Areas</p> <table border="0"> <tr> <td>Room 1</td> <td>13.00 m²</td> </tr> <tr> <td>Room 2</td> <td>10.16 m²</td> </tr> <tr> <td>Room 3</td> <td>10.16 m²</td> </tr> <tr> <td>Veranda</td> <td>3.15 m²</td> </tr> </table>	Room 1	13.00 m ²	Room 2	10.16 m ²	Room 3	10.16 m ²	Veranda	3.15 m ²	 <p>1000 Liter Tank</p>	<p>Areas</p> <table border="0"> <tr> <td>Room 1</td> <td>9.18 m²</td> </tr> <tr> <td>Room 2</td> <td>7.9 m²</td> </tr> <tr> <td>Room 3</td> <td>7.9 m²</td> </tr> <tr> <td>Room 4</td> <td>8.3 m²</td> </tr> <tr> <td>Veranda</td> <td>3.6 m²</td> </tr> </table>	Room 1	9.18 m ²	Room 2	7.9 m ²	Room 3	7.9 m ²	Room 4	8.3 m ²	Veranda	3.6 m ²
Room 1	13.00 m ²																				
Room 2	10.16 m ²																				
Room 3	10.16 m ²																				
Veranda	3.15 m ²																				
Room 1	9.18 m ²																				
Room 2	7.9 m ²																				
Room 3	7.9 m ²																				
Room 4	8.3 m ²																				
Veranda	3.6 m ²																				

Figure 7-10: House Type B: B1 and B2 layout


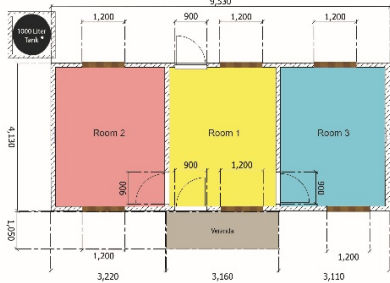


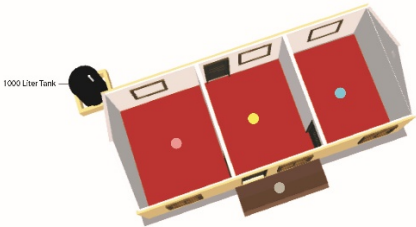
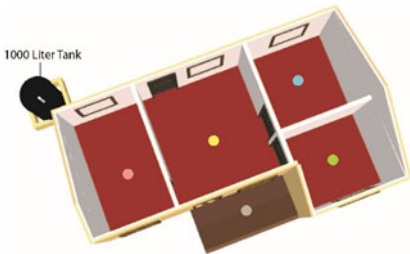
House Type C (There is one (1) structure eligible for a Type C replacement house in Geita Region)																					
<p>Description: House Type C is 39m² and is well lit with natural light through six (6) windows which also allows for good cross ventilation and two (2) external doors. Type C1 has three rooms and C2 has four (4) rooms as shown below.</p>																					
<p>Eligibility: Replaces all residential dwellings greater than 33.1 m² but less than or equal to 39 m².</p>																					
<p>Alternative: There is a choice between the three (3) room Type C1 and the four (4) room Type C2 configuration.</p>																					
C1 – 39m ² (3 Rooms)		C2 - 39m ² (4 Rooms)																			
 <p>Solar Panel (400W mono)</p>		 <p>Solar Panel (400W mono)</p>																			
 <p>1000 Liter Tank</p>	<p>Areas</p> <table border="1"> <tr> <td>Room 1</td> <td>12.96 m²</td> </tr> <tr> <td>Room 2</td> <td>13.00 m²</td> </tr> <tr> <td>Room 3</td> <td>13.00 m²</td> </tr> <tr> <td>Veranda</td> <td>3.00 m²</td> </tr> </table>	Room 1	12.96 m ²	Room 2	13.00 m ²	Room 3	13.00 m ²	Veranda	3.00 m ²	 <p>1000 Liter Tank</p>	<p>Areas</p> <table border="1"> <tr> <td>Room 1</td> <td>12.18 m²</td> </tr> <tr> <td>Room 2</td> <td>10.00 m²</td> </tr> <tr> <td>Room 3</td> <td>8.40 m²</td> </tr> <tr> <td>Room 4</td> <td>8.40 m²</td> </tr> <tr> <td>Veranda</td> <td>4.60 m²</td> </tr> </table>	Room 1	12.18 m ²	Room 2	10.00 m ²	Room 3	8.40 m ²	Room 4	8.40 m ²	Veranda	4.60 m ²
Room 1	12.96 m ²																				
Room 2	13.00 m ²																				
Room 3	13.00 m ²																				
Veranda	3.00 m ²																				
Room 1	12.18 m ²																				
Room 2	10.00 m ²																				
Room 3	8.40 m ²																				
Room 4	8.40 m ²																				
Veranda	4.60 m ²																				

Figure 7-11: House Type C: C1 and C2 layouts

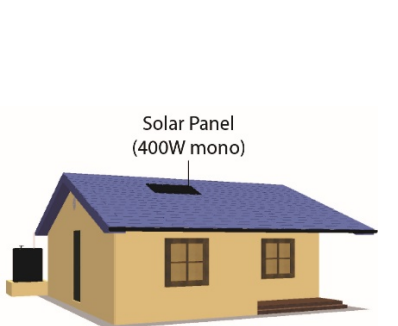

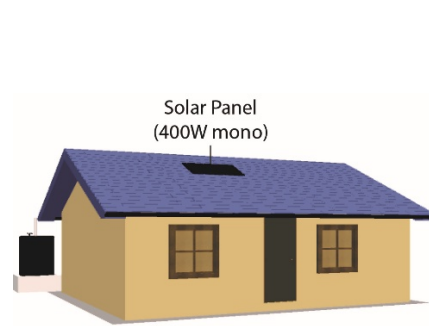

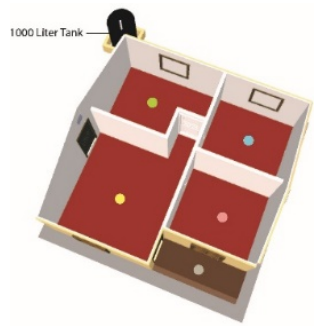

House Type D (There are two (2) structure eligible for a Type D replacement house in Geita Region)																									
<p>Description: House Type D is a 47 m². This house is well lit with natural light through four (4) windows in D1 and five (5) windows in D2 which also allows for good cross ventilation, and two (2) external doors. Type D1 has four rooms and 'D2' has five (5) rooms as shown below.</p> <p>Eligibility: Replaces all residential dwellings greater than 39.1 m² but less than or equal to 47 m².</p> <p>Alternative: There is a choice between the four (4) room Type D1 and the five (5) room Type D2 configuration.</p>																									
D1 – 47 m ² (4 Rooms)		D2 – 47 m ² (5 Rooms)																							
																									
	<p>Areas</p> <table border="0"> <tr><td>Room 1</td><td>16.86 m²</td></tr> <tr><td>Room 2</td><td>10.28 m²</td></tr> <tr><td>Room 3</td><td>10.28 m²</td></tr> <tr><td>Room 4</td><td>10.296 m²</td></tr> <tr><td>Veranda</td><td>4.00 m²</td></tr> </table>	Room 1	16.86 m ²	Room 2	10.28 m ²	Room 3	10.28 m ²	Room 4	10.296 m ²	Veranda	4.00 m ²		<p>Areas</p> <table border="0"> <tr><td>Room 1</td><td>12.7 m²</td></tr> <tr><td>Room 2</td><td>8.8 m²</td></tr> <tr><td>Room 3</td><td>8.6 m²</td></tr> <tr><td>Room 4</td><td>8.4 m²</td></tr> <tr><td>Room 5</td><td>8.6 m²</td></tr> <tr><td>Veranda</td><td>3.8 m²</td></tr> </table>	Room 1	12.7 m ²	Room 2	8.8 m ²	Room 3	8.6 m ²	Room 4	8.4 m ²	Room 5	8.6 m ²	Veranda	3.8 m ²
Room 1	16.86 m ²																								
Room 2	10.28 m ²																								
Room 3	10.28 m ²																								
Room 4	10.296 m ²																								
Veranda	4.00 m ²																								
Room 1	12.7 m ²																								
Room 2	8.8 m ²																								
Room 3	8.6 m ²																								
Room 4	8.4 m ²																								
Room 5	8.6 m ²																								
Veranda	3.8 m ²																								

Figure 7-12: House Type D: D1 and D2 layouts

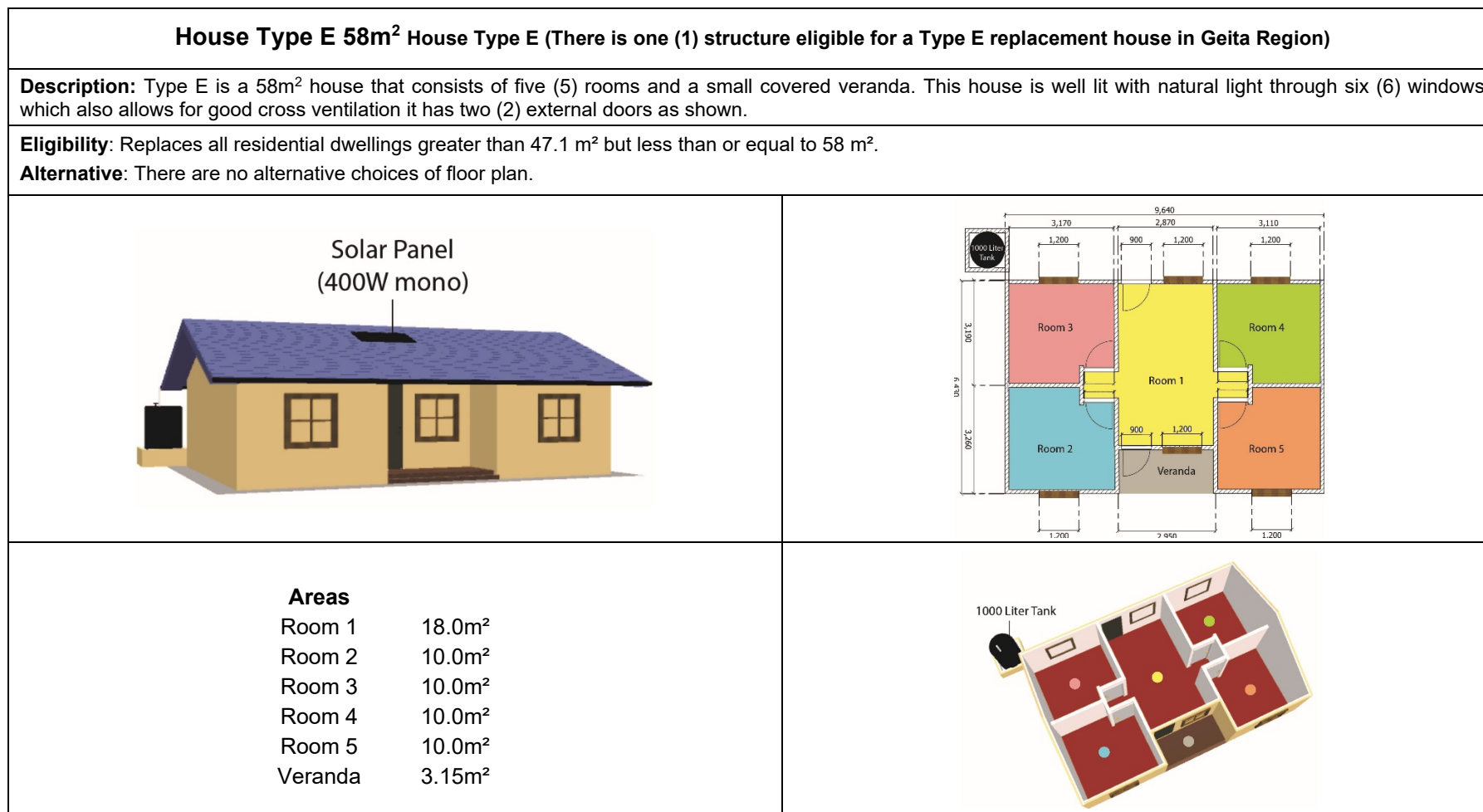


Figure 7-13: House Type E

Ablution / Latrine Designs

The two VIP latrine / ablution typologies consist of:

- A single covered VIP latrine (Latrine Type A); and
- A single VIP latrine and shower combination that is covered and enclosed with (2) two doors (Latrine Type B).

Both types will be built over a circular excavated pit, built in with concrete blocks onto a circular strip foundation. The first (5) five courses of block work will have weep holes. The pit will be covered by a reinforced concrete slab to support built up walls in concrete blocks.

Type B latrines will have a space for bathing with a door. There will be a continuous in-situ cast concrete ring beam on all external walls and the one internal wall. This will be necessary for structural support to tie together both internal and external walls.

Both VIP latrine types will have a mono-pitched roof structure, constructed in treated soft wood and covered with corrugated sheets. The floors will have non-slip ceramic matt tiles with a high wall skirting. Walls will be painted with an acrylic emulsion (silk vinyl) paint finish and varnished battened type doors and frame made from semi-hardwood. A white glazed squatting type pan will be provided.

The key features of the two (2) latrine structures are also described below including floor plans, elevations and 3-dimensional views in Figure 7-14.

Kitchen Shelter Designs

The two kitchen typologies consist of:

- Open covered kitchen (Kitchen Type A) and
- Open covered kitchen with an enclosed store (Kitchen Type B).

The rationale behind a covered kitchen with openings, no doors and windows, is to provide for a well-ventilated cooking area, but also partly screened from the outside area to prevent any potential fire risks to vegetation surrounding the homestead. A small enclosed connecting kitchen store (built in cupboard without shelves) will provide a secure space for food and cooking utensils. An elevated slab for cooking (with a mild steel hood and chimney) will offer a safe cooking area out of reach of small children. PAPs can fill-in the openings with other building material or fenestration (the arrangement of windows in a building), and shelving in the cupboard can be finished according to the households means and needs.

Type B will have an attached store. For the two kitchen types there will be concrete strip foundations to support a concrete solid block foundation wall, built up to the natural ground line, and a reinforced concrete ground beam to support a thick concrete floor slab. All external and internal walls will be built from concrete blocks (with 15 mm cement-sand plaster on both sides).

For Type A kitchen there will be treated soft wood timber beams to tie the masonry work back to two galvanized mild steel columns cast in the concrete foundation.

For Type B kitchen there will be a continuous in-situ cast concrete ring beam on all external walls and the one internal wall. This is necessary for structural support to tie the building together for both internal and external walls.

Both kitchen types will have a mono-pitched roof structure, constructed in treated soft wood and will be covered with corrugated iron sheets. The floors will have oxide colored cement screed on the concrete floor. There will not be any ceilings provided. External walls will be finished with weatherproof paint and acrylic emulsion (silk vinyl) paint will be used on internal walls. The composite panel external hardwood doors and frames will be varnished.

The key features of the four (4) ancillary structures are shown below and described in full (including floor plans, elevations and 3-dimensional views) in Appendix D.

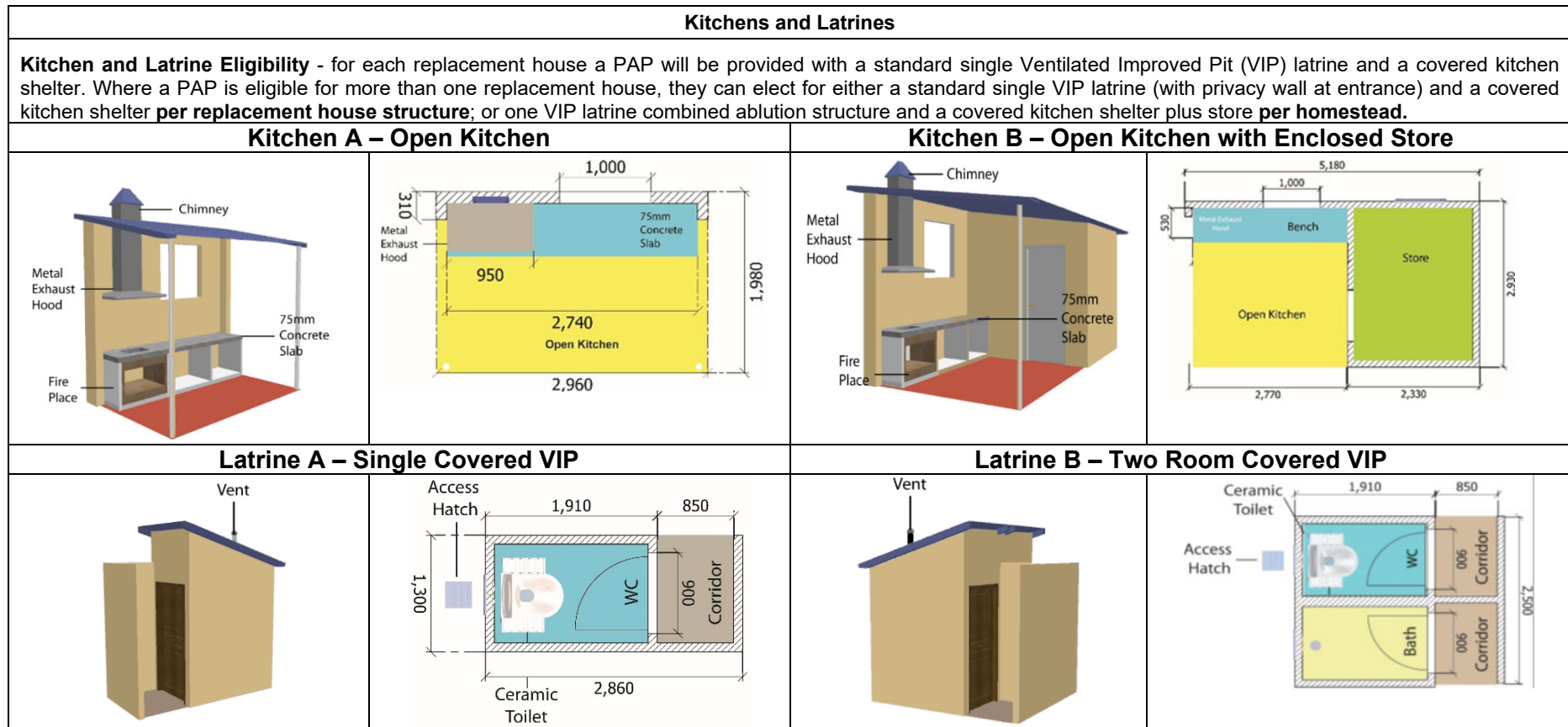


Figure 7-14: Ancillary Structures: Latrines and Kitchens

7.2 Replacement Land

PAPs that are eligible for replacement land will be given a choice between replacement land and cash compensation (or a combination of both). The same principle will apply in the case of physical displacement. Eligible PAPs will be given the opportunity to choose between cash compensation and replacement land during entitlement briefings, which will constitute one of the first steps in RAP implementation.

The replacement land requirements outlined in this document are based on the conservative assumption that all PAPs who are eligible for replacement land and / or housing will choose the in-kind rather than the cash option.

7.2.1 Land Requirements

Arable land accounts for only 15.4% of Tanzania's land mass¹⁷⁹ (FAO, 2012). The balance is predominantly forested (53.3%). On average, 83% of Tanzania's arable land available to households is currently being utilized. A review of land availability and productivity in the (8) eight Project-affected regions found that on average 67% percent of the affected districts have households which utilize more than 80% of their land, leaving less than 20% of "disposable" land. In the Geita Region, household land utilization varies from 75% in Chato to 91% in Geita District. This leaves between 15% and 9% "disposable" land in the respective districts (shown in Table 7-5).

Table 7-5: Arable Land not Currently Utilized in Geita¹⁸⁰

District	Average Planted Area per Household (Acre)	Usable Area per Household (Acre)	Percentage (%) of Land Area Currently Utilized by Households
Chato	1.1	1.48	75
Geita	0.9	0.99	91
Mbogwe	2.82	3.32	76
Bukombe	2.82	3.32	85

The land pieces to be acquired from PAPs range in size from less than 0.5 acres to more than 10 acres of land. In Geita most of the parcels required are less than 0.5 acres, while two (2) PAPs will have more than 10 acres of their land acquired by the Project. Chapter 6 presents the eligibility criteria for replacement land. Most PAPs have one piece of land acquired and approximately 10% of PAPs in Geita will have more than one (1) parcel acquired by the Project.

Figure 7-15 and Figure 7-16 show the maximum amount of replacement land required and length of each section by ward within the Geita Region.

¹⁷⁹ <http://tanzania.opendataforafrica.org/nmwhocb/tanzania-fao-stat-land-use-and-agricultural-inputs>.

¹⁸⁰ DWC. Technical Note: Eligibility Criteria for the EACOP Pipeline (2019).

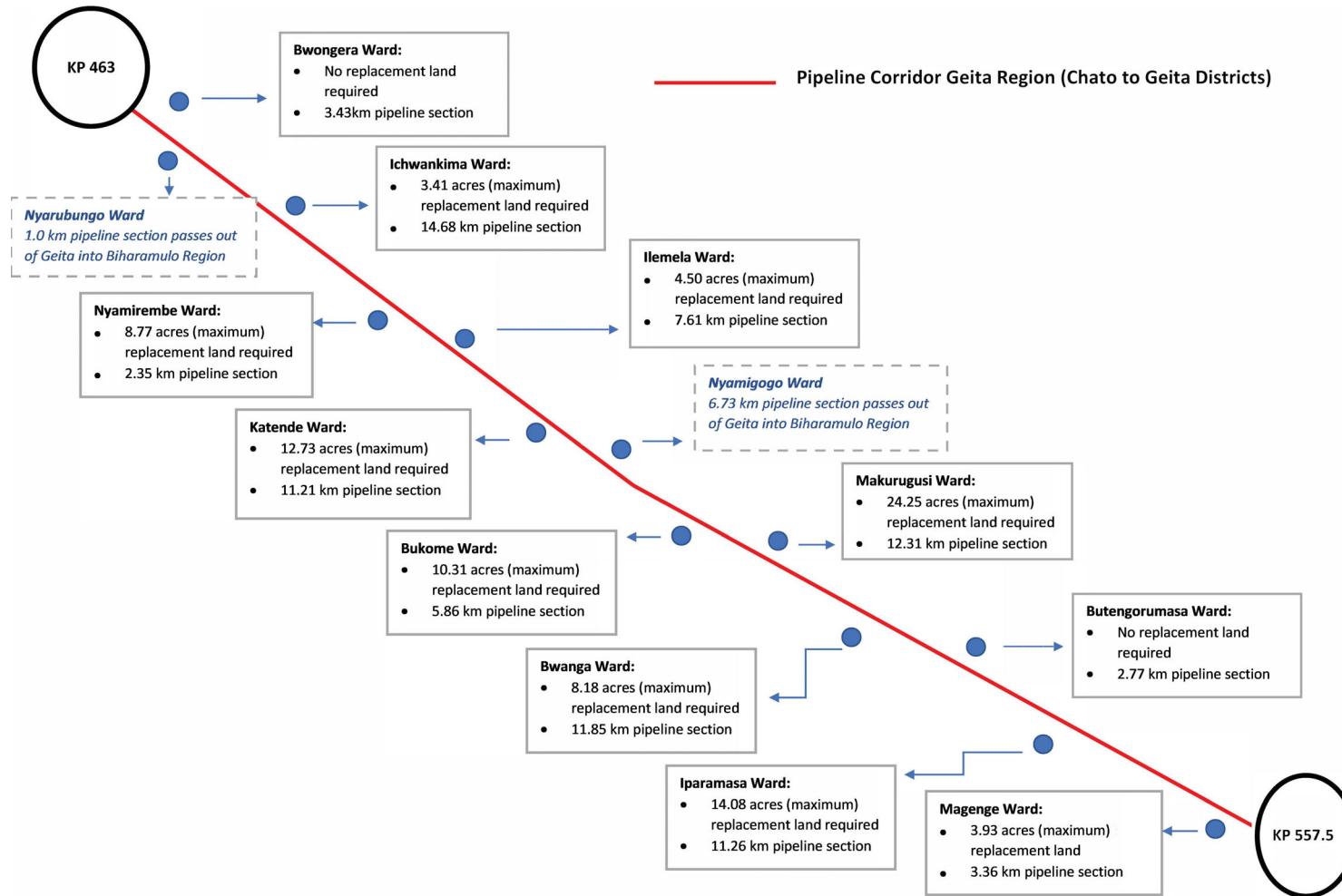


Figure 7-15 Maximum Area of Replacement Land Requirements in Geita Region¹⁸¹ (Chato and Geita Districts)

¹⁸¹ Includes 9.4 km in Biharamulo Game Reserve and 13.37 km in Biharamulo Forest Reserve

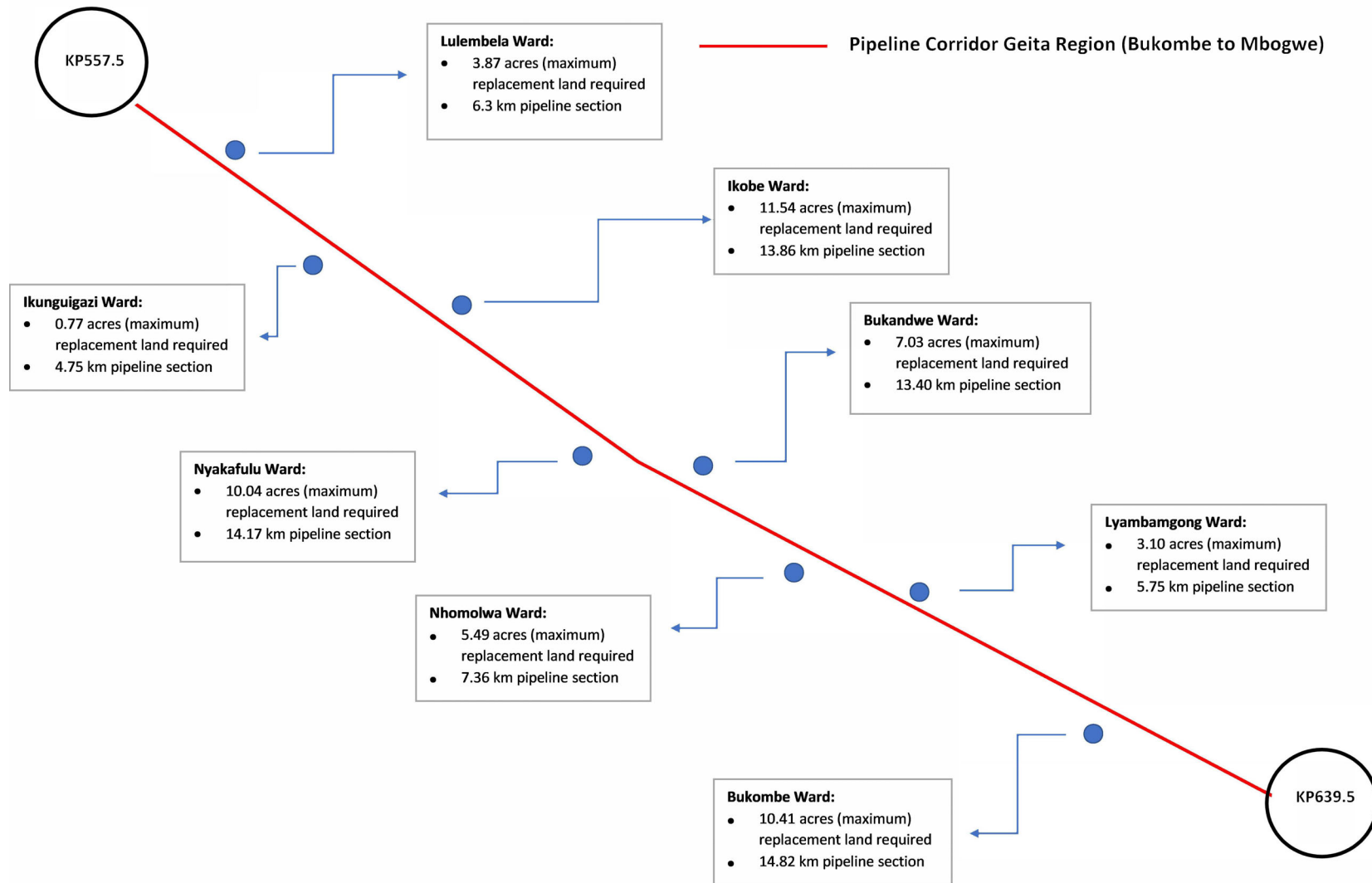


Figure 7-16 Maximum Area of Replacement Land Requirements in Geita Region (Bukombe and Mbogwe Districts)

In terms of replacement land, the total number of PAPs and land sizes of affected parcels are provided in Table 7-6. The table also shows the extent of replacement land that may be required, assuming all PAPs eligible for replacement land select it.

Table 7-6: Summary of Replacement Land in Geita

District	Ward	Village	Number of PAPs	Number of land Parcels	Replacement land Requirements (acres)	
	Bwongera	Biharamulo Game Reserve	-	-	-	
Chato	Ichwankima	Biharamulo Game Reserve	-	-	-	
	Nyamirembe	Nyambiti	9	14	8.77	
	Ichwankima	Busalala	4	5	3.41	
	Ilemela		Ilemela	1	1	1.28
			Nyambogo	1	1	1.18
			Nyagh'omango	3	5	2.04
	Katende		Chabulongo	4	5	6.13
			Katende	2	3	2.34
			Mwabaruhi	5	5	4.26
	Bukome	Mkungo	7	8	10.31	
	Makurugusi		Makurugusi	7	9	9.71
			Kasala	6	7	4.41
			Musasa	8	12	7.94
			Kamanga	1	3	2.19
	Bwanga	Minkoto	10	11	8.18	
	Iparamasa		Ilelema	4	4	5.23
Iparamasa			3	3	5.21	
Imalabupina			2	2	3.64	
Geita	Magenge	Igando	1	1	3.93	
Mbogwe	Lulembela	Nykonga	1	1	1.02	
		Lulembela	1	1	2.85	
		Kashelo	-	-	-	
	Ikunguigazi		Ikunguigazi	4	4	0.28
			Ibambula	1	1	0.49
	Ikobe		Kagongo	2	2	1.80
			Ikobe	1	1	2.02
			Ishigamva	2	5	7.72
	Nyakafulu		Lubeho	2	2	4.68
			Lubeho Village PS-4	1	2	1.85
			Shinyanga B	3	5	0.39
			Shinyanga A	6	10	3.12
	Bukandwe		Bukandwe	1	2	0.29
Kanegere			3	4	6.74	
Nhomolwa	Kabanga	3	6	5.49		
Bukombe	Lyambangongo	Kagwe	1	1	3.10	
	Bukombe	Kidete	2	2	3.12	
		Bukombe	-	-	-	
		Ilalwe	3	3	7.29	
		Nasihukulu	-	-	-	
Total			115	151	142.40	

7.2.2 Availability of Replacement Land

As prescribed by IFC PS5, where a PAP whose livelihoods are land based, it is preferred that replacement land that is at least equivalent to that being lost in terms of productive potential and locational advantage be offered. However, it is also acknowledged that in many cases unused agricultural land is increasingly rare and alternative strategies may be required. In such cases, the IFC Draft Good Practice Handbook¹⁸² suggests that:

“Land-for-land replacement can be achieved:

- *by individual households securing their own replacement land, with the Project and local authorities in a facilitating role rather than intervening directly; or*
- *by the Project securing replacement agricultural land sites or individual plots, which are then allocated to displaced households”.*

As discussed in Section 7.2.1 of this report, the amount of unutilized arable land in Geita ranges from 13.5% to 19% across the two (2) districts. Consideration is therefore required in determining the most appropriate mechanisms to ensure that land-for-land replacement can be achieved in Geita. This may include one or both of the options recommended in the Draft Good Practice Handbook.

As discussed in Section 7.1.7 a PAP may have other land available within the same area and request their replacement house be constructed there in preference to replacement land secured by the Project. In such cases, appropriate due diligence will be undertaken to ensure the site is suitable from a technical, legal and practical point of view.

7.3 Replacement Housing and Land Implementation

A more precise determination of land required for replacement housing and agricultural land will be made once PAPs have chosen their options and signed their compensation agreements.

The Project intends to construct replacement houses in a time frame that will allow physically displaced PAPs affected by the pipeline corridor to move directly into replacement housing and will not need to be moved into temporary accommodation. However, there may be instances where temporary accommodation is required, such as where a PAP elects to have a replacement house constructed on their existing homestead and for safety reasons it is not considered appropriate for these households to remain living on the homestead during this construction. In such instances the Project will work closely with PAPs and relevant authorities to support the PAPs during this transition period.

In terms of replacement land required to accommodate replacement houses, the aim is for most to be in the same village or ward as the land previously owned by PAPs (or as close as possible). Thus, the replacement plots where possible will be Village Land under jurisdiction of the same village, although right of occupancy will have to be transferred to the PAP. To

¹⁸² IFC. Draft Good Practice Handbook: Land Acquisition and Resettlement (2019).

ensure security of tenure for resettled PAPs, formal land acquisition, transfer and registration as per Tanzanian legislation will be conducted for identified replacement land. In coordination with the GoT, the Project will support the process to secure documents for the PAP to secure the best available security of tenure.

Any replacement agricultural land will be prepared and made available as soon as possible. This process will be monitored in order to ensure that the PAPs are resettled as soon as possible into their replacement houses, and that livelihoods are restored. Where replacement land is not available (or not prepared) at the time of displacement to eligible PAPs who select this option, transitional support will be put in place. Additional details on the transitional support to be offered to eligible PAPs to restore livelihoods are outlined in the LRP in Chapter 8.

8 LIVELIHOOD RESTORATION PLAN

8.1 Introduction

One of the major challenges associated with resettlement, particularly in rural contexts where people are reliant on land and the use of natural resources, is the restoration of existing livelihood strategies.¹⁸³ This chapter focuses on the restoration, and potential enhancement, of the livelihoods of the PAHs, as well as the existing inhabitants of the host communities, whose livelihoods may also be disrupted.

In cases where compensation alone, whether in cash or in-kind, will not guarantee the restoration or improvement of displaced families' existing livelihoods, a Livelihood Restoration Plan (LRP) will be introduced to those households who are eligible for such support. Generally, this is when physical resettlement or economic displacement significantly affects the income-earning or production capacity of the affected families.

The overall aim of the LRP is to ensure that there is a measurable improvement in the lives and livelihoods of eligible PAHs. This section summarizes the Project's approach to livelihood restoration activities¹⁸⁴ that will meet the following objectives:

- Provide sustainable livelihood packages for PAHs that are designed to enable the PAPs and PAHs to move beyond dependence on external resources;
- Provide mechanisms for those receiving cash compensation to optimize opportunities;
- Where possible leverage off existing skills and interests, however, also provide an environment for the development and enhancement of new skills; and
- Enable self-reliance and foster socio-economic empowerment "to improve, or at least restore, the livelihoods and standards of living of displaced persons"¹⁸⁵.

This section includes an overview of the following:

- Key principles underpinning the LRP;
- Phasing of the LRP implementation;
- Overview of livelihood context and strategies;
- Assessment of livelihood impacts;

¹⁸³ Livelihoods, in the sense that the term is used here, refers to strategies that households and individuals employ to meet their economic and survival needs. Such strategies may involve cash income, but this is not necessarily the case – a household may also meet its needs by growing its own food, bartering produce for necessities, etc. A household or individual may also engage in more than one (1) form of livelihood, some being cash-based and others being subsistence-oriented. Subsistence-orientated livelihoods are the main component of the PAPs livelihood strategies.

¹⁸⁴ Eligibility to these programs for PAPs is dependent on the significance of Project impacts on PAP livelihood strategies. Selection of land replacement land or cash compensation will determine access to specific programs.

¹⁸⁵ International Finance Corporation (IFC) (2012) Performance Standard 5.

- Eligibility for livelihood restoration support;
- Current livelihood improvement programs;
- Livelihood Restoration Plan; and
- Transitional Support Plan.

The LRP comprises a package of livelihood restoration options that will be offered to PAPs and PAHs. The level of support provided will be aligned with the level of impact experienced by a household as well as their potential vulnerability.

Households identified during the socio-economic survey process as potentially vulnerable will be further engaged to determine if these factors require a more customized level and type of support to enable them to restore their livelihoods. The support to be provided to potentially vulnerable persons and groups is described in Chapter 9.

8.2 Key Principles Underpinning the LRP

Development of the livelihood restoration approach for the Project is guided by the following principles, which correspond with applicable national laws and IFI standards.

Table 8-1: Key Principles Underpinning the LRP

Key Principles	Description
Multi-faceted approach	Livelihood strategies need to incorporate a range of different approaches to restore, and / or improve livelihood activities.
Active community participation	Livelihood strategies can only be sustained if beneficiaries are able to actively participate and make informed choices about their preferred livelihood options. Community participation needs to be planned and implemented in such a way as to enable equal participation by women and potentially marginalized groups.
Vulnerability	Particular focus and consideration need to be given to vulnerable individuals / groups throughout the livelihood restoration process, including people who are part of minority ethnic groups, or on the margins of society.
Transitional support	Pending implementation of the LRP, transitional support is required to support the income earning capacity of eligible households until their livelihood activities have been restored. Eligibility and end points for transitional support will be clearly defined.
Multi-sectoral partnerships	Technical expertise and institutional support will to be utilized across multiple service providers to ensure successful delivery.
Sustainability	Sustainability principles must be applied throughout LRP planning and implementation to ensure the strategy is resilient without compromising the natural environment.
Community ownership	Dependency is a key risk associated with resettlement activities and must be avoided. A livelihoods restoration strategy needs to empower communities to take ownership.
Capacity building	Local capacity building is a core element of a livelihood's restoration strategy. Capacity building needs to be inclusive and make provisions for the development of skills for different groups.
Monitoring and evaluation	Ongoing monitoring and evaluation are key elements of an improved livelihoods strategy. Indicators need to be used to measure change as applicable.

8.3 Phasing of the LRP

Given the scale and potential complexity associated with the implementation of the LRP, it will be completed across two phases, namely Phase 1: Immediate Livelihood Restoration and Support and Phase 2: Additional Livelihood Enhancement. The purpose of implementing the LRP across two phases is to allow for a more refined approach, efficient resourcing and also to ensure there are limited delays in restoring livelihoods impacted by the Project.

Phase 1 will focus on the immediate restoration of directly impacted livelihoods and the enhancement of food security for the PAHs. While the exact programs offered in each phase will differ depending on the nature of the impact, for the Geita region it will focus on the preparation of replacement land, agricultural enhancement and money management training.

Phase 2 will offer additional programs that will look to further enhance and potentially diversify livelihoods. It is important to note that it will be possible to implement Phase 1 and some Phase 2 programs in parallel. However, the initial focus of time and resources will be devoted to the implementation of Phase 1 programs.

Figure 8-1 provides an overview of LRP implementation phases and Section 8.8.2 provides detail on each of the proposed programs. Eight Livelihood Restoration Activities (LRAs) are considered.

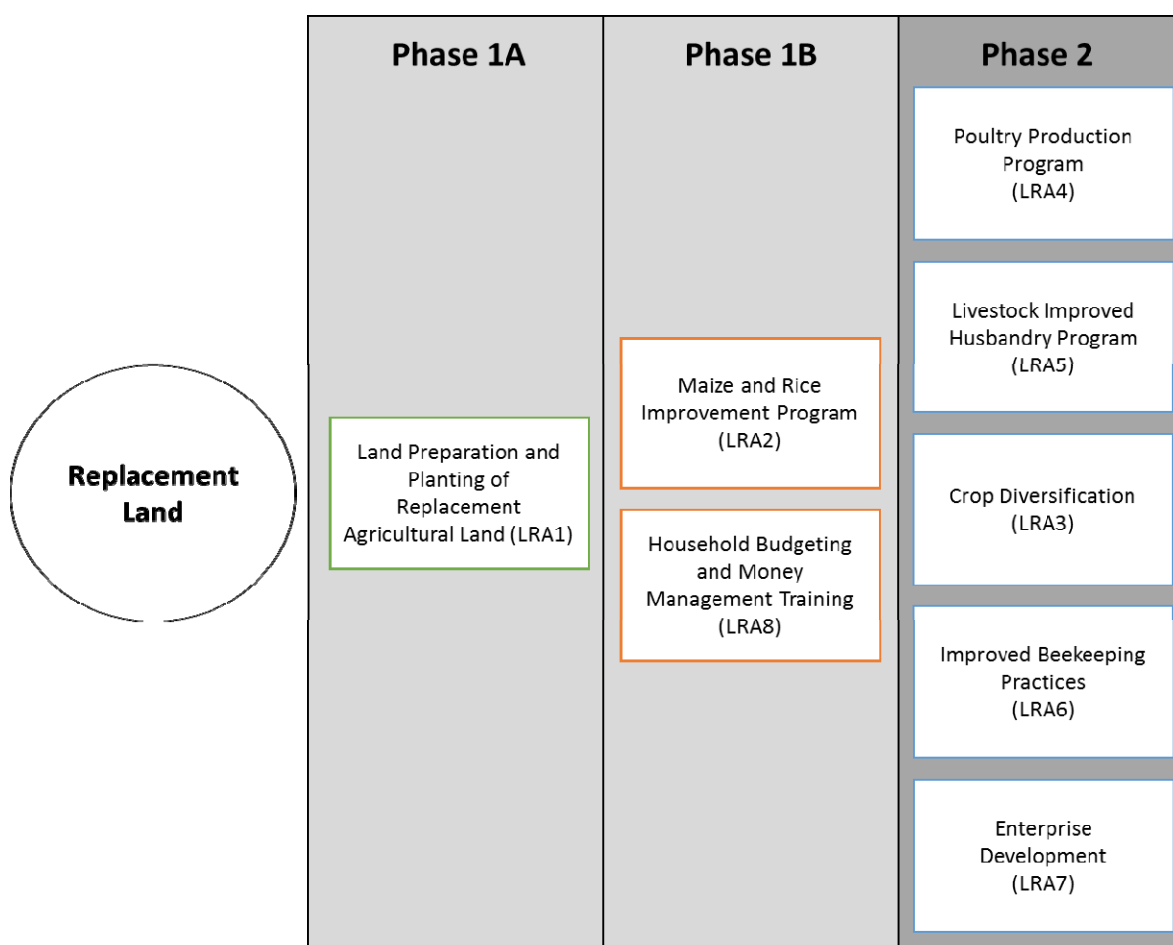


Figure 8-1: Phases of the LRP implementation

8.4 Overview of Livelihood Context and Strategies

The restoration and enhancement of livelihoods needs to consider several interconnected assets and elements, on a regional and local level, such as access to land (productive, fallow, and pasture), access to social networks, access to natural resources such as timber and non-timber forest products, medicinal plants, hunting and gathering grounds, grazing and cropping areas, fresh water, as well as employment and capital (human and financial).

These characteristics vary widely, and therefore the LRP must be developed in a contextual and practical manner. It is also important that the LRP benefits and eligibility criteria are common across all regions to ensure fairness. In developing the Geita Region LRP the following factors were considered:

- Regional population profile;
- Climate;
- Cultural characteristics;
- Livelihood zone;
- Livelihood strategies including:
 - Role of and access to markets;
 - Paid labor;
 - Size of agricultural land; and
- Climate variability, crop yields and adaptation.

8.4.1 Regional Population and Land Profile

The Geita Region is located in the northern parts of Tanzania, on the southern shore of Lake Victoria. Geita is a newly-established region. Prior to 2012 it was part of the Kagera, Mwanza and Shinyanga Regions. Geita covers an area of 20,054 km², around 2% of Tanzania's land surface area. Natural forests cover around 14% of the area of Geita Region. At the time of the 2012 national census, the region had a population of 1,337,718 people with a population growth rate of around 2.6% per annum between 2002 (when the previous census was conducted) and 2012. A growth rate of 5% per annum was predicted between 2012 and 2018 (see Chapter 5 for detail).

In 2012 most of the region's population lived in rural areas. Around one half of land ownership was customary. A modest proportion of urban households held title deeds for the land on which their dwellings were located (17%), in contrast to 3% in rural areas (see Chapter 5). In 2013, Geita Region had an estimated 3,464,417 acres (1,402,000) of arable land, of which 47% was under crop production.

8.4.2 Climate

The climate of the region is an important consideration as this can determine the suitability and timing of various agriculturally based restoration approaches. Tanzania has a tropical climate with the coolest months typically from June to October and the hottest months from December to March.

The wet season varies geographically; Geita Region has a bimodal rainfall regime with long and short rains. The long rains (also known as Masika) occur between March and May, whilst the short rains (also known as Vuli) occur between October and December. Land preparation often occurs a month before the start of each rainy season or immediately after the first rains. Among the major crops, maize is typically planted in October and November, cassava in September and October and rice in February (see Chapter 5). Crops in the region are predominantly rainfed¹⁸⁶, and hence are vulnerable to drought and occasional local flooding. The impact of drought has been noted by PAHs, with a major consequence being shortage of food.

8.4.3 Cultural Characteristics

Geita Region has five (5) districts. Four districts (Chato, Geita, Mbogwe and Bukombe) are Project-affected. The main ethnic group in Chato District is the Sukuma, whereas the predominant ethnic groups in the Geita, Bukombe and Mbogwe districts are the Sukuma and Sumbwa. Smaller ethnic groups in the Mbogwe District include the Haya, Ha, Kurya and Nyintuzu, and in the Bukombe District the Waha. All of these groups depend on agriculture (food and cash crops) and livestock keeping as main sources of livelihoods (see Chapter 5).

The biggest ethnic group among PAHs is the Sukuma. The Sukuma are agro-pastoralists and focus on livestock keeping and maize, rice and cotton farming (see Chapter 5). Livestock and especially cattle have particular significance for the Sukuma group. Cattle serve as a cultural symbol of wealth and are seldom slaughtered, except for consumption at traditional events, or when they are ill (see Section 5).

Information from the socio-economic surveys indicates that one (1) PAH in the Geita Region self-identifies as belonging to the Barabaig, one of the Vulnerable Ethnic Groups (VEG) in Tanzania who may self-identify as indigenous people. This VEG PAH is located in the Nyakafulu Ward of Mbogwe District. The Barabaig as a wider group used to be semi-nomadic pastoralists. The single VEG PAH in Nyakafulu Ward is not physically displaced. This PAH lists small trading as the only livelihood activity, showing that traditional livelihood practices are not pursued (see Section 5.7 for more detail).

8.4.4 Livelihood Zone¹⁸⁷

The pipeline traverses eight (8) distinct Tanzanian Livelihood Zones (TLZ) as seen in Figure 8-2. A livelihood zone is defined as an area within which people share broadly the same pattern of livelihood activities, including having similar options for obtaining food, income and market opportunities. The livelihoods zoning initiative began in Tanzania in 2008 and continues to be developed throughout the country.

The central parts of the Geita Region (the Project-affected districts) fall largely within Zones TLZ 29 and TLZ 31. TLZ 29 extends along the southern and south eastern shores of Lake

¹⁸⁶ Around 50,420 acres of land (20,405 ha) are under irrigation in the region. United Republic of Tanzania: Regional Administration and Local Government (2013). Geita Investment Profile.

¹⁸⁷ Based on: Preliminary Rural Livelihood Zoning: Tanzania (2010). USAID: A Special Report by the Famine Early Warning System Network. URL: <https://fews.net/sites/default/files/documents/reports>.

Victoria. The main overall food crops in Zone TLZ 29 are maize, cassava and rice and in TLZ 31 they are maize, rice and sweet potatoes. Livestock keeping is an important livelihood strategy in both zones, with cattle, goats and poultry being the most common animals owned. Important sources of income are crop sales (including cotton), agricultural labor and livestock sales¹⁸⁸.

The Livelihood Zones discussed above straddle administrative boundaries, hence they are not fully representative of Geita Region and its districts. However the Livelihood Zone profiles largely align with livelihood information for Geita Region drawn from regional socio-economic profiles, RAP socio-economic surveys and from the Geita SELI (2019).

Farming is an important source of livelihoods for PAHs in Geita Region, with 43% of PAHs listing farming as their main source of food, and 38% recording farming as the main source of income. Subsistence farming is practiced by 23% of PAHs (see Table 8-2). PAHs in the region cultivate seasonal and permanent crops, with the most prominent being maize (69%) and rice (52%). In comparison with drier regions south and east of Geita dependence on maize is not as pronounced. In this context other significant crops include cassava (27%), cotton (18%) and groundnuts/peanuts (17%). Cotton is widely cultivated in Geita District (36% of PAH). See Table 8-2.

As noted in Section 8.4.3, the rainfall regime cycle plays a significant role in land preparation, planting and harvesting. It also influences cycles of food and cash shortage, with these shortages most evident during periods of planting and of tending growing crops. Eighty six percent (86%) of PAHs in Geita Region had experienced food shortages in the previous year and 9% had experienced shortage of cash (see Chapter 5).

Apart from the main livelihood activities of crop farming, livestock keeping and the sale of crops and livestock products, other livelihood sources among Geita PAHs include self-employment, small trading, salaried employment and artisanal mining (see Chapter 5). A summary of affected livelihood activities in the affected wards is provided in Figure 8-2.

¹⁸⁸ Preliminary Rural Livelihood Zoning: Tanzania (2010). USAID: A Special Report by the Famine Early Warning System Network. URL: <https://fews.net/sites/default/files/documents/reports>.

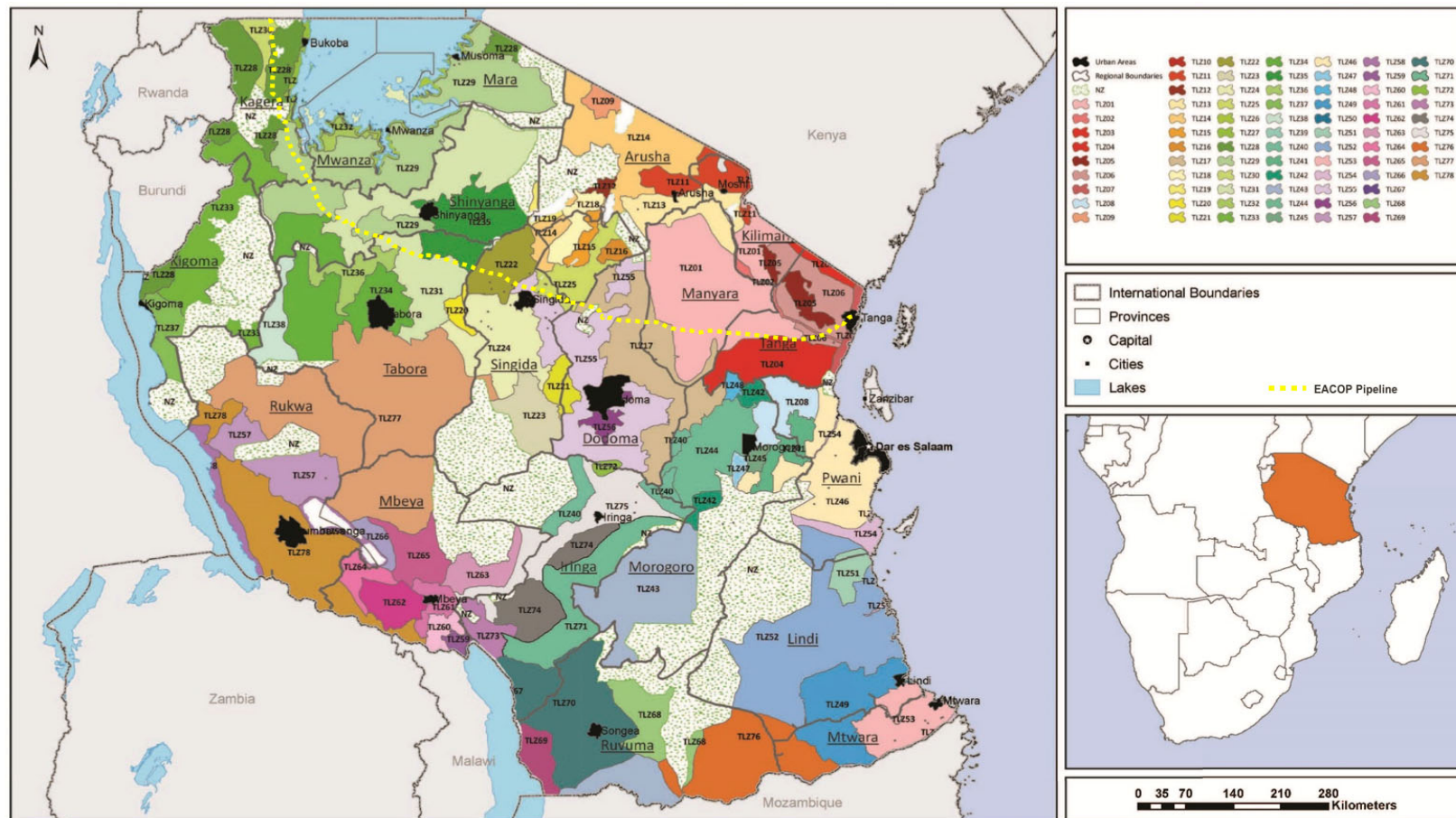


Figure 8-2: Tanzania Livelihood Zones¹⁸⁹

¹⁸⁹ Adapted from http://fews.net/sites/default/files/documents/reports/TZ_Livelihoods.pdf. Note that Geita Region was only established in 2012. It is not represented on the map above. The boundary of Geita includes parts of the Kagera, Mwanza and Shinyanga Regions.

Table 8-2: Summary of Livelihood Activities in Geita Region per Affected Ward

District	Ward	No. of PAHs ¹⁹⁰	Primary Livelihood							Role of Farming		Crops Produced							Livestock					
			Artisanal mining	Other self-employed / own business	Salaried employment	Sales of crops	Sales of livestock products	Small trading	Subsistence farming	Other	Farming main food source	Farming main income source	Maize	Rice	Cassava	Cotton	Peanuts/groundnuts	Vegetables	Other crops	Poultry	Cattle	Goats	Sheep	Other livestock
Chato	Nyamirembe	46			1	33			12		9	11	43	34	7	2	2		3	38	26	24	8	13
	Ichwankima	32				24			8		7	9	30	7	22				5	25	23	19	6	11
	Ilemela	47			1	30			16		10	8	38	29	16	3	1		6	41	32	34	17	12
	Katende	104		1	1	80			22		28	29	46	22	65	64	1	1	9	88	60	64	30	20
	Bukome	52		1	5	22		1	22	1	16	19	32	26	11	13	2	7	9	48	26	29	11	9
	Makurugusi	130	3	1	2	75	3	3	38	5	51	51	88	76	51	6	2	9	28	106	74	73	17	42
	Bwanga	83	2	3	2	49		3	20	4	42	44	53	33	50	12		7	8	54	18	38	1	22
	Iparamasa	38	2		2	22	1		10	1	24	22	23	22	14	4	5	3	5	28	16	23	4	6
Total		532	7	6	14	335	4	7	148	11	187	193	353	249	236	104	13	27	73	428	275	304	94	135
Percent of PAH			1%	1%	3%	63%	1%	1%	28%	2%	35%	36%	66%	47%	44%	20%	2%	5%	14%	80%	52%	57%	18%	25%
Geita	Kaseme	22			1	14			6	1	13	11	16	4	12	8	3	1		19	15	15	4	8
Total		22	0	0	1	14	0	0	6	1	13	11	16	4	12	8	3	1	0	19	15	15	4	8
Percent of PAH			0%	0%	5%	64%	0%	0%	27%	5%	59%	50%	73%	18%	55%	36%	14%	5%	0%	86%	68%	68%	18%	36%
Mbogwe	Lulembela	70	1	2		49			16	1	30	32	58	25	19	12	13	4	6	57	21	31	5	17
	Ikunguigazi	53	1	3		33		1	14	1	27	30	36	19	18	11	13	3	6	33	18	23	3	10

¹⁹⁰ PAH responding to SE survey (also excludes Village/Mtaa Councils and other Government institutions who administer affected land and assets).

District	Ward	No. of PAHs 190	Primary Livelihood							Role of Farming		Crops Produced						Livestock						
			Artisanal mining	Other self-employed / own business	Salaried employment	Sales of crops	Sales of livestock products	Small trading	Subsistence farming	Other	Farming main food source	Farming main income source	Maize	Rice	Cassava	Cotton	Peanuts/groundnuts	Vegetables	Other crops	Poultry	Cattle	Goats	Sheep	Other livestock
	Ikobe	126			1	96	1		26	2	77	79	93	57	32	37	14	9	10	102	69	64	13	26
	Nyakafulu	200	11	5	8	105	1	21	38	7	95	61	127	121	19	7	70	19	11	99	66	51	16	38
	Bukandwe	110	5	1	4	88		3	8	1	55	37	84	67	9	5	40	7	8	76	70	53	12	16
	Nhomolwa	83		1		71	1	2	7	1	25	12	64	78	4		13	3		66	62	49	16	3
Total		642	18	12	13	446	3	27	110	13	311	252	464	371	101	72	166	45	42	438	310	274	65	110
Percent of PAH			3%	2%	2%	69%	0%	4%	17%	2%	48%	39%	73%	58%	16%	11%	26%	7%	6%	68%	48%	43%	10%	17%
Bukombe	Lyambamgongo	41			1	22	4	1	13		17	14	27	37		12	2	3		35	35	24	16	11
	Bukombe	82		1	1	57	1	1	20	1	45	32	46	32	7	35	36	1	7	60	45	53	7	23
Total		123	0	1	2	79	5	2	33	1	62	46	73	69	7	47	38	4	7	95	80	77	23	34
Percent of PAH			0%	1%	2%	64%	4%	2%	27%	1%	50%	37%	59%	56%	6%	38%	31%	3%	6%	77%	65%	63%	19%	28%
Total Geita Region		1319	25	19	30	874	12	36	297	26	573	502	906	693	356	231	220	77	122	980	680	670	187	288
Percent of Geita Region PAH			2%	1%	2%	66%	1%	3%	23%	2%	43%	38%	69%	52%	27%	18%	17%	6%	9%	74%	51%	51%	14%	22%

Source: Socio economic survey of PAP / Household 2018

8.4.5 Livelihood Strategies

In addition to the climate and cultural practices mentioned previously, livelihood strategies are also determined by prevailing socio-economic factors, hence they can differ widely across even a relatively small geographic area. In the Geita Region these differences are dictated by factors such as:

- Role of, and access to markets;
- Paid labor;
- Size of agricultural land; and
- Climate variability, crop yields and adaptation.

Role of and Access to Markets

Most rural Tanzanians are substantially reliant on subsistence farming of crops and livestock. Monetization of rural economies is well underway, so mechanisms for the sale of crops and livestock products play a key role in the livelihoods of most rural households. In this context markets and livelihood strategies are closely interlinked.

Households use markets in many ways including:

- Poorer households rarely produce enough food to last them until the next harvest and must, therefore, buy staple food to last them several months;
- Wealthier people, on the other hand, tend to use markets to sell cash crops and livestock products;
- Even poor households with stored harvest may have to sell some of it in order to pay pressing expenses; and
- The monetization of the rural economy is also evident in changing livelihood strategies amongst pastoralists: many use markets to exchange livestock and livestock products for grain and other necessities.

PAHs in Chato, Geita, Mbogwe and Bukombe have access to local general markets operating on a daily or weekly basis. PAHs in Kaseme Ward, Geita District, access markets in Lulembela Ward, Mbogwe District as it is the closest to their homesteads. In order to access larger markets, many PAHs sell harvested crops to intermediaries living in the villages. The intermediaries in turn sell the crops at larger ward, and district markets. Whilst PAHs may secure higher prices themselves at the big markets, transport challenges and costs make it easier to sell to the intermediaries, who pay the lowest prices possible.

Livestock and associated products are sold at local markets to local and regional buyers and to intermediaries. The major livestock markets and / or auctions in the PACs include Bukombe market in Bukombe District (every Monday) and Buzirayombo market in Chato (every Wednesday). Some PAHs in Chato, Geita (Kaseme) and some parts of Mbogwe attend the livestock market in Katoro Township in Geita District which operates every Monday (see Chapter 5 for more detail).

Paid Labor

Providing and using paid labor is another element of livelihood strategy in rural Tanzania:

- Wealthier households rely on paid labor to be able to prepare the land they have, weed the crops, harvest them at the time required, and properly tend their herds – so maintaining their wealth;
- Some poorer people, on the other hand, must engage in paid labor for parts of the year to earn money for purchasing foodstuffs and other necessities – particularly at times when their home-produced food stocks have been depleted;
- In the more productive areas people tend to find local farm work and this is mostly paid in cash, not in-kind (e.g. in sacks of grain); and
- In the less productive areas, people more often look for work in local towns or migrate for several weeks a year to work in better-favored agricultural areas or in cities.

Based on the socio-economic survey and SELI information, the provision of agricultural labor is not a significant livelihood source among PAH in the Geita Region. The extent of the practice may be hidden in generic livelihood categories such as “other”. The USAID Preliminary Livelihood Zoning study¹⁹¹ notes that labour provided to cotton farms is an important livelihood source in TLZ 29, where cotton is widely cultivated.

Size of Agricultural Land

Households relying on livelihoods derived from a single source are more vulnerable to shocks generated by occurrences such as a land acquisition and resettlement process. PAHs that depend on land-based livelihoods that will be impacted by the land acquisition process, and that do not have alternatives to fall back on, are more vulnerable.

SELI survey information for the pipeline indicated an average household landholding of 4 (four) to five (5) acres. Survey results indicated that 0.5 to 1 acre per person is needed for basic subsistence and cash needs. The average holding conceals the fact that some households are land-poor or even landless.

For the Geita RAP (and other pipeline RAPs) a household has been considered eligible for replacement land if the PAP loses more than an acre equivalent of land but less than the average farm size (>AE but <AFS) and is identified as vulnerable¹⁹². More detail about eligibility and vulnerability can be found in Chapters 6 and 9 respectively.

Climate Variability, Crop Yields and Adaptation

Across the Project-affected regions agricultural output varies by location and over time. Average annual rainfall in Zones TLZ 29 and TLZ 31 (covering most of Geita Region – see

¹⁹¹ Mainly Chato and Geita Districts in the case of Geita Region. Source: http://fews.net/sites/default/files/documents/reports/TZ_Livelihoods.pdf.

¹⁹² Acre Equivalent (AE): A measure of the relative productivity of arable land in a Project-affected district. It is the ratio of two numbers: (a) the number of acres of land that a household in a district needs to sustain itself (taking into account staple crops and their prevalence in that district, as well as district-specific crop yields and average household size); and (b) the average number of acres of land per household across all Project affected districts (2.57 acres, as reported in 2007 / 2008 agricultural census data). Average Farm Size (AFS): The average agricultural (crop) land holding per household in a district, as reported in 2007 / 2008 agricultural census data.

Figure 8-2) is 600-1000 mm and 500-1000 mm respectively¹⁹³, but falls vary across all areas, with periodic droughts and heavy rainfall events. As previously noted, agriculture in Geita is predominantly rain-fed, so long term climate changes and especially droughts have negative impacts on agricultural production and food and income availability. Widely reported seasonal food shortages are likely to be exacerbated by extreme short and long-term climate events.

Climate change remains to be demonstrated in Geita Region, but PAHs participating in the SELI survey reported shifts in rainfall patterns and noted the link between drought events and food production. In order to cope with these ongoing challenges, households may be forced to diversify and adapt their agricultural practices. It is this ability to adapt, or lack of it, that is a key determining factor in a household's long-term food security. In comparison with regions to the south and east, crops in Geita Region are relatively diversified (see Section 8.4.4), making households potentially a little more resilient to climate change and drought.

Geita PAHs and PAPs identified the developmental requirements most relevant to them, together with proposed support inputs (see Chapter 5, Section 5.6). Several proposed areas of support, if mobilized, could contribute to resilience in the face of climate variability and drought:

- Access to advanced agricultural inputs and equipment such as improved seeds, pesticides, fertilizer, ploughs and tractors;
- Access to cattle dips, vaccinations and veterinary services;
- Improved roads and water infrastructure (including access to irrigation). Improved access to water could potentially increase yields during dry periods, whereas improved roads can improve access to markets;
- Construction of storage facilities for a variety of crops to improve food security and to increase income from crop sales; and
- Education and training on sustainable agricultural practices.

8.5 Assessment of Livelihood Impacts

8.5.1 Sustainable Livelihoods Framework

Livelihood impacts have been assessed in the context of the Department for International Development (DFID) Sustainable Livelihoods Framework that defines a sustainable livelihood as that which is able to withstand socio-economic or political shocks as well as enhance the well-being of present and future generations, without causing harm to the natural environment / depleting natural resources.

This ensures that a holistic assessment is undertaken that considers qualitative natural, physical and financial impacts as well as quantitative impacts on the social and human aspects of livelihood strategies.

¹⁹³ From http://fews.net/sites/default/files/documents/reports/TZ_Livelihoods.pdf.

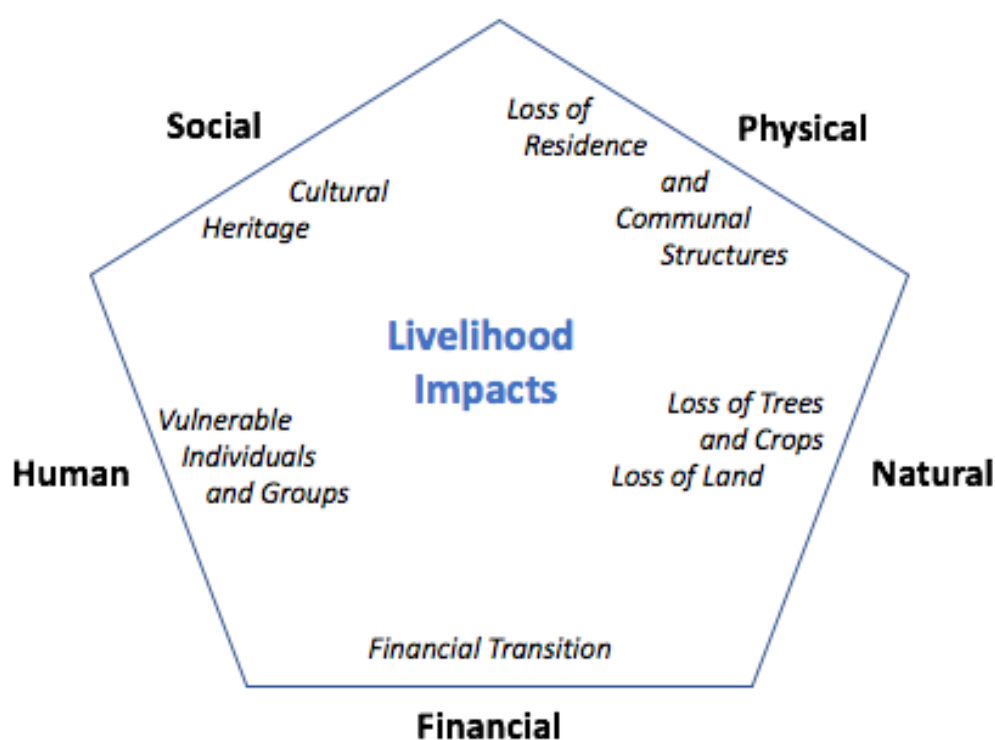


Figure 8-3: Impacts categorized using DFID Sustainable Livelihood Framework

Impacts identified in the overall Project area due to land acquisition and resettlement include:

- Loss of land;
- Loss of residences;
- Loss of trees and crops;
- Loss of communal resources;
- Impact on institutional structures;
- Impact on graves and areas of cultural heritage; and
- Impacts on vulnerable individuals and groups.

8.5.2 Summary of Displacement Impacts in Geita Region

Key findings related to the assessment of displacement impacts on the livelihood strategies of PAPs in Geita include:

- The pipeline traverses Geita Region over a distance of 142.86¹⁹⁴km, affecting 1,628 land parcels. A total of 1333.59 acres of land will be affected by the Project (including infrastructure crossings that will remain) of which 1,123.94 acres of land will be affected within the villages and has been valued for compensation by the Project. In

¹⁹⁴ This excludes the 12.83 km of the pipeline that traverses the Biharamulo Game Reserve and the 13.37 km that traverses the Biharamulo Forest Reserve. When included, the total pipeline length across the Geita Region is 167.10 km.

addition, 96.73 acres of land in the Biharamulo Game Reserve and 101.59 acres of land in Biharamulo Forest Reserve is affected in the Geita Region. During the valuation 199.89 acres was recorded as crop land, which included 31.41 acres of intercropping.

- A total of 8,172 crop stems and 10,521 economic and other trees were recorded during valuation as affected by the Project (excluding trees affected and valued using the royalty method in the Biharamulo Game Reserve and Biharamulo Forest Reserve);
- Impacts on land and crops are significant, with many PAHs across Geita Region engaged in crop farming. Around 43% of PAHs have farming as a main source of food, and 38% as a main source of income (see Table 8-2);
- The spread of crop types is relatively broad, with less reliance on a major crop (for example maize) than in many other regions. Loss of land is significant whatever the crop type, but livelihood restoration is spread across a wider range of options;
- Crop yields are related to the land available to PAHs, to agricultural inputs and to variations in rainfall and climate. Seasonal food shortages are common, and impacts potentially decreasing yield will make households more vulnerable to shortages;
- Cattle and other livestock represent important sources of supplementary income for many Geita PAHs. Livelihoods and income are secured through the sale of livestock products such as eggs, milk and manure. The livestock also provide a non-cash reserve which is relied on for a variety of household expenses. In the wider context, land alienated by the Project is a very small proportion of available crop and range land, but drought can reduce yields and restrict grazing land from time to time;
- The pipeline corridor will traverse Village and Reserved Land in places. In the former case the corridor will be restored to grassland following construction and in the latter case where the game reserve and forest were as far as possible previous biological capacity will be restored. Both approaches will allow continued community use; and
- The vast majority of PAHs are likely to need some form of financial literacy and management training to prepare them for the cash they receive as compensation. This is to encourage the use of this money to assist in the restoration of their livelihoods.

Regarding impacts specific to Vulnerable Ethnic Groups in Geita Region, as noted in Section 8.4.3, the single self-identified Barabaig PAH is seemingly not land-dependent. The main source of income is salaried employment and small trading is a secondary livelihood source.

The detailed LRP for Geita Region has been developed to leverage off the existing PAH livelihood strategies. Where crop production forms an essential part of their livelihood strategies, there will be a focus on relevant crop improvements and support programs as well as livestock improvement programs.

8.6 Eligibility for Livelihood Restoration Support

The Project will offer livelihood restoration assistance depending on the significance of impacts on the livelihood of a PAP and their resilience to restore livelihoods. As discussed in previous sections, the majority of PAHs are reliant on land-based livelihood activities, and

therefore the identification of suitable replacement agricultural land (where PAPs are eligible) is a key component of successful livelihood restoration. The nature (location, soil quality etc.) and extent of agricultural land are significant factors in yield, together with variations in rainfall and local adaptation responses. Table 8-3 provides an overview of the replacement land entitlements of PAPs which is directly linked to the relevant livelihood restoration.

Table 8-3: Replacement Land Entitlements

Replacement Land Eligibility Category	Criteria	Replacement Land Entitlements	Livelihood Restoration Support Entitlements
0	Physically displaced PAP whose dwelling is affected and is eligible for replacement housing.	<ul style="list-style-type: none"> To be offered cash compensation option or in-kind replacement of land option (provided land is available in the ward), otherwise an alternative livelihood program (with cash compensation); and Where PAP selects a replacement house they will be provided with (as a minimum) a Residential Plot only. 	<ul style="list-style-type: none"> Land and Non-land-based group level livelihood restoration programs; and Individual level livelihood restoration program (G1).
1	PAP loses < AE OR > AFS.	<ul style="list-style-type: none"> Cash compensation for the land. 	<ul style="list-style-type: none"> Group level land-based and non-land-based livelihood restoration program(s) (G4).
1a	PAP will lose <AE and is identified as vulnerable.	<ul style="list-style-type: none"> Cash compensation for the land. 	<ul style="list-style-type: none"> Group level land-based and non-land-based livelihood restoration program(s); and Individual level livelihood restoration program(s) (as appropriate to vulnerability factors of PAP) (G2).
2	PAP will lose >AE BUT <AFS.	<ul style="list-style-type: none"> Cash compensation for the land; and Assistance in formalizing appropriate tenure to alternative land within in the ward (where requested and land being self-identified by PAP). 	<ul style="list-style-type: none"> Group level land-based and non-land-based livelihood restoration program(s) (G4).
2a	PAP will lose >AE BUT <AFS and is identified as vulnerable.	<ul style="list-style-type: none"> To be offered cash compensation option or In-kind replacement of land option (provided land is available in the ward), otherwise an alternative livelihood program (with cash compensation). 	<ul style="list-style-type: none"> A group level livelihood program; or An individual level livelihood program (G3).

Replacement Land Eligibility Category	Criteria	Replacement Land Entitlements	Livelihood Restoration Support Entitlements
2b	Tenant PAP on acquired land parcels >AE who will lose crops, trees or other assets >T.Shs. 100,000 in value, but not land or residential dwellings.	<ul style="list-style-type: none"> No land entitlement. 	<ul style="list-style-type: none"> Non-land-based group level livelihood restoration (i.e. Money Management and Entrepreneurial Training); and Group Level Livelihood Program – where tenant PAPs have lost >AE and have self-identified and secured / have access to alternative land to farm (G5).
3	PAP compensated for crops, trees and other assets including other non-residential structures) valued at T.Shs. 100,000 or more.	<ul style="list-style-type: none"> No land entitlement. 	<ul style="list-style-type: none"> Non-land-based or non-crop-based livelihood restoration programs (i.e. Money Management and Entrepreneurial Training, livestock program, beekeeping program); and Livelihood program will be commensurate to assets lost (G6).
3a	PAP will lose crops, trees or other assets, but not land or residential dwellings and total cash value of compensation is less than T.Shs. 100 000.	<ul style="list-style-type: none"> No land entitlement. 	<ul style="list-style-type: none"> Not eligible for livelihood restoration programs (G7).

From the review of impacts on livelihood strategies, criteria were established (see Table 8-4) to determine the type of livelihood assistance to be offered to PAPs.

Livelihood restoration is structured around group-level livelihood restoration measures based on the significance of impacts on the PAPs (e.g. economic displacement). In addition, some PAPs will require access to individual level livelihood restoration support, e.g. physically displaced PAPs and those with vulnerabilities, as they are unable to restore their livelihoods without further assistance due to the degree of Project impact and / or lack of resilience or social standing.

These livelihood restoration entitlements will have a cumulative value for those PAPs with multiple affected land parcels.

Both land and non-land-based measures are contained within the livelihood restoration program.

Because this LRP describes the proposed approach and measures / programs to be made available and accessible to eligible PAPs, the existing programs and agencies delivering livelihood restoration in the Geita Region have been reviewed. This is described in Section 8.7.

Table 8-4 provides an overview of PAP eligibility and eligible figures for the different types of livelihoods support.

Table 8-4: Overview of Livelihood Restoration Eligibility

Livelihood Restoration Group	Replacement Land Eligibility Category	Criteria	Type of Livelihood Restoration Support	Districts															Totals per Livelihood Restoration Group		
				Chato					Geita		Mbogwe					Bukombe					
				Wards																	
				Ichwankima	Nyamirembe	Itemela	Katende	Bukome	Makurugusi	Bwanga	Iparamasa	Magenge	Lulembela	Ikunguigazi	Ikobe	Nyakafulu	Bukandwe	Nhomolwa		Lyambangongo	Bukombe
G1	0	PAP will permanently lose access to his / her residential dwelling(s).	<ul style="list-style-type: none"> Land or Non-land-based group level livelihood restoration program; and Individual level livelihood restoration program. 	1	0	0	3	0	3	2	3	1	1	5	2	8	2	2	0	1	34
G2	1a	PAP will permanently lose access to his / her land and is identified as vulnerable.	<ul style="list-style-type: none"> Group level land-based and non-land-based livelihood restoration program(s); and Individual level livelihood restoration program(s) (as appropriate to vulnerability factors of PAP). 	2	4	5	9	3	13	10	2	11	19	7	42	39	27	32	11	22	258
G3	2a	PAP loses > AE (more than an acre equivalent of land) but < AFS (less than the average farm size) for the district and is identified as vulnerable.	<ul style="list-style-type: none"> A group level livelihood program; and An individual level livelihood program. 	8	4	5	8	7	19	10	8	0	1	0	3	2	2	1	1	5	84
G4	1 and 2	PAP will permanently lose access to his / her land in part or whole.	<ul style="list-style-type: none"> Group level land-based and non-land-based livelihood restoration program(s). 	20	27	31	64	26	78	47	23	10	39	36	63	131	72	44	28	54	793
G5	2b	Tenant PAP will lose > AE of crops and / or	<ul style="list-style-type: none"> Land-based and non-land-based group level livelihood 	0	1	2	11	1	2	5	0	0	0	0	0	0	0	0	0	0	22

Livelihood Restoration Group	Replacement Land Eligibility Category	Criteria	Type of Livelihood Restoration Support	Districts															Totals per Livelihood Restoration Group		
				Chato					Geita	Mbogwe					Bukombe						
				Wards																	
				Ichwankima	Nyamirembe	Itemela	Katende	Bukome	Makurugusi	Bwanga	Iparamasa	Magenge	Lulembela	Ikunguigazi	Ikobe	Nyakafulu	Bukandwe	Nhomolwa		Lyambamgongo	Bukombe
		trees, but not compensated for land.	<ul style="list-style-type: none"> restoration programs (i.e. Money Management and Entrepreneurial Training); and Group level livelihood program – where tenant PAPs have lost > AE and have self-identified and secured alternative land. 																		
G6	3a	PAP compensated for crops, trees and other assets including other non-residential structures) valued at T.Shs. 100,000 or more.	<ul style="list-style-type: none"> Non-land-based or non-crop-based livelihood restoration programs (i.e. Money Management and Entrepreneurial Training, beekeeping program); and Livelihood program will be commensurate to assets lost. 	0	8	1	10	11	9	8	1	0	1	0	4	3	1	0	0	0	57
(G7) PAP with a total cash value of compensation of < T.Shs. 100,000 or who receive compensation for graves only, will not be eligible for livelihood restoration programs.				1	2	3	4	6	9	6	1	1	11	8	17	36	10	8	1	6	130

8.7 Current Livelihood Improvement Programs

Where possible, the Project will look to leverage and learn from current livelihood improvement programs being implemented in the area.

Information regarding current programs being implemented in proximity to Project sites was gathered in consultation with local authorities, including District Land Officers, District Agricultural Officers, District Livestock Officers, Village Development Council (VDC) representatives and Ward Development Council (WDC) representatives. Community Development Officers and local CBOs were also engaged.

Several meetings were held with the Tanzanian Social Action Fund (TASAF) at district, regional and head office levels. Currently, livelihood programs in the region are being implemented by NGO's, Non-Profit Organizations (NPOs), FBOs, CBO's and GoT.

8.7.1 Overview of Current Livelihood and Related Programs

Current livelihood improvement programs identified during consultations are listed in Table 8-5. These programs are implemented by Tanzanian and international organizations and cover a range of different livelihood and livelihood-related aspects.

Table 8-5: Livelihood Improvement and Related Programs led by NGOs and CBOs

District	Group name	Activities
Chato District	RUDIDO	Sustainable land use, environmental conservation and agriculture
	Tumaini Fund	Assistance to orphans, vulnerable children and disabled persons. Water resource projects
	Community Habitat Environmental Management (CHEMA)	Agricultural development and beekeeping projects, environmental conservation through reforestation
	Tanzania Development and AIDS Prevention (TADEPA)	Helping vulnerable groups (people with HIV/ AIDS group, elderly, orphans etc.)
	HUYAMA	Helping orphans and provision of services to disabled persons
	Community Participation Development Association (COPADEV)	Reducing malaria cases and provision of general education to the community
	Population Services International (PSI)	Reducing malaria cases, reproductive health education and HIV / AIDS education
	Netherland Development Organization - SNV	Public health and general education
	Vulnerables' Organization for Legal Aid Services (VOLAS)	Provision of legal aid to vulnerable groups and general training to the community
	Plan International	Working against child labor
	Red Cross	Support in the context of HIV / AIDS
	TIBUHOMA	Enhancing health services for children
	KIVULINI	Provision of legal education to the community
	New Light Children Organization (NELICO)	Provision of legal education
Community Development	Assistance to orphans and other vulnerable children	

District	Group name	Activities
	and Relief Trust (CODERT)	
	Chato Legal Aid Organization (CHALAO)	Provision of legal assistance and aid
	Community Health Education and Service and Advocacy (CHESA)	Community health and provision of legal aid
	Nature's Light for Human Existence Tanzania	Environmental conservation
	The Eleanor Foundation Tanzania	Hygiene education, water resource projects and support for vulnerable people
	Compassion International Tanzania	Dealing with vulnerable children
Bukombe District	Red Cross	Advocacy, sensitization and mobilization for Most Vulnerable Children / Orphan Vulnerable Children (MVC/OVC) and people living with HIV
	PLHIV NETWORK	Advocacy / sensitization for people living with HIV
	NURU UYOYU	Advocacy, sensitization, community mobilization
	TUMAINI	Assisting vulnerable people
	The Foundation for Human Health and Social Development (HUHESO)	Advocacy, sensitization, community mobilization
	NELICO	Legal education to the community
	BRAC	Financial assistance to communities
	Vision Fund	Provision of soft loans to communities
	Bayport	Provision of soft loans to communities
	John Snow, Inc (JSI)	Sensitization and advocacy on HIV / AIDS and MVC
TANDABUI	Governance and human rights education	
Mbogwe District	Service Health and Development for People Living Positively with HIV/AIDS (SHDEPHA +)	Sensitization on Tuberculosis diagnosis
	Tanzania Youth Alliance (TAYOA)	Dealing with male circumcision
	Columbia University Mailman School of Public Health (ICAP)	Addressing HIV / AIDS issues
	Management and Development for Health (MDH)	Addressing HIV / AIDS issues
	JSI	Addressing sexual harassment against women and children
	IMA World Health	Nutrition issues
	Tubari Tabia	Addressing malaria and HIV / AIDS issues
	Waraghabishi	Education on early marriages, sexual harassment against women and children
	Mbogwe Legal Aid Organization	Provision of legal aid

District	Group name	Activities
Geita District	Plan International	Human rights activism, environmental education, poverty reduction
	Songambebe Solidarity in Action (SSIA)	Agriculture, tourism and sustainable land use.
	Water and Environment Development Company (WODECO)	Improving water services, environmental awareness and mother and child health
	Act Counselor Tanzania	Education on communicable diseases, environmental conservation and drug abuse
	Ferusco Sustainable Development Agency	Capacity building through Village Community Banking (VICOBA).

8.7.2 Government Programs Identified

Agricultural Based Programs

Tanzania's Agricultural Sector Development Strategy II aims to contribute "...to the realization of the Tanzania Development Vision 2025 that envisages raising the general standard of living of Tanzanians to the level of a typical medium-income developing country by 2025". Tanzania's Long-Term Perspective Plan (2011-2025) and the First Five (5) Year Development Plan (2016-2021) provide guidelines and targets for the agricultural sector. The GoT also embarked on the implementation of Big Results Now (BRN) initiatives in 2013 / 14 to transform the economy aimed at achieving sustainable economic growth and inclusive wealth creation.

Agricultural BRN aimed at the delivery of:

- Improvement of smallholder irrigation schemes;
- Improvement of collective warehouse based maize marketing systems; and
- Promotion of commercial farming.

The World Bank recommends promoting faster economic growth in labor-intensive sectors, including agriculture where three-quarters of Tanzanians continue to be employed: "There are emerging signs of increased participation of the poor in the growth process during the last five (5) years".¹⁹⁵

TASAF Support Program

The objective of the TASAF program is to enable poor households to increase income and opportunities while improving consumption. TASAF is part of the government's poverty reduction initiative.

The TASAF support program was started in August 2012 and 2018 announced its continuation into a 3rd phase of funding. TASAF mostly works with marginalized families by providing them with access to health and education services in the form of grants paid out

¹⁹⁵ <http://www.worldbank.org/en/country/Tanzania/publication/tanzania-mainland-poverty-assessment-a-new-picture-of-growth-for-tanzania-emerges>.

six (6) times per year. Families are required to register to receive grants. TASAF has three (3) components as described in Table 8-6.

Table 8-6: Livelihood Components of the TASAF Support Program

Component	Description of Component
Monetary Pay-out	Monetary pay-out to household beneficiaries of T.Shs. 10,000 (social grant). Each identified student in the qualifying household receives T.Shs. 2,000 per month. In order to qualify for this stipend, students must have a record of 75% school attendance. Children under the age of four (4) receive an additional T.Shs. 4,000 per month. In order to qualify for this stipend, mothers have to take the children to the clinic at least once every two (2) months, or else the benefit is forfeited.
Public Works	Public works, where grant beneficiaries are required to work on governmental developmental projects in the district. This is usually unskilled work and includes construction work, leveling contours and erosion control. This is paid employment (approximately T.Shs. 3,500 per day) and usually entails six (6) to ten (10) days per month over a four (4)-month period.
Livelihood Enhancement	Livelihood enhancement. This includes the formation of groups / committees responsible for maintenance tasks in a village; construction of houses; running a nursery (seedlings are distributed to beneficiaries); water conservation projects (including constructing dams for harvesting rainwater and shallow wells); establishing vegetable gardens. A budget provided by government is utilized via a village fund. The money is distributed by a Community Management Committee, which also provides advice and input regarding potential investments, income generation and general improvement of living conditions. Support is also provided in selling of high yield crop species mainly beans and maize.

8.7.3 Additional Programs in Partnership or by GoT

Relevant development projects led by government and government agencies (sometimes in partnership with others) in the Geita Region are listed in Table 8-7:

Table 8-7: GoT – led Development Projects in the Geita Region

District	Department	Program/project
Bukombe	Environment	Urban Development and Environment Management (UDEM) program. Sensitization on proper use and management of the environment
	Forest Resources	Beekeeping. Capacity building and formation of beekeeping groups
		Afforestation program. Sensitization, development of tree nurseries and provision of equipment
	Health	Immunization and vaccination. Vaccination for children under one year
		Malaria program. Distribution of medicine, education, mosquito nets and fumigation
		HIV/AIDS. Education provision, testing, provision of ARVs, identification of the vulnerable for financial assistance
		TB and leprosy program. Identification of the vulnerable, free provision of medication, sensitization of the community
	Water	Neglected Tropical Diseases campaign. Sensitization and medication
		Construction of deep wells in villages.
		Construction of water supply systems in Nampalahala, Namsenga, Ushirombo, Msonga, Ng'anzo and Butizya
Chato	Economics and Planning	Construction of Kasenda fish market in Nyabugera village and Kasenda hamlet
		Support to sunflower oil refinery industry
		Construction of operating theatre in Chato DC hospital
		Construction of a health centre in Bwanga/Minkoto and Muganza

District	Department	Program/project	
		Construction of classes, latrines and teacher's apartments for secondary schools under the World Bank program (SEDEP)	
		Inchwankima-Imalabupina water project. Pumping water from Lake Victoria to villages	
		Support to concrete block production industry	
		Airport construction and renovation of the port	
		Construction of two markets, one in Chato town and one in Buseresere	
		Construction of a cultural heritage centre in Chato town	
		Support to stone crushing industry	
		Land survey and town planning project in Chato	
	Livestock, Fisheries, Forests and Natural Resources	Renovation of abattoirs in Buseresere and Chato, charco dams for Katende and Nyambogo	
		In field training (mashamba darasa) for grazing in Iliamchele and Khaumo	
		Maintenance Buzirayombo cattle market fencing, weighbridge and other infrastructures	
		Land use survey. Surveying on land uses within the villages	
		Development of tree nurseries	
		Beekeeping in the forests	
		Sports leagues. Enhancing the relationship between miners and forest stakeholders to promote good use and management of the environmental	
	Afforestation and planting program in the forest reserve		
	Water	Chato town water project. Construction of wells and distribution infrastructure	
		Nyamirembe, Kikumbaitale, Kasenga, Mnekezi, Mganza and Katoro Buselesele water projects	
	Geita	Agriculture	Increasing food and cash crops production
			Purchasing cassava, pineapple and sunflower processing machines
		Community Development	Economic empowerment project. Financial assistance youth, women and vulnerable groups
TASAF. Provision of conditional and unconditional financial support			
HIV/AIDS National programme			
Environment		Environmental sensitization, environmental education and promotion construction of sanitary facilities	
		Environmental cleaning exercise conducted at the end of each month	
Livestock and Fisheries		Construction of 10 slaughtering centres. Construction of two centres each year	
		Education on proper livestock keeping and livestock health	
		Construction of two fenced auctions sites and cattle loading and unloading points	
		Artificial insemination program. Introducing cattle hybrids. Livestock vaccination	
Planning		Construction of schools and classrooms	
		Construction of health centres in 4 wards including Kaseme ward	
		District hospital construction	
		Completion of the district sunflower milling centre	
	Construction of a market in Katoro ward		
Water	Changkonongo, Lwamgasa and Nyakangwe water projects		
Mbogwe	Environment	Environmental education program	
		Tree planting program. Tree planting and distribution of seedlings to schools	
		Education and training for livestock keepers	

District	Department	Program/project
	Planning	Construction of health centres and dispensaries
		Construction of school classrooms and laboratories
		Construction of 20 deep water wells in various wards within the district
		Construction of charco-dams in Masumbwe and Mbogwe wards

8.8 Livelihood Restoration Plan

Further to the earlier commentary, the Livelihood Restoration Plan (LRP) acknowledges the five (5) key assets required to sustain livelihoods, namely social, physical, natural, human and financial capital which set the framework for the LRP.

Natural Capital:

- Land-based Livelihood Restoration Programs;
 - Technical support in the improvement of agricultural practices – including generation and use of compost, drought resistant seeds, crop management;
 - Post-harvest handling of crops to decrease spoilage and loss of harvest;
- Increased value adding initiatives;
- Strengthening market access; and
- Sustainable use of natural resources for income generation.

Human Capital:

- Building on the existing skill base of the PAPs – agriculture, brick making, welding, food preservation, beekeeping;
- Enhancing the skills of PAPs through training programs – business management, financial planning and management, marketing, etc.;
- Identifying impediments to PAPs education and health care, and facilitation of improvements where relevant to livelihood resilience and sustainability; and
- Extending skills enhancement to the children of PAPs where appropriate to livelihood sustainability.

Social Capital:

- Facilitating linkages between PAPs and social institutions to enhance economic benefit and flow of income and support grants;
- Empowering producer organizations to link with economic institutions to support local economic development;
- Empowering local social structures to support local economic development and effective use of land-based resources;
- Identifying and supporting vulnerable households with appropriate targeted initiatives; and
- Ensuring that the integrity and self-worth of vulnerable households is maintained.

Physical Capital:

- Minimizing impact and loss of access to Physical Capital to enable PAPs to support their families; and

- Facilitating access to appropriate modern equipment and technology to support economic activities.

Financial Capital:

- Facilitating access to financial instruments to enhance PAPs ability to grow economically; and
- Empowering PAPs to earn an income (community based works programs, encourage use of local labor etc.), while re-establishing livelihood and economic activities.

8.8.1 Livelihood Restoration Themes

Inputs to promote more effective crop farming and livestock keeping were a common area of discussion with PAPs, including the provision of improved seeds, organic fertilizers, pesticides, access to traction, improved storage facilities, cattle dipping facilities, access to veterinary services and vaccines, and improved and reliable agriculture and livestock water sources.

Skills training was identified by several PAHs, including the promotion of sustainable livelihood practices. Sustainable practices are especially important in a region almost entirely reliant on rain-fed agriculture and prone to drought.

PAHs in several wards noted the need for improved roads and water infrastructure. Poor roads were reported to impede access to markets, schools, and medical facilities, adversely impacting health, education and household incomes. Water was noted as a key area for development input, potentially enhancing resilience to climate shocks such as drought.

The livelihood restoration activities and programs listed in Section 8.8.2 provide vehicles to respond to livelihood impacts, contexts and themes. For example, most PAPs will receive some form of cash payment. A money management / entrepreneurial training program linked to agricultural activities from a small business perspective is a non-land-based program on offer.

The programs are presented in the form of 'training' and 'capacity building' modules to groups of qualifying PAPs. One-to-one interventions will be offered to PAPs identified as particularly vulnerable, i.e. those PAPs that possess a lack of resilience to the upheaval and dislocation related to resettlement, be it because of illness, age, physical ability, marginalization, or other personal circumstances. Mitigation measures will be planned to take account of each individual situation. Women and men will have equal entitlement to any livelihood restoration measures.

8.8.2 Livelihood Restoration Activities and Program Options

The Livelihood Restoration options available to PAPs are outlined in Table 8-8 and the livelihood restoration activities around which these are formed are presented in Table 8-9 to Table 8-16. These programs may alter and will be developed in further detail during the Geita RAP implementation.

Table 8-7: Livelihood Restoration Options

Livelihoods Restoration Options – Groups 1; 2; 3 & 4 (as per the Table 8-3 categorizations)	
(Group 1, 2 & 3 PAPs will be given access to some individual and additional targeted support to access these programs and help restore livelihoods).	
Phase 1 Implementation	
Core (Groups 1; 2; 3 & 4) – all eligible households entitled to:	Replacement Land (for those who are eligible) – commensurate to land lost.
	Land Preparation and Planting of Replacement Agricultural Land (LRA1). (<i>Group 1 and Group 3 only</i>)
	Maize and Rice Improvement program (LRA2).
	Household Budgeting & Money Management Training (LRA8).
Phase 2 Implementation	
Optional Groups 2 & 4 – each household is entitled to one (1) option. Groups 1 & 3 – each household is entitled to two (2) options	Option 1: Poultry Production Program (LRA4).
	Option 2: Livestock Improved Husbandry Program (LRA5).
	Option 3: Crop Diversification (LRA3).
	Option 4: Improved Beekeeping Practices (LRA6).
	Enterprise Development (LRA7) ¹⁹⁶ (Each eligible household eligible to access one (1) support package).
Livelihood Restoration Options – Group 5 & 6 (i.e. agricultural tenants).	
Phase 1 Implementation	
Core (Group 5 & 6) – all eligible households entitled to:	Enterprise Development (LRA7) (Each eligible household eligible to access one (1) support package).
	Household Budgeting and Money Management Training (LRA8) (Affected Wards along pipeline corridor).
Phase 2 Implementation	
Optional (Group 5 & 6) – each household is entitled to one (1) option:	Option A: Poultry Production Program (LRA4).
	Option B: Improved Beekeeping Practices (LRA6)
Core (Group 7)	Not eligible for livelihood restoration programs.

¹⁹⁶ Within the livelihood restoration activities training and capacity building is built-in. The Project will consider also supporting PAPs to access vocational training opportunities.

Table 8-8: Livelihood Restoration Activity 1 (LRA1)

LRA 1	Land Preparation and Planting of Replacement Agricultural Land
Context	Re-establishment of livelihood activities of eligible PAPs who lose access to productive agricultural lands.
Objectives	Re-establishment of agricultural activity to enable PAPs to generate an equivalent level of income and / or food security as achieved on land acquired by the Project.
Outcomes	<ol style="list-style-type: none"> 1. Income generated equal to income produced off acquired land by the Project, and / or 2. Quantity of food harvested is equal to the quantity lost off acquired land by the Project.
Spatial Application	Affected Wards along the pipeline corridor.
Beneficiaries	Groups 1 and 3 PAPs who lose access to productive agricultural lands as well as vulnerable groups identified as requiring assistance in re-establishing their agricultural production activities.
Potential Partners	<ul style="list-style-type: none"> • District and Ward Agricultural Officers. • Local district-based NGOs. • Local land preparation contractors (tractor operators). • Local community-based labor.
Key Activities	<ol style="list-style-type: none"> 1. Identify implementation partner in collaboration with District Agricultural Office. 2. Assess suitability of land for crop production: <ol style="list-style-type: none"> a. Soil fertility. b. Type of crops. 3. Identify suitable crop type. 4. Procure contractors (including local labor) to prepare land. 5. Provide appropriate input supplies (fertilizer; seeds). 6. Prepare and plant land and provide assistance to harvest crops. 7. Monitor crop management activities. 8. Provide assistance in delivering harvest to market where required.
Monitoring and Evaluation	<ol style="list-style-type: none"> 1. Yields harvested off prepared lands. 2. Income generated off prepared lands. 3. Replanting of agricultural land post-harvest. 4. Access to food year-round by PAHs.

Table 8-9: Livelihood Restoration Activity 2 (LRA2)

LRA 2	Maize and Rice Improvement Program
Context	Maize and rice are the most widely cultivated crops in the four Project affected districts of Geita Region. Maize is cultivated by 69% of PAHs and rice by 52%.
Objectives	<ol style="list-style-type: none"> 1. To improve the existing maize, rice and / or other grain production of eligible PAPs 2. To increase the yield of existing maize, rice and / or other grain production of eligible PAPs 3. To increase the income generated from maize, rice and / or other grain by eligible PAPs 4. To improve the drought resilience of eligible PAPs maize, rice and or other grain crops
Outcomes	<ol style="list-style-type: none"> 1. Adoption of improved maize, rice and / or other grain production practices by eligible PAHs 2. Improved resilience of eligible PAPs maize, rice and / other grain crops to drought conditions 3. Increased income generated from maize, rice and / or other grain crops by eligible PAPS 4. Increased food security of eligible PAHs
Spatial Application	Affected wards along pipeline corridor.
Beneficiaries	Groups 1; 2; 3 & 4 PAPs who lose access to productive agricultural lands as well as vulnerable groups identified as requiring assistance in re-establishing their agricultural production activities.
Potential Partners	<ul style="list-style-type: none"> • District Agricultural Officers • Local district-based NGO's • Local land preparation contractors (tractor operators) • Local community-based labor
Existing Programs (see Section 8.7)	<ol style="list-style-type: none"> 1. World Vision Tanzania 2. GoT – programs to improve yields and production
Key Activities	<ol style="list-style-type: none"> 1. Identify effectiveness of farmer associations as an implementation platform 2. Training on improved production practices 3. Demonstration plots 4. Access to drought resistant seed varieties 5. Improved post-harvest storage technologies 6. Improved access to markets and efficient processing (milling) facilities
Monitoring and Evaluation	<ol style="list-style-type: none"> 1. Improvement in maize yields 2. Increased income from maize 3. Adoption of improved production practices 4. Improved access to food year-round by PAHs

Table 8-10: Livelihood Restoration Activity 3 (LRA3)

LRA 3	Crop Diversification Program
Context	The Comprehensive Food Security and Vulnerability Analysis, Tanzania 2012 report, identifies the lack of crop diversity as one (1) of the factors contributing to food insecurity and household vulnerability. While maize is the dominant crop produced across the areas affected by the pipeline corridor, other crops are also produced and the improvement in production practices and yields of these crops will also have a significant impact on the food security and income generation of PAHs. The crops will vary across the region, as well as with the personal preference of the PAHs, however the basic principles of production will remain the same with minor adjustments to accommodate specific crops. Crops in Geita Region are more diversified than in most other Project-affected regions, providing a sound base for this program
Objectives	<ol style="list-style-type: none"> 1. To improve crop production of eligible PAPs. 2. To increase the yield of crop production of eligible PAPs. 3. To increase the income generated from crops by eligible PAPs. 4. To improve the drought resilience of eligible PAPs crops. 5. To encourage the diversification of cropping practices of PAHs
Outcomes	<ol style="list-style-type: none"> 1. Adoption of improved crop production practices by eligible PAHs 2. Improved resilience of eligible PAPs crop to drought conditions 3. Increased income generated from crops by eligible PAPS 4. Increased food security of eligible PAHs 5. Diversified crop production by PAHs
Spatial Application	Affected Wards along pipeline corridor.
Beneficiaries	Groups 1; 2; 3 & 4 PAPs who lose access to productive agricultural lands as well as vulnerable groups identified as requiring assistance in re-establishing their agricultural production activities.
Potential Partners	<ul style="list-style-type: none"> • District Agricultural Officials • Local district-based NGO's • Local land preparation contractors (tractor operators) • Local community-based labor
Existing Programs (see Section 8.7)	<ol style="list-style-type: none"> 1. World Vision Area Development programs 2. RUDIDO sustainable land use and agricultural programs 3. CHEMA agricultural programs 4. SSIA agricultural programs
Key Activities	<ol style="list-style-type: none"> 1. Identify effectiveness of farmers associations as an implementation platform 2. Training on improved production practices 3. Demonstration plots 4. Access to drought resistant seed varieties 5. Improved post-harvest storage technologies 6. Improved access to markets and efficient processing (milling) facilities
Monitoring and Evaluation	<ol style="list-style-type: none"> 1. Improvement in crop yields 2. Increased income from crops 3. Adoption of improved production practices 4. Improved access to food, year-round by PAHs

Table 8-11: Livelihood Restoration Activity 4 (LRA4)

LRA 4	Poultry Production Program
Context	<p>Poultry is kept by the majority of the PAHs in the Project-affected districts. In Geita Region 74% of PAH own poultry.</p> <p>Chicken production is an important source of animal food and income for rural subsistence producers in Tanzania. It offers well-remunerated opportunities for commercial chicken production enterprises. In terms of livestock ownership, 86% of livestock-keeping households own chickens.</p> <p>The traditional indigenous chicken system supports the largest proportion of the national flock. The supply of indigenous chickens meets more than 70% of demand for chicken meat and egg production in rural areas and 20% in urban areas. In addition, women tend to have more discretionary power over income generated from local chicken production than income generated from other types of livestock.</p>
Objectives	<ol style="list-style-type: none"> 1. To improve poultry production among eligible PAPs 2. To increase the income generated from poultry by eligible PAPs, especially women 3. To establish poultry enterprises to improve income generation by PAHs 4. To encourage the diversification of agricultural practices of PAHs
Outcomes	<ol style="list-style-type: none"> 1. Adoption of improved poultry production practices by eligible PAHs 2. Improved resilience of eligible PAPs to drought conditions 3. Increased the income generated from poultry by eligible PAPS 4. Increased food security of eligible PAHs 5. Diversified agricultural production by PAHs
Spatial Application	Affected Wards along the pipeline corridor.
Beneficiaries	<p>Groups 1; 2; 3 & 4 PAPs who lose access to productive agricultural lands and vulnerable groups identified as requiring assistance in re-establishing their agricultural production activities.</p> <p>(As this is a program which is not necessarily dependent on access to agricultural land Group 5 & 6 (i.e. agricultural tenants) will be given access to this as an option).</p>
Potential Partners	<ul style="list-style-type: none"> • District Agricultural Officials and Ward Livestock Officers • Local district-based NGO's
Existing Programs	<ol style="list-style-type: none"> 1. Heifer International
Key Activities	<ol style="list-style-type: none"> 1. Improved access to superior genetic birds 2. Training on better husbandry practices 3. Facilitate access to feed, vaccinations and medicine 4. Improved capacity of livestock extension service 5. Facilitate access to improve processing and marketing channels
Monitoring and Evaluation	<ol style="list-style-type: none"> 1. Improved yields 2. Increased income 3. Adoption of improved production practices 4. Improved access to food year-round by PAHs

Table 8-12: Livelihood Restoration Activity 5 (LRA5)

LRA 5	Livestock Improved Husbandry Program
Context	Livestock are found across the Geita Region in varying numbers, and cattle are widely owned by the large Sukuma ethnic group. Often referred to as “walking capital” livestock (and especially cattle) are an important source of capital when money is needed to plant fields, buy food or meet unexpected expenses.
Objectives	<ol style="list-style-type: none"> 1. To improve livestock production of eligible PAPs 2. To increase the potential income generated from livestock by eligible PAPs 3. To improve animal husbandry practices amongst PAPs who own livestock
Outcomes	<ol style="list-style-type: none"> 1. Adoption of improved livestock production practices by eligible PAHs 2. Improved resilience of eligible PAPs to shocks 3. Increased food security of eligible PAHs
Spatial Application	Affected wards along pipeline corridor.
Beneficiaries	Groups 1; 2; 3 & 4 PAPs who lose access to productive agricultural lands as well as vulnerable groups identified as requiring assistance in re-establishing their agricultural production activities.
Potential Partners	<ul style="list-style-type: none"> • District Agricultural Officials, District and Ward Livestock Officers • Local district-based NGO's
Existing Programs	<ol style="list-style-type: none"> 1. World Vision Area Development Programs (not district-specific) 2. Heifer International (not district-specific) 3. GoT Livestock and Fisheries Dept. grazing and animal health programs 4. GoT Livestock and Fisheries Dept. infrastructure programs including slaughter facilities and markets
Key Activities	<ol style="list-style-type: none"> 1. Improved access to superior genetic breeding stock 2. Training on better husbandry practices 3. Facilitate access to feed 4. Improved capacity of livestock extension service 5. Facilitate access to improve processing and marketing channels
Monitoring and Evaluation	Adoption of improved animal husbandry practices.

Table 8-13: Livelihood Restoration Activity 6 (LRA6)

LRA 6	Improved Beekeeping Practices
Context	The major areas of honey production in Tanzania are Dodoma, Iringa, Singida and Geita Regions, although evidence of beekeeping can be found throughout the eight (8) Project regions. Honey is generally harvested on a seasonal basis predominately for personal use. Beekeeping is not listed among the main primary or secondary livelihoods of Geita PAHs, but honey production and sale is recognized as a contribution to the regional economy.
Objectives	<ol style="list-style-type: none"> 1. To improve honey production of eligible PAPs 2. To increase the potential income generated from beekeeping by eligible PAPs 3. To improve beekeeping husbandry practices amongst PAPs
Outcomes	<ol style="list-style-type: none"> 1. Adoption of improved beekeeping production practices by eligible PAHs 2. Improved resilience of eligible PAPs to shocks 3. Increased food security of eligible PAHs
Spatial Application	Affected Wards along the pipeline corridor.
Beneficiaries	Groups 1; 2; 3 & 4 PAPs who lose access to productive agricultural lands as well as vulnerable groups identified as requiring assistance in re-establishing their agricultural production activities. (As this is a program which is not necessarily dependent on access to agricultural land Group 5 & 6 (i.e. agricultural tenants) will be given access to this as an option).
Potential Partners	Partners known to promote beekeeping: <ul style="list-style-type: none"> • District Agricultural Officials • Beekeeping Officers (district and ward) • Institute for beekeeping in Tanzania • Tanzania Forest Services (TFS) • Tanzanian Honey Bee Project – Eva Crane Trust • USAID: Women’s Beekeeping Initiative • Farmer Managed Natural Regeneration (FMNR)
Existing Programs (not district specific)	<ol style="list-style-type: none"> 1. Institute for beekeeping in Tanzania 2. Tanzanian Honey Bee Project – Eva Crane Trust 3. USAID: Women’s Beekeeping Initiative 4. GoT Dept. Forest Resources beekeeping capacity building and formation of beekeeping groups
Key Activities	<ol style="list-style-type: none"> 1. Improved access to better hives, 2. Training on better husbandry practices 3. Improved capacity of extension service 4. Facilitate access to improve processing and marketing channels
Monitoring and Evaluation	Adoption of improved beekeeping practices.

Table 8-14: Livelihood Restoration Activity 7 (LRA7)

LRA 7	Enterprise Development
Context	The stimulation of enterprise development among the PAHs takes pressure off the demand for land to meet livelihood needs and creates employment opportunities outside of the Project for local communities. The development of enterprises within the construction sector such as masons, bricklayers and welders could assist in meeting this objective. The creation of value-adding enterprises within the agricultural value-chain has also been shown to exponentially increase the income generated by households.
Objectives	<ol style="list-style-type: none"> 1. To increase the capacity of entrepreneurs to function more effectively and expand their businesses 2. To provide time-bound business support to self-employed enterprises, aiming to grow them into viable and sustainable businesses 3. To provide seed capital based on viable business plans to PAPs interested in starting or expanding SMEs
Outcomes	<ol style="list-style-type: none"> 1. Establishment and / or expansion of SMEs amongst PAPs 2. Support to existing PAPs SMEs to access market opportunities and run more efficiently 3. Skills development that promotes the establishment of SMEs
Spatial Application	Affected Wards along pipeline corridor.
Beneficiaries	Groups 1 2; 3; 4; 5 & 6 PAPs (As this is a program which is not necessarily dependent on access to agricultural land, all groups will be given access to this as an option).
Potential Partners	<ul style="list-style-type: none"> • District Officials • Local district-based NGO's & training facilities
Existing Programs (see Section 8.7)	<p>No enterprise development programs specific to Geita identified. Below are partners known to promote enterprise development:</p> <ol style="list-style-type: none"> 1. Tanzanian Local Enterprise Development 2. Center for Entrepreneurship Development 3. Tanzania's Small Industries Development Organization 4. Helvetas KUWAKI project 5. Many providers of small loans – BRAC, Vision Fund, Bayport, Ferusco Sustainable Development Agency (Village Community Banking)
Key Activities	<ol style="list-style-type: none"> 1. Identify interested PAPs 2. Training on Entrepreneurship and Business Management 3. Development of a District-based SME Fund and dispersal mechanism 4. Support to participating / potential SME's to develop viable Business Plans 5. SME mentoring by the District-based SME Fund
Monitoring and Evaluation	<ol style="list-style-type: none"> 1. Dispersal of funds from the District-based SME Fund 2. Sustainability of SMEs established and / or supported

Table 8-15: Livelihood Restoration Activity 8 (LRA8)

LRA 8	Household Budgeting and Money Management Training
Context	PAPs are not accustomed to receiving relatively large amounts of cash and may spend / invest it unwisely. An identified potential Project risk is that of PAPs are taking out loans against anticipated compensation payments. In addition, literacy and numeracy levels are low in rural Tanzania, and particularly low for women. There is also a pervasive concern that women will be disadvantaged because they do not have control over compensation money. Financial training must involve sensitization in this context. Fair distribution of compensation money must be addressed in compensation agreements and in the compensation process (see Chapter 4).
Objectives	<ol style="list-style-type: none"> 1. To assist PAPs (men and women) to use their cash compensation sensibly to restore their livelihoods and build a sustainable future. 2. To increase employment and knowledge opportunities through improved numeracy skills.
Outcomes	<ol style="list-style-type: none"> 1. Interested PAPs and those receiving cash compensation payments open Bank accounts 2. All PAPs and their spouses receive money management training and advice on different options for investment
Spatial Application	Affected Wards along pipeline corridor.
Beneficiaries	Groups 1, 2; 3; 4; 5 & 6 PAPs.
Potential Partners	<ul style="list-style-type: none"> • Local Banks • Local district-based NGO's • Ward and village leaders, Community Development Officers • Teachers at primary and secondary schools.
Existing Programs (not district specific)	<ol style="list-style-type: none"> 1. Tanzania literacy program: UNESCO 2. Integrated Community-Based Adult Education (ICBAE) 3. BRAC 4. FinMark Trust.
Key Activities	<p>A series of financial management training sessions will be provided to all households receiving cash compensation and all households participating in any LR Program. The training will be designed to assist households in using their compensation payments appropriately by providing each household with the necessary tools and skills to manage their cash. The training will encourage participants to share their experiences, both positive and negative, relating to household cash management and seek solutions where households may have had problems.</p> <p>Financial training sessions will include basic numeracy skills; money management and basic household budgeting; savings and strategic cash management; basic literacy; and advisory services.</p> <p>Financial management training will commence as soon as possible following payment of cash compensation as part of the Project's early support. Follow up training may also be provided to boost household cash management skills and to reduce the risk of misuse. The Project will seek to involve local banks or other similar micro-finance service providers to provide this training.</p>
Monitoring and Evaluation	Adoption of good money management practices.

8.9 Overview of Possible Partners for Implementation

Where possible and practical, the Project will manage livelihood restoration programs with the assistance of implementing partners (NGOs, service providers, farmer groups) and relevant government departments, village councils and ward councils.

8.9.1 NGOs and CBOs

Information on active NGOs and CBOs has been gathered and updated incrementally through fieldwork and formal engagement with groups of NGOs / CBOs. The list of potential partner NGOs and CBOs will be supplemented as other organizations are identified and engaged.

Organizations / groups / interventions listed in this section could potentially be brought into a partnership to assist with livelihood restoration programs for this Project. Partnering will eliminate the duplication of efforts and will strengthen current interventions. The fit of these organizations / groups / initiatives with the Project's aim to address project-induced livelihood impacts will have to be assessed in consultation with the affected districts, wards, and villages.

Table 8-16: Potential Livelihood Restoration Partners

Organization / Group	Description of Key Activities
Oikos East Africa (OEA)	A Tanzanian NGO based in Arusha that promotes the protection of biodiversity and the sustainable use of natural resources to fight against poverty and boost socio-economic development.
Fundación Capital	Works together with the public and private sectors to provide innovative solutions for vulnerable groups, through access to services, information, and knowledge, strengthened assets and livelihoods, improved capabilities and enhanced resilience.
Stichting Nederlandse Vrijwilligers (Foundation of Netherlands Volunteers - SNV)	Expertise in Agriculture, Energy and Water, Sanitation and Hygiene and work with local partners to equip communities, businesses and organizations with the tools, knowledge and connections they need to increase their incomes and gain access to basic services.
Volunteer Services Overseas	Places people on development projects in Tanzania.
Africare	Invests in community projects in a range of programs from Food Security to HIV & AIDS, Value Chain Development and Youth Empowerment.
Red Cross	Advocacy, sensitization and mobilization for Most Vulnerable Children / Orphan Vulnerable Children (MVC/OVC) and people living with HIV
WaterAid	Started in 1981 to make clean water, reliable toilets and good hygiene accessible to everyone.
Technoserve	Works towards building competitive farms, businesses and industries by linking people to information, capital and markets.
Society of Chemical Industry (SCI)	A pan African company in technology consulting and solutions. Formerly known as NCR Tanzania, SCI operates in the financial sector and introduced Tanzania's first Automated Teller Machine (ATM).
Water Mission International	Works to provide engineering solutions to deliver clean water to destitute communities.
BRAC	Serves the needs of women, young people, and smallholder farmers through group-based microloans and enterprise loans.

Organization / Group	Description of Key Activities
Heifer International	Works with communities to increase income and improve child nutrition, through improved and better management of livestock.
Helvetas KUWAKI	Focuses on empowering women through agriculture, with an emphasis on horticulture.
SEMA	NGO focused on facilitating access to information on development and social services.
RECODA	Tanzanian NGO seeking to bridge technology gaps in community development.

Other international organizations identified that are active in Tanzania and could play a role in livelihood restoration activities are presented in Table 8-18.

Table 8-17: A Selection of International NGOs Active in Tanzania

International NGO	Strategic Objective / Development Focus	Description of aspects of the program that could be beneficial / applicable to livelihoods restoration
ActionAid International	To work with poor and marginalized communities to strengthen their capacity to advocate for international and national policies that promote their rights to a world without poverty.	Areas of work are agricultural and food security, land rights, governance-public and corporate accountability, education, women's rights.
Aga Khan Development Network (AKDN)	To design and implement strategies in which its different agencies participate in settings to help those in need achieve a level of self-reliance and improve their quality of life. Successful development occurs when a continuum of development activities offers people in a given area not only a rise in incomes, but a broad, sustained improvement in their overall quality of life.	Contributes to poverty alleviation, education, health care, economic development and cultural restoration in Tanzania. The Aga Khan Fund for Economic Development operates project companies including agro-processing.
CAMFED	To provide holistic and targeted support for girls to go to secondary school, covering needs that include school fees, uniforms, books, pens, boarding fees and disability aids. "Educating girls is the best investment we can make to alleviate poverty and create a safer world".	Teacher Mentors are joined by Learner Guides - young women who return to local schools to support vulnerable children with life skills, study skills and literacy training. Learner Guides understand the barriers imposed by poverty, having lived it. As peer role models and mentors, they are transforming prospects for young people.
CARE International	To save lives, defeat poverty and achieve social justice. Women and girls are put in the center because the view is that poverty can be overcome only when all people have equal rights and opportunities.	Five (5) program outcome areas are: <ul style="list-style-type: none"> • Food and nutrition security and climate change resilience; • Humanitarian response; • Right to a life free from violence; • Sexual, reproductive and maternal health and rights; and • Women's economic empowerment.

International NGO	Strategic Objective / Development Focus	Description of aspects of the program that could be beneficial / applicable to livelihoods restoration
Food and Agriculture Organization	It works closely with the GoT by providing policy advice, credible, up-to-date information and technical expertise on food security and natural resource management.	It provides support in four (4) main areas: <ul style="list-style-type: none"> • Evidence-based agriculture policy, planning, investment and sector coordination; • Increasing agricultural production, productivity for food security and nutrition; • Improving market access for increased incomes; and • Strengthening resilience to natural and man-made threats and crises such as climate change impacts; and unsustainable management of natural resources.
Skillshare International	To reduce poverty, injustice and inequality and to further economic and social development in partnership with people and communities.	Priority sectors are health, education, environment and economic empowerment.
Swedish International Development Cooperation (Sida)	To reduce poverty in the world by enabling people living in poverty to improve their lives. For Tanzania, a prioritized goal is to reduce Tanzania's dependency on Aid, the main target groups being women, children, young people, and entrepreneurs.	Focus areas are: <ul style="list-style-type: none"> • More jobs and development of energy and agricultural markets; • Improved education and increased entrepreneurship; and • Strengthened democratic accountability and transparency, and increased awareness of human rights.
SwissAid - Socio-Economic Development Initiatives (SEDIT), Grain Postharvest Loss Prevention (GPLP) Program	GPLP focuses on grains post-harvest losses prevention, particularly through introduction improved storage technologies and facilities i.e. metal silos and super grain bags. VICOBA serves the farmers in terms of capital, training platform and providing buffer funds to sustain farmers during storage.	Programs related to a land-based livelihoods plans concentrating on grain storage and the reduction of post-harvest loss. A key focus of SwissAid.
Water Aid	Provision of expert training and support to local authorities for the provision of clean water, improved pit latrines and hygiene practices.	Improved local health as a basis for sustainable livelihoods restoration.
Young Women's Christian Organization	Committed to the empowerment of women to realize their potential and contribute to the achievement of peace, dignity and good health for all.	Currently seven (7) donor funded programs are active.

8.9.2 Process to Appoint Service Providers

The process to appoint service providers to assist with the development and implementation of programs is outlined below:

- Determine and shortlist suitable implementing partners, and post-training support agents;
- Undertake key respondent interviews and mini-focus group discussions with possible implementing partners to determine fit with the Project's principles and needs;
- Conduct key respondent interviews to identify possible opportunities to build on existing programs and skills in the Project area;
- Shortlist potential implementing partners;
- Invite shortlisted implementing partners to submit proposal with unit costs for participation and timeframes;
- Present proposals for discussion and comment to relevant parties such as Village Authorities, Agricultural and Social Officers, the LARWG. Key Government stakeholders, the LARWG, NGOs, CBOs, PAPs, and PAHs;
- Select implementing partners;
- Contract the implementing partners inclusive of a clear outline of roles and responsibilities, timeframes and payment structures;
- Liaison with regional and district technical staff to assist with co-ordination and integration with existing livelihood support initiatives of livelihood development initiatives, where applicable;
- Develop a detailed execution plan;
- Develop monitoring plans including Key Performance Areas (KPAs) and Key Performance Indicators (KPIs);
- Commence with livelihoods restoration; and
- Commence with monitoring.

8.10 Transitional Support Plan

8.10.1 Transitional Support to Physically and Economically Displaced PAPs

Transitional support is provided to complement compensation payments to ensure that households can meet their basic needs and maintain their standard of living once access to their land has been lost and until they have had opportunity to restore their livelihood to pre-project levels. These early support components, incorporate:

- Transitional support in the form of food baskets and other provisions¹⁹⁷ to ensure households are food secure during the transitional period; and
- Financial management training for all households receiving cash compensation to provide households with the tools and skills to manage the cash they received.

Transitional support entitlements are outlined in Table 8-19. To benefit from transitional support, households will be required to register with (and participate in) the Project's livelihood restoration program. The components of transitional support include a "basket of goods" and medical and education / school support as required while eligible.

¹⁹⁷ This may also include additional cash elements.

Table 8-18: Transitional Support Entitlements

Household Category : LR Group	Period of Support	Rationale and Recommendations
<p>Highly Impacted Households:</p> <p>LR Group 1</p> <p>LR Group 3</p>	<p>Up to 12 months or end of first harvest, post displacement then re-assessed – may extend or be provided at reduced quantities up to end of second harvest if required. (Support will be structured to discourage food dependency).</p>	<p>It is expected that these households will take longer to restore their livelihoods and will therefore need a longer duration of transitional support. An assessment will be undertaken six (6) monthly / at the end of first harvest to determine whether support must continue, stop or be reduced.</p> <p>One transitional support package per household – where more than one PAP is present in a household only one package of support generally for this household will be applicable.</p>
<p>Partially Impacted Households:</p> <p>LR Group 2</p> <p>LR Group 4</p> <p>(LR Group 5 (Tenants) will be assessed for eligibility, if determined to be vulnerable may be given access to transitional support.)</p>	<p>Up to six (6) months and/or to end of first harvest, post displacement. (Support will be structured to discourage food dependency).</p>	<p>These households only lose part of their livelihoods and those that loose land have not been assessed as vulnerable. It is therefore expected that their livelihoods will be restored as a result of the LRP. Support will be provided until it can be demonstrated that livelihoods have been restored effectively or that households have been provided with necessary support to restore their livelihoods. For Group 2 PAPs who are vulnerable an assessment will be undertaken at six (6) months and / or at end of first post displacement harvest.</p> <p>One transitional support package per household – where more than one PAP is present in a household only one package of support generally for this household will be applicable.</p>

Transitional support will consist primarily of a “basket of goods”. The basket of goods is based on a typical United Nations World Food Program food basket providing cereal, rice, pulses, oil, and salt. Since all households still have some livelihood capacity, assistance will commence with 50% of the quantities issued under the World Food Programme (WFP) (approximately 5kg each of maize, rice, pulses; 0,5l oil and 150g salt / person / month). This percentage will be reduced for partially impacted households accordingly. Items provided to each household, six (6) members, per month could include:

- maize (20kg);
- beans (20kg);
- rice (20kg);
- salt (1kg); and

- oil (5l).

This will be adapted to provide staples consumed in the region in consultation with the Community Development Officers and WEOs. Vulnerable and highly impacted households will be monitored closely to ascertain whether the support provided is adequate and to consider any adjustments to the basket of goods. Those eligible for transitional support may also be eligible for specific medical support while on the program. This may include payment of costs associated with Community Health Funds. (The annual contribution from each household is between T.Shs. 5,000 – T.Shs. 15,000, as defined by the respective districts.) Fees will only be paid directly to the authority upon provision of evidence such as a bill.

Costs associated with changing schools (books, uniforms, etc.) will also be covered by the program. The TASAF program allocates an amount of T.Shs 2,000 / child / month attending school. Children must have a 75% attendance record at school for the grant to continue.

8.10.2 Temporary Accommodation

The Project intends to construct replacement houses where entitlements require, in a timeframe that will allow physically displaced PAHs to move directly into this housing. However, there may be instances where temporary accommodation is required, such as where a PAH elects to have a replacement house constructed on their existing homestead and for safety reasons it is not considered appropriate for these households to remain living on the homestead during construction. In such instances the Project will work closely with PAHs and relevant authorities to support the PAHs during this transition period.

8.10.3 Monitoring and Evaluation

Households will be assessed to determine whether they are eligible to remain on the program. An assessment will be undertaken at six (6) months, 12 months, and 18 months and, if required, 24 months to determine which households may still need transitional support. There will be flexibility to continue transitional support for as long as is necessary until households have had enough opportunity to restore livelihoods. Additional support options will be considered for those struggling beyond 24 months. Households will no longer be eligible for transitional support if:

- Households have replaced the cash income they have lost as a result of the Project or are able to harvest to the level they could prior to the Project; or
- A member of the household has achieved gainful employment, or the household is benefiting from another income source. A household's ability to replace their cash income and standard of living will be monitored using existing baseline data on household income levels for each household category; or
- They do not demonstrate willingness to undertake activities to restore their livelihoods. Each household benefiting from transitional support will be required to demonstrate that they are taking steps, either through the LRP or another means, to restore their livelihood.

9 VULNERABLE PEOPLES PLAN

9.1 Introduction

As per IFC Performance Standard 1, a disadvantaged or vulnerable status can stem from an individual's or group's race, color, sex, language, religion, political or other opinions, national or social origin, property, birth, or other status. Additional factors to be considered include gender, age, ethnicity, culture, literacy, sickness, physical or mental disability, poverty or economic disadvantage, and dependence on unique natural resources.

In the context of this RAP, vulnerable people are seen to be more susceptible to the rigors and stresses of the resettlement process, have reduced ability to access and benefit from resettlement support programs and hence, will require additional assistance and monitoring throughout the process.

This chapter describes the Project's approach to Vulnerable People impacted by the Project and focuses on:

- Objectives of the Vulnerable Peoples Plan (VPP);
- Definition of Vulnerable People (VP);
- Vulnerability Criteria; and
- Confirming Vulnerability Status.

The VPP addresses how the Project intends to confirm the vulnerability of potentially vulnerable PAPs, as identified during the survey process, and address the vulnerabilities noted. This includes ensuring that such PAPs are properly informed of Project activities and suitably assisted to address any additional vulnerabilities resulting from these activities.

9.2 Objectives of the Vulnerable Peoples Plan

The objectives of the VPP are to:

- 1) Identify or Confirm Vulnerable People:** Ensure that actual and potentially vulnerable people and households are identified and monitored during and after the resettlement process, so as to track their standard of living and effectiveness of resettlement compensation, assistance, and livelihood restoration;
- 2) Provide Appropriate Assistance:** Provide appropriate assistance to people and households identified as vulnerable to re-establish their livelihoods (including those physically resettled). Members of vulnerable households may require special or supplementary resettlement assistance, such as legal, financial and practical assistance, because they are less able to cope with the displacement effects than the general population. This will be determined on a case by case basis;
- 3) Identify Support Packages:** Identify compensation and livelihood restoration packages for vulnerable people that include additional forms of support, and favor the lowest risk mitigation options whenever possible;

- 4) **Assist with Understanding Support:** Assist persons identified as vulnerable to fully understand their support options for resettlement and compensation, and encourage them to choose the option(s) with the lowest risk;
- 5) **Consider Social Networks:** Carefully consider social networks and how these can be re-created at resettlement locations, especially regarding support to vulnerable people; and
- 6) **Identify Additional Support Measures:** In line with the additional protections afforded to certain groups under international human rights law, additional measures will be identified for vulnerable groups to cope with Project-induced impacts during physical relocation, particularly paying attention to women, children, the elderly, and vulnerable ethnic groups who may self-identify as indigenous people, and persons with disabilities.

9.3 Definition of Vulnerable People

Within the context of resettlement and land acquisition the term “vulnerable groups” is given to individuals, households, or groups of people that may be disproportionately affected by the resettlement process.

For the purposes of this RAP, vulnerability is defined as:

- Lack of capacity of a person or group to anticipate, cope with, resist and recover from impacts;
- People who by virtue of gender, ethnicity, age, physical or mental disability, economic disadvantage, or social status may be more adversely affected by resettlement than others;
- Reduced ability to cope with the change and, if not provided with additional assistance, may be disproportionately affected by displacement;
- Limited ability to claim or take advantage of resettlement assistance and related development benefits; and
- Vulnerable ethnic groups who have been marginalized, excluded, discriminated against and/or dispossessed of traditional lands and territories, because they have different cultures, ways of life or mode of production than the rest of the population.

9.4 Vulnerability Criteria

In line with this definition, the Project-specific criteria¹⁹⁸ have been developed to support the identification of potentially vulnerable individuals and households among those that are being physically and economically displaced by the Project.

¹⁹⁸ These criteria have been developed in accordance with the GoT's Vulnerable Groups Planning Framework and the requirements of IFC Performance Standard 5: Land Acquisition and Involuntary Resettlement.

Acknowledging that no single criteria automatically renders a household vulnerable, a number of reports were reviewed, including the Comprehensive Food Security and Vulnerability Analysis Reports¹⁹⁹, in order to identify the main contributing factors impeding the resilience of households to withstand external shocks, hence making them potentially vulnerable due to impacts of the land acquisition associated with the Project. These contributing factors are²⁰⁰:

- Age of household head (either over 60 years of age or child-headed households);
- The household is female headed;
- Education level of household head;
- The household has one or more physically and / or mentally disabled household member ²⁰¹.
- Percentage of household expenditure on food;
- Number of household income earners and resources available to support dependents; and
- Number of children between six (6) to 14 years not attending school.

To identify likely vulnerable individuals and households directly affected by the required land acquisition and resettlement, the criteria were applied to data gathered in the socio-economic baseline, census, assets, land surveys and socio-economic and livelihood investigations and through semi-structured interviews.

9.5 Categorization of Vulnerability

The vulnerability analysis recognizes that vulnerability is not an absolute but rather a graded scale between destitute and varying degrees of “at-risk”. To incorporate this variability, three (3) categories of vulnerability have been adopted which recognize varying degrees of vulnerability:

- **Category 1 (Vulnerable)** households will immediately be placed on the Vulnerable Households Register (VHR) and qualify for in-kind assistance and individual level livelihood support as discussed in Section 9.8. In addition, additional support may be necessary, commensurate to the households’ level of vulnerability.

¹⁹⁹ United Nations World Food Program, “Comprehensive Food Security & Vulnerability Analysis (CFSVA), Tanzania, 2010” and United Nations World Food Program, “Comprehensive Food Security & Vulnerability Analysis” (CFSVA), Tanzania, 2012.

²⁰⁰ Potentially vulnerable ethnic groups have not been explicitly included in the vulnerability criteria. However, they will be identified and engaged in a specific manner as described in Section 9.7.4

²⁰¹ Disability is the loss or limitation of opportunities to take part in the normal life of the community on an equal level with others due to physical, mental or social factors. It is an umbrella term, covering impairments, activity limitation, and participation restrictions. National Disability Policy of 2004.

- **Category 2** (Potentially Vulnerable) households will qualify for in-kind assistance and livelihood support but will need further verification before being placed on the VHR.
- **Category 3** (At-risk) households will be placed on a “watch list” and must be included in any review / survey to monitor the PAPs, they will not be classified as vulnerable in terms of in-kind assistance but will qualify for livelihood support

Using the vulnerability criteria discussed in Section 9.4, several data queries were run through the pre-validated project database (which includes socio-economic data collected during the pipeline survey) to identify those households which were potentially vulnerable, and their level of vulnerability. The final query assessed whether any of the households identified as potentially vulnerable appeared in multiple queries i.e. a cumulative impact, as this would have the effect of increasing their overall level of vulnerability. Table 9-1 shows the queries that were used to interrogate the database, to identify and categorize potentially vulnerable people.

Table 9-1: Database Analysis Used to Identify Potentially Vulnerable People

Query	Classification into Categories
Query A:	<i>Category 1:</i> Elderly (>60yrs) male headed household with 1 or no income earners. <i>Category 2:</i> Elderly (>60yrs) male headed household with 2 income earners. <i>Category 3:</i> Male (≤60yrs) with 1 or no income earners.
Query B:	<i>Category 1:</i> Household food expenditure ≥ 80%. <i>Category 2:</i> Household food expenditure < 80% and ≥ 70%. <i>Category 3:</i> Household food expenditure < 70% and ≥ 60%.
Query C:	<i>Category 1:</i> Child headed households, household head (< 18yrs)
Query D:	<i>Category 1:</i> Female-headed (≤ 60yrs) household – household head has no education. <i>Category 2:</i> Male headed (≤ 60yrs) household – household head has no education. <i>Category 3:</i> Household head (> 60yrs) has no education.
Query E:	<i>Category 1:</i> Percentage of children in household (≥ 6 and ≤14yrs) not attending school ≥ 75%. <i>Category 2:</i> Percentage of children in household (≥ 6 and ≤ 14yrs) not attending school ≥ 50% to < 75%. <i>Category 3:</i> Percentage of children in household (≥ 6 and ≤ 14yrs) not attending school ≥ 25% to < 50%.
Query F:	<i>Category 1:</i> Household head is Female and two or more disabled people under 60 in the household. <i>Category 2:</i> Household head is Male and two or more disabled people under 60 in the household. <i>Category 3:</i> Household head is Female or Male and one disabled person under 60 in the household.
Query G	<i>Cumulative Analysis of households who were categorized in more than 1 query above.</i> <i>Category 1:</i> Household has 1 or more classifications in category 1. <i>Category 1:</i> Household has 3 or more classifications in category 2. <i>Category 2:</i> Household has 1 or more classifications in both categories 2 and 3. <i>Category 2:</i> Household has 3 or more classifications in category 3. <i>Category 3:</i> Household has 1 or 2 classifications in category 3.

Households are assigned a vulnerability category, as described in Section 9.6, based on their classifications in Queries A to G.

A household will be categorized as vulnerable if after an accumulative analysis (Query G) of the factors contributing to vulnerability identify them as potentially vulnerable.

9.6 Confirming Vulnerability Status

Based on the information collected, a Register of Vulnerable Individuals and Households has been developed. This Vulnerable Household Register (VHR) will be used throughout the resettlement process to plan and implement the specific activities that have been designed to support potentially vulnerable groups, as summarized in the VPP.

The number of households in each category was then calculated based on the queries described above.

District	Ward	Village	Category 1	Category 2	Category 3
Chato	Nyamirembe	Nyambiti	2	9	10
	Ichwankima	Busalala	4	10	8
	Ilemela	Ilemela	2	5	3
		Nyambogo	0	4	5
		Nyagh'omango	1	4	5
	Katende	Chabulongo	1	5	3
		Katende	5	4	6
		Mwabaruhi	2	8	5
	Bukome	Mkungo	6	9	8
	Makurugusi	Makurugusi	1	5	3
		Kasala	2	8	7
		Musasa	7	10	11
		Kamanga	7	3	3
	Bwanga	Minkoto	11	13	20
	Iparamasa	Ilelema	3	5	2
Iparamasa		3	1	3	
Imalabupina		1	1	0	
Geita	Magenge	Igando	3	8	7
Mbogwe	Lulembela	Nykonga	6	6	12
		Lulembela	3	4	1
		Kashelo	3	5	3
	Ikunguigazi	Ikunguigazi	2	4	8
		Ibambula	3	2	7
	Ikobe	Kagongo	7	7	5
		Ikobe	11	12	10
		Ishigamva	5	11	12
	Nyakafulu	Lubeho	5	9	9
		Luhebo (PS-4)	0	2	3
Shinyanga B		2	14	16	

District	Ward	Village	Category 1	Category 2	Category 3
		Shinyanga A	8	8	15
	Bukandwe	Bukandwe	1	9	8
		Kanegere	7	16	22
	Nhomolwa	Kabanga	21	16	18
Bukombe	Lyambamgongo	Kagwe	8	5	14
	Bukombe	Kidete	2	2	4
		Bukombe	4	8	15
		Ilalwe	6	8	6
		Nasihukulu	0	0	0
Total			165	260	297

provides the numbers of vulnerable households, per category, identified in the Geita Region based on the socio-economic baseline survey.

Table 9-2: Vulnerable Households by Category in the Geita Region

District	Ward	Village	Category 1	Category 2	Category 3
Chato	Nyamirembe	Nyambiti	2	9	10
	Ichwankima	Busalala	4	10	8
	Ilemela	Ilemela	2	5	3
		Nyambogo	0	4	5
		Nyagh'omango	1	4	5
	Katende	Chabulongo	1	5	3
		Katende	5	4	6
		Mwabaruhi	2	8	5
	Bukome	Mkungo	6	9	8
	Makurugusi	Makurugusi	1	5	3
		Kasala	2	8	7
		Musasa	7	10	11
		Kamanga	7	3	3
	Bwanga	Minkoto	11	13	20
	Iparamasa	Ilelema	3	5	2
Iparamasa		3	1	3	
Imalabupina		1	1	0	
Geita	Magenge	Igando	3	8	7
Mbogwe	Lulembela	Nykonga	6	6	12
		Lulembela	3	4	1
		Kashelo	3	5	3
	Ikunguigazi	Ikunguigazi	2	4	8
		Ibambula	3	2	7
	Ikobe	Kagongo	7	7	5

District	Ward	Village	Category 1	Category 2	Category 3
		Ikobe	11	12	10
		Ishigamva	5	11	12
	Nyakafulu	Lubeho	5	9	9
		Luhebo (PS-4)	0	2	3
		Shinyanga B	2	14	16
		Shinyanga A	8	8	15
	Bukandwe	Bukandwe	1	9	8
		Kanegere	7	16	22
	Nhomolwa	Kabanga	21	16	18
Bukombe	Lyambamgongo	Kagwe	8	5	14
	Bukombe	Kidete	2	2	4
		Bukombe	4	8	15
		Ilalwe	6	8	6
		Nasihukulu	0	0	0
Total			165	260	297

This categorization is considered in the eligibility criteria for both compensation options and livelihood restoration as is appropriate and commensurate to their loss of physical and economic assets. This approach is a precautionary approach and provides a further safety net for PAHs. It is expected that the Project will also benefit from lessons learned from the process followed in the PAs.

This categorization then triggers additional efforts to be made with regard to these PAHs during the next stages of RAP implementation. During the entitlement briefing process (see Chapter 10) and through additional engagements with these PAHs more information on their specific circumstances will be gathered. This will be considered alongside their specific displacement impacts to confirm whether they require additional resettlement support and discuss with them (if relevant) support options are available.

This process will also be used to help structure PAHs final entitlements and compensation options. The livelihood strategies of these PAHs will be investigated in more detail during RAP implementation to ensure access to and delivery of livelihood restoration programs that are structured appropriately.

The exact set of activities that will be provided to each confirmed vulnerable individual and household will be assessed on a case by case basis and will therefore vary according to their specific needs.

It may be confirmed during further engagement with these PAHs that these vulnerability factors (or criteria) from Section 9.4 on which their vulnerability has been based, may not affect their resilience to restore livelihoods, and the impacts experienced by them as a result of the Project's land acquisition will not necessarily be disproportionate.

9.7 Specific Vulnerabilities

9.7.1 Vulnerability Assessment of Women

The Tanzanian legal framework establishes land rights for women in the following pieces of legislation:

- Village Land Act of 1999: “The right of every woman to acquire, hold, use and deal with land shall to the same extent and subject to the same restrictions be treated as a right of any man” (Part II 3(2)); and
- Law of Marriage Act of 1971 as amended by Act 23 / 73, Act 15 / 80 and Act 9 / 96: “...married women have the right to acquire, hold and dispose of property, movable or immovable, during the course of the marriage, and the right to distribution of property earned jointly when the relationship is dissolved. Property and other matrimonial assets that a woman has acquired individually belong to her. When there are two or more wives, they have equal rights and liabilities as spouses”.

Given these legal provisions it is therefore expected that at least in most cases, it will be possible to ensure land rights exist for female-headed households, thus, at least ensuring their basic entitlements as PAHs to compensation and other entitlements.

However, it is recognized that women’s access to resources and opportunities is often limited by discrimination and cultural norms whereby they commonly experience greater financial, work and time burdens from unpaid responsibilities such as those related to childcare, or household duties such as preparing food, fetching water and firewood etc. In addition, women who are tied to their domestic duties are frequently less able to leave their house or land to find alternative livelihoods.

Where a woman is also the household head, her responsibilities increase further and, given traditional village and cultural structures, she and her family may be marginalized or excluded from village decision making as well as from engagement structures with which the Project and other organizations interact. Instead, women are more likely to rely on informal networks of support, such as neighbors or relatives that may be disrupted by the resettlement process.

Lastly, the payment of cash compensation can leave women and children in a vulnerable state, and even homeless, should the compensation not be utilized for its intended purpose i.e. the construction of a new house.

Women in general, while not identified as a vulnerable group, are the focus of specific, targeted engagement measures, and some specific mitigations, to ensure they receive equitable benefits that may be necessary from the resettlement program. This is the basis for the inclusion of female-headed households as one of the criteria.

There is a total of 204 female headed households that will be impacted by Project pipeline and AGIs in Geita Region, however; a female headed household does not automatically indicate vulnerability. Female headed PAHs will be considered on a case by case basis to

determine whether this factor affects their ability to cope with the displacement impacts on them and their ability to restore livelihoods.

In addition, the Comprehensive Food Security and Vulnerability Analysis²⁰² shows that female-headed households who have one or more additional vulnerabilities, are more likely to be food insecure and vulnerable. Particular attention will, therefore, be given to female-headed households that will lose more than an acre equivalent (AE)²⁰³ of agricultural land and are identified as vulnerable (refer to Table 9-3). They will need to be monitored closely to ensure they have access to sufficient food. Additional assistance may also be required for them to re-establish livelihood activities.

Table 9-3: Female Headed Households Identified across the Geita Region

District	Chato	Geita	Mbogwe	Bukombe
Female-headed household (≤60 years).	64	1	83	15
Female-headed household (>60 years).	19	1	18	3
Female-headed household, and one or more disabled household members.	11	0	3	1
Female-headed household, losing >AE of agricultural land.	35	0	8	3

9.7.2 Vulnerability Assessment of Elderly Households

Elderly households may become vulnerable for a number of reasons:

- Poverty, or lack of cash income to support their day to day subsistence requirements;
- Physical or mental impairments may make it difficult for them to care for themselves;
- Sickness may make it difficult for elderly households to tend to their fields that provide either cash crops or subsistence food;
- The elderly may be less socially integrated and need to rely heavily on the day to day support of children, relatives or neighbors;
- Lack of access to transportation may be an issue, for example to enable access to alternative livelihood sites or village services (shops, banks, government agencies, etc.), especially if household members are unable to walk long distances; and
- Household decisions may be made on their behalf by relatives and children without their consent; including relocating the elders to the children's homes, having power of attorney on the financials of the elderly PAP and possibly mismanaging the compensation they received

²⁰² United Republic of Tanzania 2009 / 10 Comprehensive Food Security and Vulnerability Analysis (CFSVA).

²⁰³ An Acre Equivalent (AE) which takes into account the productivity of the land in the district and the average number of household members for households in the district.

Any of these factors may make it difficult for an elderly individual or household to adapt to significant change to their asset base and the structure of their livelihood / s.

For the purposes of identification of vulnerability in this RAP, an elderly household has been defined as one where the household head is older than 60.

Households with an elderly head (especially if female) are at higher risk and will be considered on a case by case basis to determine whether this affects the PAP's ability to cope with the displacement impacts on them and their resilience to restore livelihoods. Table 9-4 shows the elderly head of household for the three vulnerability categories across the Geita Region.

Table 9-4: Elderly Headed Households Identified across the Geita Region

District	Chato	Geita	Mbogwe	Bukombe
Household head 60 years or older.	116	4	121	29
Household head 60 years or older, and disabled household member.	10	0	9	2
Household head 60 years or older, and farming is main livelihood, and remaining land after land loss is ≤ 2.5 acres.	8	0	4	0
Household head 60 years or older, and disabled household member, and farming is main livelihood, and remaining land after land loss is ≤ 2.5 acres.	2	0	1	0



Figure 9-1: Focus Group Discussion with Elders in Musasa Village

9.7.3 Households Inclusive of Disabled Family Members

Chronic, frequent illness or disabilities among household members threatens livelihood security, reduces income and mobility, and increases the required expenditure on health. Households with persons with disabilities or chronic illnesses are likely to be more vulnerable than households that do not have these characteristics.

During the socio-economic survey, a significant number of households with one or more disabled household members were identified. Impaired lack of physical mobility accounts for more than half of all reported instances of disability. However, it is possible that the concept

of impaired physical mobility may have been misunderstood (e.g. a child younger than normal walking age) or its incidence over-reported, and this will need to be verified as part of implementation (refer to Section 9.10) on a case by case basis as households are offered participation in appropriate livelihoods restoration or social programs.

For the purposes of resettlement activities, a household has been defined as vulnerable if one or more members under the age of 60 suffer from a disability or chronic illness. However, as mentioned each PAP's individual circumstances will be considered during implementation to ensure appropriate categorization has been allocated.

9.7.4 Potentially Vulnerable Indigenous Ethnic Groups

Membership of a vulnerable ethnic group or self-identification as an indigenous person was not included in the vulnerability criteria employed in Section 9.4.. This exclusion is motivated by the fact that, based on available evidence, indigenous status does not automatically translate into household vulnerability, despite the group's potential for vulnerability. Conversely, vulnerability is not the sole criteria for recognizing a group as indigenous. As discussed in Chapter 5, many vulnerable ethnic communities in Tanzania have abandoned their traditional ways of life and have (to a large extent) been assimilated into mainstream culture. This conclusion is supported by the fact that across Geita, the Barabaig used to be hunters and gatherers but have since diversified their livelihoods and are now agro-pastoralists.

Data from the socio-economic surveys indicate that one (1) out of 1 319 PAHs across Chato, Geita, Mbogwe and Bukombe belong to Barabaig vulnerable ethnic group²⁰⁴. The household consists of 7 members (compared to an average of 9.1 for other PAHs in the region), and that it compares favorably with other PAHs in the region in terms of most socio-economic indicators: all adults are literate (compared to 68% for other PAHs; all children between 6 and 14 years are in school (compared to 81% for other PAHs); the household had experienced food shortages in the past year (as have 86% of other PAHs), but not cash shortage (reported by 91% of other PAHs). The household's primary source of livelihood is salaried employment in the local police force.

This household does not fall into any of the three vulnerability categories, as defined in Section 9.5.

While this household does not demonstrate any increased vulnerability (as reflected in the socio-economic and demographic indicators utilized in the analysis above), a number of other factors may render vulnerable ethnic groups more vulnerable than other communities to the impacts associated with Project-related land acquisition and displacement²⁰⁵:

²⁰⁴ Located in Shinyanga A Village, Nyakafulu Ward, Mbogwe District.

²⁰⁵ African Commission on Human and Peoples' Rights (2014). Report of the African Commission's Working Group on Indigenous Populations / Communities: Research and Information Visit to the Republic of Tanzania, 21st January – 6th February 2013. URL: https://www.iwgia.org/images/publications/0719_TANZANIA-ENGELSK.pdf

- The Government of Tanzania has stated that all people of African descent are indigenous and therefore that recognition of the rights of indigenous peoples is not relevant;
- Displacement of large numbers of pastoralists and other groups with traditional land-based livelihoods has been a frequent occurrence in many parts of Tanzania in the past;
- Hunter-gatherer groups such as the Barabaig face increasing encroachment onto their land by agro-pastoralists, commercial farming ventures and wildlife reserves;
- Climate change adds a range of challenges to the situation of pastoralists, hunter-gatherers and other groups with traditional land-based livelihoods. Their strategy of flexible tracking of resources is well-adapted to short-term climate variability, but such adaptive strategies may be blocked by restrictions on mobility imposed by competing land uses;
- Although official education statistics are not disaggregated by ethnicity, there is evidence that school attendance among Vulnerable Ethnic Groups is lower and the drop-out rates higher than among other Tanzanians. The reasons for non-attendance and dropping out include distances to schools, the proximity of wildlife (which poses a safety risk for children walking to school), collusion between education officials and parents to keep children out of school, and a curriculum that is at variance with the interests of such groups; and
- Lack of access to productive resources and services have also been detrimental to pastoralism and other traditional land-based livelihoods since it has resulted in poor conditions of living, low incomes, poor health and low literacy

While the potential vulnerability of PAH from vulnerable ethnic groups is an important consideration in determining the type of additional targeted support measures that may be required, it is recognized that additional support measures and engagement are required to respect the rights of all PAH from Vulnerable Ethnic Groups to ensure that they are able to effectively restore their livelihoods to pre-displacement levels. Additional support measures for Vulnerable Ethnic Groups will be agreed upon with the specific groups prior to any displacement or impact. Such additional support measures are described in more detail in Section 9.10.

9.8 Livelihood Restoration Strategies for Vulnerable Households

The majority of households within the Geita Region rely on their land for both household subsistence and cash income (see Chapter 5). Household support which is derived from a single source is more vulnerable to shock, including those that may be as a result of participation in a resettlement process.

Additional assistance will be provided to PAPs that are identified as vulnerable and lose >AE but <AFS. As per the Livelihood Restoration Plan (Chapter 8), these vulnerable households

will have access to individual level livelihood restoration program(s) as appropriate to their relevant vulnerability factors. Assistance will include access to programs that will be designed to address individual circumstances such as:

- Crop improvement programs;
- Livestock improvement programs, especially poultry which can be farmed intensively in a smaller area and produce greater returns; and
- Non-land-based programs, such as enterprise and skill development.

(See Chapter 8 for more details).



Figure 9-2: Livelihood Strategies for Vulnerable People will Include Crop Improvement Programs

One reason vulnerability can arise is through the failure of crop production for a season (or two) post-displacement (due to climatic and other natural shocks). In addition, sometimes it may be that alternative land identified for agricultural activities / livestock does not have the carrying capacity of the land that was lost and / or PAPs need additional support to practice alternative farming practices to utilize alternative land better. The same applies to a lack of access to alternative areas to source firewood, building materials (thatch) and medicinal plants. The RAP has identified the following measures to prevent PAPs from emerging as vulnerable due to impacts on livelihoods post-displacement:

- Support and capacity building in improved methods of land, preparation, and crop and livestock production;
- Training to help PAPs manage their finances / cash received during compensation; and
- Assistance to vulnerable PAHs where they are unable to re-establish their croplands due to limited access to labor.

The Project will also undertake ongoing monitoring and evaluation to ensure any emerging vulnerability issues are picked up and actioned appropriately.

While every effort has been made in the Livelihood Restoration Program (Chapter 8) and in the eligibility criteria (Chapter 6) to ensure that PAPs are resettled in a way that at a minimum re-establishes their current level of livelihoods and in the case of vulnerable PAHs provides for additional assistance, a few PAP households may emerge as vulnerable after resettlement for a variety of reasons, not within the Projects control. Therefore, all PAPs will be monitored carefully to identify any emerging vulnerability issues.

9.9 Engagement Processes for Vulnerable Groups

A key element of supporting vulnerable groups is ensuring that they have access to engagement processes so that:

- They are provided with sufficient information about the Project, including the potential impacts and opportunities relevant to them;
- They can respond and provide feedback to help shape processes and activities they are involved in;
- The development process fosters full respect for human rights, dignity, aspirations, culture, and natural resource-based livelihoods; and
- An ongoing relationship based on informed consultation and participation is established, ensuring free, prior and informed consent where required.

9.9.1 Engagement with Women

The Project aims to facilitate meaningful engagement and access to information by vulnerable groups, including women.

In the case of women additional opportunities have been and will be provided to receive information and raise concerns / ask questions about what they consider to be a safe environment. Methods used to date have included:

- Individual or small group women-only discussions to allow participants time and space to share their views; and
- Intra-household meetings, including male and female household members.

During RAP planning, specific focus was made to encourage the involvement of spouses (many of which are women):

- During the community sensitization for the land surveys to inform landholders of their need to be present during the surveys they were informed to be accompanied by their spouses;
- During land delineation, and the asset inventory and socio-economic household surveys, spouses were encouraged to be present as far as possible and, if necessary, surveys were delayed until the particular spouse was present; and
- During the disclosure of compensation schedules, PAPs were given individual and private access to their compensation schedules, entitlements, and amounts. PAPs

signed an acknowledgment letter to confirm that they had seen their individual schedule. Spouses were encouraged to be present during this disclosure and time was allowed for them to finish any activities they were busy with to give them the opportunity to attend.

Care has been, and will be taken to prevent division between male and female partners, to respect cultural sensitivities and not appear to support a view that men should not partake in livelihoods and family support activities.

Going forward, appropriate methods to engage with women will continue to be utilized. In addition, PAPs will be informed that spouses should be present for the entitlement briefings and that Compensation Agreements will be structured to include a spousal consent form. Where appropriate, the Project will seek joint bank accounts for PAPs, to enable spouses' access to compensation. Spouses will have access to the LRP.

9.9.2 Engagement with Vulnerable Ethnic Groups

Targeted measures have also been implemented to ensure adequate, equitable and culturally-appropriate engagement with vulnerable ethnic groups (who may potentially be vulnerable to specific Project-related displacement impacts). These measures have included:

- In PACs where Kiswahili is not universally understood, resettlement stakeholder engagement teams have included persons who speak the relevant local languages. In general, however, PACs and PAPs preferred to identify their own translators – usually local leaders or family members whom they trusted;
- During the survey sensitization process, suitable persons from local Vulnerable Ethnic Groups were sometimes appointed to assist the stakeholder engagement teams and facilitate a point of entry for the teams into vulnerable ethnic group communities. These persons would be briefed about the Project, the sensitization process and his / her role as a member of the stakeholder engagement team;
- Engagement with Vulnerable Ethnic Group communities was always preceded by engagement with local PAC leaders to request their support, approval and assistance in engagement with the communities. This prior engagement has demonstrated respect for the status of vulnerable ethnic groups who may self-identify as IPs community leadership; and
- In recognition of the fact that, in pastoralist communities, mornings are often devoted to tending livestock, meetings in such communities were arranged for later in the day (after noon or in the evening).

9.10 Implementation Support for Vulnerable Groups

Different individuals and households will need different levels of support and assistance during resettlement implementation dependent on their specific area of vulnerability.

Specific initiatives to protect and support vulnerable groups which may be considered include:

- Ensuring Compensation Agreements contain a spousal consent;
- Identifying ways to help reduce women's workload and improve family services such as improved access to water and basic services;
- Improving financial stability through a money management program, e.g. by supporting credit groups, providing skills training, supporting access to markets;
- Supporting education development, particularly numeracy and literacy, financial management and planning;
- Strengthening the participation of vulnerable groups in decision making processes by providing support such as training, access, and safe conditions to encourage participation;
- Promoting equal opportunities for employment on the Project by ensuring that employment opportunities are advertised and open to all groups;
- Consider the needs of vulnerable individuals and groups where possible during site selection for replacement housing / replacement land such as access to facilities, services, transport etc.;
- Assisting vulnerable groups and individuals in dismantling and moving assets;
- Providing support (not just monetary compensation) to vulnerable groups where the re-building of structures is required; and
- Ensuring vulnerable individuals have priority access to LRPs.

9.11 Implementation and Responsibilities

The VPP will be implemented in parallel to the wider RAP implementation and conclude only when the livelihoods of vulnerable people have been restored to at least pre-Project levels (as determined by a completion audit) The VPP may be updated during the RAP implementation program.

All activities to support vulnerable groups are documented and tracked within the Register of Vulnerable Individuals and Households. Tracking activities may include:

- Ongoing engagement with the Village Development Committee (VDC) (where operational) as part of the monitoring of vulnerable households;
- Engagement with authorized spokespersons for vulnerable ethnic groups at village or ward level;
- Identifying and recording information about vulnerable individuals and households in the Register of Vulnerable Individuals and Households;
- Monitoring all measures developed to support vulnerable individuals and households through the compensation process and livelihoods restoration activities; and

- Monitoring livelihood restoration.

The stakeholder engagement teams will be responsible for ensuring that additional engagement methods are used to facilitate the participation of vulnerable groups.

The Project social investment team will be responsible for managing the participation of vulnerable individuals in appropriate social investment projects.

Responsibility for coordinating and monitoring the status of vulnerable people and the associated support activities falls within the scope of the Livelihood's Restoration Implementation Team with an independent bi-annual review.

10 CONSULTATION AND DISCLOSURE

10.1 Introduction

Stakeholder consultation forms an integral part of the RAP planning process and will also be central during disclosure and implementation of the land acquisition and resettlement process.

It provides opportunities for affected and / or interested stakeholders to offer input into the RAP process and could help shape priorities, processes and outcomes, not only during planning but also during the implementation stage.

This chapter summarizes:

- Project engagement principles and objectives of engagement;
- Identification of stakeholders;
- Engagement structures;
- Engagement methods applicable to the RAP planning stage;
- Engagement support and measures adopted for specific stakeholder groups;
- Consultation activities during the RAP planning phase, including the disclosure of the RPF and the plan for the Geita RAP disclosure; and
- The Project Grievance Management procedure and findings during the RAP planning phase.

10.2 Engagement Principles and Objectives

The Project is committed to openness, dialogue and engagement as it views long term, transparent relationships with stakeholders across all levels as essential to its success.

In its Stakeholder Engagement Plan²⁰⁶, the Project outlines ten (10) stakeholder engagement principles that guide its engagement activities. These principles have been developed based on GIIP, national regulations and partner company guidelines. They are summarized in Table 10-1 below. The Project stakeholder engagement objectives to are presented in Table 10-2.

²⁰⁶ EACOP Stakeholder Engagement Plan. Document Number TZ-MID-60-0120-200299.



Figure 10-1: Kabanga Village, Nhomolwa Ward, Mbogwe District, Focus Group Discussion

Table 10-1: EACOP's Stakeholder Engagement Principles

No.	Principle	Definition
1	Open and Transparent	Information relevant to Project activities will be as accessible and transparent as possible, providing stakeholders with a comprehensive understanding of Project activities and how they are or may be affected by them.
2	Listening and Dialogue	Stakeholders will be invited and encouraged to actively engage with the Project. Stakeholders will be listened to, their questions and concerns taken seriously, and responses provided in a timely manner.
3	Empowering	Engagement should ensure stakeholders have an opportunity to share their perspectives. This will include informing them of what they can expect in terms of feedback and responses to their inputs.
4	Proactive	The engagement process will provide information in advance of Project-related activities.
5	Impact Focused	Engagement with communities affected by the Project will be, whenever possible, focused around the potential and actual negative Project impacts and mitigation measures that may concern them.
6	Safe	Steps will be taken by the Project towards ensuring stakeholder engagement is free from manipulation, interference, coercion or intimidation and that participation in any form of engagement will be safe and without risk or fear for retaliation.
7	Effective	Information and forms of engagement will be acceptable to and effective for the stakeholder for whose use they were intended and will be accessible, legitimate and transparent.
8	Appropriate	Different forms of engagement may be required for different kinds of stakeholders and different purposes. Information provided to stakeholders will be provided in formats appropriate and accessible to the stakeholder concerned.
9	Equal and Human Rights Respectful	Everyone, without discrimination, will be afforded the right to participate on equal terms.
10	Gender and Culture Sensitive	Engagement approach will include the need for and use of any special measures to ensure that marginalized or vulnerable individuals and groups are inclusively engaged.

Table 10-2: Project Stakeholder Engagement Objectives

The Project's objectives for meaningful stakeholder engagement are to:

- Ensure that local stakeholders are informed as early as possible about Project activities;
- Build trust and broader community support for future operations, including understanding and monitoring the way that impacts are being managed and international standards are being applied;
- Ensure that engagement is undertaken in a coordinated fashion using the same principles, standards, messages, etc.;
- Gain access to civil society expertise, skills or resources to assist with, for example, social investment, livelihood restoration project development and implementation, achieving local content targets and implementing the Voluntary Principles on Security and Human Rights (VPSHR);
- Facilitate the creation of partnerships to the mutual benefit of the Project and stakeholders including Civil Society Organizations (CSOs) and enhance reputation;
- Identify opportunities and risks related to activities early in order to intervene and avoid escalation in the case of risks;
- Ensure that stakeholder queries are handled in time through continuous engagements; and
- Identify and address potential human rights impacts and respect the rights to information and consultation of affected stakeholders.

10.3 Stakeholder Identification

EACOP's Stakeholder Engagement Plan defines stakeholders as:

"...persons or groups external to the core operations of the Project who may be affected by the Project or have an interest in it or may have influence over it. This may include individuals, businesses, communities and local government authorities, local non-governmental and other institutions. Local communities potentially impacted by the Project and their local and traditional authorities are regarded as key stakeholders".

The Project has identified relevant stakeholders that fall within these categories. Details of these can be found in Appendix C as the following:

- Key national level GoT stakeholders (Appendix C, Table C-1);
- Key regional and district GoT stakeholders (Appendix C, Table C-2);
- Key village level stakeholders (Appendix C, Table C-3);
- International and national NGOs (with focus on land and livelihoods matters) (Appendix C, Table C-4); and
- CSOs, CBOs and NGOs active in the region and districts (with focus on land and livelihoods matters) (Appendix C, Table C-5).

10.3.1 Affected Stakeholders

Project Affected Persons

This group is directly affected by land acquisition, will experience physical and /or economic displacement and has therefore been prioritized for engagement by the Project. This group may include individuals, households and villages with affected village land who have been identified and recorded within the detailed surveys and valuation activities undertaken to

date. These affected groups are described further in Chapter 5. Project-related impacts on this group may include:

- Physical displacement due to loss of dwelling structures;
- Economic displacement due to loss of land / access to land;
- Economic impact due to loss of access to other land that forms part of their livelihood strategies (e.g. forests, grazing areas, fishing ponds, village land or land traditionally used by vulnerable ethnic groups);
- Impact on community relations due to changes in access to social structures and livelihoods; and
- Other social, cultural or human rights impacts that could be affected by the resettlement process.

Their interest in this process therefore includes:

- Having meaningful engagement with the Project throughout the resettlement process to ensure access to information and dialogue around impacts;
- Project impact on PAPs' land and structures; validity of verification; compensation rates and processes; and replacement of assets;
- Livelihood restoration options and assistance during the resettlement process;
- Construction timelines and activities and measures to mitigate the impacts of temporary access restrictions during construction as per Section 5.9 (temporary impacts);
- Employment opportunities; and
- Benefits to local communities.

Project Affected Communities

PACs include the PAHs' village of residence and the community the PAHs may be moved to, i.e. the host community if relevant. The intention is to move PAHs within the ward / village boundaries. These communities are described further in Chapter 5. Project-related impacts on this group may include:

- Physical splintering (e.g. community divided in two (2) by an access road);
- Social disintegration / conflict (e.g. new residents are not welcomed where they move between villages), which is expected to be an unlikely occurrence, given the Project's intention to move PAHs within ward / village boundaries; and
- Economic impact due to loss of access to other land which form part of their livelihood strategies (e.g. forests, grazing areas, fishing ponds, village land or land traditionally used by vulnerable ethnic groups).

Their interest in this process therefore includes:

- Project progress including construction timelines and activities and measures to mitigate the impacts of temporary access restrictions during construction;

- Resettlement process including location of replacement land and replacement houses;
- Employment opportunities; and
- Benefits to local communities.

10.3.2 Interested Stakeholders

Interested stakeholders are defined as those groups who may not be directly affected by the land acquisition but who, by their position, knowledge and / or experience, are able to influence the outcome of the Project.

The main categories of interested stakeholders relevant to the RAP process for this Project are discussed below:

The Government of Tanzania

The GoT, along with the GoU, is a partner in the Project. Engagement activities between PPT and the GoT are wide-ranging, across the national, regional, district and ward levels and across a range of technical areas, including resettlement.

As described in the RPF, land matters are the responsibility of MLHSD, in collaboration with local authorities. The ME is the lead ministry managing development and delivery of the Project. The Project requires cooperation from a wide range of government organizations at national, regional, district, and ward levels, and also from village level authorities. These stakeholders play key roles in land acquisition, compensation and resettlement.

Such roles are documented in the RPF and summarized in Appendix C: Tables C-1 and C-2.

Civil Society Organizations including Non-Governmental Organizations and other Community Based Organizations

NGOs and CBOs are a diverse stakeholder group that, collectively, can play an important role in resettlement planning and implementation for projects such as the EACOP.

They can act as an independent third party to facilitate community engagement with the Project; particularly at key points in the Project schedule, such as during payment of compensation. They can also contribute, as implementation partners, to livelihood restoration activities and potentially other parts of the RAP. The list provided in Appendix C will be updated on an ongoing basis.

International Financial Institutions

Financing for the Project is being sought from IFIs and as described in Chapter 3 and the RPF. The Project is being managed and subsequently implemented to relevant IFI standards.

Of particular relevance for this section are the applicable engagement requirements of the IFC's PS1 Assessment and Management of Environmental and Social Risks, PS5 Land Acquisition and Involuntary Resettlement and IFC PS 7 on Indigenous Peoples.

10.4 Project Engagement Structures

The Project stakeholder engagement, particularly at the local level, is designed and undertaken by Project engagement teams, in consultation with key GoT and community stakeholders. These teams use a variety of structures and processes to ensure accurate and effective communication is tailored to the needs of different stakeholder groups.

There is one (1) key group and three (3) key teams relevant to Project RAP planning engagement. These are:

- The LARWG (Combination of GoT and Project representatives);
- The Project Stakeholder Engagement team (EACOP);
- The Project RAP Planning and Implementation teams (EACOP); and
- The RAP Planning Consultant team (DWC).

All activities are guided by EACOP's central Stakeholder Engagement Plan and coordinated in alignment with this.

10.4.1 Land Acquisition and Resettlement Working Group

The LARWG is a committee comprising EACOP and GoT technical representatives.

It was established in March 2018, during the early stages of the EACOP resettlement planning process and meets regularly to receive updates on the land acquisition and resettlement process, discuss issues and provide input into planning and implementation.

It is chaired by the ME's Project country coordinator. The EACOP Project team provides secretariat support together with the LARWG representative from TPDC.

Core LARWG members are the ME, TPDC, TPA, MLHSD and the EACOP Project. Other relevant government agencies attend meetings when required. These include: TANROADS, TARURA, TAWA / Tanzania National Parks Authority (TANAPA) / TFS, Water Basin Authority, TANESCO; TTCL and the TRC.

Broadly, the LARWG's responsibilities are to:

- Review the progress of planning and implementation of the land acquisition and resettlement process;
- Identify arising issues and the process that require discussion between the Project and the GoT in order to advance the land acquisition process;
- Identify risks to the Project schedule and land access requirements, and seek solutions to drive the process;
- Advise on resolving any disputes, complaints and concerns related to resettlement and compensation raised by communities / individuals as needed; and
- Update the Steering Committee, Project and GoT on the Project's land acquisition progress and status.

10.4.2 Project Stakeholder Engagement Team

During the preconstruction period and prior to delay of certain Project activities, the Stakeholder Engagement and Social Studies Coordinator based in Dar es Salaam, led the EACOP Project Stakeholder Engagement team of two (2) Stakeholder Engagement Coordinators based in Dar es Salaam and 24 Community Relations Coordinators (CRCs) and Community Liaison Officers (CLOs), across the pipeline route. Each CRC / CLO pair is responsible for between two (2) – five (5) districts.

Two (2) local teams, consisting of a CRC and a CLO, have been and will be active in the Geita Region. Dedicated CLOs were and will be recruited to support the land acquisition process and other RAP implementation activities.

The teams report to the EACOP Stakeholder Engagement and Social Studies Coordinator.

10.4.3 Project RAP Planning and Implementation Teams

The two (2) teams lead land acquisition and resettlement activities and are based in Dar es Salaam with regular travel to site. The teams work in close coordination with the EACOP Stakeholder Engagement team as well as the RAP Planning Consultant team, which is responsible for resettlement planning related engagement.

The teams report to the EACOP Land and Social Manager.

10.4.4 RAP Planning Consultant Stakeholder Engagement Team

During the resettlement planning activities, the RAP Planning Consultant deployed four (4) groups focusing on Project stakeholder engagement, collectively referred to as the RAP Planning Consultant Stakeholder Engagement team. These were the:

- Stakeholder Engagement team that formed part of the survey team, referred to in Section 4.3.2;
- Stakeholder Engagement team that formed part of the valuation team, referred to in Section 4.3.3;
- Stakeholder Engagement team that formed part of the disclosure team referred to in Section 4.3.3; and
- A team of social specialists and assistants (the SELI team) referred to in section 4.5.3.

The Stakeholder Engagement teams that formed part of the survey teams supported the field-based sensitization meetings, land delineation, asset valuation and socio-economic surveys (described in Chapter 4) and comprised 27 stakeholder engagement personnel that supported related engagement activities across the Project.

Each survey team included a Stakeholder Engagement team with a:

- Stakeholder Engagement Coordinator;
- Stakeholder Engagement Lead; and
- Stakeholder Engagement Assistant Facilitator.

There were two (2) teams surveying Geita Region therefore a total of six (6) field-based engagement resources supported the survey activities with two (2) engagement resources per team.

Dedicated engagement resources also formed part of the valuation and disclosure teams that completed the validation and disclosure activities.

In addition, the SELI team conducted a range of interviews, discussions and meetings, individual and group based, with PAPs and non-PAPs to inform the livelihood restoration planning.

These engagement activities were undertaken in consultation with the Project CRCs / CLOs.

The primary responsibilities of the RAP Planning Consultant's Stakeholder Engagement team were to:

- Liaise with the Project CRCs / CLOs to arrange and conduct meetings at district, ward and village level such as sensitization, verification, disclosure and focus group meetings;
- Ensure PAPs are informed and understand the land acquisition process, the displacement impacts on their households and their rights to compensation;
- Ensure engagement methods are adapted to the PAPs and that any identified vulnerable PAPs receive additional engagement as necessary;
- Ensure that women participate during the land acquisition process including being present during land delineation, surveys and initial disclosure;
- Maintain clear and concise engagement records particularly in the case of vulnerable groups and transfer these to the EACOP Project team for their follow up; and
- Assist in receiving, recording and addressing resettlement and land related grievances in accordance with the Project's Grievance Management procedure. This included the use of Project Grievance Books to register grievances, ongoing engagement with the Project Stakeholder Engagement team to inform them of grievances raised in relation to the RAP planning activities, and implementation of actions, in consultation with the Project, to address these.

10.5 Engagement Methods

Not all stakeholder groups require the same type or depth of information and therefore the Project has used a range of engagement strategies, methods and frequency of engagement for specific stakeholder groups, dependent on the objective of the engagement activities.

10.5.1 Language of Engagement

The official languages in Tanzania are Kiswahili and English. Engagement materials for the Project were developed and usually shared in both Kiswahili and English. Where the understanding of Kiswahili and English is limited, the Project will endeavor to make information available in the preferred language and / or to have interpreters available. In Geita Region, engagement was mostly in Kiswahili. Translations to Sukuma were required

mostly for elderly people and women not fluent in Kiswahili. Sukuma translations were understood by other language groups not fluent in Kiswahili, such as Subi and Sungu speakers.

In general, PACs and PAPs preferred to identify their own translators, usually the local leaders or family members they trusted. Thus, the teams enlisted the assistance of local leaders / community members to assist with translations when PACs and PAPs did not identify their own translators.

All consultations were arranged using the accepted governance structures in place in the Geita Region. RAP consultation was not specifically aimed at achieving FPIC but was designed and implemented in such a way that it prepares for eventual FPIC.

Vulnerable Ethnic Groups, apart from one (1) Barabaig PAH, were not encountered.

10.5.2 Community Engagement Materials

Supporting materials have been developed to support resettlement-related engagement activities, particularly with community stakeholders. Examples of engagement materials developed include presentations; storyboards; and frequently asked questions (FAQs).

These engagement materials have been updated on an ongoing basis to address additional questions identified through analysis of engagement records, review of grievances submitted, and feedback from the RAP Planning Consultant and Project Stakeholder Engagement teams.

EACOP Project communications materials in Kiswahili have been extensively used during resettlement engagement activities, including the Project's general presentation flyer, Grievance Management procedure flyer and FAQs booklet. The Grievance Management procedure flyer is available in Maasai.

10.5.3 Engagement Methods

Various engagement methods have been used to support resettlement-related engagement. These have included:

- LARWG meetings and other GoT meetings / meetings with specific government departments;
- Quarterly regional meetings;
- Community meetings / meetings with specific groups;
- Meetings / interviews with NGOs;
- FGDs / small group meetings with minority / vulnerable ethnic groups;
- Formal one-on-one discussions with PAHs / PAPs including vulnerable ethnic groups; and
- Display / provision of printed information.

All consultations were arranged using the accepted governance structures in place in the Geita Region. A summary of engagement methods, their application, tools / materials and process is provided in Table 10-3.

Table 10-3: Summary of RAP Engagement Methods and Information Dissemination Tools

No	Method	Application	Tools / Materials	Deliverables
1	Meetings with the LARWG	Meetings to discuss progress, plans, challenges and issues related to the RAP.	Presentations Technical information documents / summaries Instruction letters.	Agendas Attendance registers Meeting invitations Meeting notes.
2	Government meetings / meetings with specific government departments	Government meetings have been used to provide information and to consult. At district level, Project team members new to the district have been introduced.	Posters Presentations Flyers / brochures FAQs Maps Storyboards.	Agendas Attendance registers Meeting invitations Meeting notes.
3	Community meetings / meetings with specific groups	Community meetings have been used to provide information and to consult regarding processes such as valuation methods.	Posters Presentations Flyers / brochures FAQs Maps Storyboards.	Agendas Attendance registers Meeting invitations Meeting notes.
4	Meetings / interviews with NGOs / CSOs.	Discuss issues / livelihood restoration.	Technical information documents / summaries.	Agendas Attendance registers Meeting invitations Meeting notes.
5	FGD / small group meetings for minority / vulnerable / unique stakeholder groups	Focus group meetings have been used to discuss specific issues such as valuation methods, livelihood restoration activities with specific groups of people and to specifically focus on the issues / concerns / context of these groups.	Posters Presentations Forms Flyers / brochures FAQs Maps Storyboards.	Agendas Attendance registers Meeting invitations Meeting notes.
6	Formal one-on-one discussions with PAPs / PAHs	Discussion of sensitive information such as valuation results, vulnerable families.	Forms FAQs Maps Storyboards.	Summary of discussions signed by parties present.
7	Informal discussions	Unplanned / ad hoc discussions with individuals / groups.	Flyers / brochures FAQs Storyboards.	Summary of discussions.
8	Display / provision of printed information	Provision of printed materials at information desks / village / offices and to PAP / stakeholders.	Forms Flyers / brochures Posters Maps.	Distribution of materials is recorded to keep track of the type and number of materials and area of distribution.
9	Village notice boards	Short notices / posters Information sharing updates.	Short information snaps.	Record of distribution.

10.6 Consultation During the Resettlement Planning Phase

This section broadly describes the land acquisition and resettlement-related engagement activities for the development of the Geita RAP.

10.6.1 Land Acquisition and Resettlement Working Group Meetings

LARWG meetings have been held since 29th March 2018 to guide development of the RAP strategy and provide input into RAP planning. A summary of LARWG meetings including participants and key discussion points can be found in Appendix C (Table C-6). Table 10-4 summarizes the number of meetings and attendees to date.

Table 10-4: LARWG Attendees and Meetings to Date

LARWG Meetings (March 2018-September 2019)	
Number of meetings held to date	24
Number of Attendees (excluding EACOP and RAP Planning Consultant attendees)	165

10.6.2 Government Entities and Regional Meetings

The RAP Planning Consultant's Stakeholder Engagement team met during the RAP planning stage with the regions affected by the Project and government ministries to discuss specific resettlement-related topics.

To date there have been six (6) sets of meetings with the Geita Regional Government focusing on elements of the RPF and pipeline RAP planning. These were held in:

- July 2018: Sensitization meeting, focusing on survey preparation;
- September 2018: Progress, focusing on completion of surveys and the validation process;
- December 2018: Land acquisition progress, focusing on the validation activities;
- March 2019: Update on land acquisition activities including planned disclosure;
- June 2019: Update on land acquisition activities including planned disclosure; and
- October 2019: Update on land acquisition activities including disclosure activities.

Appendix C (Table C-7) contains a summary of meetings prior with national and regional level government entities prior to November 2019.

10.6.3 Engagement at District, Ward and Village Levels

To date, engagement has been held at district, ward and village levels, as follows:

- **Sensitization meetings** at all three (3) levels to:
 - Provide information on the survey process and discuss GoT oversight and support during the surveys;
 - Provide notice to complete asset registration and delineation of lands;
 - Inform stakeholders of assets to be recorded and the recording mechanism;

- Inform stakeholders of the purpose of valuation, procedures involved, duration of the valuation exercise, applicable compensation rates and legal rights and obligations of PAPs;
 - Inform landholders of their need to be present during the surveys accompanied by their spouses;
 - Announce and explain the cut-off date; and
 - Disclose and discuss Project's Grievance Management procedure.
- **Survey processes** (Land delineation, asset inventory and socio-economic household survey), involving one-on-one discussions with PAHs / PAPs. Whenever possible spouses have been encouraged to be present and if necessary, surveys have been delayed until the spouse was present. The process included:
 - Disclosure of the specific cut-off date for each village at Village Assembly sensitization meetings;
 - Undertaking of a land delineation survey to map the Project-affected area and identify PAPs whose land and assets are in the mapped area;
 - Asset inventory to record where the type and number of assets (e.g. structures, land, crops, etc.) are located on land earmarked for the Project. This was then reflected on Valuation Form No.3, signed by the PAP, valuer, and village leader (one (1) copy of the document remains with the PAP); and
 - Socio-economic household survey to assist the study team in assessing how the loss of land, crops and / or structural assets will affect each household and how livelihood restoration can be effectively implemented.
 - **Public disclosure of land and assets records compiled during the survey:** The land and assets recorded (Asset Valuation Schedule) were posted on the village notice board. PAPs were required to confirm the content of the asset inventory appearing in their Valuation Form No.3 against this schedule, which was subsequently used to determine compensation.
 - **Validation of land and assets:** Each village was visited again five (5) to six (6) months later to (a) inform PAPs about any modification in land requirements resulting from the internal assessment of provisional survey findings and grievances / queries received to date, and (b) determine if any additional queries or grievances had been lodged in respect of the information that was recorded.
 - **Disclosure of compensation schedules:** PAPs were given individual and private access to their compensation schedules, entitlements and amounts. PAPs signed an acknowledgment letter to confirm that they had seen their individual schedule. Spouses were encouraged to be present during this disclosure and time was allowed for them to finish any activities they had underway and attend.
 - **Qualitative data** was collected by the SELI team through FGDs and KIs to understand the constraints, challenges and opportunities PAPs face and to develop a more complete understanding of the likely impacts of displacement and

resettlement on livelihoods. This information informed the development of this RAP, as well as RAP planning and implementation activities more generally.

- **Housing** meetings were held to discuss in-kind compensation for PAPs eligible for replacement housing.
- **Forestry meetings** were held to discuss the land acquisition process of Reserved Land and its validation process.

Table C-8 and C-9 in Appendix C provides further details of these engagement activities and Table 10-5 and Table 10-6 provide details on the number of meetings and attendees excluding the Project and RAP Planning Consultant personnel that were present.

Table 10-5: Number of Formal RAP Planning Phase Meetings

Meeting Type	Sensitization Meeting	Validation Meeting	Forestry Meeting	Housing Meeting	SELI Meeting	Disclosure Related Meeting	TOTAL
Regional Level Meetings	1	3	N / A	N / A	N / A	2	6
District Level Meetings	7	7	2	4	28	4	52
Ward Level Meetings	16	17	N / A	N / A	15	11	59
Village Level Meetings	56	31	N / A	N / A	92	49	228
TOTAL	80	58	2	4	135	66	345

Table 10-6: Number of Attendees at Formal RAP Planning Phase Meetings

Meeting Type	Sensitization Meeting	Validation Meeting	Forestry Meeting	Housing Meeting	SELI Meeting	Disclosure Related Meeting	TOTAL
Regional Level Attendees	45	179	N / A	N / A	0	93	317
District Level Attendees	19	23	6	9	70	17	144
Ward Level Attendees	271	261	N / A	N / A	221	177	930
Village Attendees	639	423	N / A	N / A	1 466	380	2 908
Village Assembly Attendees	3 093	N / A	N / A	N / A	N / A	1 119	4 212
TOTAL	4 067	886	6	9	1 757	1 786	8 511

Table C-10 in Appendix C provides an overview of issues raised. An issues-and-comments register was collated during RAP planning, which will continue to be maintained during RAP implementation (see Chapter 11) by the Project and is part of the Project stakeholder engagement records. Issues raised were used to update and inform the FAQs and agenda items at future consultations and / or meetings. Table 10-7 provides a summary of these recorded questions or issues raised at ward and village level. Out of 447 questions and issues raised 225 related to land acquisition and resettlement and 57 to other economic loss.

Questions and issues related to land and resettlement during sensitization and validation were focused on the implications of the cut-off date, the rates that would be applied and

when compensation would be paid. Additional recurring issues during sensitization were in relation to the pipeline route and the approach to tenants and during validation the compensation of trees. The key issues during SELI were about payment of compensation and allowances. The process of grave removal and associated compensation was a concern during sensitization only. During disclosure, issues focused on the process to follow in the event that a PAP passed away or could not attend the disclosure meeting, dissatisfaction with land rates, continuation of farming activities in the corridor.

It is also noticeable that the number of questions and issues related to land and resettlement increased between the sensitization and SELI meetings, possibly because potentially vulnerable people and female representatives of PAHs attended the SELI meetings but did not attend the sensitization and validation meetings.

Table 10-7: Number of Issues Raised at Ward and Village Level Meetings

Category	Sensitization Meeting	Validation Meeting	SELI Meeting	Disclosure Meeting	TOTAL
Land and Housing.	66	56	71	32	225
Livelihoods (economic loss).	18	16	12	11	57
Employment and Supply Chain.	20	4	27	1	52
Environment and Health (nuisances / pollution).	4	3	1	0	8
Safety (transport, explosion).	2	1	6	0	9
Social Conduct and Security.	1	0	7	3	11
Cultural Heritage.	13	3	3	0	19
Social Investment Projects.	11	12	18	1	42
Engagement and Communication.	2	3	5	0	10
Other.	0	5	9	0	14
TOTAL	137	103	159	48	447

10.7 Engaging Specific Stakeholder Groups

In addition to the information shared in Section 10.5, the following steps were taken to ensure meaningful participation of all stakeholders:

- There has been a particular focus on facilitating women's equal access to information by providing additional opportunities to receive information and raise concerns / ask questions in what they consider to be a safe environment. Care has been taken to avoid division between male and female partners and not appear to support a view that men should not partake in livelihood and family support activities. The methods included:
 - Individual or small group women only discussions, to allow participants time and space to share their views;
 - Intra household meetings including male and female household members; and
 - Requesting spouses to be present at compensation schedule disclosure meetings. The village meetings had approximately one-third (33%) females in attendance and of the 600 PAP meetings, 16 male and 8 female spouses attended;

- Meetings were arranged with consideration of the schedules of agro-pastoralist households and women and therefore meetings were held later in the morning and early in the afternoon when people were not involved in farming activities;
- SELI included discussions with four (4) small scale mines which are based at Iparamasa and Musasa Villages in Chato District;
- With consideration of governance processes, meetings were arranged with the assistance of CRCs / CLOs and village authorities;
- During stakeholder consultation, a standing item on the agenda has been to discuss any specific measures required to address the requirements of potentially vulnerable groups; and
- A tracking system and records of meetings are kept.

10.8 RPF and RAP Disclosure Meetings

IFI requirements stipulate that a Project's RPF and RAP are publicly disclosed.

The RPF has been publicly disclosed and RPF documentation is available on the Project website in both English and Kiswahili²⁰⁷. Hard copy RPF documents in English and Kiswahili languages have been provided to the ME to enable circulation to the eight (8) regions and 27 district councils / town councils / city councils affected by the Project. Commencing December 2018, follow up briefing sessions for regional and district level stakeholders were integrated with the education and awareness sessions related to RAP implementation.

This Geita RAP will be provided to the GoT for a 30-day comment period and is planned to then be disclosed publicly for a 120-day period.

Key points of the RAP will be summarized and translated into Kiswahili for a non - technical summary for provision to the WDCs and VDCs and a poster will be displayed at key meeting points at the local level (e.g. regional, district and ward offices). Translation into Maasai and other languages will be considered where required for informed consultation and participation.

A simplified version of the updated entitlements framework included in the RAP will also be translated into Kiswahili. This documentation will be provided to each Project-affected district. Translation into Maasai and other languages will be considered where required for informed consultation and participation.

Copies of the RAP (in English) will be available at the EACOP Project head office in Dar es Salaam, and on the Project website.

²⁰⁷ The specific documentation available on the Project website is: i) the full RPF document in English language; and ii) a summary RPF document in Kiswahili language (this comprises the Executive Summary and Chapter 6 Eligibility and Entitlements / Compensation Framework).

10.9 Grievances and Grievance Mechanism

Even with the implementation of a proactive stakeholder engagement system, unexpected issues and complaints will arise. To ensure consistency and coherency across the Project, the standard Project Grievance Management procedure and associated documentation have been developed and implemented. The Project Grievance Management procedure will be adapted to ensure accessibility and effectiveness for vulnerable groups including vulnerable ethnic groups.

10.9.1 Overview of the Project's Grievance Management Procedure

Grievances / complaints can be reported through the following channels:

- Project CRCs / CLOs;
- Toll free line: 0800 780 068;
- The Project offices;
- Project staff and contractors in the field; including the RAP Planning Consultant team (for land and resettlement-related grievances); and
- Local leaders.

The Project Grievance Management procedure is open to all stakeholders who regard themselves as affected by the Project's activities, whether received by the Project directly or via one (1) of its contractors. Occasionally, regional and district officials receive Project-related grievances directly. In such cases, these are communicated to the Project to act on.

Within the Project Grievance Management procedure, resettlement-related grievances are managed as follows:

- Project-related grievance received from stakeholder (orally or written) by the Project or RAP Planning Consultant team member, or by a district officer: If received by a district officer or the RAP Planning Consultant it is forwarded to the Project CRCs / CLOs for recording in the centralized Project grievance management database;
- Recorded grievances are categorized so that those related to resettlement / land acquisition / compensation are separated from those dealing with other aspects of the Project (e.g. environmental impacts, contractor conduct, employment, etc.);
- During the resettlement planning phase, the RAP Planning Consultant team works with the Project to address any grievances related to resettlement / land acquisition / compensation that have been recorded in the Project grievance management database;
- The EACOP Project Grievance Management procedure is used for addressing and resolving these grievances; and
- Feedback is provided to district officials on resettlement-related grievances that have been recorded in the Project grievance database, as well as on progress in addressing or resolving these.

Where the Project and a complainant cannot agree on the resolution of a grievance, the complainant is advised of alternative channels they may take to seek redress. This grievance mechanism process is summarized in Figure 10-2.

10.9.2 Summary of Grievances

A total of 12 land acquisition and resettlement-related grievances were received in the Geita Region by the RAP planning consultant. Four (4) grievances are still open of which one (1) is with the Land Tribunal, one (1) relates to the Val Form No. 3 and two (2) question the economic viability of the piece of land left over with the rest affected by both the AGI and the pipeline corridor. The closed grievances (apart from one (1) that was in connection with land conflict) were in connection with the Valuation Form No.3, and included inconsistencies in relation to:

- Number of crops recorded;
- Number of graves recorded; and
- Number of land parcels recorded.

Grievances were addressed in consultation with the relevant EACOP CRC / CLO.

10.9.3 Ongoing Resettlement-related Grievance Management

The current EACOP Project Grievance Management procedure will continue for the remainder of the resettlement process, specifically during RAP implementation. The RAP Planning Consultant team continues to work in accordance with this procedure and remains involved in the resolution of resettlement planning and land related grievances.

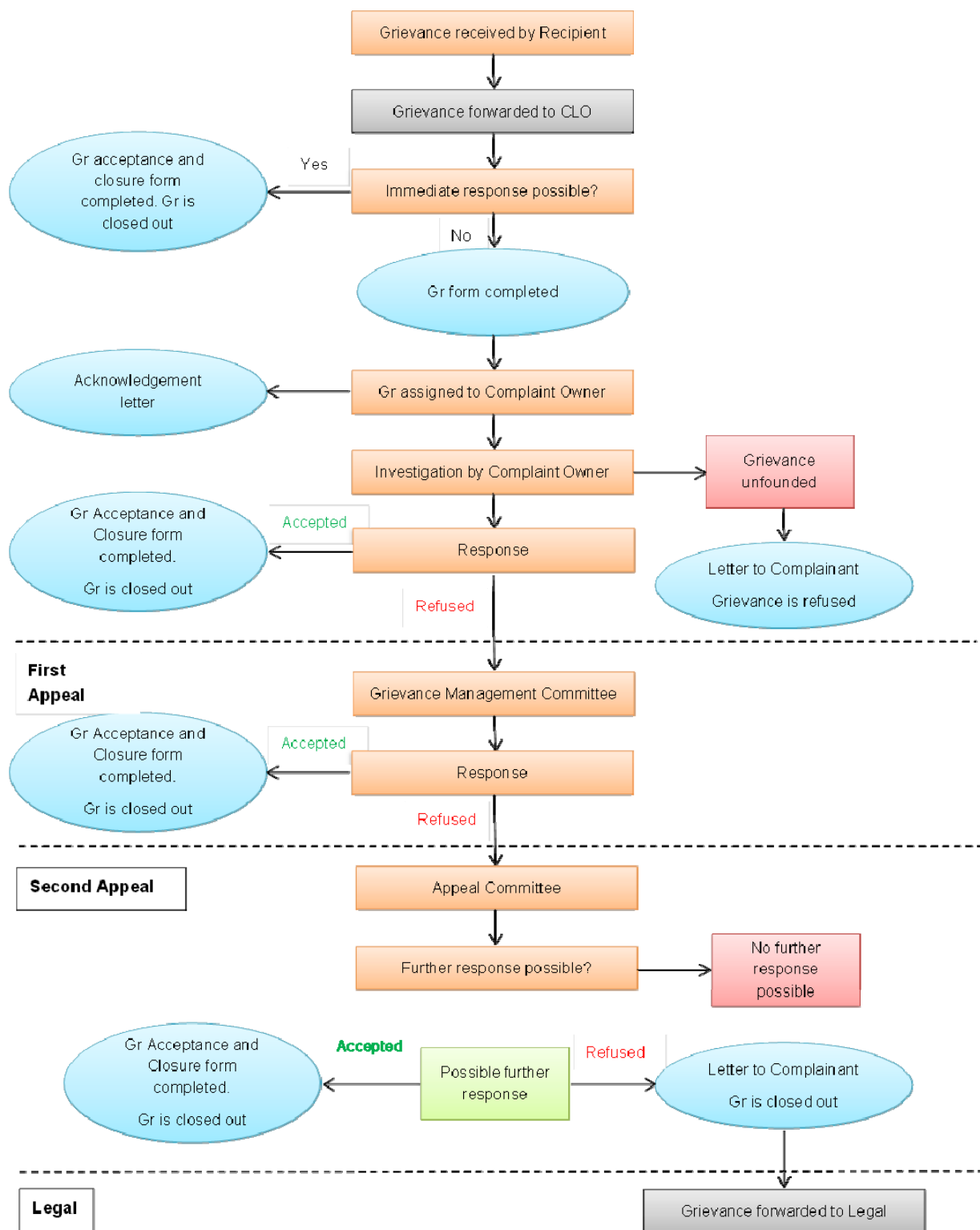


Figure 10-2: Grievance Management Flowchart

11 IMPLEMENTATION OF LAND ACQUISITION AND RESETTLEMENT

11.1 Introduction

This chapter provides an overview of the key activities and processes required for the implementation of the RAP and the completion of land acquisition and granting of rights. This includes the primary roles and responsibilities of key stakeholders, including both the Project Company and the Government of Tanzania (GoT).

11.2 Implementation Timing and Approach

Given the scale, logistics and potential complexity associated with the implementation of the RAP, it will take place over three phases that will allow for more accurate budgeting and scheduling, inclusive stakeholder engagement, as well as ensuring key activities and processes are completed in a sequential and logical manner. These phases are not sequential and some activities within them will occur in parallel (see Chapter 12).

- **RAP Implementation Planning.** During this phase, work will predominantly focus on the legal requirements for land acquisition and conversion. Final engagement will also be undertaken relating to entitlement and compensation determination;
- **Implementation.** This phase will focus on the drafting and signing of the individual household compensation agreements and the subsequent implementation of their requirements including payment of compensation, construction of replacement housing and relocation and transition support; and
- **Project Support Activities.** This will include the initiation and ongoing input to the various livelihood restoration activities (as described in Chapter 8) as well as the implementation of the monitoring and evaluation programme (as described in Chapter 13).

Ongoing stakeholder engagement, as described in Section 11.6, and grievance management will occur throughout. Figure 11-1 provides an overview of the key components. A detailed breakdown of the various activities is provided in the subsequent sections.

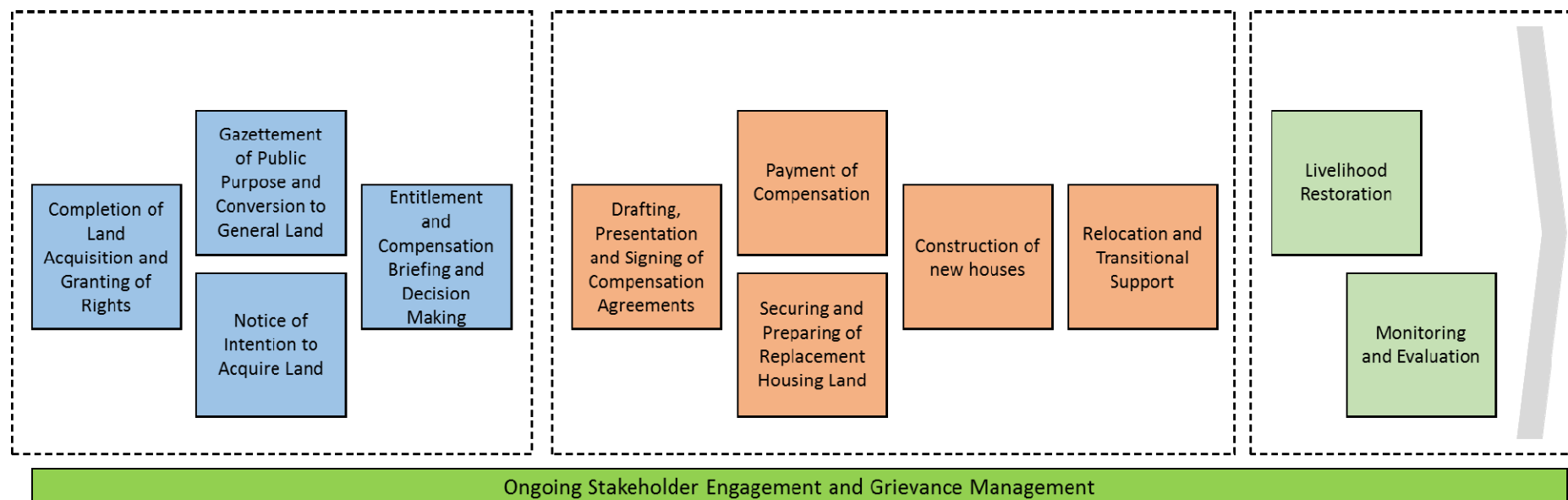


Figure 11-1: Overview of RAP Implementation Approach and Phasing²⁰⁸

²⁰⁸ Some activities are undertaken in parallel and not sequential – see Chapter 12 for further details

11.3 RAP Implementation Planning

The land acquisition will be undertaken to meet the provisions of the LAA with the GoT and PPT working in collaboration, as appropriate. This process will include the completion of the land acquisition process and subsequent granting of rights of the Land Acquisition Process. The process is presented in Chapter 4 (see Figure 4.1) and the RAP implementation steps summarized below.

11.3.1 Gazettement of Public Purpose and Conversion to General Land (Step 5)

Land for the Project will be acquired on the basis that it is required for public interest²⁰⁹.

The Notice of Intention to Acquire Land will be published in the Government Gazette and presented to the PAPs²¹⁰. This will occur prior to the meetings with the PAPs and affected communities regarding compensation agreements.

The majority of land acquired for the Project will be converted into General Land by the GoT.

11.3.2 Final Entitlement and Compensation Engagement

Some PAPs' entitlement options will include a choice between cash and in-kind compensation options where eligible, as well as the selection of various livelihood restoration options (land-based activities, non-land-based activities, etc.).

Although these options would have been explained to each PAP during the disclosure of compensation schedules (Section 4.3.3) the Project will conduct additional entitlement briefings²¹¹ at village level to explain and discuss the entitlements to PAPs and their spouses where appropriate. Where eligible, PAPs will then be given the opportunity to make informed decisions regarding the compensation and livelihood restoration options they select. During these entitlement briefings, vulnerable PAPs will receive particular attention to ensure that they are able to attend the briefings and are aware of the support options that are available to them over and above compensation for losses.

11.4 Implementation

11.4.1 Compensation Agreements (Step 6)

Individual household compensation agreements will be drafted in English and translated into Kiswahili where applicable. The agreements are legally binding documents that will clearly define all entitlements, contractual modalities and necessary commitments of all parties.

²⁰⁹ This falls under the provisions of Section 4 Part II of the Land Acquisition Act (Cap. 118 R.E., 2010) ("LAA").

²¹⁰ The GoT will undertake the necessary steps, in collaboration as appropriate with the Project, for the Notice of Intention to Acquire to be issued in accordance with the LAA. The Project shall provide necessary resources to assist the GoT in the delivery of the notices of intention to acquire in line with the LAA, including the approach for absent owners (Sec. 8(1) LAA).

²¹¹ These activities will be completed in liaison with GoT and with the support of district, ward and village authorities.

Each compensation agreement will be based on the values and entitlements confirmed in the final approved Valuation Report and in the Entitlements Framework (Chapter 6).

Compensation agreements (customized to include the compensation options applicable to each PAP) will be presented to the PAPs. This engagement (which will be conducted in a manner sensitive to cultural nuances and literacy levels) will seek to achieve compensation agreements that are clearly understood, transparent and consensual in nature²¹².

Once agreement has been reached with the PAPs, followed by a review period of up to two weeks, the compensation agreements will be signed and witnessed. The compensation agreements will include a spousal consent (where appropriate). At the time of writing, discussions are still underway between the GoT and the Project on the modalities and signing arrangements for the compensation agreements.

In the event that the engagement process fails to gain agreement regarding compensation, the Project will submit to the GoT Acquiring Authority information on PAPs / land areas which the Project has been either: Unable to reach compensation agreement with (this will include where there are incomplete inheritance matters); or refused access to assets and / or land for surveying purposes; or the PAP is absent. The Project will keep the GoT informed throughout the land acquisition process of such cases and work with the GoT to resolve them. The GoT will proceed with subsequent steps for compulsory acquisition as laid down in the LAA (but with the provision that PAPs are offered the same entitlements disclosed in this RAP to meet both national legal requirements and IFS. The Project will establish an escrow style account arrangement to hold compensation funds for such PAPs until resolution of incomplete compensation claims and / or payments.

11.4.2 Payment of Compensation Relocation & Implementation of Livelihood Restoration & Assistance Programs (Step 7)

Payment of Compensation

When compensation is agreed²¹³, as per the details contained in the final signed Compensation Agreements, PAPs will be paid their cash compensation (or, as applicable, arrange for relevant amounts to be placed in escrow) and be provided with other in-kind entitlements such as relocation and livelihood restoration assistance (where eligible).

Cash compensation due to PAPs will be paid on a rolling basis after the compensation agreements have been signed. Cash compensation payments will be deposited directly into the bank account²¹⁴ of the beneficiary and spouse (if married). All payments made will be recorded in an auditable format.

²¹² The Project will only offer rates agreed by the CV for the relevant District / Area / Zone. Rates will not be a subject of negotiation with PAPs. Negotiation will generally be limited to selection of compensation options by eligible PAPs (e.g. cash compensation or in-kind entitlement (where eligible)) and potentially livelihood restoration entitlement options.

²¹³ Or the relevant arrangements following failure of the engagement process are affected by GoT at the Project's request, in coordination with the Project, and in all instances, in accordance with the LAA.

²¹⁴ For very small compensation payments, the Project is evaluating other payment methods for secure provision of such funds to PAPs. These would include PAPs whose total cash value of compensation of < T.Shs.

Where compensation payment is delayed longer than 6-month from approval of Valuation Reports by the Chief Valuer then interest will be applied as required under Tanzania law. Also, where compensation is delayed the additional entitlements under IFS will be reviewed to confirm the requirements of 'replacement cost' are met by compensation packages.

Replacement Land and Replacement Housing

Following the selection of compensation options by PAPs and signing of the compensation agreements, it will be possible to make a more precise determination of land required for replacement housing and agriculture.

Options for suitable plots have already been discussed and continue to be researched by the Project in collaboration with district, ward and village authorities. The aim, is for most replacement land to be in the same village/mtaa or ward as the land previously owned by PAPs (or as close as possible); thus, the replacement plots, where possible, will be Village Land under the jurisdiction of the same village/mtaa.

The Project will support the process with the objective to secure the best available security of tenure as per Tanzanian legislation for PAPs with relevant documents.

The Project will be responsible for the preparation of replacement plots and construction of replacement houses according to house designs prepared by the RAP architect (See Chapter 7). The Project will be responsible for facilitating the registration (as relevant and possible under Tanzanian law) of replacement land and will pay all charges that are accrued from the process of acquiring the land and constructing replacement housing and ancillary structures.

Relocation and Transitional Support

Following the payment of cash compensation and the delivery of relevant in-kind entitlements (i.e. mainly associated with the provision of replacement houses), the Project will coordinate with the GoT to issue the PAPs with a notice to vacate.

Additional activities during this stage will include the provision for salvaging of materials by PAP and the demolition of existing structures as detailed in the final compensation agreements. An important consideration will be ensuring enough time is allowed for PAPs to prepare for salvaging activities and subsequent relocation.

Transitional support will also be provided to complement compensation payments to ensure that PAH's can meet their basic needs and maintain their standard of living once access to their land has been lost and until they have had the opportunity to restore their livelihood to pre- project levels.

Any replacement farmland will be prepared and made available as soon as possible to these PAPs to restore livelihoods as outlined in the LRP (Chapter 8). Additional details on the transitional support to be offered to eligible PAPs to restore livelihoods are outlined in the LRP (Chapter 8).

100,000. However, the minimum trigger amount for such 'very small compensation' payments is subject to ongoing analysis and discussion with potential banking partners.

Livelihood Restoration and Assistance Programs

Chapter 8 presents the LRP. During RAP implementation this activity will give effect to the additional entitlements related to livelihood restoration through:

- Engagement with PAPs to ensure they understand what implementation of their selected livelihood restoration options will involve;
- Refinement of livelihood restoration programs and support to PAPs;
- Discussions with regional and district officials, NGOs and CBOs, to understand existing development projects that may be suitable to support livelihood restoration;
- Liaison with regional and district technical staff to assist with coordination and integration with existing livelihood support initiatives, where applicable;
- Assessing locally based service providers who are able to provide training and post training support and monitoring of livelihood restoration initiatives (refer to Chapter 8 for additional detail on the appointment of service providers); and
- Mobilization of the necessary human, financial and material resources to implement livelihood restoration initiatives.

11.4.3 Granting of Rights (Step 8) and Leasing of Land (Step 9)

The State will undertake all necessary steps to grant to the relevant authority, the rights to the Project required land²¹⁵. The relevant Authority will then provide a lease²¹⁶ to the Project for the required duration. The arrangements for the lease are still under discussion between the Project and the GoT.

11.5 Implementation Roles and Responsibilities

To ensure the Project maintains ownership and accountability of the overall process, the RAP implementation activities, as detailed above, will be managed by the EACOP Project Pipeline Team (PPT), as well as The GoT (particularly TPDC, ME, TPA, MLHSD, TARURA, TANROADS, TANESCO, REA and Regional and District Authorities) will provide strategic input and support. The roles and responsibilities for the RAP Implementation phase are summarized in Table 11-1.

Table 11-1: Roles and Responsibilities for the RAP Implementation Phase

Activity	Project Company / PPT (Project) Role	Government of Tanzania Role
----------	--------------------------------------	-----------------------------

²¹⁵ The granted rights will comply with the principles set out in the IGA (and relevant other agreements in place at that time between the State and the PPT).

²¹⁶ Lease will comply with the principles set out in the IGA (and relevant other agreements in place at that time between the State and the PPT).

Activity	Project Company / PPT (Project) Role	Government of Tanzania Role
[Step 5] Gazettement of Public Purpose, and Conversion of Land to General Land.	<ul style="list-style-type: none"> Provide maps and information (including a list of affected villages) of required Project land per section. Review gazettement area and any orders and / or notices prior to publication in the Gazette. Provide timing to the GoT and input to the wording of notices of intention to acquire if possible. 	<ul style="list-style-type: none"> Prepares, issues and publishes necessary orders and / or notices in Gazette required under the LAA. Undertakes all necessary steps and actions to meet the provisions of the LAA, including for the gazettement and acquisition of land, and for the conversion of certain land (at timing agreed with Project) to General Land as agreed with the Project²¹⁷.
[Step 6] Compensation Agreements		
Entitlements and Compensation Briefings.	<ul style="list-style-type: none"> Conduct additional entitlement briefings at village level to explain and discuss the entitlements to PAPs. 	<ul style="list-style-type: none"> Support provided by GoT in addition to district, ward and village authorities.
Drafting and Signing of Compensation Agreements.	<ul style="list-style-type: none"> Lead the engagement with PAPs and communities to reach compensation agreements. Signatories of Compensation Agreements under discussion with GoT. Determine cases where the GoTs further compulsory acquisition powers need to be engaged and facilitate process, where applicable. 	<ul style="list-style-type: none"> Signatories of compensation agreements under discussion with GoT. Provide support should the engagement process continuously fail to gain agreement over compensation.
[Step 7] Payment of Compensation, Relocation & Implementation of Livelihood Restoration & Assistance Programs		
Payment of Compensation	<ul style="list-style-type: none"> Payment of compensation. (The arrangements for payment of Tanzanian regulatory entitlements are a matter of discussion between the GoT and the Project). 	<ul style="list-style-type: none"> Acquiring Authority for land acquisition. (The arrangements for payment of Tanzanian regulatory entitlements are a matter of discussion between the GoT and the Project.) Oversight of compensation and relocation process.
Construction of Replacement Housing.	<ul style="list-style-type: none"> Preparation of replacement plots for construction of replacement houses. Facilitating the registration of replacement land and payment of all charges that will accrue from the process of acquiring the land and constructing replacement housing. 	<ul style="list-style-type: none"> Support with formal land acquisition, transfer and registration as per Tanzanian legislation.

²¹⁷ This is expected to include, but not be limited to: all required approvals from village, ward, district, regional and national authorities; resolution of any related planning matters; necessary surveys and reports; and notices as prescribed under the legal framework and the publishing of these, as required, in the Government Gazette. Gazettement of the land for the public purpose and conversion of Village and Reserved Land to General Land is to occur simultaneously.

Activity	Project Company / PPT (Project) Role	Government of Tanzania Role
Relocation and Transitional Support.	<ul style="list-style-type: none"> Provide timing and agree modalities of giving PAPs notice to vacate. Provision of transitional support (where required). 	<ul style="list-style-type: none"> Prepares in agreement with the Project Co. / PPT, issues at the precise time requested by the Project Co. / PPT and publishes statutory notices to yield possession (vacate) to PAPs (and affected villages, as required under the LAA)²¹⁸.
Implementation of Livelihood Restoration and Assistance Programs.	<ul style="list-style-type: none"> Refinement of livelihood restoration programs and support to PAPs. Discussions and liaison with regional and district officials & technical staff, NGOs and CBOs. Assess locally based service providers who are able to provide training and post training support. Mobilization of the necessary human, financial and material resources. 	<ul style="list-style-type: none"> Support and potential partnerships with District Agricultural Office. Project to liaise with regional and district official and technical staff.
[Step 8] Granting of Rights and [Step 9] Lease to Land.		<ul style="list-style-type: none"> The GoT will undertake all necessary steps to grant to the relevant authority a Granted Right of Occupancy on required land which comply with the principles set out in the IGA.
		<ul style="list-style-type: none"> The relevant authority to then provide a lease to the Project for the required duration which grants land rights to the Project which comply with the principles set out in the IGA (and relevant other agreements in place at that time between State and the PPT).

11.6 Stakeholder Engagement During RAP Implementation

This section broadly describes the stakeholder engagement activities that will take place during the land acquisition and RAP implementation phase following RAP disclosure.

The objectives of stakeholder engagement during this phase are to:

- Provide feedback to regional, district, ward and village government levels and gain insights into how implementation is progressing;
- Provide feedback to, and gain insights from the LARWG;
- Introduce PAPs to the processes and activities planned to be undertaken as part of the RAP implementation to those affected;
- Explain and ensure that every individual affected household understands their compensation and resettlement options and agreements;
- Ensure that PAPs understand the household relocation process and associated timing, as relevant;

²¹⁸ The statutory Notice to Yield Possession may be issued as part of the Notice of Intention to Acquire under the LAA. The Project will work with the government to agree the modalities of giving notice to vacate to PAPs under the IFS.

- Ensure that meetings and information are accessible, specifically for affected stakeholders;
- Ensure the identification and participation of vulnerable groups (including vulnerable minority and / or ethnic groups) in information disclosure and consultation activities; and
- Ensure that all resettlement activities proceed smoothly and in a way that minimizes and / or avoids difficulties for PAPs and PAHs.

Following the disclosure of the RAP, all RAP engagement activities will transition to management by the EACOP Project RAP implementation team, who will build on the structures and processes set up by the RAP planning consultant team during the RAP planning phase. During the transition, the EACOP Project RAP implementation team will:

- Undertake land acquisition and resettlement engagement to support implementation of the resettlement and livelihood restoration activities. This will align within the overarching EACOP Project Stakeholder Engagement Framework and Stakeholder Engagement Plan (as appropriate);
- Set up daily management structures and continue training and mentoring of office and field-based members of the EACOP Project RAP implementation team; and
- Develop any required additional management tools to provide quality assurance of engagement-related records including meeting notes, stakeholder records, commitments, concerns and grievances.

The stakeholder engagement execution plan for RAP implementation is summarized in Table 11-2. This aligns with the stakeholder engagement approach and activities during RAP planning.

In summary, during resettlement implementation, engagement will be required for:

- Entitlement briefings for each PAP with the support of district, ward and village authorities;
- Agreement and signing of compensation agreements;
- Payment of compensation processes;
- Implementation of livelihood restoration and assistance programs at regional, district, ward and village level (e.g. to ensure coordination and integration with existing livelihood support initiatives);
- Relocation activities such as serving notices to PAPs and communicating notice periods;
- Provision of an ongoing cycle of updates and feedback on implementation progress to affected stakeholders, including modifications to the RAP process, as needed; and
- Monitoring the process and outcomes of RAP implementation.

Vulnerable PAPs and PAHs will receive specific, targeted support to enable their equitable participation in engagement activities and ensure awareness of additional support options available (as outlined in Chapter 9).

Table 11-2: Stakeholder Engagement Execution Plan for RAP Implementation

Stakeholder Group	Task Description	Deliverables
Engagement with regional and district authorities.	Regular feedback and guidance meetings with regional and district authorities to: <ul style="list-style-type: none"> • Provide updates on activities completed; • Discuss upcoming activities; • Seek guidance on regulatory requirements; • Provide feedback on grievances received and resolved; and • Solicit feedback and adapt plans accordingly. 	Minutes of meetings. Attendance registers. Meeting invitations.
Engagement with the LARWG.	Regular feedback and guidance meetings with the LARWG to: <ul style="list-style-type: none"> • Provide updates on activities completed; • Discuss upcoming activities; • Seek guidance on regulatory requirements; • Provide feedback on grievances received and resolved; and • Solicit feedback and adapt plans accordingly. 	Minutes of meetings. Attendance registers. Meeting invitations.
Engagement with PAPs (incl. PAHs and PACs).	Engagement will include: <ul style="list-style-type: none"> • Disclosure of resettlement agreement information and notification to PAPs and PAHs regarding resettlement options; • Regular community meetings with PACs to disclose relevant information and provide guidance to PAPs on resettlement options as well as provide updates on the progress of the resettlement process; • Record options / preferences of PAPs / PAHs; • Notification to PAPs of key activities in relation to payment of compensation and commencement of the construction of replacement housing; • Accompanying PAPs to the site / s where replacement housing is being constructed (as per agreed schedule of visits); • One-on-one engagement with PAPs to support understanding of an agreement on compensation / support packages; • Management of complaints and grievances process; • Ongoing monitoring and evaluation related engagement with PAPs, RAP implementation partners and other related stakeholders; and • Discussions and activities related to livelihoods restoration. 	Notes / minutes of discussions / meetings. Notifications of meetings. Signed agreements.

12 IMPLEMENTATION BUDGET AND SCHEDULE

12.1 Budget Estimate

An estimated budget for the implementation of the Geita RAP has been developed based on the displacement metrics reported in Chapter 6. Budgeting at this stage of the resettlement process is important to help the Project complete detailed planning and resourcing prior to the onset of implementation activities.

The main components of this budget are presented in Table 12-1. All cash compensation contained in the VRs and Compensation Schedules (see Chapters 4 and 6) has been included in the budget. In-kind and other entitlements (e.g. Replacement Housing and Livelihood Restoration) will also be monetized for budgeting purposes.

Table 12-1: Summary of RAP Implementation Budget Components

Budget Main Component	Summary Description
Land.	The cost of land is a function of the area of land to be acquired by the Project. For permanently acquired land, market rates as determined during professional valuation apply. These rates are dependent on location and on the category of land (residential land, bare farmland, community land, etc.). The budget uses the CV approved rates (see Chapter 6). When estimating the cost of land, allowance has been made for orphaned land that has been identified in the VRs. Transaction costs (10%) have been included in the cost of land as an additional entitlement under IFS.
Residential and Other Structures.	<p>Owners of Project-affected occupied and complete residential dwellings will have a choice between cash compensation, and the provision of replacement structures. The RAP implementation budget has adopted a conservative approach – i.e., it has assumed that all PAPs will choose replacement housing rather than cash compensation.</p> <p>Replacement of adequate housing is required under the international standards, and costs for provision of 'adequate housing' have been included in the budget.</p> <p>Owners of ancillary structures will also be eligible for cash compensation for these affected structures, with this also included in the RAP implementation budget. The compensation cost of structures has been determined on the basis of replacement value (not including depreciation).</p>
Crops and Economic Trees.	<p>During asset valuation surveys all affected crops and economic trees have been recorded, valued, and owners of these are eligible for cash compensation which has been included in the budget.</p> <p>IFC PS5 "requires loss of assets to be compensated at replacement cost". IFC PS5 defines replacement cost as the market value of the assets plus transaction costs. Market value is the value required to allow affected communities and persons to replace lost assets with assets of similar value. In order to meet this standard and provide for replacement cost for loss of crops and trees, the approved 2012 crop compensation values have been increased using compounded inflation rates from 2013 to the first half of 2018. The compounded or cumulative inflation rate for the years (2013-2018) is 45.44%.</p>

Budget Main Component	Summary Description
Allowances.	<ul style="list-style-type: none"> • Disturbance Allowance: Physically and economically displaced households are eligible for a disturbance allowance, which is defined in the Valuation and Valuers Registration Act, 2018, Section 13 (this Act is also described as The Valuation and Valuers (General) Regulations, 2018); • Physically displaced persons are also eligible for the following allowances as defined under the regulations, which have been included in the budget: <ul style="list-style-type: none"> ○ Accommodation Allowance based on the rent that the affected property would command, multiplied by the number of months provided in the law – i.e. 36 months; and ○ Transport Allowance: i.e., the amount equivalent to transporting 12 tons either by rail / road for 20 kilometers from the point of displacement.
Graves and Ritual Sites.	<p>In terms of Tanzanian legislation, compensation for relocation of graves comprises two (2) components, which have been allocated within the budget:</p> <ul style="list-style-type: none"> • Compensation to relatives of the deceased for reasonable expenses associated with rituals involved in exhumation of graves; and • Costs involved in the removal, transportation, reinstatement and re-interment of the grave or dead body, as defined in the Graveyard Removal Act (No. 9 of 1969). <p>The budget includes the costs for moving the (165) affected graves in the Geita Region and the compensation payments to relatives required under the legal framework.</p>
Livelihood Restoration & Transitional Support.	<p>The budget for livelihood restoration measures includes three (3) main components:</p> <ul style="list-style-type: none"> • Costs associated with, transitional support and / or food security measures to accommodate the physically and / or economically displaced individuals prior to replacement land and / or replacement housing being available. • Costs associated with individual, and household-level livelihood restoration measures: Budget based on the number of PAHs and PAPs multiplied by a standard amount per household that incorporates the cost of typical elements of livelihood restoration programs (agricultural improvement training, food packages, seed capital for alternative enterprises, skills training, money management training, etc.). This standard cost per household will consider normal estimates from service providers typically involved in the provision of such programs. Livelihood restoration programs are scaled in terms of the intensity of livelihood impacts that affected households will experience; where a household will lose only a small proportion of its land, the impact on the livelihoods of its members is unlikely to be significant; and • Costs associated with community or village-level livelihood restoration measures: Budget allowance will be based on the number of villages affected by the Project and impacts on communal land etc.
Vulnerable Persons and Households.	<p>Additional assistance required by vulnerable persons or households will be assessed on a case-by-case basis during resettlement implementation, building from a list of potentially vulnerable PAHs developed during the RAP planning phase. An allowance will be made in the RAP implementation budget for this additional assistance and will be monitored closely.</p>
RAP Implementation.	<p>Implementation resources will be required to undertake RAP and LRP implementation activities. EACOP has committed to maximizing national content in the composition of these teams. Budget for the implementation resources is based on the estimated level of effort associated with each task (in terms of man-days) multiplied by the average daily cost of the resources required to perform those tasks. The level of effort involved in each task is in turn based on the number of affected households and villages that the implementation will need to cover.</p>

It should be noted that at this stage the budget is indicative and will require further refinement following the finalization of the following activities:

- Signing of household compensation agreements, which will finalize the following details:
 - Decision relating to compensation options by the PAP (e.g. cash compensation or replacement housing); and
 - Identification, allocation and securing of replacement housing, and agricultural land.
- Procurement of replacement housing building contractor, and updating of construction costs; and
- Final identification of livelihood restoration partners and initiation of activities and programs.

12.2 Indicative RAP Implementation Schedule

Tables 12-2 and 12-3 provide an indicative RAP development and implementation schedule. It is important to note, as detailed in Table 12-2, that following finalization of the RAP, there is a GoT review period followed by update of the RAP, and public disclosure.

During further community sensitization meetings, PAP entitlement briefings, and ongoing Project CLO engagements, updates will be provided to PAPs and relevant stakeholders on the RAP implementation schedule.

It is anticipated that the completion of implementation activities in the Geita Region will take approximately 21 months. It is important to note that several factors can significantly delay the implementation process, hence proactive management is necessary. For example, proceeding with implementation is dependent on GoT processes and approvals, such as approval of the Valuation Reports and issuing of relevant notices required under the Land Acquisition Act.

In addition to the key RAP implementation activities listed in Table 12-3, there are a number of activities listed that will continue beyond the 21-month implementation period. These include but are not limited to:

- Stakeholder Engagement;
- Livelihood Restoration and Assistance Programs; and
- Monitoring and Evaluation Programs.

Table 12-2: High-level Schedule for RAP Development and Disclosure

RAP Planning	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	
Development of the Resettlement Policy Framework																												
Step 1: Resettlement Policy Framework																												
Finalization and disclosure of the RPF																												
Step 2: Detailed Surveys and Valuation																												
Determination of base compensation rates																												
Confirmation of land areas for surveys																												
Preparation and planning for surveys																												
Announcement of surveys and cut-off date																												
Surveys and valuations (including additional data collection)																												
Validation of valuation schedules																												
Preparation of Valuation Reports & Compensation Schedules																												
Disclosure of individual Compensation Schedules to PAPs																												
Step 3: Final Valuation Reports																												
Compilation of final Valuation Reports and Compensation Schedules																												
Sign off (Village/Ward/District/DC Level)																												
Submission of Valuation Reports and Compensation Schedules to Chief Valuer																												
Step 4: RAP and LRP Development																												
Development of socio-economic baseline																												
Replacement land and resettlement housing (identification and concept)																												
Preparation of Draft RAP																												
Submission of Draft RAP to GoT for 30 day comment period																												
Finalisation of RAP (including final displacement metrics from VR)																												
Disclosure of RAP																												

Table 12-3: High-level Schedule for RAP Implementation

RAP Implementation	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21
Step 5: Public Purpose and Conversion to General Land (Government of Tanzania)																					
Necessary Documentation by GoT for Gazettement & Notice of Intention to Acquire	█	█	█																		
Conversion of Village Land & Reserved Land to General Land (Inc. required Notices)				█	█	█	█	█	█	█	█										
Step 6: Compensation Agreements																					
Serving Notice of Intention to Acquire Land		█	█	█																	
Preparation of Entitlement Briefings and Compensation Agreements	█	█	█	█																	
PAP Entitlement Briefings			█	█	█	█	█														
PAP Compensation Agreements					█	█	█	█													
Step 7: Payment of Compensation, Relocation & Implementation of LRP																					
Payment of compensation						█	█	█	█												
Notice to Vacate/Yield Possession						█	█	█	█	█	█										
Secure and prepare replacement land (agricultural and construction purposes)				█	█	█	█	█	█	█	█										
Procurement of house construction contractors	█	█	█	█	█	█	█	█	█	█	█										
Construction of replacement housing							█	█	█	█	█	█	█	█	█	█					
Relocation - Economically Displaced PAPs (and transitional support where necessary)								█	█	█	█	█	█	█	█	█					
Relocation - Physically Displaced PAPs (and transitional support where necessary)															█	█	█	█			
Livelihood Restoration and Assistance Programs:																					
Engagement with PAPs and refinement of LRP						█	█	█													
Engagement with district officials and potential service providers						█	█	█													
Mobilization of human, financial and material resources						█	█	█													
Operationalize Livelihood Restoration Programs (ongoing for 2-3 years until livelihoods restored)									█	█	█	█	█	█	█	█	█	█	█	█	█
Step 8: Rights Granted to GoT																					
Right of occupancy/rights to GoT															█	█	█	█	█		
Step 9: Lease for Land to Project																					
Lease																				█	█

13 MONITORING AND EVALUATION

13.1 Introduction

The Project will finalize a Monitoring and Evaluation (M&E) and reporting system prior to the implementation of the RAP. This will include both internal, external and participatory monitoring and reporting processes to ensure complete and objective information is provided. The RAP M&E and reporting process will be integrated into a larger project-wide environmental and social management process that will collectively inform the management of Project-related impacts.

The performance monitoring indicators will be selected to measure inputs, outputs, and outcomes for resettlement activities, and will aim to provide feedback to the Project as well as to relevant stakeholders on the RAP implementation process. The whole M&E process will be linked to the household level socio-economic and asset surveys undertaken for the development of the RAP. The information from these surveys will provide the baseline and indicators against which to monitor and evaluate progress, therefore the involvement of the displaced persons in the process will be vital.

This process will also confirm the levels of success of livelihood restoration measures and for that reason M&E of the impacts of resettlement will continue for a reasonable period after all resettlement and related development activities have been completed.

The section below sets out the Monitoring and Evaluation framework that will be used to set up the resettlement M&E procedures and includes:

- M&E process, objectives and purpose;
- M&E during the construction phase;
- Types of M&E including:
 - Process M&E;
 - Compliance M&E;
 - Completion audit;
 - Ex-post evaluation; and
- Reporting.

13.2 Monitoring and Evaluation Process

The key objectives of the M&E process include:

- Confirming the legal compliance of the RAP implementation;
- Verifying that the implementation of livelihood restoration programs are adequate and appropriate for re-establishing prior levels of livelihoods;
- Ensuring the ongoing management and redress of resettlement related grievances;
- Identify problems and successes early to allow timely corrective actions;

- Ensuring that correct procedures are followed; and
- Assess the quality, progress and impact of RAP implementation.

In particular, the program will track progress with:

- Physical resettlement;
- Compensation payments;
- Livelihood restoration; and
- Status of vulnerable households.

13.2.1 Purpose of Monitoring

The purposes of resettlement monitoring are to verify that:

- Actions and commitments described in the RAP are implemented fully and on time;
- Eligible people receive their full compensation within agreed timeframes;
- PAPs who are physically displaced and / or require specific transitional support, especially where replacement housing and / or land is not available at the point of displacement, will be individually monitored until settled into their replacement house (where this option is selected). This will include the monitoring of their restoration of livelihoods;
- Commitment to livelihood restoration / improvement is recognized, monitored, and documented;
- RAP actions and compensation measures are effective in enhancing or restoring livelihoods (both in the form of living standards and income levels);
- Every effort is made to ensure that PAPs identified as vulnerable can attend meetings or be consulted separately if required and provided with additional assistance (as per their vulnerability) in re-establishing their livelihoods;
- Community-level impacts are recognized, and mitigation measures are implemented;
- Changes in RAP procedures are made during implementation (so that compensation measures are effective in restoring livelihoods);
- Construction activities are closely followed and all additional land acquisition, crop compensation and construction damage issues are identified and addressed; and
- Complaints and grievances lodged by PAPs are followed-up and appropriate corrective actions are implemented.

13.2.2 Purpose of Evaluation

The purpose of evaluation programs, in contrast to monitoring, is to provide focused, independent assessment, of the overall success of the land acquisition, at regular intervals. The systematic and objective evaluation of the RAP implementation and results will be guided by the five Organization for Economic Cooperation and Development (OECD) Evaluation Criteria summarized in Table 13-1.

Table 13-1: OECD Evaluation Criteria

Relevance	Are we doing the right thing? How important is the relevance or significance of the intervention regarding local and national requirements and priorities?
Efficiency	Are the objectives being achieved economically by the development intervention? How big is the efficiency or utilization ratio of the resources used?
Effectiveness	Are the objectives of development interventions being achieved? How big is the effectiveness or impact of the Project compared to the objectives planned?
Impact	Does the development intervention contribute to reaching the overall objective? What is the impact or effect of the intervention in proportion to the overall situation of the target group or those affected?
Sustainability	Are the positive effects or impacts sustainable? How is the sustainability or permanence of the intervention and its effects to be assessed?

In line with the above guiding criteria, and further elaborated in the RAP Evaluation Framework in Table 13-2, the proposed evaluation programs will include the following:

- Evaluation of monitoring results, and actions are taken as a result;
- Determination of compliance with the VPP / LRP / RAP, Company policies, Tanzanian requirements, and international standards;
- Evaluation of emergent, mid and long-term development indicators, including the key performance indicators defined as part of the monitoring program;
- Identification of any unforeseen, or inadequately addressed risks or problems; and
- Recommendations designed to correct identified problems and / or enhance the achievement of resettlement goals and objectives.

Ongoing meetings of the LARWG will serve as opportunities to collectively evaluate progress towards achievement of LRP / RAP objectives. An annual external evaluation may also be conducted of the livelihood restoration and resettlement programs.

A completion audit, conducted approximately three (3) years after the initiation of the LRP, will constitute the final step in the evaluation program.

A system for data collection is to be established, this will include resources required to carry out the monitoring. The data collected is to be entered into a database, which will allow for a comparison between the monitoring events.

The Project will be responsible for providing the human resources, training, funds and facilities for implementing the monitoring program, including any external evaluations. Monitoring programs will typically be designed and implemented by the RAP implementation team in collaboration with those affected, and with other stakeholders.

The monitoring activities will be considered to be complete when all construction activities are completed, and the adverse impacts of resettlement have been addressed in a manner consistent with the objectives stated in the RAP and resulting resettlement agreements.

Table 13-2: RAP Implementation Evaluation Framework

Question area	Learning Questions	Approach	Data collection
Relevance	Are the LRP outputs relevant and well-conceived in the context of IFC PS5?	This question will be answered through a combination of activities including focus group discussions with PAPs as well as specific questions on relevance included in the monitoring of the activities of the RAP implementation team.	Internal ME; Participatory Inquiry.
Efficiency	<p>Have the outputs and related activities been implemented in a timely and cost-effective manner?</p> <p>Have resources been utilized cost effectively?</p> <p>Do the quantitative and qualitative results justify resources used?</p>	<p>Administrative data will be collected for all RAP activities, including contracts, travel, logistics, etc. to quantify the numbers of organizations, institutions and people reached and at what cost.</p> <p>Records will be kept of those attending and completing training provided.</p> <p>Overall costs per individual for changes in the outputs and related activities will be disaggregated and tracked.</p>	<p>Internal ME.</p> <p>External ME.</p>
Effectiveness	<p>What changes in resettlement behavior, relationships or activities of the key service providers and PAPs is the Project generating?</p> <p>To what extent have the RAP outputs been achieved and are contributing to these changes?</p> <p>What barriers and constraints have affected the outputs?</p> <p>What can be learned from this to date and what improvements could be made and by whom?</p>	<p>These questions will be answered through a combination of guided key informant interviews and focus group discussions on significant changes.</p> <p>These will be administered with all PAPs and with representatives of the host community, and key stakeholders at the district level.</p> <p>They will provide data on overall changes in the livelihood and income generation capacities and behaviors related to the objectives of IFC PS5 and guided by the evaluation and monitoring framework output indicators. They will also enable identification of unexpected consequences that can be attributed directly or indirectly to the resettlement.</p> <p>The data collected and analyzed will be compiled into quarterly progress reports, that are reviewed and reflected upon to inform any adjustments in the RAP implementation approach.</p> <p>Direct contributions to gender equity and women's empowerment will also be considered in answering these questions.</p>	<p>Internal ME,</p> <p>External ME</p> <p>Participatory Inquiry.</p>

Question area	Learning Questions	Approach	Data collection
Impact	<p>In what ways have resettlement and livelihood interventions and investments lead to sustainable livelihood restoration?</p> <p>To what degree have community development activities lead to improvement in the welfare of Project-affected persons, households and communities?</p> <p>Are there any broader positive or negative impacts on the resettlement communities, if so, what are they?</p> <p>Is there collaboration on issues related to land access?</p>	<p>The answers to these questions will involve a summation of the RAP approach, the relevance, efficiency and effectiveness questions about the outputs. These will also provide the measures for the output indicators.</p> <p>The RAP will be evaluated and monitored according to the output areas, through review of internal progress reports, follow-up focus group discussion and key informant interviews to assess changes and outcomes.</p> <p>These questions will also frame the completion audit to assess the RAP impact.</p>	External ME
Sustainability	<p>To what extent is the intervention contributing to improved livelihoods, assets enhancement and income generation capacity of PAPs in the context of integration in the resettlement community?</p>	<p>Answers will come from a combination of RAP evaluation, Project level outcome and output monitoring by the RAP implementation team and external consultants. The PAPs will be included in all stages of data collection and feedback provision and data will be disaggregated to reflect various groups including women, children, and youth.</p>	External ME

13.2.3 Monitoring and Evaluation During Construction

Resettlement M&E is generally not carried out in isolation from the overall Environmental and Social M&E due to the range of related and / or integrated impacts resulting from the construction phase that could have a bearing on livelihoods.

Outcomes of monitoring related to impacts from construction e.g. dust, noise, vibration, water quality, health, community safety, and security will feed into a broader overall environmental and social monitoring system that will also inform the RAP process and the possible impacts on ongoing livelihoods and on livelihood restoration.

It is also possible that additional land may be required once construction activities start. If this additional land is a permanent Project requirement then additional land acquisition will be required. An integrated management process will ensure that additional permanent land acquisition is completed in accordance with the principles outlined in the RAP and RPF. Land required for temporary use during construction will be accessed according the requirements of the Project's Land Management Plan.

13.2.4 Types of Monitoring and Evaluation

Four (4) types of M&E will be conducted as part of the RAP implementation, consisting of:

- Process monitoring and evaluation;
- Compliance monitoring and evaluation;
- Completion audit; and
- Ex-post evaluation.

Process Monitoring

This is an internal monitoring activity that tracks the impacts of the resettlement implementation process on the PAPs, PAHs and host communities. It ensures efficient resettlement implementation management through:

- Identification and timeous implementation of corrective actions;
- Providing an opportunity for those involved in the programs to take stock by evaluating the work honestly;
- Formulating improvements; and
- Allowing those involved in the implementation who have first-hand experience and are often acutely aware of the weaknesses.

This M&E will start when land acquisition notices are distributed and continue until the completion of the Project construction phase.

Achieved progress will be measured against planned deliverables and the quality of services and construction will be reviewed. A quarterly report by the RAP implementation team will be distributed among the relevant teams for responsible individuals and / or groups to take appropriate actions (including corrective actions and / or improvements) where relevant.

As a minimum, the following components will be monitored:

- Community consultations implemented and on-going;
- Grievance procedures in place and functioning (claims addressed);
- Transfer of entitlements and compensation payments disbursed;
- Transitional support program monitoring;
- PAPs identified as vulnerable;
- RAP implemented in line with RAP principles, procedures and timeframes;
- RAP funding for livelihood restoration is implemented fairly and transparently;
- Progress with income restoration and development activities; and
- Monitoring and Evaluation reports submitted.

Indicators associated with the process monitoring are set out in Table 13-3.

A monitoring plan will be established by the RAP implementation team who will refine relevant elements in the RAP.

Table 13-3: Monitoring Matrix

Component Activity	Indicators	Information Source	Monitoring	Frequency
Physical Resettlement.	<ul style="list-style-type: none"> • Number of households physically resettled including: <ul style="list-style-type: none"> - resettled to replacement houses (where selected); - resettled who selected cash compensation. 	Implementation management records generated by the Project and / or RAP implementing agent.	Process monitoring. Compliance monitoring. Completion audit.	Monthly for process monitoring, bi-annual for compliance monitoring and once off for completion audit.
Economic Resettlement.	<ul style="list-style-type: none"> • Number of households economically resettled. 			
Compensation.	<ul style="list-style-type: none"> • Number of PAPs to whom the compensation packages have been disclosed; • Number of households that have signed the compensation agreement; • Number of households that have received their cash compensation payments and other entitlements; • Number of households allocated replacement houses if applicable. 			
	<ul style="list-style-type: none"> • Compensation has been delivered to all as per entitlements and can be demonstrated to have achieved replacement; • Has community infrastructure been replaced? 	PAP specific qualitative and quantitative compared to baseline information and GIS records, VRs, direct site observation, photos, interviews.	Compliance monitoring. Completion audit.	Annual for compliance monitoring and once off for completion audit.

Component Activity	Indicators	Information Source	Monitoring	Frequency
Demographic Changes to PAPs esp. impacted households.	<ul style="list-style-type: none"> Household demographic profile; Educational status of household members; Health status of household members; Food security; Asset ownership; Access to services; Land holding; Income and expenditure. 	Baseline survey.	Monitoring survey conducted by compliance monitor.	Annual compliance monitoring.
Replacement land and plots.	<ul style="list-style-type: none"> Number of households allocated replacement land/supported to secure replacement land; Number of new plots of land legally transferred and registered (as appropriate) and documents provided to PAP. 	Implementation management records generated by the Project and / or RAP implementing agent.	Process monitoring. Compliance monitoring. Completion audit.	Quarterly for process monitoring, bi-annual for compliance monitoring and once off for completion audit.
Livelihood Restoration.	<ul style="list-style-type: none"> Number of households enrolled for the livelihood restoration program; Status on on-going income restoration activities; Food security of PAPs from handover to 6-months. 			
	<ul style="list-style-type: none"> Have livelihoods been restored? 	PAP specific qualitative and quantitative compared to baseline information and GIS records, direct site observation, photos, interviews.	Compliance monitoring. Completion audit.	Annual for compliance monitoring and once off for completion audit.
Vulnerability.	<ul style="list-style-type: none"> Number of vulnerable households supported during the transition period. Type of support given to vulnerable households. 	Implementation of management records generated by the Project and / or RAP implementing agent.	Process monitoring. Compliance monitoring. Completion audit.	Monthly for process monitoring, bi-annual for compliance monitoring and once off for completion audit.
	<ul style="list-style-type: none"> Evaluation of assistance given to vulnerable categories. 	PAP specific qualitative and quantitative compared to baseline information direct site observation, photos, and interviews.	Compliance monitoring. Completion audit.	Annual for compliance monitoring and once off for completion audit.

Component Activity	Indicators	Information Source	Monitoring	Frequency
Grievances.	<ul style="list-style-type: none"> Number of grievances received; Number of grievances resolved; Number of grievances pending; Number of Project grievances forwarded to the Court; Number of Project grievances resolved at the District Land and Housing Tribunal. 	Implementation of management records generated by the Project and / or RAP. Implementing agent.	Process monitoring. Compliance monitoring. Completion audit.	Monthly for process monitoring, bi-annual for compliance monitoring and once off for completion audit.
RAP Completion Schedule.	<ul style="list-style-type: none"> RAP entitlement delivered in a timely fashion to works contractor and to budget. 	Implementation management records.	Process monitoring.	Monthly for process monitoring.
Data Management.	<ul style="list-style-type: none"> Use of data and logical storage; Accessibility of files and security; Completeness of records. 	The Project and / or RAP. Implementing agent records, analysis and interviews—generated by compliance monitoring.	Compliance monitoring. Completion audit.	Annually for compliance monitoring and once off for completion audit.
Lessons Learned.	<ul style="list-style-type: none"> Overview of lessons learned. 	Analysis and interviews—generated by compliance monitoring and completion audit.	Compliance monitoring. Completion audit.	Annual for compliance monitoring and once off for completion audit.

Compliance Monitoring

This type of monitoring is aimed at establishing whether resettlement implementation is meeting the key objectives as defined in the RAPs / LRPs. It will be based on both:

- Quantitative monitoring in the form of follow-up socio-economic surveys to compare changes in household characteristics relative to baseline conditions (reported in Chapter 5); and
- Qualitative or participative monitoring involving consultation with stakeholders to elicit their views and inputs.

Compliance monitoring will be on-going during RAP implementation and will:

- Provide the Project with an assessment of socio-economic and other impacts arising from the resettlement process;
- Determine the impact of, and responses to, livelihood restoration activities;
- Monitor the adaptability of households, vulnerable households; vulnerable ethnic groups; and
- Identify adjustments in the implementation of the RAP, and the need for corrective action plans.

Tasks to be undertaken will include:

- Review of the RAP, overall Environmental and Social Management Plan, and other Project-related documents that are relevant for the monitoring, including internal

monitoring reports and addenda to overall Environmental and Social Impact Assessments developed for the Project;

- Review of the Grievance Register and actions taken in response to grievances;
- Reviewing compliance at regular intervals during the implementation process;
- Detailed discussions with Project personnel, including the implementation team, social investment team, stakeholder engagement team, and contractors;
- Consultations with all households, and eventually a stratified sample, of households who were resettled to confirm the ability of the households to restore their livelihoods following the resettlement;
- Confirmation that PAPs received due compensation in line with the entitlement framework;
- Consultations with a sample of people who have registered grievances;
- Discussions (in the form of key informant interviews or focus group discussions) with district, ward, and village leaders; and
- Discussions with any civil society groups who are involved in livelihood restoration activities, or who have established or presented themselves during the implementation process.

Compliance monitoring shall be undertaken quarterly during implementation and for two (2) years following resettlement, after which it will be undertaken bi-annually, with key compliance audits to be implemented at the five (5) and ten (10) year post-implementation marks. Quantitative surveys should be a sample sufficient to achieve at least a level of 90% confidence with a 10% margin of error.

Specific engagement activities to be undertaken as part of ongoing qualitative impact and compliance monitoring are outlined in Table 13-4.

Table 13-4: Stakeholder Engagement as Part of Monitoring and Evaluation during Resettlement Implementation

No	Tasks	Stakeholder Engagement Activities	Stakeholders	Medium
1.	Monitoring performance of RAP implementation ²¹⁹ .	<ul style="list-style-type: none"> • Provide periodic feedback using a structured report to authorities; and • Develop monitoring database (this will form part of the social performance monitoring carried over from the construction phase). 	<ul style="list-style-type: none"> • CLOs; • PAPs; • PACs; • Village and ward councils; and • NGOs and CBOs. 	<ul style="list-style-type: none"> • Regular village-level meetings to ensure that the information provided is considered as part of the monitoring process; and • Monitoring database to track progress against set criteria and objectives.
2.	Monitor vulnerable groups' ability to adapt to their new environment ²²⁰ .	<ul style="list-style-type: none"> • Establish and manage feedback structures. 	<ul style="list-style-type: none"> • Village and ward councils; and • Vulnerable groups. 	<ul style="list-style-type: none"> • Focus group meetings; • CLOs who will return periodically to vulnerable households to determine how well they are able to re-establish themselves; • Suggestion boxes; • Grievance records; and • Capacity building initiatives.
3.	Ongoing consultation with resettled households and host communities (monitoring period to be determined by Project).	<ul style="list-style-type: none"> • Develop a schedule for setting up regular meetings; • Determine important aspects to discuss with PACs, NGOs, etc. based on trends observed in the grievances received; and • Develop printed materials and reports for distribution that provide updates on post-implementation RAP activities. 	<ul style="list-style-type: none"> • PACs; • PAPs; • Regional and district authorities; and • Relevant NGOs and CBOs. 	<ul style="list-style-type: none"> • Focus group meetings; • Posters / notice boards; • Pamphlets; • CLOs; and • Grievance records.

Completion Audit

A completion audit will be conducted, by an independent third party to verify that the RAP implementation has met the necessary standards and restored or improved the livelihoods of the PAPs. The completion audit will assess implementation against the criteria developed in the M&E framework, previous M&E reporting and the original socio-economic baseline. The key objectives of the completion audit are:

- Assess the effectiveness of measures to avoid and minimize displacement impacts by comparing actual Project impacts on land and people versus those documented in the RAP;

²¹⁹ Monitoring during this phase will be guided by the grievance mechanism, suggestion boxes and the village leadership who will be able to provide information on how PACs and PAPs experience the process.

²²⁰ The IFC provides guidelines for monitoring vulnerable groups, which include identifying key individuals and groups within the vulnerable persons group, ensuring rightful representation and creating a safe environment for discussions to take place.

- Verify that all entitlements and commitments described in the RAP have been delivered;
- Determine whether RAP measures have been effective in restoring or enhancing PAP's living standards and livelihood;
- Check on any systemic grievances that may have been left outstanding; and
- Identify any corrective actions necessary to achieve completion of RAP commitments.

The timing of the completion audit will largely be guided by several factors, as described below, however it is anticipated to be three (3) years after the initiation of the LRP:

- PAPs must have been relocated to their new location (physical displacement) and be fully established;
- Agricultural activities on replacement land must have been reinstated. (It can typically take at least three seasons to reach previously achieved yields); and
- Longer observation periods between the impact and completion audit can eliminate the effect of natural fluctuations such as drought.

Indicators to be evaluated will include (but are not limited to):

- Changes in livelihood strategies and sources of income;
- Changes in status of vulnerable households (adaptability);
- Changes in agricultural yield / produce (quantity / quality) and income from farming;
- Changes in small business activities / economic activities other than agriculture;
- Changes in household income and expenditure patterns;
- Changes in household structure (size and composition);
- Changes in health patterns / incidence of diseases;
- Community cohesion / social stability (including for resettlement host communities); and
- Management / maintenance of replacement houses and community facilities.

The completion audit will also set out the terms of reference for the ex-post evaluation.

Ex-post Evaluation / Post-Project Evaluation

An ex-post evaluation is generally conducted three (3²²¹) years after the Project completion with the emphasis on reviewing the effectiveness and sustainability of the Project by assessing the long-term impact that resettlement has had on PAPs and host communities, and whether compensation and livelihood restoration initiatives achieved the intended benefits in a sustainable manner.

²²¹ The ex-post evaluation timing will be determined by the completion audit.

This evaluation also aims at deriving lessons learned and recommendations to improve the Project and to help plan and implement more effective and efficient projects.

The terms of reference for the ex-post evaluation will be determined by the completion audit team in conjunction with the Project, and if deemed necessary, in consultation with key additional stakeholders. Issues and associated indicators to be examined will be determined by the results of the completion audit.

The ex-post evaluation will be undertaken by a qualified independent party.

13.3 Reporting

Monitoring reports will be prepared and are likely to include, but not be limited to, (per monitoring type):

- **Process monitoring:** Monthly internal reports on Project progress and issues. These reports will be for project management and technical team use and will be accompanied by any suggested resolutions and mitigation measures, to pre-empt larger issues. As part of ongoing monitoring relevant feedback will be provided to PAPs e.g. via the EACOP CLOs.
- **Compliance monitoring:** An independent monitor will review the performance of the RAP implementation bi-annually for up to two (2) years following resettlement, after which it should be undertaken at least annually, with a key compliance audit to be done after three (3) years. As part of ongoing monitoring, relevant feedback will be provided to PAPs e.g. via the EACOP CLOs; and monitoring results required for any regulatory purposes will be provided to the relevant government authorities.
- **Completion audit:** This will be completed post-implementation (approximately three (3) years after relocation of PAPs). A suitably experienced, independent third-party will conduct this audit. Once the completion audit has been concluded, and any corrective actions arising therefrom undertaken, the resettlement program shall be deemed complete. At this point, the Project will end its resettlement monitoring program, but may decide to undertake a post-project evaluation.
- **Ex-post evaluation (or post-project evaluation):** A third-party audit to be completed approximately three (3) years following the Completion Audit. The necessity and scope of the post-project evaluation will be determined in consultation with the relevant project team and stakeholders.

In terms of ongoing monitoring, the project team will arrange for all necessary provisions to assure stakeholder engagement during the monitoring phase. Thereby, the Project will endeavor to involve independent third parties or to facilitate the community to participate in monitoring, where practical and acceptable by the communities concerned.

In terms of reporting, the Project will establish regular communication and reporting channels back to the communities and individuals impacted and concerned, whether through non-technical summaries of progress updates, engagement activities, public meetings, or targeted issue-based hearings.

Appendix A

RAP Survey Forms

Part A: Data Collection Information

- 1 PAP Identification (property identifier):
- 2 Date:
- 3 Village:
- 4 Ward:
- 5 Full name of PAP (land owner/user):
- 6 Mobile number:
- 7 Full name of spouse:
- 8 Mobile number:
- 9 If not the landowner, provide full name of the landowner/community/entity:

Part B: Absenteeism and Refusals

- 10 If PAP refuses to participate in land adjudication (recording property boundary), provide reason?
- 11 In case the PAP is absent schedule an alternate date for adjudication?
- 12 If PAP refuses to participate in boundary demarcation on basis of principle, will mediation be possible? Y/N
- 13 If yes, provide date for mediation?

- 14 Was mediation successful? Y/N
- 15 If mediation is unsuccessful, describe the reason why?
- 16 If mediation is unsuccessful:
 - (a) Dates of official notice to compulsory acquire land:
 - (b) Photographic record of notice:
 - (c) Dates of the first, second and third opportunity to reconsider whether compulsory process needs to be followed:

Part C: Land Details

- 17 Directly affected area (size of the land inside the delineated area, in acres):
- 18 Will the portion/s of the farm outside the delineated area be orphaned? Y/N (Based on outcome of orphan land criteria)
- 19 If yes, total size of the orphan land (acres):
- 20 Total size of the land including orphaned land (acres):
- 21 Land tenure on affected property:
- 22 Land uses practiced by the PAP on property:

Part D: Sketch of surveyed land and neighboring properties

#	Names	Signature
1		
2		
3		
4		
5		

Part E: Identification of other structures and/or PAPs dependent on affected property (assigning numbers to be used in valuation & socio-economic survey)

23	Description of assets on property	24	Asset Ownership (Landowning or non-landowning)	25	PAP number (issue new number for non-landowning land user)	26	Asset number / GPS Location	27	Name of non-landowning PAPs	28	Contact details	29	Tenure status

Part F: Declaration and Acknowledgement of PAPs and Neighbors

Land Owner Declaration:

I, and my spouse hereby confirm that the boundaries of my land affected have been well captured, we have visually seen the extents of the portion affected by the project and we have no reservations to the survey exercise that has been undertaken..

Signature:

Date:

Certificate of Attestation:

I, of do hereby confirm that I have duly explained to the said all the information contained in this form in dialect / language that he / she / they understand and that he / she / they fully understood all the information contained in this form before he / she / they signed or made his / her / their thumb mar.

Signature:

Date:

Acknowledgement and Signature:

I agree with the survey of the contractor and hereby sign as evidence that I was present during the survey exercise.

Full Name of Land Owner:

Signature or Right Thumb Print

Full Name of Spouse:

Signature or Right Thumb Print

Full Name of Land User (where the land owner is not the current land user):

Signature or Right Thumb Print

Full Name of Neighbour 1:

Signature or Right Thumb Print

Full Name of Neighbour 2:

Signature or Right Thumb Print

Full Name of authorised land officer:

Signature:

Full Name of Surveyor:

Signature:

Ward

Lusanga	1
Misima.....	2
Kijungu	3
Partimbo.....	4
Suruke.....	5
Msisi.....	6
Naga	7
Igusule	8
Bukombe	9
Bukome.....	10
Kasharunga.....	11
Kyaka	12
Saunyi	13
Njoro	14
Other (specify)	15

Village

Momboleyo	
Misima.....	1
Gita	2
Kwavijana.....	3
Ilala	4
Mwabib.....	5
Busonge.....	6
Bumkombe town.....	7
Bukome.....	8
Runazi.....	9
Bulifani	10
Kushaba.....	11
Bulyang'ombe.....	12
Mnyemfu	13
Other (specify)	14

Refusal reason

Absence of property and/or asset owner	1
Need to consult with other family members or third-parties	2
In-principle refusal to participate in Project processes	3

Land tenure and ownership

Customary land tenure un-registered	1
Customary land tenure registered	2
Leasehold/Renting.....	3
Freehold based on agreement of use with landowner	4
Freehold no agreement with landowner	5
Communal land	6
No tenure - Public land	7

Land use

Residential	1
Grazing.....	2
Agriculture	3
Fallow.....	4
Vacant.....	5
Business.....	6
Public	7

Asset

Multifunctional residential used less than 6 months a year	1
Multifunctional residential used more than 6 months a year	1
Sleeping only.....	2
Kitchen	3
Toilet	4
Shower	5
Business only	6
Recreation / meeting.....	8
Grain storage.....	9
Livestock kraal.....	10
Poultry coop	11
Grazing area.....	12
Crops	13
Grave	14
Cultural site	15
Other (specify)	16

Part A: Data Collection Information

- 1 PAP Identification/ Valuation Number:
- 2 Date:
- 3 Ward:
- 4 Village:
- 5 Full name of asset owner:
- 6 Contact number:
- 7 Full name of spouse:
- 8 Contact number:

Part B: Absenteeism and Refusals

- 9 PAP refuses to participate in Valuation. Provide reason for refusal
- 10 In case the PAP is absent or requires time to consult with facility, provide alternate date for valuation?
- 11 If PAP refuses to participate in valuation on basis of principle, will mediation possible? Y/N
- 12 If yes, provide date for mediation?
- 13 Was mediation successful? Y/N
- 14 If mediation is unsuccessful, describe the reason why?

- 15 Is inspection/valuation of property possible without consent of PAP (e.g. can it be done remotely without physical access to land)? Y/N
- 16 If inspection/valuation is not possible without consent and/or physical access:
 - (a) Date of official notice to acquire land through compulsory process:
 - (b) Photographic record of notice:
 - (c) Dates of the first, second and third opportunity to reconsider whether compulsory process needs to be followed:

Part C: Land Details

- 17 Total affected land area (acres):
- 18 Land tenure relevant to affected property and/or asset:
- 19 Full name of the landowner, if occupant/asset owner is not the land owner:
- 20 PAP Identification/valuation number of land owner:
- 21 Land uses practiced by the PAP on affected property:

Part D: Structures and improvements

- 22 Number of structures **OWNED** on affected property

Structures/improvements on affected property

23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Structure/ GPS no. (Extension of PAP & Property number)	Photo	Use	Occupancy status	Walls	Roof	Number of rooms	Max No of people sharing	se n r Ceiling	Window frame	No. of windows	Door	No. of doors	Floor	Structure Condition	Dimension main building	Dimensions veranda	Sketch
VAL/Vil/ 001/L/S1																	
VAL/ Vil/001/L/S2																	

41 Are any of the structures used or occupied/rented by someone other than the PAPs household? **If YES, specify in the table below:**

42	43	44	45	46	47	48
Structure/ GPS Number	Name/s of occupant / user	Relationship to structure owner	Contact details of occupant /user	Tenure status	If rented monthly amount	New PAP number
VAL/ Vil/ 001/ L / S1						e.g. VAL/VIL/001/L/S1/O
VAL/ Vil/ 001/ L / S2						e.g. VAL/ Vil/ 001/L/S2/O

Part E: Graves and sites of cultural significance

49 Are there any graves or sites of cultural significance located within the affected land area? Y / N

Graves/cultural significant site/s:

GPS/Track no.	50 Description	51 Name of deceased	52 Name of custodian
VAL/ Vii/ 001/ L / G1			
VAL/ Vii/ 001/ L /G2			

Cultural significant site/s:

GPS no.	53 Description	54 Name of custodian
VAL/ Vii/ 001/ L / C1		
VAL/ Vii/ 001/ L / C2		

Part F: Trees of economic value

55 Tree name	56 Trees and maturity ~ Quantity or Area (acres)					
	30%	60%	100%	15%	Total	Track
Mikorosho	12	21	-	2	35	
Migomba	2 acres	-	-	-	2 acres	VAL/Vii/001/L/ Tr1

Part G: Grazing land

57 Area name	58 Size	59 Tenure	60 Type of Grazing	61 Proximity to Water Source
VAL/Viii/001/T/Gr1	0,75acres	Rented		

Part H: Seasonal crops

62 Crop name	63 Crop ~ Area (acres) or Quantity					
	30%	60%	100%	15%	Total	Track
Vanilla	0,75acres				0,75acres	VAL/Vii/001/L/ Cr1

Part I: Any other claims/ disturbances as per National valuation guidelines

a.	
b.	
c.	

Section H: Certificate of Translation:

I, of do hereby confirm that I have duly explained to the said all the information contained in this form in dialect / language that he / she / they understand and that he / she / they fully understood all the information contained in this form before he / she / they signed or made his / her / their thumb mark.

Signature:**Date:****Section I: Acknowledgement and Signature:**

I agree with the assessment of the Valuer and hereby sign as evidence that I was present during the survey exercise.

Full Name of PAP:		Signature:	Right Thumb Finger Print:
Full Name of Spouse:		Signature:	Right Thumb Finger Print:
Full Name of Witness: (tick appropriate box)	Neighbour: <input type="checkbox"/> Relative: <input type="checkbox"/> Village leader: <input type="checkbox"/> Other (specify):	Signature:	Right Thumb Finger Print:
Full Name of Village Chairperson:		Signature:	Right Thumb Finger Print:
Full Name of Valuer:		Signature:	
Full Name of GoT Representative:		Signature:	

Ward:

Lusanga	1
Misima.....	2
Kijungu	3
Partimbo.....	4
Suruke.....	5
Msisi.....	6
Naga	7
Igusule	8
Bukombe.....	9
Bukome.....	10
Kasharunga.....	11
Kyaka	12
Saunyi	13
Njoro	14
Other (specify).....	15

Village

Momboleyo	
Misima.....	1
Gita	2
Kwavijana	3
Ilala	4
Mwabib.....	5
Busonge.....	6
Bumkombe town.....	7
Bukome.....	8
Runazi.....	9
Bulifani	10
Kushaba	11
Bulyang'ombe.....	12
Mnyemfu	13
Other (specify).....	14

Refusal reason

Absence of property and/or asset owner.....	1
Need to consult with other family members or third-parties	2
In-principle refusal to participate in Project processes.....	3

Land tenure and ownership

Customary land tenure un-registered.....	1
Customary land tenure registered.....	2
Leasehold/Renting.....	3
Freehold based on agreement of use with landowner	4
Freehold no agreement with landowner	5
Communal land	6
No tenure - Public land	7

Land use

Residential	1
Grazing.....	2
Agriculture	3
Fallow.....	4
Vacant.....	5
Business.....	6
Public	7

Use of structure

Multifunctional residential used less than 6 months a year.....	1
Multifunctional residential used more than 6 months a year	1
Sleeping only.....	2
Kitchen	3
Toilet	4
Shower.....	5
Business only	6
Combined multifunctional residential & business	7
Recreation / meeting	8
Grain storage.....	9
Livestock kraal.....	10
Poultry coop	11
Other (specify).....	12

Occupancy status

Occupied by members of the PAPs household.....	1
Occupied by tenants paying rent to the PAP.....	2
Occupied by occupants not paying rent (e.g. workers).....	3
Not occupied	4
Business structure.....	5
Institutional/government structure	6

Relation with head of household

Household head.....	1
Spouse of household head.....	2
Son/ daughter of household head.....	3
Son-in-law/ daughter-in-law of household head	4
Grandchild of household head.....	5
Parent of household head	6
Parent-in-law of household head	7
Brother/ sister of household head.....	8
Cousin of household head.....	9
Grandparent of household head.....	10
Not related but dependent.....	11
Other (specify)	12

Demarcation Material

Trees	1
Fencing wire	2
Wall	3
Bushes.....	4
Sisal.....	5
Road/Pathway	6
Other (specify).....	7

Walls

Mud blocks only	1
Mud blocks & plasters	2
Concrete blocks	3
Clay bricks	4
Plastic sheet	5
Mud and sticks.....	6
Tin / iron sheet	7
Other (specify)	8

Roof

Thatch	1
Tin / iron sheet	2
Plastic sheet	3
Wooden planks	4
Tiles.....	5
None.....	6
Other (specify)	7

Window frame

Steel	1
Wood.....	2
None.....	3
Other (specify)	4

Door

Steel	1
Wood	2
None.....	3
Other (specify)	4

Floor

Cement	1
Tiles.....	2
Plastic tiles.....	3
Mud / earth.....	4
Other (specify)	5

Structure Condition

Complete	1
Partially constructed.....	2
Dilapidated.....	3
Other (specify)	4

Fence

Wooden sticks	1
Wire	2
Combination of sticks and wire.....	3
Bush / shrubs.....	4
None.....	5
Other (specify)	6

Crops

Cassava.....	1
Rice	2
Yam	3

Corn	4	Mikaratus	49
White sorghum	5	Mwarobaini/Neem	50
Red sorghum	6	Mng'ong'o/King'ong'o	51
Peanuts/groundnuts	7	Mpira/Rubber	52
Cowpea	8	Mkrismasi/Christmas	53
Cotton	9	Mpilipili-Mti /Pepper	54
Onion	10	Lucina trees	55
Tomato	11	Ashok trees	56
Lettuce	12	Misonobari/Pine	57
Carrots	13	Gravelia	58
Cotton	14	Karanga Miti/Macademia nuts	59
Coffee	15	Gundi/Gum	60
Beans	16	Mitiki/Tiki	61
Potato	17	Mitopetope/Sweetsop	62
Pumpkin	18	Michongoma/Thorn tree	63
Maize	19	Mjohoro/Acacia	64
Pimento	20	Mnyaa	65
Aubergine	21	Mfolosadi	66
Green legume	22	Mti maua/Flower tree	67
Watermelon	23	Mlonge/Moringa	68
Melon	24	Mkama/	69
Okra	25	Castor Nyonyo	70
Mango	26	Cashew trees	71
Banana	27	Cassava	72
Orange	28	Maize	73
Citrus	29	Sorghum	74
Papaya	30	Rice	75
Sisal	31	Peas	76
Other (specify)	32	Groundnuts	77
Economic trees		Sesame	78
Minazi/Coconut	1	Sugar cane	79
Mikorosho/Cashewnuts	2	Plantain	80
Michikichi/Oil palm	3	Bananas	81
Miwa/Sugar cane	4	Mangoes	82
Mikarafuu/Cloves	5	Coconuts	83
Msufi/Msufi	6	Oil palm	84
Mikonge/katani/Sisal	7	Paw-paw	86
Kokoa/Cocoa	8	Natural forest	87
kahawa Arabica/Coffee Arabica	9	Other (specify)	88
kahawa Robusta/Coffee Robusta	10		
Mparachichi/Ovacado	11		
Mparachichi (improved)/Ovacado improved	12		
Mchenza/Tangarine	13		
Michungwa/Oranges	14		
Michungwa improved/Oranges improved	15		
Ndimu/Lemon	16		
Mlimau improved/Lemon improved	17		
Miembe/Mango	18		
Miembe kisassa/Mango improved	19		
Miembe Dodo/Mango dodo	20		
Mipera/Guava	21		
Mifenesi/Jackfruit	22		
Migomba/Bananas	23		
Minanasi/Pineapples	24		
Mipapai/Pawpaw	25		
Mikweme /Oyster nuts	26		
Komamanga/Pomegranate	27		
Mistafeli /Custard apple	28		
Mitende/Date palm	29		
Mipension/Passion fruit	30		
Pears	31		
Apples	32		
Peaches	33		
Mlozi /Almond	34		
Walnuts	35		
Chestnuts	36		
Lime Tree	37		
Mibuyu/Boabab	38		
Mzambarau/Plum tree	39		
Mikwaju/Tamrind tree	40		
Mzeituni/Olive tree	41		
Mzabibu /Grape	42		
Mkungumanga /Nutmeg	43		
Miti ya Kivuli/Shade trees	44		
Miti ya mbao Ngumu i.e Mininga/Hard wood trees Mininga	45		
Mipingo/Blackwood	46		
Mianzi/Bamboo	47		
Mkungu	48		

Part A: Data collection information

1. Valuation/household number:.....
2. Interviewer names:.....
3. Date:
4. Ward:
5. Village:
6. Names of household head (HHH):.....
7. Nationality of HHH
8. Mobile number of HHH or main contact person:.....
9. Names of person interviewed (if not the HHH):
10. Relationship of person interviewed to HHH:

Part B: Household demographics

1. Is this household part of a polygamous household?
2. If yes, state the number of wives:
3. Household number/s of related polygamous households:
4. Home language:.....
5. Ethnicity:
6. Religion:

Part C: Residency and tenants

1. For how many years has the household been living in this Village?
2. Does the household have another home? Y/ N
3. If yes, where is this other home:
4. Are there tenants accommodated on this property?
5. If yes, number of tenants being accommodated?....
6. Is the property used for business purposes? Y / N

Part F: Household members

1. How many people are in this household (excluding tenants/occupants)?

1. Name	2. PAP number	3. Age or Date of Birth	4. Relationship to household head	5. Marital status	6. Gender	7. Resident status	8. Disability/serious illness	Only for persons 5 years and older			Only for persons 15 years and older		
								9. Attending school?	10. Highest education completed	11. Able to read?	12. Primary activity (if formal employment specify, location)	13. Secondary activity	14. Employable skills
					M / F			Y / N		Y / N			
					M / F			Y / N		Y / N			

7. If yes, specify type of business?.....

Part D: Dwellings and structures

1. How many structures do this household own?.....
2. How many of each structure make up this homestead?

Structure	#
Multifunctional residential	
Stand-alone Sleeping	
Stand-alone Kitchen	
Stand-alone Toilet/Shower	
Business only	
Combined multifunctional residential & business	
Livestock kraal	
Other (specify)	

Part E: Water, sanitation and energy

1. Where is this household's water MOSTLY obtained from?
2. How long does it take to walk to that water source? (minutes)
3. What do you use the water for?
4. What method, if any, do you use most often to treat your water before drinking it?.....
5. What type of sanitation facility does this household use on most days?.....
6. Does the household share this sanitation facility with another household? Y / N.....
7. What energy does the household mostly use for cooking?
8. What energy does the household mostly use for lighting?

Part G: Land tenure and arable land

1. How many pieces of arable land does this household currently have access to?
2. If none, please provide reason?
3. What are the main crops/plants grown by the household?
4. What is the total acreage grown per season
5. What is the average quantity of this crop/plant sold per season? (Quantity & percentage)
6. What is the second most important crop/plant grown by the household?.....
7. What is the total acreage grown per season
8. What is the average quantity of this crop/plant sold per season? (Quantity & percentage)
9. Would you say that farming produces the (a.) principle or (b.) supplementary food source for this household?
10. Would you say that farming produces the (a.) principle or (b.) supplementary cash income for this household?
11. What tillage method does the household mostly use?
12. Has your household received any agricultural extension services during the last two seasons? Y/N.....
13. Did the household use any of the following modern inputs during the last season? (a.) improved seeds (b.) fertiliser (c.) improved breeds of livestock (d.) tractor

For each piece of land owned or used by the household, please provide the information indicated below:

#	1. Is the land within 100m of the home?	2. What is the piece of land used for?	3. Type of tenure	4. Estimated number of acres	5. Is the land impacted by Project? (field number)
1	Y/N				
2	Y/N				

Livestock/ Poultry	Est. Number owned by household	Use		
		Consumption	Sales	Rituals / ceremonies
6. Guinea fowl		Y / N	Y / N	Y / N
7. Pigeons		Y / N	Y / N	Y / N
8. Other (specify)		Y / N	Y / N	Y / N

Part H: Livestock and poultry

1. Does your household currently have access to land for grazing livestock? Y / N
2. If yes, how far is the grazing area from this homestead (minutes' walk)?
3. If No, please provide reason?
4. Does the household own any livestock animals and/or poultry?

Livestock/ Poultry	Est. Number owned by household	Use		
		Consumption	Sales	Rituals / ceremonies
1. Cattle		Y / N	Y / N	Y / N
2. Sheep		Y / N	Y / N	Y / N
3. Chickens / poultry		Y / N	Y / N	Y / N
4. Pigs		Y / N	Y / N	Y / N
5. Goat		Y / N	Y / N	Y / N

Part I: Use of natural resources

Resource type	Harvesting frequency? (D-Daily, W-Weekly, S- Seasonally)	For own use (O) or to sell (S)
1. Wood (construction/ fire)	D / W / S	O / S
2. Bamboo	D / W / S	O / S
3. Honey	D / W / S	O / S
4. Forest food products	D / W / S	O / S
5. Bush meat	D / W / S	O / S
6. Fish	D / W / S	O / S
7. Medicinal plants	D / W / S	O / S
8. Clay (brickmaking)	D / W / S	O / S
9. Thatch/Straw	D / W / S	O / S
10. Other (specify)	D / W / S	O / S

Part J: Sources of livelihood

1. What is the MOST important livelihood activity for this household?.....
2. Is the household mostly engaged in (a.) cash generating or (b.) food producing activities?.....
3. Please indicate main sources of household income below (all family members).

(Cross check all sources of income with reported sources of livelihood)

Source of income	Amount during last month for entire household (TSH)	Regular (R), Occasional (O)
1. Salary/wage (specify source)		R / O
2. Small-scale/ artisanal mining		R / O
3. Small trader		R / O
4. Crop sales		R / O
5. Livestock sales (incl. sale of animal products)		R / O
6. Social grants		R / O
7. Tenants		R / O
8. Firewood and/or charcoal		R / O
9. Building materials		R / O
10. Other (specify)		R / O

4. Who is the main cash income provider?

Part K: Marketing of produce and transport

1. Where do you sell most of your produce, crops or animals? (If at home, cross check with Q)
2. What is the principal mode of transportation used to take your goods to where they are sold?
3. How long does it take you to transport your goods to where it is sold?
4. What is the principal mode of transportation used to travel to work or farms?.....

Part L: Expenditure

Expenditure item	Rank the 5 most important items (1 most important – 5 least important)	Est. Amount during last month for entire household (TZS)
1.		
2.		
3.		
4.		

Part M: Credit

1. Does the household rely on any of the following credit lending facilities?

Facility	Y/N
1. Microcredit Fund	
2. Bank	
3. Mutual Credit	
4. Loans from family and/or friends	

Part N: Moveable assets

Item	Number currently owned in <i>working order</i>
1. Cell phone	
2. Radio	
3. Television	
4. Sewing Machine	
5. Motor cycle	
6. Car/Van	
7. Tractor	
8. Donkey cart	
9. Bicycle	
10. Wheelbarrow	
11. Solar Panel	
12. Fridge	
13. Gas lamp	
14. Bed	
15. Generator	
16. Seeder	
17. Plow drawn by oxen	
18. Table	

Part Q: Access to public services and livelihood resources

Service / resource	Location (Name of nearest village/town)
1. Bus stop	
2. Clinic/ Health Centre	
3. Market/ shop	
4. Police station	
5. Bank / credit facilities	
6. Hunting area	
7. Fishing area	
8. Area where medicinal plants are collected	
9. Area where firewood and forest food products are collected	

Part O: Nutrition

1. Was there a shortage of food during the last two seasons? Y / N.....
2. If yes, circle the months: Jan / Feb / March / April / May / June / July / Aug / Sept / Oct / Nov / Dec
3. What was the most important reason for food shortage?

Part P: Health

1. Generally, when members of this household get ill, where do they go for medical attention?
2. How long do household members need to travel to get to this facility (minutes)?
3. Has your household received any household immunisation services in the last 6 months? Y/N ...
4. How often is the household visited by a community health worker?
5. Does your youngest child have a vaccination card? Y / N

Part R: Social networks

1. Do you have relatives in this village? Y / N

Activity	Depend on friends and/or family
1. Share equipment / tools / transport / Cultivate fields etc.	Y / N
2. Exchange goods / services	Y / N
3. Take care of children	Y / N
4. Take care of sick household members	Y / N
5. Borrow money	Y / N

Part S: Needs analysis

1. What is this households five most urgent needs? ..

Need	Rating (Assign 1 to most urgent and 5 least urgent)
1. Infrastructures i.e. roads, bridges	
2. Foodstuffs/water	
3. Health facilities	
4. Schools	
5. Agricultural equipment	
6. Police station	
7. Skills training	
8. Employment	
9. Community gardens	
10. Livestock watering hole	
11. Other (specify)	

Service / resource	Location (Name of nearest village/town)
1. Church/mosque	
2. Primary/Secondary school	

Part T: Expectations regarding the project

1. What are your main expectations regarding the proposed EACOP project:

Issue	Y/N
1. It will create employment	
2. It will create opportunities for local businesses	
3. It will bring development projects	
4. It will improve local infrastructure (roads, etc.)	
5. It will help to build schools, community facilities, etc.	
6. Other (specify)	

2. What are your main concerns regarding the proposed EACOP project:

Issue	Y/N
1. People will be displaced off their land	
2. Jobs will be given to outsiders	
3. Loss of traditional values	
4. It will impact on water resources	
5. The environment will be polluted	
6. Other (specify)	

3. Are you willing to relocate your household to another area if required? Y/N
4. Are you willing to relocate your agricultural activities to another area? Y/N
5. Suppose the livelihood activities that you are currently depending on are impacted upon due to a loss of your house and/or land? What would the best way be to restore your life?

Wards

Lusanga.....	1
Misima.....	2
Kijungu.....	3
Partimbo.....	4
Suruke.....	5
Msisi.....	6
Naga.....	7
Igusule.....	8
Bukombe.....	9
Bukome.....	10
Kasharunga.....	11
Kyaka.....	12
Saunyi.....	13
Njoro.....	14
Other (specify).....	15

Villages/settlements

Momboleyo	
Misima.....	1
Gita.....	2
Kwavijana.....	3
Ilala.....	4
Mwabib.....	5
Busonge.....	6
Bumkombe town.....	7
Bukome.....	8
Runazi.....	9
Bulifani.....	10
Kushaba.....	11
Bulyang'ombe.....	12
Mnyemfu.....	13
Mtaa.....	14
Other (specify).....	15

Hamlet

tbd.....	1
Other (specify).....	2

Relationship of person interviewed to HHH

Household head.....	1
Spouse of household head.....	2
Son/ daughter of household head.....	3
Parent or parent-in-law of household head.....	4
Other (specify).....	5

Home language:

Kiswahili.....	1
Kisambaa.....	2
Kizigua.....	3
Kibondei.....	4
Kimburu.....	5
Kigogo.....	6
Kinyiramba.....	7
Kisukuma.....	8
Kinyamwezi.....	9
Kihaya.....	10
Kinyambo.....	11
Kimakua.....	12
Kimakonde.....	13
Kiyao.....	14
Kingereza.....	15
Luganda.....	16
Other (specify).....	17

Ethnicity:

Wadigo.....	1
Wasambaa.....	2
Wamburu.....	3
Mang'ati.....	4

Wagogo.....	5
Warangi.....	6
Wanyaturu.....	7
Wanyiramba.....	8
Nyamwezi.....	9
Sukuma.....	10
Wahaya.....	11
Buganda.....	12
Other (specify).....	13

Religion

Islam.....	1
Christian.....	2
Animism.....	3
Other (specify).....	4

Nationality

Tanzanian.....	1
Malawian.....	2
Kenyan.....	3
Ugandan.....	4
Other (specify).....	5

Payment to stay on land

Land board.....	1
Chief/headman.....	2
Employer.....	3
Government.....	4
Other (specify).....	5

If yes, where is this other home:

Same village.....	1
Other Village in this District (specify Village).....	2
Other District in this Region (specify District).....	3
Other Region (Specify Region).....	4
Other Country (specify Country).....	5

Type of business

Small trading from shop.....	1
Mechanical Workshop.....	2
Salon.....	3
Other (Specify).....	3

Where is water MOSTLY obtained from?

Communal borehole/well.....	1
Individual borehole/well.....	2
Government provided water (community tap/standpipe).....	3
River, stream, dam or creek.....	4
Rain tank.....	5
Water vendor.....	6
Other (specify).....	7

What do you use the water for?

Drinking.....	1
Domestic use (bathing, cleaning, etc.).....	2
Irrigation / crops.....	3
Livestock.....	4
Other (specify).....	5

What method, if any, do you use most often to treat your water before drinking it?

Do not treat water.....	1
Boiling.....	2
Adding bleach/ chlorine.....	3
Straining through cloth.....	4
Letting it stand and settle.....	5
Water filter.....	6
Other (specify).....	7

How do you store drinking water?

Do not store	1
Special water buckets	2
Any buckets	3
Covered clay pot	4
Other (specify)	5

Sanitation facility

No sanitation facility	1
Pit latrine	2
Flush toilet	3
Other (specify)	4

Type of energy mostly

Generator	1
Solar panel	2
Public Electricity	3
Charcoal	4
Flashlight/Batteries	5
Butane Gas	6
Candles	7
Wood	8
Cow dung	9
Paraffin	10
Other (specify)	11

Relationship to household head

Household head	1
Spouse of household head	2
Son/ daughter of household head	3
Son-in-law/ daughter-in-law of household head	4
Grandchild of household head	5
Parent of household head	6
Parent-in-law of household head	7
Brother/ sister of household head	8
Cousin of household head	9
Grandparent of household head	10
Adopted/ foster/ step child of household head	11
Orphan	12
Not related but dependent	13
Other (specify)	14

Marital status

Married	1
Divorced	2
Widowed	3
Single	4
Living together	5
Child	6

Resident status

Lives here full time	1
Lives here part-time (more than 5 days per month)	2
Lives here irregularly (less than 5 days per month)	3

Highest education

None	1
In primary School	2
Did not finish primary School	3
Finished Primary School	4
In Secondary School	5
Did not finish Secondary School	6
Finished Secondary School	7
Higher Educational Level	8

Economic/livelihood activity

Farming	2
Small trading	3
Livestock keeping	4
Artisanal mining	5

Other self-employment/ own business	6
Salaried employment	7
Day laborer/ pieceworker	8
Unemployed but looking for work	9
Too old or sick to work	10
Staying at home/ not looking for work	11
Still in school or studying	12
Other (specify)	13

Employable Skills

Driving	1
Operation of heavy equipment	2
Mechanical skills	3
Electrical skills	4
Plumbing	5
Builder/ construction	6
Carpentry	7
Computer operating	8
Administrative/ clerical	9
Warehouse/ storekeeping	10
None of the above	11

No access to farming land

Not enough money to rent land	1
Not enough land available	2
No need for land	3
Other (specify)	4

Crops/plants

Cassava	1
Rice	2
Yam	3
Corn	4
White sorghum	5
Red sorghum	6
Peanuts/groundnuts	7
Cowpea	8
Cotton	9
Onion	10
Tomato	11
Lettuce	12
Carrots	13
Cotton	14
Coffee	15
Beans	16
Potato	17
Pumpkin	18
Maize	19
Pimento	20
Aubergine	21
Green legume	22
Watermelon	23
Melon	24
Okra	25
Mango	26
Banana	27
Orange	28
Citrus	29
Papaya	30
Other (specify)	31

Total acreage grown per season

1-5	1
5-10	2
10-15	3
15+	4

Average amount sold per year (bunches, kilograms, sacks, poles)

1-5	1
-----------	---

5-10	2
10-15	3
15+	4
Other (specify)	5

If any fields were left uncultivated, why were they not cultivated?

Resting/ lying fallow	1
No rain	2
Late rain	3
Not enough financial resources	4
No seeds to plant	5
No farming implements	6
Shortage of labour	7
Birds/ animals eat the crops	8
Pests/ crop disease	9
Other (specify)	10

Tillage method

Leased line cows (plough)	1
Manual labour	2
Tractor	3
Other (specify)	4

What is the piece of land used for?

Cultivation of crops throughout the whole year	1
Cultivation of crops during part of the year	2
Fallow/ resting	3
Grazing	4
Rented or lent to someone else	5
Not used	6
Other (specify)	7

What type of ownership does the household have over the land?

Mailo	1
Individual land title	2
Customary land title	3
Rent/Lease (paid in cash)	4
Rent/Lease (paid in kind)	5
Free load	6
Occupied without authorization	7
Other (specify)	8

Grazing areas

Around the homestead/concession	1
In the pasture of the village	2
Grazing in the forest	3
Transhumance	6
Other (specify)	7

Livelihood resources

Subsistence farming	1
Sales of crops	2
Small trading	3
Sales of livestock/ livestock products	4
Artisanal mining	5
Other self-employment/ own business	6
Salaried employment (specify)	7
Other (specify)	9

Main income provider source of income

Farming	1
Fishing	2
Shepherding	3
Hunting	4
Driving	5
Apprentice	6
Mechanic	7
Shop owner	8

Military service	9
Livestock seller	10
Baker	11
Butcher	12
Carpenter	13
Artisanal mining	14
Other (specify)	15

Where do you sell most of your produce, crops or animals?

At the village itself	1
Surrounding villages	2
Surrounding towns (specify)	3
Other (specify)	4

Who transports produce to the market

Male adult	1
Female adult	2
Male child	3
Female child	4

How long does it take you to transport your goods to where it is sold?

Less than 1hour	1
1-3 hours	2
3-6 hours	3
More than 6 hours	4

Mode of transport

Bicycle	1
Bus	2
Car driver	3
Car passenger	4
Animal drawn cart	5
Motorbike	6
Truck	7
Head loading	8
Public transport	9
Other (specify)	10

What was the most important reason for food shortage?

Lack of income	1
Shortage of instruments to farm	2
Animals destroy crops	3
Drought	4
Lack of access to markets	5
Insufficient labour	6
Shortage of land	7
Sold food for cash	8
Bad luck/ witchcraft	9
Other (specify)	10

Health Facilities

District hospital	1
Public health centre	2
Private sector health facility	2
Private nurse	5
Traditional therapist/healer	6
Did not seek treatment	8
Other (specify)	9

HIV/AIDS Perception/information

It kills	1
Incurable	2
The manner in which it is contracted	3
Treatment or management of the condition	4
Other	5

Frequency of visits from health care workers?

Once a month	1
--------------------	---

Twice a month	2
Once in three months	3
Twice a year	4

Common causes of HIV/AIDS

Irresponsible sexual behaviour	1
Blood transfusion	2
Sharing of sharp instruments such as syringes, razorblades etc.....	3
Mother to child transfusion.....	4
Don't know.....	5
Other (specify)	6

Relocation preferences

I don't want to lose access to my land	1
Replacement of my land elsewhere to continue cultivation .	2
Be compensated with cash and find another land for cultivation	3
Be compensated with cash and start another business	4
Other	5

Appendix B

Market Survey for Compensation Rates



East African Crude Oil Pipeline

*Social and Resettlement Services for the
East African Crude Oil Pipeline
Tanzanian Section*

Market Survey for Compensation Rates – Geita Region

Total East Africa Midstream B.V.

Valuation Consultants

Date: 17 September 2020


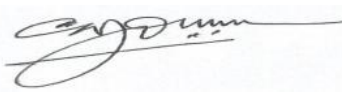


P.O. Box 35480, Dar es Salaam, Tanzania



This document has been prepared by **Whiteknights Real Estate Investment Analysts Company Limited**

Report:	Market Survey for Compensation Rates – Geita Region
Project Name:	Social and Resettlement Services for the East African Crude Oil Pipeline, Tanzanian Section
Project Code:	TOT5212

Name	Responsibility	Signature	Date
Dr. M. Geho	Author		17/09/2020
Dr. C. Ndjovu	Review		17/09/2020

This report is provided solely for the purposes set out in it and may not, in whole or in part, be used for any other purpose without Whiteknights Real Estate Investment Analysts prior written consent.

TABLE OF CONTENTS

1	Background Information	1
2	Objectives of the Market Survey	3
3	Survey and Data Analysis Methodology	4
3.1	Land Value Rates	4
3.2	Market Rental Value Rates	8
3.3	Building Construction Rates	10
3.4	Crops and Trees	11
3.5	Graves	12
4	Survey Results	13
4.1	Land Rates	13
4.2	Building Construction Rates	17
4.3	Market Rental Rates	29
4.4	Unlisted Crops and Trees	38
4.5	Graves	41
4.6	Interest Rate for Estimating Disturbance Allowance	42
5	Key Observations and Conclusion	43
6	Certification of the Market Study	44

LIST OF TABLES

Table 4-1: Land Value Rates for Relevant Wards in the Pipeline Corridor, Geita Region	15
Table 4-2: Construction Rates for Main Building Types	18
Table 4-3: Construction Rates for Ancillary Buildings, Structures and Other Land Developments	21
Table 4-4: Construction Rates for Boundary Fences and Stone Foundations	28
Table 4-5: Market Rental Rates for Residential Properties, Geita Region	29
Table 4-6: Proposed Compensation Rates for Unlisted Crops and Trees	38
Table 4-7: Proposed Compensation Rates for Graves	41

LIST OF FIGURES

Figure 1: Land Value Rates for Relevant Wards in the Pipeline Corridor, Geita Region	16
Figure 2: Revised Land Value Map for Relevant Wards in Chato District, Geita Region	49
Figure 3: Land Value Map for Relevant Wards in Geita District, Geita Region.....	50
Figure 4: Land Value Map for Relevant Wards in Mbogwe District, Geita Region.....	51
Figure 5: Land Value Map for Relevant Wards in Bukombe District, Geita Region.....	52

LIST OF APPENDICES

Appendix A: Old and Revised Land Rates for Affected Chato District Wards.....	45
Appendix B: Letter of Approval of Revised Land Rates for Affected Chato District Wards.....	46
Appendix C: Land Rates for EACOP Early Works/Priority Area Sites.....	47
Appendix D: Land Value Maps for Affected Wards in Geita Region.....	48

1 Background Information

The process of establishing compensation rates for the East African Crude Oil Pipeline (EACOP) Project commenced in 2017 whereby compensation rates to be used in relation to Early Works (EW) Priority Area (PA) sites were ascertained. A workshop on compensation rates attended by Digby Wells Consortium (DWC) staff, Government Valuers from the Ministry of Lands, Housing and Human Settlements Development (MLHSD) and District Valuers took place on 9th October, 2017 to kick-start the process for the formulation of current asset compensation rates for the EACOP Project. As a result of collaborative action between DWC staff and more specifically Whiteknights Real Estate Investment Analysts Company Limited who are the appointed Project Valuers, research was undertaken to inform the development of compensation rates to be used for Early Works (EW) Priority Area (PA) sites. These rates were subsequently finalized on 3rd April, 2018 and approved by the Chief Valuer (CV) on 11th April, 2018 (See Appendix A).

During 16 May – 20 September 2018, the Early Works (EW) Priority Area (PA) sites research initiative was followed up with a market asset survey conducted for the entire oil pipeline route in Tanzania covering 1,147 kilometers (kms) from Missenyi District in Kagera Region to Tanga City in Tanga Region. The market survey took place in conjunction with valuation asset surveys along the oil pipeline route. Nine project teams were involved in carrying out the market asset survey. In each of the nine teams, valuation research staff comprised a Senior Sensitization Valuer, Valuation Team Leader and three Assistant Valuers. The market asset survey aimed at establishing market compensation rates for land, construction rates for buildings and structures; market rental rates for buildings; compensation rates for "unlisted" crops and trees; and compensation rates for graves.

From 17th March to 25th March 2019, a team of Senior Valuers from Whiteknights Real Estate Investment Analysts Company Limited conducted consultations with District Valuers (DVs) for Geita District, Mbogwe District, Bukombe District and Chato District, per Geita Region. Engagement with the DVs was made at District Council Headquarters and augmented with site visits to selected sites in the pipeline corridor. The main aim of the engagement of DVs was validation with the DVs of

proposed market asset compensation rates prepared by the Project Valuers for use in Pipeline Valuation reports for this region.

After the DVs' engagement, the Project Valuers prepared the final draft compensation rates with a view to presenting them to The Chief Valuer of the Government to endorse before they are used in the pipeline project. In compiling proposed land compensation rates to be used for the Pipeline route, approved compensation rates for EW / PA sites formed benchmarks in deriving land values where the pipeline route is in proximity of an EW / PA site.

This dossier presents in detail the methodology which was adopted to generate the valuation compensation rates and constitutes the final report on compensation rates to be presented to the Chief Valuer for endorsement of the rates in conformity with the requirements of The Valuation and Valuers and (General) Regulations, 2018.

2 Objectives of the Market Survey

The overarching objective of the market survey undertaken 16th May – 20th September, 2018 was to establish:

- a) Market compensation rates for land taking into account prevailing land market prices at the various locations;
- b) Replacement cost rates for buildings, structures and other improvements on the land;
- c) Market rental rates for buildings and structures;
- d) Market compensation rates for "unlisted" crops and trees;
- e) Market compensation rates for graves taking into account provisions of The Graves (Removal) Act, 1969 and prevailing burial practices.

3 Survey and Data Analysis Methodology

Under the provisions of The Valuation and Valuers (General) Regulations, 2018 the Registered Valuer for a compensation project has to undertake research in order to establish current or up-to-date market values and costs of compensable items so that Project Affected Persons (PAPs) are paid compensation which is fair and adequate. The results of the market research undertaken, and the rates established by the Registered Valuer, need to obtain the CV's endorsement before being used in the project.

3.1 Land Value Rates

In ascertaining land value rates, Whiteknights Real Estate Investment Analysts Company Limited (hereafter referred to as Whiteknights) employed the Comparative Method of Valuation as per the requirements of Regulation 8 and 9 of The Valuation and Valuers (General) Regulations, 2018. These two vital Regulations have been reproduced ad-verbatim below.

8. "The basis for assessment of any land and unexhausted improvements for purposes of compensation under the Act shall be the market value of such land and unexhausted improvements".

9. "The market value of any land and unexhausted improvement shall be arrived at by use of comparative method with evidence from actual recent sales of similar properties or by use of the income approach or replacement cost method where the property is of special nature and not saleable".

Similarly, Regulation 55 (4) states:

"In assessing market value for land, the Valuer shall use comparative or market approach".

In order to determine land value rates, research undertaken along the pipeline corridor adopted a **mixed research method** using the quantitative approach based on which statistical inferences were made. These statistical analyses were augmented with the qualitative approach which was mainly founded on deductive reasoning.

The land market activities and more specifically land transaction activities within four Districts in Geita Region i.e. Geita District, Mbogwe District, Bukombe District and Chato District, were systematically analyzed with a view to ascertaining current land value rates to be used in valuing compensable land parcels along the pipeline corridor. First, the available transaction documents in the form of sales agreements were collected from village leaders, as the main source of raw data for the research. Second, interviews were conducted with responsible village and ward leaders, and also villagers in both the relevant villages and other villages which are contiguous to the wards pertinent to the EACOP Project pipeline route. Discussions were also held with peer land professionals, namely District Valuers and Authorized Land Officers of the respective districts. These interviews were mostly undertaken by sensitization valuers most of whom were the Project's Senior Valuers who had been engaged in sensitizing the villagers, PAPs, and village leaders regarding various valuation aspects for the project. These valuers are experienced land professionals who have practiced for a considerable period of time and possess the requisite experience and expertise in engaging with land market actors.

The field work for the market study undertaken by the valuers focused on:

- Collecting land sales agreements with the aim of obtaining data and information on land sales/purchases within affected hamlets, villages and wards, identifying the prices, actors, spatial dimension of the land parcels, nature of the land, and transaction dates.
- Undertaking interviews and focus group discussions with villagers and leaders at various village and ward levels in an attempt to get credible transactions data and information, and
- Viewing the transacted land parcels and observing the basic land characteristics and aspects which would have affected land parcel values, building rates and rentals.

In the realms of real estate, it is known that property markets are inefficient, and this has a bearing on how real estate research is conducted. Land parcels and properties are heterogeneous products, i.e. no two land parcels or properties are 100% identical. In addition, property market transparency is often limited and property markets tend to exhibit a marked degree of opaqueness. Most property deals are conducted clandestinely and in confidence making securing land market data difficult. The absence of a central market for real estate, as is the case with financial assets, further accentuates data problems relating to land / property sales. Hence, it should be borne in mind that this study was no exception and had to contend with typical data constraints associated with immature property markets. In these circumstances, great reliance was placed on our experience with property markets in Tanzania, deductive reasoning and sense of judgement.

In Geita Region, the collection of data and information for creating the required compensation rates was faced with a number of challenges. These included reluctance on the part of local village and ward leaders in providing data from their areas of jurisdiction because they either had no reliable data or had no sales data at all. Furthermore, only a few village leaders kept transaction documents or records in their offices whereas others were afraid of “betraying the electorate” i.e. PAPs who happen to be their voters in all local government elections, the next being due this year i.e. in 2019. It was apparent that village leaders preferred to give valuers higher priced transactions rather than those which were realistic with lower land prices. Some of the village leaders claimed they were observing confidentiality of sales transactions i.e. they claimed that land sales agreements are typically confidential only to parties who were privy to the sales contract, and accordingly the village leaders could not divulge information to Whiteknights. It is noteworthy that these constraints were varied in nature and not of the same character or magnitude across villages.

Despite the existence of data constraints, it was still possible to capture reliable data to inform pipeline valuation rates through a combination of methods, including examining land rates issued by the Chief Valuer, interviews conducted privately with individual villagers, comparison with approved EW/PA land rates, carrying out value profiling for the pipeline route and data validation with District Valuers.

Data analysis involved compiling market land prices within a hamlet and later on villages, and adjusting them for the time lag for those transactions which were not carried out recently. Similarly, the exercise involved converting the units of measurement used in the transactions into standardized units of analysis. The type of units used in the transactions and recorded in the sales agreements included square feet, square meters and simply pacing the length and width of the land parcels using footsteps. The transaction medium was mainly in Tanzania shillings. These transacted prices were divided by the land area to produce a price per “acre” or price per square meter for building land, which was taken as a unit of analysis. Later on these analyzed prices were aggregated at the ward level to arrive at the Land Value Rate for the ward in question.

During the analysis, all the affected wards in a district were sequentially arranged from the first to the last ward in a district (westerly to easterly direction) in order to observe the relativity of values across the wards. In the typical case of Geita Region bordering Kagera Region, the first ward is Ichwankima ward and the last ward, on the most easterly location is Ng’homolwa ward in Mbogwe District, which borders Wendele Ward of Kahama District in Shinyanga Region. The westerly-easterly arrangement of wards in Geita Region is unique as the pipeline corridor progresses from Chato district, then it enters Geita district, from which point it exits Geita district to enter Mbogwe district. From Mbogwe district, the pipeline corridor enters Bukombe district and then exists Bukombe district to re-enter Mbogwe district and subsequently exiting to Kahama district in Shinyanga region.

In terms of the westerly-easterly arrangement of the wards, the pipeline corridor heads south-eastwards from Bwongera ward, and first traverses nine other wards in Chato district. The pipeline corridor subsequently passes through one ward in Geita District before entering Lulembela, Ikunguigazi and Ikobe wards in Mbogwe district then passing into Lyambamgongo and Bukombe wards in Bukombe District. Thereafter, the pipeline corridor re-enters Mbogwe district and traverses the remaining three wards of Nyakafulu, Bukandwe and Ng’homolwa in Mbogwe district. The last easterly ward of Ng’ohomolwa ward in Mbogwe District borders Wendele ward of Kahama District, Shinyanga region.

This protocol was replicated in generating land value rates for all wards within districts affected by the pipeline project. After the land value rates had been arranged sequentially, a land value profile was established and graphed. Qualitative analysis was subsequently applied to identify land rate

outliers that could not be justified. For a typical land value profile seen in **Error! Reference source not found.**, the trend line drawn from the data shows a smooth transition of values from one ward to another, except in areas where there are known extraordinary factors or phenomena affecting land value. Where land rate outliers were identified, they were picked up as areas requiring further research and consultations with District Valuers and efforts were made to understand or adjust these outliers. This iterative calibration process was repeated until a realistic land value profile emerged. In some cases, the calibration process involved data interpolation and extrapolation at places where data was not forthcoming. The generation of a land value profile and the calibration of values constitute typical protocol for the analysis of land values in linear projects.

In order to be able to visualize the spatial dimension of the land value rates across the pipeline route in Geita Region, land value maps for the seventeen relevant wards in Chato District, Bukombe District, Mbogwe District and Geita District were prepared. These land value maps are presented in Appendix B.

3.2 Market Rental Value Rates

In common parlance, rent is the amount of money paid for the use of an asset for a specified period of time. In the domain of real estate, however, the market rent or rental value of a property is the maximum rent a property would fetch if exposed in the market under typical market conditions conforming to the market value standard.

From the existing Whiteknights valuation database, a number of building categories were established based on the type of building, building materials used in construction and the standard of workmanship, all of which were checked against photographs of the building type in question. For these building categories, rental values were collected from the village and ward leaders and the villagers themselves. From the information and data collected in a typical hamlet or village for a particular type of building, a simple average rental was established for a space unit per month. Descriptive statistics (i.e. minimum, maximum, range and mean values) for the data were calculated and this enabled the ascertainment of realistic rental values for building categories within a village and later on a ward. These rental values are expressed in terms of the monthly rent per room, from

which the monthly rent per housing unit can be ascertained depending on the number of rooms in the housing unit.

In general, data on rental values was more readily available compared to data on land sales, albeit we could only access limited written rental / lease agreements i.e. sufficient evidence on market rents was collected through filled-in administered questionnaires and also corroborative evidence obtained from oral interviews. We collected a limited number of written lease agreements as most of the villagers enter into oral lease agreements rather than formal written leases.

3.3 Building Construction Rates

The assessment of building construction rates was carried out in conformity with *Regulation. 55 (3) of The Valuation and Valuers (General) Regulations, 2018*, which states:-

"In assessing building value rates the following considerations shall be taken into account:

(a) the cost of replacing a building or a structure of similar nature, quality of construction, levels of completion in works-in-progress and size based on local market prices of materials and labor charges".

Building construction rates are average rates established by dividing the overall cost of construction of a building by the Gross External Area (GEA) of the building. Basically, the building rates represent the average cost of constructing a replica building per unit area. These construction rates for buildings or structures are established by considering the overall cost of a typical building and dividing it by the total building footprint area. The cost of the building is established by using the Quantity Surveyor's elemental cost estimation approach whereby building elements are priced and an allowance for professional fees is made. However, for traditional buildings and structures which are typically found in the pipeline corridor the costing was undertaken by itemizing cost items and allowing for the cost of labor and transport of building materials to the site where buildings were erected. Labor and transport costs for building materials were also worked out with reference to typical average costs for these items in the villages in question. In this work, a Registered Quantity Surveyor who is familiar with properties located along the pipeline route worked alongside the valuation teams to establish construction costs or Replacement Costs for buildings and structures.

For the different categories of buildings, costs of buildings and structures were established. Several types of buildings and structures were identified and their cost estimated while observing the cost variance based on the type of construction and construction materials. In addition to buildings, other important structures and improvements found in the pipeline route were costed. These additional assets were varied in nature and size and included water ponds, fish ponds, outer kitchens, pit latrines, shower rooms, granaries, fences of all types, foundations, and so on. These assets were priced based on the item-by-item costing approach. Typical construction costs for

buildings, structures and other improvements on the land are presented in Table 4-2, Table 4-3 and Table 4-4.

3.4 Crops and Trees

Crops and trees are currently valued using the Crop Compensation Schedule issued by the Chief Valuer in 2012 and also, the additional list of approved crops and trees from EW/PA sites which was approved by the Chief Valuer on 15th August, 2018. While conducting pipeline route surveys, additional economic trees were found and proposals on their compensation rates are presented in Table 4-6. The percentage growth rates to be used for trees and crops found along the pipeline route are in accordance with Regulation 55(6) of The Valuation and Valuers (General) Regulations, 2018 which is as follows:

Seedlings	15%
Early growth	25%
Young	50%
Early maturity	75%
Full maturity	100%
Old stage	30%

"Unlisted" crops and trees are crops and trees which do not appear in either the Compensation Schedule issued by the CV in 2012 or the subsequent list of approved compensation rates for additional crops and trees issued by the CV for the project in August, 2018¹.

The estimation of compensation rates for crops and trees is based on either: i) proposed compensation rates which were provided to Whiteknights by District Valuers or; ii) estimates of compensation rates for trees and crops made by considering compensation rates for generic crops and trees found in the 2012 compensation schedule and making due allowance for inflation between 2012 and 2018. Proposed compensation rates for unlisted crops and trees are presented in Table 4-6.

3.5 Graves

Compensation rates for graves were estimated as per the requirements of the Graves (Removal) Act, 1969. Section 9 of the Act states:

"The compensation payable under this section shall be limited to the reasonable expenses incurred in the removal, transportation, reinstatement and re-interment of the grave or dead body and any placatory or expiatory rites or other ceremony accompanying such removal and reinternment".

Accordingly, Whiteknights made an item by item estimate of costs related to grave removal and re-burial, depending on whether the grave has a construction around it or not. In general, the amount payable to the family in relation to "placatory or expiatory rites or other ceremony accompanying such removal and re-interment" is T.Shs. 300,000. In addition, the amount which should be paid to the District Medical Officer (DMO) or Contractor who would engage the District is T.Shs. 200,000 per grave for an ordinary grave. For a grave with a construction, an additional T.Shs. 200,000 is required making the total budget for grave removal T.Shs. 400,000. Itemized grave removal costs are found in Table 4-7. It is noteworthy that where the cost of grave removal is paid to the DMO or a private contractor, there are economies of scale when the number of graves to be removed is large.

¹ Letter Reference No: BA.391/466/01/58 of 15th August 2018

4 Survey Results

4.1 Land Rates

The observed land value rates for wards located in the four districts show an erratic land value pattern with rises and falls from ward to ward. The general overall observed trend for the 19 wards located in Geita Region shows land values rise from the westerly ward of Bwongera (T.Shs. 600,000 per acre) where the pipeline traverses through the forest mainly, registering the lowest land rates in Chato District and Geita region generally. The land value rates rise, slowly peaking up eastward through 9 wards in Chato district, 1 district in Geita and first 3 wards in Mbogwe before reaching to the highest rate in Nyakafuku ward (T.Shs. 1,600,000 per acre), one of the most vibrant wards in Mbogwe District. The rise in the land value rates from Chato District wards (lowest) to Nyakafulu (the highest) constitutes a phenomenal increase in the per acre land value. From Nyakafulu ward, land values slightly taper off to the easterly wards of Bukandwe and Ng'homolwa where it flattens at TShs. 1,000,000 per acre for both wards.

Land values for Nyakafulu and Lulembela wards in Mbogwe District are relatively higher because of the relatively fast population growth and agricultural activities carried out. Many land sales undertaken in settlements within wards like Nyakafulu and Lulembela in Mbogwe District, are meant for building purposes mostly, due to increased population and slowly changing land uses. The district-wise average per acre land value rates with reference to the specific wards where the pipeline crosses are as follows: Chato District (T.Shs. 463,000 per acre), Mbogwe District (T.Shs. 919,444 per acre), Bukombe District (T.Shs. 725,000 per acre), and Geita District (T.Shs. 700,000 per acre). The land value profile for Geita region is as presented in Figure 1 below.

Land value rates for Chato District were first submitted by Whiteknights Real Estate Investment Analysts Company Limited to the Chief Valuer for approval in May, 2019, as part of the Social and Resettlement Services for the EACOP, Tanzanian Section. New land rates for Chato District were approved by the Chief Valuer, MLHSD on the 23 September 2020 and the rates report was revised in accordance with this approval (See Appendices A, B, and D). Appendix A shows the old and revised rates, Appendix B is the letter of approval for revised land rates from the Chief Valuer while Appendix D shows land rate maps for affected Districts in Geita Region, including revised land rates for Chato District.

To provide a comparison with the Early Works (EW) Priority Area (PA) site in proximity to the pipeline route, the approved land value rate for MCPY-08, located in Bukombe ward in Bukombe District is T.Shs. 800,000 per acre. We have proposed the same land value for Bukombe ward in this Rates Report.

Table 4-1: Land Value Rates for Relevant Wards in the Pipeline Corridor, Geita Region

Region	District	Ward	Land Value Rate (T.Shs. / Acre)
Geita Region	Chato District	Ichwankima	483,000
		Nyamilembe	435,000
		Ilemela	435,000
		Katende	500,000
		Bukome	454,000
		Makurugusi	411,000
		Bwanga/ Minkoto	604,000
		Butengorumasa	386,000
		Iparamasa	459,000
	Geita District	Magenge	700,000
	Mbogwe District	Lulembela	1,300,000
		Ikunguigazi	1,000,000
		Ikobe	900,000
	Bukombe District	Lyambamgongo	650,000
		Bukombe	800,000
Mbogwe District	Nyakafulu	1,600,000	
	Bukandwe	1,000,000	
	Ng'homolwa	1,000,000	

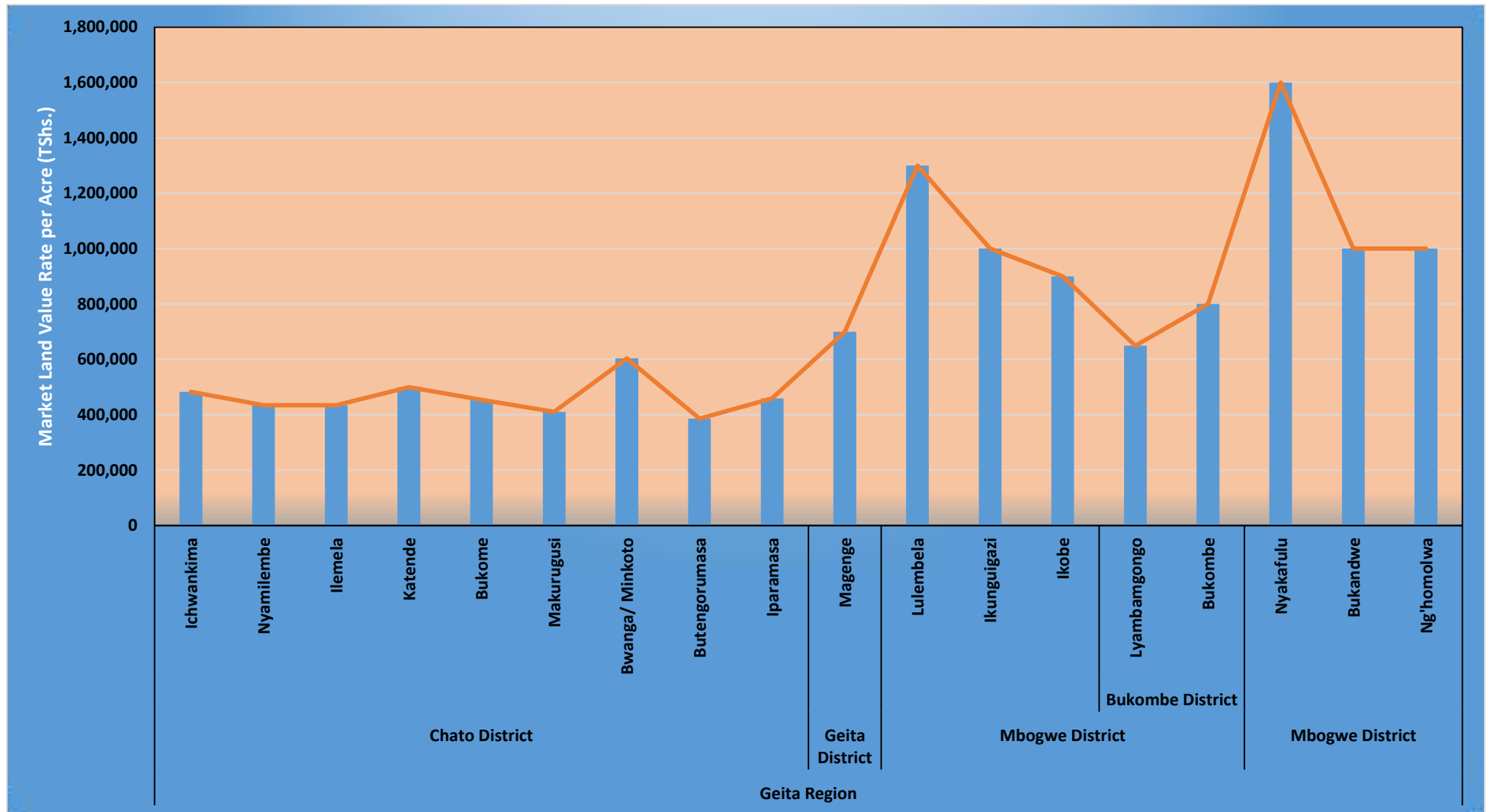







Figure 1: Land Value Rates for Relevant Wards in the Pipeline Corridor, Geita Region


4.2 Building Construction Rates

As explained above, rates for buildings, structures and other land developments were estimated by itemizing building costs based on Quantity Surveyor's methods and the results are presented in Table 4-2, Table 4-3 and Table 4-4.

Table 4-2: Construction Rates for Main Building Types


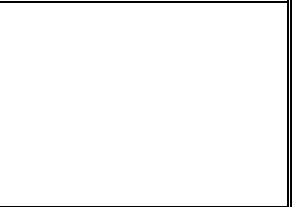

Category	Wall	Roof	Doors & Windows	Floor	Rate Per Sq.m. (T.Shs.)	Photograph
CAT. NO. A	Sand Cement	CIS	Wooden / Corrugated Iron Sheets	Cement Floor	472,000	
				Earth	404,000	
		Thatch	Wooden / CIS	Cement Floor	412,000	
				Earth	344,000	
CAT. NO. B	Burnt mud bricks	CIS	Wooden / CIS	Cement Floor	350,000	
				Earth	321,000	
		Thatch	Wooden / CIS	Cement Floor	299,000	
				Earth	261,000	



Category	Wall	Roof	Doors & Windows	Floor	Rate Per Sq.m. (T.Shs.)	Photograph
CAT. NO. C	Unburnt mud bricks / Sun baked clay bricks	CIS	Wooden / CIS	Cement Floor	218,000	
				Earth	218,000	
		Thatch	Wooden / CIS	Cement Floor	167,000	
				Earth	167,000	
		Tembe	Wooden / CIS	Earth	62,000	


Category	Wall	Roof	Doors & Windows	Floor	Rate Per Sq.m (T.Shs.)	Photograph
CAT. NO. D	Monolithic mud wall	CIS	Wooden / CIS	Cement Floor	192,000	
			Wooden / CIS	Earth	139,000	
		Thatch	Wooden / CIS	Cement Floor	90,000	
				Earth	79,000	
		Tembe	Wooden / CIS	Earth	52,000	



Category	Wall	Roof	Doors & Windows	Floor	Rate Per Sq.m. (T.Shs.)	Photograph
CAT. NO. E	Mud & poles	CIS	Wooden / CIS	Cement Floor	125,000	
				Earth	120,000	
		Thatch	Wooden / CIS	Cement Floor	65,000	
				Earth	60,000	
		Tembe	Wooden / CIS	Earth	48,000	
		CAT. NO. F	Full Suite Grass			Earth




Table 4-3: Construction Rates for Ancillary Buildings, Structures and Other Land Developments

Type	Walling Type & Specifications	Roofing & Asset Mode	Size & Coverings	Flooring	Unit Cost (T.Shs.)	Photograph
Water Ponds	Traditional Water Pond	Open to sky	Small size (<700m ³)	None	300,000	
			Medium Size (700m ³ - 1,000m ³)		500,000	
			Large Size (> 1,000 m ³)		700,000	
	Purposely Designed fishing Pond	Open to sky	Small size (<250m ³)	None	600,000	
			Medium Size (250m ³ - 550m ³)		1,300,000	
			Large Size (550m ³)		2,000,000	
Wells and Bore holes	Shallow wells	Traditional	Open	None	60,000	
			Covered with concrete slab		150,000	
	Deep	Traditional	Covered	None	3,000,000	
		Modern	Covered with concrete slab and outlet. Casings, submersible electric pumps		12,000,000	

Type	Walling Type & Specifications	Roofing & Asset Mode	Size & Coverings	Flooring	Unit Cost (T.Shs.)	Photograph
Pit Latrine	Grass / Mat walling	Open to sky, traditional	Compacted earth or arranged brick	Earth screed	300,000	
	Mud & Poles		Compacted earth or arranged brick	Cement screed	320,000	
	Cement / Burnt Bricks		Compacted earth or arranged brick	Cement / Earth screed	400,000	
	Mud & Poles	Thatch	Compacted earth or arranged brick	Earth screed	270,000	
		CIS	Compacted earth or arranged brick	Cement screed	450,000	
	Bricks	Thatch	Compacted earth or arranged brick	Cement screed	380,000	
		CIS	Compacted earth or arranged brick		500,000	




Type	Walling Type & Specifications	Roofing & Asset Mode	Size & Coverings	Flooring	Unit Cost (T.Shs.)	Photograph
Shower room	Grass	Open to sky, traditional	No windows	Earth screed	60,000	
			No windows	Earth screed	80,000	
	Mud & Poles	Grass	No windows	Earth screed	150,000	
		CIS	No windows	Cement screed	250,000	
	Burnt Bricks	Grass	Window opening only	Earth screed	160,000	
		CIS	Window opening only	Cement screed	350,000	

Type	Walling Type & Specifications	Roofing & Asset Mode	Size & Coverings	Flooring	Unit Cost (T.Shs.)	Photograph
Kitchen	Roof supporting poles	Grass / mats / tarpaulins	none	Earth screed	30,000	
	Mud & Poles	Grass	Window opening only	Earth screed	120,000	
		CIS	Window opening only	Earth screed	200,000	
	Burnt Bricks	Grass	Window openings only	Earth screed	250,000	
		CIS	Small wooden	Earth screed	380,000	

Type	Walling Type & Specifications	Roofing & Asset Mode	Size & Coverings	Flooring	Unit Cost (T.Shs.)	Photograph	
Animal Shed/Coops/Pens	Closely erected Poles	Grass	Ground level	Earth screed	200,000		
		Grass	Erected on stilts	Earth screed	250,000		
	Mud & Poles	Grass	Ground level	Earth screed	150,000		
		CIS	Ground level	Earth screed	250,000		
	Mabanzi / Wooden Planks walling	Grass	Ground level	Ground level	Earth screed	380,000	
		CIS	Erected on stilts	Erected on stilts	Flooring: Mabanzi / Planks	500,000	

Type	Walling Type & Specifications	Roofing & Asset Mode	Size & Coverings	Flooring	Unit Cost (T.Shs.)	Photograph
Granary / Kihenge	Reed / Bamboo woven walls	Grass thatch	Medium sized, 2m diameter	Erected on stilts / ground	180,000	
Livestock Kraal	Closely erected poles / widely spaced poles with thorn branches	Open to sky	Ground level, earth flooring	Small size - Up to 10m diameter / width	63,000	
				Medium size 11m to 20m diameter / width	130,000	
				Large Size - Over 20m diameter / width	200,000	

Table 4-4: Construction Rates for Boundary Fences and Stone Foundations

Wall / Foundation Type	Walling Material	Bonding Material	Unit of Measurement	Cost (T.Shs.)	Photograph
Solid wall fencing, Size: 2m high	Block wall / Burnt brick	Bonded by cement mortar	Running meter	140,000	
	stonewall		Running meter	200,000	
	mud brick / monolithic wall	Bonded by mud mortar	Running meter	15,000	
Wire fencing	4 strand barbed wire on concrete poles		Running meter	17,000	
	4 strand barbed wire on wooden poles		Running meter	12,000	
	Chicken wire mesh		Running meter	30,000	
Foundation Wall including foundation footing	Stone (Approximately 3 feet high) with cement mortar	Bonded by cement mortar	Running meter	60,000	
Foundation Wall including foundation footing	Stone (Approximately 3 feet high) with earth mortar	Bonded by mud mortar	Running meter	40,000	

4.3 Market Rental Rates

Market rental rates for relevant wards in Geita Region are shown in Table 4 5 below.

Table 4-5: Market Rental Rates for Residential Properties, Geita Region

District	Ward	Type	Construction	Type of Room	Monthly Rent (T.Shs.)				
					One Room	Two Rooms	Three Rooms	Four Rooms	
CHATO	Ichwankima	1	CIS, cement block, cement screed floor	Independent Room	12,500	25,000	37,500	50,000	
		2	Grass thatch, cement blocks, cement screed floor	Independent Room	5,500	11,000	16,500	22,000	
		3	CIS, burnt bricks, cement screed floor	Independent Room	10,000	20,000	30,000	40,000	
		4	CIS, burnt bricks, earth / mud screed floor	Independent Room	7,500	15,000	22,500	30,000	
		5	Grass, burnt bricks, earth / mud screed floor	Independent Room	5,000	10,000	15,000	20,000	
		6	Grass thatch, unburnt bricks, earth / mud screed floor	Independent Room	4,000	8,000	12,000	16,000	
		7	Grass thatch, mud and poles, earth / mud screed floor	Independent Room	3,000	6,000	9,000	12,000	
		8	CIS, Unburnt / monolithic / mud + pole, cement screed	Independent Room	9,000	18,000	27,000	36,000	
		9	CIS, Unburnt / monolithic / mud + pole, earth / mud screed floor	Independent Room	8,000	16,000	24,000	32,000	
		Nyamilembe	1	CIS, cement block, cement screed floor	Independent Room	12,500	25,000	37,500	50,000
	2		Grass thatch, cement blocks, cement screed floor	Independent Room	5,500	11,000	16,500	22,000	
	3		CIS, burnt bricks, cement screed floor	Independent Room	10,000	20,000	30,000	40,000	
	4		CIS, burnt bricks, earth / mud screed floor	Independent Room	7,500	15,000	22,500	30,000	
	5		Grass, burnt bricks, earth / mud screed floor	Independent Room	5,000	10,000	15,000	20,000	
	6		Grass thatch, unburnt bricks, earth / mud screed floor	Independent Room	4,000	8,000	12,000	16,000	
	7		Grass thatch, mud and poles, earth / mud screed floor	Independent Room	3,000	6,000	9,000	12,000	
	8		CIS, Unburnt / monolithic / mud + pole, cement screed	Independent Room	9,000	18,000	27,000	36,000	
9	CIS, Unburnt / monolithic / mud + pole, earth / mud screed floor		Independent Room	8,000	16,000	24,000	32,000		

District	Ward	Type	Construction	Type of Room	Monthly Rent (T.Shs.)			
					One Room	Two Rooms	Three Rooms	Four Rooms
	Ilemela	1	CIS, cement block, cement screed floor	Independent Room	15,000	30,000	45,000	60,000
		2	Grass thatch, cement blocks, cement screed floor	Independent Room	10,000	20,000	30,000	40,000
		3	CIS, burnt bricks, cement screed floor	Independent Room	11,000	22,000	33,000	44,000
		4	CIS, burnt bricks, earth / mud screed floor	Independent Room	6,000	12,000	18,000	24,000
		5	Grass, burnt bricks, earth / mud screed floor	Independent Room	6,500	13,000	19,500	26,000
		6	Grass thatch, unburnt bricks, earth / mud screed floor	Independent Room	5,000	10,000	15,000	20,000
		7	Grass thatch, mud and poles, earth / mud screed floor	Independent Room	5,000	10,000	15,000	20,000
		8	CIS, Unburnt / monolithic / mud + pole, cement screed	Independent Room	10,000	20,000	30,000	40,000
		9	CIS, Unburnt / monolithic / mud + pole, earth / mud screed floor	Independent Room	9,000	18,000	26,000	35,000
	Katende	1	CIS, cement block, cement screed floor	Independent Room	17,500	35,000	52,500	70,000
		2	Grass thatch, cement blocks, cement screed floor	Independent Room	10,000	20,000	30,000	40,000
		3	CIS, burnt bricks, cement screed floor	Independent Room	12,000	24,000	36,000	48,000
		4	CIS, burnt bricks, earth / mud screed floor	Independent Room	6,000	12,000	18,000	24,000
		5	Grass, burnt bricks, earth / mud screed floor	Independent Room	5,500	11,000	16,500	22,000
		6	Grass thatch, unburnt bricks, earth / mud screed floor	Independent Room	3,000	6,000	9,000	12,000
		7	Grass thatch, mud and poles, earth / mud screed floor	Independent Room	3,000	6,000	9,000	12,000
		8	CIS, Unburnt / monolithic / mud + pole, cement screed	Independent Room	11,000	22,000	32,000	43,000
9		CIS, Unburnt / monolithic / mud + pole, earth / mud screed floor	Independent Room	10,000	19,000	29,000	38,000	

District	Ward	Type	Construction	Type of Room	Monthly Rent (T.Shs.)				
					One Room	Two Rooms	Three Rooms	Four Rooms	
CHATO	Bukome	1	CIS, cement block, cement screed floor	Independent Room	13,000	26,000	39,000	52,000	
		2	Grass thatch, cement blocks, cement screed floor	Independent Room	8,000	16,000	24,000	32,000	
		3	CIS, burnt bricks, cement screed floor	Independent Room	10,000	20,000	30,000	40,000	
		4	CIS, burnt bricks, earth / mud screed floor	Independent Room	6,000	12,000	18,000	24,000	
		5	Grass, burnt bricks, earth / mud screed floor	Independent Room	4,000	8,000	12,000	16,000	
		6	Grass thatch, unburnt bricks, earth / mud screed floor	Independent Room	4,000	8,000	12,000	16,000	
		7	Grass thatch, mud and poles, earth / mud screed floor	Independent Room	3,000	6,000	9,000	12,000	
		8	CIS, Unburnt / monolithic / mud + pole, cement screed	Independent Room	9,000	18,000	27,000	36,000	
		9	CIS, Unburnt / monolithic / mud + pole, earth / mud screed floor	Independent Room	8,000	16,000	24,000	32,000	
		Makurugusi	1	CIS, cement block, cement screed floor	Independent Room	10,000	20,000	30,000	40,000
	2		Grass thatch, cement blocks, cement screed floor	Independent Room	8,000	16,000	24,000	32,000	
	3		CIS, burnt bricks, cement screed floor	Independent Room	10,000	20,000	30,000	40,000	
	4		CIS, burnt bricks, earth / mud screed floor	Independent Room	6,000	12,000	18,000	24,000	
	5		Grass, burnt bricks, earth / mud screed floor	Independent Room	4,000	8,000	12,000	16,000	
	6		Grass thatch, unburnt bricks, earth / mud screed floor	Independent Room	3,000	6,000	9,000	12,000	
	7		Grass thatch, mud and poles, earth / mud screed floor	Independent Room	3,000	6,000	9,000	12,000	
	8		CIS, Unburnt / monolithic / mud + pole, cement screed	Independent Room	9,000	18,000	27,000	36,000	
9	CIS, Unburnt / monolithic / mud + pole, earth / mud screed floor		Independent Room	8,000	16,000	24,000	32,000		

District	Ward	Type	Construction	Type of Room	Monthly Rent (T.Shs.)				
					One Room	Two Rooms	Three Rooms	Four Rooms	
CHATO	Minkoto	1	CIS, cement block, cement screed floor	Independent Room	10,000	20,000	30,000	40,000	
		2	Grass thatch, cement blocks, cement screed floor	Independent Room	8,000	16,000	24,000	32,000	
		3	CIS, burnt bricks, cement screed floor	Independent Room	10,000	20,000	30,000	40,000	
		4	CIS, burnt bricks, earth / mud screed floor	Independent Room	5,000	10,000	15,000	20,000	
		5	Grass, burnt bricks, earth / mud screed floor	Independent Room	5,000	10,000	15,000	20,000	
		6	Grass thatch, unburnt bricks, earth / mud screed floor	Independent Room	4,000	8,000	12,000	16,000	
		7	Grass thatch, mud and poles, earth / mud screed floor	Independent Room	3,000	6,000	9,000	12,000	
		8	CIS, Unburnt / monolithic / mud + pole, cement screed	Independent Room	9,000	18,000	27,000	36,000	
		9	CIS, Unburnt / monolithic / mud + pole, earth / mud screed floor	Independent Room	8,000	16,000	24,000	32,000	
		Iparamasa	1	CIS, cement block, cement screed floor	Independent Room	10,000	20,000	30,000	40,000
	2		Grass thatch, cement blocks, cement screed floor	Independent Room	8,000	16,000	24,000	32,000	
	3		CIS, burnt bricks, cement screed floor	Independent Room	10,000	20,000	30,000	40,000	
	4		CIS, burnt bricks, earth / mud screed floor	Independent Room	5,000	10,000	15,000	20,000	
	5		Grass, burnt bricks, earth / mud screed floor	Independent Room	4,000	8,000	12,000	16,000	
	6		Grass thatch, unburnt bricks, earth / mud screed floor	Independent Room	3,000	6,000	9,000	12,000	
	7		Grass thatch, mud and poles, earth / mud screed floor	Independent Room	2,500	5,000	7,500	10,000	
	8		CIS, Unburnt / monolithic / mud + pole, cement screed	Independent Room	9,000	18,000	27,000	36,000	
9	CIS, Unburnt / monolithic / mud + pole, earth / mud screed floor		Independent Room	8,000	16,000	24,000	32,000		

District	Ward	Type	Construction	Type of Room	Monthly Rent (T.Shs.)			
					One Room	Two Rooms	Three Rooms	Four Rooms
GEITA	Magenge	1	CIS, cement block, cement screed floor	Independent Room	10,000	20,000	30,000	40,000
		2	Grass thatch, cement blocks, cement screed floor	Independent Room	8,000	16,000	24,000	32,000
		3	CIS, burnt bricks, cement screed floor	Independent Room	10,000	20,000	30,000	40,000
		4	CIS, burnt bricks, earth / mud screed floor	Independent Room	5,000	10,000	15,000	20,000
		5	Grass, burnt bricks, earth / mud screed floor	Independent Room	4,000	8,000	12,000	16,000
		6	Grass thatch, unburnt bricks, earth / mud screed floor	Independent Room	3,000	6,000	9,000	12,000
		7	Grass thatch, mud and poles, earth / mud screed floor	Independent Room	2,500	5,000	7,500	10,000
		8	CIS, Unburnt / monolithic / mud + pole, cement screed	Independent Room	9,000	18,000	27,000	36,000
		9	CIS, Unburnt / monolithic / mud + pole, earth / mud screed floor	Independent Room	8,000	16,000	24,000	32,000

District	Ward	Type	Construction	Type of Room	Monthly Rent (T.Shs.)				
					One Room	Two Rooms	Three Rooms	Four Rooms	
MIBOGWE	Lulembela	1	CIS, cement block, cement screed floor	Independent Room	17,000	34000	51000	68000	
		2	Grass thatch, cement blocks, cement screed floor	Independent Room	15,000	30000	45000	60000	
		3	CIS, burnt bricks, cement screed floor	Independent Room	17,000	34000	51000	68000	
		4	CIS, burnt bricks, earth / mud screed floor	Independent Room	11,000	22000	33000	44000	
		5	Grass, burnt bricks, earth / mud screed floor	Independent Room	6,000	12000	18000	24000	
		6	Grass thatch, unburnt bricks, earth / mud screed floor	Independent Room	5,000	10000	15000	20000	
		7	Grass thatch, mud and poles, earth / mud screed floor	Independent Room	4,000	8000	12000	16000	
		8	CIS, Unburnt / monolithic / mud + pole, cement screed	Independent Room	15,000	30000	45000	60000	
		9	CIS, Unburnt / monolithic / mud + pole, earth / mud screed floor	Independent Room	14,000	28000	42000	56000	
		Ikunguigazi	1	CIS, cement block, cement screed floor	Independent Room	15,000	30000	45000	60000
	2		Grass thatch, cement blocks, cement screed floor	Independent Room	8,000	16000	24000	32000	
	3		CIS, burnt bricks, cement screed floor	Independent Room	10,000	20000	30000	40000	
	4		CIS, burnt bricks, earth / mud screed floor	Independent Room	10,000	20000	30000	40000	
	5		Grass, burnt bricks, earth / mud screed floor	Independent Room	5,000	10000	15000	20000	
	6		Grass thatch, unburnt bricks, earth / mud screed floor	Independent Room	3,000	6000	9000	12000	
	7		Grass thatch, mud and poles, earth / mud screed floor	Independent Room	2,000	4000	6000	8000	
	8		CIS, Unburnt / monolithic / mud + pole, cement screed	Independent Room	9,000	18,000	27,000	36,000	
9	CIS, Unburnt / monolithic / mud + pole, earth / mud screed floor		Independent Room	8,000	16,000	24,000	32,000		

District	Ward	Type	Construction	Type of Room	Monthly Rent (T.Shs.)			
					One Room	Two Rooms	Three Rooms	Four Rooms
MBOGWE	Ikobe	1	CIS, cement block, cement screed floor	Independent Room	13,000	26000	39000	52000
		2	Grass thatch, cement blocks, cement screed floor	Independent Room	8,000	16000	24000	32000
		3	CIS, burnt bricks, cement screed floor	Independent Room	10,000	20000	30000	40000
		4	CIS, burnt bricks, earth / mud screed floor	Independent Room	7,500	15000	22500	30000
		5	Grass, burnt bricks, earth / mud screed floor	Independent Room	5,000	10000	15000	20000
		6	Grass thatch, unburnt bricks, earth / mud screed floor	Independent Room	5,000	10000	15000	20000
		7	Grass thatch, mud and poles, earth / mud screed floor	Independent Room	5,000	10000	15000	20000
		8	CIS, Unburnt / monolithic / mud + pole, cement screed	Independent Room	5,000	18,000	27,000	36,000
		9	CIS, Unburnt / monolithic / mud + pole, earth / mud screed floor	Independent Room	5,000	16,000	24,000	32,000

District	Ward	Type	Construction	Type of Room	Monthly Rent (T.Shs.)			
					One Room	Two Rooms	Three Rooms	Four Rooms
MBOGWE	Bukandwe	1	CIS, cement block, cement screed floor	Independent Room	30,000	60000	90000	120000
		2	Grass thatch, cement blocks, cement screed floor	Independent Room	25,000	50000	75000	100000
		3	CIS, burnt bricks, cement screed floor	Independent Room	30,000	60000	90000	120000
		4	CIS, burnt bricks, earth / mud screed floor	Independent Room	17,500	35000	52500	70000
		5	Grass, burnt bricks, earth / mud screed floor	Independent Room	8,500	17000	25500	34000
		6	Grass thatch, unburnt bricks, earth / mud screed floor	Independent Room	7,500	15000	22500	30000
		7	Grass thatch, mud and poles, earth / mud screed floor	Independent Room	7,500	15000	22500	30000
		8	CIS, Unburnt / monolithic / mud + pole, cement screed	Independent Room	27,000	54,000	81,000	108,000
		9	CIS, Unburnt / monolithic / mud + pole, earth / mud screed floor	Independent Room	24,000	48,000	72,000	96,000

District	Ward	Type	Construction	Type of Room	Monthly Rent (T.Shs.)			
					One Room	Two Rooms	Three Rooms	Four Rooms
MBOGWE	Nyakafulu	1	CIS, cement block, cement screed floor	Independent Room	20,000	40000	60000	80000
		2	Grass thatch, cement blocks, cement screed floor	Independent Room	15,000	30000	45000	60000
		3	CIS, burnt bricks, cement screed floor	Independent Room	17,000	34000	51000	68000
		4	CIS, burnt bricks, earth / mud screed floor	Independent Room	10,000	20000	30000	40000
		5	Grass, burnt bricks, earth / mud screed floor	Independent Room	6,000	12000	18000	24000
		6	Grass thatch, unburnt bricks, earth / mud screed floor	Independent Room	6,500	13000	19500	26000
		7	Grass thatch, mud and poles, earth / mud screed floor	Independent Room	5,500	11000	16500	22000
		8	CIS, Unburnt / monolithic / mud + pole, cement screed	Independent Room	15,000	30000	45000	60000
		9	CIS, Unburnt / monolithic / mud + pole, earth / mud screed floor	Independent Room	14,000	28000	42000	56000

District	Ward	Type	Construction	Type of Room	Monthly Rent (T.Shs.)			
					One Room	Two Rooms	Three Rooms	Four Rooms
MBOGWE	Nhomola	1	CIS, cement block, cement screed floor	Independent Room	17,000	34000	51000	68000
		2	Grass thatch, cement blocks, cement screed floor	Independent Room	13,000	26000	39000	52000
		3	CIS, burnt bricks, cement screed floor	Independent Room	15,000	30000	45000	60000
		4	CIS, burnt bricks, earth / mud screed floor	Independent Room	10,000	20000	30000	40000
		5	Grass, burnt bricks, earth / mud screed floor	Independent Room	5,000	10000	15000	20000
		6	Grass thatch, unburnt bricks, earth / mud screed floor	Independent Room	5,000	10000	15000	20000
		7	Grass thatch, mud and poles, earth / mud screed floor	Independent Room	5,000	10000	15000	20000
		8	CIS, Unburnt / monolithic / mud + pole, cement screed	Independent Room	14,000	28000	42000	56000
		9	CIS, Unburnt / monolithic / mud + pole, earth / mud screed floor	Independent Room	12,000	24000	36000	48000

District	Ward	Type	Construction	Type of Room	Monthly Rent (T.Shs.)			
					One Room	Two Rooms	Three Rooms	Four Rooms
BUKOMBE	Lyambangongo	1	CIS, cement block, cement screed floor	Independent Room	13,000	26000	39000	52000
		2	Grass thatch, cement blocks, cement screed floor	Independent Room	8,000	16000	24000	32000
		3	CIS, burnt bricks, cement screed floor	Independent Room	10,000	20000	30000	40000
		4	CIS, burnt bricks, earth / mud screed floor	Independent Room	5,000	10000	15000	20000
		5	Grass, burnt bricks, earth / mud screed floor	Independent Room	3,000	6000	9000	12000
		6	Grass thatch, unburnt bricks, earth / mud screed floor	Independent Room	3,000	6000	9000	12000
		7	Grass thatch, mud and poles, earth / mud screed floor	Independent Room	2,000	4000	6000	8000
		8	CIS, Unburnt / monolithic / mud + pole, cement screed	Independent Room	9,000	18,000	27,000	36,000
		9	CIS, Unburnt / monolithic / mud + pole, earth / mud screed floor	Independent Room	8,000	16,000	24,000	32,000

District	Ward	Type	Construction	Type of Room	Monthly Rent (T.Shs.)			
					One Room	Two Rooms	Three Rooms	Four Rooms
BUKOMBE	Bukombe	1	CIS, cement block, cement screed floor	Independent Room	13,000	26000	39000	52000
		2	Grass thatch, cement blocks, cement screed floor	Independent Room	8,000	16000	24000	32000
		3	CIS, burnt bricks, cement screed floor	Independent Room	10,000	20000	30000	40000
		4	CIS, burnt bricks, earth / mud screed floor	Independent Room	5,000	10000	15000	20000
		5	Grass, burnt bricks, earth / mud screed floor	Independent Room	5,000	10000	15000	20000
		6	Grass thatch, unburnt bricks, earth / mud screed floor	Independent Room	5,000	10000	15000	20000
		7	Grass thatch, mud and poles, earth / mud screed floor	Independent Room	3,000	6000	9000	12000
		8	CIS, Unburnt / monolithic / mud + pole, cement screed	Independent Room	9,000	18,000	27,000	36,000
		9	CIS, Unburnt / monolithic / mud + pole, earth / mud screed floor	Independent Room	8,000	16,000	24,000	32,000

4.4 Unlisted Crops and Trees

Proposed compensation rates for unlisted crops and trees are shown in Table 4-6 below.

Table 4-6: Proposed Compensation Rates for Unlisted Crops and Trees

S/n	Type	Place Found	Latin Name	Common Name	Potential Use	Proposed Rate (T.Shs.)	Remarks
		Geita					
1.	Mbanga	Yes	Pericopsis Angolensis (Afromosia Angolensis)	Umubanga (Haya); Mmanga (Luguru); Muwanga (Matengo, Yao); Muvanga, Mwanga (Nyamwezi); Mmanga (Vidunda); Mbanga (Zinza)	Charcoal, crafts, domestic uses (pestles, mortars). fe (posts), firewood, furniture, gum, land improvement (nitrogen fixing), medicine, ritual (used to chase away witchcraft), timber (railway sleepers; hard)	45,000	Valued as per the CV's 2018 approved Compensation Rates for unlisted trees††
2.	Mbao laini/Cypress	Yes	Cupressus Family Cupressaceae	Swahili: Mvinje	Soft wood timber	70,000	Valued at the same rate as for other softwood trees such as Pines and Msonobari as per the CV's 2018 approved Compensation Rates for unlisted trees††
3.	Miboyo	Yes		Boyo	Timber tree	45,000	Valued as per the CV's 2018 approved Compensation Rates for unlisted trees††
4.	Mitundu/Brachystegia speciformis	Yes	Lannea Schweinfurthii Var. Stuhlinanni	Eravande (Arusha); Mumbu (Sonde), Shambaa, Zigua); Muwumbu (Gogo); Orbochandi (Gorowa, Iraqw); Thigii, Orbochandi, Tambaragi (Iraqw); Mumendo, Omosaruwa (Kuria); Mtokatoke (Longo); Muhingilo (Luguru); Ndelamwana (Matengo); Mpupi (Mwera); Msaru (Ngurimu); Mnyumbu (Nyamwezi); Musagha (Nyaturu); Msighe (Pare); Msakawa (Rang)); Mpiwipwi (Rufiji); Msayu, Msirgu, Nsayu (Sukuma); Muhondobogo, Mnyamendi, Mribwampara (Zinza)	Dye (Bark =Brown, Red, Purple), Fibre (Rope), Fodder, Fruit, Furniture, Medicine, Ritual, Tannin (Bark), Timber	45,000	Valued as per the CV's 2018 approved Compensation Rates for unlisted trees††

S/n	Type	Place Found	Latin Name	Common Name	Potential Use	Proposed Rate (T.Shs.)	Remarks
		Geita					
5.	Mkulungu/ Mkurungu	Yes	Croton Macrostachyus Family Name: Euphorbiaceae	Ololyapiyapi, Olobiagio (Arusha); Liwurungu (Bena); Mshunduzi (Bondei). Shambaa. Zigua); Mfurufuru. Ifurufuru (Chagga); Mzululwa (Fipa); Meali. Melia (Gorowa); Mulugu. Mulemugu. Muhugu. Muulungu (Hehe); Msuju (Kuria); Ololepo, Oloiyapiyilp (Masai); Mfofuru. Mfurfuru (Meru); Mkurungu, Mukuruguru. Mulemugu (Nyiha); Llvuluku (Pangwa); Liwulugu (Safwa); Mshunduzi (Shambaa); Muhuwa (Zinza).	Beehives. Bee Plant. Building Materials. Domestic Uses (Tool Handles). Firewood. Fodder. Land Improvement (Mulch. Soil Conservation). Medicine (Insect Repellent). Ritual. Shade.	101,808	Valued as per the CV's 2018 approved Compensation Rates Report for Shinyanga Region
6.	Mlama	Yes	Combretum Molle (C. Atelanthum, C. Gueinzil C. Holosericeum)	Maroro, Maroi, Olbukoi (Arusha); Gendai (Barbaig, Iraqw); Mlama (Bende, Luguru, Nyamwez1, V1dunda); Naganagachan (Barbaig); Mototi (Gorowa); Gendamo (Gorowa, Iraqw, F1ome); Mulama (Haya, Rang1, Isanzu, Nyaturu); Gindamo (Iraqw); Mjarujaru, Mtibari (Longo); Misma, Mlama Mwenge (Luguru); Tetekuriru, Mbugwe, Olmaroroi (Masai); Mlama, Mdama (Matengo, Yao); Mlamadoli (Nguru); Mruku (Pare); Mglito (Rangi); Mnama (Shambaa); Kaguwa, Namamwela (Sukuma); Mugombwa (Zinza)	Bee plant, building materials (termite resistant), charcoal, domestic uses (tool handles), fencing (posts), fodder, land improvement (mulch), medicine (human, animal), shade	0	Valued with the land. Ordinarily found tree of no particular economic value. Valued as per the CV's 2018 approved Compensation Rates Report for Shinyanga Region.

Market Survey for Compensation – Geita Region

S/n	Type	Place Found	Latin Name	Common Name	Potential Use	Proposed Rate (T.Shs.)	Remarks
		Geita					
7.	Msonobari/Eucalyptus	Yes	Eucalyptus globulus Family: Pinaceae,	Miti sindano; Kalitusi, Mkalitusi	Soft wood timber, oil, medicine, insect repellent, wind breaker.	70,000	Valued as per the CV's 2018 approved Compensation Rates for unlisted trees††
8.	Myenze	Yes	Brachystegia Boehmii, Family Name: Leguminosae (Subfamil V Caesalpinioideae)	Muyombo (Bondei, Shambaa, Zigua); Muyere (Bende); Nafumo (Gorowa, Iraqw); Mnyenzi (Longo); Myenze (Luguru); Myombo (Matengo, Yao); Mfumbu (Nyaturu); Myenze, Myombo (Nyamwezi, Sukuma).	Beehives, Bee Plant, Charcoal, Fibre (Rope), Firewood, Tennin.	0	Valued with the land. Ordinarily found tree of no particular economic value. Valued as per the CV's 2018 approved Compensation Rates Report for Shinyanga Region.
9.	Pines	Yes	Pinus; Family name Pinaceae	Soft wood timber,	Soft wood timber; construction, ornamental, wind breaker.	70,000	Valued as per the CV's 2018 approved Compensation Rates for unlisted trees††

†† These “unlisted trees” were approved by the Chief Valuer in 2018 in a letter bearing Ref. No. BA.391/466/01/58 of 15th August, 2018.

4.5 Graves

Standard grave size: 6 feet depth, 2.5 meters wide, 8 feet long² or 1.83 metres depth, 0.76 metres wide and 2.44 metres long. Proposed compensation rates for graves are shown in Table 4.7 below.

Table 4-7: Proposed Compensation Rates for Graves

S/n	Expenditure Item			(T.Shs.)
(a) Grave Without a Construction				
1. Amount Payable to Custodian of the Grave				
	Amount Payable to Family of the deceased for Placatory and Expiatory Rites, and ceremony.			300,000
2. Amount Payable to District Medical Officer / Graves Removal Contractor				
	Amount payable to District Medical Officer to cover exhumation of the dead body and re-interment costs			200,000
			Total	500,000
(b) Grave With a Construction				
1. Amount Payable to Custodian of the Grave				
	Amount Payable to Family of the deceased for Placatory and Expiatory Rites, and ceremony.			300,000
2. Amount Payable to District Medical Officer / Graves Removal Contractor				
	Amount payable to District Medical Officer to cover exhumation of the dead body and re-interment costs, as above.			
			Sub-Total	200,000
Add: Amount for Grave Re-Construction				
	Expenditure Item	Units	Unit Rate	
	Matofali (Blocks)	50 blocks	1,000	50,000
	Cement Bags	3 Bags	15,000	45,000
	Kokoto / Gravel	Debe / Cans 3	3,000	9,000
	Mchanga / Sand	Debe / Cans 4	1,000	4,000
	Maji / Water	Dumu / 20 liter drums 4	500	2,000
	Msalaba/ Headstone/Monument			25,000
	Labor			
	Kujenga Tofali moja/ Construction Rate per Block	50 Blocks	500	25,000
	Zege / Concrete			20,000
	Plastering of the grave			20,000
			Sub-Total	200,000
		Total Amount Payable to the DMO		400,000

² International Cemetery, Cremation and Funeral Association, www.iccfa.com. Last viewed on 1st November, 2018.

4.6 Interest Rate for Estimating Disturbance Allowance

Regulation 15 of *The Valuation and Valuers (General) Regulations, 2018* requires disturbance allowance to be calculated by “multiplying value of the interest in land by the average percentage rate of interest offered by the Central Bank on fixed deposits for twelve months at the time of loss of interest in land”. Information provided by the Bank of Tanzania indicates that the Central Bank does not offer interest on fixed deposit reserves rather it provides information on interest rates which it charges commercial banks when borrowing from the Central Bank or when investors sell government financial instruments to the Central Bank. This rate is known as the **Discount rate**. The relevant current discount rate is 7% which has been effective from August 2018.

For the valuations for the Pipeline (PL) corridor and Above Ground Installations (AGIs) areas, which are being conducted under *The Valuation and Valuers (General) Regulations, 2018*, a 7% interest rate will be applied for calculating disturbance allowance for these areas. This position has been arrived at following consultations made with the Ministry of Lands, Housing and Human Settlements Development (MLHSD) pending amendment of the law which will provide clarity for future projects.³

³ This is in accordance with the letter bearing Ref. No. BA.100/354/52/BDM from Ministry of Lands, Housing and Human Settlements Development dated 24th January, 2019.

5 Key Observations and Conclusion

Having studied the nature of immovable assets which are likely to be affected by the EACOP Project in the pipeline corridor, and examined in detail the prevailing market conditions for these assets, Whiteknights has developed proposed compensation rates for land and buildings, "unlisted" crops and trees, and graves. In formulating proposed land compensation rates to be used for the Pipeline route, approved compensation rates for Early Works/Priority Area (EW/PA) sites were used as benchmarks in deriving land values where the pipeline route is in close proximity to an EW/PA site.

In general, our survey results indicate coherence in values across wards. The survey results also seem to conform to findings of other studies on land values in the districts covered by the study⁴. On account of this, District Valuers for Chato, Geita, Mbogwe and Bukombe Districts in Geita Region generally found our survey results acceptable.

Whiteknights is therefore confident that the survey results are valid and mirror the prevailing or true underlying state of the property markets and sub-markets in the seventeen wards covered by the study. We therefore, unreservedly, put forward our proposal on compensation rates for Geita Region for approval by the CV as per the legal requirements for endorsement of compensation rates as specifically set out in *The Valuation and Valuers (General) Regulations, 2018*.

⁴ Other studies include the Chief Valuer's Research on Land Rates in Tanzania, 2016.

6 Certification of the Market Study

This market study was conducted by **WHITEKNIGHTS REAL ESTATE INVESTMENT ANALYSTS COMPANY LIMITED** as the Project Valuers.

We confirm, with utmost probity, to have carried out the research and presented factual information which we collected in the field, and subsequently analyzed to arrive at the survey results, subject to certain underlying assumptions which we had to make in some instances. The market study has been conducted in full compliance with best international practice, ethical behavior and the specific legal dictates of the **Valuation and Valuers (General) Regulations, 2018**.

CERTIFICATION

This market research has been conducted by Dr. Medard Lucas Geho and Dr. Cletus Eligius Ndjovu, both being Fully Registered Valuers, and Dr. Medard Zephryn Mushumbusi a Fully Registered Quantity Surveyor and is signed for and on behalf of **WHITEKNIGHTS REAL ESTATE INVESTMENT ANALYSTS COMPANY LIMITED** by:

.....

Dr. Medard Lucas Geho

Ph.D. (Reading, United Kingdom, 1997); M.Sc. Land Management (Reading, United Kingdom. 1992); Adv. Dipl. LMV (Ardhi Institute, Dar es Salaam, 1984)

Fellow - Tanzania Institution of Valuers and Estate Agents (TIVEA); Member - African Real Estate Society (AFRES); FRS (T)

Fully Registered and Licensed Valuation Surveyor (NCPS), Reg. No. 165 of 1990

Appendix A: Old and Revised Land Rates for Affected Chato District Wards

S/n	Ward	Old Land Rate per Acre (T.Shs.)	Revised and Approved New Land Rate per Acre (T.Shs.)
1	Ichwankima	1,000,000	483,000
2	Nyamilembe	900,000	435,000
3	Ilemela	900,000	435,000
4	Katende	1,035,000	500,000
5	Bukome	940,000	454,000
6	Makurugusi	850,000	411,000
7	Mikonto	1,250,000	604,000
8	Butengorumasa	800,000	386,000
9	Iparamasa	950,000	459,000

Appendix B: Letter of Approval of Revised Land Rates for Affected Chato District Wards

**THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF LANDS, HOUSING AND HUMAN SETTLEMENTS
DEVELOPMENT**

Tel : +255 2629633/09/13/14
Fax : +255 262 963 315
E-Mail: ps@lands.go.tz
Website: www.archi.go.tz



Government City,
Mwamba Area,
Arch Street,
P.O. BOX 2906,
40477-DODOMA.

In reply please quote:
Ref. No.BA.100/354/02/116/BDM

23rd September, 2020

Managing Director,
Whiteknights Real Estates Investments Analyst Co. Ltd.
P.O. Box 35480,
DAR ES SALAAM.

**RE: PROPOSED NEW LAND RATES FOR AFFECTED PL CHATO DISTRICT
WARDS**

Refer to the above heading together with your letter dated 17th September, 2020 with Ref. No. **WHTS/CV/1709/001**.

2. We acknowledge the receipt of the proposed land value rates to be used in various areas of Chato District affected by Crude Oil Pipeline Project. We hereby inform you that, we find them appropriate for the compensation for the said project.
3. We advise also these rates to be shared to Chato District Valuer.
4. Thank you.


Baraka D. Mollai
For: **PERMANENT SECRETARY**

Appendix C: Land Rates for EACOP Early Works / Priority Area Sites

MCPY/ District	Type of Land	DV's Rate per Acre (T.Shs.)	Proposed Rate per Acre (T.Shs.)
MCPY-05: Missenyi	Peri-urban, agricultural	500,000-1,000,000	1,000,000
MCPY-06: Muleba	Agricultural	500,000-800,000	800,000
MCPY-07: Chato	Agricultural	400,000-500,000	500,000
MCPY-08: Bukombe	Building plots, urbanised	No D.V.	800,000
MCPY-09 and CY- KP701: Nzega	Agricultural	400,000-800,000	850,000
MCPY-10: Igunga	Rural, agricultural	No D.V.	400,000
MCPY-11: Singida	Agricultural, fertile, ripe for development	450,000	500,000
MCPY-12: Kondoa	Agricultural	350,000-600,000	500,000
1MC-13 and PY- 13: Kiteto	Agricultural, (fertile)	600,000-1,200,000	1,200,000
MCPY-14: Kilindi	Rural, remote	50,000-80,000	350,000
MCPY-15: Handeni	Agricultural, Ripe for development	300,000-800,000	800,000
MCPY-16: Muheza	Commercial farming	700,000-1,000,000	1,250,000

**Appendix D: Land Value Maps for Affected Wards in
Geita Region**

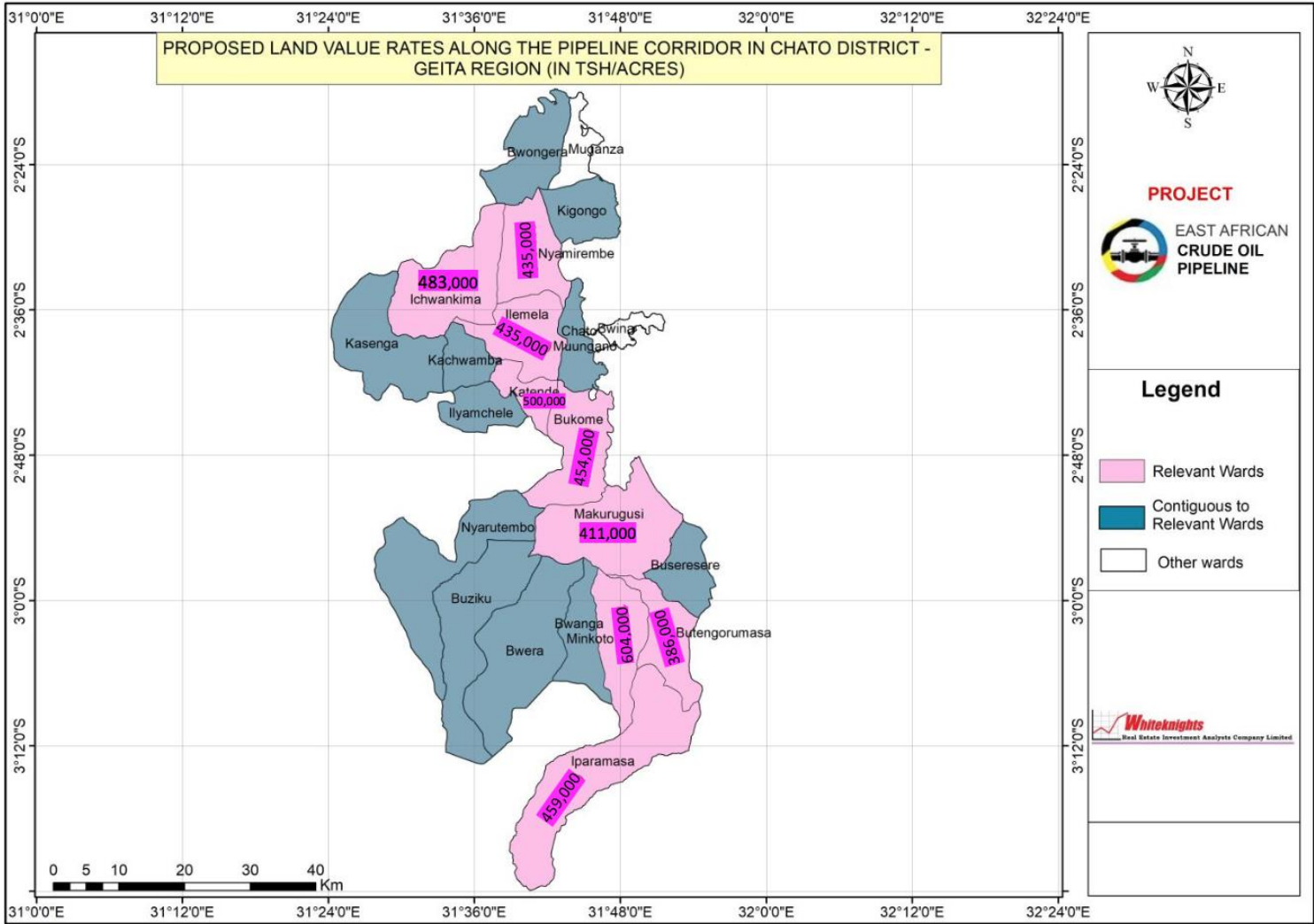


Figure 2: Revised Land Value Map for Relevant Wards in Chato District, Geita Region

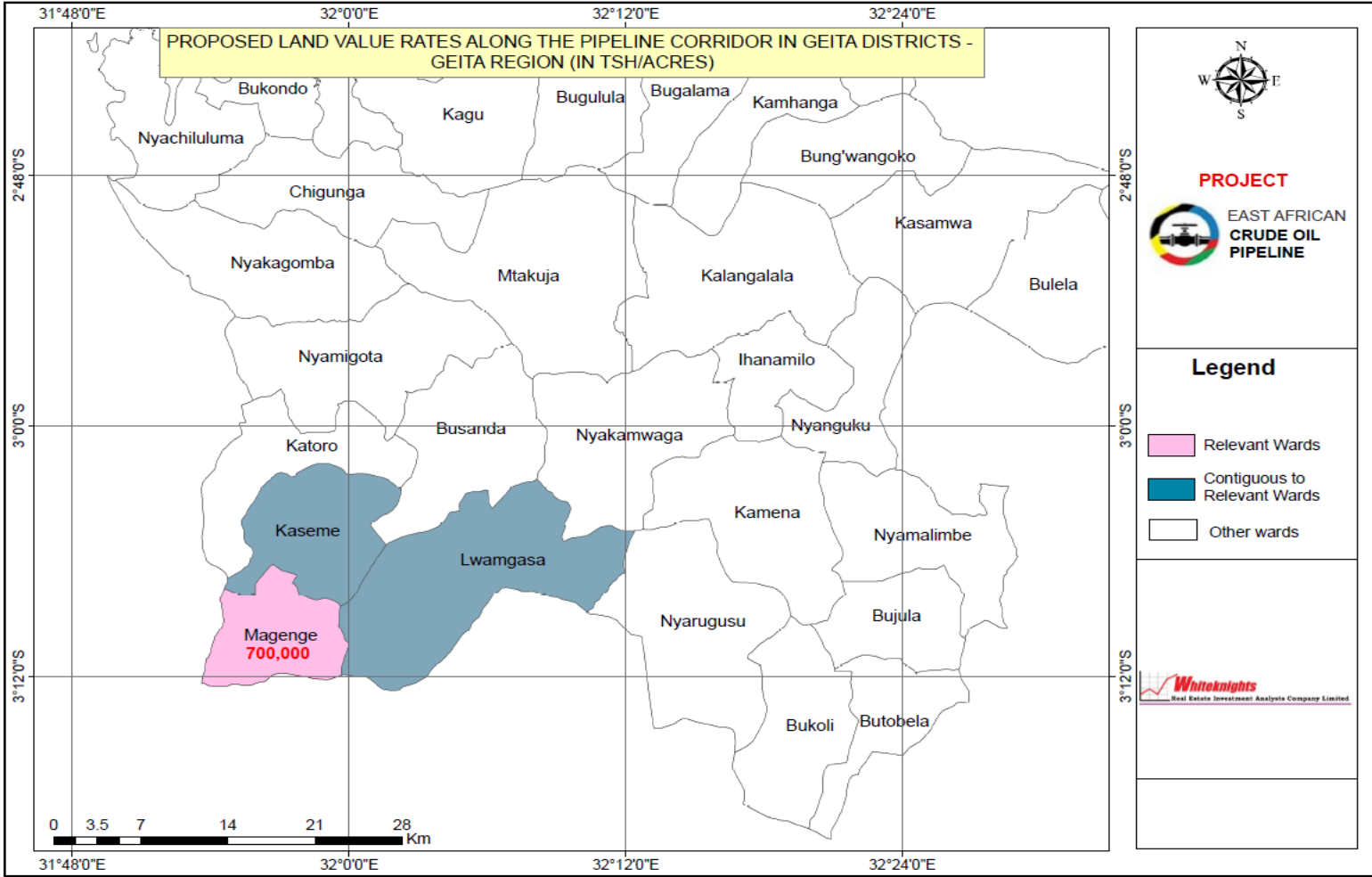


Figure 3: Land Value Map for Relevant Wards in Geita District, Geita Region

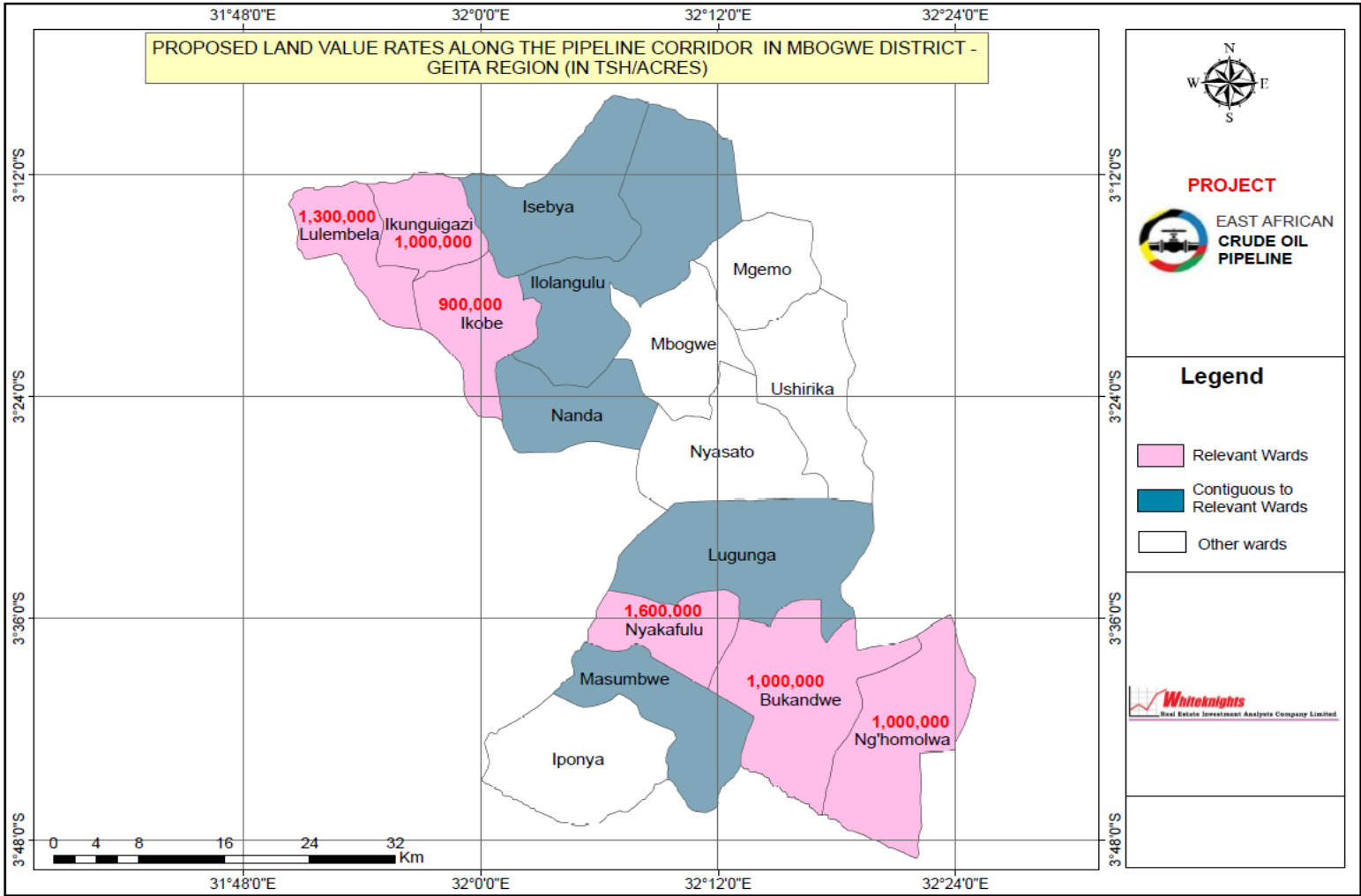


Figure 4: Land Value Map for Relevant Wards in Mbogwe District, Geita Region

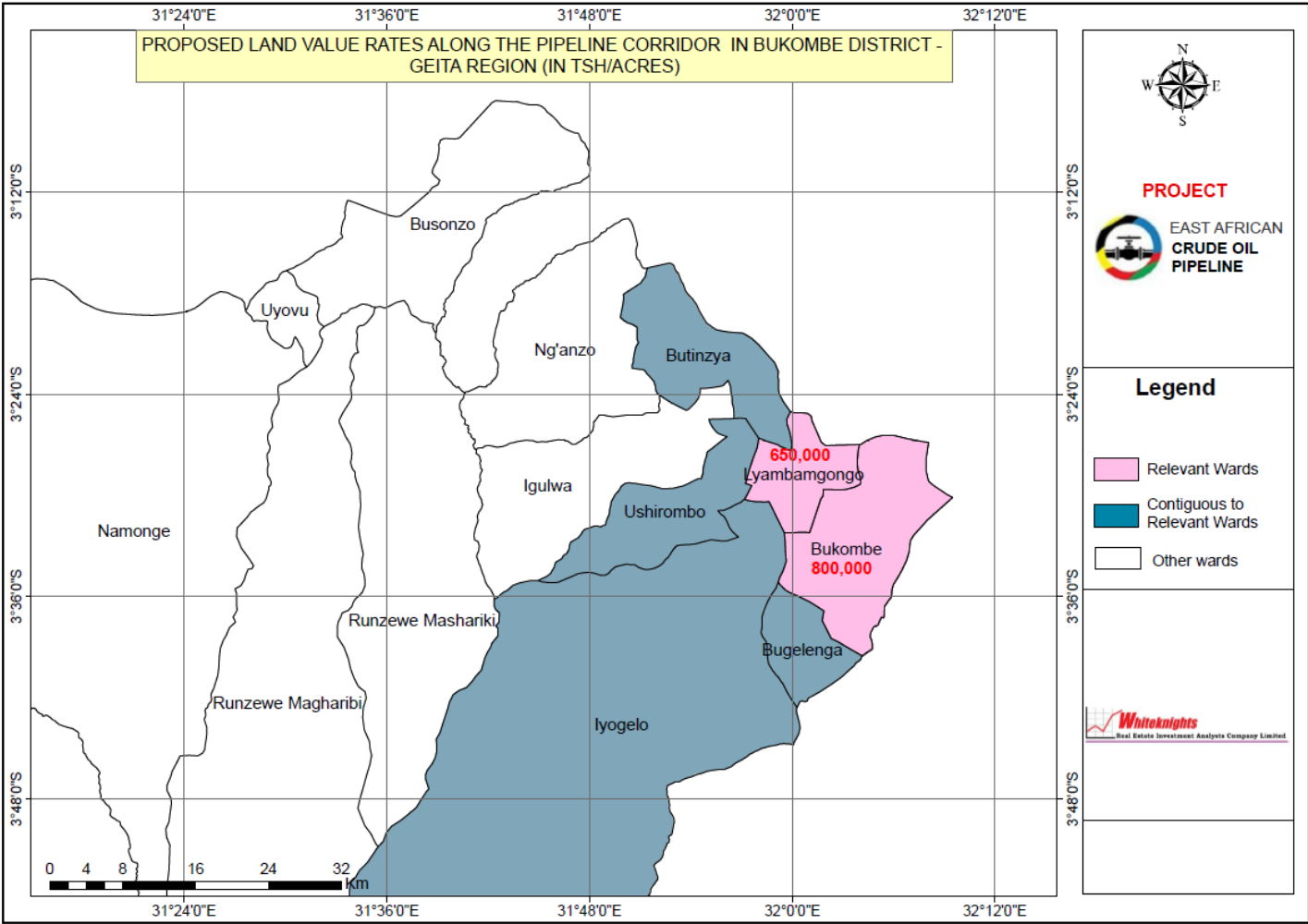


Figure 5: Land Value Map for Relevant Wards in Bukombe District, Geita Region

Appendix C

Record of Consultation & Disclosure

Appendix C–Consultation and Disclosure

Table C-1: Key National-Level Government of Tanzania Stakeholders (RAP Planning)

Name of Government Body	Summary of Overall Responsibilities	Summary of Involvement in Land Acquisition and Resettlement ¹
Key Agencies:		
Ministry of Lands, Housing and Human Settlements Development (MLHHSD).	<p>Principal ministry is responsible for land use planning, surveying and demarcating land and the provision of land ownership and tenancy rights.</p> <p>Responsible for policy, regulation, and coordination of matters relating to land in Tanzania. It also administers the various Land Acts, including the Land Acquisition Act, the Land Act, and the Village Land Act. Land use planning, management, and land delivery activities are usually conducted by the ministry.</p> <p>Within this ministry, the Commissioner for Lands administers most issues dealing with land allocation, acquisition, and registration and land management. All instances of acquisition of land for public purposes and the need for resettlement and / or compensation must be referred to the commissioner.</p>	<p>Oversight and approval role for:</p> <ul style="list-style-type: none"> Review and verification of the valuation rates, process and Valuation Reports (VRs), including the Compensation Schedules, through the Office of the CV; Regulation and oversight of the land acquisition process, including ensuring compensation is paid or resettlement undertaken as agreed in the approved Valuation Reports; and Ensuring that the amount of compensation paid to Project Affected Persons (PAPs) is equivalent to the value of affected properties and signing off VRs prepared by registered valuers to verify that the entitlements comply with Tanzanian laws governing land acquisition, resettlement and compensation.
Ministry of Energy (ME).	<p>Oversight role in instigating, coordinating and managing government responses to the Project and, in cooperation with the Tanzania Petroleum Development Corporation (TPDC)² within the ministry, provide guidance on corridor routing, and supporting associated development.</p> <p>Both Tanzania Electric Supply Company (TANESCO) and the Rural Energy Agency (REA) fall under the ME.</p>	<p>Oil and Gas reside under this ministry and it is therefore the institutional “home” of the Project. The ME is the lead ministry managing the development and delivery of the Project.</p> <p>Project specific roles as set out under the Project land acquisition process.</p> <p>Advise through relevant agencies (e.g. TANESCO) on reserves associated with powerlines that run through and / or are adjacent to the corridor.</p>
Other Relevant National Level Government Agencies		
The Vice-President’s Office.	Coordinates government service delivery, accountability and environmental management issues including climate change.	Key stakeholders for all Project activities, including the Environmental and Social Impact Assessment (ESIA).

¹ Project specific roles are set out under the Project Land Acquisition Process.

² TPDC is the National Oil Company of Tanzania through which the ME implements its petroleum exploration and development policies.

Name of Government Body	Summary of Overall Responsibilities	Summary of Involvement in Land Acquisition and Resettlement ¹
National Environment Management Council (NEMC).	Oversees environmental management issues, with the mandate to undertake enforcement, compliance, review and monitoring of environmental impacts assessments, research, facilitation of public participation in environmental decision-making, raising environmental awareness, and collecting and disseminating environmental information.	NEMC will be provided with the Resettlement Policy Framework (RPF) and Resettlement Action Plans (RAPs) (when available) as part of ESIA process.
Ministry of Regional Administration and Local Government.	Coordinates and supervises regional development, management and administration. The ministry coordinates rural and urban development management policy and strategies; and coordinates Regional Secretariats' activities, building their capacity in institutional development strategies, for integrated socio-economic development and financial development of local government authorities.	The Regional Commissioner (RC), Regional Administrative Secretary (RAS), District Commissioner (DC), District Administrative Secretary (DAS), District Land Officers, District Executive Director (DED), Town Executive Director (TED) fall under this ministry, as well as Ward Executive Officers (WEO), and Village Executive Officers (VEO), Mtaa Executive Officers. These are key stakeholders in arranging and facilitating ward and village / mtaa meetings. They participate in sensitization meetings at the ward and village / mtaa level, which are undertaken in consultation with the District Council. They participate in the valuation and resettlement process including through District Valuers and Land Officers. They also play a role in the Compensation Schedule disclosure and verification process. The DC is the final signatory of the Compensation Schedule before it is submitted to the CV for approval. This ministry is responsible for managing the district-level grievance procedure.
Ministry of Agriculture, Food Security and Co-operatives.	Regulates the livestock and fisheries sector to ensure continued livelihoods, employment, national income and food security. Provides District Agricultural Officers at village / mtaa level to oversee agricultural activities and assist with agricultural development.	Partakes in developing the crop and tree rates for Tanzania. May have an interest (as a key stakeholder) in RAP-related livelihood restoration projects that pertain to agriculture.
Ministry of Livestock and Fisheries Development.	Regulates the livestock and fisheries sector to ensure continued livelihoods, employment, national income and food security.	May have an interest in RAP-related livelihood restoration projects that pertain to livestock and / or fishing / aquaculture.
Ministry of Education, Science, Technology and Vocational Training.	Responsible for the national education system to empower locals with knowledge and skills that add value to national development.	May have an interest in RAP-related livelihood restoration projects that pertain enhance local knowledge and skills.
Ministry of Health, Community Development, Gender, Elders and Children.	Responsible for health and concerned with the improved social well-being of communities and community development programs.	May assist or have an interest in the identification, monitoring and implementation of community development programs connected to the livelihood restoration measures.
Ministry of Home Affairs.	Responsible for the registration of all Tanzanian nationals.	If needed, assists with support where PAPs require identity documents to assist them to verify land ownership and compensation payments.

Name of Government Body	Summary of Overall Responsibilities	Summary of Involvement in Land Acquisition and Resettlement ¹
Ministry of Water and Irrigation.	Responsible for the sustainable management and development of water resources.	Water Basin Authority must approve any water drilling / borehole and uptake while water utilities must approve uptake from existing water infrastructure. Monitors the impact of the Project on water resources and communities' access to water. Authority responsible for watercourses that are determined to be Reserved Land.
Ministry of Works, Transportation and Communication.	Oversees the development and maintenance of roads, bridges and government property. Coordinates the development of infrastructure, including marine, aviation, roads, and other construction projects. The Tanzania Ports Authority (TPA), Tanzania Railways Corporation (TRC) and the Tanzanian National Roads Agency (TANROADS) fall under this ministry. The TANROADS and Tanzanian Rural Roads Agency (TARURA) deal with all road infrastructure, construction and maintenance. The TRC is responsible for railway construction and maintenance. TTCL is responsible for telecommunication and cable networking.	TANROADS (and TARURA) must approve any disruption to the road network or infrastructure, including the planning and building of any new roads. Provides permission to crossroads / railway lines. Provides permission for activities at the port. Advise through relevant agencies (e.g. TANROADS, TTCL and TRC, etc.) on reserves associated with existing roads, telecommunications lines / cables and railways lines adjacent to / crossing the corridor.
Ministry of Natural Resources and Tourism.	The Tanzania Forest Service Agency (TFS) falls under this Ministry. The TFS is a semi-autonomous government Executive Agency mandated to sustainably undertake conservation, development and utilization of national forest and bee resources so that they contribute to both the current and future social, economic, ecological and cultural needs. TFS manages and protects all forest reserves, including all catchment forests and mangroves. Tanzania Wildlife Management Authority (TAWA) also falls under this Ministry. TAWA is an autonomous public institution responsible for undertaking the administration and sustainable management of wildlife resource and biodiversity conservation (outside National Parks and Ngorongoro Conservation Area), comprising Game Reserves, Game Controlled Areas and open areas.	Advises on matters related to protected areas, including on unpermitted land uses within reserve areas. TFS will have a role in land acquisition matters in forest reserves. Similar to TFS, TAWA will have a role in land acquisition in Reserved Land under its administration.
Ministry of Minerals.	Responsible for facilitating the development of the mining sectors to encourage sustainable economic development.	Concerned with the impact of the Project on Mineral Rights and royalties, local levies and other taxes of mines.

Table C-2: Key Regional and District Government of Tanzania Stakeholders

Name of Government Body	Summary of Overall Responsibilities	Summary of Involvement in Land Acquisition and Resettlement
Regional Secretariats.		<p>The relevant role of the RC's Office includes:</p> <ul style="list-style-type: none"> • In collaboration with District Councils, Mtaa and Village Assemblies, playing an oversight role in valuation surveys; • Coordinating with District Councils to ensure their attendance at sensitization meetings and valuation surveys to enable community sensitization, PAPs identification and valuation surveys to occur efficiently and effectively; • Assisting with the resolution of grievances wherever practicable; and • Providing direct assistance to adjoining regions impacted by the Project if no regional land officers and or / valuers are available.
District Authorities.	Provide coordination and guidance to land acquisition processes ensuring it is undertaken in accordance with Tanzanian law.	<p>The District Councils, DC's Office, DED's and TED's Office have a direct role in the land acquisition process regarding:</p> <ul style="list-style-type: none"> • Notifying the affected Ward Development Councils (WDCs), Village Development Councils (VDCs) and Mtaa Development Councils of the proposed Project; • Advising the VDC on the management of Village / Mtaa Land; • Participating in the land and asset valuation process in an oversight role and verification of the Compensation Schedule produced by the valuers; • Supporting on issues regarding land acquisition and transfer and preparation of title documents for relocation sites (if required); and • Where District Land and Housing Tribunals exist, attending to all grievances of a civil nature regarding land whose pecuniary value is less than T.Shs. 50 million. <p>Wards, which are part of District Councils, play a key role as follows:</p> <ul style="list-style-type: none"> • Ward Officers facilitate the arrangement of and participate in community sensitization and other meetings, including as regards livelihood restoration planning. In relation to the land and asset valuation process, they have an oversight role and verify the Compensation Schedule produced by the valuers; • Advisory services to VDCs; and • Attending to all grievances of a civil nature regarding land whose pecuniary value is less than T.Shs. 3 million are responsible for coordinating development activities and planning in the ward and linking these with the district level plans.

Table C-3: Key Village / Mtaa Level Stakeholders

Name of Village / Mtaa Body	Summary of Overall Responsibilities	Summary of Involvement in Land Acquisition and Resettlement
Village and Mtaa Assemblies / Development Councils.	<p>Key authority in village / mtaa matters.</p> <p>The Village / Mtaa Assembly is composed of all adult members residing in the village / mtaa. A village may be made up of hamlets.</p>	<p>VDC: Relevant Village / Mtaa Assemblies / Councils, who are the supreme authority in village / mtaa matters, can encourage villagers / inhabitants to participate in the process to ensure sustained collaboration between the Project and PAPs / PAHs. Their role is to:</p> <ul style="list-style-type: none"> • Participate in Project sensitization and disclosure meetings; • Mobilize affected households and provide feedback / notification to PAPs on Project-related issues; • Participate in identification of affected households and witness the property valuation exercise; • Participate and witness the land survey and mapping of the Project area; • Support PAPs during the preparation and submission of their compensation claims; • Witness the compensation payment process; and • Support in the land acquisition process and during the registration of any relocation sites (if required). <p>Village / Mtaa Assembly:</p> <ul style="list-style-type: none"> • Participate in Project sensitization and disclosure meetings; • Approve relevant aspects of the land acquisition program (e.g. with regard to the transfer of Village Land); and • Resolve property ownership disputes within households prior to land acquisition or escalate them to the VDC for guidance. <p>VEOs participate in community sensitization, and the land and asset valuation process in an oversight role and during verification of the Compensation Schedule produced by the valuers.</p>

Table C-4: International and National Non-Government Organizations (with a focus on Land and Livelihood Matters)

No.	Name	International Organizations (including Non-Government Organizations NGOs)	Umbrella National NGOs	National NGOs active on local level
1	World Wildlife Fund (WWF).	X		
2	Oxfam.	X		
3	Norwegian Church Aid (NCA).	X		
4	SNV.	X		
5	Fundación Capital (Funda K).	X		
6	Africare.	X		
7	TechnoServe (TNS).	X		
8	Plan International.	X		
9	Heifer International.	X		
10	World Vision.	X		
11	Mazingira Network (MANET).		X	
12	HakiRasilimali.		X	
13	Tanzania Gender Network Programme (TNGP).		X	
14	Pastoralists Indigenous Non-Governmental Organizations (PINGOs Forum).		X	
15	Tanzania Media Women Association.		X	
16	Tanzania Human Rights Defenders Coalition (THRDC).		X	
17	Tanzania Land Alliance (TALA).		X	
18	Interfaith Standing Committee on Economic Justice and the Integrity of Creation (ISCJIC).		X	
19	WAJIBU Institute of Public Accountability.		X	
20	Haki Ardhi.			X
21	Economic and Social Research Foundation.			X
22	Legal and Human Rights Centre (LHRC).			X
23	Legal Environmental Action Team (LEAT).			X
24	SeaSense.			X
25	Mwambao Coastal Community Network.			X

Table C-5: Civil Society Organizations Active in the Districts (with a focus on land and / or livelihood matters)

No.	District / Ward / Village	Group name	Activities
1	Chato District	RUDIDO (Rulenge Diocesan Development Office)	Promoting sustainable land use, env (ironmental conservation and agriculture.
2	Chato District	Tumaini Fund	Assisting secondary school and college orphans and vulnerable children. Implementing water resource projects. Helping disabled persons.
3	Chato District	Community Habitat Environmental Management (CHEMA)	Contributing to agricultural development and beekeeping projects. Environmental conservation through reforestation.
4	Chato District	The Eleanor Foundation, Tanzania	Focusing on hygiene; water resources and relief to vulnerable people.
5	Geita District	Plan International	Children's rights activism, environmental education, poverty reduction; women's rights and human rights activism.
6	Geita District	Songambebe Solidarity in Action (SSIA)	Focusing on agriculture, tourism and sustainable land use.
7	Geita District	Water and Environment Development Company (WODECO)	Improving water services, environment and mother and child health
8	Geita District	Act counselor Tanzania	Education about communicable diseases, environmental conservation, drug abuse and poverty reduction through using available resources.
9	Geita District	Ferusco Sustainable Development Agency	Capacity building through Village Community Banking (VICOBA).

Table C-6: Summary of Land Acquisition and Resettlement Working Group Discussions

LARWG Meeting Number	LARWG Meeting Date	Ministries in Attendance	Relevant Issues Discussed
1	29 th March 2018	ME MLHHS TPDC TPA.	<ul style="list-style-type: none"> • LARWG organization; • Updated land acquisition process; • PAs survey progress; • Compensation rates for PAs; • PAs RAP planning; • Reserved Land including roads; and • Mining interfaces.
2	10 th April 2018	ME TPDC MLHHS (Office of CV).	<ul style="list-style-type: none"> • Land acquisition changes and encumbrances; • Fieldwork including verification, in-kind compensation and livelihood restoration investigations; • Confirmation of land rates (by CV); • Gazettement schedule / timetable; • Provision of MST land acquisition data; • Access to mining cadastral data; and • Road issues.
3	24 th April 2018	ME MLHHS TANESCO TANROADS TARURA TPDC TRC.	<ul style="list-style-type: none"> • Road and rail reserve encumbrances; • Power line and water utilities infrastructure; • Land rates; • Provision of MST land acquisition data; • Access to mining cadastral data; • Engagement at regional level; • Fieldwork including verification, in-kind compensation and grievances; • Data format required for gazette submission; • Gazettement process; • VRs; and • RAP implementation.
4	8 th May 2018	ME MLHHS TANESCO TARURA TPA	<ul style="list-style-type: none"> • Powerline utility; • Land and crop rates; • Provision of MST land acquisition data; • Access to mining cadastral data; • Road issues;

LARWG Meeting Number	LARWG Meeting Date	Ministries in Attendance	Relevant Issues Discussed
		TPDC.	<ul style="list-style-type: none"> • RPF; • VR templates; • Compensation schedules; • Gazettement information; • Payment of compensation; • Grievances; and • RAP implementation.
5	22 nd May 2018	MWTC TANROADS TPA TRC MLHSD.	<ul style="list-style-type: none"> • Confirm width of road reserves, classification approach and compensation approach to roads that require upgrades; • Gazettement procedure and transfer; • Provision of MST land acquisition data; • Access to mining cadastral data; • RAP field work update; • Progress in VRs, gazettelement and compensation payments; • Above the line and below the line terminology; • Unlisted trees of economic value; • RAP implementation Expression of Interest; and • Replacement housing.
6	12 th June 2018	ME MLHSD TANESCO MWTC.	<ul style="list-style-type: none"> • Provision of land MST acquisition data; • Access to mining cadastral data; • Submission of RPF and disclosure; • RAP survey; • Housing strategy; • Valuation methodology and reports; • Government verification process; • Gazettement plan; and • RAP implementation, Expression of Interest.
7	10 th July 2018	TARURA TPDC MLHSD.	<ul style="list-style-type: none"> • Provision of MST land acquisition data; • Access to mining cadastral data; • Gazettement letter; • Compensation letter; • Unlisted trees; • RAP survey;

LARWG Meeting Number	LARWG Meeting Date	Ministries in Attendance	Relevant Issues Discussed
			<ul style="list-style-type: none"> • Housing strategy; • VRs; • Government verification process; and • RAP implementation, Invitation to Tender.
8	7 th August 2018	MLHHS MWTC TARURA TPDC.	<ul style="list-style-type: none"> • Provision of MST land acquisition data; • Access to mining cadastral data; • Gazettement progress; • Unlisted trees; • RAP survey; • Housing strategy; • VRs; and • Government verification process.
9	4 th September 2018	ME MLHHS TPDC.	<ul style="list-style-type: none"> • RPF comments received from MLHHS; • Land acquisition process including declaration and gazette for public purpose; • Survey requirements and timing for land transfer and issuing of consolidated Right of Occupancy (ROO); • Provision of MST land acquisition data; • Access to mining cadastral data; • Regional engagement; and • RAP progress.
10	18 th September 2018	ME MLHHS TPDC	<ul style="list-style-type: none"> • Provision of MST land acquisition data; • Access to mining cadastral data; • RAP progress on the VRs, cadastral surveys, disclosure and verification progress and RAP development; and • Regional engagement.
11	10 th December 2018	ME MLHHS TPDC FB Attorneys.	<p>The following topics discussed have bearing on the Geita RAP development and process:</p> <ul style="list-style-type: none"> • Arrangements for the transfer of land; • Compensation Agreement and Payment of Compensation; and • Requirement of Issuing of ROO.
12	18 th January 2019	ME TPDC MLHHS TPA FB Attorneys.	<p>The following topics discussed have bearing on the Geita RAP development and process:</p> <ul style="list-style-type: none"> • Interest rate – disturbance allowance; • Gazette and Notice of Intention to Acquire; • Conversion of Village Land and Reserved Land to General Land; • Clarity on the Notice to Yield Possession; and

LARWG Meeting Number	LARWG Meeting Date	Ministries in Attendance	Relevant Issues Discussed
			<ul style="list-style-type: none"> • Reserved Land data.
13	1 st April 2019	ME TPDC MLHHS FB Attorneys.	<p>The following topics discussed have bearing on the Kagera RAP development and process:</p> <ul style="list-style-type: none"> • Confirmation of Public Purpose; • Gazettement and Notice of Intention to Acquire; • Notice to Yield Possession; • Reserved Land matters; • Land / boundary matters; • Mining Commission meeting; • Regional and district engagements; and • Pipeline and resettlement planning process.
14	17 th July 2019	ME TPDC MLHHS.	<ul style="list-style-type: none"> • PA Planning Progress; • Land access and project schedule; • Pipeline and Above Ground Installations (AGIs) progress; • Regional and district engagement; • Reserved Land issues; • Outstanding boundary disputes; and • Meeting with Mining Commission.

Table C-7: Summary of Meetings with National & Regional GoT Stakeholders

Meeting Date	Government Ministry / Department / Region	Purpose / Objectives	Issues / Topics Discussed
As part of the PA RAP			
17 th August 2017	Key ministerial stakeholders.	Technical kick-off meeting to provide background on the RPF, the scoping report and the PA surveys.	<ul style="list-style-type: none"> Replacement land where affected people can be moved to should be identified; The VRs should be submitted to the CV; Vulnerable groups should be identified and receive special consideration; A workshop between the Project, RAP planning consultant and the CV should be held prior to the commencement of field surveys; The pipeline corridor should be confirmed; and Communication with the government should follow the proper protocols.
4 th September 2017	Attendees included the RAS; RC; and DCs.	<ul style="list-style-type: none"> Introduction to the Project and the scope of work of the RAP planning consultant; International Financial Institutions requirements pertaining to resettlement and compensation; Upcoming surveys of PAs; Typical roles of regional and district authorities during valuation and resettlement. Working relationship and interaction between national, regional and district authorities; Constraints relevant to planning and implementation of valuation and resettlement; Knowledge of other resettlement projects where international standards were applied; and Views on differences between international and Tanzanian resettlement standards. 	<ul style="list-style-type: none"> Pipeline route; Compensation payment for temporary land acquisition; Compensation rates; Compensation process; Compensation of mining companies and unlicensed mining activities; Valuation of resources being mined and the difference between surface rights and non-surface rights; Process to follow in the event that a district valuer was not available; Involvement of the district authorities in the sensitization process; Livelihood restoration considerations; Grave and sacred site removal; and Timeframes for sensitization and the completion of the RPF.
As part of the Pipeline RAP			
27 th July 2018	Attendees included the RAS; RC; and RAS members.	<p>Provide information on the RAP progress and timeframes on the:</p> <ul style="list-style-type: none"> Surveys; Compensation approach; Valuation; Land acquisition / compensation process; and 	<p>The majority of issues and comments revolved around compensation and valuation, followed by issues related to engagement and grievances, benefits to Tanzanians in general and local communities specifically and discussions around land ownership after construction.</p> <p>Recurring themes across the regions:</p> <ul style="list-style-type: none"> Ensure that local people are aware of / benefit from employment opportunities, and the process that is required to be followed to apply for positions. Procurement and supply contracts need to be simplified for local

Meeting Date	Government Ministry / Department / Region	Purpose / Objectives	Issues / Topics Discussed
		<ul style="list-style-type: none"> • Planned future engagements in the region on the resettlement process. <p>The objectives were that regions would be able to:</p> <ul style="list-style-type: none"> • Convey the progress of the Project, the key milestones already achieved and yet to be achieved to other stakeholders; • Verbally and actively provide continued support for the Project; • Determine and plan for the resources required to meet requirements of the Project from the region; and • Communicate key messages to stakeholders. 	<p>companies. Local companies and service providers must be informed about EACOP requirements in order for them to prepare, e.g. catering.</p> <ul style="list-style-type: none"> • <u>Infrastructure, land allocation and town plans</u>: including whether local people would be allowed to use Project roads; payments for disturbance to community resources and infrastructure. • <u>Engagement and communication</u>: including discussion about the extent of the sensitization meetings and the content of the discussions at these meetings; Regular feedback required to the district; Possibility to align regional and district meetings to better understand the challenges experienced at district level. Project feedback at regional level to be improved. • <u>Grievance Management</u>: Confirmed that EACOP appoints all contractors and has a grievance system in place for reporting issues and concerns about poorly performing contractors; Proposed to include the regional level government officials in the valuation process since grievances would, overall, be directed at regional level; The process by which the district is engaged in grievance resolution was discussed and EACOP feedback on grievances received and resolved to date was requested. • <u>Safety and security</u>: The parties responsible for the security and safety of the pipeline and ensuring that the latest technology is used in monitoring the pipeline for theft, vandalism and other threats were discussed. It was observed that the opportunity for theft by the workforce should be minimized. • <u>Compensation amounts and process</u>: <ul style="list-style-type: none"> ○ The ways in which valuations based on the 2012 crop and tree rates would be handled when the new rates were available were queried; ○ Differences between national and international compensation standards and reasons for adhering to both were clarified; ○ Concerns that international standards seemed to slow down the process were addressed; ○ Clarification about the process followed to compensate for affected roads and rail was sought; ○ Compensation methods for cultural sites, graves, historical sites and churches / mosques were discussed; ○ Valuations to account for the difference in age of crops and trees should be reflected in the PAP compensation amounts; ○ The basis for compensation amounts for structures; ○ The comment was made that compensation should be paid before the

Meeting Date	Government Ministry / Department / Region	Purpose / Objectives	Issues / Topics Discussed
			<p>start of the local elections in 2019;</p> <ul style="list-style-type: none"> ○ Compensation for small parcels of land as part of a bigger parcel of land not affected by the Project would require that the title deed is changed in accordance with the Land Acquisition Act of 1967. It was confirmed that costs for the change would be included in the compensation amount; ○ PAP refusals would be treated with sensitivity and sufficient engagement to ensure that PAPs understood the process and compensation procedure; ○ Compensation should be paid prior to the commencement of construction in adherence with national laws to avoid conflict with PAPs; ○ Comment was made that compensation should not be given in the form of cash but rather in-kind or using a cheque account; ○ Observation was made that the difference in land rates between areas could cause conflict. Observation was made that the compensation payments and rates should be harmonized to avoid unnecessary conflict; ○ The approval process of the VRs was confirmed; and <ul style="list-style-type: none"> ● The RAP planning consultant confirmed that government representatives were welcome to visit surveyed areas. The RAP planning consultant requested that the Project community liaison officers (CLOs) were informed about intended visits to enable them to make appropriate arrangements.
10 th September 2018	Attendees included the RAS.	<ul style="list-style-type: none"> ● Discuss the PA compensation schedule disclosure process; and ● Pipeline validation process. 	<ul style="list-style-type: none"> ● Part II of the Compensation Schedule; ● Land rates; and ● Involvement of the regional valuer.
11 th December 2018	Attendees included the RAS; DCs; and RAS members.	<ul style="list-style-type: none"> ● Project overview and status; ● Stakeholder Engagement; ● ESIA; ● Land acquisition process; ● Local content; ● Community development ● Questions that needed clarification from the presentations; ● Issues and concerns from the invited regional members, and 	<ul style="list-style-type: none"> ● Impact on a school and confirmation that the buildings were not affected; ● Number of people expected to stay at the camp site; ● Availability of the ESIA's environmental management plan; ● Timing of town planning and cadastral surveys; ● Involvement of TANROADS and TANESCO; ● Supplier registration with Energy and Water Utilities Regulatory Authority (EWURA); ● Construction of permanent structures; ● Payment of service levy;

Meeting Date	Government Ministry / Department / Region	Purpose / Objectives	Issues / Topics Discussed
		<ul style="list-style-type: none"> Advice and guidance from the RC and various other regional heads of departments and committee members. 	<ul style="list-style-type: none"> Lifespan of the Project; Compensation rates; Dealing with Encumbrances; and Timing of compensation payment.
5 th March 2019	Attendees included the ME; MLHSD; TFS; Tanzania National Parks Authority (TANAPA); TAWA; MNRT; and NEMC.	<ul style="list-style-type: none"> Confirmation of Reserved Land defined as protected / reserve areas that is traversed by pipeline corridor; Game Reserves, Game Controlled Areas, Open Areas, National Parks, Forest Reserves and community / village forests traversed by the pipeline corridor: <ul style="list-style-type: none"> Gazettement Notices; Status of Talamai Open Area; Restricted activities under the Wildlife Conservation Act 2009 (WCA 2009) and permits for licensed activities and / or customary Right of Occupancy's (ROO) issued; Valuation and compensation process within these reserves / areas; Compensation entitlements of the Management Authority / Reserved Land Authorities; Confirmation of boundaries and management arrangements of community / village forests; Conversion of Reserved Land (within protected / reserve areas) to General Land – process and timing; and Management of pipeline corridor through the protected / reserve areas. 	<ul style="list-style-type: none"> Boundary information of protected / reserve areas; Valuation and compensation process for PAPs within protected / reserve areas; Compensation of land within protected / reserve areas; Type, status and ownership of Forest Reserves; Biharamulo Forest Reserve in the process of becoming a National Park; Biharamulo Forest Reserve boundaries; Swagaswaga Game Reserve; Villages in close proximity to the Swagaswaga Game Reserve; Talamai Open Area does not have protected / reserved area status; Talamai Open Area management; Kitwai and Handeni Game Controlled Areas boundaries; Minziro, Ruiga, Biharamulo, Uyovu, Ngogwa Busangi. Mkwani Hills and North Mwakalundi Forest Reserves; Agreement that was previously made to convert Reserved Land within the pipeline corridor to General Land; International Finance Corporation (IFC) standards; Spiritual and cultural sites; and List of villages / mitaa crossed by the pipeline route within the boundaries of protected / reserve areas.
12 th March 2019	Attendees included the RC; RAS; DCs; and RAS members.	<ul style="list-style-type: none"> Project overview and status; Stakeholder engagement; The ESIA; Land acquisition and resettlement planning; and Land acquisition and resettlement implementation. 	<ul style="list-style-type: none"> Rightful owners of Reserved Land; Compensation rates; Security of the pipeline and Project teams; Approval of town planning drawings and cadastral surveys; Provision of permanent structures at camps; and Benefits to the regions.

Meeting Date	Government Ministry / Department / Region	Purpose / Objectives	Issues / Topics Discussed
25 th June 2019	Attendees included the RC; RAS; DCs; DEDs; and RAS members.	<ul style="list-style-type: none"> Project overview and status; PA RAP Disclosure; Stakeholder engagement; The ESIA; Land acquisition and resettlement planning; and Land acquisition and resettlement implementation. 	<ul style="list-style-type: none"> Local opportunities; Security of the pipeline, communities and Project teams; Environmental management; Location of the police post; Orphan land; Supplier requirements; Provision of permanent structures at camps; and Timeframes of the Project.
11 th October 2019	Attendees included the RAS.	<ul style="list-style-type: none"> Project update; RAP Planning and implementation update; ESIA status; Grievance management; and Stakeholder engagement. 	<ul style="list-style-type: none"> Various topics were discussed.
Ongoing discussions from September 2017 to date	Attendees included the MLHSD and the CV.	<ul style="list-style-type: none"> Discuss and finalize land and crop rates, and rates for economic trees not listed in the 2012 schedule; and Discuss VRs and Compensation Schedules. 	<ul style="list-style-type: none"> Discussions revolve around the valuation process, compensation rates, application of the new Valuation & Valuers (General) Regulations 2018 (released after the valuation surveys and during the preparation of the VRs) and the valuation of unlisted trees³.

³ Issues raised at these meetings have been addressed as part of the development of the RAP strategy and therefore responses are reflected in the drafting of this document as appropriate, as well as in planning and implementation activities more generally.

Table C-8: Overview of District, Ward, Village and PAP Meetings - RAP Consultation and Engagement

Meeting Date	Engagement	Stakeholders	Purpose	Issues / Topics Discussed
16 th May-1 st August 2018	District sensitization meetings.	Generally attended by the: TC / DC and DED / TED.	<ul style="list-style-type: none"> • Provide information on the survey process and discuss oversight and support of GoT during the surveys; • Provide notice to complete asset registration and delineation of lands; • Inform stakeholders on the purpose of valuation, procedures involved, duration of the valuation exercise, applicable compensation rates and legal rights and obligations of PAPs; • Inform PAPs of assets to be recorded and recording mechanisms; • Discuss base compensation rates; • Disclosure of the cut-off date; and • Disclose and discuss the grievance procedure. 	See Table C-10.
	Ward Development Council (WDC) sensitization meetings.	Generally attended by the: WDC members; WEO; District land officer; and District valuer.		
	Village Development Council (VDC), and Assembly sensitization meetings.	Generally attended by the: Ward councilor; WEO; VEO; Village chairperson; Development council members; WDC members; District land officer; District valuer; Central government officials; Villagers; and PAPs.		
17 th May 2018-3 August 2018	Land delineation, asset inventory and socio-economic household survey.	PAPs / Project Affected Households (PAHs).	<ul style="list-style-type: none"> • Collect socio-economic information for the PAPs / PAHs using a structured questionnaire; • Compile an asset inventory to generate Valuation Form No. 3 for each PAP and for the development of the land and asset schedules displayed on village notice boards; and • Determine the size of the land affected through the land delineation survey. This information was displayed on Valuation Form No. 3 and the asset schedule. 	Where issues could not be solved, grievances were raised and submitted via the EACOP grievance procedure.
25 th February-in progress 2019	District validation meetings.	Generally attended by the: DC; RAS; DED; TED; valuers; and	<ul style="list-style-type: none"> • Create awareness on the crude oil pipeline project in general, and validation process in particular; • Role of the DC, district officials (land officer, community development officer (CDO), and district valuer) in the validation process; • Discuss grievances / concerns which were raised; and • Construction of pipeline and the need for mitigation measures. 	See Table C-10.

Meeting Date	Engagement	Stakeholders	Purpose	Issues / Topics Discussed
		surveyors.		
	WDC Validation meetings.	WDC members.	<ul style="list-style-type: none"> • Create awareness of the crude oil pipeline project in general and validation process in particular; and • Confirm the role of the WDC in the validation process. 	See Table C-10.
	VDC, Village Assembly and individual validation meetings.	VDC members and PAPs / PAHs.	<ul style="list-style-type: none"> • Inform PAPs about any modification in land requirements resulting from internal assessment of provisional survey findings; and • Determine if any queries or grievances had been lodged in respect of the information that was recorded on the asset inventory appearing in their Valuation Form No. 3 against the publicly displayed schedule, or on both. 	See Table C-10.
14 th January 2019	Validation of Forest Reserve areas.	Participants included the TFS; DED; and DC.	<p>Discuss the</p> <ul style="list-style-type: none"> • Project area and context; • Legal/legislative framework in validation processes; • Ascertain data accuracy; • Verify methodology used; and • Recording the biodiversity; 	No issues were raised.
28 th March- 23 rd May 2019	Interviews and / or focus groups by SELI teams.	PAPs / PAHs and district / ward / village representatives.	<p>To gain a deeper understanding of the following themes to enhance and enrich the RAP development (the focus of discussions was not on Project issues and concerns):</p> <ul style="list-style-type: none"> • Current livelihoods and implication for livelihood restoration requirements and implementation, with consideration of gender differences: <ul style="list-style-type: none"> ○ Use of land in the district, challenges and process to gain access to land; ○ Type of agricultural crops cultivated; ○ Agricultural seasons for these crops, including land preparation, planting and harvesting time; ○ Land and cash income required for household use; ○ Agricultural projects and programs active in the area, challenges experienced and responses to these; ○ Recommended livelihoods restoration approaches; ○ Mining practices; • Vulnerability: <ul style="list-style-type: none"> ○ Definition of vulnerability in the local context; ○ Assistance rendered to the vulnerable; • Natural resource use and access to natural resources; • Replacement land (building on studies already done): <ul style="list-style-type: none"> ○ Availability of replacement land; • Community development activities; 	Information provided during these discussions informed and shaped the development of this RAP and the RAP activities, and therefore responses are reflected in the drafting of this document as appropriate, as well as in planning and implementation activities more generally.

Meeting Date	Engagement	Stakeholders	Purpose	Issues / Topics Discussed
			<ul style="list-style-type: none"> • Community dynamics: <ul style="list-style-type: none"> ○ Settlement patterns; ○ Ethnic groups; ○ Role and status of women; ○ Conflict resolution; ○ Religious and spiritual beliefs; ○ Celebrations and rituals; ○ Burial practices; • Access to, and challenges with social services (education, health, financial, commercial) and facilities (water, sanitation, electricity); and • Type and role of NGOs, community-based organizations (CBOs) and community associations. 	
20 th June-21 st June 2019	In-kind compensation approach to those losing dwellings.	Participants included the DAS; DCs; and DED.	<ul style="list-style-type: none"> • Impacted dwellings; • In-kind compensation approach; and • Housing market research. 	See Table C-10.
4 th October-16 th October 2019	Meetings to discuss the compensation schedule disclosure process.	Introductory meeting with the (TBC). Meetings with the WDC, VDC and PAPs.	<ul style="list-style-type: none"> • Communicate the intention to disclose the compensation schedules; and • Arrange for signing of VRs. 	See Table C-10.
4 th October-18 th October 2019	Compensation schedule disclosure to PAPs: personal, private meetings.	PAPs.	<ul style="list-style-type: none"> • Disclosure of the compensation schedules; • Sign acknowledgment that schedule was seen and discussed; • Identify and solve issues; • Submit grievances; and • Discuss general concerns and questions in a group. 	See Table C-10.

Table C-9: Overview of Focus Group Discussions – Livelihood Restoration (SELI)

No.	Date	Region	District	Ward	Village	Position Representatives /	Gender (Female / Male / Mixed)	Number of Participants (excluding SELI team)
1	28 th March 2019	Geita	Geita			DC	Male	1
2	28 th March 2019	Geita	Geita			DAS District Security Officer	Male	2
3	28 th March 2019	Geita	Geita			DED	Male	1
4	28 th March 2019	Geita	Geita			Land Officer	Male	1
5	28 th March 2019	Geita	Geita			Livestock and Fisheries Officer	Male	1
6	28 th March 2019	Geita	Geita			Environmental Officer	Male	1
7	28 th March 2019	Geita	Geita			Agricultural Officer	Female	1
8	28 th March 2019	Geita	Geita			Planning Officer	Male	1
9	28 th March 2019	Geita	Geita			Regional Medical Officer Environmental Management Officer	Male	2
10	28 th March 2019	Geita	Geita			Water Department Officer	Female	1
11	28 th March 2019	Geita	Geita			CDO	Female	1
12	28 th March 2019	Geita	Geita			Forestry Officer	Male	1
13	24 th April 2019	Geita	Geita	Magenge	Igando	PAPs	Female	10
14	24 th April 2019	Geita	Geita	Magenge	Igando	PAPs	Male	14
15	24 th April 2019	Geita	Geita	Magenge		WDC	Mixed	8
16	24 th April 2019	Geita	Mbogwe			District Officials	Mixed	10
17	25 th April 2019	Geita	Mbogwe			DC	Female	1
18	25 th April 2019	Geita	Mbogwe	Lulembela		WDC	Mixed	27
19	25 th April 2019	Geita	Mbogwe	Lulembela	Nyikonga	VDC	Mixed	5

No.	Date	Region	District	Ward	Village	Position Representatives /	Gender (Female / Male / Mixed)	Number of Participants (excluding SELI team)
20	25 th April 2019	Geita	Mbogwe	Lulembela	Lulembela	VDC	Mixed	6
21	25 th April 2019	Geita	Mbogwe	Lulembela	Kashelo	VDC	Mixed	5
22	27 th April 2019	Geita	Mbogwe	Lulembela	Kashelo	PAPs	Female	10
23	27 th April 2019	Geita	Mbogwe	Lulembela	Kashelo	PAPs	Male	14
24	27 th April 2019	Geita	Mbogwe	Lulembela	Lulembela	PAPs	Mixed	27
25	27 th April 2019	Geita	Mbogwe	Nyakafulu	Shinyanga B	VDC	Mixed	10
26	27 th April 2019	Geita	Mbogwe	Nyakafulu	Shinyanga B	PAPs	Female	22
27	27 th April 2019	Geita	Mbogwe	Nyakafulu	Shinyanga B	PAPs	Male	24
28	29 th April 2019	Geita	Mbogwe	Bukandwe		WDC	Mixed	10
29	29 th April 2019	Geita	Mbogwe	Ikunguigazi		WDC	Mixed	9
30	29 th April 2019	Geita	Mbogwe	Bukandwe	Bukandwe	VDC	Mixed	12
31	29 th April 2019	Geita	Mbogwe	Ikunguigazi	Ibambula	VDC	Mixed	8
32	29 th April 2019	Geita	Mbogwe	Ikunguigazi	Ikunguigazi	VDC	Mixed	19
33	29 th April 2019	Geita	Mbogwe	Lulembela	Nyikonga	PAPs	Female	19
34	29 th April 2019	Geita	Mbogwe	Bukandwe	Bukandwe	PAPs	Female	17
35	29 th April 2019	Geita	Mbogwe	Bukandwe	Bukandwe	PAPs	Male	22
36	29 th April 2019	Geita	Mbogwe	Lulembela	Nyikonga	PAPs	Male	22
37	30 th April 2019	Geita	Mbogwe	Ikobe		WDC	Mixed	21
38	30 th April 2019	Geita	Mbogwe	Ikobe	Ikobe	VDC	Mixed	14
39	30 th April 2019	Geita	Mbogwe	Ikobe	Ishigamva	VDC	Mixed	36
40	30 th April 2019	Geita	Mbogwe	Ikobe	Kagongo	VDC	Mixed	7
41	30 th April 2019	Geita	Mbogwe	Ikobe	Ikunguigazi	PAPs	Male	8
42	30 th April 2019	Geita	Mbogwe	Ikobe	Ikunguigazi	PAPs	Female	5
43	30 th April 2019	Geita	Mbogwe	Ikobe	Ibambula	PAPs	Female	3
44	30 th April 2019	Geita	Mbogwe	Ikobe	Ibambula	PAPs	Mixed	27
45	2 nd May 2019	Geita	Mbogwe	Nhomolwa		WDC	Mixed	10
46	2 nd May 2019	Geita	Mbogwe	Nhomolwa	Kabanga	VDC	Mixed	15

No.	Date	Region	District	Ward	Village	Position Representatives /	Gender (Female / Male / Mixed)	Number of Participants (excluding SELI team)
47	2 nd May 2019	Geita	Mbogwe	Ikobe	Kagongo	PAPs	Male	26
48	2 nd May 2019	Geita	Mbogwe	Ikobe	Kagongo	PAPs	Female	8
49	2 nd May 2019	Geita	Mbogwe	Nhomolwa	Kabanga	PAPs	Male	27
50	2 nd May 2019	Geita	Mbogwe	Nhomolwa	Kabanga	PAPs	Female	50
51	2 nd May 2019	Geita	Mbogwe	Ikobe	Ikobe	PAP	Male	34
52	2 nd May 2019	Geita	Mbogwe	Ikobe	Ishigamva	PAPs	Male	24
53	2 nd May 2019	Geita	Mbogwe	Ikobe	Ishigamva	PAPs	Female	23
54	2 nd May 2019	Geita	Mbogwe	Ikobe	Ikobe	PAPs	Female	28
55	7 th May 2019	Geita	Bukombe			DC	Male	1
56	7 th May 2019	Geita	Bukombe			Water Department Officer	Male	1
57	7 th May 2019	Geita	Bukombe			Health Officer	Male	1
58	7 th May 2019	Geita	Bukombe			Planning Officer Trade Officer Economic Officer	Mixed	3
59	7 th May 2019	Geita	Bukombe			Environmental Officer	Male	1
60	8 th May 2019	Geita	Bukombe			Forestry Officers	Mixed	3
61	8 th May 2019	Geita	Bukombe	Lyambamgongo		WDC	Mixed	11
62	8 th May 2019	Geita	Bukombe	Bukombe	Bukombe	PAPs	Male	22
63	8 th May 2019	Geita	Bukombe	Bukombe	Bukombe	PAPs	Female	12
64	8 th May 2019	Geita	Bukombe	Lyambamgongo	Kagwe	PAPs	Male	18
65	8 th May 2019	Geita	Bukombe	Lyambamgongo	Kagwe	PAPs	Female	6
66	8 th May 2019	Geita	Bukombe	Lyambamgongo	Kagwe	VDC	Mixed	26
67	8 th May 2019	Geita	Bukombe	Bukombe	Kidete	VDC	Mixed	22
68	8 th May 2019	Geita	Bukombe	Bukombe	Ilalwe	VDC	Mixed	9
69	8 th May 2019	Geita	Bukombe	Bukombe	Nasihukulu	VDC	Mixed	13
70	9 th May 2019	Geita	Bukombe			Land Officer	Male	1

No.	Date	Region	District	Ward	Village	Position Representatives /	Gender (Female / Male / Mixed)	Number of Participants (excluding SELI team)
71	9 th May 2019	Geita	Bukombe	Bukombe	Kidete	PAPs	Male	15
72	9 th May 2019	Geita	Bukombe	Bukombe	Kidete	PAPs	Female	12
73	9 th May 2019	Geita	Bukombe	Bukombe	Ilalwe	PAPs	Male	22
74	9 th May 2019	Geita	Bukombe	Bukombe	Ilalwe	PAPs	Female	23
75	13 th May 2019	Geita	Chato			DC CDO	Male	2
76	13 th May 2019	Geita	Chato			DED District Officers	Mixed	23
77	14 th May 2019	Geita	Chato	Makurugusi		WDC	Mixed	16
78	14 th May 2019	Geita	Chato	Minkoto		WDC	Mixed	17
79	14 th May 2019	Geita	Chato	Makurugusi	Musasa	VDC	Mixed	16
80	14 th May 2019	Geita	Chato	Makurugusi	Makurugusi	VDC	Mixed	12
81	14 th May 2019	Geita	Chato	Makurugusi	Kasala	VDC	Mixed	13
82	14 th May 2019	Geita	Chato	Makurugusi	Kamanga	VDC	Mixed	10
83	14 th May 2019	Geita	Chato	Makurugusi	Makurugusi	PAPs	Male	19
84	14 th May 2019	Geita	Chato	Makurugusi	Makurugusi	PAPs	Female	17
85	15 th May 2019	Geita	Chato	Makurugusi	Musasa	PAPs	Female	26
86	15 th May 2019	Geita	Chato	Makurugusi	Musasa	PAPs	Male	26
87	15 th May 2019	Geita	Chato	Makurugusi	Kasala	PAPs	Female	10
88	15 th May 2019	Geita	Chato	Makurugusi	Kasala	PAPs	Male	10
89	15 th May 2019	Geita	Chato	Makurugusi	Kamanga	PAPs	Male	11
90	15 th May 2019	Geita	Chato	Makurugusi	Kamanga	PAPs	Female	6
91	16 th May 2019	Geita	Chato	Minkoto	Minkoto	VDC	Mixed	9
92	16 th May 2019	Geita	Chato	Minkoto	Minkoto	PAPs	Male	21
93	16 th May 2019	Geita	Chato	Minkoto	Minkoto	PAPs	Female	16
94	16 th May 2019	Geita	Chato	Iparamasa	Imalabupina	VDC	Mixed	8
95	16 th May 2019	Geita	Chato	Bukome	Mkungo	VDC	Mixed	12

No.	Date	Region	District	Ward	Village	Position Representatives /	Gender (Female / Male / Mixed)	Number of Participants (excluding SELI team)
96	16 th May 2019	Geita	Chato	Iparamasa	Ilelema	VDC	Mixed	11
97	16 th May 2019	Geita	Chato	Iparamasa		WDC	Mixed	20
98	16 th May 2019	Geita	Chato	Iparamasa	Iparamasa	VDC	Mixed	7
99	16 th May 2019	Geita	Chato	Bukome		WDC	Mixed	16
100	17 th May 2019	Geita	Chato	Katende		WDC	Mixed	16
101	17 th May 2019	Geita	Chato	Iparamasa	Iparamasa	PAPs	Mixed	30
102	17 th May 2019	Geita	Chato	Bukome	Mkungo	PAPs	Male	24
103	17 th May 2019	Geita	Chato	Bukome	Mkungo	PAPs	Female	6
104	17 th May 2019	Geita	Chato	Iparamasa	Ilelema	PAPs	Male	14
105	17 th May 2019	Geita	Chato	Iparamasa	Ilelema	PAPs	Female	6
106	20 th May 2019	Geita	Chato	Ichwankima		WDC	Mixed	21
107	20 th May 2019	Geita	Chato	Nyamirembe		WDC	Mixed	10
108	20 th May 2019	Geita	Chato	Nyamirembe	Nyambiti	VDC	Mixed	28
109	20 th May 2019	Geita	Chato	Ichwankima	Busalala	VDC	Mixed	9
110	20 th May 2019	Geita	Chato	Katende	Katende	VDC	Mixed	14
111	20 th May 2019	Geita	Chato	Katende	Katende	PAPs	Female	10
112	20 th May 2019	Geita	Chato	Katende	Katende	PAPs	Male	20
113	20 th May 2019	Geita	Chato	Katende	Ng'wabaluhi	VDC	Mixed	24
114	21 st May 2019	Geita	Chato	Ilemela		WDC	Mixed	9
115	21 st May 2019	Geita	Chato	Ilemela	Nyambogo	VDC	Mixed	13
116	21 st May 2019	Geita	Chato	Katende	Ng'wabaluhi	PAPs	Male	19
117	21 st May 2019	Geita	Chato	Katende	Ng'wabaluhi	PAPs	Female	7
118	21 st May 2019	Geita	Chato	Makurugusi	Musasa	Artisanal Miners	Male	5
119	22 nd May 2019	Geita	Chato	Katende	Chabulongo	VDC	Mixed	8
120	22 nd May 2019	Geita	Chato	Katende	Chabulongo	PAPs	Mixed	12
121	22 nd May 2019	Geita	Chato	Ilemela	Ilemela	VDC	Mixed	1
122	22 nd May 2019	Geita	Chato	Ichwankima	Busalala	PAPs	Female	14

No.	Date	Region	District	Ward	Village	Position Representatives /	Gender (Female / Male / Mixed)	Number of Participants (excluding SELI team)
123	22 nd May 2019	Geita	Chato	Ichwankima	Busalala	PAPs	Male	16
124	22 nd May 2019	Geita	Chato	Ilemela	Nyambogo	PAPs	Male	10
125	22 nd May 2019	Geita	Chato	Ilemela	Nyambogo	PAPs	Female	11
126	22 nd May 2019	Geita	Chato	Ilemela	Ilemela	PAPs	Mixed	15
127	22 nd May 2019	Geita	Chato	Nyamirembe	Nyambiti	PAPs	Female	37
128	23 rd May 2019	Geita	Chato	Nyamirembe	Nyambiti	PAPs	Male	22
129	23 rd May 2019	Geita	Chato			Livestock and Fisheries Officer	Male	1
130	23 rd May 2019	Geita	Chato			Economic Officer Planning Officer	Male	2
131	23 rd May 2019	Geita	Chato			Forestry and Natural Resource Officers	Male	2
132	23 rd May 2019	Geita	Chato			Water Department Officer	Female	1
133	23 rd May 2019	Geita	Chato			District CDO Agricultural Officer Land Officer	Male	3
134	23 rd May 2019	Geita	Chato	Ilemela	Nyagh'omango	VDC	Mixed	17
135	23 rd May 2019	Geita	Chato	Ilemela	Nyagh'omango	PAPs	Mixed	13

Table C-10: Summary of Issues Raised at District, Ward, Village and PAP Meetings⁴

Issues / Topics Discussed	District Meeting	Ward and Village Sensitization Meeting	Ward and Village Validation Meeting	Ward and Village SELI Meeting	Ward and Village Compensation Schedule Disclosure Meeting
Pipeline route.	X	X			
Demarcation of route.				X	
Companies involved in the EACOP Project.			X		
Pipeline will be buried.			X	X	
Width of the corridor.			X	X	
Valuation of empty land.		X			
Compensation will be paid once off.				X	
Project timeframes.		X	X	X	X
Compensation will be paid for crops and land.		X			
Compensation for loss of revenue due to not cultivating perennial crops?			X		
Valuation rates.		X		X	
Compensation of sisal on boundaries between farmers.			X		
Compensation of mining areas.		X			
Compensation amount to be expected.				X	
Compensation rates to be used.		X	X		
Fertility of land should be considered when the compensation amount is determined.		X			
Compensation of land for mining.			X		
Compensation for uncultivated land.		X			
Compensation for water sources / management of impact on water sources.		X	X	X	

⁴ During the RAP planning, consultations by the Project Stakeholder Engagement team at village /, ward, district and regional level were ongoing. Issues relevant to RAP planning were also shared with the RAP Planning consultant in order to inform the resettlement planning and to structure feedback / further engagement with stakeholders.

Issues / Topics Discussed	District Meeting	Ward and Village Sensitization Meeting	Ward and Village Validation Meeting	Ward and Village SELI Meeting	Ward and Village Compensation Schedule Disclosure Meeting
How the Zigi River affected will be dealt with.			X		
Compensation of Forest Land.				X	
Who will be responsible for keeping miners out of Reserved Land.				X	
Dealing with encumbrances.			X		
Compensation of land belonging to institutions.		X	X		
Compensation of Kanegere primary school.			X		
Land of Mkungo school between corridor and camp.			X		
Use of land not impacted, which borders land that is impacted.			X	X	
Explanation of orphan land.		X			
Treatment of compensation of Village Land / clan land.		X	X		
Compensation of tenants.		X		X	
Compensation of tenant PAPs on Amboni land (sisal plantations).			X		
Payment of temporary residence during transition.		X			
Geotech did not look for or find diamonds.			X		
Improvements / neglect of house after cut-off will not affect the compensation amount.		X			
Cash compensation versus in-kind compensation.				X	
Explanation of cut-off date.		X			
What if compensation is delayed and effect of not doing improvements is negative?				X	
Difference between compensation for mud / thatch houses and brick / corrugated iron houses.				X	
Project stopped current Projects such as building in the corridor.				X	
Land will not be returned to the current owner after the project.				X	
The method of payment to people without identity cards / the necessary legal documents / a title deed.		X			X

Issues / Topics Discussed	District Meeting	Ward and Village Sensitization Meeting	Ward and Village Validation Meeting	Ward and Village SELI Meeting	Ward and Village Compensation Schedule Disclosure Meeting
Process to follow if PAP dies.			X		X
Process to follow if PAP needs a representative.					X
Process to follow if PAP sells land.			X	X	
Process to follow if PAP moves away.			X		
A PAP may move after compensation had been paid.			X		
Allowances requested for meetings / for PAPs' time.			X	X	X
Value of disturbance allowance.		X			
The method of payment.		X	X	X	X
When will payment happen?	X	X	X	X	X
Compensation will be paid once-off.			X	X	
Use of land during operation.		X		X	
Crossing of the corridor will be possible after construction and during construction pathways will be made available, also for pastoralists and cattle.		X	X	X	
Compensation of cattle paths.			X		
Requirements for involvement of spouses.				X	X
If PAP has more than one spouse, who is to accompany the PAP during the survey.		X		X	X
Involvement of family during compensation process recommended.				X	
No need to bring children along to the survey.					X
Process to be followed when PAP refuses compensation / to move.			X	X	
Process to follow if PAP is dissatisfied with compensation amount.					X
Process to be followed when PAP is not available for surveys / meetings.		X	X		X
Dealing with land disputes.		X	X		
Compensation of natural resources in agricultural plot that cannot be moved.		X			

Issues / Topics Discussed	District Meeting	Ward and Village Sensitization Meeting	Ward and Village Validation Meeting	Ward and Village SELI Meeting	Ward and Village Compensation Schedule Disclosure Meeting
Type of trees that will be compensated.		X	X		
Harvesting of trees.				X	X
Valuation of trees (amount and method).		X	X		X
Use of grazing land in the corridor.				X	
Compensation of grazing land.		X			
Compensation for seeds planted yesterday.		X			
Dealing with spiritual sites.			X		
How crude oil will be transported.			X	X	
Oil won't be processed in Tanzania.				X	
Will not be compensated for crops cultivated after cut-off.			X		
May harvest crops after cut-off.			X		X
Confirmation that cultivation may continue.		X	X	X	X
Confirmation that land inside the corridor may not be cultivated during operation.		X			X
Procedures for moving graves / graveyards.		X	X		
Where will graves be moved to.		X		X	
Party responsible for finding alternative land.			X		
What happens in the event of a leak in the pipeline.		X			
Environmental impact of the Project.		X	X		
Security of the pipeline.			X	X	
Security of people.				X	
Future engagement activities.			X		
Involvement of local leaders.				X	
Grievance process.		X		X	

Issues / Topics Discussed	District Meeting	Ward and Village Sensitization Meeting	Ward and Village Validation Meeting	Ward and Village SELI Meeting	Ward and Village Compensation Schedule Disclosure Meeting
List of PAPs.		X			
Number of PAPs / villages.	X			X	
The district will be available to assist with issues.	X				
Sukuma translators will be available.	X				
Situation with the Roman Catholic Church's buildings that will be affected.	X				
Plan of action with sacred site in Ibambula Village.	X	X			
Dishonesty about land ownership amongst people.	X				
Districts must be debriefed after field activities.	X				
Availability of Authorized Land Officer.	X				
Requirements for suppliers.		X			
Employment of women.		X		X	
Recruitment procedure.				X	
Opportunity for casual work.		X			
Opportunity for employment of youth.				X	
Opportunities for skilled people with disabilities.		X			
Employment opportunities for local people in general.	X	X	X	X	
There will not be a road next to the pipeline.				X	
Road safety measures.				X	
Engaging with people living far away.		X			
Dealing with land conflict.		X		X	X
Impact of the pipeline on the health of people.				X	
Confirmed that social services will not be provided / improved at village / ward level.			X	X	
Confirmed that social investment benefits will not be implemented at village / ward level.		X	X	X	

Issues / Topics Discussed	District Meeting	Ward and Village Sensitization Meeting	Ward and Village Validation Meeting	Ward and Village SELI Meeting	Ward and Village Compensation Schedule Disclosure Meeting
Benefits to young people.				X	

Appendix D

Replacement Housing and Ancillary Structures Designs

House Type A – 25m²

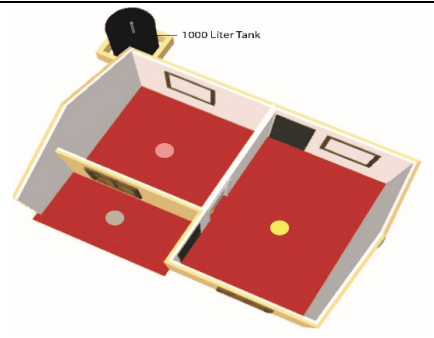
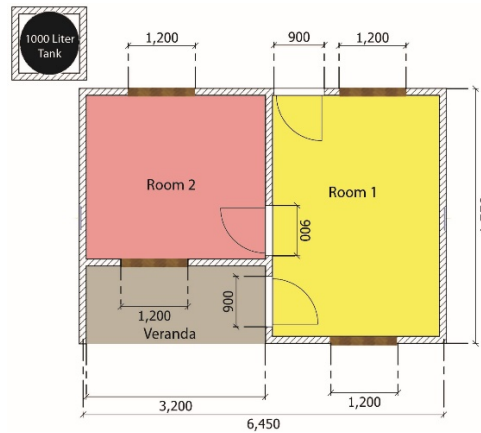
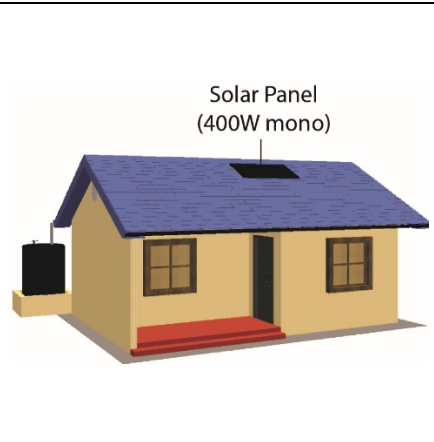
Description: Type A is the smallest of the house types at 25 m². These houses are well lit with natural light through four (4) windows which allows for good cross ventilation, Type A1, A2 and A3 have two (2) external doors and a small covered veranda. Type A1 has two (2) rooms with Type A2 and A3 have three (3) rooms.

Eligibility: Replaces all units less than or equal to 25 m² irrespective of the number of rooms. If the combined footprint of any two (2) houses of a PAP is less than or equal to 25 m² (House Type A), the PAP would be offered for these two (2) houses, one (1) replacement House Type A and cash compensation for the smallest house.

Alternatives: An eligible PAP can choose from one (1) of three (3) floor plans. House Type A1 has two (2) rooms and House Type A2 and A3 both have three (3) rooms.

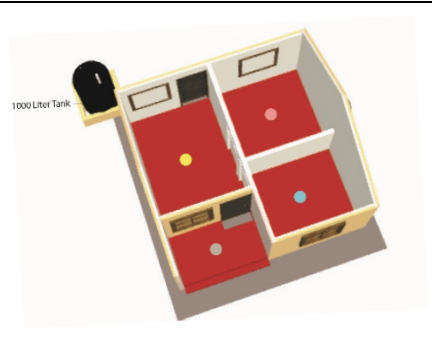
A1 – 25m² (2 Rooms)

A2 - 25m² (3 Rooms)



Areas

Room 1	14.33m ²
Room 2	10.64m ²
Veranda	3.55m ²



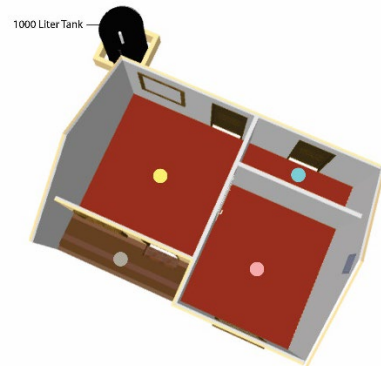
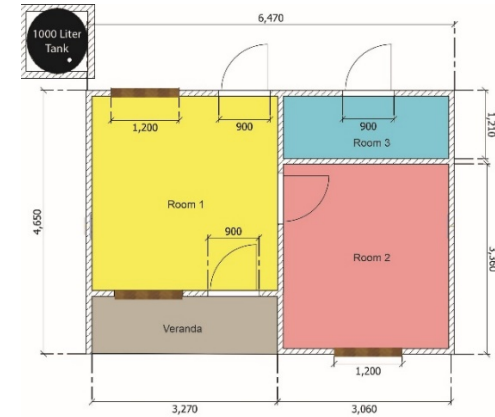
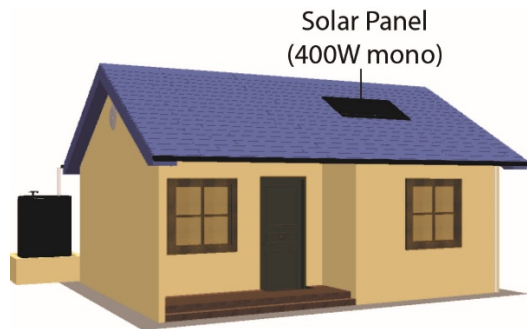
Areas

Room 1	9.2m ²
Room 2	8.0m ²
Room 3	8.0m ²
Veranda	3.6m ²

House Type A – 25m² (CONT)

A3 – 25m² (3 Rooms)

Description: Type A3 has two (2) rooms designed for human habitation and a third smaller room (4 m²), specifically to allow for animal husbandry separate to living spaces. This house is well lit with natural light through three (3) windows and three (3) doors which allows for good cross ventilation. This alternative design for the 25 m² structure will enable protection for livestock whilst also providing clear separation from sleeping areas within the structure.



Areas

Room 1	11.00m ²
Room 2	10.00m ²
Room 3	4.0 m ²
Veranda	3.20m ²

House Type B – 33m²

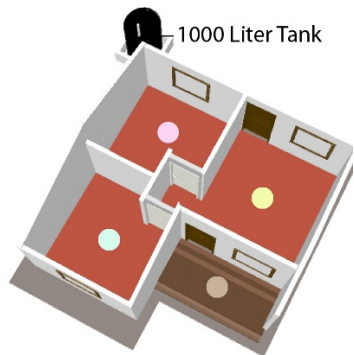
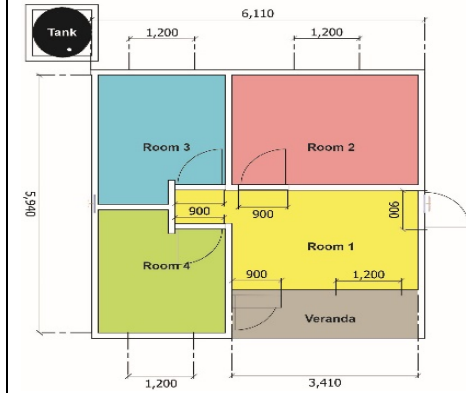
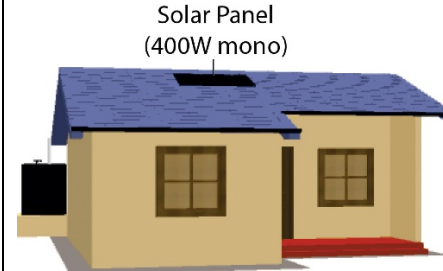
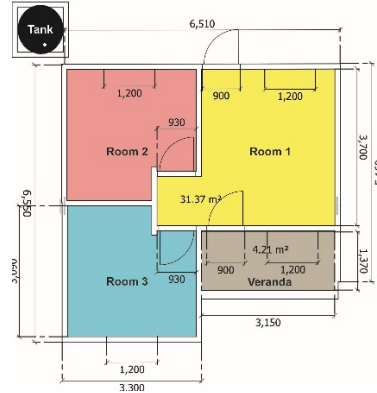
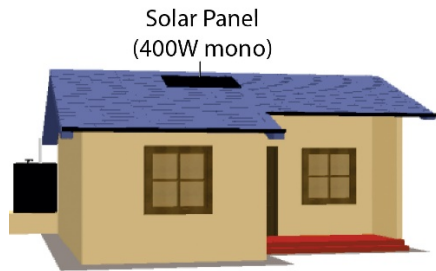
Description: Type B is 33 m² and is well lit with natural light through four (4) windows which also allows for good cross ventilation, two (2) external doors and a small covered veranda. Type B1 has three (3) rooms and B2 has four (4) rooms as shown below.

Eligibility: Replaces all residential dwellings greater than 25 m² but less than or equal to 33 m².

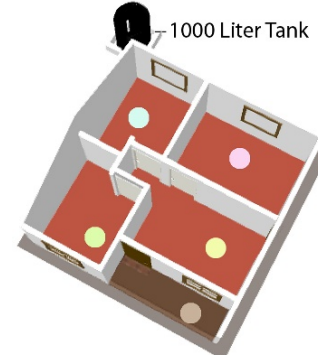
Alternative: Like the smaller Type A dwelling, there are two (2) alternative floor plans that an eligible PAP can choose from, including House Type B1 which has three (3) rooms and House Type B2 which has four (4) rooms.

B1 – 33m² (3 Rooms)

B2 - 33m² (4 Rooms)



Areas	
Room 1	13.00m ²
Room 2	10.16m ²
Room 3	10.16m ²
Veranda	3.15m ²



Areas	
Room 1	9.18m ²
Room 2	7.9m ²
Room 3	7.9m ²
Room 4	8.3m ²
Veranda	3.6m ²

House Type C – 39m²

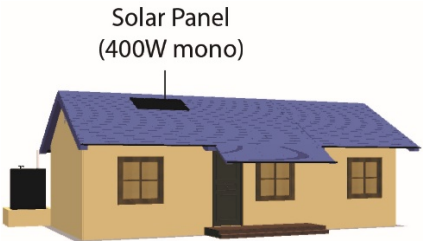
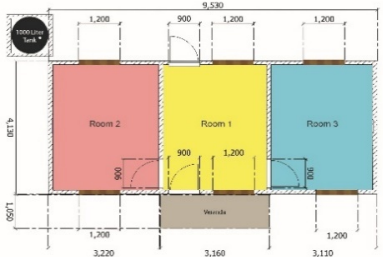
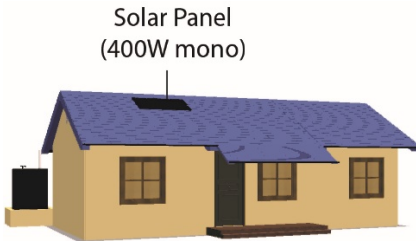

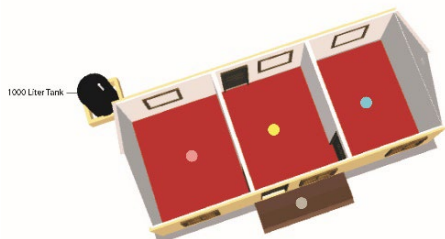
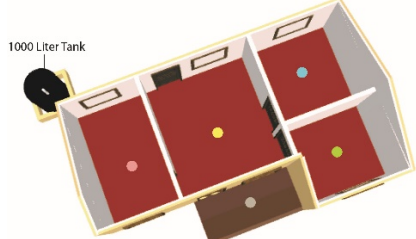
Description: House Type C is 39 m² and is well lit with natural light through six (6) windows, which also allows for good cross ventilation and two (2) external doors. Type C1 has three (3) rooms and C2 has four (4) rooms as shown below.

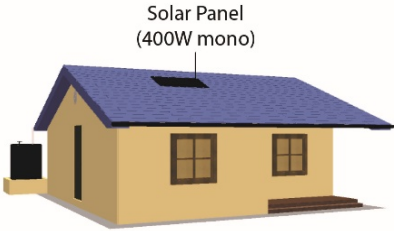

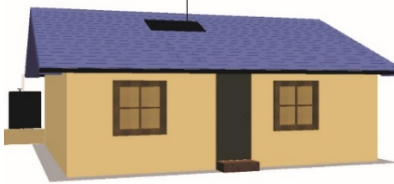
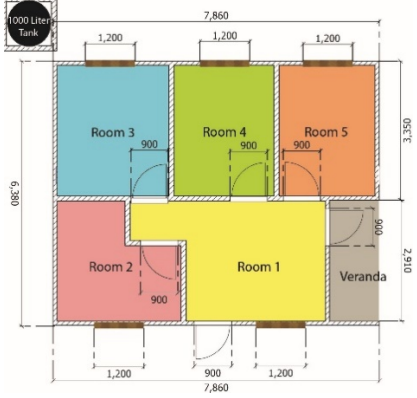
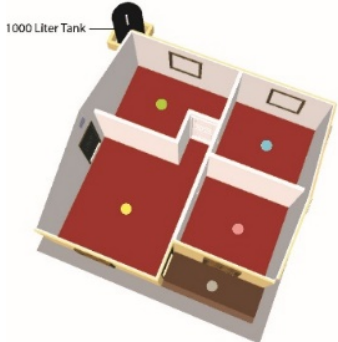
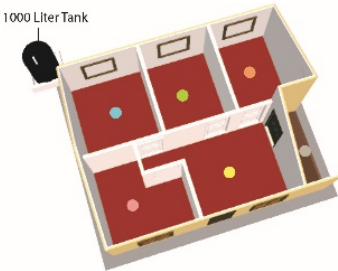
Eligibility: Replaces all residential dwellings greater than 33.1 m² but less than or equal to 39 m².

Alternative: There is a choice between the three (3) room Type C1 and the four (4) room Type C2 configuration.

C1 – 39m² (3 Rooms)

C2 - 39m² (4 Rooms)

 <p>Solar Panel (400W mono)</p>		 <p>Solar Panel (400W mono)</p>																			
 <p>1000 Liter Tank</p>	<p>Areas</p> <table border="0"> <tr> <td>Room 1</td> <td>12.96m²</td> </tr> <tr> <td>Room 2</td> <td>13.00m²</td> </tr> <tr> <td>Room 3</td> <td>13.00m²</td> </tr> <tr> <td>Veranda</td> <td>3.00m²</td> </tr> </table>	Room 1	12.96m ²	Room 2	13.00m ²	Room 3	13.00m ²	Veranda	3.00m ²	 <p>1000 Liter Tank</p>	<p>Areas</p> <table border="0"> <tr> <td>Room 1</td> <td>12.18m²</td> </tr> <tr> <td>Room 2</td> <td>10.00m²</td> </tr> <tr> <td>Room 3</td> <td>8.40m²</td> </tr> <tr> <td>Room 4</td> <td>8.40m²</td> </tr> <tr> <td>Veranda</td> <td>4.60m²</td> </tr> </table>	Room 1	12.18m ²	Room 2	10.00m ²	Room 3	8.40m ²	Room 4	8.40m ²	Veranda	4.60m ²
Room 1	12.96m ²																				
Room 2	13.00m ²																				
Room 3	13.00m ²																				
Veranda	3.00m ²																				
Room 1	12.18m ²																				
Room 2	10.00m ²																				
Room 3	8.40m ²																				
Room 4	8.40m ²																				
Veranda	4.60m ²																				

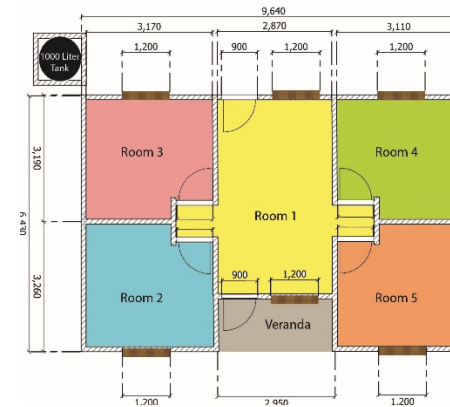
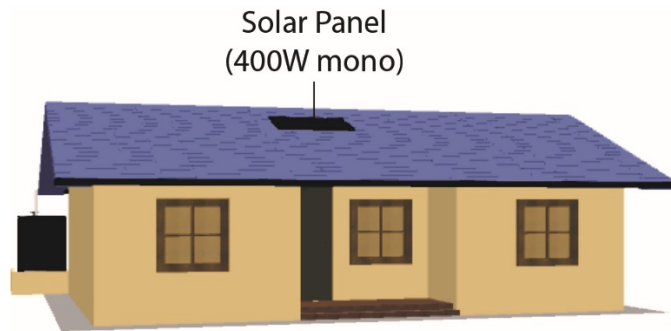
House Type D -47m²																									
<p>Description: House Type D is 47 m² and is well lit with natural light through four (4) windows in D1 and five (5) windows in D2 allowing for good cross ventilation. Both have two (2) external doors and Type D1 has four (4) rooms and D2 has five (5) rooms, as shown below.</p> <p>Eligibility: Replaces all residential dwellings greater than 39.1 m² but less than or equal to 47 m².</p> <p>Alternative: There is a choice between the four (4) room Type D1 and the five (5) room Type D2 configuration.</p>																									
D1 – 47m² (4 Rooms)		D2 - 47m² (5 Rooms)																							
 <p>Solar Panel (400W mono)</p>		 <p>Solar Panel (400W mono)</p>																							
 <p>1000 Liter Tank</p>	<p>Areas</p> <table border="0"> <tr> <td>Room 1</td> <td>16.86m²</td> </tr> <tr> <td>Room 2</td> <td>10.28m²</td> </tr> <tr> <td>Room 3</td> <td>10.28m²</td> </tr> <tr> <td>Room 4</td> <td>10.296m²</td> </tr> <tr> <td>Veranda</td> <td>4.00m²</td> </tr> </table>	Room 1	16.86m ²	Room 2	10.28m ²	Room 3	10.28m ²	Room 4	10.296m ²	Veranda	4.00m ²	 <p>1000 Liter Tank</p>	<p>Areas</p> <table border="0"> <tr> <td>Room 1</td> <td>12.7m²</td> </tr> <tr> <td>Room 2</td> <td>8.8m²</td> </tr> <tr> <td>Room 3</td> <td>8.6m²</td> </tr> <tr> <td>Room 4</td> <td>8.4m²</td> </tr> <tr> <td>Room 5</td> <td>8.6m²</td> </tr> <tr> <td>Veranda</td> <td>3.8m²</td> </tr> </table>	Room 1	12.7m ²	Room 2	8.8m ²	Room 3	8.6m ²	Room 4	8.4m ²	Room 5	8.6m ²	Veranda	3.8m ²
Room 1	16.86m ²																								
Room 2	10.28m ²																								
Room 3	10.28m ²																								
Room 4	10.296m ²																								
Veranda	4.00m ²																								
Room 1	12.7m ²																								
Room 2	8.8m ²																								
Room 3	8.6m ²																								
Room 4	8.4m ²																								
Room 5	8.6m ²																								
Veranda	3.8m ²																								

House Type E - 58m²

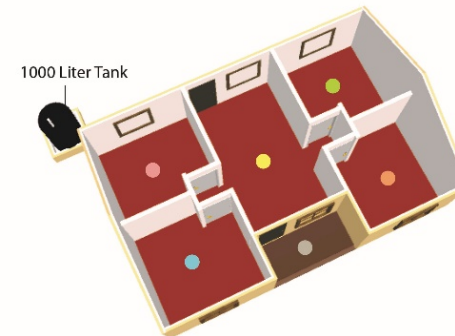
Description: Type E is 58 m² and consists of five (5) rooms and a small covered veranda. This house is well lit with natural light through six (6) windows, which also allow for good cross ventilation, and two (2) external doors as shown.

Eligibility - Replaces all residential dwellings greater than 47.1 m² but less than or equal to 58 m².

Alternative - There are no alternative choices in floor plan.



Areas	
Room 1	18.0m ²
Room 2	10.0m ²
Room 3	10.0m ²
Room 4	10.0m ²
Room 5	10.0m ²
Veranda	3.15m ²

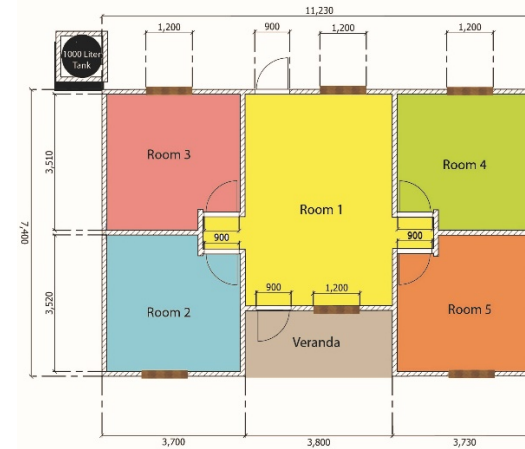
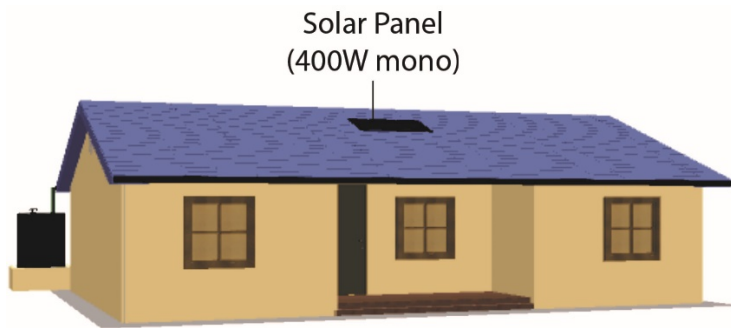


House Type F - 75m²

Description: Type F is 75m² and consists of five (5) rooms and a small covered veranda as shown below. This house is well lit with natural light provided from six (6) windows that also allow for good cross ventilation with two (2) external doors.

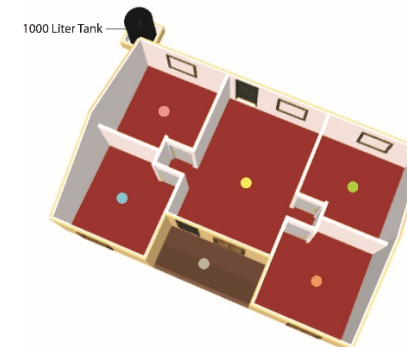
Eligibility – Replaces all residential dwellings greater than 58.1 m² but less than or equal to 75 m²

Alternative - There are no alternative choices in floor plan.



Areas

Room 1	23.5m ²
Room 2	12.9m ²
Room 3	12.9m ²
Room 4	12.9m ²
Room 5	12.9m ²
Veranda	6.66m ²

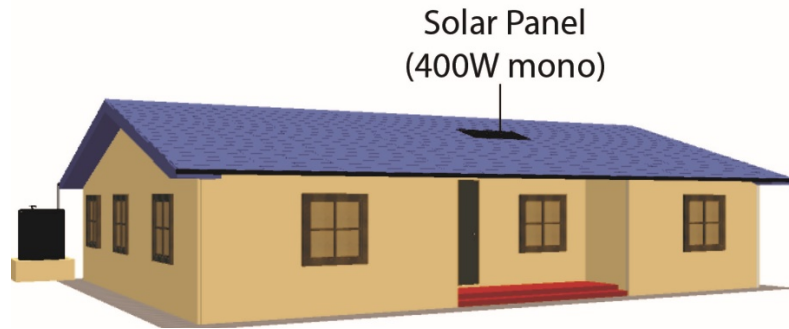


House Type G - 105m²

Description: Type G is a 105 m² house and consists of six (6) rooms and two (2) small covered verandas as shown below. This house is well lit with natural light provided from eleven (11) windows that also allow for good cross ventilation with three (3) external doors.

Eligibility: Replaces all residential dwellings greater than 75.1 m² but less than or equal to 105 m².

Alternative: There are no alternative choices in floor plan.



Areas			
Room 1	28.86 m ²	Room 4	14.75 m ²
Room 2	14.75 m ²	Room 5	14.45 m ²
Room 3	11.86 m ²	Room 6	14.45 m ²
Veranda	10.4 m ²	Corridor	8 m ²

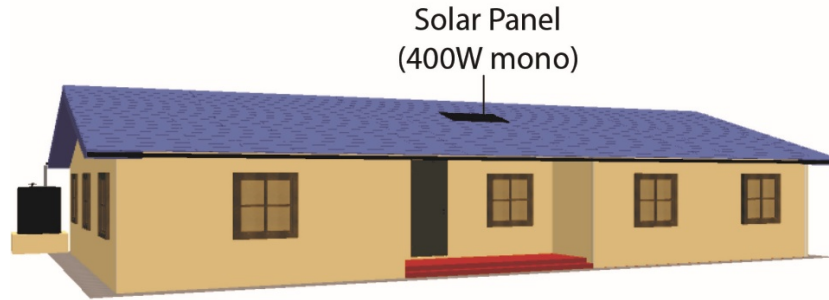


House Type H 145m²

Description: Type H is the biggest (145 m²) of the house types and consists of eight (8) rooms and two (2) small covered verandas as shown below. This house is well lit with natural light provided from thirteen (13) windows that also allow for good cross ventilation with three (3) external doors.

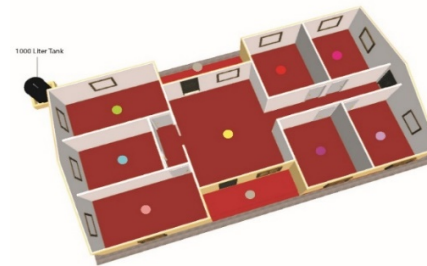
Eligibility – Replaces all residential dwellings greater than 105.1 m² but less than or equal to 145 m².

Alternative - There are no alternative choices in floor plan.



Areas

Room 1	30.10 m ²	Room 5	13.90 m ²
Room 2	17.30 m ²	Room 6	13.90 m ²
Room 3	12.73 m ²	Room 7	13.90m ²
Room 4	17.30 m ²	Room 8	13.90m ²
Corridor	12.10	Veranda	13.5 m ²



Kitchens

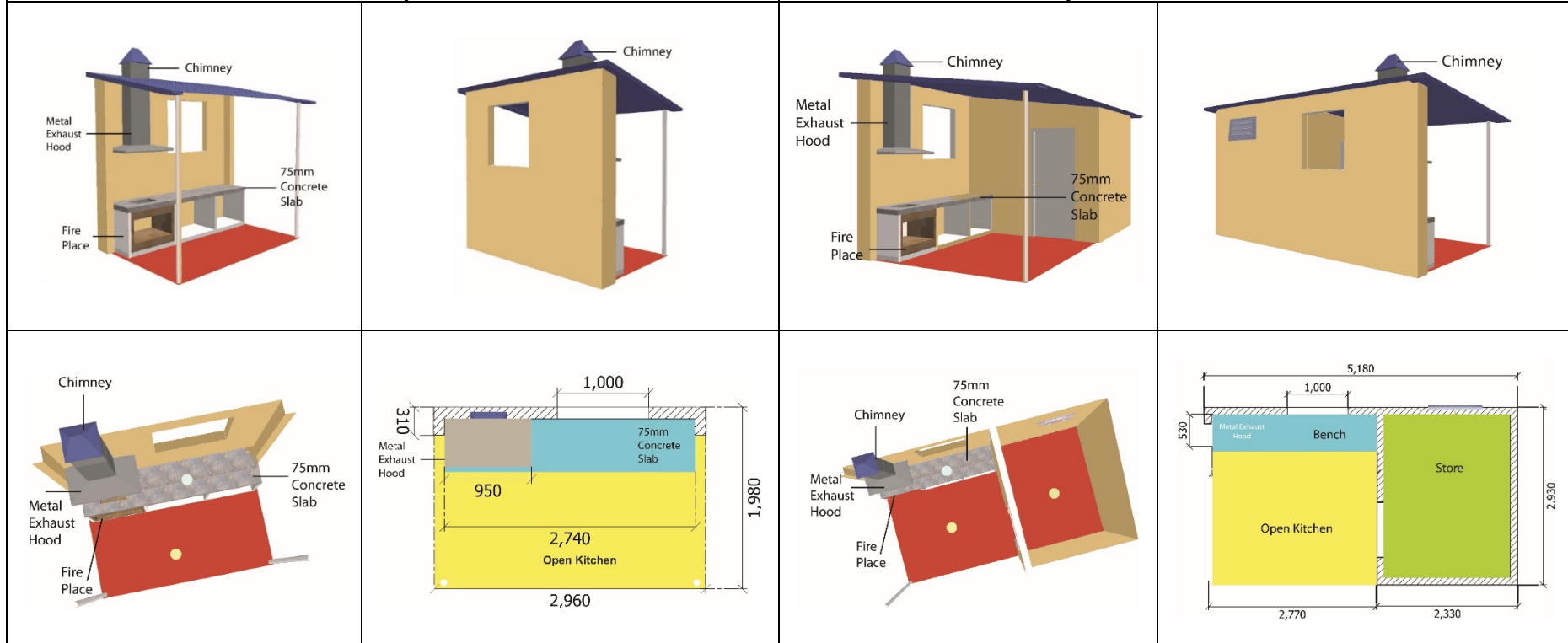
Description: Type A and Type B kitchens are covered open structures with a raised cooking platform and fireplace with a metal flue. Type B has an additional connecting store. Both kitchens have mono-pitched roof structures covered with corrugated iron sheets.

Kitchen Eligibility – For improvement of living conditions for each replacement house, a PAP will be provided with a covered kitchen shelter and a standard single ventilated improved pit (VIP) latrine. Where a PAP is eligible for more than one (1) replacement house, they can elect for either:

- a standard single VIP latrine (with privacy wall at entrance) and a covered kitchen shelter per replacement house structure; or
- one (1) VIP latrine combined with an ablution (shower) structure, and a covered kitchen shelter plus store per homestead.

Kitchen A – Open Kitchen

Kitchen B – Open Kitchen with Enclosed Store



Latrines

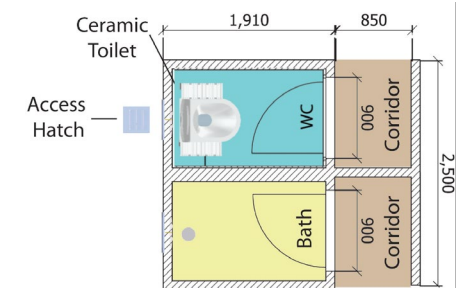
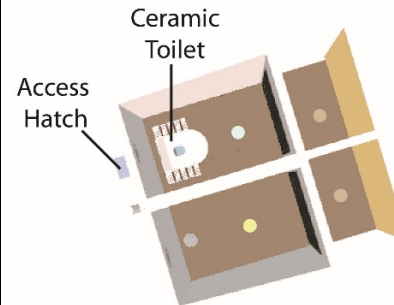
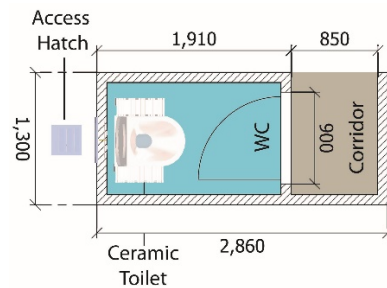
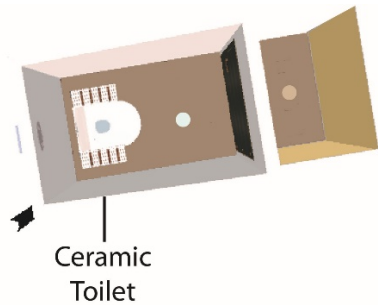
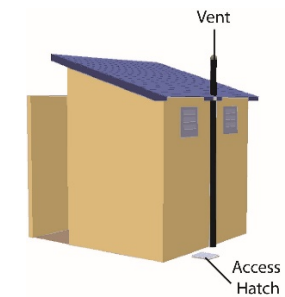
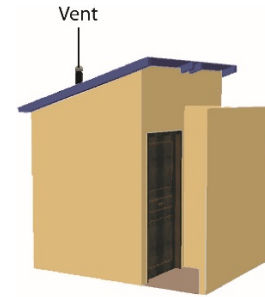
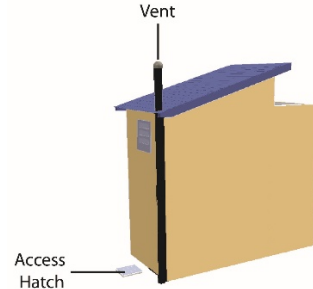
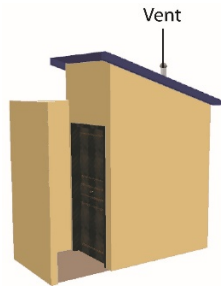
Description: Both VIP latrines have a mono-pitched roof, non-slip ceramic matt tiles with a high wall skirting. The walls will be painted in a high gloss enamel finish, hardwood varnished doors, white glazed squatting type pan. Type B will also have a connecting washing space with door.

Latrine Eligibility - For improvement of living conditions for each replacement house, a PAP will be provided with a covered kitchen shelter and a standard single ventilated improved pit (VIP) latrine. Where a PAP is eligible for more than one (1) replacement house, they can elect for either:

- a standard single VIP latrine (with privacy wall at entrance) and a covered kitchen shelter per replacement house structure; or
- one (1) VIP latrine combined with an ablation (shower) structure, and a covered kitchen shelter plus store per homestead.

Latrine A – Single Covered VIP

Latrine B – Two Room Covered VIP





**EAST AFRICAN
CRUDE OIL
PIPELINE**

EACOP PROJECT IN TANZANIA

TEAM - Total East Africa Midstream,
Msasani Peninsula, 429 Mahando Road, Block D,
P.O. Box 38568, Dar es Salaam - Tanzania.
Tel: 0800 780 068 (Toll free) or +255 22 2214100/4102/4103
Email: EACOP.info@total.com
www.eacop.co.tz

EACOP PROJECT IN UGANDA

TEAM - Total East Africa Midstream,
Plot 21, Yusuf Lule Road,
P.O.Box 34867, Kampala - Uganda.
Tel: 0800 216 000 (Toll free) or +256 (0) 204 916 000
Email: EACOP.info@total.com
www.eacop.com



@2020, All rights reserved

This booklet or part(s) thereof, may not be reproduced, altered, stored in any form or transmitted by any means without written consent from the Management of the East African Crude Oil Pipeline Project.