



EAST AFRICAN  
**CRUDE OIL  
PIPELINE**

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

## RESETTLEMENT ACTION PLAN FOR SINGIDA REGION

**TOTAL EAST AFRICA MIDSTREAM B.V.**

SEPTEMBER 2020



**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 Singida Region*

**Total East Africa Midstream BV**

**September 2020**



This document has been prepared by Digby Wells Consortium.

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

#### **Versions**

<b>Version No.</b>	<b>Revision</b>	<b>Report Date</b>
V1	Draft Final Resettlement Action Plan (RAP) for Pipeline and AGIs in Singida Region issued to Government of Tanzania (GoT) for comments period.	February 2020
V2	Final Disclosed Resettlement Action Plan (RAP) for Pipeline and AGIs in Singida Region	September 2020

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## EXECUTIVE SUMMARY

### 1. INTRODUCTION

**Chapter 1:** The introductory chapter of the Singida Region 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 Singida Region 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 and town councils / city councils. This document is the Resettlement Action Plan (RAP) for the 140.79 km long pipeline section crossing the area administered by Iramba, Mkalama and Singida District Councils, in the Singida Region. The Singida Region RAP is one of nine (9) required for the Tanzanian section of the Project.

Three upstream partners hold interests in petroleum resource licenses in Uganda. The governments of Uganda and Tanzania (GoU, GoT), with the upstream partners, wish to construct the pipeline and associated infrastructure. Project development during the initial project planning stage is to be led 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 Singida RAP**

The Project will require access to over 9,884 acres, (or 4,000 hectares (ha)) of land in Tanzania including the Singida section of the pipeline. Approximately 90% of the land to be acquired comprises the construction corridor for the pipeline and Above Ground Installations (AGIs). Pump Station 6 (PS-6), found in Singida Region, is located in Msinko Village, Ughandi Ward. In addition, one (1) facility (Main Camp and Pipe Yard No. 11 (MCPY-11)) in Ntondo Village, Msiwi Ward will be built as part of the Early Works activities required to support the construction of the pipeline. PS-6 forms part of this Singida RAP and MCPY-11 forms 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 Singida RAP, a total of 1,231<sup>1</sup> Project Affected Persons (PAPs), settlements and institutions have been identified, including 1,115 landholders, 85 tenants, 29 villages and 2 Government Institutions.

The Singida Region RAP describes the policies, principles, procedures, roles and responsibilities for managing displacement impacts caused by Project-related land acquisition in the Iramba, Mkalama and Singida Districts of the Singida Region.

The Singida Region RAP aims to establish and describe:

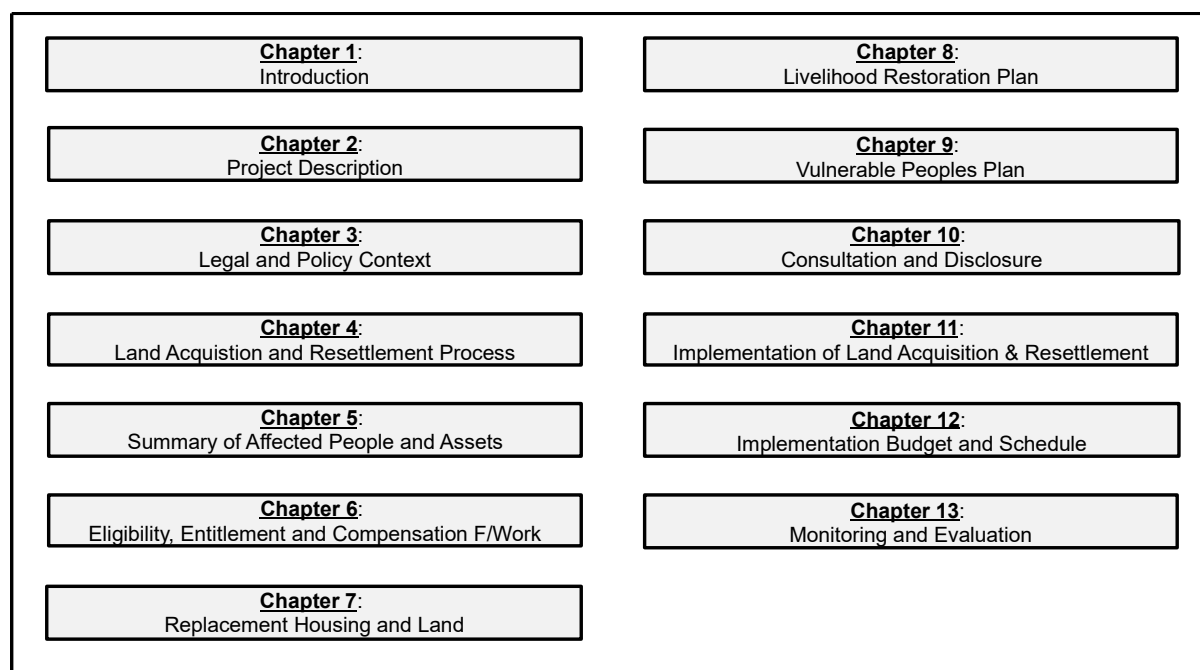
- A summary of the legal framework;
- The individuals and households who will experience physical and / or economic displacement, and the communities who will experience impacts associated with the land acquisition process;
- The way that compensation rates for lost assets were determined;
- Eligibility 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 Singida RAP has been prepared on behalf of and with the support of TEAM B.V. for the Tanzanian section of the EACOP Project 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 Singida Region RAP has 13 Chapters, each addressing a key component of the resettlement planning process. The sequence of chapters is shown in Figure ES- 1 below.

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<sup>1</sup> This includes 12 PAPs who have land parcels in multiple villages.



**Figure ES- 1: Singida Region 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 Singida RAP, the chapter details project elements and associated land requirements in the Singida Region and the administrative area of the Iramba, Mkalama and Singida 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- 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 Land<sup>2</sup>.

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.

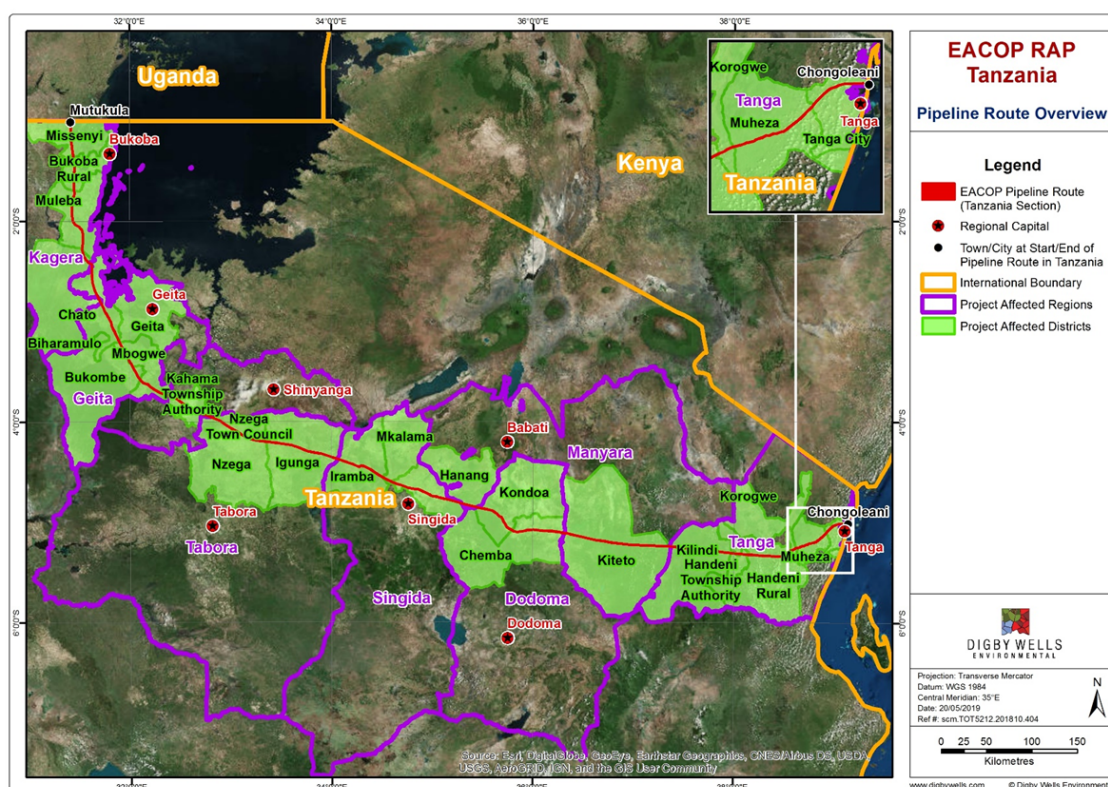


Figure ES- 2: Pipeline Route and Affected Areas

<sup>2</sup> 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 use shall be determined with the relevant technical agencies and the government of Tanzania.

## Project Elements and Land Requirements in the Singida Region

The Singida Region RAP focusses on Project elements within areas in the Iramba, Mkalama and Singida Districts. These elements will require land access to an area of approximately 1,152<sup>3</sup> and 1,131.4 acres will be valued and is to be compensated. The table below provides an overview of land requirements.

Key points:

- The pipeline directly impacts 17 of the 136 wards in the region, including 31 villages;
- The Project affects 1,428 compensable land parcels, 68 of which are used by tenants;
- The pipeline corridor will cross 21 roads, 3 underground water pipelines, 1 railway line and 11 powerlines in the overall pipeline corridor area of Iramba, Mkalama and Singida Districts; and
- The pipeline route in the Singida Region will cross 39 village tracks<sup>4</sup>, 101 cattle tracks, various watercourses and a number of local footpaths.

**Table ES - 1: The Distances and Impacted Land along the Pipeline Route in Singida**

District	Nearest KP		Pipeline Length (km)	Land Cover Area (Acres)
	Start	End		
Iramba	843.5	898	54.42	425.79
Mkalama	898	911.5	13.52	107.25
Singida	911.5	984.5	72.85	619.26
<b>SINGIDA REGION TOTAL</b>			<b>140.79</b>	<b>1,152.3</b>

### 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 Singida Region 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 III and the Performance Standards (PS) of the International Finance Corporation (IFC).

<sup>3</sup> Includes crossings and orphaned land.

<sup>4</sup>Tracks 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.



## 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 Development 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 Singida 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 26<sup>th</sup> 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 Singida RAP has adopted the IGA principles, ensuring compliance with these in processes undertaken to develop the Singida 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 Singida RAP align with the provisions of the Equator Principles III and the IFC PS:

- The Equator Principles are 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 Singida 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

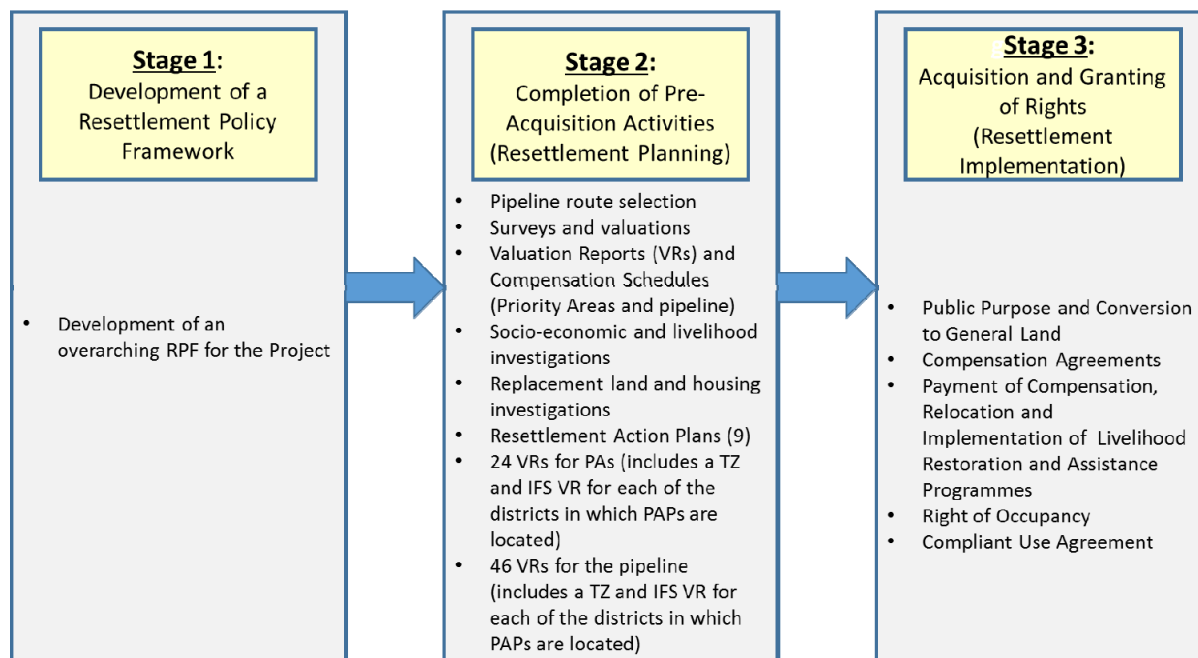
A Gap Analysis between Tanzanian legislative requirements and IFC standards has been undertaken. Gaps have been identified in the context of valuation, socio-economic surveys, eligibility and eligibility cut-off dates, compensation, resettlement assistance, vulnerable people and compensation payment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

## 4. SUMMARY OF RESETTLEMENT PLANNING, PRINCIPLES AND PROCESSES

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



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

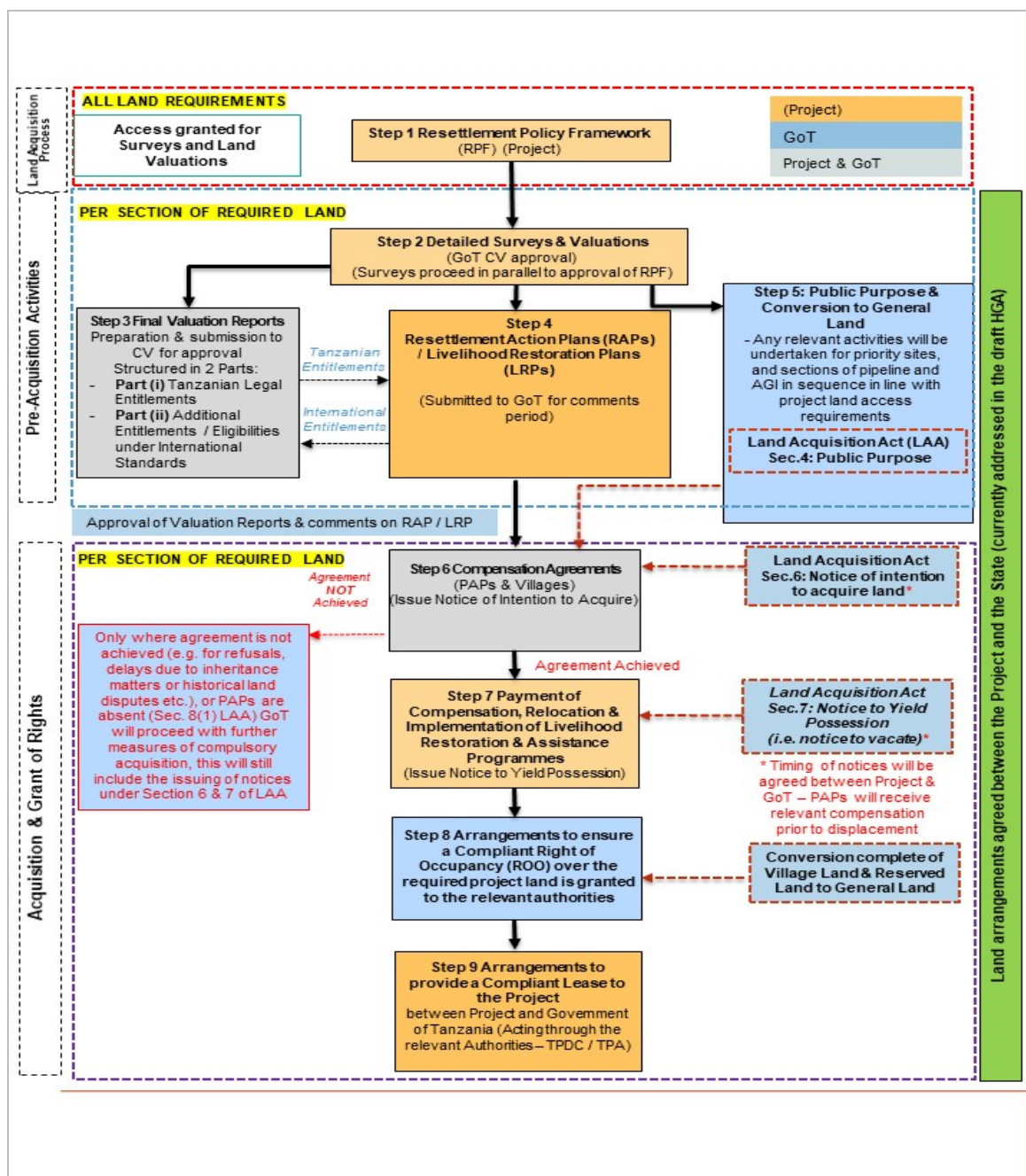


Figure ES- 4 : Land Acquisition Process

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 - 2 outlines the context and content of Stage 2 activities and indicates the status (at the time of compiling the Singida RAP).

**Table ES - 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 Singida 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"> <li>• Community Sensitization, including discussion of surveys with local leadership, community awareness meetings and the announcement of cut-off dates;</li> <li>• 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);</li> <li>• 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;</li> <li>• Socio-economic Information, including PAH and PAP demographic and socio-economic characteristics; and</li> <li>• Posting of Asset Schedules.</li> </ul>
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 Singida 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 Singida RAP, the following disclosure steps were adopted:</p> <ul style="list-style-type: none"> <li>• Engagement with government entities to outline the disclosure process;</li> <li>• 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</li> <li>• Completing any valuation activities including reviewing concerns as raised by PAPs. The valuations activities undertaken during the disclosure process in the</li> </ul>

Stage 2 Activity	Context and Description
	<p>Singida Region marked the date for the valuation of the last person's interest.</p> <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 Singida 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 Singida RAP was undertaken between 10<sup>th</sup> November 2018 and 9<sup>th</sup> March 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"> <li>• A team including registered architects and a quantity surveyor (Tanzanian and international);</li> <li>• 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;</li> <li>• Visits to suppliers of building materials;</li> <li>• Development of concept designs; and</li> <li>• Preparation of a concept design report for the eight (8) pipeline-impacted regions.</li> </ul>
RAP Preparation	<p>The outcomes and results of Pre-Acquisition (Stage 2) activities are documented in the Singida 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

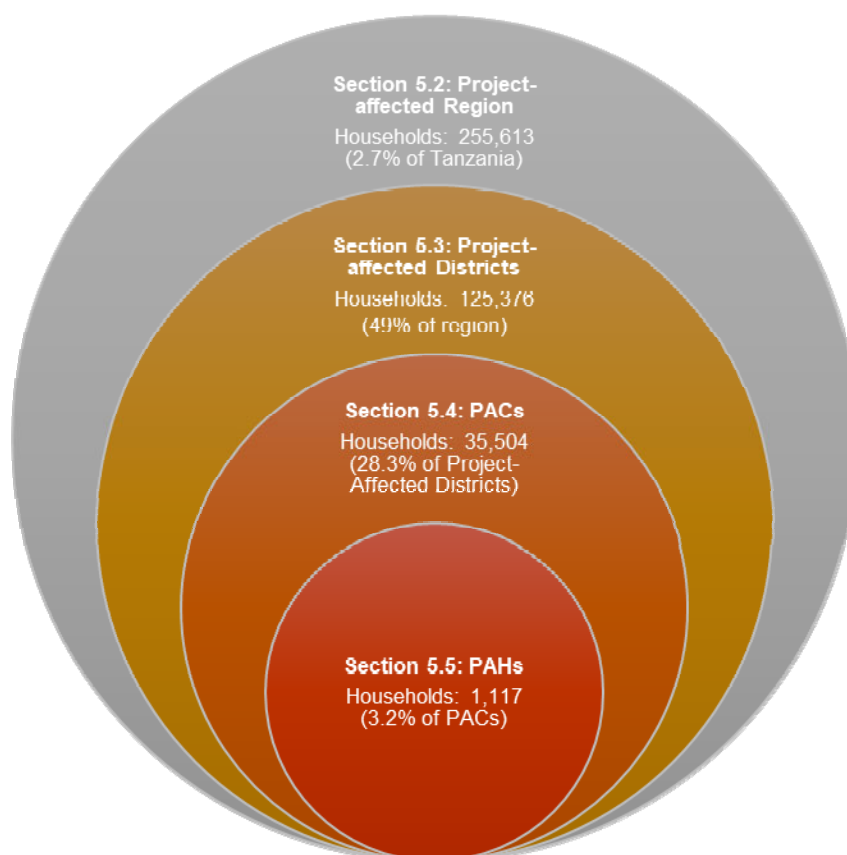
**Chapter 5** profiles the areas, settlements (villages), households and people affected by the Project in light of Project-related displacement impacts. The work described in Chapter 5 is especially important as a context for further elements of the Singida RAP, including determination of entitlements 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 Singida Region. The chapter itself provides an overview of:

- The Singida Region;
- The Project-affected districts (Iramba, Mkalama and Singida Districts);
- Project-affected communities; and
- Project-affected households.

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



**Figure ES- 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 - 3.

Table ES - 3 : Summary of Displacement Impacts in the Singida 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 (No.)			Economic Trees and other trees (No.)	Graves
										Residential Dwellings	Other Structures	Incomplete Structures	Crops Acres	Intercropping Acre	Crops Stems		
Iramba	Mgongo	10.24	69	77.22	61	57	37	0	4	8	2	0	5.45	1.20	0	232	0
	Shelui	4.03	26	30.68	27	11	5	0	0	0	0	0	14.01	0.00	0	0	0
	Mtoa	14.06	111	113.21	109	100	45	0	1	2	1	1	25.52	0.66	0	61	0
	Ulemo	3.28	14	25.62	15	15	10	0	1	1	2	1	4.45	0.00	0	45	6
	Mukulu	9.48	92	71.07	94	87	25	0	4	7	12	0	20.61	0.00	7	51	19
	Kyengege	7.18	71	55.07	56	55	14	0	0	0	3	0	36.30	0.50	0	14	0
	Maluga	6.15	40	46.66	31	29	7	0	2	4	4	0	19.66	0.00	0	128	3
Mkalama	Tumulii	13.52	132	104.91	121	106	30	1	2	2	5	0	57.31	2.34	41	210	2
Singida	Msisi	11.95	129	89.78	124	116	28	0	0	0	0	2	21.89	9.74	48	225	18
	Ughandi	9.01	80	56.06	59	58	14	0	1	2	1	1	16.60	4.97	663	204	9
	Ughandi PS-6	-	21	58.23	19	17	5	0	2	2	0	0	18.39	0.00	223	96	24
	Ntonge	6.10	100	43.86	73	70	7	0	0	0	2	2	15.67	1.75	274	135	9
	Ntonge PS-6	-	2	3.10	4	2	1	0	0	0	0	1	2.30	0.00	0	0	0
	Ilongero	4.10	84	31.31	70	66	21	0	0	0	0	1	11.39	4.52	818	560	0
	Mrama	4.27	72	31.50	52	46	16	0	1	1	1	1	8.00	6.44	1582	2652	63
	Kinyagigi	5.99	119	44.83	96	89	22	0	4	5	5	0	24.99	4.52	1237	5297	39
	Merya	3.45	39	26.55	34	31	5	0	0	0	1	0	9.34	1.11	125	78	9
	Itaja	4.06	59	35.24	53	38	14	0	2	2	3	1	10.02	0.20	1201	471	4
Ngimu	23.92	168	186.53	133	124	15	0	1	2	4	4	36.71	1.26	3198	8893	19	
<b>TOTAL : SINGIDA REGION</b>		<b>140.79</b>	<b>1 428</b>	<b>1 131.45</b>	<b>1 231</b>	<b>1 117</b>	<b>321</b>	<b>1</b>	<b>25</b>	<b>38</b>	<b>46</b>	<b>15</b>	<b>358.60</b>	<b>39.21</b>	<b>9 417</b>	<b>19 352</b>	<b>224</b>



## 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 - 4.

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

District	Ward	Number of PAPs	Number of PAHs	Proportion (%) of Households Affected per ward	Average size of PAH	Household Head (%)		Literacy Rate (%)	Predominant Residential status <sup>5</sup>
						Male	Female		
Iramba	Mgongo	61	57	2.8	10	93	7	59	100%
	Shelui	27	11	0.4	8	73	27	32	100%
	Mtoa	109	100	5.0	7	86	14	75	100%
	Ulemo	15	15	0.4	9	100	0	60	100%
	Mukulu	94	87	7.5	6	76	24	85	99%
	Kyengege	56	55	3.8	7	91	9	82	100%
	Maluga	31	29	1.9	6	87	13	72	100%
Mkalana	Tumuli	121	106	5.3	7	90	10	84	99%
Singida	Msisi	124	116	6.7	8	87	13	87	99%
	Ughandi (pipeline)	59	58	1.9	8	93	7	87	99%
	Ughandi (PS-6)	19	17	0.5					
	Ntonge (pipeline)	73	70	4.8	7	90	10	91	100%
	Ntonge (PS-6)	4	2	0.1					
	Ilongero	70	66	3.2	8	78	22	88	100%
	Mrama	52	46	2.7	7	82	18	90	100%
	Kinyagigi	96	89	5.4	7	86	14	90	97%
	Merya	34	31	2.1	8	90	10	91	100%
	Itaja	53	38	2.9	7	78	22	86	
	Ngimu	133	124	6.3	7	92	8	89	100%
<b>TOTAL</b>		<b>1 231</b>	<b>1 117</b>	<b>3.2</b>	<b>7.5</b>	<b>87<sup>6</sup></b>	<b>13</b>	<b>79</b>	

<sup>5</sup> Refers to percentage of PAHs who stay in the area on a permanent / full-time basis.

<sup>6</sup> Numbers in *italics* denote averages

There are 1,231 PAPs, of which 1,115 are landholders and 85 are tenants. An additional 31 PAPs include government institutions and villages. There are 1,117 PAHs - the largest proportion is found in Singida District (657), followed by Iramba District (354) and Mkalama District (106). Of the PAHs, one (1) self-identified as Barabaig - see Section 5.7 for more detailed information on vulnerable ethnic groups.

The primary livelihood activity and income generating activities of most PAHs across all three districts (an average of 92%) are agriculture based. This includes the sale of crops (an average of 52% of PAHs) and subsistence farming (40% of PAHs). Households in Iramba and Mkalama districts plant similar crops, which include mostly maize, sorghum (red and white), sunflowers and 'other', which include a variety of crops such as millet, lentils, cotton, cassava and groundnuts.

Although households in the Project-affected wards in general rely on kerosene for lighting, the majority of PAHs across the Project-affected wards predominantly relied on battery-operated torches or solar panels for lighting. Similar to other households in the Project-affected wards, PAHs used wood for cooking, whilst water is sourced from a variety of sources: largely from unimproved water sources in Iramba District (e.g. rivers, dams and streams) and some government / donor water projects, and improved water sources in Mkalama and Singida districts (e.g. communal boreholes / wells and government / donor water projects, although PAHs in some wards in Singida District rely on unimproved water sources). Most PAHs in all three districts make use of pit latrines.

### **Development Support**

Current crop yields are affected by a lack of agricultural equipment. During the SELI, PAHs reported that the use of agricultural inputs like improved seeds, organic fertilizer, pesticides, and animal and mechanical traction are only used by PAHs who can access and afford these inputs and equipment. Further, the lack of crop storage facilities contributes to post-harvest losses and compels farmers to sell to intermediaries and buyers shortly after harvest, rather than being able to hold on to crops and sell when the market price is more favorable. Coupled with this is a need for education and training on sustainable agricultural practices given that traditional farming practices are becoming less viable due to the impacts of climate change on historic rainfall patterns. Improved seeds can increase crop yields<sup>7</sup> and provision of improved seeds to PAHs may significantly contribute to restoration and improvement of livelihoods.

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 as it provided easier access to markets.

### **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

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<sup>7</sup> SELI team 3, 2019, Personal communication with District Agricultural Officers.

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 not<sup>8</sup>. 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 Singida Region from the Barabaig vulnerable ethnic group who may self-identify as indigenous. . The household is located in the Milade Village in the Mkalama District and owns one (1) land parcel. The project will compensate the PAH for 0.504 acres of land and two (2) economic trees. The land is held under customary tenure (unregistered) and is used for agriculture. The PAH is not physically displaced.

### 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 321 households are regarded as potentially vulnerable in the Singida Region (29% of all PAHs).

### Displacement Impacts

Table ES - 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 - 5 : Summary of Impacts**

Impact	Management Actions
<b>TEMPORARY IMPACTS</b>	
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 timeous manner regarding the closure of any (foot)paths and crossings and provide people with alternative routes, where required.

<sup>8</sup> [http://www.africa.kyoto-u.ac.jp/kiroku/asm\\_normal/abstracts/pdf/36-1/yatsuka.pdf](http://www.africa.kyoto-u.ac.jp/kiroku/asm_normal/abstracts/pdf/36-1/yatsuka.pdf)

Impact	Management Actions
Disruption of agricultural activities	<p>To ensure that the agricultural production cycle is minimally disrupted, it is recommended that the Project implement the following management actions during construction:</p> <ul style="list-style-type: none"> <li>• Pay PAHs compensation as early as possible so that they have sufficient time to locate and purchase replacement land;</li> <li>• Co-ordinate the land take schedule with the seasonal crop calendar to ensure that the agricultural production cycle is minimally disrupted;</li> <li>• Assist PAHs to locate and purchase replacement land, where required;</li> <li>• Assist PAHs in clearing and preparing replacement land for agricultural production, where required;</li> <li>• Provide transitional food support, staple cereals, and oil and salt, to PAHs until agricultural productivity levels on replacement land are restored or improved.</li> </ul>
Land speculation	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Consider the findings of the EACOP study on Project-Induced In-Migration Situational Analysis July 2019.</li> </ul>
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"> <li>• If construction of the pipeline section will take longer than a month in village forests, consider allowing community members to harvest natural resources by-weekly for a few hours (within any permit or legal restrictions).</li> <li>• 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.</li> <li>• Implement mitigation measures set-out in ESIA.</li> <li>• Ensure that all contractors adhere to terms laid out in EACOP Contractor Management Plans.</li> </ul>
<b>PERMANENT IMPACTS</b>	
Loss of land	Compensated / replaced
Loss of structures (residential and non-residential)	Compensated / replaced
Loss of crop stems and economic trees and other 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 Singida Region RAP are grouped and summarized below (Chapter 6 of the Singida 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 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. These dates were communicated to the PAPs in each village 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 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 Iramba, Mkalama and Singida was 2<sup>nd</sup> August, 26<sup>th</sup> July and 8<sup>th</sup> 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 Singida Region (Pipeline and AGIs). For the purpose of the Executive Summary Table ES - 6 captures the structure and general content of the Singida Region Entitlement Framework.

**Table ES - 6 : General Content of the Singida Region Entitlement Framework**

Impact	Effect	Entitled Persons	Entitlement <sup>9</sup>	
			In-kind and / or cash	Livelihood Restoration
<b>Land</b>				
Seven 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 significant of impact.
<b>Loss of Residence by Owner</b>				
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	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.

<sup>9</sup> 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 <sup>9</sup>	
			In-kind and / or cash	Livelihood Restoration
		owners.		
<b>Loss of resources providing income in cash or kind</b>				
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.	-
<b>Loss of Communal or Institutionally owned structures or land</b>				
Five 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.	None.
<b>Trees and Crops</b>				
Seven 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 physically and economically displaced PAPs.
<b>Cultural Assets</b>				
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 Singida. 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 Singida 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 Singida Region have been recorded and tabulated. Details are presented in Chapter 6.

## 7. REPLACEMENT HOUSING AND LAND

**Chapter 7** of the Singida 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 Study<sup>10</sup> 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 Singida Region, 25 households owning 38 residential structures will be physically displaced. Of the 38 structures 37 have been identified as eligible for the replacement housing in-kind compensation. There is one case where the PAH owns two structures with a total combined floor space of less than 25m<sup>2</sup>. In this situation, the PAH is only entitled to one (1) replacement house (25m<sup>2</sup>) and will be compensated 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.

Twenty (20) of the 37 residential structures eligible for replacement in Singida are less than 25 m<sup>2</sup> and are eligible for the 25m<sup>2</sup> Type A house. 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.

The majority of affected structures in Singida are traditional houses constructed from readily available local materials. Data from the socio-economic surveys indicates there is only one

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<sup>10</sup> Replacement Housing Concept Design Report: Pipeline (2019) (Digby Wells Consortium).



(1) household in Singida Region who self-identifies as belonging to the Barabaig and will not lose a residential structure.

### Basis for Design

The local architectural style for residential dwellings in Singida 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.

### Replacement House and Ancillary Structure Designs

Eight replacement house designs have been developed for the Project. They range in size from the smallest at 25m<sup>2</sup> (Type A) to the largest at 145m<sup>2</sup> (Type H). The majority (54%) of structures eligible for replacement in the Singida Region are less than 25m<sup>2</sup> and are eligible for the Type A house.

**Table ES - 7 : Houses Types and Eligible Dwellings in Singida**

House	Eligible Dwellings in Singida	Floor Space	Sub – Type	Number of Rooms
House Type A	20	25m <sup>2</sup>	A1	2
			A2	3
			A3	3
House Type B	5	33m <sup>2</sup>	B1	3
			B2	4
House Type C	4	39m <sup>2</sup>	C1	3
			C2	4
House Type D	3	47m <sup>2</sup>	D1	4
			D2	5
House Type E	3	58m <sup>2</sup>	E	5
House Type F	1	75m <sup>2</sup>	F	5
House Type G	1	105m <sup>2</sup>	G	6
House Type H	0	145m <sup>2</sup>	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 Singida Region (7.9% to 13.5%), so consideration of the most appropriate mechanisms to ensure that “land for land” replacement can be achieved is required.

The IFC Draft Good Practice Handbook<sup>11</sup> 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 Singida Region 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.

<sup>11</sup> 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.

### **Singida 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 Singida 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 Singida 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 Singida Region include the following:

- Non-Governmental Organization (NGO) and Non-Profit Organization (NPO) led programs. These include empowering women to participate in horticulture, supporting maize farmers, providing seeds on credit, advice on storage and marketing, training in bee and livestock keeping, sustainable land restoration and entrepreneurship training.
- 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 project affected districts, undertaken by the Government of Tanzania, or GoT in partnership with others. Many government departments and agencies are active in this context, including those responsible for health, education, water and sanitation and livestock development. Infrastructure projects (water supply, schools, health care facilities are common), but there are also programs with direct livelihood improvement links, including the construction of charco dams and rehabilitation of cattle dipping facilities.

### **Livelihood Restoration Plan**

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

- LRA 1 - Land preparation and planting of replacement agricultural land;
- LRA 2 - Maize 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 are especially relevant in Singida 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.

### **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 Singida Region 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 Singida 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 - 8. Note that Chapter 9 of the Singida RAP provides details at ward and village level.

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

Ward	Category 1	Category 2	Category 3
<b>Iramba</b>			
Mgongo	24	13	10
Shelui	2	3	3
Mtoa	17	28	15
Ulemo	0	10	3
Mukulu	9	16	26
Kyengege	5	9	11

Ward	Category 1	Category 2	Category 3
Maluga	1	6	11
<b>Mkalama</b>			
Tumuli	8	22	27
<b>Singida District</b>			
Msihi	7	21	24
Ughandi	5	14	24
Ntonge	0	8	19
Ilongero	10	11	14
Mrama	8	8	14
Kinyagigi	4	18	15
Merya	2	3	7
Itaja	4	10	4
Ngimu	3	12	31
<b>TOTAL</b>	<b>109</b>	<b>212</b>	<b>258</b>

The level and nature of vulnerability will differ from one 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 - 9 summarizes the key findings.

**Table ES - 9 : Assessment of Specific Vulnerabilities**

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

### Livelihood Strategies for Vulnerable Households

Most PAHs affected by the pipeline corridor in the Singida 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 Singida 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 Singida RAP describes the manner in which interaction with stakeholders has been undertaken. It addresses the identification of stakeholders, engagement structures and methods and engagement and consultation already completed.



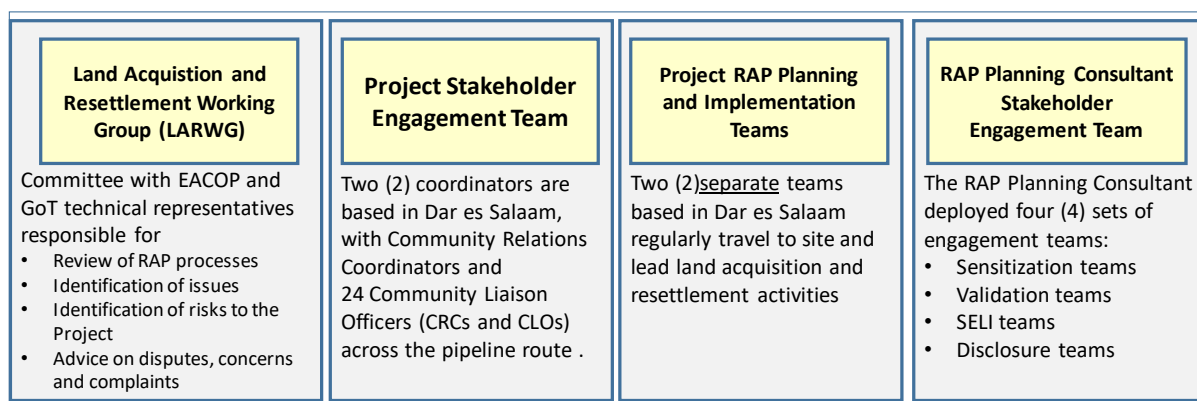
The Project is committed to meaningful engagement with all of its stakeholders based on principles of open and transparent engagement, promotion of listening and dialogue, empowerment through engagement, timely and proactive information sharing, freedom from manipulation or coercion, effective and accessible 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 Singida 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 Singida RAP planning and engagement. These are shown in Figure ES- 6.



**Figure ES- 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.

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

Meeting Type	Sensitization Meeting	Validation Meeting	Housing Meeting	SELI Meeting	Disclosure Related Meeting	TOTAL
Regional Level Meetings	1	3	N / A	N / A	2	6
District Level Meetings	4	4	3	20	7	<b>38</b>
Ward Level Meetings	16	17	N / A	17	15	<b>65</b>
Village Level Meetings	61	31	N / A	102	33	<b>227</b>
<b>TOTAL</b>	<b>82</b>	<b>55</b>	<b>3</b>	<b>139</b>	<b>57</b>	<b>336</b>
Regional Level Attendees	53	99	N / A	N / A	69	208
District Level Attendees	29	20	8	38	26	107
Ward Level Attendees	267	189	N / A	190	253	899
Village Attendees	482	279	N / A	1 432	208	1 324
Village Assembly Attendees	2,161	N / A	N / A	N / A	960	4 118
<b>TOTAL</b>	<b>2 992</b>	<b>577</b>	<b>8</b>	<b>1 660</b>	<b>1 516</b>	<b>6 656</b>

### Issues and Grievances

An Issues and Comments register has been compiled. The timeframes for the payment of compensation remained a concern throughout the planning process. Other concerns related to economic loss included concerns about management of cattle tracks, as well as access to the pipeline corridor and the other side thereof during construction and operation. The process of grave removal and associated compensation remained a concern.

A Project-level Grievance Management procedure and associated documentation have been developed and implemented. A total of 33 land acquisition and resettlement related grievances were received in the Singida 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 Singida 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).

Implementation of the Singida 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 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 (see ES-5 and Chapter 4) will be managed by the EACOP Project Pipeline Team (PPT), as well as the GoT. Roles and responsibilities for the Singida RAP Implementation phase are summarized in Table ES - 11 below.

**Table ES - 11 : Roles and Responsibilities for the Singida RAP Implementation Phase**

Activity	Project Company / PPT (Project) Role	Government of Tanzania Role
<b>[Step 5] Gazettement of Public Purpose, and Conversion of Land to General Land.</b>	<ul style="list-style-type: none"> <li>• Provide maps and information (including a list of affected villages) of required Project land per section.</li> <li>• Review gazettelement area and any orders and / or notices prior to publication in the Gazette.</li> <li>• Provide timing to the GoT and input to the wording of notices of intention to acquire if possible.</li> </ul>	<ul style="list-style-type: none"> <li>• Prepares, issues and publishes necessary orders and / or notices in Gazette required under the LAA.</li> <li>• Undertakes all necessary steps and actions to meet the provisions of the LAA, including for the gazettelement and acquisition of land, and for the conversion of certain land (at timing agreed with Project) to General Land as agreed with the Project<sup>12</sup>.</li> </ul>
<b>[Step 6] Compensation Agreements</b>		
Entitlements and Compensation Briefings.	<ul style="list-style-type: none"> <li>• Conduct additional entitlement briefings at village level to explain and discuss the entitlements to PAPs.</li> </ul>	<ul style="list-style-type: none"> <li>• Support provided by GoT in addition to district, ward and village authorities.</li> </ul>

<sup>12</sup> 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. Gazettelement 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
Drafting and Signing of Compensation Agreements.	<ul style="list-style-type: none"> <li>Lead the engagement with PAPs and communities to reach compensation agreements.</li> <li>Signatories of Compensation Agreements under discussion with GoT.</li> <li>Determine cases where the GoT's further compulsory acquisition powers need to be engaged and facilitate process, where applicable.</li> </ul>	<ul style="list-style-type: none"> <li>Signatories of compensation agreements under discussion with GoT.</li> <li>Provide support should the engagement process continuously fail to gain agreement overcompensation.</li> </ul>
<b>[Step 7] Payment of Compensation, Relocation &amp; Implementation of Livelihood Restoration &amp; Assistance Programs</b>		
Payment of Compensation	<ul style="list-style-type: none"> <li>Payment of compensation (The arrangements for payment of Tanzanian regulatory entitlements are a matter of discussion between the GoT and the Project).</li> </ul>	<ul style="list-style-type: none"> <li>Acquiring Authority for land acquisition. (The arrangements for payment of Tanzanian regulatory entitlements are a matter of discussion between the GoT and the Project.)</li> <li>Oversight of compensation and relocation process.</li> </ul>
Construction of Replacement Housing.	<ul style="list-style-type: none"> <li>Preparation of replacement plots for construction of replacement houses.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Support with formal land acquisition, transfer and registration as per Tanzanian legislation.</li> </ul>
Relocation and Transitional Support.	<ul style="list-style-type: none"> <li>Provide timing and agree modalities of giving PAPs notice to vacate.</li> <li>Provision of transitional support (where required).</li> </ul>	<ul style="list-style-type: none"> <li>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)<sup>13</sup>.</li> </ul>
Implementation of Livelihood Restoration and Assistance Programs.	<ul style="list-style-type: none"> <li>Refinement of livelihood restoration programs and support to PAPs.</li> <li>Discussions and liaison with regional and district officials &amp; technical staff, NGOs and CBOs.</li> <li>Assess locally based service providers who are able to provide training and post training support.</li> <li>Mobilization of the necessary human, financial and material resources.</li> </ul>	<ul style="list-style-type: none"> <li>Support and potential partnerships with District Agricultural Office.</li> <li>Project to liaise with regional and district official and technical staff.</li> </ul>

<sup>13</sup> 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
[Step 8] Granting of Rights and [Step 9] Lease to Land.		<ul style="list-style-type: none"> <li>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.</li> </ul>
		<ul style="list-style-type: none"> <li>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).</li> </ul>

### Stakeholder Engagement during Singida RAP Implementation

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

**Table ES - 12 : Engagement Execution Plan for Singida 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"> <li>Provide updates on activities completed;</li> <li>Discuss upcoming activities;</li> <li>Seek guidance on regulatory requirements;</li> <li>Provide feedback on grievances received and resolved; and</li> <li>Solicit feedback and adapt plans accordingly.</li> </ul>	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"> <li>Provide updates on activities completed;</li> <li>Discuss upcoming activities;</li> <li>Seek guidance on regulatory requirements;</li> <li>Provide feedback on grievances received and resolved; and</li> <li>Solicit feedback and adapt plans accordingly.</li> </ul>	Minutes of meetings. Attendance registers. Meeting invitations.
Engagement with PAPs (incl. PAHs and PACs).	Engagement will include: <ul style="list-style-type: none"> <li>Disclosure of resettlement agreement information and notification to PAPs and PAHs regarding resettlement options;</li> <li>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;</li> <li>Record options / preferences of PAPs / PAHs;</li> <li>Notification to PAPs of key activities in relation to payment of compensation and commencement of the construction of replacement housing;</li> <li>Accompanying PAPs to the site / s where replacement housing is being constructed (as per agreed schedule of visits);</li> <li>One-to-one engagement with PAPs to support understanding of an agreement on compensation / support packages;</li> <li>Management of complaints and grievances process;</li> <li>Ongoing monitoring and evaluation related engagement with PAPs, RAP implementation partners and other related stakeholders; and</li> </ul>	Notes / minutes of discussions / meetings. Notifications of meetings. Signed agreements.

Stakeholder Group	Task Description	Deliverables
	<ul style="list-style-type: none"> <li>Discussions and activities related to livelihoods restoration.</li> </ul>	

## 12. IMPLEMENTATION BUDGET AND SCHEDULE

The Singida 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 assess 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 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 Singida Region will take approximately 21 months from 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 Singida 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 monitoring and evaluation.

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 Singida 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 Singida 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 Singida RAP implementation team.
- **Compliance Monitoring:** This form of monitoring will establish whether resettlement implementation is meeting the objectives defined in the Singida RAP. Compliance monitoring should be undertaken quarterly during implementation and for two 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 Singida 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 around (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.

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## 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
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
ERB	Engineers Registration Board of Tanzania
ESIA	Environmental and Social Impact Assessment

<b>Abbreviations or Acronyms</b>	<b>Meaning</b>
EW	Early Works
FAQ	Frequently Asked Question
FBE	Fusion-bonded epoxy
FDR	Fixed Deposit Reserves
FGD	Focus Group Discussion
FPIC	Free Prior and Informed Consent
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
LARWG	Land and Resettlement Working Group
LEAT	Lawyers' Environmental Action Team
LHRC	Legal and Human Rights Center
LIP	Livelihood Improvement Program
LOF	Load-out Facility
LRP	Livelihood Restoration Plan
m	Meter
M&E	Monitoring and Evaluation
MCPY	Main Camp and Pipe Yard
ME	Ministry of Energy

<b>Abbreviations or Acronyms</b>	<b>Meaning</b>
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
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
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
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

<b>Abbreviations or Acronyms</b>	<b>Meaning</b>
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
VEO	Village Executive Officer
VEG	Vulnerable Ethnic Group
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.



<b>Term</b>	<b>Definition</b>
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.

<b>Term</b>	<b>Definition</b>
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.
Murram	A form of laterite (a material containing clay) used for road surfaces.
Mtaa/Mitaa	Mtaa / Mitaa is the Swahili term for a street or streets. Administratively, Mtaa / Mitaa are local subdivisions in urban wards.
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 Land Acquisition Act (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.

<b>Term</b>	<b>Definition</b>
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 subprojects 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".

<b>Term</b>	<b>Definition</b>
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 BV (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 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 councils<sup>14</sup>. This Resettlement Action Plan (RAP) is for land acquisition for the section of pipeline corridor (140.79 km) traversing the Singida Region; the area where the pipeline is located is administered by the Iramba, Mkalama and Singida Districts. In the Singida District one (1) Above Ground Installation (AGI), Pump Station 6 (PS-6), is located in Msinko Village, Ughandi Ward with the eastern-most part of the access road crossing into Iguari Village, Ntonge Ward. One (1) facility (Main Camp and Pipe Yard No. 11 (MCPY-11)) in Ntongo Village, Msisi Ward will be built as part of the Early Works activities required to support the construction of the pipeline. PS-6 forms part of this Singida RAP and MCPY-11 forms 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:

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 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

<sup>14</sup> This comprises: one (1) city council, four (4) town councils and 22 district councils; therefore, a total of 27 administrative district councils.

construction corridor for the export pipeline and AGIs, with the remainder required for temporary construction facilities and access roads. The current estimated land requirements<sup>15</sup> of the Project include the following:

- Construction facilities (approximately 641.5 acres)<sup>16</sup>;
- Access roads (approximately 182.9 acres); and
- Operational facilities (approximately 9,238.3 acres)<sup>17</sup>.

Land acquisition and resettlement for the Project will comply with 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 documents<sup>18</sup>:

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

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

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<sup>15</sup> 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).

<sup>16</sup> 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).

<sup>17</sup> 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.

<sup>18</sup> Additional documents and specialist reports (e.g. for fisheries) may be developed as part of further planning and implementation.

completed for the PA valuations and is currently being completed for each of the 24 districts (which includes four (4) town councils<sup>19</sup>) 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 PAs<sup>20</sup> – already completed;
- Eight (8) RAPs for the pipeline corridor and AGIs – divided in terms of regional administrative geographical areas<sup>21</sup>; 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 this RAP for Singida

This RAP is for the pipeline corridor traversing the Iramba, Mkalama and Singida districts of the Singida region of Tanzania and adopts the principles and processes set out in the EACOP Project RPF<sup>22</sup>.

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 components<sup>23</sup>. In this RAP the most directly impacted stakeholders are:

- **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

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<sup>19</sup> 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).

<sup>20</sup> 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.

<sup>21</sup> These regional administrative geographical areas are Kagera, Geita, Shinyanga, Singida, Manyara, Tabora, Dodoma and Tanga.

<sup>22</sup> The RPF (September 2018) has been disclosed on the EACOP Project website <http://eacop.com/information-centre/publications/>.

<sup>23</sup> 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 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 GoT<sup>24</sup> supported and contributed to the processes required to develop this RAP and they will continue to be involved with its implementation. These include:

- **Central Government** with various mandated authorities e.g.:
  - Tanzania Petroleum Development Corporation (TPDC);
  - Ministry of Lands, Housing and Human Settlements Development (MLHSD);

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<sup>24</sup> 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.

- Ministry of Energy (ME);
  - Ministry of Minerals (MM);
  - Tanzanian Rural Roads Agency (TARURA);
  - Tanzanian National Roads Agency (TANROADS);
  - Tanzania Electric Supply Company Limited (TANESCO);
  - Tanzanian Forest Services Agency (TFS);
  - Rural Energy Agency (REA);
  - Regional Commissioner's office (RC)
  - District Commissioner's (DC) Offices; and
  - Water Basins Office (Western Zone Office).
- **Local Government** within the Project affected region includes:
    - Urban authorities<sup>25</sup> include: Town Director's Office, Mtaa Development Councils; and
    - District Councils (Rural authorities)<sup>26</sup> include: District Executive Director's (DED) Office<sup>27</sup>, Ward Development Councils (WDC) and Village Development Councils (VDCs)<sup>28</sup>.

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 MLHHS.

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.

## 1.2 Summary of the Singida Region Land Context

The following table summarizes the PAPs within the Singida Region. There are 12 PAPs within the Singida Region who occupy land parcels in more than one (1) village and are

<sup>25</sup> Urban authorities consist of city councils, municipal councils and town councils. The Project involves one (1) city council and four (4) town councils.

<sup>26</sup> District councils coordinate township council and village/mtaa council authorities. The village and township councils have the responsibility for formulating development plans for their areas.

<sup>27</sup> The District Executive Director's (DED) office was specifically in an oversight position to the land and asset valuation process.

<sup>28</sup> 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.

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 totals<sup>29</sup>. There are three (3) PAPs who occupy land in PS-6 and the pipeline corridor in Misinko Village and is one (1) PAP who occupies land in PS-6 and the pipeline corridor in Iguari Village.

**Table 1-1: Summary of PAP Numbers within the Singida Region**

Description	PAPs (No.)	Landholders (No.)	Tenants (No.)	Villages <sup>30</sup> (No.)	Government Institutions <sup>31</sup> (No.)
<b>Iramba District</b>					
Total PAPs including those included in multiple villages.	393	347	36	9	1
PAPs with land parcels in multiple villages.	9	5	4	0	0
<b>Mkalama District</b>					
Total PAPs including those included in multiple villages.	121	108	10	2	1
PAPs with land parcels in multiple villages.	0	0	0	0	0
<b>Singida District</b>					
Total PAPs including those included in multiple villages (PAPs with land in the pipeline corridor and PS-6 are only counted once in the PS-6 figures).	717	660	39	18	0
PAPs with land parcels in multiple villages.	3	3	0	0	0
PAPs with land parcels in the pipeline corridor and PS-6 <sup>32</sup> .	4	2	0	2	0
<b>Total (Singida Region)</b> (including PAPs with multiple land parcels in different villages and PAPs with land/assets affected in the pipeline corridor)	<b>1231</b>	<b>1115</b>	<b>85</b>	<b>29</b>	<b>2</b>
<b>Totals (Singida Region)</b> (counting only once the PAPs with multiple land parcels in different villages and PAPs with land/assets affected in the pipeline corridor and PS-6 & Access Road).	<b>1,219</b>	<b>1,107</b>	<b>81</b>	<b>29</b>	<b>2</b>

The main land acquisition and resettlement related impacts associated with the 140.79 km pipeline section traversing the Iramba, Mkalama and Singida Districts of the Singida Region include:

<sup>29</sup> 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 Ilongero and Misinko villages, the land parcels are counted as belonging to one (1) PAP.

<sup>30</sup> 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 Development Council (VDC). A PAP village is counted only once although more than one land parcel and / or asset of the village may be affected.

<sup>31</sup> Institutions that are not owned by government are included as landholders or tenant PAPs, for example churches.

<sup>32</sup> There are four (4) PAPs who have land/assets affected by both the pipeline and PS-6/Access Road; 3 PAPs from Misinko Village and one (1) PAP from Iguari Village. See also footnotes and content of Table 5-1.

- Iramba District:
  - Seven (7) of the 17 wards (Mgongo, Shelui, Mtoa, Ulemo, Mukulu, Kyengege and Maluga);
  - Eleven (11) of the 78 villages (Mseko, Kizonzo, Nkayala, Kinkungu, Tyeme, Masagi, Misigiri, Simbalungwala, Mukulu, Makunda and Ng'ang'uli);
- Mkalama District:
  - One (1) of the 14 wards (Tumuli);
  - Two (2) of the 70 villages (Tumuli and Milade);
- Singida District:
  - Nine (9) of the 21 wards (Msisi, Ughandi, Ntonge, Ilongero, Mrama, Kinyagigi, Merya, Itaja and Ngimu);
  - Eighteen (18) of the 84 villages (Ntondo, Nkwae, Msisi, Misinko, Iguari, Ifombou, Madamigha, Ilongero, Mrama, Idisimba, Makhandi, Mitula, Kiyangigi, Kinyamwambo, Kinyamwenda, Mwighanji, Ngimu and Pohama);
- A total of 1,231 PAPs are affected, of whom 12 have more than one (1) land parcel in different villages, generally with customary land tenure:
  - In Iramba District, a total of 393 PAPs<sup>33</sup> (includes nine (9) PAPs with land in multiple villages) comprising 347 landholders, 36 tenants, nine (9) villages and one (1) government institution recorded as affected PAPs;
  - In Mkalama District, a total of 121 PAPs with 108 landholders, ten (10) tenants, two (2) villages and one (1) government institution recorded as affected PAPs;
  - In Singida District, a total of 717 PAPs (includes three (3) PAPs with land in multiple villages). Four (4) PAPs are included in figures who have land affected by both the pipeline and PS-6 and/or the PS-6 Access Road) comprising 660 landholders, 39 tenants, and 18 villages recorded as affected PAPs on various land parcels;
- PS-6 affects 23 PAPs (four (4) who also have land and/assets affected by the pipeline corridor) of whom 18 are landholders (generally with un-registered customary land tenure), three (3) are tenants and two (2) are villages;
- The majority of PAPs will experience some level of economic displacement in the form of crops, trees and loss of grazing land;

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<sup>33</sup> 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.

- Of the total, 12 PAPs in Iramba, two (2) PAPs in Mkalama and 11 PAPs in Singida, of whom two (2) are located on PS-6, will experience some degree of physical displacement;
- A total of 48 structures will be compensated for in Iramba, seven (7) in Mkalama and 44 in Singida, including:
  - 38 residential dwelling structures, of which two (2) are located on PS-6;
  - 46 other structures (could include grain storages, livestock kraals and latrines), of which none is located on PS-6;
  - 15 incomplete structures, of which one (1) is located on PS-6.
- The Project will value and compensate<sup>34</sup> approximately 1,131 acres of land (including orphaned land) in Singida Region;
- The Project will cover approximately 1,152 acres of land (including infrastructure crossings which will remain and orphaned land) in Singida Region:
  - In Iramba District, the pipeline corridor will cover 425.79 acres of land of which a total of 419.52 acres has been valued;
  - In Mkalama District, the pipeline corridor will cover 107.25 acres of land of which a total of 104.91 acres has been valued;
  - In Singida District, the pipeline corridor will cover a total of 619.26 acres of land of which a total of 606.99 has been valued;
- Included in the 619.17 acres in Singida District is 61.33 acres that will cover PS-6, including 5.57 acres allocated to a temporary worksite, orphaned land and an additional 0.62 acres for an emergency response area;
- A total of 397.81 acres of cropland (including acres of intercropping land) will be affected by the pipeline corridor and AGIs: 128.36 acres in Iramba District, 59.65 acres in Mkalama District and 209.8 acres, of which 20.69 are on PS-6, in Singida District;
- A total of 19,352 economic trees<sup>35</sup> and other trees will be affected: 531 in Iramba District, 210 in Mkalama District and 18,611, of which 96 are on PS-6, in Singida District;
- A total of 224 graves will be affected: 28 in Iramba District, two (2) in Mkalama District and 194, of which 24 are on PS-6, in Singida District;
- The pipeline will cross a number of existing roads, powerlines and a railway line:

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<sup>34</sup> 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.

<sup>35</sup> 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.

- Twenty (21) roads;
  - Nine (9) powerlines;
  - Three (3) underground water pipelines; and
  - One (1) railway line.
- The pipeline route in Singida Region will cross 39 village tracks<sup>36</sup>, 101 cattle tracks, three (3) rivers, 17 seasonal rivers, one (1) stream, 13 seasonal streams, a few other water courses and two (2) valleys as well as a number of local footpaths.

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 Singida 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 Singida 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.

<sup>36</sup>Tracks 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.

Chapter 13	Describes the planned monitoring and evaluation of the land acquisition and resettlement program.
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## 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);
- 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)<sup>37</sup>.

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.

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<sup>37</sup> 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, 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 point<sup>38</sup> 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.

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<sup>38</sup> The temperature at which a liquid becomes semisolid and loses its flowing characteristics.



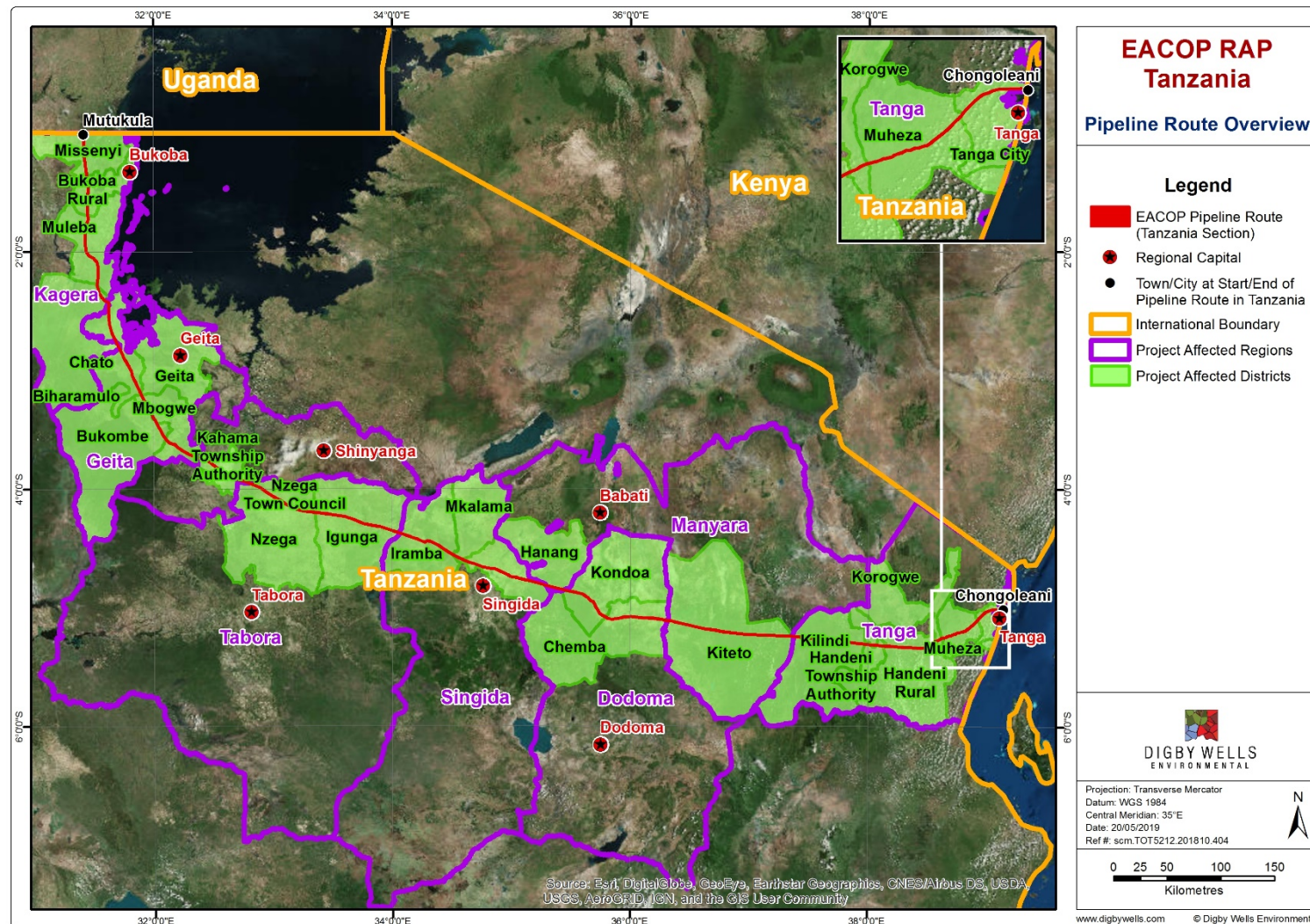


Figure 2-1: The EACOP Pipeline Route

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)<sup>39</sup>;
- Twelve (12) Main Camps and Pipe Yards (MCPYs<sup>40</sup>); and
- Construction access roads<sup>41</sup>.

The resettlement process related to land acquisition for these components has been addressed in the Priority Area (PA) RAP that is already completed<sup>42</sup>.

### **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 rehabilitated<sup>43</sup> 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 corridor<sup>44</sup>. During operation, this corridor will be kept clear from deep-rooting vegetation and permanent structures to ensure the safe operation of, and

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<sup>39</sup> 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.

<sup>40</sup> 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.

<sup>41</sup> 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.

<sup>42</sup> Digby Wells Consortium (2018). EACOP Priority Areas Resettlement Action Plan.

<sup>43</sup> 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.

<sup>44</sup> 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.

easy access to, the pipeline for maintenance purposes. However, the operation of the 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;

### **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 6 (PS-6), is located in Msinko Village, Ughandi Ward, with the eastern-most part of the access road crossing into Iguari Village, Ntonge Ward in Singida 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.

### **Other components**

- **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.

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 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 RPF<sup>45</sup>.

## 2.2 Overview of Project Elements in the Singida Region

This RAP focusses on the Project elements to be constructed in the areas within the Iramba, Mkalama and Singida Districts of the Singida 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 valued and to be compensated for the Project, within the Singida Region is approximately 1,131.4 acres (including orphaned land), with approximately 419.5 acres in Iramba District, 104.9 acres in Mkalama District and 607 acres in Singida District. This represents approximately 0.01% of the three (3) districts' total land area.

The pipeline directly impacts 17 of the 136 wards within the region including 31 villages. Figure 2-2, Figure 2-3 and Figure 2-4 illustrate the route of the pipeline Project through the Iramba, Mkalama and Singida Districts respectively. The route enters the region from the west through Igunga District in the Tabora Region (Kilometer Point (KP)-843.5) and traverses approximately 140 km to the east before crossing into Chemba District of the Dodoma Region (KP-984).

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<sup>45</sup> Digby Wells Consortium (2018). East African Crude Oil Pipeline (EACOP), Tanzania Section: Resettlement Policy Framework (RPF) (September 2018). (Digby Wells Environmental; PaulSam Consultants; Whiteknights Real Estate and Investment Analysts Company Ltd.).

Within the Singida Region, the pipeline traverses 54.42 km in the Iramba District before entering Mkalama District for 13.52 km and then traversing 72.85 km in the Singida District. Pump Station 6 (PS-6), is located in Msinko Village, Ughandi Ward, and part of the access road in Iguari Village, Ntonge Ward (KP-931). Further information is provided in Section 2.2.2.

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 field. According to the currently available Tanzanian GIS data the pipeline corridor will pass through several wards within the region which field data shows differently. These are summarized as follows:

- In Iramba District, Figure 2-2 shows the pipeline traversing five wards but bypassing the sixth affected ward (Shelui Ward) to the north. However, the field data indicates a short section of the pipeline route runs through Shelui Ward. In addition to this, field data indicates that an area identified within the dataset for administrative boundaries as part of the Ulemo Ward actually forms part of the seventh affected ward (Mukulu Ward) and the pipeline passes through Maluga Ward before exiting Iramba District.
- In Mkalama District, Figure 2-3 shows the pipeline traversing the Iguguno Ward. However, field data indicates in Mkalama District the pipeline only traverses Tumuli Ward.

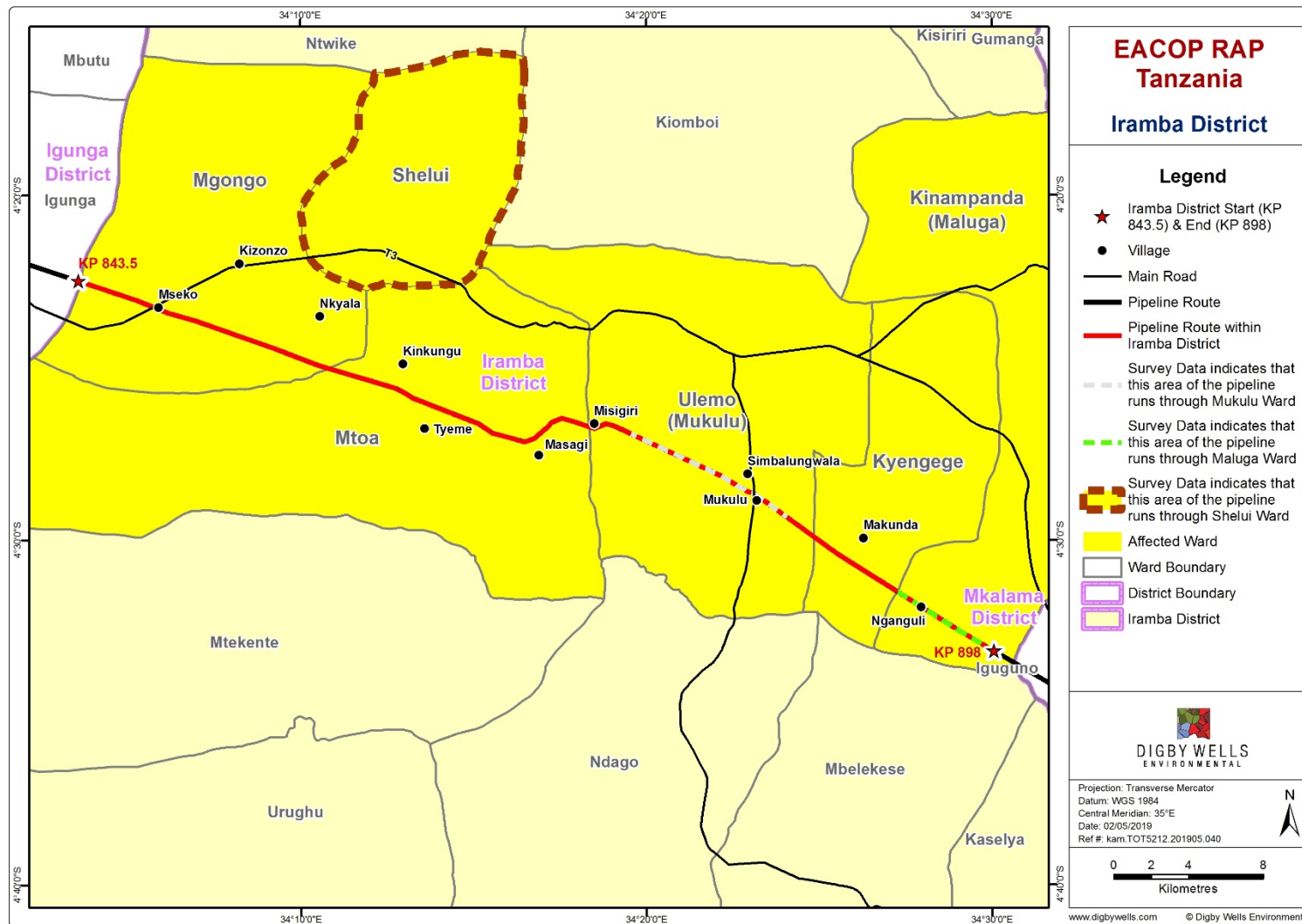


Figure 2-2: Location of Pipeline in the Iramba District, Singida Region

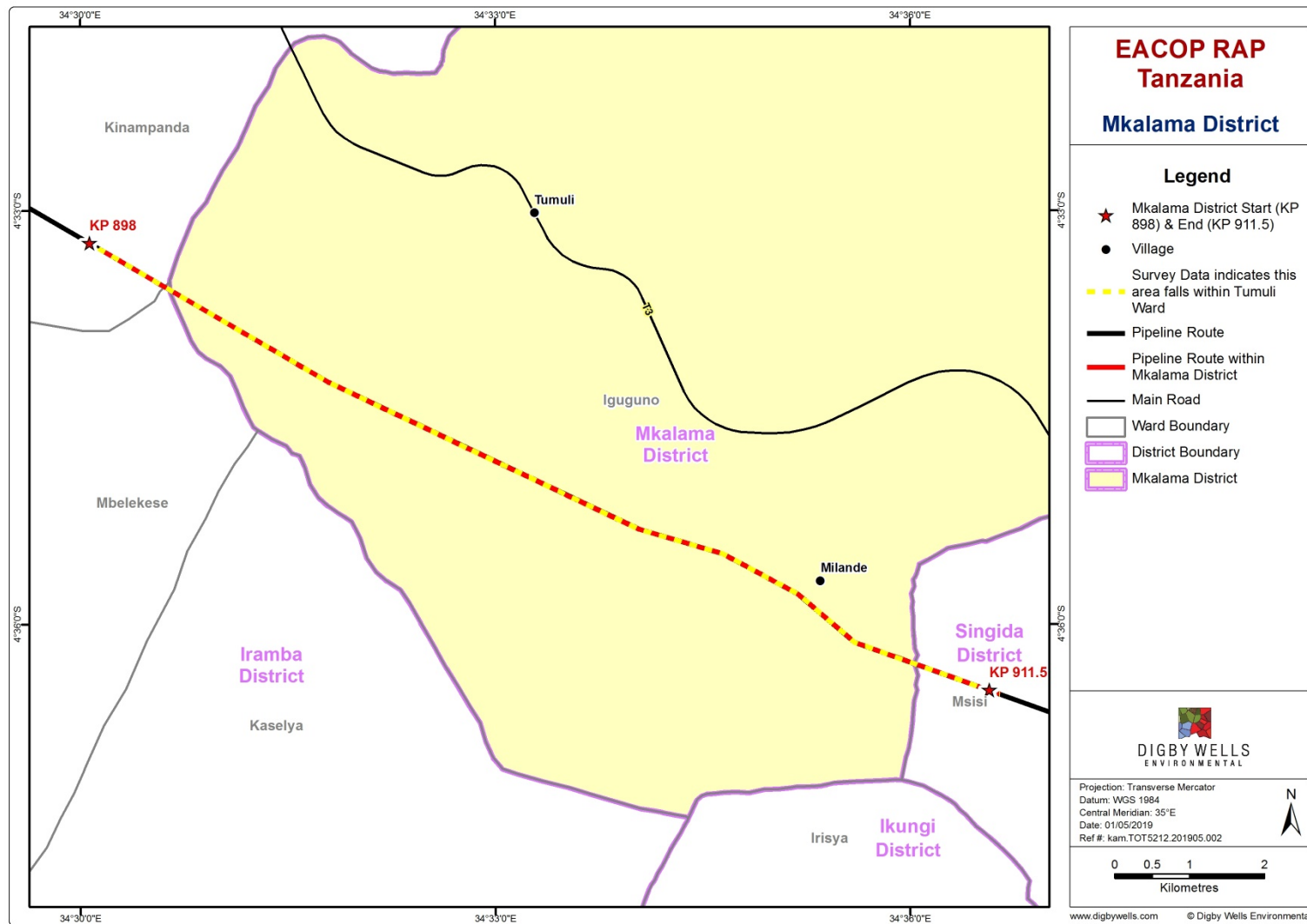


Figure 2-3: Location of Pipeline in the Mkalama District, Singida Region

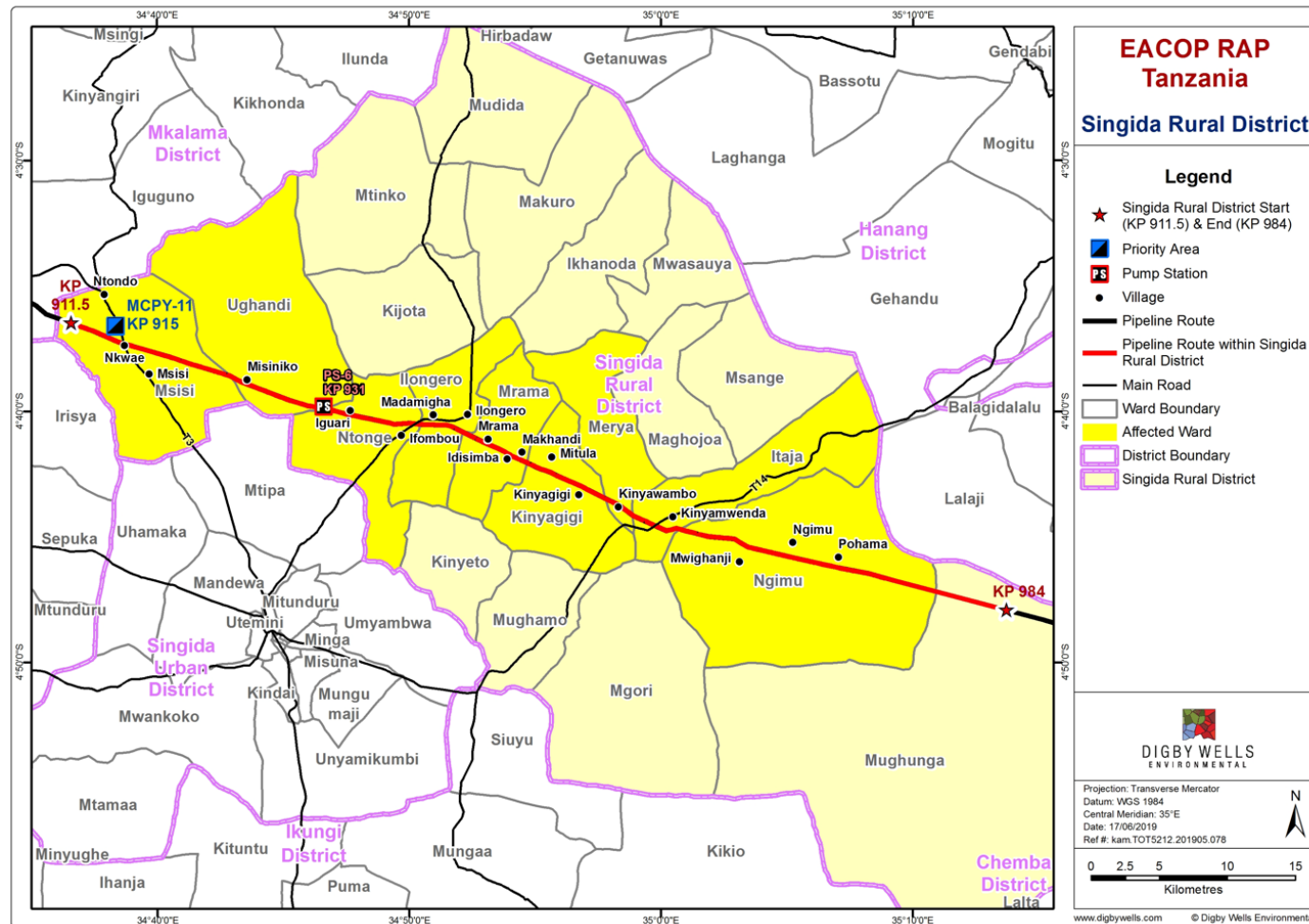


Figure 2-4: Location of Pipeline in the Singida District, Singida Region



## 2.2.2 Project Land Requirements in the Singida Region

Table 2-1 below summarizes the length of the pipeline that crosses the relevant wards and villages in the Iramba, Mkalama and Singida Districts and the size of land impacted within each.

**Table 2-1: Summary of Pipeline Corridor in Singida Region**

District	Ward	Village	Nearest KP		Pipeline Length (km)	Land cover area (Acres)
			Start	End		
Iramba	Mgongo	Mseko	843.5	852	8.51	65.33
		Kizonzo	852	854	1.73	14.24
	Shelui	Nkayala	854	858	4.03	31.77
	Mtoa <sup>46</sup>	Kinkungu	858	861.5	3.62	28.72
		Tyeme	861.5	865	3.20	25.78
		Masagi	865	867	2.29	18.36
		Tyeme	867	870	2.70	22.54
		Masagi	870	872	2.25	19.04
	Ulemo	Misigiri	872	875.5	3.28	25.62
	Mukulu	Simbalungwala	875.5	882.5	7.33	55.76
		Mukulu	882.5	885	2.15	16.26
	Kyengege	Makunda	885	892	7.18	55.54
Maluga	Ng'ang'uli	892	898	6.15	46.83	
Mkalama	Tumuli	Tumuli	898	903.5	5.70	43.95
		Milade	903.5	911.5	7.82	63.30
Singida	Msisi	Ntondo	911.5	915.5	3.73	28.84
		Nkwae	915.5	920	4.69	37.63
		Msisi	920	923.5	3.53	26.98
	Ughandi	Misinko (including PS 6 and PS-6 access road)	923.5	932.5	9.01	116.19
	Ntonge	Iguari (including PS-6 access road)	932.5	934.5	1.93	15.99
		Ifombou	934.5	938.5	4.17	32.15
	Ilongero	Madamigha	938.5	941	2.22	16.76
		Ilongero	941	943	1.88	15.11
	Mrama	Mrama	943	945.5	2.65	19.49
		Idisimba	945.5	946.5	0.89	6.61
		Makhandi	946.5	947	0.73	5.39
	Kinyagigi	Mitula	947	949	2.06	15.34
		Kinyagigi	949	953	3.93	29.62
Merya	Kinyamwambo	953	956.5	3.45	27.25	
Itaja	Kinyamwenda	956.5	960.5	4.06	36.29	

<sup>46</sup> The location of the village boundaries in relation to the pipeline corridor results in the pipeline crossing Tyeme Village and Masagi Village twice.

District	Ward	Village	Nearest KP		Pipeline Length (km)	Land cover area (Acres)
			Start	End		
	Ngimu	Mwighanji	960.5	965.5	4.73	39.61
		Ngimu	965.5	970.5	5.15	38.85
		Pohama	970.5	984.5	14.04	111.16
<b>SINGIDA REGION TOTAL</b>					<b>140.79</b>	<b>1,152.30</b>

### 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).

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 423 land parcels in the villages in Iramba District, 132 land parcels in the villages in Mkalama District and 873 in Singida District. Tenants are present on 68<sup>47</sup> of these 1,428 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.

**Schools:** The corridor traverses Mseko Primary School in Mseko Village in Iramba District, affecting 32 trees, 0.5 acres of cotton and 2.88 acres of land. It also traverses the Milade Primary School premises in Milade Village in Mkalama District, affecting 1.447 acres of land and 46 trees

**Mgori Forest:** This community forest (is not under administration of TFS) is located in Ngimu Ward, Singida District. This forest is centrally located in Singida District and is a village forest on Village Land, collectively managed in partnership with local forest authorities, Singida District Council and external advisors. Mgori Forest comprises of approximately 100,000 acres of miombo woodland. The Project will impact 71.86 acres of forest in Pohama Village, Ngimu Ward. People are dependent on the forest for a variety of livelihoods and ecosystem services, in particular those associated with the harvesting of natural products such as building poles, firewood and honey. The 71.86 acres affected by the Project contains 947 m<sup>3</sup> of wood, in addition to 5,902 trees.

<sup>47</sup> With tenants present on 19 land parcels in Iramba District, ten (10) land parcels in Mkalama District and 39 land parcels in Singida District.

**Infrastructure and Other Crossings:** The pipeline corridor within the Iramba District will cross five (5) roads (two (2) under the jurisdiction of TANROADS and three (3) under the jurisdiction of TARURA), with associated reserves. Four (4) powerlines with wayleaves will be crossed. The pipeline corridor within the Mkalama District will cross three (3) roads (under the jurisdiction of TARURA), with associated reserves. The pipeline corridor within the Singida District will cross 13 roads (three (3) under the jurisdiction of TANROADS and ten (10) under the jurisdiction of TARURA), with associated reserves. Seven (7) powerlines with wayleaves and one (1) railway line with associated reserve.

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, TRC, etc.).

**Community Tracks, Cattle Tracks, Streams and other crossings<sup>48</sup>:** The pipeline corridor in the Iramba District will cross 14 village tracks and 17 cattle tracks. In the Mkalama District, four (4) village tracks and four (4) cattle tracks. In the Singida District, 21 village tracks and 80 cattle tracks will be crossed. The land associated with these crossings is Village Land. 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.

Iramba District Council confirmed jurisdiction over three (3) rivers (two (2) in Nkyala Village, one (1) in Makunda Village). In addition, four (4) seasonal rivers fall within their jurisdiction will be crossed (one in Tyeme village, one in Mseko village, one between Kinkungu and Tyeme villages, and one between Masagi and Tyeme villages). One (1) stream (Makunda Village) and two (2) valleys (one (1) in Masagi and one (1) in Kizonza) under their jurisdiction will be also crossed.

In Mkalama District the pipeline will cross six (6) seasonal rivers (all within the Milade Village and under Mkalama District Council jurisdiction), 13 seasonal streams and a few other water courses. In Singida District, seven (7) seasonal rivers will be crossed.

Two (2) underground water pipelines will be crossed by the pipeline corridor in Idisimba and Kinyagigi Villages in Singida District and one (1) water pipeline in Mukula Village in Iramba District will also be crossed. The water pipeline in Idisimba Village is located within a cattle track.

## 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.

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<sup>48</sup> Tracks 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.

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 ESIA<sup>49</sup>.

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 minimised. This is an ongoing process and is being further informed by the engagement program with PAPs, PACs and other stakeholders.

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<sup>49</sup> East African Crude Oil Pipeline ESIA, 2019.

## 3 LEGAL AND POLICY CONTEXT

This section draws from the legal context described in the Resettlement Policy Framework (RPF<sup>50</sup>), 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;

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<sup>50</sup> 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 Singida 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 RPF<sup>51</sup>:

#### **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 Marine Parks and Reserves Act, 1994;
- The Urban Planning Act, 2007;
- The Water Resources Management Act, 2009;
- The Wildlife Conservation Act, 2013

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<sup>51</sup> East African Crude Oil Pipeline – Resettlement Policy Framework RPF, 2018

- 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 Table 3-1.

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 below.

**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"> <li>• Developing transparent, constructive relationships with all of its stakeholders;</li> <li>• Reducing negative socio-economic impacts related to its operations;</li> <li>• Participating in the economic diversification of host communities and countries by supporting local initiatives;</li> <li>• Contributing to human development by emphasizing education and the strengthening of local skills and capacities; and</li> <li>• Enhancing the value of the historical, natural and cultural heritage of local communities.</li> </ul> <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 26<sup>th</sup> 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 Principles 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 cost<sup>52</sup> 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 tenure<sup>53</sup> 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;

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<sup>52</sup> 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).

<sup>53</sup> 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.

- 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:

- 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 fail<sup>54</sup>.

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

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<sup>54</sup> 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).

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 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.

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. One (1) PAH from the Barabaig ethnic group was registered in Mkalama and this PAH will be monitored for vulnerability to livelihood restoration and the ability to adapt to changed circumstances.

### **Performance Standard 8: Cultural Heritage**

PS 8 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 ESIA<sup>55</sup> 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 Singida Region 224 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. One grave which is used as a spiritual site was identified during the RAP surveys in the Merya Ward of the Singida District. Land and assets (i.e. grave) 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.

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

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<sup>55</sup> East African Crude Oil Pipeline -ESIA, 2019

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 Singida 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
<b>Valuation of Land and Assets</b>		
<ul style="list-style-type: none"> <li>• Market rates for land;</li> <li>• Replacement cost for structures;</li> <li>• Rates for crops and trees based on extensive research and published by the Chief Valuer (CV) (valid for up to five (5) years); and</li> <li>• Crops in abandoned field to receive 50% of designated market value.</li> </ul>	<ul style="list-style-type: none"> <li>• Replacement cost not taking depreciation into account;</li> <li>• All affected land eligible for compensation;</li> <li>• Rates to be current; and</li> <li>• Transaction costs to be made over as compensation.</li> </ul>	<p><b>Valuation Reports and Compensation Schedules shall introduce:</b></p> <ul style="list-style-type: none"> <li>• Tanzanian Entitlements (to be approved by CV) (also referred to as Part I);</li> <li>• 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</li> <li>• Affected persons will be informed of additional entitlements offered by the Project.</li> </ul> <p><b>Valuation Methodology:</b></p> <ul style="list-style-type: none"> <li>• Rates agreed with CV;</li> <li>• Full replacement cost without taking depreciation into account; and</li> <li>• Valuation of entitlements under Tanzanian law presented in a separate report from entitlements to meet international financing standards of the Compensation Schedules.<sup>56</sup></li> </ul>

<sup>56</sup> It should be noted that, the valuation conducted according to Tanzanian law outlined in the Valuation Reports for Singida Region are 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.

Tanzanian Legislation	IFC PS5	Way Forward
<b>Socio-Economic Surveys</b>		
<ul style="list-style-type: none"> <li>• Not required.</li> </ul>	<ul style="list-style-type: none"> <li>• Requires socio-economic survey.</li> </ul>	<ul style="list-style-type: none"> <li>• Project will undertake socio-economic surveys of Project Affected Households (PAHs)<sup>57</sup>; and</li> <li>• Data will be used to inform the livelihood restoration and in-kind compensation options<sup>58</sup>.</li> </ul>
<b>Cut-off Date for Eligibility</b>		
<ul style="list-style-type: none"> <li>• Cut-off date set as commencement of valuation.</li> </ul>	<ul style="list-style-type: none"> <li>• Cut-off date to be established by Project.</li> </ul>	<ul style="list-style-type: none"> <li>• Cut-off date triggered by valuation, in line with Tanzanian law.</li> </ul>
<b>Eligibility of PAP – without formal rights or claims to land / informal occupiers</b>		
<ul style="list-style-type: none"> <li>• Only people with recognized land use / owner rights (including customary) qualify for compensation; and</li> <li>• Informal occupiers do not qualify for compensation.</li> </ul>	<ul style="list-style-type: none"> <li>• Informal occupiers compensated for improvements on land (i.e. for loss of assets other than land) present at the cut-off date for eligibility;</li> <li>• A choice of options to relocate them with security of tenure without the risk of facing forced eviction; and</li> <li>• Resettlement assistance to restore livelihoods.</li> </ul>	<ul style="list-style-type: none"> <li>• Recognize and appropriately compensate PAPs with formal and informal land rights and those with no recognizable right or claim;</li> <li>• Not required to compensate those who encroach on the Project area after the cut-off date for eligibility; and</li> <li>• 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).</li> </ul>
<b>In-kind Compensation Options and Resettlement Assistance</b>		
<ul style="list-style-type: none"> <li>• Provision of replacement land generally not offered. Regulations allow provision of a comparable plot of land or building(s); practice generally is cash<sup>59</sup>; and</li> <li>• Range of support allowances including disturbance, transport and accommodation allowances, and loss of profits, for eligible PAPs.</li> </ul>	<ul style="list-style-type: none"> <li>• Cash compensation for land-based livelihoods is considered appropriate where the land taken is a small fraction of the affected asset and the residual land is economically viable;</li> <li>• Otherwise, requires choice of replacement land / housing or cash or combination; and</li> <li>• Relocation support allowances such as for:</li> </ul>	<ul style="list-style-type: none"> <li>• Eligibility for in-kind compensation options will be related to significance of impacts on livelihoods: <ul style="list-style-type: none"> <li>– Persons losing only a small fraction of their land (with the remainder being economically viable<sup>60</sup>) receive cash compensation for that land; and</li> <li>– In cases of significant impact<sup>61</sup>, offer eligible PAPs a choice between cash or replacement land / housing (i.e. in-kind compensation) or a combination of cash and in-kind compensation; and resettlement assistance.</li> </ul> </li> <li>• VRs will distinguish between the standard</li> </ul>

<sup>57</sup> 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;

<sup>58</sup> Livelihood restoration and in-kind options to address IFC PS5.

<sup>59</sup> 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 not generally provided in practice via this regulation; rather, Tanzanian RAPs reviewed offer this through application of international financing standards.

<sup>60</sup> 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.

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



Tanzanian Legislation	IFC PS5	Way Forward
	disturbance, vulnerability, transportation and temporary accommodation.	Tanzanian entitlements of cash and the additional in-kind compensation options offered for international financing standards; and <ul style="list-style-type: none"> <li>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.</li> </ul>
<b>Vulnerable Individuals and Groups</b>		
<ul style="list-style-type: none"> <li>No special support required for vulnerable groups.</li> </ul>	<ul style="list-style-type: none"> <li>Additional attention and support measures to vulnerable groups.</li> </ul>	<ul style="list-style-type: none"> <li>Identify vulnerable groups and provide special attention and support measures.</li> </ul>
<b>Timing of Compensation Payments</b>		
<ul style="list-style-type: none"> <li>Valuation valid for a 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.</li> </ul>	<ul style="list-style-type: none"> <li>Payment prior to possession of land.</li> </ul>	<ul style="list-style-type: none"> <li>Project responsible for payment of cash compensation and delivery of in-kind compensation entitlements and resettlement assistance;</li> <li>Compensation paid in line with Tanzanian law;</li> <li>Project would only seek land access after: <ul style="list-style-type: none"> <li>Reasonable notice to vacate / yield possession has occurred (minimum of six (6) weeks);</li> <li>All cash compensation has been paid and eligible physically displaced PAPs have been offered and moved to permanent replacement housing<sup>62</sup> (where selected and eligible) while relevant other in-kind compensation / and resettlement assistance is in process; and</li> <li>Required land transfer, provision of ROO to TPDC, Project lease and other arrangements are in place with relevant GoT agency.</li> </ul> </li> </ul>
<b>Livelihoods Restoration</b>		
<ul style="list-style-type: none"> <li>Does not generally require livelihood restoration support; and</li> <li>Regulations allow that compensation can include plants and seedlings; regular supplies of grain and other</li> </ul>	<ul style="list-style-type: none"> <li>Requires livelihood</li> </ul>	<ul style="list-style-type: none"> <li>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</li> </ul>

<sup>62</sup> 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"> <li>basic foodstuffs for a specified period<sup>63</sup>.</li> </ul>	<ul style="list-style-type: none"> <li>restoration support.</li> </ul>	<ul style="list-style-type: none"> <li>An LRP is presented in this RAP in Chapter 8, outlining the approach to livelihood restoration to be adopted during the resettlement process.</li> </ul>
<b>Land Acquisition and Resettlement Documentation</b>		
<ul style="list-style-type: none"> <li>VRs required;</li> <li>RAPs not required<sup>64</sup>; and</li> <li>National Environment Management Council (NEMC) request RAPs as part of Environmental Impact Assessment (EIA) submissions.</li> </ul>	<ul style="list-style-type: none"> <li>RAPs where there is physical displacement;</li> <li>LRPs where there is only economic displacement; and</li> <li>Required prior to taking possession of land.</li> </ul>	<ul style="list-style-type: none"> <li>VRs (structured in two reports 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;</li> <li>Project RAPs will be prepared by the Project and submitted for information and for a comments period to the relevant agencies in Tanzania<sup>65</sup>; and</li> <li>As required under international financing standards, RAPs will be publicly disclosed including on the EACOP Project website.</li> </ul>
<b>Disclosure, Consultation and Informed Participation</b>		
<ul style="list-style-type: none"> <li>Some disclosure is required, including on compensation rates;</li> <li>PAPs are given the opportunity to inspect compensation schedules following valuation; and</li> <li>No negotiation of compensation options.</li> </ul>	<ul style="list-style-type: none"> <li>Disclosure of rates, entitlements, options and participation during resettlement phases; and</li> <li>Negotiation on content of compensation package<sup>66</sup>.</li> </ul>	<ul style="list-style-type: none"> <li>Disclosure of relevant information (including on rates and entitlements);</li> <li>Entitlement Briefings in which PAPs' valuation and compensation options are explained and PAPs are given the opportunity to select preferred options;</li> <li>Engagement and participation of affected persons, households and affected communities during resettlement phases; and</li> <li>Allow negotiation about selection of compensation options, resettlement allowance and livelihood restoration options (in terms of cash and in-kind combinations).</li> </ul>
<b>Grievance Mechanisms</b>		
<ul style="list-style-type: none"> <li>No requirement for a Project dispute resolution mechanism beyond those legal remedies</li> </ul>	<ul style="list-style-type: none"> <li>Establishment of dedicated, easily accessible, and no-cost grievance management</li> </ul>	<ul style="list-style-type: none"> <li>Establish a dedicated grievance management mechanism, at no-cost to affected people; and</li> </ul>

<sup>63</sup> 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.

<sup>64</sup> Certain licenses include the condition for a relocation plan e.g. Mining Licenses.

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

<sup>66</sup> 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
	mechanism.	<ul style="list-style-type: none"> <li>Complainants will still be able to seek legal remedies in accordance with the laws and regulations of Tanzania.</li> </ul>
Monitoring and Evaluation		
<ul style="list-style-type: none"> <li>No monitoring and evaluation requirement.</li> </ul>	<ul style="list-style-type: none"> <li>Require monitoring and evaluation.</li> </ul>	<ul style="list-style-type: none"> <li>Conduct process and outcome monitoring during and upon completion of RAP implementation.</li> </ul>

## 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**

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

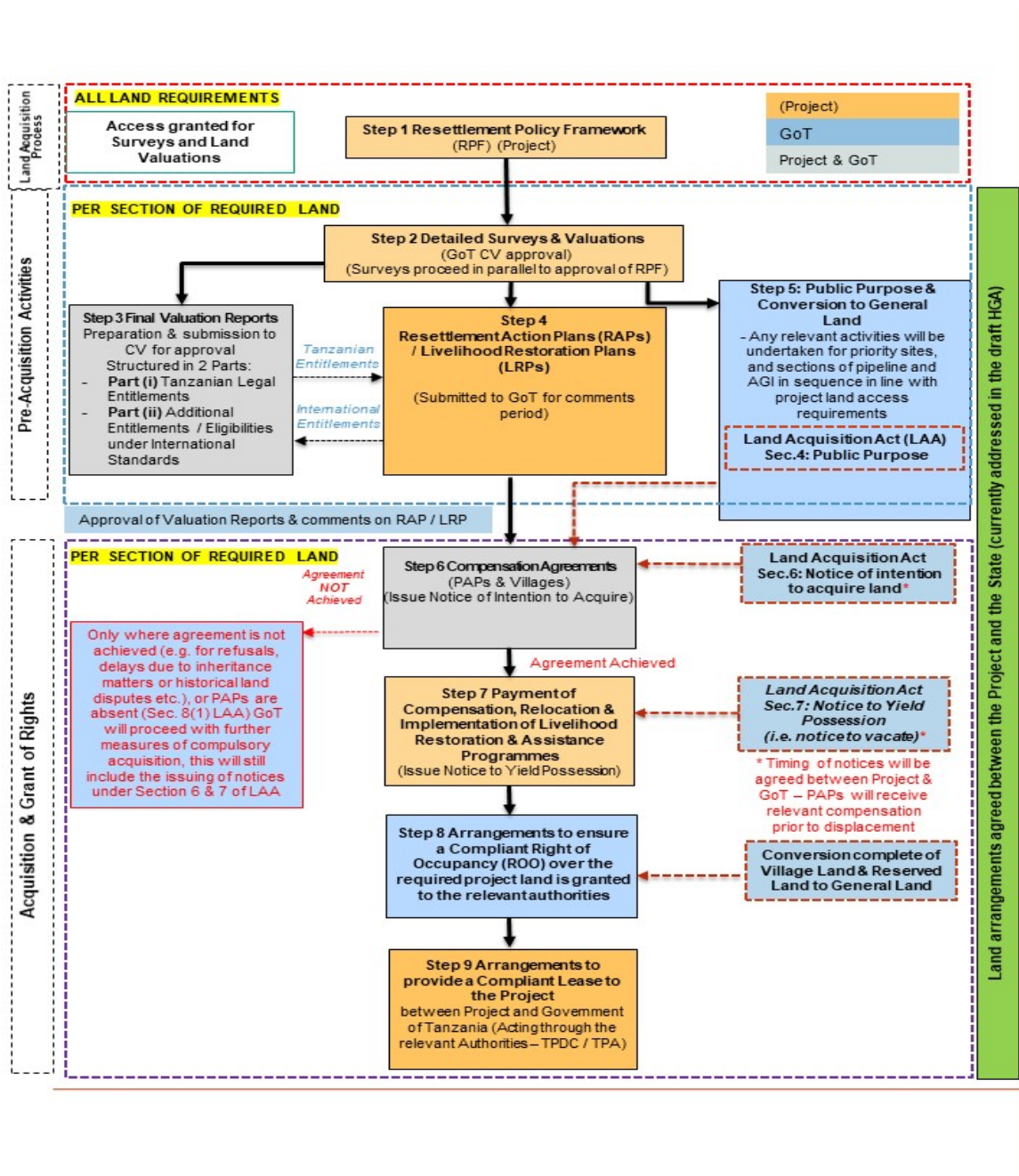


Figure 4-1: Land Acquisition Process<sup>67</sup>

<sup>67</sup> 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 Supplementary Plan for the MST site;
- 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)<sup>68</sup>.

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 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 below. Some criteria resulted in certain areas being strictly avoided for these sites (e.g. internationally

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<sup>68</sup> 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 the relevant district report.

protected 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"> <li>• Steep slopes;</li> <li>• Wetlands (permanent and seasonal) and water bodies;</li> <li>• Flooding hazards;</li> <li>• Landslide hazards;</li> <li>• Karsts / Tunnels / Mines (settlement hazards);</li> <li>• Seismic zone with liquefaction risk and earthquake zone;</li> <li>• Geological features; and</li> <li>• Infill land and waste disposal sites, including those contaminated by disease, radioactivity or chemicals.</li> </ul>
Environmental	<ul style="list-style-type: none"> <li>• Internationally protected areas<sup>69</sup> (these areas were excluded from consideration);</li> <li>• Nationally protected areas<sup>70</sup>;</li> <li>• Internationally designated protected areas<sup>71</sup>;</li> <li>• Internationally and nationally designated protected areas<sup>72</sup>;</li> <li>• Critical habitats<sup>73</sup>; and</li> <li>• Natural habitats<sup>74</sup>.</li> </ul>

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

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

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

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

<sup>73</sup> 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.

<sup>74</sup> 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"> <li>• Industrial areas (mines, factories, power plants) (no go);</li> <li>• Social and community infrastructure (including places of worship);</li> <li>• Right-of-way (RoW) of existing or planned linear facilities;</li> <li>• Transport infrastructure;</li> <li>• Settlements (urban area, town, village);</li> <li>• Grazing / grass land;</li> <li>• Crop land / cultivated land;</li> <li>• Trees / timber forest;</li> <li>• Cash crop (e.g. tea, coffee plantation, sisal, sugar cane, banana) shrub land;</li> <li>• Water points / sources / wells;</li> <li>• Cultural heritage sites; and</li> <li>• Tourism facilities / sites.</li> </ul>

### 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 Iramba, Mkalama and Singida District (Singida Region) VR's 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 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**

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

DWC and the PPT worked with the ME and MLHHS D 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 D 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.

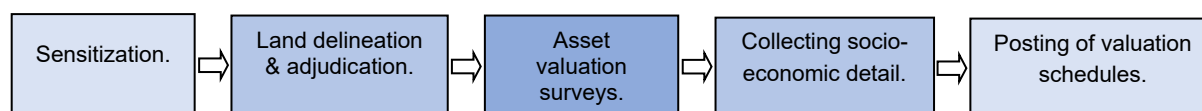
Each team was accompanied by a member of either ME, TPDC or MLHSD and an EACOP stakeholder engagement team member.

### 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 Singida Region. The research aimed at establishing current or up-to-date market values and replacement costs of compensable items. Whiteknights prepared and submitted a Rates Report for the Singida region (Whiteknights, 2018) to the CV for endorsement outlining the results of the research, including the rates established for the Project in the region. This is an important milestone required by the national regulations (The Valuation and Valuers (General) Regulations, 2018) to ensure that PAPs are paid the full replacement cost due to them.

### Execution of Surveys

The surveys were mostly conducted in the following order:



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 dates<sup>75</sup> 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
- PAPs<sup>76</sup> were identified and arrangements made to enable them to be present during survey activities.



**Figure 4-2: Sensitization and Engagement Meetings in Iramba, Mkalama and Singida District**

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.

**Table 4-4: Sensitization and cut-off dates for Villages in Iramba, Mkalama and Singida District**

Ward.	Village	Date of Sensitization Meetings	Valuation Cut-off Date
<b>Iramba</b>			
Mgongo	Mseko	05-Jun-18	05-Jun-18
	Kizonzo	05-Jun-18	06-Jun-18
Shelui	Nkyala	18 Jun-18	20-Jun-18
Mtoa	Kinkungu	18-Jun-18	18-Jun-18
	Tyeme	01-Jun-18	04-Jun-18

<sup>75</sup> 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.

<sup>76</sup> PAPs include owners and / or users of affected land, houses, economic trees, other improvements on land, crops and other assets.

Ward.	Village	Date of Sensitization Meetings	Valuation Cut-off Date
	Masagi	01-Jun-18	04-Jun-18
Ulemo	Misigiri	13-Jun-18	13-Jun-18
Mukulu	Simbalungwala	30-May-18	30-May-18
	Mukulu	30-May-18	30-May-18
Kyengege	Makunda	28 May-18	28 May-18
Maluga	Ng'ang'uli	26-May-18	26-May-18
<b>Mkalama</b>			
Tumuli	Tumuli	22-May-18	22-May-18
	Milade	21-May-18	21-May-18
<b>Singida District</b>			
Msisi	Ntondo	17-May-18	17-May-18
	Nkwae	19-May-18	19-May-18
	Msisi	21-May-18	21-May-18
Ughandi	Misinko	22-May-18	22-May-18
Ntonge	Iguari	23-May-18	23-May-18
	Ifombou	24-May-18	24-May-18
	Madamigha	26-May-18	26-May-18
	Ilongero	25-May-18	25-May-18
Mrama	Mrama	29-May-18	29-May-18
	Idisimba	31-May-18	31-May-18
	Makhandi	30-May-18	30-May-18
Kinyagigi	Mitula	09-Jun-18	09-Jun-18
	Kinyagigi	08-Jun-18	08-Jun-18
Merya	Kinyamwambo	07-Jun-18	07-Jun-18
Itaja	Kinyamwenda	06-Jun-18	06-Jun-18
Ngimu	Mwighanji	05-Jun-18	05-Jun-18
	Ngimu	04-Jun-18	04-Jun-18
	Pohama	02-Jun-18	02-Jun-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 land<sup>77</sup> 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 Singida**

#### *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 tenant<sup>78</sup> where relevant;
- Recording geographical coordinates of each asset, except trees, crops and land;
- 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 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.

<sup>77</sup> 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.

<sup>78</sup> 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.

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 Valuation numbers placed on structures as part of the survey process.**

#### *Socio-economic Surveys*

These surveys involved the collection of demographic and socio-economic information<sup>79</sup> about PAHs, including all PAPs, through interviews with an adult household member.

#### *Displaying 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**

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

<sup>79</sup> 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.

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 Iramba and Singida District**

### 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 entities<sup>80</sup> 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 would 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 would be recorded in writing.

The valuations activities undertaken during the disclosure process in the Singida Region marked the date for the valuation of the last person's interest. For the Iramba, Mkalama and Singida District the dates for the valuation of the last person's interest were 2<sup>nd</sup> August, 26<sup>th</sup> July and 8<sup>th</sup> October 2019 respectively. The VR for this district has to be approved by the CV within six (6) months from the "Date of Valuation of the last person's interest"<sup>81</sup>.

### **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;
6. Authorized Valuer; and
7. District Commissioner.

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<sup>80</sup> The following individuals are generally consulted prior to the PAP engagement: RC, DC; DED; DLO; DV; Ward Executive Officer (WEO); VDC; and VEO.

<sup>81</sup> The Valuation Act, 2016 and Valuation Regulations, 2018.



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 sign offs, 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)<sup>82</sup> 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.

Once eligible PAPs have selected their preferred compensation and livelihood restoration options, the compensation agreements will be signed by the PAPs and witnessed. The

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<sup>82</sup> 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).

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 Singida 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;
- 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 Singida region included:

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

The Singida region SELI team underwent training from 8<sup>th</sup> – 13<sup>th</sup> October 2018. Table 4-5 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"> <li>● Introduction of team members and presentation on recent organogram distributed;</li> <li>● Discussion on the allocation of teams to regions;</li> <li>● Discussion on delivery dates for VRs and RAPs and compiling of team members rotations and schedule;</li> <li>● Overview of deliverables and responsibilities; and</li> <li>● Expected inputs into the RAP.</li> </ul>
Training and research tool development.	<ul style="list-style-type: none"> <li>● Qualitative research tools;</li> <li>● Research methods included Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs);</li> <li>● Interview approach (including role plays);</li> <li>● Stakeholder engagement approach and deliverables;</li> <li>● Livelihood restoration concepts;</li> <li>● Value-chain analysis;</li> <li>● Host communities (Issues, risks, benefits);</li> <li>● Mapping of social and community services and assets;</li> <li>● Baseline surveys;</li> <li>● Vulnerable groups and sensitive receptors;</li> <li>● Key risks – influx, transitional support;</li> <li>● Identification of livelihood programs;</li> <li>● Identification and capacity of partners (CBOs; Govt);</li> <li>● Monitoring and evaluation;</li> <li>● Ad hoc activities; and</li> <li>● HSE, conduct, reporting.</li> </ul>
On-the-job, or in-field, training.	<ul style="list-style-type: none"> <li>● All of the above.</li> </ul>

### Execution of the Study

The SELI team undertook the fieldwork research and engagement in Singida region from 10<sup>th</sup> November 2018 – 9<sup>th</sup> March 2019.

The SELI team focused on gathering qualitative socio-economic data through a series of FGDs, KIIs, 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 1 660 participants across the Singida Region.

### **Analysis of Existing Data and Literature**

In addition to fieldwork research and engagement, 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 learnt, 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 has contributed to the development of the following areas of the RAP:

- Socio-economic conditions in the Singida Region and within the PACs (see Chapter 5);
- Identification and contextual understanding of potential vulnerable ethnic groups in the Singida 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. Replacement land eligibility is detailed in Chapter 6. Replacement housing is briefly outlined below and further discussed in relation to housing design in Chapter 7.

The field team responsible for the replacement housing study included a:

- 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 Report<sup>83</sup> 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 / or 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, fit for purpose, and generic throughout (i.e. includes standardized sizing for fittings such as doors, windows, handles etc.).

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<sup>83</sup> Replacement Housing Concept Design Report: Pipeline (2019) (Digby Wells Consortium).

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 the Singida Region.

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 includes 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 Singida. A summary of the existing dwellings and structures within Singida 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 MLHHSD, 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 aim 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 Singida Region. The chapter is structured as follows:

- Section 5.1: Background and introduction (this section);
- Section 5.2: A general overview of the Singida Region as the host region;
- Section 5.3: A general overview of the three (3) Project-affected districts, namely Iramba, Mkalama and Singida Districts;
- Section 5.4: A general overview of the Project-affected communities;
- Section 5.5: A detailed description of PAHs within the context of affected wards (including villages);
- Section 5.6: An overview of PAHs requirements in terms of development support;
- Section 5.7: An overview of Vulnerable Ethnic Groups that may self-identify as Indigenous People in the Singida Region, the PACs and the households affected by the Project;
- Section 5.8: An overview of vulnerable households and persons<sup>84</sup>; 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, and National Population and Housing Census: Population Distribution by Administrative Areas;
- Singida Region Basic Demographic and Socio-Economic Profile (2015) (based on 2012 Population and Housing Census);
- Iramba District Council Socio-Economic Profile (2016) (based on 2012 Population and Housing Census);
- Draft Mkalama District Council Socio-Economic Profile (2016) (based on 2012 Population and Housing Census);
- Draft Singida Rural District Council Socio-Economic Profile (2016) (based on 2012 Population and Housing Census);

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<sup>84</sup> More detail on potential vulnerable households is provided in Chapter 9.



- Results of the RAP Socio-Economic Survey undertaken by DWC (2018);
- SELI Field Notes for the Singida Region compiled by DWC (2019);
- Tanzania ESIA Vol 1, Section 6: Environmental and Social Baseline Conditions (November 2018);
- Valuation Report for Compensation for Additional Entitlements under International Financing Standards for the Iramba District (dated 31<sup>st</sup> October 2019);
- Valuation Report for Compensation for Additional Entitlements under International Financing Standards for the Mkalama District (dated 19<sup>th</sup> October 2019); and
- Valuation Report for Compensation for Additional Entitlements under International Financing Standards for the Singida District (dated 31<sup>st</sup> October 2019).

A summary of displacement impacts is provided in Table 5-1, following the pipeline corridor where it enters Singida Region in the west at Mgongo Ward of Iramba District and exits the region in the east at Ngimu Ward.

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

District	Ward	Village	Pipeline Length (km)	Land Parcels (No.)	Land Area (acres) <sup>85</sup>	PAPs (No.)	PAHs (No.) <sup>86</sup>	Vulnerable PAHs (No.)	Vulnerable Ethnic Group PAHs (No.)	PAHs Losing Dwellings	Buildings and Structures Affected (No.)			Crops Affected (No.)			Economic Trees and other trees (No.)	Graves
											Residential Dwellings	Other Structures	Incomplete Structures	Crops Acres	Intercropping Acre	Crops Stems		
Iramba	Mgongo	Mseko Village	8.51	57	62.98	50	47	32	0	4	8	2	0	3.64	0.64	0	229	0
		Kizonzo Village	1.73	12	14.24	11	10	5	0	0	0	0	0	1.81	0.56	0	3	0
	Shelui	Nkyala Village	4.03	26	30.68	27	11	5	0	0	0	0	0	14.01	0.00	0	0	0
	Mtoa	Kinkungu Village	3.62	23	28.63	32	28	15	0	0	0	0	0	12.48	0.66	0	3	0
		Tyeme Village	5.90	68	47.40	59	56	23	0	1	2	1	1	11.37	0.00	0	54	0
		Masagi Village	4.54	20	37.17	18	16	7	0	0	0	0	0	1.67	0.00	0	4	0
	Ulemo	Misigiri Village	3.28	14	25.62	15	15	10	0	1	1	2	1	4.45	0.00	0	45	6
	Mukulu	Simbalungwala Village	7.33	78	55.14	78	72	23	0	4	7	12	0	12.03	0.00	0	34	19
		Mukulu Village	2.15	14	15.93	16	15	2	0	0	0	0	0	8.58	0.00	7	17	0
	Kyengege	Makunda Village	7.18	71	55.07	56	55	14	0	0	0	3	0	36.30	0.50	0	14	0
Maluga	Ng'Anguli Village	6.15	40	46.66	31	29	7	0	2	4	4	0	19.66	0.00	0	128	3	
<b>Subtotal: Iramba District</b>			<b>54.42</b>	<b>423</b>	<b>419.52</b>	<b>393</b>	<b>354</b>	<b>143</b>	<b>0</b>	<b>12</b>	<b>22</b>	<b>24</b>	<b>2</b>	<b>126.00</b>	<b>2.36</b>	<b>7</b>	<b>531</b>	<b>28</b>
Mkalama	Tumuli	Tumuli Village	5.70	55	43.49	52	49	14	0	0	0	0	0	28.77	0.00	0	12	1
		Milade Village	7.82	77	61.42	69	57	16	1	2	2	5	0	28.54	2.34	41	198	1
<b>Subtotal: Mkalama District</b>			<b>13.52</b>	<b>132</b>	<b>104.91</b>	<b>121</b>	<b>106</b>	<b>30</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>0</b>	<b>57.31</b>	<b>2.34</b>	<b>41</b>	<b>210</b>	<b>2</b>
Singida	Msisi	Ntondo Village	3.73	49	28.72	48	43	12	0	0	0	0	1	7.46	5.36	43	76	8
		Nkwae Village	4.69	43	35.34	35	34	10	0	0	0	0	0	7.65	1.55	4	110	5
		Msisi Village	3.53	37	25.72	41	39	6	0	0	0	0	1	6.78	2.83	1	39	5
	Ughandi	Misinko Village	9.01	80	56.06	59	58	14	0	1	2	1	1	16.60	4.97	663	204	9
		Misinko Village PS-6		21	58.23	19 <sup>87</sup>	17	5	0	2	2	0	0	18.39	0.00	223	96	24
	Ntonge	Iguari Village	1.93	23	12.59	18	17	3	0	0	0	0	0	6.31	0.00	90	78	2
		Iguari Village PS-6		2	3.10	4 <sup>88</sup>	2	1	0	0	0	0	1	2.30	0.00	0	0	0
		Ifombou Village	4.17	77	31.28	55	53	4	0	0	0	2	2	9.36	1.75	184	57	7
	Ilongero	Madamigha Village	2.22	39	16.76	35	33	11	0	0	0	0	0	6.88	1.05	146	35	0
Ilongero Village		1.88	45	14.56	35	33	10	0	0	0	0	1	4.51	3.47	672	525	0	

<sup>85</sup> Land area valued and compensated in each village/mtaa including infrastructure crossings such as road reserves and powerline wayleaves which will remain.

<sup>86</sup> Determined from PAHs who participated in the socio-economic household survey and excludes village/mtaa authorities and other government institutional PAPs as well as individual PAPs that did not participate.

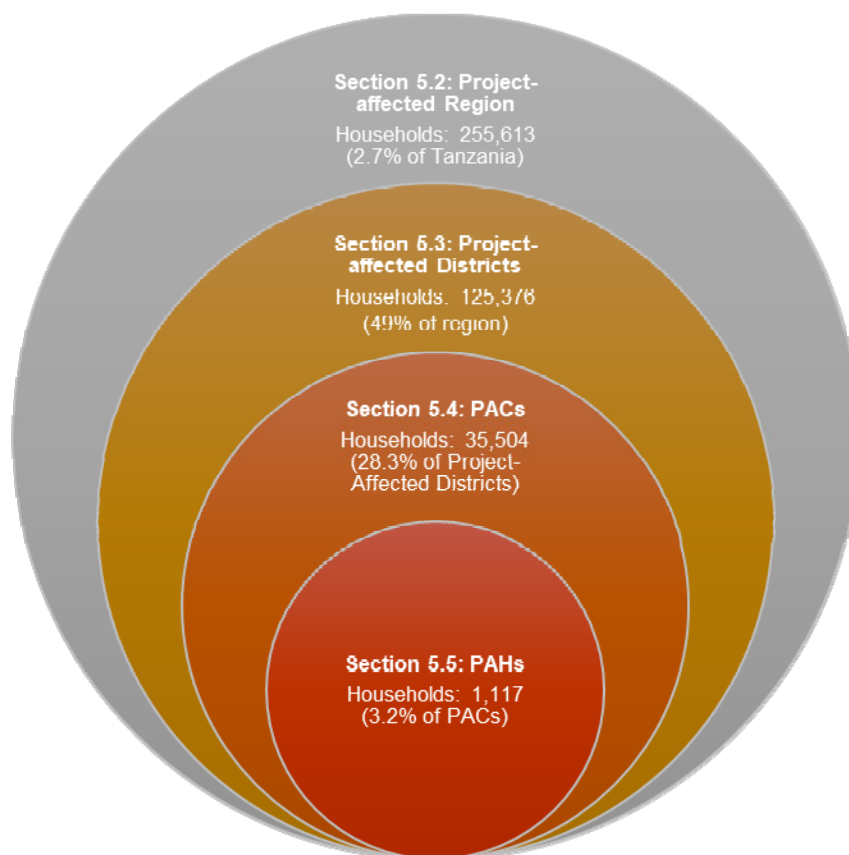
<sup>87</sup> In Misinko Village there are three (3) PAPs who have land and/or assets affected by the pipeline corridor and PS-6.

<sup>88</sup> In Iguari Village there is one (1) PAPs who has land and/or assets affected by the pipeline corridor and PS-6.

District	Ward	Village	Pipeline Length (km)	Land Parcels (No.)	Land Area (acres) <sup>85</sup>	PAPs (No.)	PAHs (No.) <sup>86</sup>	Vulnerable PAHs (No.)	Vulnerable Ethnic Group PAHs (No.)	PAHs Losing Dwellings	Buildings and Structures Affected (No.)			Crops Affected (No.)			Economic Trees and other trees (No.)	Graves
											Residential Dwellings	Other Structures	Incomplete Structures	Crops Acres	Intercropping Acre	Crops Stems		
	Mrama	Mrama Village	2.65	44	19.50	31	28	7	0	1	1	1	0	5.57	3.41	1 190	1 713	42
		Idisimba Village	0.89	17	6.61	14	12	8	0	0	0	0	1	1.32	2.39	321	691	19
		Makhandi Village	0.73	11	5.40	7	6	1	0	0	0	0	0	1.11	0.64	71	248	2
	Kinyagigi	Mitula Village	2.06	47	15.34	34	33	5	0	1	2	0	0	7.19	1.66	290	817	11
		Kinyagigi Village	3.93	72	29.49	62	56	17	0	3	3	5	0	17.80	2.86	947	4480	28
	Merya	Kinyamwambo Village	3.45	39	26.55	34	31	5	0	0	0	1	0	9.34	1.11	125	78	9
	Itaja	Kinyamwenda Village	4.06	59	35.24	53	38	14	0	2	2	3	1	10.02	0.20	1201	471	4
	Ngimu	Mwighanji Village	4.73	53	38.32	44	43	4	0	0	0	0	0	14.79	1.15	2206	309	0
		Ngimu Village	5.15	73	38.42	53	49	4	0	1	2	4	4	14.04	0.11	984	2666	19
Pohama Village		14.04	42	109.79	36	32	7	0	0	0	0	0	7.87	0.00	8	5918	0	
<b>Subtotal: Singida District</b>			<b>72.85</b>	<b>873</b>	<b>606.99</b>	<b>717</b>	<b>657</b>	<b>148</b>	<b>0</b>	<b>11</b>	<b>14</b>	<b>17</b>	<b>13</b>	<b>175.29</b>	<b>34.51</b>	<b>9 369</b>	<b>18 611</b>	<b>194</b>
<b>TOTAL: SINGIDA REGION</b>			<b>140.79</b>	<b>1 428</b>	<b>1 131.42</b>	<b>1 231<sup>89</sup></b>	<b>1 117</b>	<b>321</b>	<b>1</b>	<b>25</b>	<b>38</b>	<b>46</b>	<b>15</b>	<b>358.60</b>	<b>39.21</b>	<b>9 417</b>	<b>19 352</b>	<b>224</b>

<sup>89</sup> This includes 12 PAPs who have land parcels in multiple villages.

The structure followed for the socio-economic baseline profiles (i.e. Sections 5.2, 5.3, 5.4 and 5.5) is shown in Figure 5-1 below.



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

## 5.2 Project Affected Region

The Singida region is located in central Tanzania and is bordered by the Shinyanga, Simiyu and Arusha regions to the north, the Manyara region to the northeast, the Dodoma region to the east, the Iringa region to the southeast, the Mbeya region to the southwest and the Tabora region to the west. As of 2017<sup>90</sup>, the region consists of five (5) districts, namely Ikungi, Manyoni, Iramba, Mkalama and Singida; seven (7) Local Government Authorities; 21 Divisions; 136 wards; 441 villages; and 2,298 hamlets. Three (3) of the districts are Project-affected: Iramba, Mkalama and Singida.

The Singida Region within the broader context of surrounding regions and affected wards is shown in Figure 5-2. Unless otherwise stated, this subsection is based on Census data (2012) and the Singida Regional Profile (2015).

<sup>90</sup> National Bureau of Statistics Singida (2017). Singida in Figures.

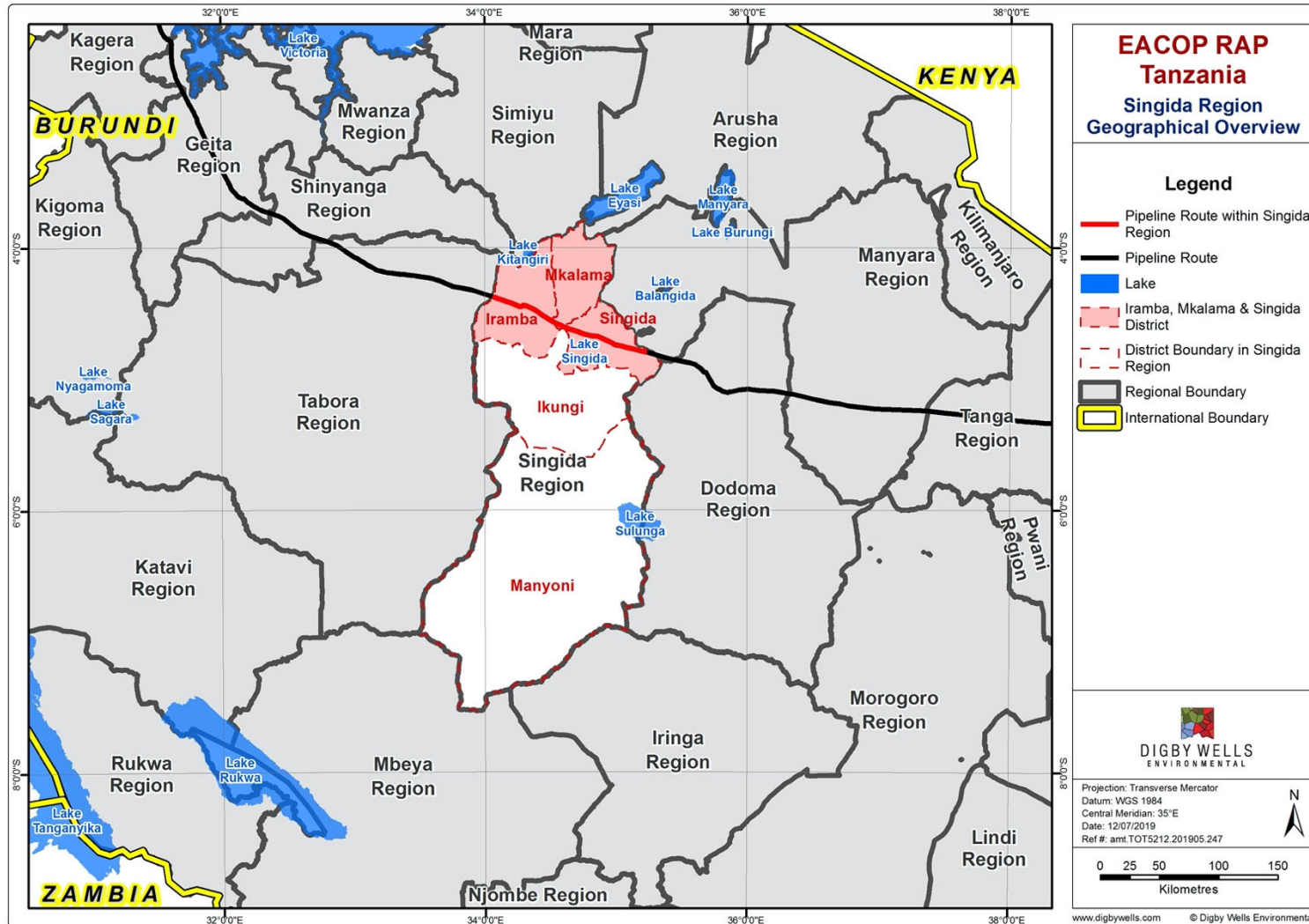


Figure 5-2: Geographical Context of the Singida Region

## 5.2.1 Population and Household Characteristics

### Population

The Singida region covers a geographical area of 49,438 km<sup>2</sup> which includes 49,342.5 km<sup>2</sup> dry land and 95.5 km<sup>2</sup> of water bodies (Lakes Eyasi, Kitangiri, Singidani, Kindai and other small lakes). In 2012, Singida had a total population of 1,370,637 people, with a population density of 27.8 people per km<sup>2</sup> (only taking the dry land area into consideration as habitable). According to the Singida Regional Commissioner's Office (2017), the projected population for the region in 2017 was 1,539,286 with an estimated population growth rate of 2.4% per annum. There was an equal split between males and females, with females in the slight majority at 50.5%.

Singida is one of 12 regions that experienced negative net migration with -112,281. This is less than 2002's net migration of -151,271 people, which the region attributed to an improvement in social services in the region.

Just under half (48.3%) of the Singida Region population were economically active. This was projected to have remain unchanged in 2015, and indeed the Singida Regional's projections for 2017 placed the economically active population at 48%. The proportion of the dependent population therefore also remained largely unchanged between 2012 and 2017 at around 52%

### Households

In 2012 (cf. National Census), the region had 255,613 households with an average household size of 5.4 persons per household. Slightly less than a third (31.9%) of households were female headed.

### Literacy Rate

The adult literacy rate in the region stood at 67.1% in 2012, but of these more than half (58.4%) were literate in Kiswahili only, with a further 7.9% literate in both Kiswahili and English.

### Ethnic Groups

The main ethnic groups in the region are the Nyaturu, Sukuma, Gogo and Taturu (also known as the Datooga). Significant minority groups include the Nyisanu, Kimbu and the Sangu. In addition to these groups, there are also other ethnic groups in smaller numbers, including groups that are internationally recognized as indigenous peoples, namely the Barabaig and the Hadzabe. 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.<sup>91</sup> 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 Taturu (also known as the Datooga) is a Barabaig tribe numbered 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 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 not<sup>92</sup>. 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 inhabit the Dodoma Region and has a total estimated population size of around 40,000.

Of these groups, only one (1) PAH in the Singida Region self-identified as Barabaig.

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<sup>91</sup> MRGI (2016). World Directory of Minorities and Indigenous Peoples. Minority Rights Group International website, URL: <http://minorityrights.org>.

<sup>92</sup> [http://www.africa.kyoto-u.ac.jp/kiroku/asm\\_normal/abstracts/pdf/36-1/yatsuka.pdf](http://www.africa.kyoto-u.ac.jp/kiroku/asm_normal/abstracts/pdf/36-1/yatsuka.pdf):

## 5.2.2 Land Use

In 2015, 10,992.4 km<sup>2</sup> (19%)<sup>93</sup> of the region's geographical area was classified as arable land suitable for crop farming. Of the arable land, 71% (7,837.6 km<sup>2</sup>) were under crop production. The region is divided into six (6) agro-ecological zones. Of these, three (3) zones are relevant to the Project-affected area:

- Zone 1: Covers the western part of Iramba and southern part of Singida District and is characterized by moderately high rainfall ranging between 500 – 700 mm. Crops grown are maize, millet, sorghum, groundnuts, cassava, sweet potatoes and beans. Some livestock keeping with fishing activities are present, but are confined to Lake Kitangiri;
- Zone 2: Covers the northeastern Iramba District and is characterized by high rainfall (between 650 – 800 mm). Vegetation is a mixture of acacia bushland, grassland and *Brachystegia* woodlands. Crops include maize, sorghum, millet, cassava, sweet potatoes, beans, groundnuts, sunflowers and cotton; and
- Zone 3: Covers Ilongero and Mgori areas of the central Singida district. The zone has a rainfall ranging between 600 – 700 mm. The zone is free from tsetse flies and therefore livestock keeping is widely practiced. Other crops grown are cotton, onions, groundnuts, millet, sorghum, yellow gram, cassava and sweet potatoes.

The natural resources sector consists of various sub-sectors including forestry, beekeeping, fisheries and wildlife. A total of 2,788 km<sup>2</sup> were taken up by forest reserves in the region. The region has commenced tree planting initiatives to mitigate against increasing deforestation caused by increased human activity such as cutting down trees for firewood, charcoal, timber and other agricultural activities.

The mining sector land area decreased between 2011 and 2015 from 3,146.5 km<sup>2</sup> to 1,277.1 km<sup>2</sup>.

## 5.2.3 Livelihood Activities

Out of the 255,613 households in the region, 216,992 (85%) were classified as agricultural households. This means that the main source of income for these households is the sale of food crops (53%), sale of cash crops (17%), other casual earnings (10%), sale of livestock (6%), business income (5%), sale of livestock products (3%), cash remittances (2%), and wages and salaries (2%). According to the Singida Regional Profile, considering income

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<sup>93</sup> Data from the District Executive's Directors' Office for the Singida Region (2015) in the Singida Socio-Economic Profile of 2015, which puts the total surface area of the region at 58,124.6 km<sup>2</sup>, hence the calculation of arable land totaling 18.9%.



from business-related activities<sup>94</sup>, only about (7%) of households had members employed in the formal sector.

#### **5.2.4 Access to Services and Public Infrastructure**

Just over a third (39%) of the region's households had access to an improved water source (i.e. a source that is protected from contamination through an active intervention). This means that most households (the remaining 62%) use non-improved water sources (i.e. unprotected from contamination such as rivers, streams and hand dug wells).

Most households (86%) only access to toilet facilities are pit latrines. A further 10% had no access to any facilities and made use of the bush or open field. Only 0.5% of households had access to a waterborne toilet facility.

Most households (46%) use kerosene for lighting. Only 1 in every 10 households have access to electricity and use it for lighting. The main source for cooking is firewood (82%) followed by charcoal (14%). Only 1% of households use electricity for cooking.

In 2010, the region had a total of 503 primary schools, which increased to 541 in 2015. The lack of primary education development in the region is in part ascribed to a lack of private sector participation in the education sector<sup>95</sup>.

### **5.3 Project Affected Districts**

An overview of the pipeline route through the three Project-affected districts is shown in Figure 5-3, followed by an integrated discussion of these districts.

Unless otherwise specified, information for this subsection was sourced from:

- Iramba District Council Socio-Economic Profile (2016) (based on 2012 Population and Housing Census);
- Draft Mkalama District Council Socio-Economic Profile (2016) (based on 2012 Population and Housing Census); and
- Draft Singida Rural District Council Socio-Economic Profile (2016) (based on 2012 Population and Housing Census).

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<sup>94</sup> The type of business activities referred to has not been specified in the Singida Region Socio-Economic profile.

<sup>95</sup> In the Republic of Tanzania: Singida Region Socio-Economic Profile (2015).

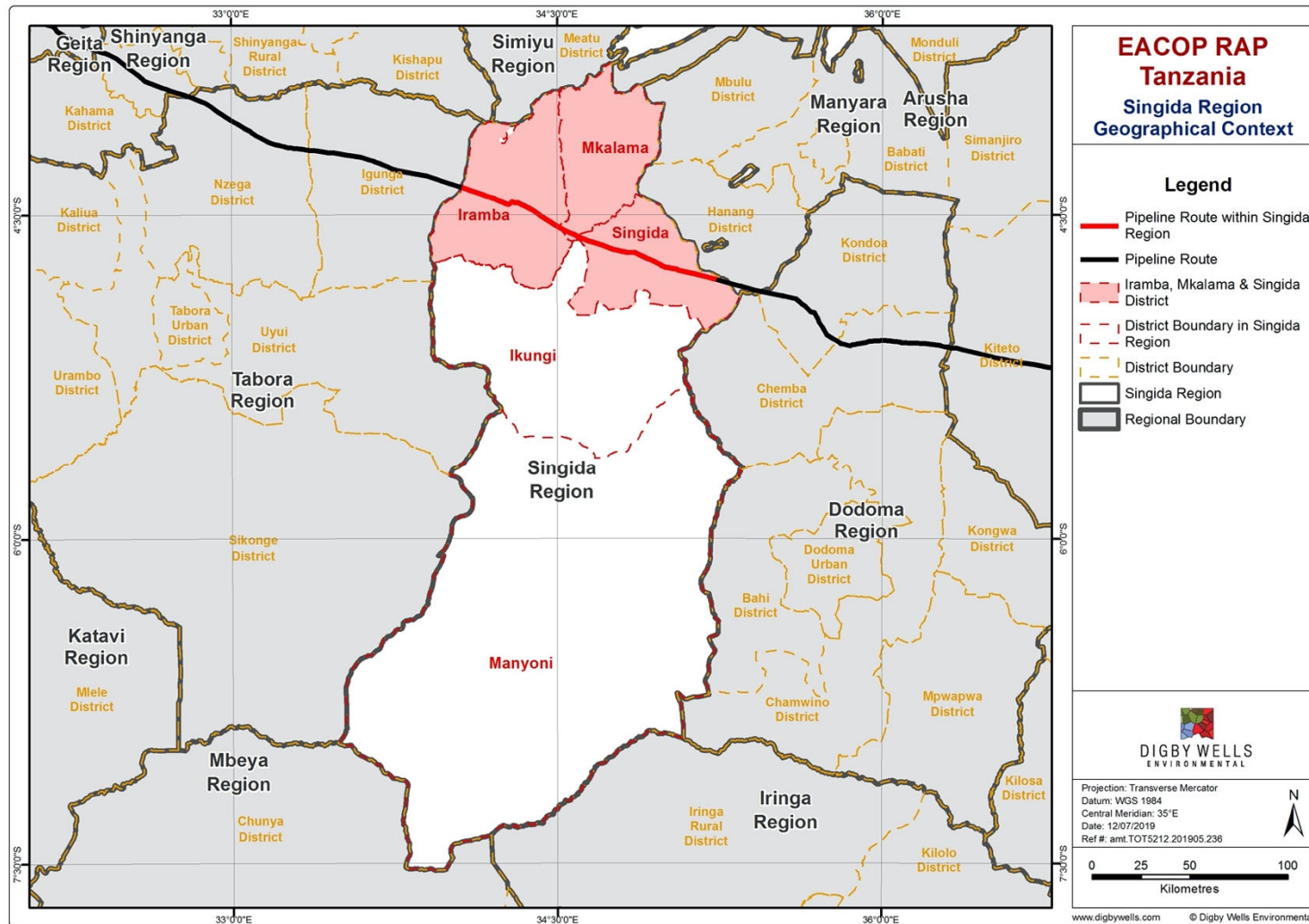


Figure 5-3: Pipeline Route through the Project-Affected Districts

### 5.3.1 Population and Household Characteristics

The Project-affected districts cover a combined geographical area of 11,587 km<sup>2</sup> (1% of the regional area) and according to projections made by the Singida Regional Commissioner's Office in 2017, had total population of 650,589 (48% of the region's population). A summary of the population per affected district is shown in Table 5-2.

**Table 5-2: Summary of Population and Household Characteristics per Affected District**

District	Surface area (km <sup>2</sup> )	Population	Population Density (per km <sup>2</sup> )	Gender split (%)		Number of Households	Occupancy Rate	Household Head (%)		Adult Literacy Rate
				Male	Female			Male	Female	
Iramba	4 471	236 282	52.8	49.5	50.5	49 436	4.8	70.1	29.9	70%
Mkalama	3 329	188 786	56.7	49.6	50.4	34 276	5.5	65.7	34.3	75%
Singida	3 787	225 521	59.6	49.6	50.4	41 664	5.4	68.5	31.5	74%
<b>TOTAL</b>	<b>11 587</b>	<b>650 589</b>	<b>56.1</b>	<b>49.6</b>	<b>50.4</b>	<b>125 376</b>	<b>5.2</b>	<b>68.1</b>	<b>31.9</b>	<b>73%</b>

The affected districts consist of a total of 125,376 households (49% of the region's households), of which just under a third (32%) are female headed. On average, households headed by females consisted of 8.7 persons per household whereas male headed households on average consisted of 3.9 persons per household.

The main ethnic groups in the Iramba District are the Nyiramba and Sukuma. The Taturu and Barabaig can be found in small numbers in the district. The major ethnic groups of the Mkalama and Singida Districts include the Hadzabe, Nyiramba, Nyisanzu, Nyaturu, Sukuma, Kimbu (in Singida District only), and the Barabaig.

Of these, the Hadzabe and the Barabaig (which would include the Taturu as a tribe of the Barabaig) have been internationally recognized by the African Commission on Human and People's Rights as Indigenous People and that may self-identify as being IPs.

The Hadzabe still practices primitive hunting and the collection of wild plants and honey as a primary livelihood activity. This group is difficult to access because of their nomadic lifestyle. The Barabaig, on the other hand, have largely moved away from herding and collecting honey as a primary livelihood and now mostly grow crops (such as maize, beans and sweet potatoes) as a primary livelihood - similar to other Vulnerable Ethnic Groups in the districts.

### 5.3.2 Land Use

The land use in the three Project-affected districts is characterized by arable land, grazing land, forest reserves, waterbodies and settlements.

Around 44% of the land in the Iramba District is arable land, but around 25% of this is underutilized. Of the district's total land area, around 43% is taken up by grazing, followed by reserves (7%), water bodies (4%) and forests (2%). A similar pattern can be observed in the

Mkalama District – 44% of the land is arable, followed by residential land (37%), forests (9%) and waterbodies (9%). In Singida District, around 67% of the district's land surface is used for agriculture, followed by grazing / livestock keeping (24%), forests (9%) and water bodies (1%).

### 5.3.3 Livelihood Activities

The primary livelihood activities practiced by the districts' households are predominantly small-scale farming of food and cash crops and livestock keeping. These activities also employ the largest number of people (an average of 70% across the three (3) districts, according to the respective socio-economic profiles). Secondary livelihood activities across the three (3) districts are also similar and include beekeeping, small businesses, agro-processing, and sand and rock quarrying.

Food crops produced include maize, sorghum, bulrush millet, beans, cassava and sweet potatoes while cash crops include finger millet, sunflowers, onions, ground nuts, yellow peas, coriander, sesame, cotton, pigeon peas and cashew nuts. Animal husbandry (livestock keeping) includes poultry (chicken, guinea fowl, ducks and pigeons), cattle, goats, donkeys and sheep.

A total of 25,196 beehives are found in the Project-affected districts. Of these, most (19,046) are located in Singida District, followed by Iramba District (3,513) and Mkalama District (2,637). The average honey volume yield across the districts is approximately a combined 93,860 kg per annum.

### 5.3.4 Access to Services and Public Infrastructure

Kerosene was the most common source of energy for lighting across all three (3) districts (56% in Iramba and Singida respectively, and 68% in Mkalama). Firewood was the main source of energy for cooking in all three districts (89% in Iramba, 96% in Mkalama and 62% in Singida). Households in Singida also used charcoal as energy source for cooking (16%).

In Iramba, most households used surface water (rivers, dams and wells) as their main source of drinking water. Only about a third of the district's households (36%) used piped water from either a public tap, borehole, protected well or spring. The same was true for households in Mkalama District, but here each household had to walk on average 1.5 km to access their nearest water source. Similarly, the Singida District relied to a large extent on underground water located at a depth of around 120 m. Long dry spells impacted severely on the district's water supply.

Across the board, households used pit latrines – 88% in Iramba, 58% in Mkalama and 68% in Singida District.

The Project affected districts had a total of 528 schools, of which 444 were primary schools (168 in Iramba, 81 in Mkalama and 195 in Singida) and 84 secondary schools (39 in Iramba, 19 in Mkalama and 26 in Singida).

Iramba district had a total of 41 health facilities, which included one (1) district hospital, three (3) health centers and 37 dispensaries. Households in Mkalama had access to 34 health facilities, which included one (1) hospital, four (4) health centers and 29 dispensaries. In Singida there were 31 health facilities, which included one (1) hospital, two (2) health centers and 28 dispensaries.

## **5.4 Project Affected Communities**

For the purposes of this RAP, PACs are defined as the population of any ward overlapping with the Project footprint. It thus encompasses PAHs and PAPs, but also includes households that reside in Project-affected wards but will not be physically or economically displaced by the Project.

Theoretically, PACs would also include host communities (communities residing in or using land to which displaced PAHs will be relocated). However, it is the Projects intention to relocate the 27 physically displaced PAHs in Singida region to nearby sites within the same village or at least the same ward, therefore avoiding the creation of separate host communities, thus, PACs constitute the same communities as those within which PAHs currently reside.

This section provides a high-level overview of the PACs per ward within the Singida Region, based on national census data. Section 5.5 discusses Project-Affected Households in more detail, based on primary data gathered during the SELI and household socio-economic survey. An overview of the PACs is provided in Figure 5-4 for the Project-affected wards within the Iramba and Mkalama Districts, and in Figure 5-5 for the Project-affected wards within the Singida District.

Unless otherwise specified, this subsection was based on information from the Iramba, Mkalama and Singida District Profiles (2015) and the results of the SELI undertaken by DWC (2018 / 19).

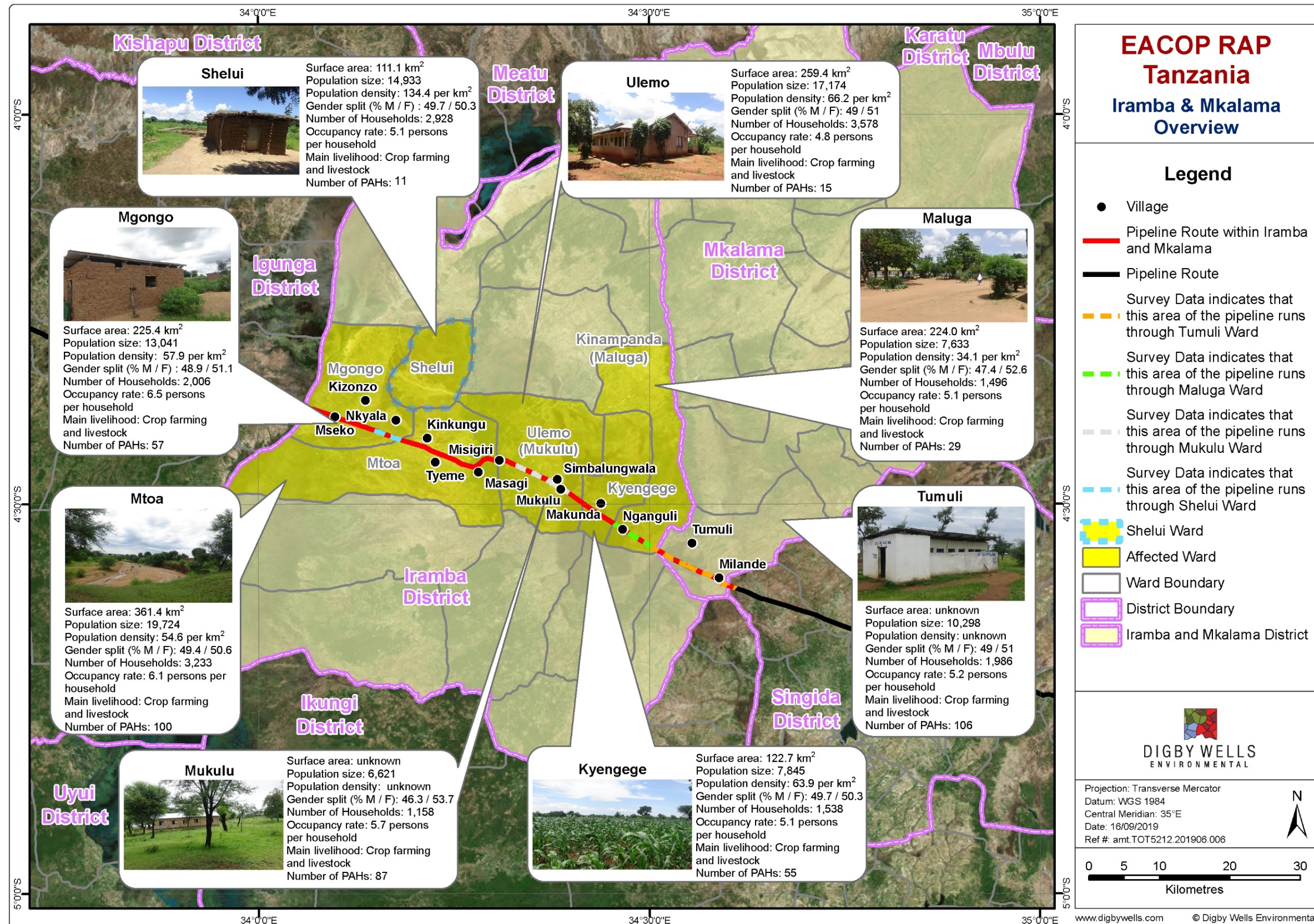


Figure 5-4: Population and Household Characteristics of the Project Affected Communities (Iramba and Mkalama Districts)

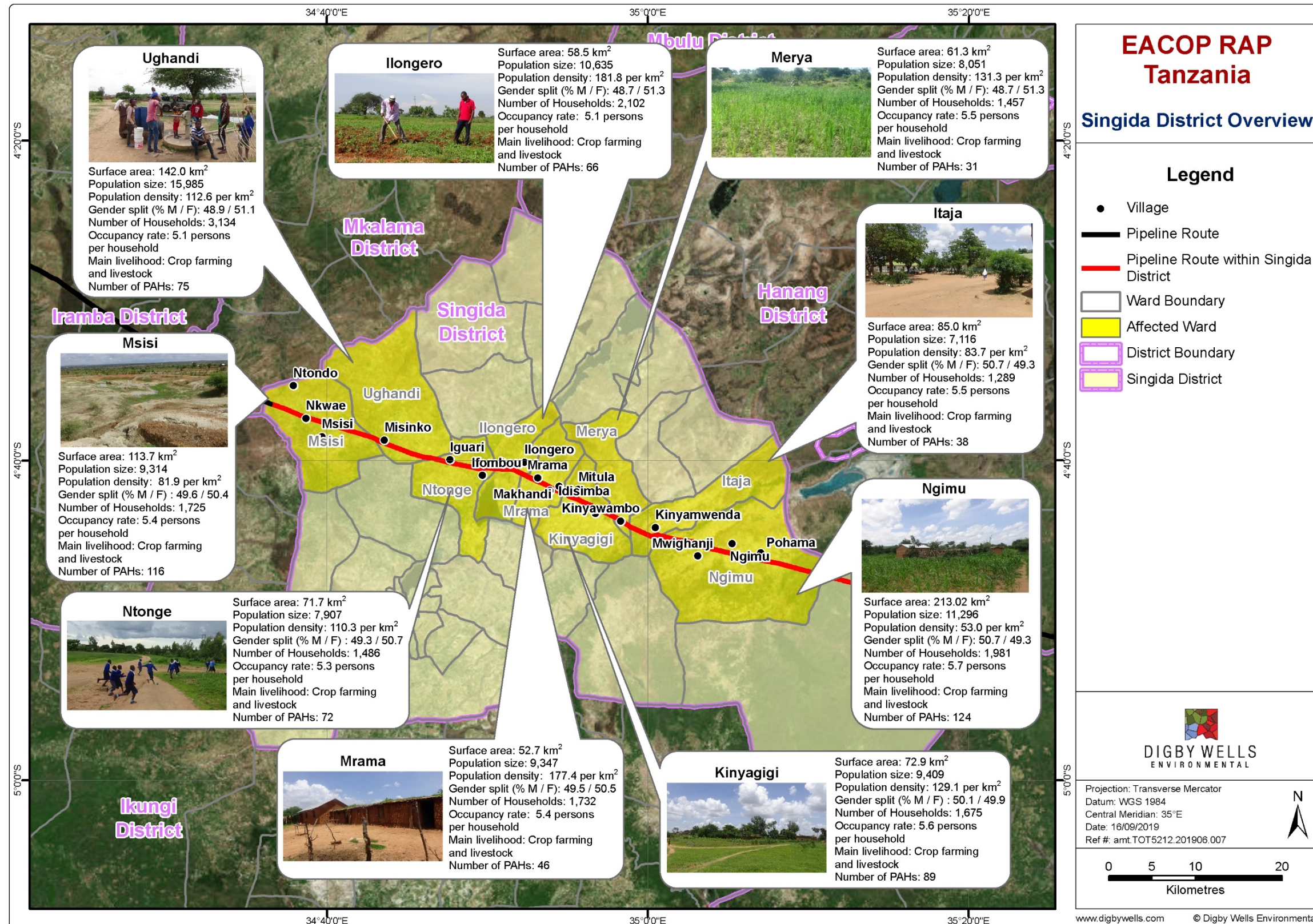


Figure 5-5: Population and Household Characteristics of the Project Affected Communities (Singida District)

### 5.4.1 Population and Household Characteristics

The Project-affected wards cover an area of around 2,175 km<sup>2</sup> (excluding the Mukulu and Tumuli Wards<sup>96</sup>) with a total population of 186,329 people at an average population density of around 98 people per km<sup>2</sup> across the 17 Project-affected wards. There was an almost equal split between genders with females in the slight majority at 51%. The PACs consisted of 34,504 households with an average household size of around 5 people per household, except households in Mgongo and Mtoa Wards that averaged at 6 people per household.

A total of 1,128 households (3% of the PACs' households) are affected by the Project, of these, 365 PAHs are in Iramba District, 106 PAHs in Mkalama District and 657 PAHs in Singida District.

### 5.4.2 Land Use & Tenure

Land is primarily held under unregistered customary tenure arrangements. Men and women are legally entitled to own and inherit land equally but traditionally, only sons generally inherited land from, or were allocated land by, the head of the household. Over the past decade, the legal entitlement to equal inheritance is increasingly being put into practice. While widows are generally permitted to remain on the deceased husband's land, a widow will usually return to her father's land if her deceased husband's family refuses to allow her to remain on the land.

The SELI found that land uses include farming, grazing, and residential use. The average household landholdings differed across the Project-affected wards. In Iramba, average household landholdings in the affected wards ranged from three (3) to eight (8) acres; in Singida, from three (3) to ten (10) acres, and in Mkalama, from three (3) to five (5) acres. Most villages hold agricultural, grazing, and / or forest land. Designated grazing land is used for grazing purposes, designated agricultural land is rented out to land-poor households by the Village District Council (VDC) on a seasonal basis<sup>97</sup>, and designated forest is used for grazing and other services (firewood, apiaries, medicinal herbs, wild fruits etc.).

The Mgori Forest covers an area of 44,000 hectares and is the biggest forest in Singida region. Mgori was established as a Village Land Forest Reserve and is managed through Community Based Forest Management (CBFM). Mgori is managed by five villages, namely Ngimu, Pohama, Unyampanda, Nduamghanga and Mughunga, through village committees, village councils (VDCs) and village assemblies<sup>98</sup>. Ngimu and Pohama are Project-affected villages. The pipeline corridor though affects 71.86 acres of Mgori forest in the Pohama Village. According to the Ngimu WDC, villagers from Mwishanji Village, also a Project-affected village, are permitted to access the forest.

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<sup>96</sup> These wards are newly established wards and therefore data on surface area was not available at the time of compiling this RAP.

<sup>97</sup> Republic of Tanzania: Singida Region Socio-Economic Profile (2015).

<sup>98</sup> Global ICCA Database, Mgori Forest, Tanzania, [https://cmsdata.iucn.org/downloads/mgori\\_forest\\_tanzania\\_icca\\_database.pdf](https://cmsdata.iucn.org/downloads/mgori_forest_tanzania_icca_database.pdf), Sourced on 2019/08/27.



Mgori is classified as a Miombo woodland. Information collected during the SELI indicated that the forest provides a variety of ecosystem services for the surrounding villages, including:

- Construction materials (timber, grasses, clay)
- Firewood and charcoal
- Medicinal plants
- Food products, including wild fruit and mushrooms
- Grazing for livestock
- Sites for crop cultivation during the dry season
- Wild honey
- Sites for apiaries
- Wildlife (large mammal populations, including a small number of elephants)
- Climate regulation

It was reported that there are several sacred sites within Mgori, none of which, according to the stakeholders interviewed, are impacted by the pipeline.

It was further reported that there are frequent conflicts and disputes around access to Mgori Forest and that forest invasions by people from Singida and other regions are an issue. It was indicated that there are at least fourteen (14) households informally occupying the forest<sup>99</sup>.

The ecosystem services provided by Mgori Forest are important for sustaining the livelihoods of those residing in the abovementioned villages. However, none of the stakeholders consulted during the SELI raised concerns about the Projects impact on Mgori.

### **5.4.3 Livelihood Activities**

Most households in the PACs are agro-pastoralists and their primary livelihood strategies are food and cash crop farming and livestock keeping. The main food crops include maize, bulrush millet, sweet potatoes and rice and the main cash crops include sunflowers, onions, groundnuts, cotton, rice and lentils. Livestock animals include cattle, goats, sheep, donkeys, and poultry. Livestock products contribute to household food security and income and are especially valued as a savings mechanism and a symbol of household wealth. Secondary livelihood strategies include small businesses (agro-processing, retail sales), buying, holding and selling cash crops, livestock sales, sale of fuelwood, small-scale gold mining and seasonal farm labor.

### **5.4.4 Access to Services and Public Infrastructure**

Kerosene is used by most households across the PACs for lighting, and wood for cooking. Although all wards have drilled communal water wells, only about half of households in each

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<sup>99</sup> Singida District Environmental Officer, SELI personal communication in 2018, DWC / EACOP.

ward reported having access to the well – the other half accessed water through unimproved water sources such as rivers, streams and dams.

Most households in the region (86%) used pit latrines, with a further 10% who had no latrine facilities. Only 0.5% of households had access to a flush toilet.

All the wards have some form of health facility, mostly in the form of dispensaries. Shelui, Kyengege and Ilongero also have a health center each. All the wards have at least one (1) primary school and one (1) secondary school.

The location of public services, infrastructure and community services in the Project-affected districts is shown in Figure 5-6 and Figure 5-7, whereas Figure 5-8 and Figure 5-9 show the communities' access to natural resources along the pipeline corridor for each of the districts. Data for these maps were obtained from EACOP based on information gathered informally by the field-based stakeholder engagement team.

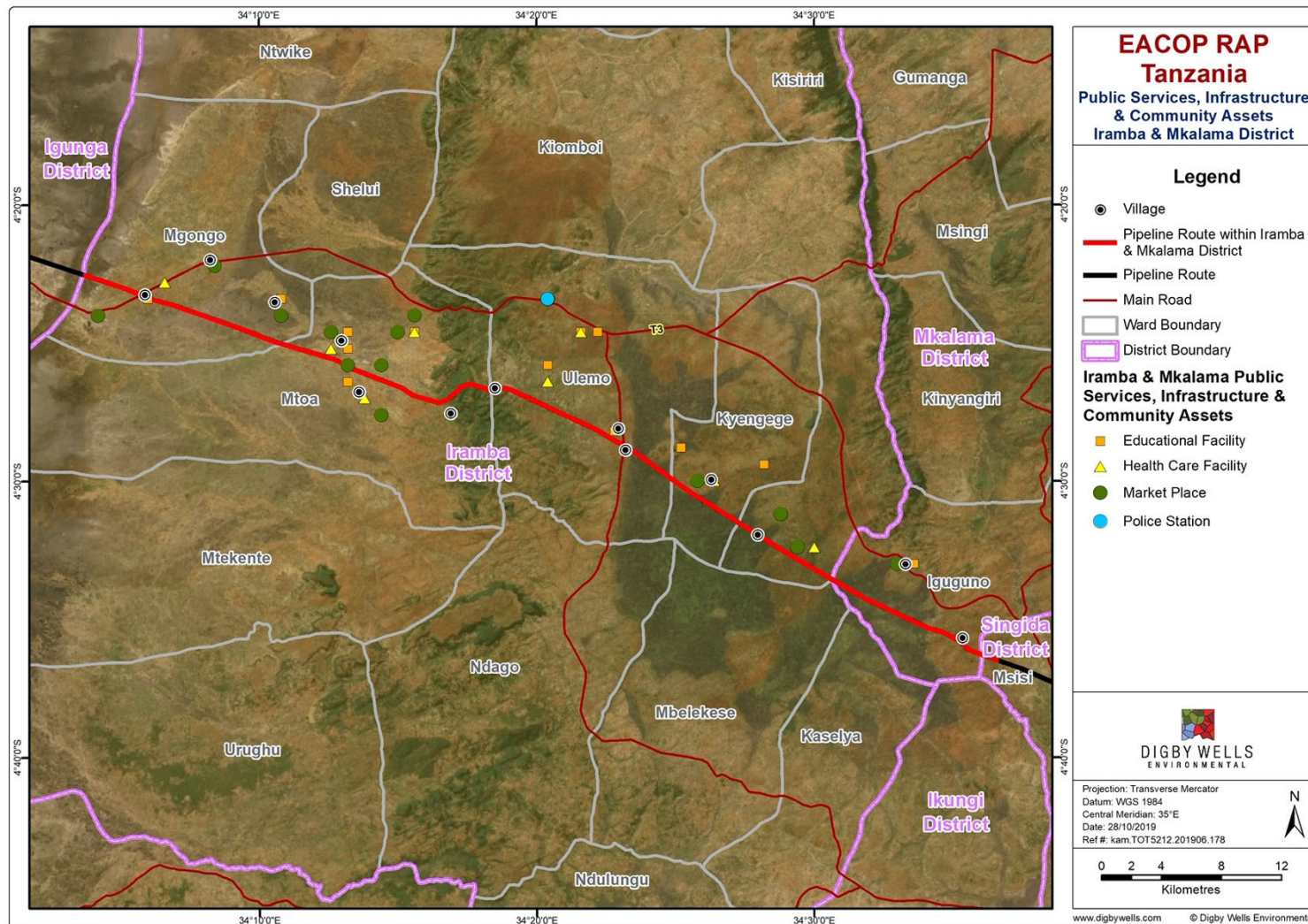


Figure 5-6: Public Services, Infrastructure and Community Assets in the Iramba and Mkalama Districts

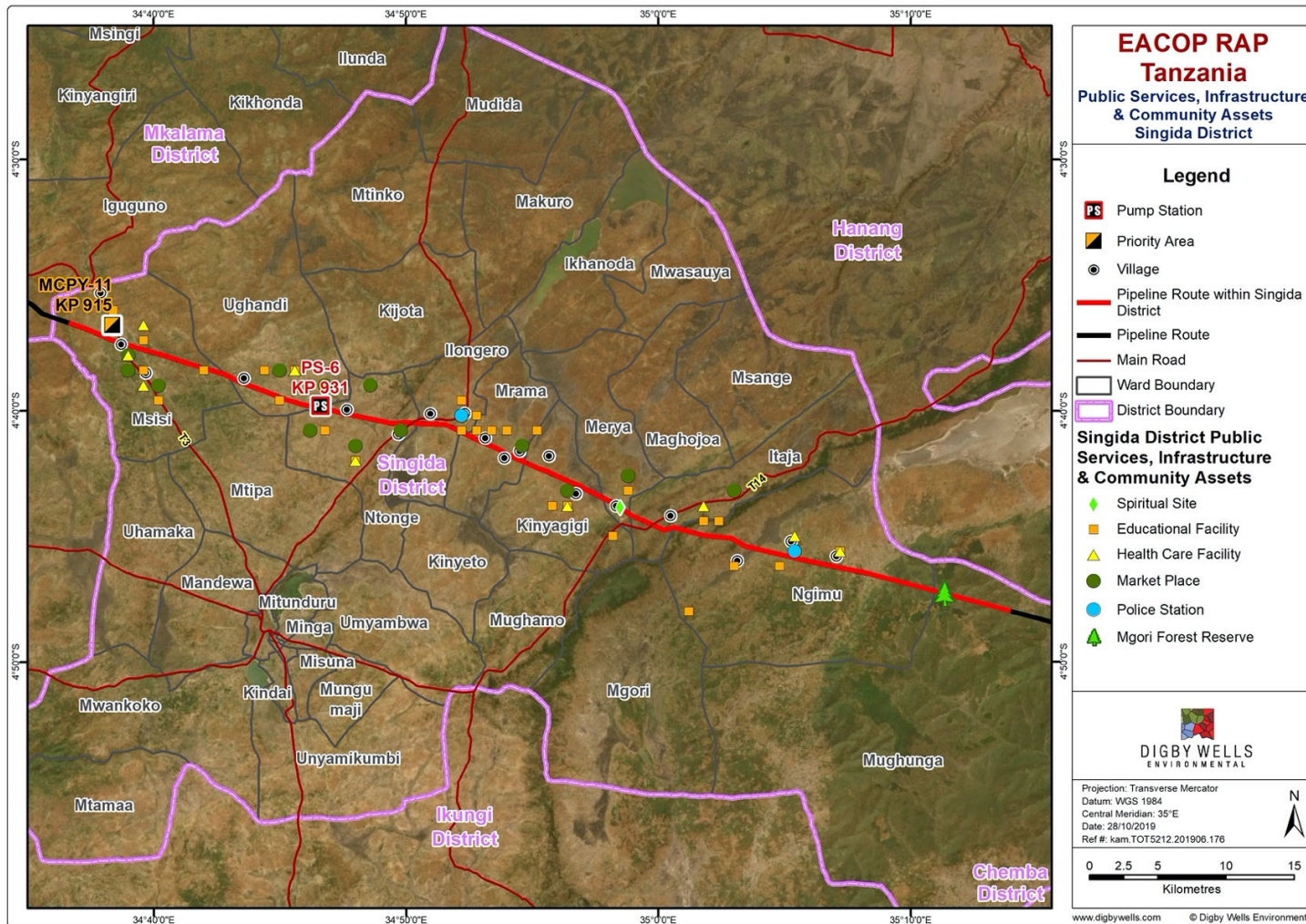


Figure 5-7: Public Services, Infrastructure and Community Assets in the Singida District

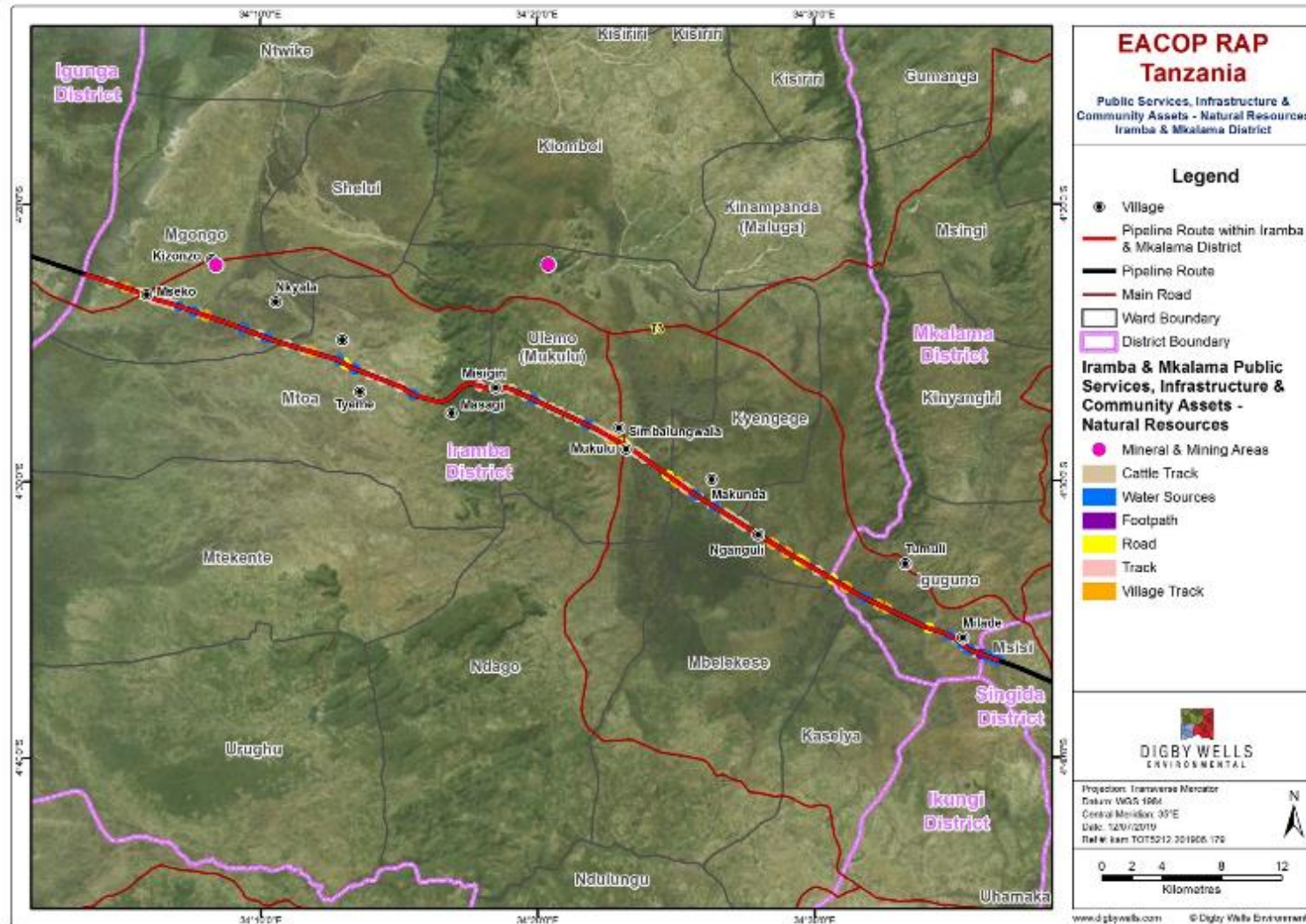


Figure 5-8: Community access to Natural Resources along the Pipeline Corridor in the Iramba and Mkalama Districts

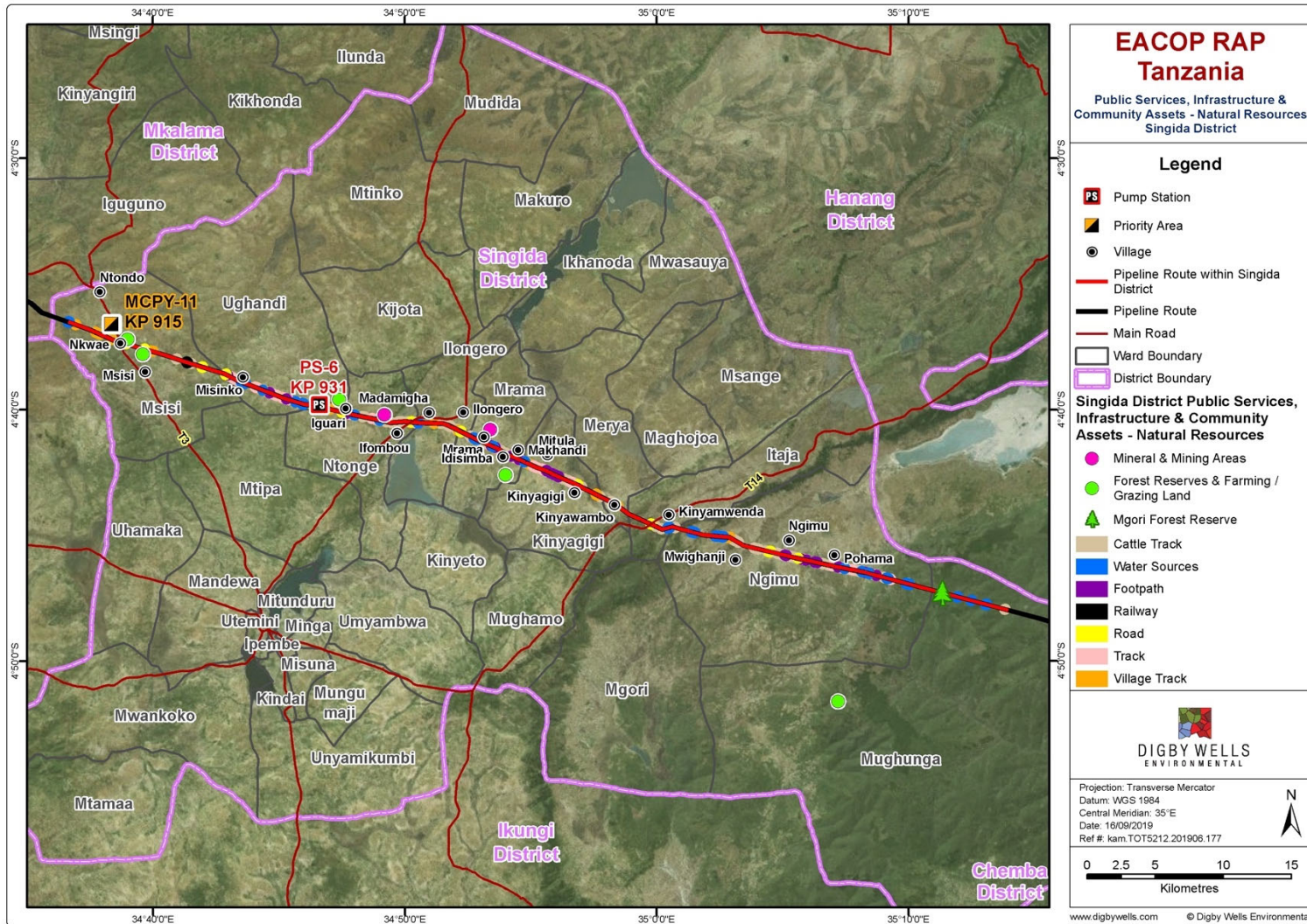


Figure 5-9: Community access to Natural Resources along the Pipeline Corridor in the Singida District

## 5.5 Project Affected Households

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

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

Unless otherwise stated, this subsection was based on information obtained from the following internal reports:

### 5.5.1 Population and Household Characteristics

A summary of the PAH's population and household characteristics of PAHs across the affected wards (grouped per district) is provided in Table 5-3 and discussed in more detail in the ensuing subsections.

**Table 5-3: Summary of Project Affected Households per Affected Ward**

District	Ward	Number of PAPs	Number of PAHs	Proportion (%) of Households Affected per ward	Average size of PAH	Household Head (%)		Literacy Rate (%)	Predominant Residential status <sup>100</sup>
						Male	Female		
Iramba	Mgongo	61	57	2.8	10	93	7	59	100%
	Shelui	27	11	0.4	8	73	27	32	100%
	Mtoa	109	100	5.0	7	86	14	75	100%
	Ulemo	15	15	0.4	9	100	0	60	100%
	Mukulu	94	87	7.5	6	76	24	85	99%
	Kyengege	56	55	3.8	7	91	9	82	100%
	Maluga	31	29	1.9	6	87	13	72	100%
Mkalana	Tumuli	121	106	5.3	7	90	10	84	99%
Singida	Msisi	124	116	6.7	8	87	13	87	99%

<sup>100</sup> Refers to percentage of PAHs who stay in the area on a permanent / full-time basis.

District	Ward	Number of PAPs	Number of PAHs	Proportion (%) of Households Affected per ward	Average size of PAH	Household Head (%)		Literacy Rate (%)	Predominant Residential status <sup>100</sup>
						Male	Female		
	Ughandi (pipeline)	59	58	1.9	8	93	7	87	99%
	Ughandi (PS-6)	19	17	0.5					
	Ntonge (pipeline)	73	70	4.8	7	90	10	91	100%
	Ntonge (PS-6)	4	2	0.1					
	Ilongero	70	66	3.2	8	78	22	88	100%
	Mrama	52	46	2.7	7	82	18	90	100%
	Kinyagigi	96	89	5.4	7	86	14	90	97%
	Merya	34	31	2.1	8	90	10	91	100%
	Itaja	53	38	2.9	7	78	22	86	
	Ngimu	133	124	6.3	7	92	8	89	100%
<b>TOTAL</b>		<b>1 231</b>	<b>1 117</b>	<b>3.2</b>	<b>7.5</b>	<b>87<sup>101</sup></b>	<b>13</b>	<b>79</b>	

There are 1,231 PAPs<sup>102</sup>, of which 1,115 are landholders and 85 are tenants. An additional 31 PAPs include government institutions (2) and villages (29). There are 1,117 PAHs - the largest proportion is found in Singida District (657), followed by Iramba District (354) and Mkalama District (106). Of the PAHs, one (1) is from the vulnerable ethnic group the Barabaig - see Section 5.7 for more detailed information on vulnerable ethnic groups.

The average household size across the wards is 7.5 persons per household, with the largest average household size in Mgongo (10 persons per household) and the smallest in Mukulu and Maluga (6 persons per household).

Most households are headed by males (an average of 87% of PAHs). The highest proportion of female-headed households are in Shelui (27%), Mukulu (24%), Ilongero (22%) and Itaja (22%).

The predominant age group across all PAHs are youths aged between 5 and 19 years.

<sup>101</sup> Numbers in *italics* denote averages

<sup>102</sup> As indicated in Table 1-1, there are 1,219 PAPs if each of the 12 PAPs who have land parcels in multiple villages and four (4) PAPs who are affected by both the pipeline and PS-6 are counted once only. They are double-counted here so that the total aligns with the sum of the numbers of PAPs per village.



On average, 79% of PAHs have at least one member over ten (10) years old who is literate. The literacy rate of household members over ten (10) years old is lowest in Shelui (32%) and highest in Ntonge and Merya (91% each).



**Figure 5-10: A typical homestead in Mrama Ward (Singida District)**

### 5.5.2 Land Use and Tenure

A total of 1,595 valuations were carried out in the Singida Region<sup>103</sup>. Of the number of valuations, 1,420 are held under customary land tenure (unregistered), four (4) under customary land tenure (registered), and 110 under tenancy. Most of the valued land was used for agriculture (1,167 or 73%). Other predominant uses included communal / village land (173 or 11% - including Mgori community forest), grazing (70 or 4%) and residential (37 or 2%). The remaining valuations (10%) included a mix of land uses such as institutional land (land associated with two Primary Schools) and unused land.

For most PAHs across the affected wards, seasonal cropping is the predominant land use activity, from 73% in Msisi to 96% in Ughandi and Ntonge. Other land uses include perennial cropping, grazing and fallow land.

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<sup>103</sup> 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.

## Graves and Spiritual Sites

The pipeline corridor will affect 224 graves within Singida Region and 1 spiritual site (which uses one of these graves) was identified during the RAP surveys. Of the affected graves: 28 graves in Iramba District; two (2) graves in Mkalama District; and 194 affected graves located in Singida District with a cluster of 24 graves on the land affected by PS-6.

Similarly, to the process of grave relocation, the suitable rituals to be performed before the relocation of any spiritual sites will be determined by engagement with the site's guardian. Land and assets associated with these sites has been valued, for example the grave in the case if the identified site in Singida. 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.

### 5.5.3 Livelihood Activities

The livelihood activities that PAHs are engaged in are discussed in detail in the following subsections.

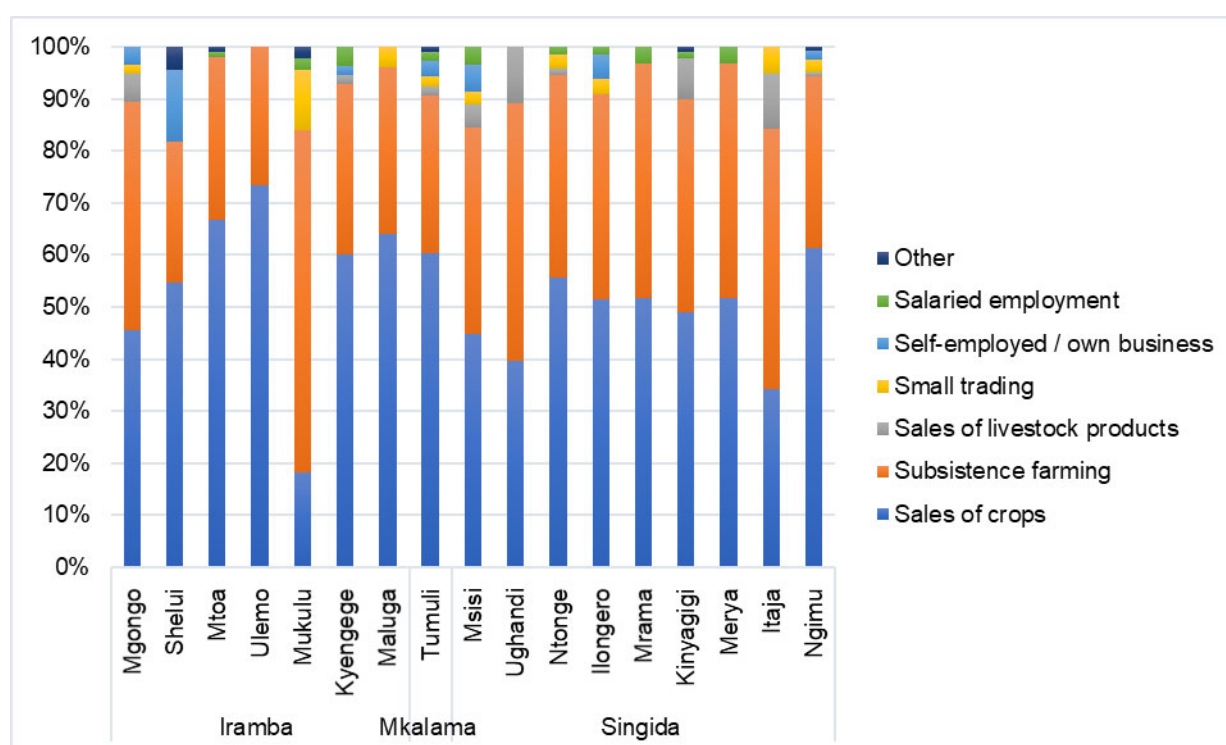
The forests and forested areas in the Project-affected wards provide a variety of ecosystem services to surrounding communities that are integral to sustaining livelihoods, including:

- Construction materials (timber, grasses, clay)
- Firewood and charcoal
- Medicinal plants
- Food products, including wild fruit and mushrooms
- Grazing for livestock
- Sites for crop cultivation during the dry season
- Wild honey
- Sites for apiaries
- Wildlife
- Water retention
- Climate regulation

As discussed in Section 5.4.2 above, the Project impacts the Mgori Village Forest Reserve in Singida District.

#### Primary Livelihood Activities

A summary of PAHs' primary livelihood activities is presented in Figure 5-11.



**Figure 5-11: Overview of PAH Livelihood Activities in Project Affected Wards, grouped per District**

The primary livelihood activity and income generating activities of most PAHs across all three districts (an average of 92%) are agriculture based. This includes the sale of crops (an average of 52% of PAHs) and subsistence farming (40% of PAHs).

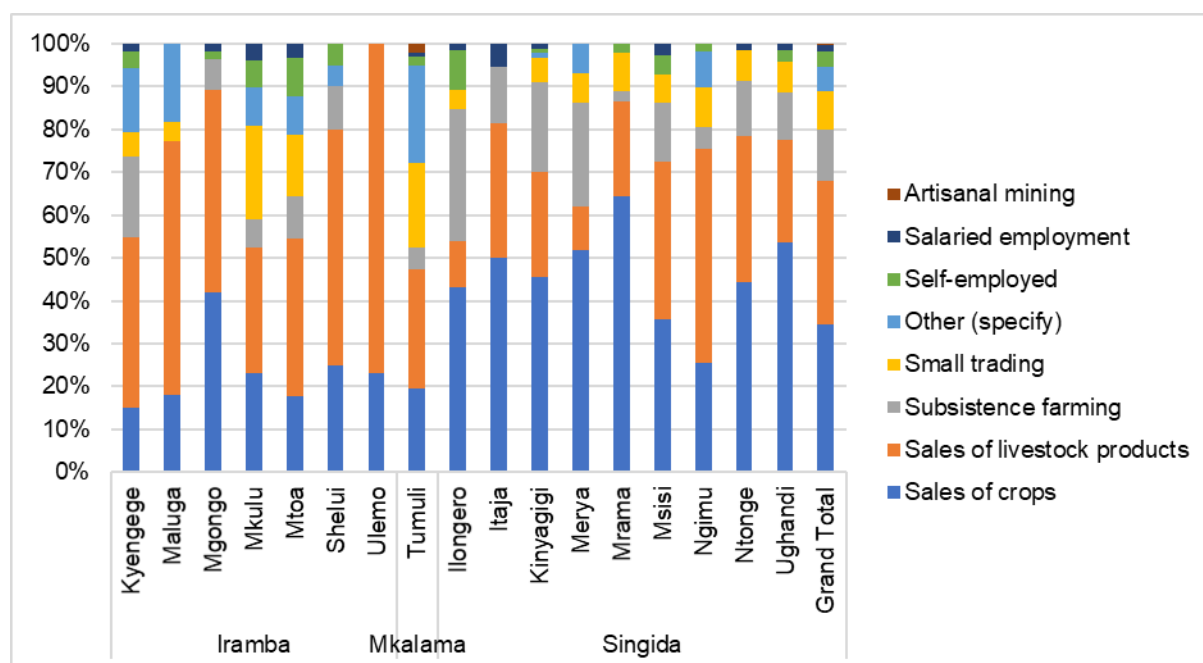
Other primary livelihood activities in Iramba District include general work (3%) such as construction and agricultural day labor, livestock herding, driving and carpentry, petty trading (2%), artisanal mining (1%) and the sale of livestock products, like meat, eggs, and manure.

In Mkalama District, PAHs also identified general work (3%) such as construction, agricultural day labor, livestock herding, driving and carpentry, petty trading (2%) and the sale of livestock products (2%), like meat, eggs, and manure as other primary livelihood activities.

Other primary livelihood activities identified by households in Singida District include the sale of livestock products, like meat, eggs, and manure (4%), petty trading (2%), "other" activities (1%) such as agricultural day labor and carpentry, self-employment (1%), and salaried employment (1%). The professions included under salaried employment are driver and local government administrator.

### Secondary Livelihood Activities

A summary of PAHs' secondary livelihood activities is summarized in Figure 5-12.



**Figure 5-12: Overview of PAH Secondary Livelihood Activities in Project Affected Wards (grouped per District)**

PAHs' secondary livelihood activities across the three districts include the sale of livestock products, the sale of crops and subsistence farming.

Other secondary livelihood activities that PAHs reported in Iramba District include general work (7%) such as construction, agricultural day labor, driving and carpentry, self-employment and small business ownership (4%), and salaried employment (2%). The activities included under self-employment and small business ownership include the production and sale of honey, livestock breeding, the sale of fish and printing. The professions included under salaried employment are local government leader and teacher.

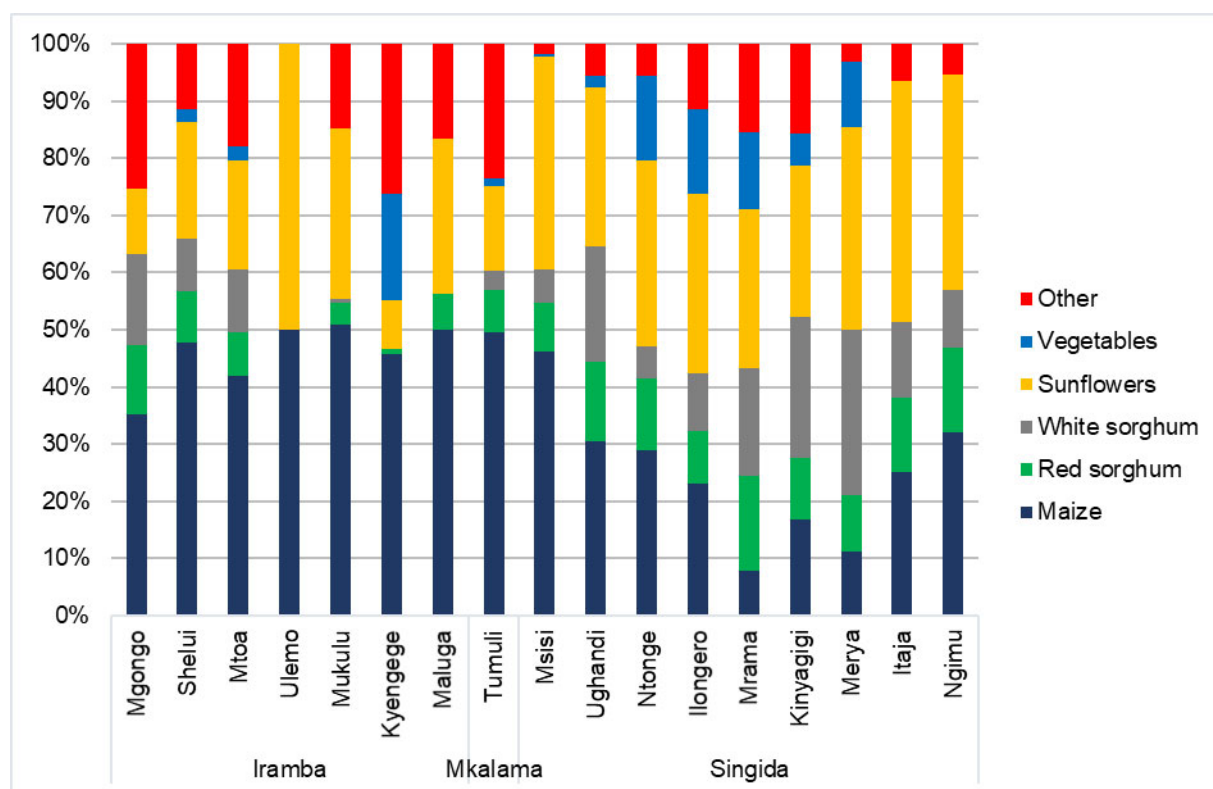
Other secondary livelihood and income generation activities reported by PAHs in Mkalama district are petty trading (18%), "other" activities (21%) like construction, agricultural day labor, driving, welding, selling honey, and carpentry, self-employment and small business ownership (2%), salaried employment (1%) and artisanal mining (1%). The activities included under self-employment and small business ownership include buying, holding and selling crops, production and sale of honey, and traditional healing. The professions included under salaried employment are driver and revenue collector.

In addition to agricultural activities, the secondary livelihood activities that PAHs in Singida district reported include petty trading (6%), "other" activities (2%) like agricultural day labor, selling honey, and driving, self-employment and small business ownership (2%), and salaried employment (1%). The professions listed under salaried employment include lawyer, builder, tourism operator, pastor and local government administrator.

### Crop Farming

As demonstrated in the section above, crop farming is fundamental to PAH livelihoods, both as a food and income source. PAHs cultivate both food crops and cash crops. Farming

activities are undertaken by all household members, including the elderly, and young children. Figure 5-13 provides a summary of the crops grown by PAHs in the region, grouped per ward.



**Figure 5-13: Summary of crops cultivated by PAHs in Singida Region (grouped per ward)**

Households in Iramba and Mkalama districts plant similar crops, which include mostly maize, sorghum (red and white), sunflowers and ‘other’, which include a variety of crops such as millet, lentils, cotton, cassava and groundnuts. Households in the Kyengege ward and the Singida district overall reported cultivating more diverse crops when compared to households in Iramba and Mkalama districts, with more households cultivating vegetables (which includes yams, tomatoes, onion, okra and sweet potatoes) in these areas. Pesticide is used by only a small percentage of farmers and then usually only for horticultural produce.

PAHs reported using both traditional and modern agricultural inputs to maximize production levels. In general, it is the lack of capital that impedes access to improved agricultural inputs. The most commonly used modern input is improved seeds, specifically for maize, sorghum and sunflower crops. The most common fertilization method is farmyard manure, although PAHs in Iramba district reported during the SELI that farmyard manure is only used in Mukulu and Mtoa wards because the soil in Kyengege, Maluga, Shelui and Ulemo is highly fertile and does not require additional fertilization. It was reported that the ambient temperature in Mgongo Ward is too high to use farmyard manure for fertilization.

Pesticide is used by only a small percentage of farmers and then usually only for the onion crop and horticultural produce.

Most PAHs sell their harvested crops to intermediaries living in the villages. The intermediaries in turn sell these crops at large ward and district markets, which are frequented by buyers from around Tanzania as well as neighboring countries. PAHs noted that while they can sell crops for higher prices at these big markets, the transport challenges and costs involved render it easier to sell to intermediaries, who pay the lowest price possible. Farmers in the district generally do not hold crops to take advantage of market price fluctuations because of the lack of adequate storage facilities. Due to this lack, they are forced to sell crops very soon after harvest.



**Figure 5-14: Sunflower crops in Mukulu Ward (Iramba District)**

The planting and harvesting seasons for crops cultivated are indicated in Figure 5-15.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Rainy season	Blue										Blue	
Land preparation									Yellow			
Maize				Harvesting							Planting	
Sorghum				Harvesting							Planting	

Millet				Harvesting						Planting
Sunflowers	Planting			Harvesting						
Vegetables & legumes	Planted and harvested throughout the year. Includes crops such as cassava, sweet potatoes, cow peas, groundnuts, beans, pumpkins, lentils, sesame and onions.									
Hunger months	Red									Red

**Figure 5-15: Crop Production Calendar**

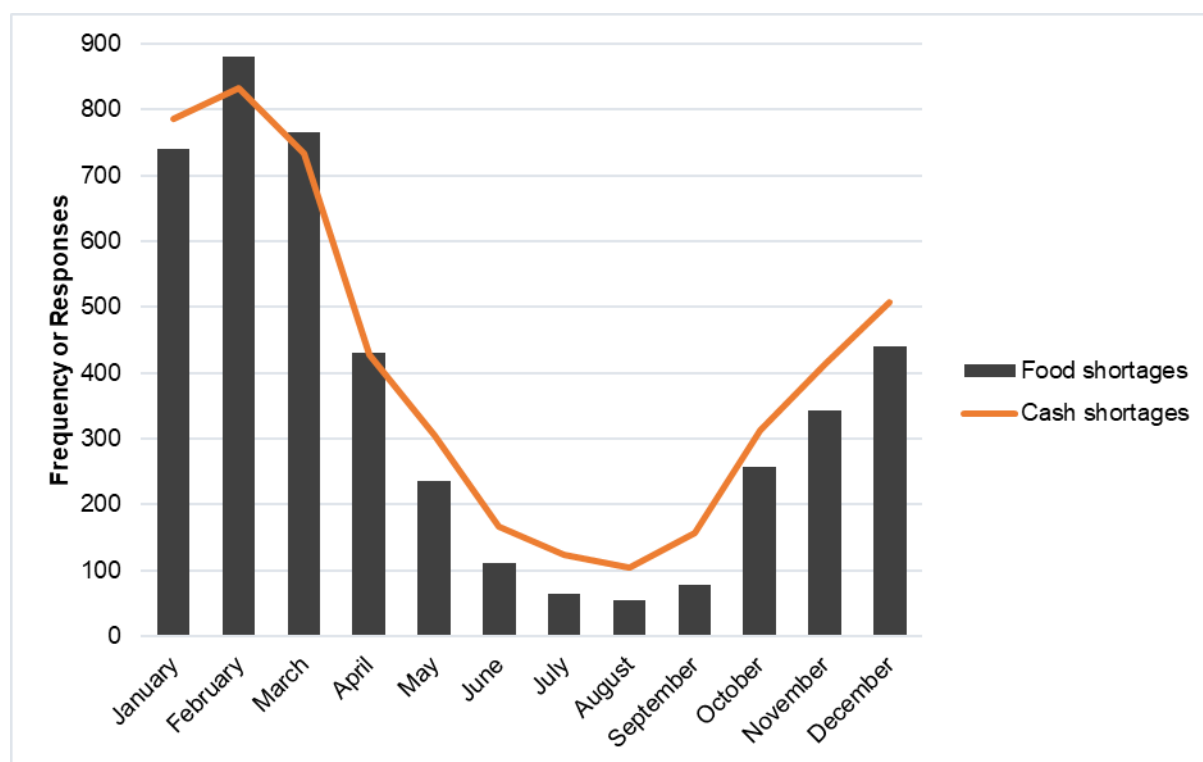
Land preparation is dependent on the predicted commencement of the rainy season. Singida region has a unimodal rainfall regime. Land preparation is usually done in September and October and involves clearing crop residue and adding organic manure to the soil. Early planting of maize, sorghum and millet (i.e. staple food crops) is done during these months. The normal planting of maize is done in November and December and the planting of sorghum, millet, groundnuts, sunflowers, sesame and bambara nuts is done in January (normal) and February (late). In March and April, cassava, sweet potatoes and leguminous crops are planted.

Harvesting of sunflowers, beans, bambara nuts and early maize begins in April. The harvesting of other crops takes place in May, June and July while the harvesting of lentils, one of the most profitable food crops, takes place in September.

As is to be expected for households whose primary livelihood activity is farming, the cycles of food and cash availability and shortages coincide with the seasonal cropping calendar. PAHs generally experienced food and cash shortages from October to the end of March (see Figure 5-16), which coincides with the planting and pre-harvest period for primary food crops.

During the RAP Survey, over 80% of PAHs indicated that the household experienced food shortages in the previous year. For most households, food shortages commenced in October and peaked between January and March. The food shortage timeline coincides with the cropping season for maize and sorghum, which are usually harvested between April and July, leading to a noticeable decrease in PAHs' food shortages and household income. During the RAP survey, PAHs reported the following reasons for food shortages: the impact of drought on crop production; lack of income to purchase food; the sale of food crops; lack of agricultural inputs; land shortages; and destruction of crops by animals.

The months when PAHs experienced cash shortages corresponds with the food shortage months. This correspondence is to be expected given that the primary source of income for most PAHs is the sale of crops (cf. Figure 5-16) which are sold after harvest.



**Figure 5-16: Summary of PAH Food and Cash Shortages**

### Livestock Keeping

Cattle, goats, sheep, donkeys, pigs, poultry, guinea fowl and ducks are the livestock animals owned by PAHs, with cattle, goats, sheep and poultry being the most commonly owned. There is a dual system of livestock keeping in the Project-affected districts: livestock ownership and livestock rental. It is common for livestock owners who own large numbers of livestock to “rent” out their livestock to households who do not own livestock. Livestock owners benefit from this arrangement because their livestock is taken care of by livestock renters who are responsible for grazing, watering and accommodating the livestock. Livestock ‘renters’ enjoy the benefits of livestock keeping that owners do, including livestock products (milk, eggs, manure) produced by the animals they take care of. Both ‘renters’ and owners use the livestock for animal traction (ploughing, transport of goods etc.).

There is a relative shortage of grazing land in the affected wards and livestock is grazed wherever grazing is available and permitted. Depending on the season and availability of grazing sources, livestock may be herded to grazing and water sources at distances of up to 20 km daily. Some households in the district are reported to engage in seasonal migration to other regions to access grazing land. At times, an entire household will migrate for the season, which disrupts school attendance, while at others (only some household members, usually young men) will migrate with the livestock.

PAHs across the affected wards reported that they graze livestock around their homesteads, in community and privately held forests, on village grazing land, and on family-owned grazing land (“other” category). Livestock also graze crop residues on agricultural land after the harvesting season. Conflicts regarding incursion of livestock herds on to agricultural land



were only reported in Mgongo Ward where cattle herds are amongst the largest in the district<sup>104</sup>.



**Figure 5-17: Cattle-drawn transport in Tumuli Ward (Mkalama District)**

#### **5.5.4 Access to Services and Public Infrastructure**

The section provides a summary of PAHs' access to predominant services and public infrastructure, grouped per ward. Table 5-4 below represents a summary of PAHs' access to services and public infrastructure, grouped per ward<sup>105</sup>.

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<sup>104</sup> RAP Socio-economic survey, DWC / EACOP, 2018; SELI Team 3, Personal communication with affected ward and village leaders.

**Table 5-4: Summary of PAHs Access to Predominant Services and Public Infrastructure**

District	Ward	Lighting	Cooking	Water Source	Sanitation	Markets (No.)	Health Facilities	Schools
Iramba	Mgongo	70% Battery torches	96% Fuelwood	58% Rivers, dams and streams.	88% Pit latrines	2	1 Dispensary	4 Primary 1 Secondary
	Shelui	64% Battery torches	91% Fuelwood	59% Rivers, dams and streams.	91% Pit latrines	1	2 Dispensaries 1 Health center	7 Primary (1 private) 1 Secondary
	Mtoa	58% Solar panels	96% Fuelwood	70% Rivers, dams and streams.	96% Pit latrines	0	2 Dispensaries (1 private)	7 Primary 1 Secondary
	Ulemo	54% Battery torches	100% Fuelwood	55% Rivers, dams and streams.	100% Pit latrines	1	2 Dispensaries	6 Primary 1 Secondary
	Mkulu	46% Solar panels	94% Fuelwood	33% Government / donor water projects.	89% Pit latrines	0	1 Dispensary	3 Primary 1 Secondary
	Kyengege	55% Solar panels	96% Fuelwood	64% Rivers, dams and streams.	93% Pit latrines	0	1 Dispensary (private) 1 Health center	5 Primary 1 Secondary
	Maluga	52% Solar panels	100% Fuelwood	60% Government / donor water projects.	83% Pit latrines	1	1 Dispensary	3 Primary 1 Secondary
Mkalana	Tumuli	50% Battery torches	95% Fuelwood	49% Government / donor water projects.	92% Pit latrines	1	1 Dispensary	4 Primary 1 Secondary
Singida	Msisi	47% Battery torches	94% Fuelwood	56% Rivers, dams and streams.	87% Pit latrines	2	2 Dispensaries (1 private)	4 Primary 1 Secondary
	Ughandi	55% Solar panels	100% Fuelwood	81% Rivers, dams and streams.	97% Pit latrines	0	1 Dispensary	8 Primary 2 Secondary
	Ntonge	53% Solar panels	100% Fuelwood	50% Communal borehole / well.	97% Pit latrines	0	1 Dispensary	4 Primary 1 Secondary

District	Ward	Lighting	Cooking	Water Source	Sanitation	Markets (No.)	Health Facilities	Schools
	Ilongero	52% Solar panels	91% Fuelwood	51% Government / donor. water project.	97% Pit latrines	2	1 Dispensary 1 Health center	5 Primary 3 Secondary
	Mrama	52% Battery torches	98% Fuelwood	54% Communal borehole / well.	89% Pit latrines	0	0	4 Primary 1 Secondary
	Kinyagigi	54% Battery torches	99% Fuelwood	50% Rivers, dams and streams 50% Government / donor water project.	94% Pit latrines	0	1 Dispensary	4 Primary 1 Secondary
	Merya	59% Battery torches	100% Fuelwood	65% Communal borehole / well.	97% Pit latrines	0	2 Dispensaries (1 private)	3 Primary 1 Secondary
	Itaja	47% Battery torches 47% Solar panels	97% Fuelwood	68% Communal borehole / well.	92% Pit latrines	1	1 Dispensary	4 Primary (1 private) 1 Secondary
	Ngimu	Battery torches (55%)	99% Fuelwood	43% Communal borehole / well.	99% Pit latrines	1	1 Dispensary	4 Primary 1 Secondary

Although households in the Project-affected wards in general rely on kerosene for lighting, the majority of PAHs across the Project-affected wards predominantly relied on battery-operated torches or solar panels for lighting. Similar to other households in the Project-affected wards, PAHs used wood for cooking, whilst water is sourced from a variety of sources: largely from unimproved water sources in Iramba District (e.g. rivers, dams and streams) and some government / donor water projects, and improved water sources in Mkalama and Singida districts (e.g. communal boreholes / wells and government / donor water projects, although PAHs in some wards in Singida District rely on unimproved water sources). Most PAHs in all three districts make use of pit latrines.



**Figure 5-18: Construction of improved pit latrines underway in Mtoa Ward (Iramba District)**

Apart from Mrama that has no health facilities, all of the Project-affected wards have at least one (1) dispensary (these provide basic health services including preventative and curative work, maternity services, vaccinations, and mother-child services). PAHs in Shelui, Kyengege and Ilongero Wards also have health centers that provide the same services as a dispensary, but also have the capacity to admit patients for in-patient medical care.

All the Project-affected wards have several primary and secondary schools. Land associated with the Mseko Primary School (in Mgongo Ward, Iramba District) (2.88 acres) and the Milade Primary School (in the Tumuli Ward, Mkalama District) (1.45 acres) are affected by the pipeline.

PAHs in Iramba District have access to five (5) markets / auctions, Mkalama has one (1) market / auction and Singida District has six (6). PAHs access these markets / auctions as well as markets and auctions in neighboring wards and districts to buy and sell crops, livestock and livestock products, and other goods and services.



**Figure 5-19: Malendi Market and Auction in Mgongo Ward (Iramba District)**

## 5.6 Development Support

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 5-20 shows the percentage of PAHs per ward who identified various development support requirements as their top priorities<sup>106</sup>. The top priorities are discussed in more detail in the subsections following the graph. Where relevant, the information on development support requirements was used to guide the LRP to some extent (see Chapter 8).

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<sup>106</sup> The results reflect the total number of times a focus area was mentioned in a ward.

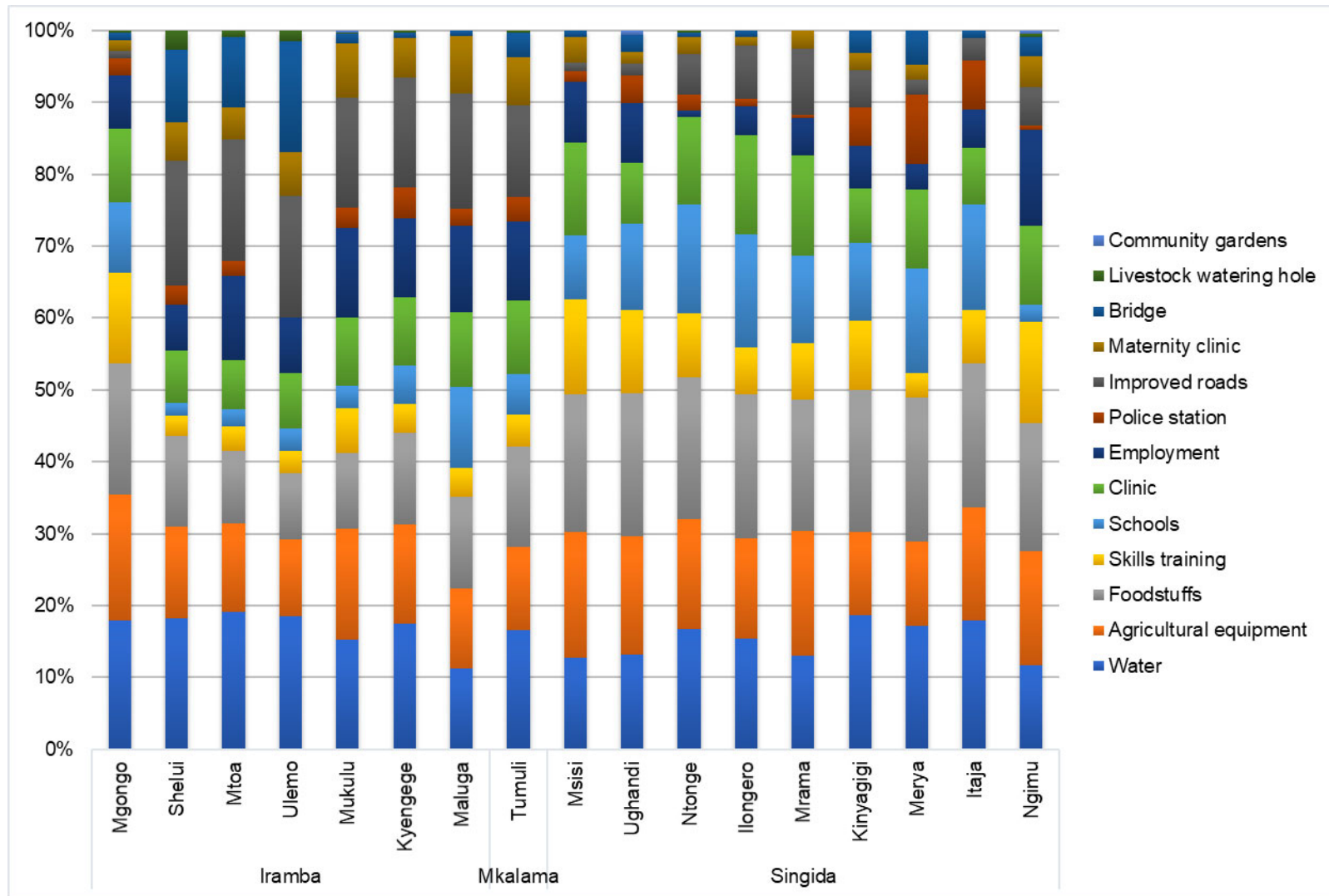


Figure 5-20: Overview of Development Requirements Identified by PAHs (grouped per ward) in the Singida Region

Current crop yields are affected by a lack of agricultural equipment. During the SELI, PAHs reported that the use of agricultural inputs like improved seeds, organic fertilizer, pesticides, and animal and mechanical traction are only used by PAHs who can access and afford these inputs and equipment. Further, the lack of crop storage facilities contributes to post-harvest losses and compels farmers to sell to intermediaries and buyers shortly after harvest, rather than being able to hold on to crops and sell when the market price is more favorable. Coupled with this is a need for education and training on sustainable agricultural practices given that traditional farming practices are becoming less viable due to the impacts of climate change on historic rainfall patterns. Improved seeds can increase crop yields<sup>107</sup> and provision of improved seeds to PAHs may significantly contribute to restoration and improvement of livelihoods.

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 as it provided easier access to markets.



**Figure 5-21: Example of poor road infrastructure in Mtoa Ward**

<sup>107</sup> SELI team 3, 2019, Personal communication with District Agricultural Officers.



**Figure 5-22: Absence of bridge at river crossing in Mtoa Ward**



**Figure 5-23: Charco dam constructed by TASAF beneficiaries in Itaja Ward (Singida District)**



## 5.7 Vulnerable Ethnic Groups

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 ethnic groups, which may include pastoralists and hunter / gatherer groups, who may be nomadic or semi nomadic, often have strong 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 studies<sup>108</sup>. 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 Singida Region

Data from the socio-economic surveys indicates there is only one (1) household in Singida Region who belongs to the Barabaig vulnerable ethnic group and who may self-identify as an indigenous person.

### 5.7.2 Vulnerable Ethnic Group PAH's Affected Land and Assets

The household is located in the Milade Village in the Mkalama District and owns one (1) land parcel. The project will compensate the PAH for 0.504 acres of land and two (2) economic trees. The land is held under customary tenure (unregistered) and is used for agriculture. The PAH is not physically displaced.

The household consists of seven (7) members (similar for other PAHs in the region) and is reliant on subsistence farming as primary livelihood activity (compared to 39% for other PAHs) and the sale of crops as secondary livelihood (compared to 33% for other PAHs). They have experienced cash and food shortages in the past year (as have 88% of other PAHs for food shortages and 95% for cash shortages). Two thirds of the household's adults are literate (67% compared to 80% of other PAHs).

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<sup>108</sup> 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 48<sup>th</sup> Session of the United Nations Committee on Economic Social and Cultural Rights.

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

## 5.8 Vulnerable Households

Based on socio-economic and demographic information obtained during the household surveys, vulnerable PAHs have been divided into three categories<sup>109</sup>, 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 are concerned but will qualify for livelihood support.

PAHs within categories one and two are regarded as potentially vulnerable households. This means 321 households are regarded as potentially vulnerable in the Singida Region (around 40% of all PAHs). The 258 PAHs in category 3 will be monitored and if warranted, moved to category 1 or 2.

A count of vulnerable PAHs per village is provided in Table 5-5 and discussed in more detail in Chapter 9.

**Table 5-5: Summary of Vulnerable Households in Singida Region**

District	Ward	Village	Vulnerable Households			Category 3 (at risk)
			Category 1	Category 2	Total	
Iramba	Mgongo	Mseko	21	11	32	8
		Kizonzo	3	2	5	2
	Shelui	Nkyala	2	3	5	3
	Mtoa	Kinkungu	3	12	15	4
		Tyeme	9	14	23	10
		Masagi	5	2	7	1
	Ulemo	Misigiri	0	10	10	3
	Mukulu	Simbalungwala	9	14	23	19
		Mukulu	0	2	2	7
	Kyengege	Makunda	5	9	14	11
	Maluga	Ng'Anguli	1	6	7	11

<sup>109</sup> See Chapter 9 for more information on the classification criteria used to identify and categorize vulnerable households.

District	Ward	Village	Vulnerable Households			Category 3 (at risk)
			Category 1	Category 2	Total	
<b>Subtotal: Iramba District</b>			<b>58</b>	<b>85</b>	<b>143</b>	<b>79</b>
Mkalama	Tumuli	Tumuli	3	11	14	13
		Milade	5	11	16	14
<b>Subtotal: Iramba District</b>			<b>8</b>	<b>22</b>	<b>30</b>	<b>27</b>
Singida	Msisi	Ntondo	1	11	12	6
	Msisi	Nkwae	3	7	10	7
	Msisi	Msisi	3	3	6	11
	Ughandi	Misinko	3	11	14	18
	Ughandi	Misinko Village PS-6	2	3	5	6
	Ntonge	Iguari	0	3	3	6
	Ntonge	Iguari Village PS-6	0	1	1	0
	Ntonge	Ifombou	0	4	4	13
	llongero	Madamigha	5	6	11	10
	llongero	llongero	5	5	10	4
	Mrama	Mrama	3	4	7	12
	Mrama	Idisimba	4	4	8	0
	Mrama	Makhandi	1	0	1	2
	Kinyagigi	Mitula	0	5	5	4
	Kinyagigi	Kinyagigi	4	13	17	11
	Merya	Kinyamwambo	2	3	5	7
	Itaja	Kinyamwenda	4	10	14	4
	Ngimu	Mwighanji	3	1	4	10
	Ngimu	Ngimu	0	4	4	10
	Ngimu	Pohama	0	7	7	11
<b>Subtotal: Singida District</b>			<b>43</b>	<b>105</b>	<b>148</b>	<b>152</b>
<b>Total</b>			<b>109</b>	<b>212</b>	<b>321</b>	<b>258</b>

Vulnerable households could experience the following impacts: :

- Food and cash shortages at 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 older children and relatives may make decisions on their behalf 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 have received; and
- Women and children are at risk of being left homeless if the head of the household absconds with the 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 the pipeline corridor will mostly be kept within a width of 30 m 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.

In areas categorized as Village Land prior to the Project - all 30m of the corridor will be (after end of relevant construction activities) 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 30m-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 within the 10m wide strip directly 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, and pedestrian and livestock crossings will be generally allowed, 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.

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. PS-6 is an AGI located in Singida Region. A total of 61.33 acres will be required for PS-6 and its associated access road. The land required for PS-6 will be permanently acquired and the site will be fenced.

After the end of the operation lease of the corridor and the AGIs the land will be returned to the government.

### **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 proposed management actions is reflected in Table 5-6.

**Table 5-6: Summary of Temporary Impacts**

Impact	Description	Management Actions
Loss of footpaths and tracks <sup>110</sup>	<p>The pipeline corridor within the <b>Iramba District</b> crosses 14 tracks and 17 cattle tracks with no associated reserves.</p> <p>The pipeline corridor within the <b>Mkalama District</b> crosses four (4) tracks, four (4) cattle tracks with no associated reserves.</p> <p>The pipeline corridor within the <b>Singida District</b> crosses 21 tracks, 80 cattle tracks, all with no associated reserves. In addition, the pipeline crosses two (2) underground water pipelines in the Ididsimba and Kinyagigi Villages. The pipeline reserve in Idisimba village is located completely within a cattle track.</p> <p>The land associated with these crossings is Village Land and valued in the Valuation reports for the Iramba, Mkalama and Singida Districts, respectively. This includes footpaths crossings within a PAPs' land holding, etc.</p> <p>Temporary disruption of footpaths and tracks could force people to take longer alternative routes, thus increasing travelling 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 source water. 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>	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.
Disruption of agricultural activities	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	To ensure that the agricultural production cycle is minimally disrupted, it is recommended that the Project implement the following management actions during construction:

<sup>110</sup> 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>replacement land and resume the cultivation of crops on the replacement land. Given that agricultural production is the primary livelihood activity for the PAHs in Singida 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>(Not all PAPs are eligible for replacement land – see Chapter 6).</p>	<ul style="list-style-type: none"> <li>• Pay PAH compensation as early as possible so that they have sufficient time to locate and purchase replacement land;</li> <li>• Allow as far as possible PAHs to harvest crops;</li> <li>• Assist PAHs to secure replacement land, where required;</li> <li>• Assist PAHs in clearing and preparing replacement land for agricultural production, where required;</li> <li>• Provide transitional food support.</li> </ul> <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 is expected to cease once the resettlement process is complete, prior to pipeline construction.</p>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Consider the findings of the EACOP Project-Induced In-Migration Situational Analysis of July 2019.</li> </ul>
Social impacts on PACs	<p>Some of the potential impacts on the PACs include:</p> <ul style="list-style-type: none"> <li>• Increased road safety risks to vehicles, pedestrians and livestock due to road use by Project vehicles;</li> <li>• Temporary worksite at PS-6 could cause an increase in noise and dust;</li> <li>• 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;</li> <li>• Increased incidence of sexually transmitted infections, including HIV, associated with the Project workforce and in-migration;</li> <li>• Potential tension and conflict between locals and the Project workforce and jobseekers over disregard for local social and religious norms, women, natural resources and loss of assets;</li> <li>• PACs' potential dissatisfaction with and anger toward the Project over unmet expectations associated with economic benefits, employment and procurement opportunities, as</li> </ul>	<ul style="list-style-type: none"> <li>• Impact and mitigation measures addressed in the ESIA and Project Provisional Human Rights Impact Assessment.</li> </ul>

Impact	Description	Management Actions
	<p>well as development benefits;</p> <ul style="list-style-type: none"> <li>• Safety of school children near open trenches at Mseko and Milande Primary Schools can be affected during construction.</li> <li>• Potential impacts on the human rights of affected stakeholders and particularly on vulnerable groups</li> </ul>	
Loss of access to natural resources	<p>The pipeline corridor could cause temporary restriction of access to community forests. The community utilize these 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. Community members may not be able to access forests 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 corridor area (i.e. 30 m corridor).</p>	<ul style="list-style-type: none"> <li>• 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 ((within any permit/legal restrictions).</li> <li>• 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.</li> <li>• Implement mitigation measures set out in ESIA.</li> <li>• Ensure that all contractors adhere to terms laid out in EACOP Contractor Management Plans.</li> </ul>



## 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 PAP / PAHs include:

- **Physical displacement** – the loss of residential structures will result in the physical displacement of some PAP / PAHs. The compensation options for PAP / PAHs that will be physically displaced are described in Chapter 6 and Chapter 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 PAP / PAHs that are economically displaced is described in Chapter 6 and Chapter 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 / or roads. These impacts are discussed in Chapter 6.

A summary of these impacts across all Project-affected wards is shown in Figure 5-24. 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 (No.)			Economic Trees and other trees (No.)	Graves
										Residential Dwellings	Other Structures	Incomplete Structures	Crops Acres	Intercropping Acre	Crops Stems		
Iramba	Mgongo	10.24	69	77.22	61	57	37	0	4	8	2	0	5.45	1.20	0	232	0
	Shelui	4.03	26	30.68	27	11	5	0	0	0	0	0	14.01	0.00	0	0	0
	Mtoa	14.06	111	113.21	109	100	45	0	1	2	1	1	25.52	0.66	0	61	0
	Ulemo	3.28	14	25.62	15	15	10	0	1	1	2	1	4.45	0.00	0	45	6
	Mukulu	9.48	92	71.07	94	87	25	0	4	7	12	0	20.61	0.00	7	51	19
	Kyengege	7.18	71	55.07	56	55	14	0	0	0	3	0	36.30	0.50	0	14	0
	Maluga	6.15	40	46.66	31	29	7	0	2	4	4	0	19.66	0.00	0	128	3
Mkalama	Tumulii	13.52	132	104.91	121	106	30	1	2	2	5	0	57.31	2.34	41	210	2
Singida	Msisi	11.95	129	89.78	124	116	28	0	0	0	0	2	21.89	9.74	48	225	18
	Ughandi	9.01	80	56.06	59	58	14	0	1	2	1	1	16.60	4.97	663	204	9
	Ughandi PS-6	-	21	58.23	19	17	5	0	2	2	0	0	18.39	0.00	223	96	24
	Ntonge	6.10	100	43.86	73	70	7	0	0	0	2	2	15.67	1.75	274	135	9
	Ntonge PS-6	-	2	3.10	4	2	1	0	0	0	0	1	2.30	0.00	0	0	0
	Ilongero	4.10	84	31.31	70	66	21	0	0	0	0	1	11.39	4.52	818	560	0
	Mrama	4.27	72	31.50	52	46	16	0	1	1	1	1	8.00	6.44	1582	2652	63
	Kinyagigi	5.99	119	44.83	96	89	22	0	4	5	5	0	24.99	4.52	1237	5297	39
	Merya	3.45	39	26.55	34	31	5	0	0	0	1	0	9.34	1.11	125	78	9
	Itaja	4.06	59	35.24	53	38	14	0	2	2	3	1	10.02	0.20	1201	471	4
Naimu	23.92	168	186.53	133	124	15	0	1	2	4	4	36.71	1.26	3198	8893	19	
<b>TOTAL : SINGIDA REGION</b>		<b>140.79</b>	<b>1 428</b>	<b>1 131.45</b>	<b>1 231</b>	<b>1 117</b>	<b>321</b>	<b>1</b>	<b>25</b>	<b>38</b>	<b>46</b>	<b>15</b>	<b>358.60</b>	<b>39.21</b>	<b>9 417</b>	<b>19 352</b>	<b>224</b>

Figure 5-24: Summary of Displacement Impacts per Project-affected Ward in Singida Region<sup>111</sup>

<sup>111</sup> Footnotes for Table 5-1 applicable to this table.

A summary of the permanent impacts on PAHs and proposed management actions are presented in Table 5-7 below.

**Table 5-7: Summary of Permanent Impacts**

Impact	Description	Management Actions
Loss of land	<p>The pipeline traverses Singida Region over 140.79 km, affecting 1,429 land parcels. Of these, 23 land parcels are located at PS-6.</p> <p>A total of 1,131.45 acres of land (61.33 acres at PS-6) has been valued as is directly affected by the Project of which 358.60 acres (20.69 acres at PS-6) is crop land and 39.21 acres of intercropping. A total of 71.86 acres at the Mgori Forest Reserve will be directly affected by the project.</p> <p>The pipeline corridor will be permanently acquired. Access for grazing and pedestrians will be allowed across the pipeline corridor. Existing infrastructure crossings will be retained as will access for local crossings (e.g. community tracks etc.) where appropriate.</p>	See Chapter 6 for compensation measures.
Loss of structures (residential and non-residential)	<p>Twenty-five (25) PAPs will lose their dwellings, of which two (2) are located at PS-6.</p> <p>Of the structures impacted, 38 are residential structures (two at PS-6), 46 non-residential structures (none at PS-6) and 15 incomplete structures (one at PS-6).</p>	See Chapter 6 for compensation measures.
Loss of crop stems and economic trees	<p>A total of 9,417 crop stems (223 at PS-6) and 19,352 economic and other trees (96 at PS-6) will be directly affected due to the land acquisition for the Project. Of these, 5,902 economic trees at Mgori Forest Reserve will be lost to the project.</p>	See Chapter 6 for compensation measures.
Disturbance of graves	<p>A total of 224 graves will have to be relocated to areas outside the pipeline corridor and associated installations. Of these, 24 are located at PS-6, all within the Msinko Village of the Ughandi Ward (Singida District).</p>	See Chapter 6 for grave relocation procedures.

## 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 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 Singida 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.;
- Small scale miners with mining licenses<sup>112</sup>;
- 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 manufacture, furniture manufacture, 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 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 Singida Region, the cut-off dates<sup>113</sup> were determined by the commencement of the asset valuation surveys as prescribed under the Valuation and Valuers Registration Act 2016.

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<sup>112</sup>Artisanal mining was recorded as a primary livelihood activity in three (3) PAHs in the Iramba District, however, the Project is not anticipated to directly impact these activities within the Singida District.

<sup>113</sup> 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 Tanzanian 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 Iramba, Mkalama and Singida districts was 2<sup>nd</sup> August, 26<sup>th</sup> July and 8<sup>th</sup> 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 Singida Region<sup>114</sup>. The numbering of eligibility categories outlined in the RPF was retained for continuity purposes.

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<sup>114</sup> 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 – Singida Region (Pipeline &amp; AGIs)

Impact	Effect	Entitled Persons	Entitlement		
			In-kind and / or cash compensation	Livelihood Restoration <sup>115116</sup>	
<b>Land</b>					
<b>A1</b>	Loss of Land with dwelling – entire plot acquired (because it falls wholly <sup>117</sup> 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><b>In-kind Option 1:</b></p> <ul style="list-style-type: none"> <li>Replacement land of equivalent size to land lost (provided land is available in the ward), with security of tenure as per IFC PS5;</li> <li>Payment of all transaction costs<sup>118</sup>;</li> <li>Disturbance allowance;<sup>119</sup> and</li> <li>Other allowances as applicable.</li> </ul> <p><b>In-kind Option 2:</b></p> <ul style="list-style-type: none"> <li>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);</li> <li>Cash compensation for land affected and not replaced (if entitled);</li> <li>Project support to find replacement land;</li> <li>Disturbance allowance; and</li> <li>Other allowances as applicable.</li> </ul> <p>OR</p> <p><b>Cash Option:</b></p>	<p><b>G1</b></p> <ul style="list-style-type: none"> <li>Land and non-land-based group level livelihood restoration programs; and</li> <li>Individual level livelihood restoration program.</li> </ul> <p>Where replacement agricultural land is not available in the ward an additional alternative livelihoods program will be offered to the PAP.</p>
<b>A2</b>	Loss of land with dwelling – only part of plot acquired (with remaining portion viable for economic use).				

<sup>115</sup> See Table 6-6 for further information.

<sup>116</sup> Livelihood restoration entitlements are linked to PAPs and will have a cumulative value for PAPs with multiple affected land and / or assets.

<sup>117</sup> 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.

<sup>118</sup> For transaction or registration costs real figures will be established from the local authorities.

<sup>119</sup> See Section 6.4.1.5.

Impact		Effect	Entitled Persons	Entitlement	
				In-kind and / or cash compensation	Livelihood Restoration <sup>115116</sup>
				<ul style="list-style-type: none"> <li>• Compensation (if entitled) for permanently lost land at market rates as defined by the Registered Valuer plus 10% for transaction costs;<sup>120 121</sup> and</li> <li>• Allowances as above.</li> </ul>	
<b>A3 &amp; A4</b>	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.	Acquisition (permanent loss).	Legal holder of land Customary holder of land (PAP loses <AE OR >AFS) <sup>123</sup> .	<ul style="list-style-type: none"> <li>• Compensation (if entitled) for permanently lost land at market rates as defined by the Registered Valuer plus 10% for transaction costs.</li> </ul>	<p><b>G4</b></p> <ul style="list-style-type: none"> <li>• Group level land-based and non-land-based livelihood restoration program(s).</li> </ul> <p>Should the PAP be deemed vulnerable, additional entitlement will include:</p> <p><b>G2</b></p> <ul style="list-style-type: none"> <li>• Individual level livelihood restoration program(s) (as appropriate to vulnerability factors of PAP).</li> </ul>
	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 <sup>122</sup> or where the prior use of the land can continue post-construction).		Legal holder of land. Customary holder of land. (PAP will lose >AE BUT <AFS) and <b>PAP not vulnerable.</b>	<ul style="list-style-type: none"> <li>• Cash compensation (if entitled) for permanently lost land at market rates as defined by the Registered Valuer plus 10% for transaction costs; and</li> <li>• Assistance in formalizing appropriate tenure to alternative land within in the ward (where requested and land being self-identified by PAP).</li> </ul>	<p><b>G4</b></p> <ul style="list-style-type: none"> <li>• Group level land-based and non-land-based livelihood restoration program(s).</li> </ul>

<sup>120</sup> 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.

<sup>121</sup> 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.

<sup>122</sup> Assumes Project Livelihood Restoration Program in place.

<sup>123</sup> 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. 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 6.4.2.9 for additional detail)

Impact	Effect	Entitled Persons	Entitlement	
			In-kind and / or cash compensation	Livelihood Restoration <sup>115116</sup>
		Legal holder of land. Customary holder of land. (PAP will lose >AE BUT <AFS) and <b>PAP is vulnerable.</b>	<p><b>In-kind Option:</b></p> <ul style="list-style-type: none"> <li>Replacement land of equivalent size to land lost (provided land is available in the ward), with security of tenure as per IFC PS5;</li> <li>Payment of all transaction costs<sup>124</sup>;</li> <li>Disturbance allowance;<sup>125</sup> and</li> <li>Other allowances as applicable.</li> </ul> <p>OR</p> <p><b>Cash Option:</b></p> <ul style="list-style-type: none"> <li>Compensation (if entitled) for permanently lost land at market rates as defined by the Registered Valuer plus 10% for transaction costs;<sup>126 127</sup> and</li> <li>Allowances as above.</li> </ul>	<p><b>G3</b></p> <ul style="list-style-type: none"> <li>Group level land-based and non-land-based livelihood restoration program(s); and</li> <li>Individual level livelihood restoration program(s) (as appropriate to vulnerability factors of PAP).</li> </ul> <p>Where replacement agricultural land is not available in the ward an additional alternative livelihoods program will be offered to the PAP.</p>

<sup>124</sup> For transaction or registration costs real figures will be established from the local authorities.

<sup>125</sup> See Section 6.4.1.

<sup>126</sup> 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.

<sup>127</sup> 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.

Impact		Effect	Entitled Persons	Entitlement	
				In-kind and / or cash compensation	Livelihood Restoration <sup>115116</sup>
<b>A5</b>	Permanent loss of agricultural (crop) land.	Acquisition (permanent loss).	Acknowledged users but not owners (incl. tenants by occupancy) <sup>128</sup> . Persons with informal occupancy <sup>129</sup> .	<ul style="list-style-type: none"> <li>No land entitlement.</li> </ul>	<b>G5<sup>130</sup></b> <ul style="list-style-type: none"> <li>Non-land-based group level livelihood restoration (i.e. Money Management and Entrepreneurial Training); and</li> <li>Where tenant PAPs have lost &gt;AE and have self-identified and secured / have access to alternative land to farm they may be offered access to group level livelihood program.</li> </ul>
<b>A6</b>	Permanent loss of grazing land.	Acquisition (permanent loss).	Legal holder of land. Customary holder of land.	<ul style="list-style-type: none"> <li>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.</li> </ul>	<b>G4</b> <ul style="list-style-type: none"> <li>Group level land-based and non-land-based livelihood restoration program(s).</li> </ul>
<b>A7</b>	Permanent loss of bare farmland / vacant land. <sup>131</sup>	Acquisition (permanent loss).	Legal holder of land Customary holder of land.	<ul style="list-style-type: none"> <li>Cash compensation for the farmland / vacant land at market value plus 10% for transaction costs.</li> </ul>	
<b>Loss of Residence by Owner<sup>132</sup></b>					
<b>B1</b>	Loss of primary residence and associated secondary dwellings for wives or family members (subject to criteria) – houses	Permanent loss of full structures or if partial where remainder unable to be	Structure owner and occupier irrespective of legal right of occupation including	<b>In-kind Option:</b> <ul style="list-style-type: none"> <li>Structure owners will receive replacement housing (and certain ancillary domestic structures) with standard house design<sup>134</sup>. The design will comply with Tanzanian</li> </ul>	<b>G1</b> <ul style="list-style-type: none"> <li>Land and non-land-based group level livelihood restoration programs; and</li> <li>Individual level livelihood restoration program.</li> </ul>

<sup>128</sup> 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.

<sup>129</sup> Informal occupiers have a presence on the property that is deemed to be permanent or semi-permanent and that precludes other competing interests.

<sup>130</sup> Tenants whose total compensation is less than T.Shs. 100,000 will not be eligible for livelihoods restoration program support.

<sup>131</sup> 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.

<sup>132</sup> 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.

Impact		Effect	Entitled Persons	Entitlement	
				In-kind and / or cash compensation	Livelihood Restoration <sup>115116</sup>
	must be occupied and in regular use and complete at time of valuation survey <sup>133</sup> .	occupied.	"Certificate of Occupancy".	<p>regulations and standards, and be of an equivalent or adequate standard than the existing houses and comply with all relevant building and planning standards;</p> <ul style="list-style-type: none"> <li>• Transaction Costs;</li> <li>• Cost of transportation for the removal of household goods and reusable and transportable construction materials to replacement location;</li> <li>• Disturbance Allowance; and</li> <li>• Other allowances as applicable.</li> </ul> <p><b>OR Cash Option:</b></p> <ul style="list-style-type: none"> <li>• Replacement cost for structure in entirety;</li> <li>• Where applicable, mortgage is deducted from pay out and paid to lending institution;</li> <li>• Disturbance Allowance; and</li> <li>• Other allowances as applicable.</li> </ul>	
<b>B3</b>	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	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"> <li>• Replacement cost for entire structure, if no longer viable;</li> <li>• Incomplete structures to be valued at Replacement Cost considering the level of completion of the structures;</li> <li>• Disturbance Allowance; and</li> <li>• Cost of transportation for the removal of household goods and reusable and transportable construction materials to replacement location.</li> </ul>	N/A

<sup>134</sup> Each replacement house will be provided with a standard single ventilated improved pit (VIP) latrine and a covered kitchen shelter.

<sup>133</sup> Secondary residential structures and ancillary immovable homestead structures will be assessed based on functional, locational and cultural factors – refer Chapter 7 for full definition and context.

Impact		Effect	Entitled Persons	Entitlement	
				In-kind and / or cash compensation	Livelihood Restoration <sup>115116</sup>
	incomplete structures				
<b>B4</b>	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"> <li>• Replacement cost for facility / structure;</li> <li>• Disturbance allowance; and</li> <li>• Other allowances as applicable.</li> </ul> <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"> <li>• A standard single VIP latrine (with privacy wall at entrance) per replacement house structure; or</li> <li>• One (1) combined VIP latrine / ablution structure, per homestead.</li> </ul>	N/A.
<b>Loss of resources providing income in cash or in kind</b>					
<b>G1</b>	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"> <li>• Community level access would be maintained.</li> <li>• 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).</li> </ul>	N/A

Loss of Communal or Institutionally owned structures or land					
<b>H1</b>	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:  <b>Cash Compensation</b><sup>135</sup>OR <b>Cash Option:</b></p> <ul style="list-style-type: none"> <li>• Replacement cost for land and structures;</li> <li>• Disturbance Allowance; and</li> <li>• Other allowances as applicable.</li> </ul> <p><b>Temporary loss of access:</b></p> <ul style="list-style-type: none"> <li>• Project assistance to maintain access on a case by case basis.</li> </ul>	None.
<b>H2</b>	Government developed and owned structures and / or land.	Permanent Loss.	Government as owner.	<p><b>In-kind Option:</b></p> <ul style="list-style-type: none"> <li>• Replacement of structures in consultation with relevant Government Authority<sup>136</sup>.</li> </ul> <p>OR <b>Cash Option:</b></p> <ul style="list-style-type: none"> <li>• Compensation on a case by case basis as per agreement with government.</li> </ul>	None.
<b>H4</b>	Land used for communal purposes; particularly pastoral land used for collective grazing.	Permanent Loss.	Communal owner.	<ul style="list-style-type: none"> <li>• 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);</li> <li>• Allowances as applicable; and</li> <li>• Corridor not fenced.</li> </ul>	None.
<b>H5</b>	Land used for communal purposes; particularly pastoral land used for	Temporary loss of access.	Communal owner.	<ul style="list-style-type: none"> <li>• Project assistance in maintaining some access or alternative arrangements during the construction period; and</li> </ul>	None.

<sup>135</sup> 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.

<sup>136</sup> For Iramba and Mkalama two pieces of land are affected and are owned by the Mseko and Milade primary schools. In addition, one piece of land owned by the Songela Water Users Cooperative Society Ltd. is impacted. Following review these will in this instance be offered cash compensation. Further consultation will be undertaken during entitlement briefings with the affected institutions.

	collective grazing.			<ul style="list-style-type: none"> <li>Corridor not fenced.</li> </ul>	
<b>H6</b>	Roads, pathways, drainage, and electricity mains.	Permanent loss of infrastructure.	District and local government, communities, or utility company.	<ul style="list-style-type: none"> <li>Project will have crossing agreements for the pipeline corridor with relevant authorities for roads, electricity and other such infrastructure;</li> <li>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;</li> <li>Any diversion of services and infrastructure in conformity with national standards; and</li> <li>Rerouting of community pathways around Project infrastructure based on assessment of loss of access.</li> </ul>	None.
<b>Trees and Crops</b>					
<b>I1 &amp; I2</b>	Loss of crops – seasonal and perennial.	Permanent loss or restriction of access.	Owner of Crops or Trees of Economic Value.	<ul style="list-style-type: none"> <li>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 trees of economic value adjusted to reflect the market value for the year of valuation (i.e. 2018).</li> <li>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).</li> </ul>	For landholders and physically displaced PAPs Livelihood Restoration program as described above under A to F.
<b>I3</b>	Loss of crops – seasonal and perennial.	Permanent loss or restriction of access.	Tenant farmer.		For Tenants who lose crops & trees where there is no loss of land or dwellings: Should the value of compensation be T.Shs. 100,000 or more, the following will apply:
<b>I4 &amp; I5</b>	Loss of fruit trees of economic value including fruit and timber trees.	Permanent loss or restriction of access.	Tree owner. Tree user / Tenant owner.		<b>G6</b> <ul style="list-style-type: none"> <li>Non-land-based or non-crop-based livelihood restoration programs (i.e. Money Management and Entrepreneurial Training, livestock program, beekeeping program); and</li> <li>Livelihood program will be commensurate to assets lost.</li> </ul>
<b>I6</b>	Loss of fruit or timber trees.	Permanent loss or restriction of access.	Communal / Village ownership.		For Tenant PAP who lose >AE of crops and / or trees, (but are not compensated for land):



					<p><b>G5</b></p> <ul style="list-style-type: none"> <li>Land-based and non-land-based group level livelihood restoration programs (i.e. Money Management and Entrepreneurial Training).</li> </ul> <p>Group Level livelihood program – where tenant PAPs have lost &gt;AE and secured / have access to alternative land to farm.</p>
<b>I7</b>	Loss of agricultural assets.	Permanent loss of access.	Informal owner of all categories of crops and trees.	<ul style="list-style-type: none"> <li>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.</li> </ul>	
<b>Cultural Assets</b>					
<b>J2</b>	Graves.	Permanent.	Individuals or groups laying claim to grave.	<ul style="list-style-type: none"> <li>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</li> <li>Compensation limited to the reasonable expenses incurred in the removal, transportation, reinstatement and re-interment of the grave and any placatory or expiatory rites or other ceremony<sup>137</sup>.</li> </ul>	N/A.

<sup>137</sup> Refer to Section 6.4.1.9

Vulnerable Individuals and Groups					
<b>K1</b>	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 6.4.2.7.	<ul style="list-style-type: none"> <li>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;</li> <li>Legal assistance, financial assistance and practical assistance as determined applicable on a case by case basis.</li> </ul>	<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) and (as appropriate)</p> <p>Individual level livelihood restoration program(s).</p>
Financial Transition					
<b>L1</b>	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"> <li>Assistance with the opening of bank accounts<sup>138</sup>.</li> </ul>	Money management training will be provided (which will be relative to cash compensation amount);

<sup>138</sup> 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 Singida. 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, 2018) to the CV of the Government for endorsement outlining the results of the research including the rates established for the Project in Singida. This is an important milestone required by the regulations to ensure Project Affected Persons (PAPs) are paid compensation at current replacement cost.
- **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 Requirements.** This report covers entitlements 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 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 exercise<sup>139</sup> to calculate the value of the land parcels and unexhausted improvements / assets that are affected by the pipeline corridor within the Singida Region and specifically Iramba, Mkalama and Singida District.

This valuation process considered:

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<sup>139</sup> 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.

- Rates issued by the CV<sup>140</sup>;
- 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:

- Land<sup>141</sup>; and
- Crop and economic trees<sup>142</sup>.

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 11<sup>th</sup> 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 16<sup>th</sup> May and 20<sup>th</sup> 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;

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<sup>140</sup> The base rates for land are indicative, however, the rates for crops and trees and additional approved rates relevant to the Project are prescriptive.

<sup>141</sup> 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.

<sup>142</sup> 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 Iramba, Mkalama and Singida Districts to confirm the established rates and consult with the DV who validated the established rates. WK subsequently compiled the Singida rates which were submitted and approved by the CV.

### **Land<sup>143</sup>**

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 Project<sup>144</sup>. 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 AGI<sup>145</sup> components of the Project, in the Iramba, Mkalama and Singida District.

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 Iramba, Mkalama and Singida districts. The land rates submitted to the CV for the wards in Iramba, Mkalama and Singida districts are presented in Table 6-2.

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<sup>143</sup> 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.

<sup>144</sup> 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.

<sup>145</sup> One AGI, Pump Station 6 (PS-6) is located in Singida District.

**Table 6-2: Land Rates for Relevant Wards in Iramba, Mkalama and Singida District<sup>146</sup>**

Region	District	Ward	Rate per m <sup>2</sup> for Building Plots (T.Shs.)	Rate per Acre for Agricultural Land (T.Shs.)
SINGIDA	Iramba	1. Mgongo	N / A	500 000
		2. Shelui	N / A	500 000
		3. Mtoa	N / A	500 000
		4. Ulemo	N / A	500 000
		5. Mukulu	N / A	500 000
		6. Kyengege	N / A	500 000
		7. Maluga	N / A	500 000
	Mkalama	1. Tumuli	N / A	500 000
	Singida	1. Msisi	N / A	500 000
		2. Ughandi	N / A	400 000
		3. Ntonge	N / A	500 000
		4. Ilongero	N / A	800 000
		5. Mrama	N / A	500 000
		6. Kinyagigi	N / A	600 000
		7. Merya	N / A	600 000
		8. Itaja	N / A	550 000
9. Ngimu		N / A	450 000	

### 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

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

<sup>146</sup> Land rates in accordance with the Market Survey for Compensation Rates Report – (December 2018). This was submitted for approval to the CV in December 2018 by WK.

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: Summary of Rates submitted to the chief valuer for approval (December 2018) 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: Summary of Rates approved by the CV (May 2019).

### **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 Northern Zone Crop Rates, 2012 for Mkalama and the Lake Zone Crop Rates, 2012 for Iramba and Singida District, both issued by the CV.

Previously "Unlisted" crops and trees (i.e. those not on the Northern Zone Crop Rates and 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, 2018<sup>147</sup>.

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 2018<sup>148</sup>.

The Northern Zone Crop Rates and Lake Zone Crop Rates, 2012 and the subsequently approved rates are presented in Appendix B: Summary of Rates approved by the CV for approval (May 2019).

### **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% (seven percent) 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

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<sup>147</sup> Letter Reference No: BA.391/466/01/58 of 15<sup>th</sup> August 2018

<sup>148</sup> 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.



MLHHS. 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 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: Summary of Rates approved by the CV (May 2019).

### **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 valuation<sup>149</sup>.

### **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 Iramba, Mkalama and Singida districts, 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

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<sup>149</sup> Regulation 12(2) of the Valuation and Valuers (General) Regulations, 2018.

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 Council**

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 Valuation Reports 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 land<sup>150</sup>;
- Inflation rate of 45% for crops and trees valued using the 2012 crops rates<sup>151</sup> schedule;
- Disturbance allowance of seven percent (7%) to all relevant additional entitlement's compensable items<sup>152</sup>;
- Orphaned land;

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<sup>150</sup> 10% Transactions cost is applied to the value of the land as determined under Tanzanian law.

<sup>151</sup> The 2012 list of Crops Rates are provided by the Government of Tanzania.

<sup>152</sup> The seven percent (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.

- Assets (i.e. crops and trees) contained within the road reserve or powerlines wayleaves (proven not speculative and where they meet the eligibility criteria presented below);
- Livelihood restoration entitlements;
- 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.

### 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.

**Table 6-3: Land Rates & Transaction Costs for Relevant Wards in Iramba, Mkalama and Singida Districts**

Region	District	Ward	Rate per M <sup>2</sup> for Building Plots (T.Shs.)	Rate per Acre for Agricultural Land (T.Shs.)	10% Transaction Cost (T.Shs.)	Rate per Acre for Agricultural Land plus Transaction Cost (T.Shs.) <sup>153</sup>
Singida	Iramba	1. Mgongo	N/A	500 000	50 000	550 000
		2. Shelui	N/A	500 000	50 000	550 000
		3. Mtoa	N/A	500 000	50 000	550 000
		4. Ulemo	N/A	500 000	50 000	550 000
		5. Mukulu	N/A	500 000	50 000	550 000
		6. Kyengege	N/A	500 000	50 000	550 000
		7. Maluga	N/A	500 000	50 000	550 000
	Mkalama	1. Tumuli	N/A	500 000	50 000	550 000
	Singida	1. Msisi	N/A	500 000	50 000	550 000
		2. Ughandi	N/A	400 000	40 000	440 000

<sup>153</sup> The amount represents the Market Value of the land plus 10% transaction cost.

Region	District	Ward	Rate per M <sup>2</sup> for Building Plots (T.Shs.)	Rate per Acre for Agricultural Land (T.Shs.)	10% Transaction Cost (T.Shs.)	Rate per Acre for Agricultural Land plus Transaction Cost (T.Shs.) <sup>153</sup>
		3. Ntonge	N/A	500 000	50 000	550 000
		4. Ilongero	N/A	800 000	80 000	880 000
		5. Mrama	N/A	500 000	50 000	550 000
		6. Kinyagigi	N/A	600 000	60 000	660 000
		7. Merya	N/A	600 000	60 000	660 000
		8. Itaja	N/A	550 000	55 000	605 000
		9. Ngimu	N/A	450 000	45 000	495 000

### Inflation Adjustment for 2012 Crop / Tree Rates

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%. This inflation adjustment is applied in the IFS Compensation Schedules.

**Table 6-4: Inflation Rates (2013-2018)<sup>154</sup>**

Year	Annual Inflation Rate (%)
2013	12.00
2014	5.75
2015	4.75
2016	6.25
2017	6.50
January - October 2018	3.6
<b>Compounded Inflation (2013-2018)</b>	<b>45.44</b>

<sup>154</sup> 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%.

## Disturbance Allowance

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 seven percent (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 boundaries<sup>155</sup> 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 PAP 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.<sup>156</sup>

## Pipeline Crossings

The pipeline corridor within Iramba, Mkalama and Singida District will cross a total of 20 roads with associated reserves as well as nine (9) powerlines with wayleaves and a railway line with associated reserves. 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 the 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:

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<sup>155</sup> 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.

<sup>156</sup> 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.

- 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 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 PAPs' 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 reserves<sup>157</sup>, 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 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 are 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

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<sup>157</sup> 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).

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. 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 below.

**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 Centre 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

### 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 <sup>158</sup>	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"> <li>Land and Non-land-based group level livelihood restoration programs; and</li> <li>Individual level livelihood restoration program.</li> </ul>
G2	1a	PAP will permanently lose access to his / her land and is identified as vulnerable.	<ul style="list-style-type: none"> <li>Group level land-based and non-land-based livelihood restoration program(s); and</li> <li>Individual level livelihood restoration program(s) (as appropriate to vulnerability factors of PAP).</li> </ul>

<sup>158</sup>

See section below on replacement land.

G3	2a	PAP loses >Acre Equivalent (AE) (more than an acre equivalent of land) but < Average Farm Size (AFS) (less than the average farm size) for the District and is identified as vulnerable <sup>159 160</sup> .	<ul style="list-style-type: none"> <li>Group level land-based and non-land-based livelihood restoration program(s); and</li> <li>Individual level livelihood restoration program(s) (as appropriate to vulnerability factors of PAP).</li> </ul>
G4	1 and 2	PAP will permanently lose access to his / her land in part or whole.	<ul style="list-style-type: none"> <li>Group level land-based and non-land-based livelihood restoration program(s).</li> </ul>
G5	2b	Tenant PAP will lose >AE of crops and / or trees, but not compensated for land.	<ul style="list-style-type: none"> <li>Land-based and non-land-based group level livelihood restoration programs (i.e. Money Management and Entrepreneurial Training);</li> <li>Group Level livelihood program – where tenant PAPs have lost &gt;AE and secured / have access to alternative land to farm.</li> </ul>
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"> <li>Non-land-based or non-crop based livelihood restoration programs (i.e. Money Management and Entrepreneurial Training, livestock program, beekeeping program); and</li> <li>Livelihood restorations program will be commensurate to assets lost.</li> </ul>
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 <sup>161</sup> 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:

<sup>159</sup> 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.

<sup>160</sup> The Acre Equivalent (AE) and Average Farm Size (AFS) for Iramba, Mkalama and Singida Districts are as follows: Iramba: AE = 0.86 acres and AFS = 5.93 acres; Mkalama :AE = 1.01 acres and AFS = 4.94 acres; and Singida: AE = 0.86 acres and AFS = 4.94 acres.

<sup>161</sup> 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.



- Age of household head (including child-headed households);
- Gender of household head;
- Education level of household head;
- Household caring for one or more disabled persons<sup>162</sup>;
- 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.

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<sup>162</sup> 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.

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.

### Replacement Land<sup>163</sup>

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 Program<sup>164</sup> was determined. This has been termed a District Acre Equivalent Coefficient (DAEC) or Acre Equivalent (AE)<sup>165</sup>.

The criteria detailed in Table 6-7 were then applied to determine eligibility for being offered the option of cash compensation or replacement agricultural land<sup>166</sup>.

The Acre Equivalent (AE) and Average Farm Size (AFS) for Iramba, Mkalama and Singida District are as follows:

- Iramba: AE = 0.86 acres and AFS = 5.93 acres;
- Mkalama: AE = 1.01 acres and AFS = 4.94 acres; and
- Singida: AE = 0.86 acres and AFS = 4.94 acres.

**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"> <li>• 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</li> <li>• Where PAP selects replacement house they will be provided with as a minimum a Residential Plot only.</li> </ul>	<ul style="list-style-type: none"> <li>• Land and Non-land-based group level livelihood restoration programs; and</li> <li>• Individual level livelihood restoration program (G1).</li> </ul>

<sup>163</sup> 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..

<sup>164</sup> World Food Program, 2012. Comprehensive Food Security and Vulnerability Analysis. Tanzania

<sup>165</sup> For additional information, refer to the Technical Note: Eligibility Criteria for the EACOP Pipeline, February 2019

<sup>166</sup> 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 <sup>167</sup> OR >AFS <sup>168</sup> (average farm size).	<ul style="list-style-type: none"> <li>• Cash compensation for the land.</li> </ul>	<ul style="list-style-type: none"> <li>• Group level land-based and non-land-based livelihood restoration program(s) (G4).</li> </ul>
1a	PAP will lose <AE and is identified as vulnerable.	<ul style="list-style-type: none"> <li>• Cash compensation for the land.</li> </ul>	<ul style="list-style-type: none"> <li>• Group level land-based and non-land-based livelihood restoration program(s); and</li> <li>• Individual level livelihood restoration program(s) (as appropriate to vulnerability factors of PAP) (G2).</li> </ul>
2	PAP will lose >AE BUT <AFS	<ul style="list-style-type: none"> <li>• Cash compensation for the land; and</li> <li>• Assistance in formalizing appropriate tenure to alternative land within in the ward (where requested and land being self-identified by PAP).</li> </ul>	<ul style="list-style-type: none"> <li>• Group level land-based and non-land-based livelihood restoration program(s) (G4).</li> </ul>
2a	PAP will lose >AE BUT <AFS and is identified as vulnerable	<ul style="list-style-type: none"> <li>• 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).</li> </ul>	<ul style="list-style-type: none"> <li>• A group level livelihood program; or</li> <li>• An individual level livelihood program (G3).</li> </ul>
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"> <li>• No land entitlement.</li> </ul>	<ul style="list-style-type: none"> <li>• Non-land-based group level livelihood restoration (i.e. Money Management and Entrepreneurial Training); and</li> <li>• Group Level livelihood program – where tenant PAPs have lost &gt;AE and have self-identified and secured / have access to alternative land to farm (G5).</li> </ul>
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"> <li>• No land entitlement.</li> </ul>	<ul style="list-style-type: none"> <li>• Non-land-based or non-crop-based livelihood restoration programs (i.e. Money Management and Entrepreneurial Training, livestock program, beekeeping program); and</li> <li>• Livelihood program will be commensurate to assets lost (G6).</li> </ul>
3a	PAP will lose crops, trees or other assets, but not land or	<ul style="list-style-type: none"> <li>• No land entitlement.</li> </ul>	<ul style="list-style-type: none"> <li>• Not eligible for livelihood restoration programs (G7).</li> </ul>

<sup>167</sup> 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.

<sup>168</sup> AFS – Average Farm Size for the district.

Replacement Land Eligibility Category	Criteria	Replacement Land Entitlements	Livelihood Restoration Support Entitlements
	residential dwellings and total 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 m<sup>2</sup> (Type A). All units less than or equal to 25 m<sup>2</sup>, 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 m<sup>2</sup>, the PAP would be offered for these two houses one replacement Type A house and cash compensation for the smallest house;
- Type B (33 m<sup>2</sup>) will replace all residential dwellings greater than 25 m<sup>2</sup> but less than or equal to 33 m<sup>2</sup>;
- Type C (39 m<sup>2</sup>) will replace all residential dwellings greater than 33 m<sup>2</sup> but less than or equal to 39 m<sup>2</sup>;
- Type D (47 m<sup>2</sup>) will replace all residential dwellings greater than 39 m<sup>2</sup> but less than or equal to 47 m<sup>2</sup>;
- Type E (58 m<sup>2</sup>) will replace all residential dwellings greater than 47 m<sup>2</sup> but less than or equal to 58 m<sup>2</sup>;
- Type F (75 m<sup>2</sup>) will replace all residential dwellings greater than 58 m<sup>2</sup> but less than or equal to 75 m<sup>2</sup>;
- Type G (105 m<sup>2</sup>) will replace all residential dwellings greater than 75 m<sup>2</sup> but less than or equal to 105 m<sup>2</sup>; and
- Type H (145 m<sup>2</sup>) will replace all residential dwellings greater than 105 m<sup>2</sup> but less than or equal to 145 m<sup>2</sup>.

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 (VIP) 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 1000 m<sup>2</sup> 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 m<sup>2</sup>). 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 option<sup>169</sup>.

**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 <sup>2</sup>	1	1	80
ii.	High density	301 – 600 m <sup>2</sup>	1	2	60
iii.	Medium density	601 – 800 m <sup>2</sup>	1	2	55
iv.	<i>Low density</i>	<i>801 – 1200 m<sup>2</sup></i>	<i>1</i>	<i>2</i>	<i>50</i>
v.	<i>Super Low density</i>	<i>1201 – 2000 m<sup>2</sup></i>	<i>1</i>	<i>2</i>	<i>45</i>

## 6.5 Summary of Entitlements

Table 6-9 – 6-11 provide a breakdown of the PAPs entitlements across the Singida Region. This includes entitlement to both livelihood restoration and additional support to potentially vulnerable people.

<sup>169</sup> 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 – Iramba District

Ward	Village	Landholders (No.)	Tenants (No.)	Other Government Owned Structures and / or Land	Village Owned Structures and / or Land Parcels	Forest Reserves, Game Reserves & GCAs	PAPs Losing Dwellings	Buildings and Structures			Crops Acres	Crops Stems	Economic Trees (2012 Crop & Tree Rates schedule) & Other Trees (No.) <sup>170</sup>	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											
<b>IRAMBA</b>																								
Mgongo	Mseko Village	46	2	1	8	0	4	8	2	0	3.64	0	229	0	21	11	8	4	15	13	13	0	0	3
	Kizonzo Village	10	0	0	1	0	0	0	0	0	1.81	0	3	0	3	2	2	0	2	2	5	0	0	1
Shelui	Nkyala Village	25	1	0	1	0	0	0	0	0	14.01	0	0	0	2	3	3	0	3	3	18	0	0	3
Mtoa	Kinkungu Village	16	15	0	2	0	0	0	0	0	12.48	0	3	0	3	12	4	0	3	3	11	2	8	3
	Tyeme Village	56	2	0	4	0	1	2	1	1	11.37	0	54	0	9	14	10	1	14	8	27	0	2	6
	Masagi Village	15	2	0	1	0	0	0	0	0	1.67	0	4	0	5	2	1	0	1	5	7	0	0	4
Ulemo	Misigiri Village	14	1	0	0	0	1	1	2	1	4.45	0	45	6	0	10	3	1	1	8	4	0	0	0
Mukulu	Simbalungwala Village	68	9	0	4	0	4	7	12	0	12.03	0	34	19	9	14	19	4	8	6	39	0	2	18
	Mukulu Village	13	3	0	0	0	0	0	0	0	8.58	7	17	0	0	2	7	0	1	0	10	0	0	5
Kyengege	Makunda Village	54	1	0	12	0	0	0	3	0	36.30	0	14	0	5	9	11	0	1	10	35	0	0	9

<sup>170</sup> 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 Reserves, Game Reserves & GCAs	PAPs Losing Dwellings	Buildings and Structures			Crops Acres	Crops Stems	Economic Trees (2012 Crop & Tree Rates schedule) & Other Trees (No.) <sup>170</sup>	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	
IRAMBA																								
Maluga	Ng'Anguli Village	30	0	0	6	0	2	4	4	0	19.66	0	128	3	1	6	11	2	2	4	22	0	0	0
<b>TOTALS</b>		<b>347</b>	<b>36</b>	<b>1</b>	<b>39</b>	<b>0</b>	<b>12</b>	<b>22</b>	<b>24</b>	<b>2</b>	<b>126.00</b>	<b>7</b>	<b>531</b>	<b>28</b>	<b>58</b>	<b>85</b>	<b>79</b>	<b>12</b>	<b>51</b>	<b>62</b>	<b>191</b>	<b>2</b>	<b>12</b>	<b>52</b>

Table 6-10: Overview of PAPs Entitlements – Mkalama District

Ward	Village	Landholders (No.)	Tenants (No.)	Other Government Owned Structures and / or Land	Village Owned Structures and / or Land Parcels	Forest , Game Reserves & GCAs	PAPs Losing Dwellings	Buildings and Structures			Crops Acres	Crops Stems	Economic Trees (2012 Crop & Tree Rates schedule) & Other Trees (No.) <sup>171</sup>	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	
MKALAMA																								
Tumuli	Tumuli Village	48	3	0	5	0		0		0	28.8	0	12	1	3	11	13	0	8	3	30	0	1	9
	Milade Village	60	7	1	4	0	2	2	5	0	28.5	41	198	1	5	11	14	2	13	3	39	2	3	5
<b>TOTALS</b>		<b>108</b>	<b>10</b>	<b>1</b>	<b>9</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>0</b>	<b>57.31</b>	<b>41</b>	<b>210</b>	<b>2</b>	<b>8</b>	<b>22</b>	<b>27</b>	<b>2</b>	<b>21</b>	<b>6</b>	<b>69</b>	<b>2</b>	<b>4</b>	<b>14</b>

<sup>171</sup> 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 – Singida District

Ward	Village	Landholders (No.)	Tenants (No.)	Other Government Owned Structures and / or Land	Village Owned Structures and / or Land Parcels	Forest, Game Reserves & GCAs	PAPs Losing Dwellings	Buildings and Structures			Crops Acres	Crops Stems	Economic Trees and other trees (2012 Crop & Tree Rates schedule) (No.) <sup>172</sup>	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	
<b>SINGIDA</b>																								
Msisi	Ntondo Village	41	6	0	6	0	0	0	0	1	7,46	43	76	8	1	11	6	0	7	4	25	2	3	4
	Nkwae Village	32	2	0	6	0	0	0	0	0	7,65	4	110	5	3	7	7	0	5	3	19	0	1	6
	Msisi Village	32	8	0	3	0	0	0	0	1	6,78	1	39	5	3	3	11	0	3	1	24	0	6	6
Ughandi	Misinko Village	57	2	0	9	0	1	2	1	1	16,60	663	204	9	3	11	18	2	8	3	42	0	0	5
	Misinko Village PS-6	17	1	0	1	0	2	2	0	0	18,39	223	96	24	2	3	6	2	1	3	10	1	0	1
Ntonge	Iguari Village	18	0	0	4	0	0	0	0	0	6,31	90	78	2		3	6	0	2	1	14	0	0	1
	Iguari Village PS-6	1	2	0	1	0	0	0	0	1	2,30	0	0	0	0	1	0	0	0	0	1	0	2	0
	Ifombou Village	54	0	0	13	0	0	0	2	2	9,36	184	57	7	0	4	13	0	3	1	39	0	0	10
Ilongero	Madamigha Village	33	1	0	4	0	0	0	0	0	6,88	146	35	0	5	6	10	0	8	1	20	0	1	4
	Ilongero Village	33	0	0	7	0	0	0	0	1	4,51	672	525	0	5	5	4	0	7	0	20	0	0	6

<sup>172</sup> 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, Game Reserves & GCAs	PAPs Losing Dwellings	Buildings and Structures			Crops Acres	Crops Stems	Economic Trees and other trees (2012 Crop & Tree Rates schedule) (No.) <sup>172</sup>	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											
Mrama	Mrama Village	27	3	0	8	0	1	1	1	0	5,57	1190	1713	42	3	4	12	1	5	1	18	0	0	5
	Idisimba Village	12	1	0	4	0	0	0	0	1	1,32	321	691	19	4	4	0	0	6	1	4	0	0	2
	Makhandi Village	6	0	0	4	0	0	0	0	0	1,11	71	248	2	1	0	2	0	0	1	4	0	0	1
Kinyagigi	Mitula Village	33	0	0	9	0	1	2	0	0	7,19	290	817	11	0	5	4	1	4	0	27	0	0	1
	Kinyagigi Village	58	3	0	9	0	3	3	5	0	17,8	947	4480	28	4	13	11	3	12	3	33	0	2	8
Merya	Kinyamwambo Village	29	4	0	6	0	0	0	1	0	9,34	125	78	9	2	3	7	0	4	0	24	1	1	3
Itaja	Kinyamwenda Village	50	2	0	3	0	2	2	3	1	10,02	1201	471	4	4	10	4	2	11	5	28	0	0	6
Ngimu	Mwighanji Village	42	1	0	8	0	0	0	0	0	14,79	2206	309	0	3	1	10	0	4	0	36	0	1	3
	Ngimu Village	50	2	0	15	0	1	2	4	4	14,04	984	2666	19	0	4	10	1	3	1	40	0	0	5
	Pohama Village	34	1	0	4	0	0	0	0	0	7,87	8	5918	0	0	7	11	0	2	4	24	1	0	2
<b>TOTALS</b>		<b>660</b>	<b>39</b>	<b>0</b>	<b>124</b>	<b>0</b>	<b>11</b>	<b>14</b>	<b>17</b>	<b>13</b>	<b>175,29</b>	<b>9369</b>	<b>18611</b>	<b>194</b>	<b>43</b>	<b>105</b>	<b>152</b>	<b>12</b>	<b>95</b>	<b>33</b>	<b>452</b>	<b>5</b>	<b>17</b>	<b>79</b>

# 7 INTRODUCTION

## 7.1 Replacement Housing

This section provides an overview of the replacement housing strategy including an analysis of existing structures in the Singida Region, existing structures identified as eligible for replacement, housing, and the design strategy developed for the Singida Region. The designs for each house type and ancillary structures are presented in Appendix D of this report.

### 7.1.1 Approach to Replacement Housing Strategy and Design

A Concept Design Study<sup>173</sup> 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. As part of the baseline and concept design work undertaken, investigations in the Singida Region included inspections of impacted structures, discussions with PAPs and visits with hardware merchants.

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 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. A mixture of dwelling types and sizes were identified across the region.

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. 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 or more

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<sup>173</sup> Replacement Housing Concept Design Report: Pipeline (2019) (Digby Wells Consortium).

residential dwellings affected and the combined footprint of any two houses is less than or equal to 25 m<sup>2</sup>. In such cases, the PAP would be offered for these two houses one replacement house of the smallest available size (Type A, which has a footprint of 25 m<sup>2</sup>) and cash compensation for the smallest house. In the Singida Region, there are 25 households (owning 38 residential structures) that will be physically displaced. Of the 38 residential structures, 37 have been identified as eligible for the replacement housing in-kind compensation. There is one case where the PAH owns two structures with a total combined floor space of less than 25m<sup>2</sup>. In this situation, the PAH is only entitled to one (1) replacement house (25m<sup>2</sup>) 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.

Twenty (20) of the 37 residential structures eligible for replacement in the Singida region are less than 25 m<sup>2</sup> and are eligible for the 25m<sup>2</sup> Type A house. 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. Entitlement is not linked to the existing PAP ancillary structures which will be lost (which will be compensated for in cash) but provided per replacement house / homestead as indicated above.

Table 7-1: Eligible Dwellings for Replacement within Singida Region

District	Ward	Village	PAPs Losing Dwellings <sup>174</sup>	Residential Dwellings	Dwellings eligible for Replacement	Eligible Dwellings for Replacement								Other Structures	Incomplete structures	
						House Type A : 25 m <sup>2</sup> <sup>175</sup>	House Type B : 33 m <sup>2</sup>	House Type C : 39 m <sup>2</sup>	House Type D : 47m <sup>2</sup>	House Type E : 58 m <sup>2</sup>	House Type F : 75 m <sup>2</sup>	House Type G : 105m <sup>2</sup>	House Type H : 145m <sup>2</sup>			
Iramba	Mgongo	Mseko	4	8	7	7	0	0	0	0	0	0	0	2	0	
		Kizonzo	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Shelui	Nkyala	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mtoa	Kinkungu	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Tyeme	1	2	2	0	1	1	0	0	0	0	0	1	1	
		Masagi	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Ulemo	Misigiri	1	1	1	1	0	0	0	0	0	0	0	2	1	
	Mukulu	Simbalungwal	4	7	7	4	0	0	0	3	0	0	0	12	0	
		Mukulu	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Kyengege	Makunda	0	0	0	0	0	0	0	0	0	0	0	3	0	
Maluga	Ng'Anguli	2	4	4	1	0	0	2	0	0	1	0	4	0		
<b>Iramba Sub Total</b>			12	22	21	13	1	1	2	3	0	1	0	24	2	
Mkalama	Tumuli	Tumuli	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Milade	2	2	2	1	0	1	0	0	0	0	0	5	0	

<sup>174</sup> Residential dwellings must be completed and must be in regular use and not abandoned by the PAP to be eligible for a replacement housing option.

<sup>175</sup> Floor areas exclude external living spaces / verandas. .

District	Ward	Village	PAPs Losing Dwellings <sup>174</sup>	Residential Dwellings	Dwellings eligible for Replacement	Eligible Dwellings for Replacement								Other Structures	Incomplete structures
						House Type A : 25 m <sup>2</sup> /175	House Type B : 33 m <sup>2</sup>	House Type C : 39 m <sup>2</sup>	House Type D : 47m <sup>2</sup>	House Type E : 58 m <sup>2</sup>	House Type F : 75 m <sup>2</sup>	House Type G : 105m <sup>2</sup>	House Type H : 145m <sup>2</sup>		
<b>Mklama Sub Total</b>			<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>
Singida	Msisi	Ntondo	0	0	0	0	0	0	0	0	0	0	0	0	1
		Nkwae	0	0	0	0	0	0	0	0	0	0	0	0	0
		Msisi	0	0	0	0	0	0	0	0	0	0	0	0	1
	Ughandi	Misinko	3	4	4	4	0	0	0	0	0	0	0	1	1
	Ntonge	Iguari	0	0	0	0	0	0	0	0	0	0	0	0	1
		Ifombou	0	0	0	0	0	0	0	0	0	0	0	2	2
	Ilongero	Madamigha	0	0	0	0	0	0	0	0	0	0	0	0	0
		Ilongero	0	0	0	0	0	0	0	0	0	0	0	0	1
	Mrama	Mrama	1	1	1	0	0	0	1	0	0	0	0	1	0
		Idisimba	0	0	0	0	0	0	0	0	0	0	0	0	1
		Makhandi	0	0	0	0	0	0	0	0	0	0	0	0	0
	Kinyagigi	Mitula	1	2	2	1	0	1	0	0	0	0	0	0	0
		Kinyagigi	3	3	3	0	2	0	0	0	1	0	0	5	0
	Merya	Kinyamwamb o	0	0	0	0	0	0	0	0	0	0	0	1	0
	Itaja	Kinyamwenda	2	2	2	0	2	0	0	0	0	0	0	3	1
Ngimu	Mwighanji	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Ngimu	1	2	2	1	0	1	0	0	0	0	0	4	4	
	Pohama	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Singida Sub Total</b>			<b>11</b>	<b>14</b>	<b>14</b>	<b>6</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>17</b>	<b>13</b>	
<b>SINGIDA REGION TOTAL</b>			<b>25</b>	<b>38</b>	<b>37</b>	<b>20</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>46</b>	<b>15</b>

## 7.1.2 Analysis of Existing Structures Affected in Singida Region

### Homesteads and Dwellings

A mixture of dwelling types and sizes were identified across the region as well as the cultural needs and practices that influence the design, location and use of ancillary buildings. Affected households range from single dwelling structures to homesteads (with multiple dwelling structures) positioned around shared facilities such as ablutions, kitchens and storage areas. The number of household members living in a dwelling was also considered in developing concept designs. Alternative floor layouts for the four (4) smallest structures have been developed to provide PAP's with a choice.

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. In total there are 37 existing dwelling structures that are eligible for replacement which include 19 sleeping structures and 18 multi-functional residential structures.

The two (2) major categories of dwellings identified in the region are described as “traditional houses” and “modern houses”. Traditional houses are those constructed of readily available local materials without cement or stone aggregates. Modern houses are those that were built utilizing industrial cement, sand or burnt bricks with mortar. Traditional houses represent the majority of affected structures in Singida region. Although generally less durable, traditional materials can often be obtained without cash and are therefore more easily maintained or replaced. Typical examples of both traditional and modern houses are shown in Figure 7-1



**Figure 7-1: Example of traditional house and modern house in Singida**

Most dwellings in the region are traditional, constructed in locally available materials, including grass and corrugated iron sheets (CIS), mud (monolithic), mud and poles, unburnt bricks, burnt brick for walls, rammed (tamped) earth finish for floors, thatch and CIS for roofs. Some traditional dwellings demonstrate changes made over time by the owners to accommodate their needs and means. This includes improvements such as the replacement of thatched roofs with corrugated roofing material and window frames filled in with glazing.

A more detailed analysis including additional examples of both traditional and modern housing types has been undertaken as part of the concept design development and is

presented in the Concept Design Report<sup>176</sup> for the Project (for the Priority Areas and Pipeline).

### Ancillary Structures

Eight (8) of the physically displaced households with structures eligible for replacement, have a separate constructed kitchen space or outside structure for cooking. They are generally of poor condition providing basic protection from the elements, ventilation and limited security. The total number of other structures in Singida which includes kitchens and toilets is provided in Table 7-1.

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). Most households do not have separate kitchens and PAPs cook and sleep in the same space.



**Figure 7-2: Examples of kitchens found in Singida Region**



**Figure 7-3: Example of toilet structures found in Singida Region**

<sup>176</sup> Replacement Housing Concept Design Report: Pipeline (2019) (Digby Wells Consortium).



### **7.1.3 Influence of Climate and Vegetation on Building Materials**

The Singida region forms part of the semi-arid central zone of Tanzania and generally experiences lower rainfall than the rest of the country. There is a short and often highly variable rainy season from December to March and a long dry season from April to November. This variation is reflected in the natural and traditional building techniques and materials used for the construction of traditional houses.

The drier climate has resulted in less wattle and daub construction and more un-stabilized sun-dried bricks (adobe / unburnt bricks) being used. Timber used in construction is mostly transported from Mufindi (located in the Iringa Region of the Tanzanian Southern Highlands).

### **7.1.4 Availability of materials**

Stones, aggregates, sand and sand blocks are readily available and extracted locally in Singida. Masonry work using cement blocks is common in contemporary buildings. Local stone is used in foundation walls with mud mortar rather than sand and cement mortar observed in other regions. This has resulted in visible cracks in many structures of this type as mud mortar does not provide a very strong bond with the stone. The absence of water proofing in mud and burnt brick structures has given rise to damp walls in many structures due to capillary action.

Contemporary buildings are constructed in both fired clay bricks and cement blocks. The sand cement blocks consist of fine sand and cement with a fine sand damp proof barrier provided to prevent capillary action commonly seen in more traditional structures.

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 dwelling and domestic structures in Singida were considered in the development of the designs for the replacement houses. The older local architectural style is practical, well adapted for the climate and with well-developed building material economics.

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.

The courtyard system / homestead layout is commonly seen across the region. Structures combined with shrubs and vegetation are used to create protected enclosed spaces. They are multi-functional enabling various activities including livestock to be kept safely providing good visibility from the residential structures. The open space within the compound will usually have vegetation to provide shade and shelter. For security reasons, the main

entrances to the building face the open courtyard providing protection for domestic livestock from wild animals as shown in Figures 7-4 and 7-5.



**Figure 7-4: Example of an Entrance to a Courtyard in Singida**



**Figure 7-5: Example of a Multi-functional Courtyard in Singida**

Buildings of the last few decades show stone foundation walls, with thin masonry walls in locally fired clay brick or concrete blocks. A concrete ring beam is used to distribute the weight of the roof evenly onto thin (125-220 mm) loadbearing walls. Piers or small buttresses are also used in larger buildings where higher walls are needed to span wider spaces.

### **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

PAPs eligible for more than one (1) replacement house to have the choice to elect for either:

- A standard single VIP latrine 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.

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 typologies 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 below in Table 7-2.

The district engineer was consulted regarding the replacement housing including issues relating to the suitability of building materials, availability and building approval processes. In developing appropriate designs for seismic zones consideration was also given to advice from the district engineer.

Based on the Geological Survey of Tanzania, the Singida region is within a seismic zone and house designs should consider potential seismic risks and adopt the seismic design. However, as the exact locations for the replacement houses in Singida 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. Detailed designs for structures in both seismic and non-seismic zones have been developed and are summarized in Table 7-2.

**Table 7-2: Key Design Technology (Seismic and Non-Seismic)**

Type	Structural Element	Proposed Technology <sup>177</sup>
Seismic	Substructure	<ul style="list-style-type: none"> <li>- 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;</li> <li>- 230 mm concrete block foundation wall of 7N / mm<sup>2</sup> bonded in class (iii) mortar with T10 reinforcement (every 3<sup>rd</sup> course);</li> <li>- compacted selected and approved earth fill;</li> <li>- 230 mm x 200 mm reinforced ground beam; and</li> <li>- 100 mm reinforced concrete floor slab.</li> </ul>
	Superstructure	<ul style="list-style-type: none"> <li>- 125 mm concrete block wall reinforced wall for external walls and internal walls with T10 reinforcement (every 3<sup>rd</sup> course);</li> <li>- 125 mm x 200 mm reinforced concrete ring beam at 2,100 mm height on both external and internal walls; and</li> <li>- 125 mm x 150 mm reinforced concrete lintel above door opening where there is no ring beam.</li> </ul>
	Roof	<ul style="list-style-type: none"> <li>- 100 mm x 50 mm rafters - treated pressure impregnated softwood;</li> <li>- 75 mm x 50 mm struts - treated pressure impregnated softwood;</li> <li>- 100 mm x 50 mm tie beam - treated pressure impregnated softwood;</li> <li>- 50 mm x 50 mm purlin - treated pressure impregnated softwood;</li> <li>- 100 mm x 50 mm wall plate - treated pressure impregnated standard; and</li> <li>- 28 gauge galvanized corrugated iron sheets.</li> </ul>
Non-Seismic	Substructure	<ul style="list-style-type: none"> <li>- 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;</li> <li>- 230 mm concrete block foundation wall of 7N / mm<sup>2</sup> bonded in class (iii) mortar;</li> <li>- compacted selected and approved earth fill;</li> <li>- 230 mm x 200 mm reinforced ground beam; and</li> <li>- 100 mm plain concrete floor slab.</li> </ul>
	Superstructure	<ul style="list-style-type: none"> <li>- 125 mm concrete block wall for external walls and internal walls;</li> <li>- 125 mm x 200 mm reinforced concrete ring beam at 2,100 mm height; and</li> <li>- 125 mm x 150 mm reinforced concrete lintel above door opening where there is no ring beam.</li> </ul>
	Roof	<ul style="list-style-type: none"> <li>- 100 mm x 50 mm rafters - treated pressure impregnated softwood;</li> <li>- 75 mm x 50 mm struts - treated pressure impregnated softwood;</li> <li>- 100 mm x 50 mm tie beam - treated pressure impregnated softwood;</li> <li>- 50 mm x 50 mm purlin - treated pressure impregnated softwood; and</li> <li>- 28 gauge galvanized corrugated iron sheets.</li> </ul>

<sup>177</sup> 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 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 m<sup>2</sup> 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 option<sup>178</sup>.

**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 <sup>2</sup>	1	1	80
ii.	High density	301 – 600 m <sup>2</sup>	1	2	60
iii.	Medium density	601 – 800 m <sup>2</sup>	1	2	55
iv.	Low density	801 – 1200 m <sup>2</sup>	1	2	50
v.	Super Low density	1201 – 2000 m <sup>2</sup>	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

<sup>178</sup> 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.

specific circumstances and individual choices to be finalized during the entitlement briefings phase. Factors to be considered include:

- 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 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 Singida 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 use 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;
- Uncontrolled flames under a timber roof structure that is not controlled by a hood and a flue are a significant fire hazard;
- The fear of spreading fire to outside vegetation, a secure space to store cooking utensils, and convenience, which were stated by PAPs as the main reasons for cooking indoors;
- Providing a separate safe covered space for PAPs to cook, to reduce the risks associated with cooking fires being moved inside housing structures; and
- Households eligible for more than one (1) replacement house can select a covered kitchen structure with an enclosed store room 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:

- For improvement of living conditions and welfare of households;
- Provide a facility which is durable and safe, and can be maintained; and
- Cultural considerations.

#### **Water**

Rainwater will be harvested on all house roofs with a series of PVC gutters and downpipes. It will be stored in tanks supported on block work platforms approximately 30 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 wind flow directions and rainfall impacts;
- Avoiding dampness seeping from the ground which may affect the structure, hence selecting appropriate construction materials and adopting appropriate construction technology; 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 m<sup>2</sup> (Type A) to the largest houses at 145 m<sup>2</sup> (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 layouts to allow a choice of floor plans for the PAP. The smallest house (Type A) has three (3) alternative layouts and Type B, C and D have two (2) alternative floor plans each. The third alternative layout (A3) 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 25m<sup>2</sup> 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 Singida**

House	Eligible Dwellings in Singida	Floor Space	Sub – Type	Number of Rooms
House Type A	20	25m <sup>2</sup>	A1	2
			A2	3
			A3	3
House Type B	5	33m <sup>2</sup>	B1	3
			B2	4
House Type C	4	39m <sup>2</sup>	C1	3
			C2	4
House Type D	3	47m <sup>2</sup>	D1	4
			D2	5
House Type E	3	58m <sup>2</sup>	E	5
House Type F	1	75m <sup>2</sup>	F	5
House Type G	1	105m <sup>2</sup>	G	6
House Type H	0	145m <sup>2</sup>	H	8

In the Singida Region there are 25 households (who inhabit 37 residential structures) that will be physically displaced and have been identified as eligible for the replacement housing in-kind compensation. As shown above, there are seven (7) types of houses that PAPs are eligible for in Singida. The majority (20) of the 37 residential structures eligible for replacement qualify for a Type A (25m<sup>2</sup>) house, as they have floor spaces that are less than 25 m<sup>2</sup>.

A full description including floor plans, elevations and three (3) dimensional views of all eight (8) house types (A-H) and the alternative floor plans are provided in Appendix D. The seven (7) eligible structures (Types A, B, C, D E, F and G) in Singida are presented in Figures 7-6 to 7-12.

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.



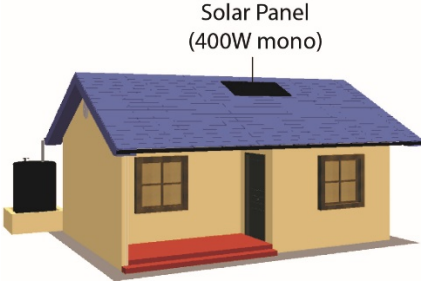



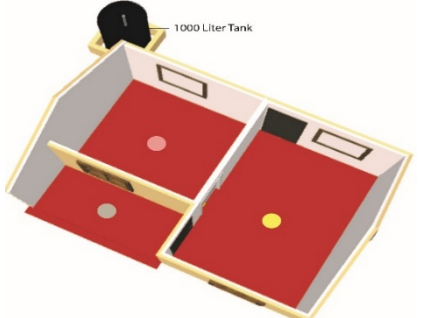
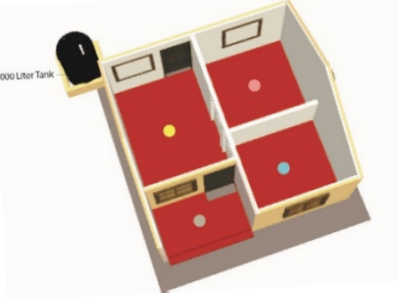
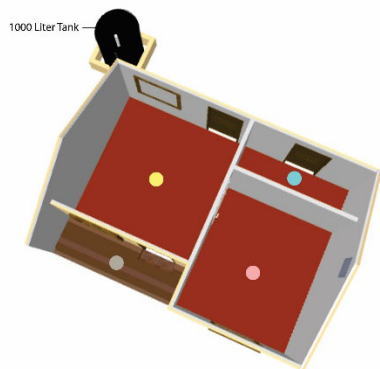
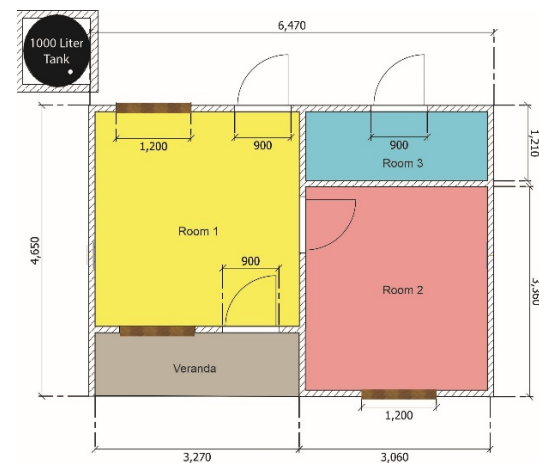
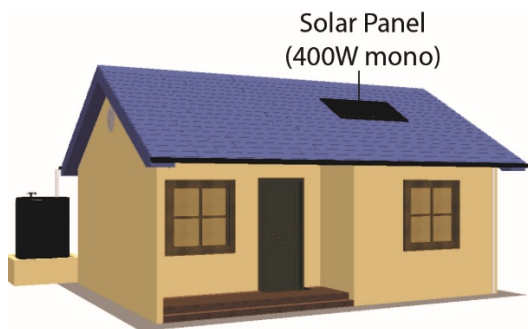
House Type A 25m <sup>2</sup> (There are twenty (20) structures that are eligible for Type A replacement houses in Singida Region)																	
<p><b>Description:</b> Type A is the smallest of the house types at 25 m<sup>2</sup>. These houses are well lit with natural light through four (4) windows 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.</p> <p><b>Eligibility:</b> Replaces all units less than or equal to 25 m<sup>2</sup> irrespective of the number of rooms. If the combined footprint of any two houses of a PAP is less than or equal to 25 m<sup>2</sup> (House Type A) the PAP would be offered for these two (2) houses one replacement House Type A and cash compensation for the smallest house.</p> <p><b>Alternatives:</b> An eligible PAP can choose from one of three (3) floor plans. House Type A1 has two (2) rooms and House Type A2 and A3 both have three (3) rooms.</p>																	
A1 – 25m <sup>2</sup> (2 Rooms)		A2 - 25m <sup>2</sup> (3 Rooms)															
																	
	<p style="text-align: center;"><b>Areas</b></p> <table border="0"> <tr> <td>Room 1</td> <td>14.33m<sup>2</sup></td> </tr> <tr> <td>Room 2</td> <td>10.64m<sup>2</sup></td> </tr> <tr> <td>Veranda</td> <td>3.55m<sup>2</sup></td> </tr> </table>	Room 1	14.33m <sup>2</sup>	Room 2	10.64m <sup>2</sup>	Veranda	3.55m <sup>2</sup>		<p style="text-align: center;"><b>Areas</b></p> <table border="0"> <tr> <td>Room 1</td> <td>9.2m<sup>2</sup></td> </tr> <tr> <td>Room 2</td> <td>8.0m<sup>2</sup></td> </tr> <tr> <td>Room 3</td> <td>8.0m<sup>2</sup></td> </tr> <tr> <td>Veranda</td> <td>3.6m<sup>2</sup></td> </tr> </table>	Room 1	9.2m <sup>2</sup>	Room 2	8.0m <sup>2</sup>	Room 3	8.0m <sup>2</sup>	Veranda	3.6m <sup>2</sup>
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Room 3	8.0m <sup>2</sup>																
Veranda	3.6m <sup>2</sup>																

Figure 7-6: House Type A1 and A2 Layout

**House Type A3 (There are twenty (20) structures that are eligible for Type A replacement houses in Singida Region) (CONT)**

**Description:** Type A3 has two (2) rooms designed for human habitation and a third smaller room (4m<sup>2</sup>) 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 25m<sup>2</sup> structure will enable protection for livestock whilst also providing clear separation from sleeping areas within the structure.



Areas	
Room 1	11.00m <sup>2</sup>
Room 2	10.00m <sup>2</sup>
Room 3	4.0 m <sup>2</sup>
Veranda	3.20m <sup>2</sup>

**Figure 7-7 : House Type A3 Layout (CONT)**

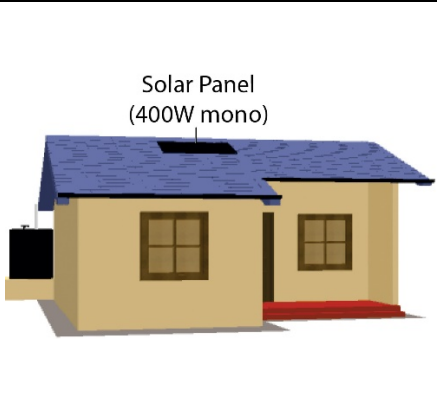

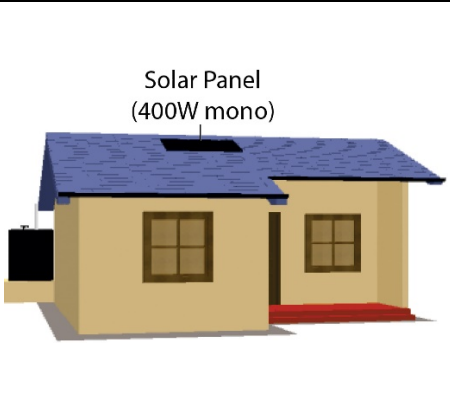

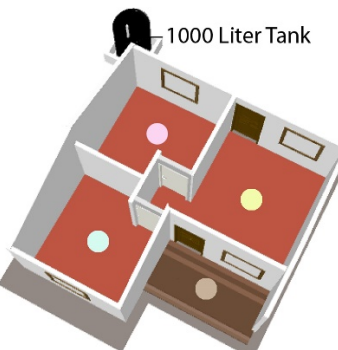
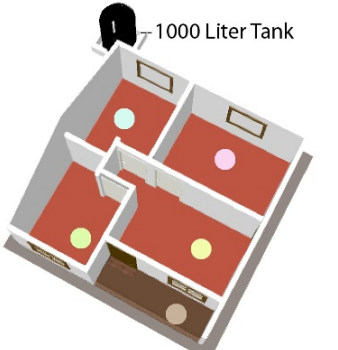
House Type B 33m <sup>2</sup> (There are five (5) structures eligible for a Type B replacement house in Singida Region)																					
<p><b>Description:</b> Type B is 33m<sup>2</sup> and is well lit with natural light through four (4) windows which also allows for good cross ventilation, two (2) external doors and a small covered veranda. Type B1 has three (3) rooms and B2 has four (4) rooms as shown below.</p> <p><b>Eligibility:</b> Replaces all residential dwellings greater than 25 m<sup>2</sup> but less than or equal to 33 m<sup>2</sup>.</p> <p><b>Alternative:</b> 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.</p>																					
B1 - 33m <sup>2</sup> (3 Rooms)		B2 - 33m <sup>2</sup> (4 Rooms)																			
 <p>Solar Panel (400W mono)</p>		 <p>Solar Panel (400W mono)</p>																			
 <p>1000 Liter Tank</p>	<p><b>Areas</b></p> <table border="0"> <tr> <td>Room 1</td> <td>13.00m<sup>2</sup></td> </tr> <tr> <td>Room 2</td> <td>10.16m<sup>2</sup></td> </tr> <tr> <td>Room 3</td> <td>10.16m<sup>2</sup></td> </tr> <tr> <td>Veranda</td> <td>3.15m<sup>2</sup></td> </tr> </table>	Room 1	13.00m <sup>2</sup>	Room 2	10.16m <sup>2</sup>	Room 3	10.16m <sup>2</sup>	Veranda	3.15m <sup>2</sup>	 <p>1000 Liter Tank</p>	<p><b>Areas</b></p> <table border="0"> <tr> <td>Room 1</td> <td>9.18m<sup>2</sup></td> </tr> <tr> <td>Room 2</td> <td>7.9m<sup>2</sup></td> </tr> <tr> <td>Room 3</td> <td>7.9m<sup>2</sup></td> </tr> <tr> <td>Room 4</td> <td>8.3m<sup>2</sup></td> </tr> <tr> <td>Veranda</td> <td>3.6m<sup>2</sup></td> </tr> </table>	Room 1	9.18m <sup>2</sup>	Room 2	7.9m <sup>2</sup>	Room 3	7.9m <sup>2</sup>	Room 4	8.3m <sup>2</sup>	Veranda	3.6m <sup>2</sup>
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Veranda	3.6m <sup>2</sup>																				

Figure 7-8 : House Type B1 and B2 Layouts

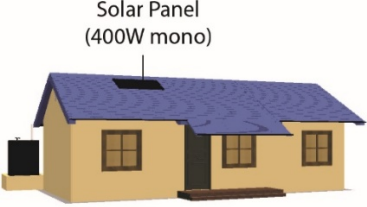
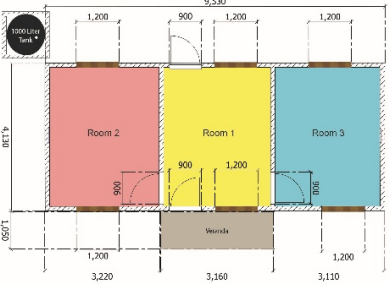

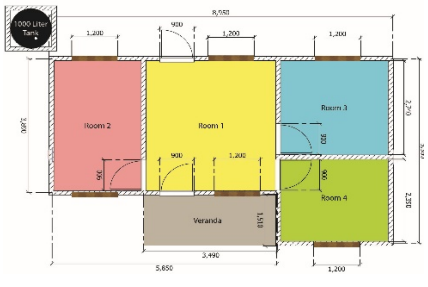
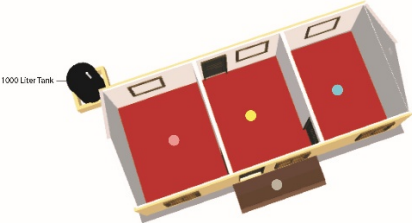

House Type C 39 m <sup>2</sup> (There are four (4) structures eligible for a Type C replacement house in Singida Region)																					
<p><b>Description:</b> House Type C is 39m<sup>2</sup> and is well lit with natural light through six (6) windows which also allows for good cross ventilation and two (2) external doors. Type 'C1' has three rooms and C2 has four (4) rooms as shown below.</p>																					
<p><b>Eligibility:</b> Replaces all residential dwellings greater than 33.1 m<sup>2</sup> but less than or equal to 39 m<sup>2</sup>.</p>																					
<p><b>Alternative:</b> There is a choice between the three (3) room Type C1 and the four (4) room Type C2 configuration'.</p>																					
C1 – 39m <sup>2</sup> (3 Rooms)		C2 - 39m <sup>2</sup> (4 Rooms)																			
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Veranda	4.60m <sup>2</sup>																				

Figure 7-9 : House Type C1 and C2 Layouts

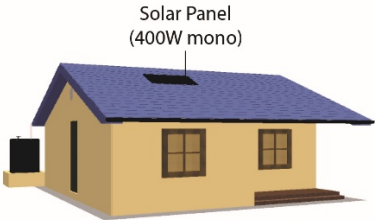

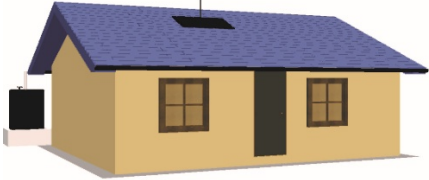
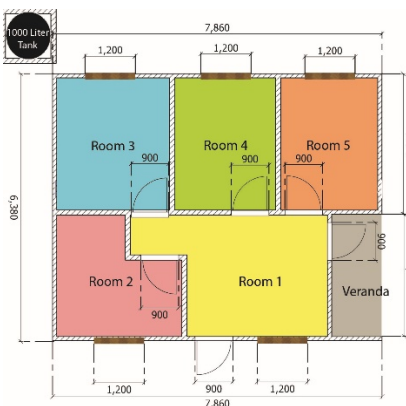
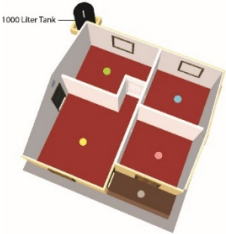
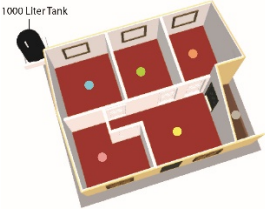
House Type D 47 m <sup>2</sup> (There are three (3) structures eligible for a Type D replacement house in Singida Region)																									
<p><b>Description:</b> House Type D is a 47 m<sup>2</sup>. This house is well lit with natural light through four (4) windows in D1 and five (5) windows in D2 which also allows for good cross ventilation, and two (2) external doors. Type D1 has four (4) rooms and D2 has five (5) rooms as shown below.</p> <p><b>Eligibility:</b> Replaces all residential dwellings greater than 39.1 m<sup>2</sup> but less than or equal to 47 m<sup>2</sup>.</p> <p><b>Alternative:</b> There is a choice between the four (4) room Type D1 and the five (5) room Type D2 configuration'.</p>																									
D1 – 47m <sup>2</sup> (4 Rooms)		D2 - 47m <sup>2</sup> (5 Rooms)																							
 <p>Solar Panel (400W mono)</p>		 <p>Solar Panel (400W mono)</p>																							
 <p>1000 Liter Tank</p>	<p><b>Areas</b></p> <table border="1"> <tr><td>Room 1</td><td>16.86m<sup>2</sup></td></tr> <tr><td>Room 2</td><td>10.28m<sup>2</sup></td></tr> <tr><td>Room 3</td><td>10.28m<sup>2</sup></td></tr> <tr><td>Room 4</td><td>10.296m<sup>2</sup></td></tr> <tr><td>Veranda</td><td>4.00m<sup>2</sup></td></tr> </table>	Room 1	16.86m <sup>2</sup>	Room 2	10.28m <sup>2</sup>	Room 3	10.28m <sup>2</sup>	Room 4	10.296m <sup>2</sup>	Veranda	4.00m <sup>2</sup>	 <p>1000 Liter Tank</p>	<p><b>Areas</b></p> <table border="1"> <tr><td>Room 1</td><td>12.7m<sup>2</sup></td></tr> <tr><td>Room 2</td><td>8.8m<sup>2</sup></td></tr> <tr><td>Room 3</td><td>8.6m<sup>2</sup></td></tr> <tr><td>Room 4</td><td>8.4m<sup>2</sup></td></tr> <tr><td>Room 5</td><td>8.6m<sup>2</sup></td></tr> <tr><td>Veranda</td><td>3.8m<sup>2</sup></td></tr> </table>	Room 1	12.7m <sup>2</sup>	Room 2	8.8m <sup>2</sup>	Room 3	8.6m <sup>2</sup>	Room 4	8.4m <sup>2</sup>	Room 5	8.6m <sup>2</sup>	Veranda	3.8m <sup>2</sup>
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Room 4	8.4m <sup>2</sup>																								
Room 5	8.6m <sup>2</sup>																								
Veranda	3.8m <sup>2</sup>																								

Figure 7-10 : House Type D1 and D2 Layouts

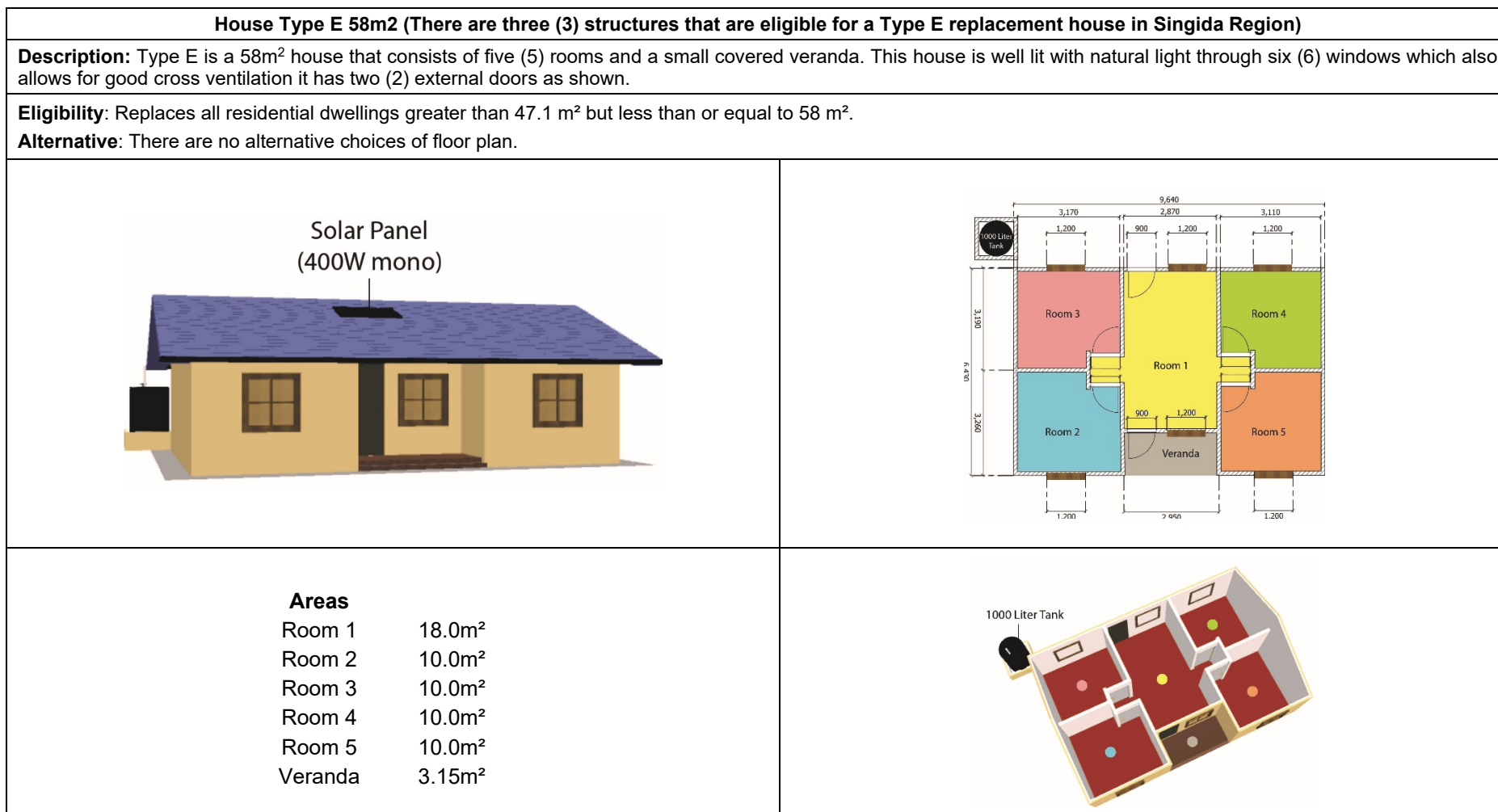
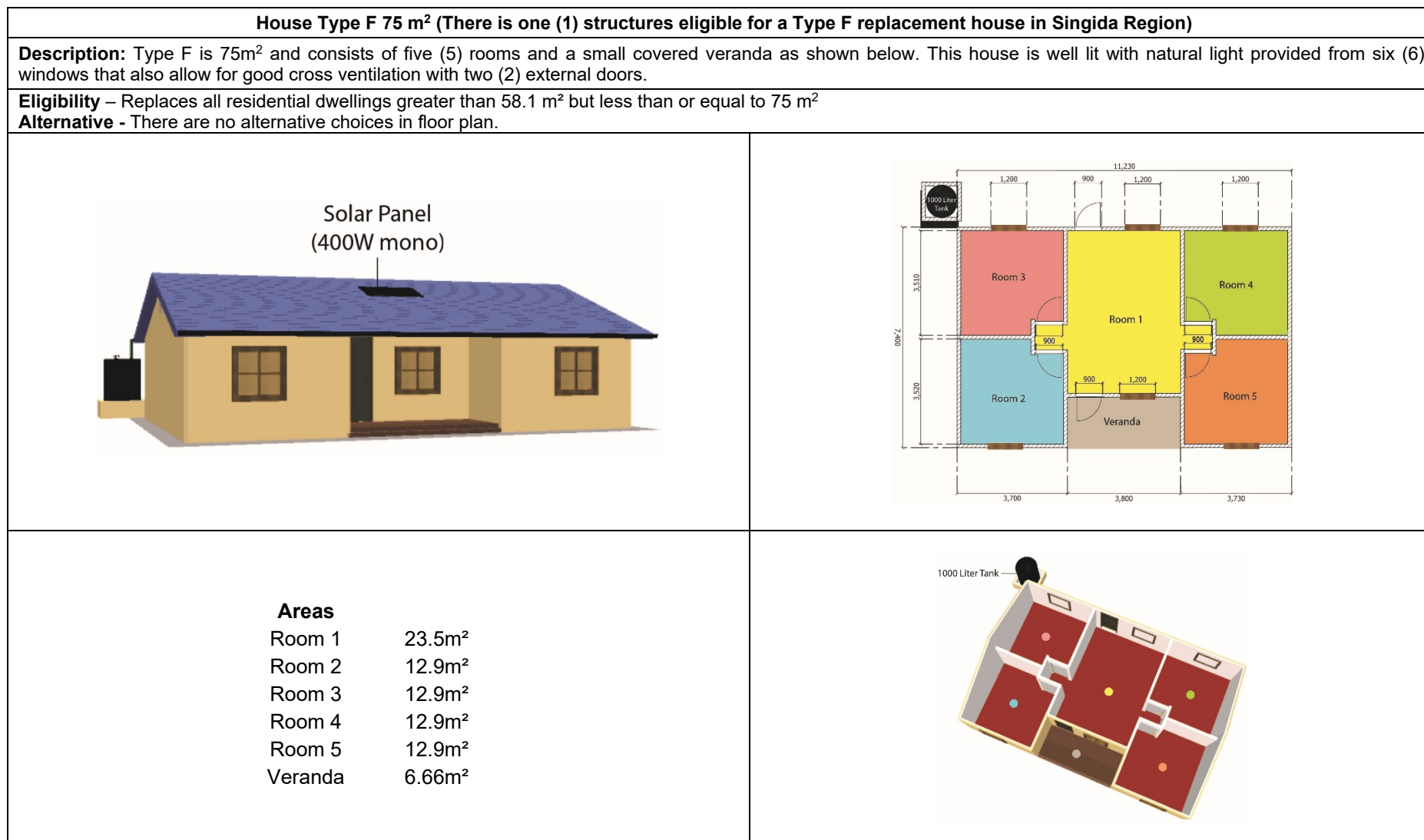


Figure 7-11 : House Type E Layout



**Figure 7-12 : House Type F Layout**

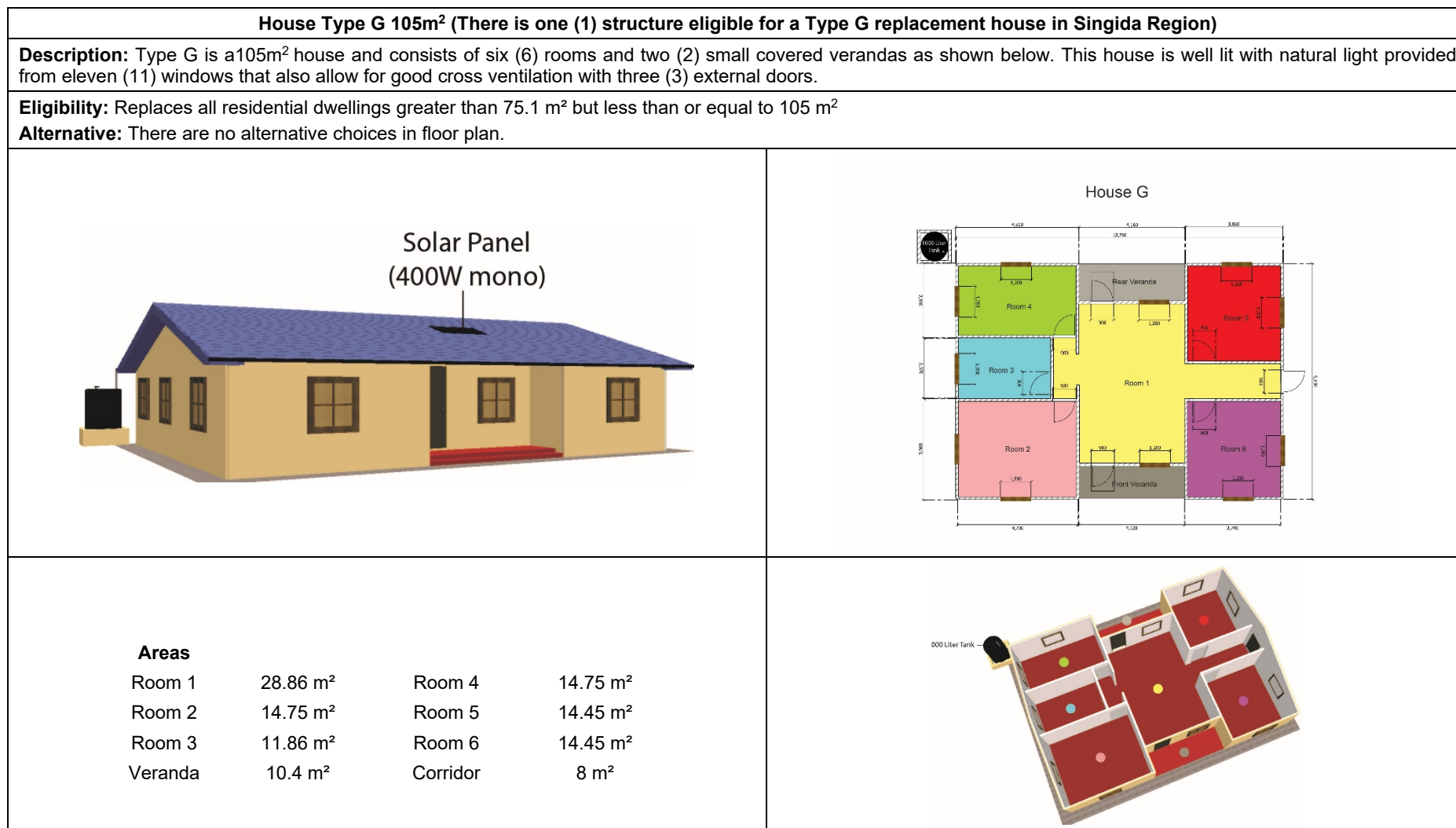


Figure 7-13 : House Type G Layout



## **Ablution / Latrine Designs**

The two VIP latrine / ablution typologies consist of:

- Single covered VIP latrine (Type A); and
- A single VIP latrine and shower combination that is covered and enclosed with two doors (Type B).

Both types will be built over a cylindrical excavated pit, built in with concrete blocks onto a cylindrical strip foundation. The first five courses of block work will have weep holes. The cylinder will be covered by a reinforced concrete slab to support built up walls in concrete blocks.

Type B latrines will have a connecting washing space with a single 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 distribute the weight of the roof evenly on 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 in a high gloss enamel finish, and battened type hardwood doors in hardwood frames will be varnished. A white glazed squatting type pan will be provided. A p-trap will be necessary to create a water trap for the prevention of odors in the spaces.

The key features of the four (4) ancillary structures are also described below including floor plans, elevations and 3-Dimensional views

## **Kitchen Shelter Designs**

The two kitchen typologies consist of:

- Open covered kitchen (Type A) and
- Open covered kitchen with an enclosed store (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.

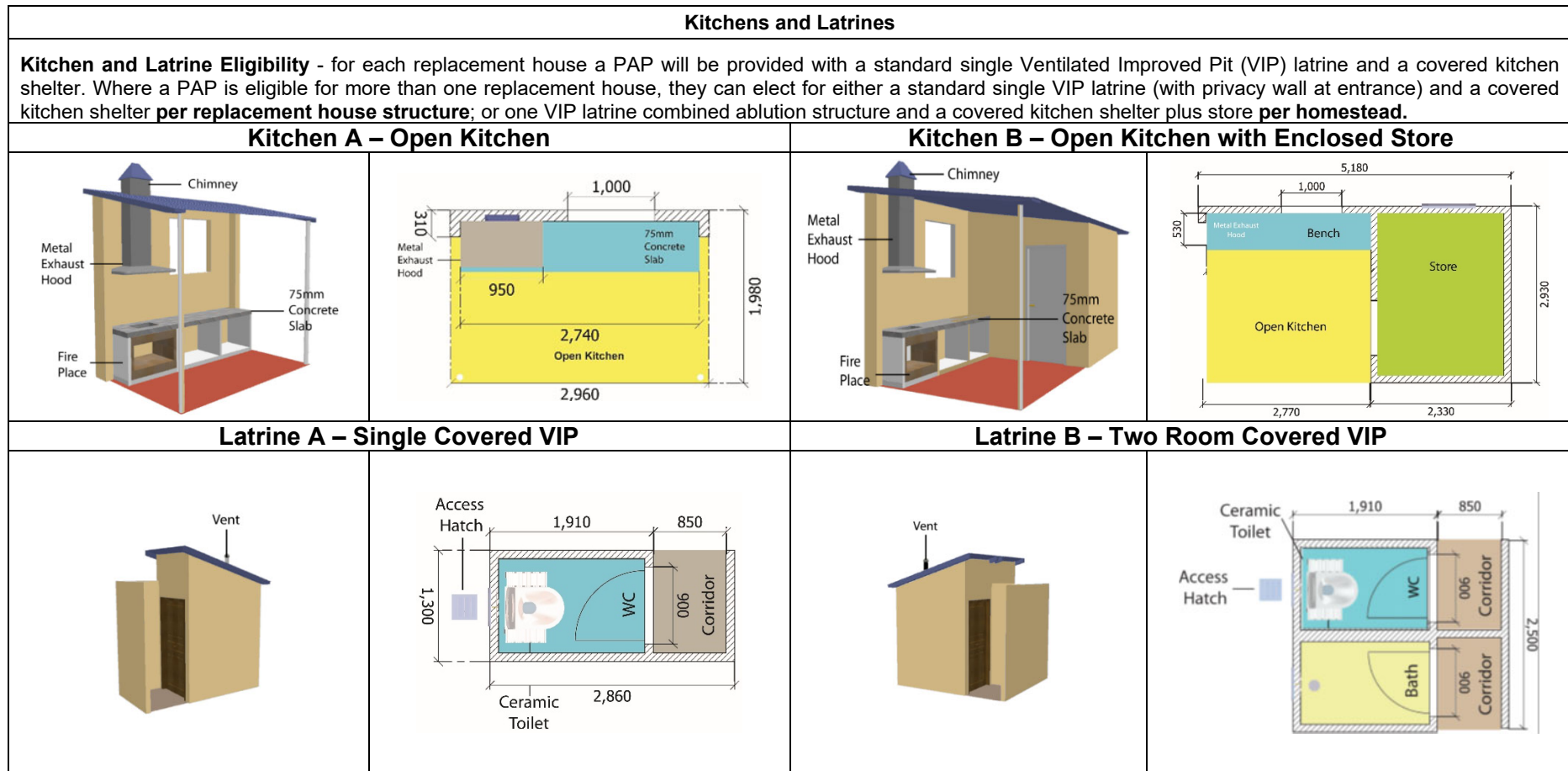
Type B will have an additional connecting store. For the two kitchen types there will be concrete strip foundations to support a concrete solid block foundation wall, built up to the natural ground line, and a reinforced concrete ground beam to support a thick concrete floor slab. All external and internal walls will be built from concrete blocks (with 12mm cement 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 will be necessary for structural support to distribute the weight of the roof evenly on 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 screeds on the concrete floor slabs. There will not be any ceilings provided. Walls will be painted in eggshell colored finish. The composite panel external doors that have hardwood frames will be varnished after installation.

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 : Kitchens and Latrines**

## 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% of Tanzania's land mass<sup>179</sup> (FAO, 2012). The balance is predominantly forested (53%). On average, 83% of Tanzania's arable land available to households is currently being utilized. A review of land availability and productivity in the eight pipeline affected districts found that land utilization in Singida ranges from 72% in Mkalama, 88% in Mklama and 94% in Iramba (shown in Table 7-5).

**Table 7-5 Arable Land not Currently Utilized in Singida<sup>180</sup>**

District	Average Planted Area per Household (Acre)	Usable Area per Household (Acre)	Percentage (%) of Land Area Currently Utilized by Households
Iramba	1.58	1.8	94
Mkalama	2.26	2.4	72
Singida	2.66	3.7	88

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 Singida most of the parcels required are less than 0.5 acres, while three (3) PAPs will have more than 10 acres of their land acquired by the Project. Most PAPs have one piece of land acquired and approximately 14% of PAPs in Singida will have more than one (1) parcel acquired by the Project. Chapter 6 presents the eligibility options for replacement land.

Figure 7-14 shows the maximum amount of replacement land required and length of each section by ward within the Singida Region.

<sup>179</sup> <http://tanzania.opendataforafrica.org/nmwhocb/tanzania-fao-stat-land-use-and-agricultural-inputs>.

<sup>180</sup> DWC. Technical Note: Eligibility Criteria for the EACOP Pipeline (2019).

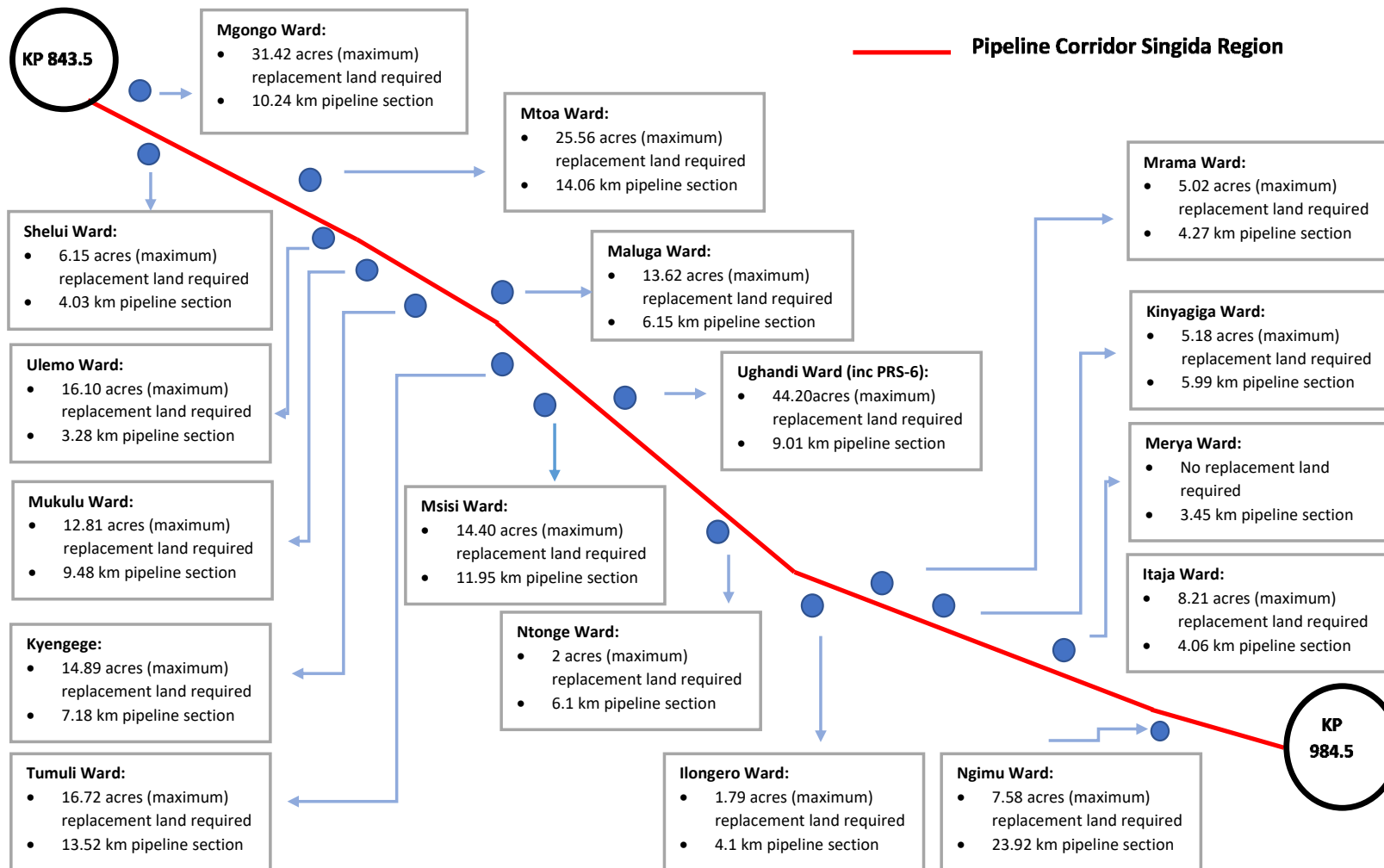


Figure 7-15: Maximum Area of Replacement Land Requirements in Singida Region (by Ward)

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 agricultural land that may be required, assuming all PAPs eligible for replacement land select it.

**Table 7-6 Summary of Replacement Land in Singida**

District	Ward	Village	Number of PAPs	Number of land Parcels	Replacement land Requirements (acres)
Iramba	Mgongo	Mseko	15	16	27.42
		Kizonzo	2	2	4.00
	Shelui	Nkyala	3	4	6.15
	Mtoa	Kinkungu	3	3	3.99
		Tyeme	9	10	14.76
		Masagi	5	5	6.82
	Ulemo	Misigiri	8	8	16.10
	Mukulu	Simbalungwala	10	13	12.81
		Mukulu			
	Kyengege	Makunda	10	14	14.89
Maluga	Ng'Anguli	6	6	13.62	
Mkalama	Tumuli	Tumuli	3	3	7.98
		Milade	4	6	8.73
Singida	Msisi	Ntondo	4	4	5.73
		Nkwae	3	4	6.26
		Msisi	1	1	2.41
	Ughandi	Misinko	5	8	10.16
		Misinko Village PR-6	5	10	34.05
	Ntonge	Iguari	1	1	0.95
		Iguari Village PS-6			
		Ifombou	1	1	1.06
	Ilongero	Madamigha	1	2	1.79
		Ilongero			
	Mrama	Mrama	2	3	2.96
		Idisimba	1	1	1.12
		Makhandi	1	1	0.95
	Kinyagigi	Mitula	1	1	0.44
		Kinyagigi	6	7	4.74
	Merya	Kinyamwambo			
	Itaja	Kinyamwenda	7	8	8.21
Ngimu	Mwighanji				
	Ngimu	2	2	2.80	
	Pohama	4	4	4.78	
<b>SINGIDA REGION TOTAL</b>			123	148	225.68

## Land for Land Replacement

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 Handbook<sup>181</sup> 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 Singida ranges from 6% to 28% across the three (3) districts. Consideration is therefore required in determining the most appropriate mechanism(s) to ensure that land-for-land replacement can be achieved in Singida. This may include one or both of the options recommended in the draft Good Practice Handbook.

As mentioned in Section 7.1.5, 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 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 elects 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 support the PAPs during this transition period.

In terms of replacement land, the aim is for most 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 jurisdiction of the same village, although right of

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<sup>181</sup> IFC. Draft Good Practice Handbook: Land Acquisition and Resettlement (2019).

occupancy will have to be transferred to the PAP. To 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.<sup>182</sup> 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 activities<sup>183</sup> 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"<sup>184</sup>.

This section includes an overview of the following:

- Key principles underpinning the LRP;
- Phasing of the LRP implementation;
- Overview of livelihood context and strategies;

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<sup>182</sup> 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 components of the PAPs livelihood strategies.

<sup>183</sup> 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.

<sup>184</sup> International Finance Corporation (IFC) (2012) Performance Standard 5.

- Assessment of livelihood impacts;
- 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
<b>Multi-faceted approach.</b>	Livelihood strategies need to incorporate a range of different approaches to restore, and / or improve livelihood activities.
<b>Active community participation.</b>	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.
<b>Vulnerability.</b>	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.
<b>Transitional support.</b>	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.
<b>Multi-sectoral partnerships.</b>	Technical expertise and institutional support will to be utilized across multiple service providers to ensure successful delivery.
<b>Sustainability.</b>	Sustainability principles must be applied throughout LRP planning and implementation to ensure the strategy is resilient without compromising the natural environment.
<b>Community ownership.</b>	Dependency is a key risk associated with resettlement activities and must be avoided. A livelihoods restoration strategy needs to empower communities to take ownership.
<b>Capacity building.</b>	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.
<b>Monitoring and evaluation.</b>	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 Singida 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.

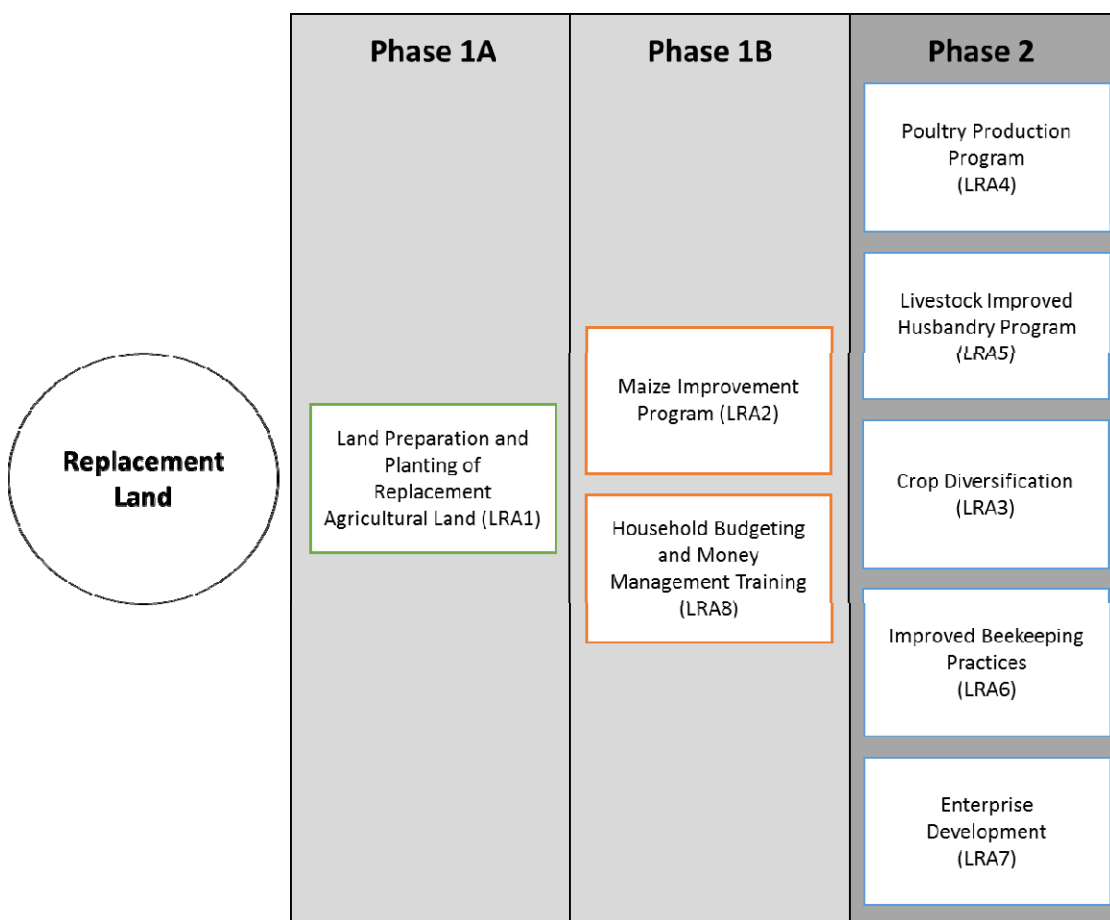


Figure 8-1: Phases of the LRP implementation

## 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 LRP benefits and eligibility criteria are common across all regions to ensure fairness. In developing the Singida Region LRP the following factors were considered:

- Regional population profile;
- Climate;
- Cultural characteristics;
- Livelihood zone;
- Livelihood strategies including:
  - Options for sale of crops;
  - Paid labor;
  - Size of agricultural land;
  - Climate variability, crop yields and adaptation; and
- Viable livelihood alternatives.

### 8.4.1 Regional Population Profile

The Singida Region is located in central Tanzania, south east of Lake Victoria. The population was projected to reach 1.54 million people in 2017 (from a census-based 1.37 million in 2012 – see Chapter 5 for details), with a population growth rate of 2.4% per annum. The region covers about 50,000 square kilometers with a population density of 28 people per square kilometer. Singida is one of 12 regions in Tanzania that is experiencing negative net migration. It is reported that the negative rate is slowing, due to an improvement of social services in the region (see Chapter 5).

### 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 from June to October and the hottest months from December to March.

The wet season varies geographically; the Singida Region is located in the semi-arid zone of Tanzania, which is characterized by a unimodal rainfall regime spanning the months November – May (Msimu rains<sup>185</sup>). The long-term mean annual rainfall is 624mm, with an average of 49 rainy days in a year. Generally, rainfall in the region is low and unreliable, and food shortages are common (Kangalawe and Lyimo, 2013).<sup>186</sup>

### 8.4.3 Cultural Characteristics

The main ethnic groups in the Project-affected districts are the Nyiramba and the Nyaturu. The Hadzabe are a minority in the Mkalama District and the Barabaig are a minority group found in all three districts. The Hadzabe and the Barabaig are two of the four vulnerable ethnic groups internationally recognized as indigenous people in Tanzania.

The Nyiramba and Nyaturu practice various forms of agriculture as their main source of livelihood (see Section 8.4.5), with livestock keeping as an additional source. These livelihood practices are the most common across the Project-affected districts and among PAHs and PAPs.

The Hadzabe are concentrated mainly in Mungulu Village, some 70 km from the pipeline corridor (and are therefore unlikely to experience any direct impacts from the Project). They are close to a forest reserve (Kipamba Forest Reserve) set aside for their use in 2003. The Hadzabe people in Nkalama District practice hunting and gathering as livelihood sources, including beekeeping and collecting plant roots.

Although more widely represented in the Project-affected districts, only one PAH from the Barabaig ethnic group who may self-identify as indigenous people was identified in the course of the socio-economic survey. This PAH is located in the Tumuli Ward of the Mkalama District. Traditionally the Barabaig are nomadic pastoralists, but the single Barabaig PAH has adopted agro-pastoral livelihood practices, in common with most other PAHs in the district. Hence Project impacts on this PAH should not differ from those experienced by the majority of PAHs and PAPs. Consequently, the identified Barabaig household should be well served by the Livelihood Improvement Programs described in Section 8.7.

### 8.4.4 Livelihood Zone<sup>187</sup>

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

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<sup>185</sup> Msimu rains are specific to the western, central, south-western highlands, southern regions and southern coast.

<sup>186</sup> Kangalawe and Lyimo, 2013. *Climate Change, Adaptive Strategies and Rural Livelihoods in Semi-arid Tanzania*. Natural Resources, 4, 266 – 278.

<sup>187</sup> 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>.

market opportunities. The livelihoods zoning initiative began in Tanzania in 2008 and continues to be developed throughout the country.

The northern part of the Singida Region (the project-affected districts) falls within Zones TLZ-22, TLZ-25 and TLZ-55. Information provided for these zones was largely corroborated by the SELI and socio-economic survey findings for the districts of Iramba, Mkalama and Singida. The primary livelihood and income generation activities of PAHs in these districts are agriculture based (92% of all PAHs). This includes sale of crops (52% of PAHs) and subsistence farming (40% of PAHs). See Chapter 5, Section 5.5.3 for a more detailed discussion.

The rainfall cycle plays a significant role in land preparation, planting and harvesting. Land preparation usually takes place in September and October. Planting follows according to crop type (early planting of maize, sorghum and millet in September and October, normal planting of a variety of crops between November and April). The first harvesting begins in April and continues through the range of crops to September. PAHs report food and cash shortages between October and March, aggravated in times of reduced rainfall. With food shortages already common, PAHs are especially vulnerable to climate change.

Livestock keeping is an important supplementary livelihood in the districts of Iramba, Mkalama and Singida, as is typical of Livelihood Zones TLZ-22, TLZ-25 and TLZ-55. Cattle, goats and sheep are the most commonly owned animals. There is a relative shortage of grazing in the affected districts and livestock are grazed wherever grazing is available and permitted. There is a dual system of livestock keeping; livestock owners and renters (see Chapter 5 for more detail). This arrangement optimizes livestock-derived benefits, and is an adaptation to limited grazing. When grazing is poor and water is in short supply, cattle may be herded to sites up to 20km away. Seasonal migration also takes place.

Secondary PAH livelihood activities in the three regions include general work (construction, agricultural day labor, carpentry, driving, welding, honey selling and petty trading). Some PAPs own small businesses, including buying and selling crops, producing and selling honey and traditional healing. A small proportion have salaried employment. Jobs listed are local government employee, teacher, lawyer, driver, tourism operator, pastor and builder. Just 1% of PAPs in Mkalama District report artisanal mining as a livelihood source.

A summary of affected livelihood activities in the Singida region, per ward, is provided in Table 8-2.

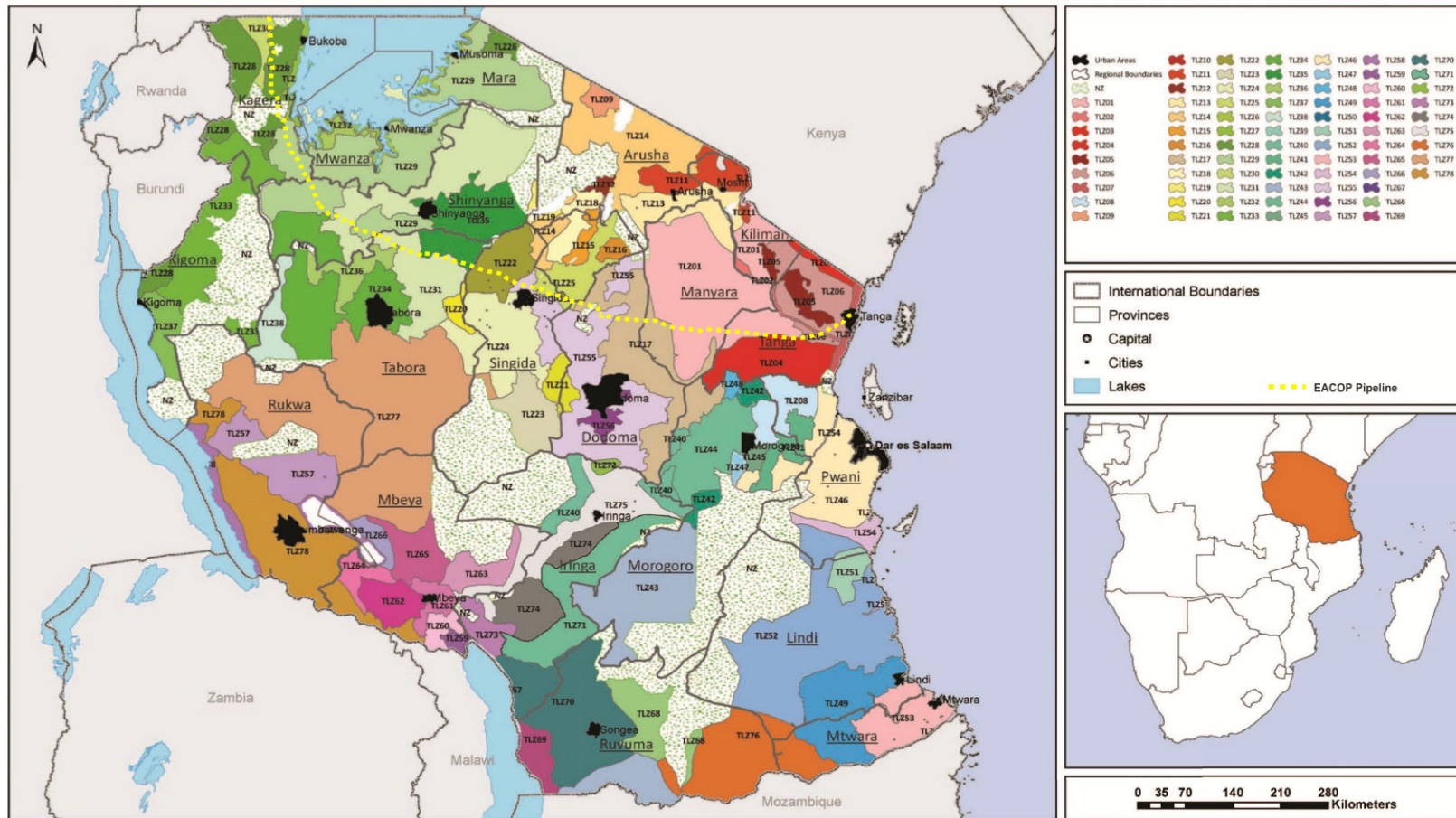


Figure 8-2: Tanzania Livelihood Zones<sup>188</sup>

<sup>188</sup> Adapted from [http://fews.net/sites/default/files/documents/reports/TZ\\_Livelihoods.pdf](http://fews.net/sites/default/files/documents/reports/TZ_Livelihoods.pdf)

Table 8-2: Summary of Livelihood Activities in Singida Region per Affected Ward

District	Ward	No. of PAHs <sup>189</sup>	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	Sunflowers	White sorghum	Red sorghum	Vegetables	Other	Poultry	Cattle	Goats	Sheep	Other livestock
Iramba	Mgongo	57		2		26	3	1	25		46	46	40	13	18	14		28	47	47	35	33	12
	Shelui	11	1	3		5			2		7	7	11	5	1	3		2	6	8	5	5	
	Mtoa	100	1		1	68			30		66	73	83	37	21	15	5	35	77	61	31	31	15
	Ulemo	15				11			4		11	12	15	15					14	14	11	10	2
	Mukulu	87	1		1	48		5	29		62	69	82	48	1	6	1	23	68	58	41	26	11
	Kyengege	55		1	2	33	1		18		32	32	49	9		1	20	28	45	41	30	11	4
	Maluga	29				16		1	8		20	19	24	13		1		8	23	22	15	11	1
<b>Total</b>		<b>354</b>	<b>3</b>	<b>6</b>	<b>4</b>	<b>207</b>	<b>4</b>	<b>7</b>	<b>114</b>	<b>0</b>	<b>244</b>	<b>258</b>	<b>304</b>	<b>140</b>	<b>41</b>	<b>42</b>	<b>26</b>	<b>124</b>	<b>280</b>	<b>251</b>	<b>170</b>	<b>129</b>	<b>45</b>
<b>Percent of PAHs</b>			<b>1%</b>	<b>2%</b>	<b>1%</b>	<b>58%</b>	<b>1%</b>	<b>2%</b>	<b>33%</b>	<b>0%</b>	<b>69%</b>	<b>73%</b>	<b>86%</b>	<b>40%</b>	<b>12%</b>	<b>12%</b>	<b>7%</b>	<b>35%</b>	<b>79%</b>	<b>71%</b>	<b>48%</b>	<b>36%</b>	<b>13%</b>
Mkalana	Tumuli	106		3	2	64	2	2	32	1	71	62	101	30	7	15	4	47	77	73	59	26	31
<b>Total</b>		<b>106</b>		<b>3</b>	<b>2</b>	<b>64</b>	<b>2</b>	<b>2</b>	<b>32</b>	<b>1</b>	<b>71</b>	<b>62</b>	<b>101</b>	<b>30</b>	<b>7</b>	<b>15</b>	<b>4</b>	<b>47</b>	<b>77</b>	<b>73</b>	<b>59</b>	<b>26</b>	<b>31</b>
<b>Percent of PAHs</b>			<b>0%</b>	<b>3%</b>	<b>2%</b>	<b>60%</b>	<b>2%</b>	<b>2%</b>	<b>30%</b>	<b>1%</b>	<b>67%</b>	<b>58%</b>	<b>95%</b>	<b>28%</b>	<b>7%</b>	<b>14%</b>	<b>4%</b>	<b>44%</b>	<b>73%</b>	<b>69%</b>	<b>56%</b>	<b>25%</b>	<b>29%</b>
Singida	Msisi	116		6	4	52	5	3	46		64	74	103	83	13	19	2	3	94	79	65	21	9
	Ughandi <sup>190</sup>	75				29	8		38		34	33	46	40	29	22	3	8	73	59	45	27	13
	Ntonge <sup>190</sup>	72			1	40	1	2	28		69	61	41	46	8	18	21	8	61	53	27	33	7

<sup>189</sup> PAHs responding to the SE survey (also excludes village/mtaa councils and other government institutions who administer affected land and assets)<sup>190</sup> This includes households at PS-6



District	Ward	No. of PAHs 189	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	Sunflowers	White sorghum	Red sorghum	Vegetables	Other	Poultry	Cattle	Goats	Sheep	Other livestock
	Ilongero	66		3	1	34		2	26		59	48	30	41	13	12	19	15	47	31	21	16	15
	Mrama	46				12	1		34	1	38	35	7	25	17	15	12	14	43	34	25	27	7
	Kinyagigi	89			1	44	7		36	1	53	55	30	46	44	18	10	28	77	62	42	45	15
	Merya	31			1	16			14		14	14	7	22	18	6	7	2	27	29	17	12	2
	Itaja	38				13	4	2	19		26	25	19	32	10	10		5	33	34	23	9	1
	Ngimu	124		2		76	1	3	41	1	114	115	77	91	24	36		14	111	102	89	32	11
<b>Total</b>		<b>657</b>		<b>11</b>	<b>8</b>	<b>316</b>	<b>27</b>	<b>12</b>	<b>280</b>	<b>3</b>	<b>471</b>	<b>460</b>	<b>360</b>	<b>426</b>	<b>176</b>	<b>156</b>	<b>74</b>	<b>97</b>	<b>565</b>	<b>482</b>	<b>351</b>	<b>221</b>	<b>82</b>
<b>Percent of PAHs</b>			<b>0%</b>	<b>2%</b>	<b>1%</b>	<b>48%</b>	<b>4%</b>	<b>2%</b>	<b>43%</b>	<b>0%</b>	<b>72%</b>	<b>70%</b>	<b>55%</b>	<b>65%</b>	<b>27%</b>	<b>24%</b>	<b>11%</b>	<b>15%</b>	<b>86%</b>	<b>73%</b>	<b>53%</b>	<b>34%</b>	<b>12%</b>
<b>Singida Region Total</b>		<b>1117</b>	<b>3</b>	<b>20</b>	<b>14</b>	<b>587</b>	<b>33</b>	<b>21</b>	<b>428</b>	<b>4</b>	<b>786</b>	<b>780</b>	765	596	224	213	<b>104</b>	<b>268</b>	<b>922</b>	<b>806</b>	<b>580</b>	<b>376</b>	<b>158</b>
<b>Singida Region Percent of Total PAHs</b>			<b>0%</b>	<b>2%</b>	<b>1%</b>	<b>53%</b>	<b>3%</b>	<b>2%</b>	<b>38%</b>	<b>0%</b>	<b>70%</b>	<b>70%</b>	68%	53%	20%	19%	<b>9%</b>	<b>24%</b>	<b>83%</b>	<b>72%</b>	<b>52%</b>	<b>34%</b>	<b>14%</b>

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 Singida region these differences are dictated by factors, such as:

- Options for sale of crops;
- Paid labor;
- Size of agricultural land; and
- Climate variation, crop yields and adaptation.

#### Options for Sale of Crops

Most rural Tanzanians are partly reliant on subsistence farming of crops and livestock. Monetization of rural economies is well advanced, so mechanisms for the sale of crops 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 very 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;
- Even a poor household with only six (6) months' worth of 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.

In order to access larger markets, many PAHs in Iramba, Mkalama and Singida sell their harvested crops to intermediaries living in the villages. The intermediaries in turn sell the crops at large ward, and district markets which are frequented by buyers from around Tanzania as well as neighboring countries. Many PAHs noted that while they might 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. Farmers generally do not hold crops to take advantage of market price fluctuations because of the lack of adequate storage facilities. Consequently, they are forced to sell crops soon after harvest.

As already noted, the majority of households in Singida are involved in crop production as well as livestock as their main source of livelihood. Both activities are prone to climate change and variability. This suggests that when such activities are impacted by climate change it may have serious consequences on household food security and general livelihoods, thus, involvement in other economic activities besides agriculture strengthens

the livelihood base and household adaptive capacity when agriculture (i.e. crop production and livestock keeping) is negatively affected.

### **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.

Agricultural day labor is listed as source of livelihood by PAPs in Iramba, Mkalama and Singida districts.

### **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 livelihood(s) 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 four (4) to five (5) acres. Some households were land poor, or landless. Survey results indicated that 0.5 to 1 acre per person is needed for basic subsistence and cash needs.

PAPs in the Singida Project affected areas expressed concern about the loss of all or part of their agricultural land. The main areas of concern were:

- Loss of crop production with subsequent adverse impacts on household food security and income; and
- Availability of suitable nearby replacement land, considering a perceived shortage of arable land and the possibility that the current holders of potential replacement land will be reluctant to sell.

For the Singida RAP 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 vulnerable<sup>191</sup>. 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. Like many of these regions, Singida is classified as semi-arid, with relatively low and highly seasonal rainfall. As previously noted, agriculture in Singida is predominantly rain-fed, so long-term climate changes and periodic droughts have negative impacts on agricultural production, food and income availability and food shortages.

Long term climate change remains to be demonstrated in Singida Region, but many respondents in a climate change survey in the region reported indicators of such change, including rainfall coming late in the rainfall season<sup>192</sup>. Drought was cited by PAHs in Iramba, Mkalama and Singida as a driver of food shortages in these regions.

In order to cope with these ongoing challenges, where possible households are forced to diversify and adapt their agricultural practices. Adaptive measures listed by households in the Singida climate change survey noted above included:

- Growing drought tolerant crops;
- Growing fast maturing crops;
- Buying supplementary foods; and
- Crop diversification and mixed cropping<sup>193</sup>.

Households with limited livelihood assets were seen to be more vulnerable to the impacts of climate change. Singida PAPs identified several post-resettlement areas of Project support, some of which will contribute to climate variability adaptation and resilience:

- Supplying improved seeds (drought and disease resistant), specifically for maize, sorghum, millet, sunflower and onion crops;
- Providing training in conservation agriculture, sustainable agricultural practices and climate smart agriculture; and
- Constructing storage facilities to diminish post-harvest shortages.

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<sup>191</sup> 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.

<sup>192</sup> Survey conducted in Kitopeni and Mvumi villages, Manyoni District; Singida Region by Kangalawe and Lyimo (2013). The survey villages are not in a Project-affected district, but in the absence of climate change findings specific to Project-affected areas, the observations can usefully be generalized. See Kangalawe and Lyimo (2013): Climate Change, Adaptive Strategies and Rural Livelihoods in Semi-Arid Tanzania

<sup>193</sup> Kangalawe and Lyimo (2013).

### 8.4.6 Viable Livelihood Alternatives

Several livelihood diversification options have been noted in the Singida Region and in some of the affected wards and villages. Many are practiced by small local CBOs<sup>194</sup> and sometimes relatively informal community groups and are not mainstream strategies among PAPs. The diversification options listed below do have potential, however, and could become more significant with appropriate training and funding support (see Section 8.7.3):

- **Beekeeping (production and sale of honey).** Beekeeping is traditionally practiced in Singida and in most of the affected villages. Beekeeping is practiced by at least some PAPs and has also been adopted by local CBOs. Successful beekeeping requires areas with enough trees and water to attract bees. Beekeeping is practiced as a secondary livelihood by PAPs in the following wards across the affected districts:
  - Iramba District – Mtoa, Shelui, Ulemo, Kyengege, Maluga (5 of the 7 affected wards),
  - Mkalama District – Tumuli Ward (1 of 1 affected ward); and
  - Singida District – Msisi, Ughandi, Ntonge, Ilongero, Kinyagigi, Merya, Itaja, Ngimu (8 of the 9 affected wards).

Beekeeping has been adopted by CBOs in the following wards:

- Iramba District – Maluga (1 of 7 affected wards but may be more);
- Mkalama District – none identified, but the ward CDO stated that the conditions in Tumuli Ward (water and trees) are ideal for beekeeping; and
- Singida District – Msisi, Ughandi Ilongero, Itaja (4 of 9 affected wards, but may be more).

Challenges to the effectiveness of beekeeping include availability of modern equipment (hives, protective clothing, honey filtering machines), drought and water shortages, ants and honey badgers and access to major markets. NGOs and districts often provide a brief period of training and information sharing, but it is not considered adequate. At present there is no follow-up training to deal with challenges encountered;

- **Indigenous chicken rearing and sales.** There is a thriving indigenous chicken market in Singida Region and many PAPs and CBOs are involved in indigenous<sup>195</sup> chicken rearing and sales. Challenges include access to chicken feed (availability and cost), access to vaccinations and medicine (availability and cost), equipment (availability and cost of materials for coops and of incubators), access to markets and market volatility;

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<sup>194</sup> In this context CBO refers to a range of community based organizations – many small, locally-based and relatively informal.

<sup>195</sup> Chickens native to Tanzania

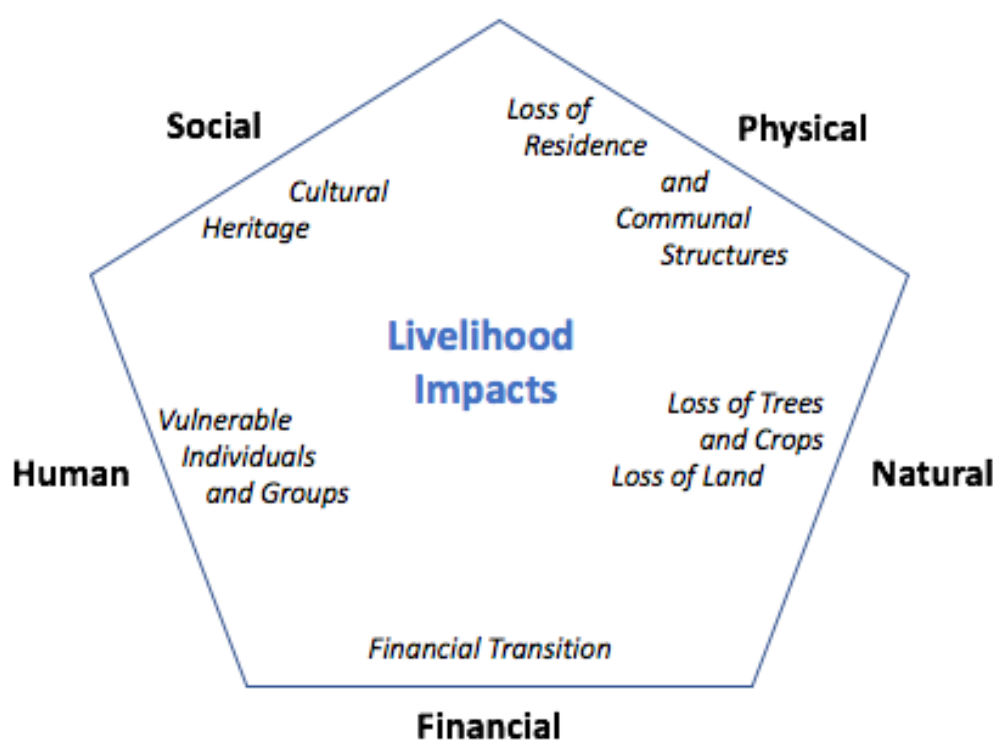
- **Production and sale of red onions.** Singida Region is the biggest producer of red onions (rain fed) in Tanzania (according to Singida District Officers) and there is a large red onion market in Singida Town, frequented by national and international buyers. Red onions are not widely grown among PAPs (socio-economic survey), but the potential of the crop was noted by some participants in the SELI survey. Storage is an important component of the commercial viability of red onions. The Singida DC is considering construction of onion storage facilities in various districts in the region to address this issue;
- **Horticulture.** Despite water shortages in the affected wards and districts, a number of CBOs have been established to practice horticultural production (mainly vegetables). A horticulture project aimed at women farmers and being implemented in the project-affected districts (Singida, Mkalama, Iramba) and elsewhere (see discussion of the Helvetas / KUWAKI project in Section 8.7.3). Horticultural production may provide opportunities to increase red onion production. Challenges to horticultural production are limited resources for the purchase of irrigation equipment and pesticides, inadequate skills training, water shortages and pest infestations;
- **Cash crop cultivation.** Many of the CBOs interviewed are engaged in cash crop cultivation and sales (sunflowers, maize, onions, finger millet). Challenges include insufficient investment capital (renting / buying agricultural land, buying agricultural inputs such as improved seeds and pesticides), lack of storage facilities and access to markets. Lentils are among the most profitable cash crops in the region, but lack of access to pesticides and storage facilities adversely impacts yield and income. Ground nuts are cultivated by PAPs in all the affected wards, but access to improved seeds and markets as well as drought reduce income potential;
- **Biomass charcoal briquettes.** Briquettes could be produced from sunflower crop residue and groundnut shells with appropriate equipment; and
- **Production of improved seeds.** The NGO Faida Mali has provided training to CBOs on improved seed production. Members of the NGO stated that there is a stable market for improved seeds (selling to Faida Mali and farmers). Challenges include insufficient access to hybrid seeds, availability and cost of pesticides and sprayers and lack of irrigation pumps.

## 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.



**Figure 8-3: Impacts categorized using DFID Sustainable Livelihood Framework.**

Impacts identified in the Project area due to land acquisition and resettlement include:

- Loss of land;
- Loss of residences;
- Loss of trees and crops;
- Loss of communal resources – part of a forested area, and natural springs in some wards;
- 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 Singida Region**

Key findings related to the assessment of displacement impacts on the livelihood strategies of PAPs in Singida include:

- The pipeline traverses Singida Region over a distance of 140.79 km, affecting 1,429 land parcels. A total of 1152 acres of land will be affected by the Project (including infrastructure crossings that will remain), of which 358.60 acres was recorded as crop land;
- A total of 9,417 crop stems and 19,352 economic and other trees were recorded during the valuation as affected by the Project;

- Agriculture and crop production are undertaken by 92% of PAHs within the Districts of Iramba, Mkalama and Singida, with 52% indicating the sale of crops as a primary livelihood activity, and 40% practicing subsistence farming;
- Crop production is undertaken by most PAHs a principal source of food – variations in yield (including loss of land) have the potential to prompt food shortages;
- Some PAHs rely on seasonal agricultural jobs to supplement their household income during the lean months associated with the beginning of the cropping season;
- The loss of economic trees may affect food supplies and will reduce sites for beehives;
- Cattle and other livestock represent key sources of supplementary income for PAHs through the sale of livestock products such as eggs, milk, manure etc. The livestock also provide a non-cash reserve which is relied on to finance children's education, supplement households' food supplies and cover medical emergencies and funerals;
- 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 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.

No impacts specific to identified indigenous peoples have been identified. As noted in Section 8.4.3, the single Barabaig household in Mkalama District has adopted livelihood practices common to most households in the district. Hence impacts for this household will be largely the same as those for neighboring households.

The detailed LRP for Singida 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 below 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
<b>0</b>	Physically displaced PAP whose dwelling is affected and is eligible for replacement housing.	<ul style="list-style-type: none"> <li>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</li> <li>Where PAP selects replacement house they will be provided with (as a minimum) a Residential Plot only.</li> </ul>	<ul style="list-style-type: none"> <li>Land and Non-land-based group level livelihood restoration programs; and</li> <li>Individual level livelihood restoration program (G1).</li> </ul>
<b>1</b>	PAP loses < AE OR > AFS (Acre Equivalent and Average Farm Size).	<ul style="list-style-type: none"> <li>Cash compensation for the land.</li> </ul>	<ul style="list-style-type: none"> <li>Group level land-based and non-land-based livelihood restoration program(s) (G4).</li> </ul>
<b>1a</b>	PAP will lose <AE and is identified as vulnerable.	<ul style="list-style-type: none"> <li>Cash compensation for the land.</li> </ul>	<ul style="list-style-type: none"> <li>Group level land-based and non-land-based livelihood restoration program(s); and</li> <li>Individual level livelihood restoration program(s) (as appropriate to vulnerability factors of PAP) (G2).</li> </ul>
<b>2</b>	PAP will lose >AE BUT <AFS	<ul style="list-style-type: none"> <li>Cash compensation for the land; and</li> <li>Assistance in formalizing appropriate tenure to alternative land within in the ward (where requested and land being self-identified by PAP).</li> </ul>	<ul style="list-style-type: none"> <li>Group level land-based and non-land-based livelihood restoration program(s) (G4).</li> </ul>
<b>2a</b>	PAP will lose >AE BUT <AFS and is identified as vulnerable	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>A group level livelihood program; or</li> <li>An individual level livelihood program (G3).</li> </ul>
<b>2b</b>	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"> <li>No land entitlement.</li> </ul>	<ul style="list-style-type: none"> <li>Non-land-based group level livelihood restoration (i.e. Money Management and Entrepreneurial Training); and</li> <li>Group Level livelihood program – where tenant PAPs have lost &gt;AE and have self-identified and secured / have access to alternative land to farm (G5).</li> </ul>

Replacement Land Eligibility Category	Criteria	Replacement Land Entitlements	Livelihood Restoration Support Entitlements
<b>3</b>	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"> <li>• No land entitlement.</li> </ul>	<ul style="list-style-type: none"> <li>• Non-land-based or non-crop-based livelihood restoration programs (i.e. Money Management and Entrepreneurial Training, livestock program, beekeeping program); and</li> <li>• Livelihood program will be commensurate to assets lost (G6).</li> </ul>
<b>3a</b>	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"> <li>• No land entitlement.</li> </ul>	<ul style="list-style-type: none"> <li>• Not eligible for livelihood restoration programs (G7).</li> </ul>

From the review of impacts on livelihood strategies, criteria were established (see Table 8-4 below) 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 Singida 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		
				Iramba						Mkalama	Singida										
				Wards																	
				Mgongo	Shelui	Mtoa	Ulemo	Mukulu	Kyengege	Maluga	Timuli	Msisi	Ughandi	Ntonge	Ilongero	Mrama	Kinyagigi	Merya		Itaja	Ngimu
G1	0	PAP will permanently lose access to his / her residential dwelling(s).	Land or non-land-based group level livelihood restoration program. Individual level livelihood restoration program.	4	0	1	1	4	0	2	2	0	4	0	0	1	4	0	2	1	26
G2	1a	PAP will permanently lose access to his / her land and is identified as vulnerable.	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).	17	2	18	2	9	1	2	21	15	9	5	15	11	16	4	11	9	167
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.	A group level livelihood program; and An individual level livelihood program.	15	3	16	8	6	10	4	6	8	6	2	1	3	3	0	5	5	101
G4	1 and 2	PAP will permanently lose access to his / her land in part or whole.	Group level land-based and non-land-based livelihood restoration program(s).	18	18	45	4	49	35	22	69	68	52	54	40	26	60	24	28	100	712
G5	2b	Tenant PAP will lose > AE of crops and / or trees, but not compensated for land.	Land-based and non-land-based group level livelihood restoration programs (i.e. Money Management	0	0	2	0	0	0	0	2	2	1	0	0	0	0	1	0	1	9

Livelihood Restoration Group	Replacement Land Eligibility Category	Criteria	Type of Livelihood Restoration Support	Districts														Totals Per Livelihood Restoration Group			
				Iramba							Mkalama	Singida									
				Wards																	
				Mgongo	Shelui	Mtoa	Ulemo	Mukulu	Kyengege	Maluga	Timuli	Msisi	Ughandi	Ntonge	Ilongero	Mrama	Kinyagigi		Merya	Itaja	Ngimu
			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.	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	0	10	0	2	0	0	4	10	0	2	1	0	2	1	0	1	33
(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.				4	3	13	0	23	9	0	14	16	6	11	10	8	9	3	6	10	145

## 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, 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 aspects.

**Table 8-5: Summary Table - NGOs, NPOs, FBOs and Livelihood Improvement Programs**

Area	Non-Government Organizations (NGOs, Non-Profit Organizations (NPOs) and Faith-based Organizations (FBOs)	Summary of Relevant Livelihood Improvement Programs
Iramba, Mkalama and Singida Districts	Helvetas KUWAKI project.	<ul style="list-style-type: none"> <li>• Focused on empowering women through agriculture.</li> <li>• Promotes the development of horticulture (vegetable production) and aligns with the Tanzanian Horticulture Development Strategy.</li> <li>• Active in five Singida districts (including the three Project affected districts).</li> </ul>
	One Acre Fund.	<ul style="list-style-type: none"> <li>• Provides support to farmers cultivating maize.</li> <li>• Follows a holistic approach that includes providing seeds on credit, training in modern agricultural techniques and advice on crop storage and marketing.</li> <li>• Feasibility study undertaken in Iramba in 2018 / 2019.</li> </ul>
	World Vision Area Development Programs (ADP).	<ul style="list-style-type: none"> <li>• Multi-sector development programs offered in specific areas in partnership with local stakeholders: Education, health, water, agriculture, children's right, environmental conservation, capacity building on entrepreneurship.</li> <li>• Provides beekeeping, livestock-rearing and horticultural training for CBOs in the Project affected districts.</li> <li>• Contributes to health and education infrastructure in Project-affected districts.</li> </ul>

Area	Non-Government Organizations (NGOs, Non-Profit Organizations (NPOs) and Faith-based Organizations (FBOs)	Summary of Relevant Livelihood Improvement Programs
Iramba, Mkalama and Singida Districts	Farmer Managed Natural Regeneration (FMNR).	<ul style="list-style-type: none"> <li>Support for sustainable land restoration initiatives, with an emphasis on the restoration of vegetation (mainly trees).</li> <li>Training and support for beekeeping CBOs in Singida Region.</li> </ul>
	SEMA	<ul style="list-style-type: none"> <li>NGO focused primarily on facilitating access to information on development and social services (public health, water, nutrition, capacity building and entrepreneurship), with an emphasis on empowering women and children.</li> <li>The focus is on improved nutrition for pregnant women and children under 5.</li> <li>Currently active in Project-affected districts.</li> </ul>
	RECODA	<ul style="list-style-type: none"> <li>Tanzanian NGO seeking to bridge technology gaps in community development. Promotes research and capacity building and participates in community projects with the aim of reducing poverty and food insecurity</li> <li>Focus on improved nutrition for pregnant woman and children under 5 through horticulture and conservation agriculture.</li> <li>Involved in various forms of support and training, including livestock-rearing (poultry and goats) and horticulture (plantains, nutritious sweet potatoes).</li> <li>Active in Project-affected districts.</li> </ul>
	FAIDA MALI	<ul style="list-style-type: none"> <li>Tanzanian NPO that seeks to enable men and women in rural Tanzania to access markets through capacity building of CBOs</li> <li>Focus is on increasing sunflower crop yield by improving farming methods.</li> <li>Active in Project-affected districts.</li> </ul>
	Save the Children	<ul style="list-style-type: none"> <li>International NGO that focuses on improving children's lives by ensuring that children have healthcare, food and shelter, as well as learning and child protection services.</li> <li>EVERY ONE campaign in Tanzania that seeks to reduce malnutrition amongst under-5 children, pregnant women, lactating mothers, and adolescent girls as well as improving access to maternal, newborn and child health services.</li> <li>In Singida Region, focus is on agricultural projects (horticulture and livestock keeping) and entrepreneurship skills training to address malnutrition.</li> </ul>
Iramba, Mkalama and Singida Districts	Action Aid International	<ul style="list-style-type: none"> <li>A global justice federation working to achieve social justice, gender equality and poverty eradication.</li> <li>In the Project-affected wards, Action Aid is focused on child nutrition, promoting children's rights, promoting women's rights and sensitizing communities to the importance of contributing to community development projects.</li> </ul>

Area	Non-Government Organizations (NGOs, Non-Profit Organizations (NPOs) and Faith-based Organizations (FBOs)	Summary of Relevant Livelihood Improvement Programs
Singida District	WFP (World Food Program)	<ul style="list-style-type: none"> <li>• A leading humanitarian organization delivering food assistance in emergencies and working with communities to improve nutrition and build resilience.</li> <li>• The Boresha Lishe programme is focused on providing training on how to prepare and use nutritious food.</li> <li>• Training provided to health care facility staff and CBOs) on how to prepare nutritional porridge for under-5 children.</li> <li>• Currently active in Singida District.</li> </ul>
Iramba, Mkalama and Singida Districts	BioSustain Limited Tanzania	<ul style="list-style-type: none"> <li>• A company that has signed an MoU with districts in Singida to revive cotton production using organic farming methods and to provide markets for organic certified products.</li> <li>• Provides farmers with support and technical assistance and pays an organic premium for the cotton.</li> <li>• Operates in Singida Region.</li> </ul>
Mkalama District	Trees for the Future	<ul style="list-style-type: none"> <li>• International NPO focused on reforestation to revitalize soil and regenerate agriculture.</li> <li>• Provides tree seeds, technical training and on-site planning assistance.</li> <li>• Forest Garden project currently active in Singida Region.</li> </ul>
Iramba, Mkalama and Singida Districts	CIMMYT	<ul style="list-style-type: none"> <li>• International Maize and Wheat improvement Center that uses science and technology to help farmers grow more nutritious, resilient and productive maize and wheat cropping systems, using methods that nourish the environment and combat climate change.</li> <li>• Improved Maize for African Soils (IMAS) is a current initiative in Singida Region: Provides improved maize seeds to agriculture extension officers who in turn distribute to CBO members who are part of initiative as well as land for the IMAS initiative.</li> <li>• Active in Project-affected districts.</li> </ul>
Iramba, Mkalama and Singida Districts	CARE International	<ul style="list-style-type: none"> <li>• A global organization that seeks to end poverty and social injustice by empowering women and girls.</li> <li>• Provides sensitization training on the importance of group activities for improving livelihoods.</li> <li>• Active in the Project-affected districts.</li> </ul>
Iramba, Mkalama and Singida Districts	Vision Fund International	<ul style="list-style-type: none"> <li>• A Christian relief, development and funding organization that works with World Vision.</li> <li>• Provides microfinance loans and related financial training to impoverished households.</li> <li>• Active in Singida Region</li> </ul>

Area	Non-Government Organizations (NGOs, Non-Profit Organizations (NPOs) and Faith-based Organizations (FBOs)	Summary of Relevant Livelihood Improvement Programs
Singida Districts	CARITAS Australia	<ul style="list-style-type: none"> <li>• A Catholic agency for international aid and development.</li> <li>• Focuses on water and sanitation, HIV / AIDS awareness, gender issues, food security and sustainable agriculture.</li> <li>• Active in Singida Region.</li> </ul>
Iramba District	AMREF	<ul style="list-style-type: none"> <li>• International African Organization working with the most vulnerable African communities to achieve lasting health change.</li> <li>• Four main project areas: Reproductive, Maternal, Newborn and Adolescent Health; Disease Control and Prevention; Water, Sanitation and Hygiene; and Capacity Training.</li> <li>• Current projects in Iramba District: Entrepreneurship and reproductive health training for teenage girls living in poverty.</li> </ul>
Iramba District	Ndugu Organization	<ul style="list-style-type: none"> <li>• Tanzanian organization that focuses on education and schools.</li> <li>• Donation of school uniforms, books, and soap to in-need children.</li> <li>• Construction of libraries at secondary schools.</li> <li>• Provision of saplings to produce firewood.</li> </ul>
	EQUIP Tanzania (Education Quality Improvement Program)	<ul style="list-style-type: none"> <li>• An organization that supports the GoT vision for high quality education, especially for girls.</li> <li>• Projects include improvements in teacher performance, school leadership, district management and community participation. Also ensuring that children can access education and preparing them to start school.</li> <li>• Construction of classrooms in Ulemo Ward, Iramba District.</li> </ul>
	Water Aid	<ul style="list-style-type: none"> <li>• A UK-based organization working with the GoT to provide expert training and support to local authorities to provide clean water, improved pit latrines and hygiene to all people in Tanzania.</li> <li>• Construction of improved pit latrines at schools in Ulemo Ward, Iramba District.</li> </ul>
	PACT (Kizazi Kipya project)	<ul style="list-style-type: none"> <li>• PACT is an international development organization that aims to provide a better future for those challenged by poverty and marginalization.</li> <li>• The Kizazi Kipya (New Generation) project in Tanzania aims to transform the lives of vulnerable Tanzanian children and young people, especially those affected by HIV.</li> <li>• Active in all regions to provide better financial resources for parents and caregivers of orphans and vulnerable children as well as improved access to health and HIV services for children and adolescents.</li> <li>• Provides school uniforms and household amenities to children in need as well as education about childcare in Maluga and Ulemo wards, Iramba District.</li> </ul>



Area	Non-Government Organizations (NGOs, Non-Profit Organizations (NPOs) and Faith-based Organizations (FBOs)	Summary of Relevant Livelihood Improvement Programs
	IYAMI	<ul style="list-style-type: none"> <li>• A local organization that focuses on vulnerable children.</li> <li>• Donates school uniforms to students in need and provides counselling to reduce psychosocial impacts of vulnerability in Ulemo Ward, Iramba District.</li> </ul>
	Mwanzomwema (Good Start)	<ul style="list-style-type: none"> <li>• A UK-based NPO committed to supporting young people with disabilities to build independent lives.</li> <li>• Provides education, counselling and homebased care for vulnerable children and HIV-infected adolescents in Iramba District.</li> </ul>
Iramba District, Singida District	MEDO (Mtinko Education Development Organization)	<ul style="list-style-type: none"> <li>• Tanzanian organization that focuses on women and children's rights and education.</li> </ul>
Singida District	HAPA (Health Actions Promotion Association)	<ul style="list-style-type: none"> <li>• A Tanzanian NGO based in Singida Region that is committed to improving the wellbeing of women, children and youth through water, health and education services, infrastructural development, awareness raising and lobbying and advocacy.</li> <li>• Construction of improved pit latrines and classrooms in Singida District.</li> </ul>
	WIRWANA	<ul style="list-style-type: none"> <li>• A Tanzanian association for empowerment and development based in Singida Region.</li> <li>• Focuses on education, health, agriculture (including beekeeping) and legal advice.</li> </ul>

During the SELI interviews were conducted with CBOs in each of the Project-affected villages to determine the livelihood improvement initiatives that CBOs are engaged in across the Project-affected districts and to explore the benefits to CBO members. Table 8-6 presents the livelihood improvement initiatives and associated benefits for the CBOs engaged with.

**Table 8-6: CBOs<sup>196</sup> currently active in Project-affected Districts**

Project-affected District	Type of livelihood improvement initiative	General benefits of being part of a CBO
Iramba	<ul style="list-style-type: none"> <li>• Beekeeping (production and sale of honey);</li> <li>• Cash crop cultivation and sales (sunflowers, onions, finger millet, maize, beans, sweet potatoes, cotton)</li> <li>• Buying and selling fruit;</li> <li>• Buying and selling cash crops (maize, sunflowers, lentils, onions, tomatoes, bananas, ground nuts, rosella, orange-fleshed sweet potatoes) and sunflower oil;</li> <li>• Buying and selling second-hand clothes;</li> <li>• Horticulture production and sales (tomatoes, spinach, cabbages, okra, sweet peppers);</li> <li>• Establishing and operating a general goods kiosk;</li> <li>• Buying and selling livestock (cattle, goats, sheep);</li> <li>• Rearing and selling indigenous chickens (and eggs);</li> <li>• Rearing and selling livestock (cattle, goats);</li> <li>• Making and selling kitenge cloth;</li> <li>• Establishing and operating a seed mill;</li> <li>• Buying and selling fish;</li> <li>• Brewing and selling local liquor (millet and sorghum);</li> <li>• Producing and selling shoe polish, mosquito repellent, body lotion and body gel made from sunflower oil and herbs;</li> <li>• Producing and selling charcoal briquettes;</li> <li>• Buying and selling curtains; and</li> <li>• Establishing and operating a butchery.</li> </ul>	<ul style="list-style-type: none"> <li>• Strengthening social networks</li> <li>• Access to capital;</li> <li>• Gaining self-confidence;</li> <li>• Empowerment of women; and</li> <li>• Generating income to improve household circumstances - for example to: <ul style="list-style-type: none"> <li>- Rent or buy agricultural land</li> <li>- Construct improved housing</li> <li>- Purchase school uniforms and books</li> <li>- Improve household food security</li> <li>- Access healthcare</li> <li>- Start additional businesses</li> <li>- Gain a degree of financial independence.</li> </ul> </li> <li>• In some cases, CBOs have not yet generated income</li> </ul>
Mkalama	<ul style="list-style-type: none"> <li>• Making and selling traditional cloth (kitenge) clothing;</li> <li>• Cultivation and sale of cash crops (sunflower, onion, maize, lentils);</li> <li>• Rearing and selling livestock (goats, chickens, cattle, pigs);</li> <li>• Buying, holding and selling cash crops (sunflower, millet, tomatoes, onions);</li> <li>• Cultivating and selling horticultural produce (vegetables);</li> <li>• Food vending (cooked food);</li> <li>• Brewing and selling local liquor (millet and sorghum);</li> <li>• Making and selling soap; and</li> <li>• Establishing and operating a tree nursery (fruit and timber trees).</li> </ul>	<ul style="list-style-type: none"> <li>• Strengthening social networks</li> <li>• Access to capital;</li> <li>• Gaining self-confidence;</li> <li>• Empowerment of women; and</li> <li>• Generating income to improve household circumstances - for example to: <ul style="list-style-type: none"> <li>- Rent or buy agricultural land</li> <li>- Construct improved housing</li> <li>- Purchase school uniforms and books</li> <li>- Improve household food security</li> <li>- Access healthcare</li> <li>- Start additional businesses</li> <li>- Gain a degree of financial independence.</li> </ul> </li> <li>In some cases, CBOs have not yet</li> </ul>

<sup>196</sup> Includes formal and informal community groups, active mainly at local level

Project-affected District	Type of livelihood improvement initiative	General benefits of being part of a CBO
Singida	<ul style="list-style-type: none"> <li>• Beekeeping (production and sale of honey);</li> <li>• Cash crop cultivation and sales (sunflowers, onions, finger millet, orange-fleshed sweet potatoes, bananas);</li> <li>• Indigenous poultry rearing (chicken and egg sales);</li> <li>• Livestock rearing (goats);</li> <li>• Buying, holding and selling cash crops (sunflowers and maize);</li> <li>• Buying and selling fish;</li> <li>• Horticultural production and / or sales (tomatoes, cabbage, spinach, amaranth greens, okra and sweet peppers);</li> <li>• Making and selling handmade soap;</li> <li>• Making and selling kitenge and batik cloth;</li> <li>• Establishing and running a village bakery;</li> <li>• Establishing and running a cereal mill;</li> <li>• Cultivation of plantains in wetland areas;</li> <li>• Purchasing and selling cow and goat's milk;</li> <li>• Producing and selling traditional liquor (millet and sorghum based);</li> <li>• Production and sale of clay charcoal cookers;</li> <li>• Establishing and operating village restaurants;</li> <li>• Food vending (cooked food);</li> <li>• Establishing and running general goods kiosks;</li> <li>• Buying and selling cooking utensils;</li> <li>• Buying and selling clothes;</li> <li>• Establishing and operating a butchery;</li> <li>• Pottery production and sales;</li> <li>• Tree planting;</li> <li>• Carpentry;</li> <li>• Producing improved seeds (sunflower, millet, onion, sorghum, finger millet);</li> <li>• Rearing hybrid dairy cattle and selling milk; and</li> <li>• Producing and donating or selling nutritious cereal for infants and children.</li> </ul>	<p>generated income</p> <ul style="list-style-type: none"> <li>• Strengthening social networks</li> <li>• Access to capital;</li> <li>• Gaining self-confidence;</li> <li>• Empowerment of women; and</li> <li>• Generating income to improve household circumstances - for example to: <ul style="list-style-type: none"> <li>- Rent or buy agricultural land</li> <li>- Construct improved housing</li> <li>- Purchase school uniforms and books</li> <li>- Improve household food security</li> <li>- Access healthcare</li> <li>- Start additional businesses</li> <li>- Gain a degree of financial independence.</li> </ul> </li> </ul> <p>In some cases CBOs have not yet generated income</p>

## 8.7.2 Government Programs Identified

### Agricultural Based Programs

Tanzania's Agricultural Sector Development Strategy II aims to contribute "...to the realization of 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”.<sup>197</sup>

### TASAF Support Program

The objective of TASAF 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 announced in 2018 its continuation into a 3<sup>rd</sup> 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 six (6) times per year. Families are required to register to receive grants. TASAF has three (3) components as described in Table 8-7 below.

**Table 8-7: Livelihood Components of the TASAF Support Program**

Component.	Description of Component.
<b>Monetary Pay-out.</b>	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.
<b>Public Works.</b>	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.
<b>Livelihood Enhancement.</b>	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 vegetables 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.

<sup>197</sup> <http://www.worldbank.org/en/country/Tanzania/publication/tanzania-mainland-poverty-assessment-a-new-picture-of-growth-for-tanzania-emerges>.

### **8.7.3 Additional Programs in Partnership or by GoT**

Relevant development projects identified during consultations and currently ongoing in the Singida Region are listed in Table 8-8 below;

**Table 8-8: Development projects in Iramba, Mkalama and Singida Districts**

Sector	Current and on-going Initiatives, Projects and Programs	District / Ward / and Village	Office Responsible for Implementation
Education	<ul style="list-style-type: none"> <li>• Construction of hostels at Mgongo secondary school; Teachers houses at Kibululu primary school; 1 classroom, and teachers' house in Kisonga Shelui and Kizonzo primary schools; and teachers houses at Mseko primary school.</li> <li>• Construction of 2 hostels, administration block and dining room at Shelui ward secondary school; 3 classrooms and 2 teachers' houses at Kibigiri Primary School; 1 classroom at Shelui primary school; 3 classrooms, 1 teacher's house and one office at Tintigulu Primary School; and 1 staff room and 1 teacher's house at Nkyala Primary School (Project-affected village).</li> <li>• Construction of Mtoa secondary school hostel and laboratory.</li> <li>• Construction of laboratory and hostel at Mkulu ward secondary school; and construction of Mkulu pre-primary classrooms.</li> <li>• Construction of hostel and laboratory at Kyengege ward secondary School; and classrooms at Makunda and Kyengege Primary Schools.</li> <li>• Construction of 2 classrooms and teachers' houses in Maluga primary school.</li> <li>• Construction of desks and chairs for Msisi ward primary schools; additional teachers' house and classrooms at Nkwae primary school; and construction of laboratory, desks, chairs and hostel for Msisi secondary school.</li> <li>• Construction of 3 classrooms at Misinko primary school; pit latrines and 1 classroom at Mfumbu primary school; laboratory at Misinko secondary school; teachers' houses and class rooms at Mjura primary school; Construction of Kisutu pre-school; girls' hostel for Ughandi secondary school which is 80% completed.</li> <li>• Construction of teachers houses at Ifombou primary school at Ntonge ward.</li> <li>• Construction of primary school desks; 2 hostels for Ilongero secondary school; 4 class rooms for Ilongero secondary school; 2 teachers' offices; desks for Ilongero secondary school and rehabilitation of Ilongero secondary school dormitories.</li> <li>• Construction of teachers houses, 12 desks and 2 classrooms at Mrama primary school; construction of 2 laboratory rooms and administration block at Mrama secondary school.</li> <li>• Construction of Nyeri secondary school laboratory; class rooms and office building for Mwamenya primary school; and construction of Kindergarten classroom at Mwanyone village.</li> <li>• Construction of girls' hostel for Itaja ward secondary school and looking forward to finish 2019 (June / July financial year); desks for secondary school; teachers' houses at Kinyamwenda secondary school (still under construction); boys' hostel on plan; rehabilitation of Kinyamwenda secondary school and construction of matron's house at secondary school.</li> <li>• Completing laboratory for Ngimu and Pohama secondary schools; construction of 4 classrooms</li> </ul>	<p><u>Singida</u> All Project-affected wards (Msisi, Ughandi, Igauri, Ilongero, Mrama, Kinyagigi, Merya, Itaja and Ngimu)</p> <p><u>Iramba</u> All Project-affected wards (Mgongo, Shelui, Mtoa, Ulemo, Mukulu, Kyengege, and Maluga)</p> <p><u>Mkalama</u> Tumuli Ward</p>	District Dept. of Primary and Secondary Education with community contributions

Sector	Current and on-going Initiatives, Projects and Programs	District / Ward / and Village	Office Responsible for Implementation
	for primary schools; 2 classrooms for Pohama secondary school, 2 classrooms for kindergarten and teachers' houses at Pohama Secondary school • Improved pit latrines under construction at Tumuli Primary School		
<b>Health</b>	<ul style="list-style-type: none"> <li>• Construction of Mseko and Kizonzo dispensaries (blocks are ready)</li> <li>• Construction of Shelui ward health center</li> <li>• Construction of Misigiri health center (at foundation stage currently) and construction of Kitukuntu dispensary</li> <li>• Construction of 2 dispensaries at Mukulu ward and Mukulu health center</li> <li>• Construction of dispensaries and doctors' houses at Makunda and Ngundu villages of Kyengege ward</li> <li>• Reconstruction of Dispensary due to poor quality of the initial construction at Tumuli ward</li> <li>• Construction of Mother and Child building at Nkwae dispensary</li> <li>• construction (uncompleted) of Ughandi "B" dispensary Out Patient Department (OPD) building</li> <li>• Construction of Ifombou dispensary</li> <li>• Construction of Ilongero hospital (has started)</li> <li>• Construction of Kinyagigi health center (6,000 bricks for construction are ready)</li> <li>• Construction of doctors' house at Kinyamwenda dispensary</li> <li>• Construction of Ngimu health center</li> </ul>	<u>Iramba</u> Mseko, Kizonzo, Shelui, Misigiri, Mukulu and Kyengege  <u>Mkalama</u> Tumuli  <u>Singida</u> Nkwae, Ughandi, Ifombou, Ilongero, Kinyagigi, Kinyamwenda and Ngimu	District Dept. of Health and community initiatives
<b>Sanitation</b>	<ul style="list-style-type: none"> <li>• Construction of 2 improved pit latrines at Shelui and Nselembwe Primary Schools</li> <li>• Construction of pit latrines at Makunda and Kyengege Primary Schools</li> <li>• Construction of improved pit latrines at primary schools in Tumuli ward (under construction)</li> <li>• Construction of pit latrines at primary schools for Msisi ward</li> <li>• Construction of 11 pit latrines for Ifombou primary school</li> <li>• Construction of improved pit latrine for Ilongero secondary school</li> <li>• Construction of 16 pit latrines at Mrama primary school</li> <li>• Construction of improved pit latrines at Merya secondary school</li> <li>• Construction of improved 10 pit latrines at Itaja secondary school</li> </ul>	<u>Iramba</u> Shelui, Makunda, and Kyengege  <u>Mkalama</u> Tumuli  <u>Singida</u> Msisi, Igauri, Ilongero, Mrama, Merya and Itaja	District Dept. of Environment and community initiatives

Sector	Current and on-going Initiatives, Projects and Programs	District / Ward / and Village	Office Responsible for Implementation
<b>Water</b>	<ul style="list-style-type: none"> <li>• Construction of water tank of 300,000 liter capacity to be serving two villages in Ulemo ward</li> <li>• Construction of charco dams in each village at Mukulu ward (water for domestic use and livestock)</li> <li>• Construction of 1 water well and charco dams in each village at Tumuli ward, as TASAF funded</li> <li>• Construction of charco dam at Nkwae village; Installing of boreholes and hand pumps at Nkwae village</li> <li>• Construction of water well at Nkhema hamlet (Ifombou village / Ntonge ward)</li> </ul>	<u>Iramba</u> Ulemo, Mukulu  <u>Mkalama</u> Tumuli  <u>Singida</u> Ntonge and Nkwae	District water department, community, TASAF and community
<b>Administration</b>	<ul style="list-style-type: none"> <li>• Construction of Mseko, Mgongo, and Kisonga Shelui village offices</li> <li>• Construction of WDC and VDC offices in Mukulu ward</li> <li>• Construction of VDC office in Kyengege village</li> <li>• Construction of VDC offices in Tumuli ward</li> <li>• Construction of Mrama, Idd simba and Makhandi village offices and Mrama ward office.</li> <li>• Construction of 4 villages office buildings (Semfuru, Laghanida, Misinko and Ughandi).</li> </ul>	<u>Iramba</u> Mseko, Mgongo, Kisonga Shelui, Mukulu, and Kyengege  <u>Mkalama</u> Tumuli <u>Singida</u> Mrama and Ughandi	Village Development Committees / Ward Development Committees and Community initiatives.
<b>Transport infrastructure</b>	<ul style="list-style-type: none"> <li>• Rehabilitation of 3 kilometers of rough road across the Misinko River (this project is at its initial stage)</li> <li>• Construction of 4 tracks to enable improved access for cattle, transport of crops, ox-carts, and to villages Igauri, Ikiu, and Mhango.</li> </ul>	<u>Singida</u> Ughandi (Misinko) Igauri (Ikiu and Mhango)	Tanzania Rural and Urban Road Authority (TARURA) and community initiatives
<b>Livestock</b>	<ul style="list-style-type: none"> <li>• Rehabilitation of cattle dip at Maluga ward.</li> </ul>	<u>Iramba</u> Maluga	District agriculture department and community contribution
<b>Security</b>	<ul style="list-style-type: none"> <li>• Construction of Mseko police station.</li> </ul>	<u>Iramba</u> Mgongo	District security department and community



## 8.8 Livelihood Restoration Plan (LRP)

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 – 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 (mushrooms, beekeeping, building material medicinal plants, insects).

### 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
- Providing 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 the use of local labor), while re-establishing livelihood and economic activities.

**8.8.1 Livelihood Restoration Themes**

The dominant theme that emerged from discussions with stakeholders is the need to enhance agricultural activities to curb food and money shortages, especially in the dry season. Associated with this PAPs were anxious to secure replacement land and to proceed with agricultural activities as speedily as possible.

Inputs to promote more effective agriculture were a common area of discussion, including improved seeds, organic fertilizer, pesticides, access to traction and storage facilities. The latter is especially important because it enables farmers distribute the sale of crops more evenly through the season allowing them to secure the best prices, thereby securing the best prices. In current circumstances crops are made available immediately post-harvest, where oversupply suppresses prices. In addition, most farmers are forced to sell to intermediaries because they do not have access to markets through poor road infrastructure, and cost of transport. Singida Region is the largest producer of red onions in Tanzania, and local and international buyers purchase this product. With a lack of adequate onion storage facilities, onion growers are often forced to sell at low prices.

Education and training for sustainable farming practices were noted as an important consideration, given that traditional farming practices often fail to provide food and income in the dry season. These practices contribute to land degradation, soil erosion and reduced soil fertility. They also do not address or promote resilience to recurring droughts and to long-term climate change. In the context of livestock rearing, suggested improvements include vaccinations, facilities like crushes and dips and access to livestock officers.

Whilst agriculture, and to some extent livestock rearing are livelihood cornerstones in the Singida Region, many other activities act as secondary or supplementary livelihood sources. In some cases these activities have the potential to provide primary livelihoods if correctly practiced. At the least, appropriately enhanced they can be more effective as secondary livelihoods. Among these opportunities are bee keeping and honey distribution, indigenous chicken rearing and sales, production and marketing of red onions, and enhanced horticulture and vegetable production.

The livelihood restoration programs and activities 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 8-9 and the livelihood restoration activities around which these are formed are presented in Table 8-10 to Table 8-17. These programs may alter and will be developed in further detail during the Singida RAP implementation.

**Table 8-9: Livelihood Restoration Options**

<b>Livelihoods Restoration Options – Groups 1; 2; 3 &amp; 4</b>	
(Group 1, 2 & 3 PAPs will be given access to some individual and additional targeted support to access these programs and help restore livelihoods).	
<b>Phase 1 Implementation</b>	
<b>Core (Groups 1; 2; 3 &amp; 4)</b> – all eligible households entitled to:	<b>Replacement Land</b> (for those who are eligible) – commensurate to land lost.
	<b>Land Preparation and Planting of Replacement Agricultural Land (LRA1).</b> <i>(Group 1 and Group 3 only)</i>
	<b>Maize Improvement program (LRA2).</b>
	<b>Household Budgeting &amp; Money Management Training (LRA8).</b>
<b>Phase 2 Implementation</b>	
<b>Optional</b>	<b>Option 1: Poultry Production Program (LRA4).</b>
	<b>Option 2: Livestock Improved Husbandry Program (LRA5).</b>
	<b>Option 3: Crop Diversification (LRA3).</b>
	<b>Option 4: Improved Beekeeping Practices (LRA6).</b>
<b>Groups 2 &amp; 4</b> – each household is entitled to <b>one</b> (1) option.	<b>Enterprise Development (LRA7)</b> <sup>198</sup> (Each eligible household eligible to access one (1) support package).
<b>Groups 1 &amp; 3</b> – each household is entitled to <b>two</b> (2) options	
<b>Livelihood Restoration Options – Group 5 &amp; 6 (i.e. agricultural tenants).</b>	
<b>Phase 1 Implementation</b>	
<b>Core (Group 5 &amp; 6)</b> – all eligible households entitled to:	<b>Enterprise Development (LRA7)</b> (Each eligible household eligible to access one (1) support package).
	<b>Household Budgeting and Money Management Training (LRA8)</b> (Affected wards along pipeline corridor).
<b>Phase 2 Implementation</b>	
<b>Optional (Group 5 &amp; 6)</b> – each household is entitled to <b>one</b> (1) option:	<b>Option A: Poultry Production Program (LRA4).</b>
	<b>Option B: Improved Beekeeping Practices (LRA6)</b>
<b>Core (Group 7).</b>	Not eligible for livelihood restoration programs.

<sup>198</sup> 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 8-10: Livelihood Restoration Activity 1 (LRA1)**

<b>LRA 1</b>	<b>Land Preparation and Planting of Replacement Agricultural Land</b>
Context	Re-establishment of livelihood activities of eligible PAPs who lose access to productive agricultural lands.
Objectives	Re-establish agricultural activity to enable PAPs to generate the same level of income and / or food security as achieved on land acquired by the Project.
Outcomes	<ol style="list-style-type: none"> <li>1. Income generated equal to income produced off acquired land by the Project, and / or</li> <li>2. Quantity of food harvested is equal to the quantity lost off acquired land by the Project.</li> </ol>
Spatial Application	Affected Wards along 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"> <li>• District and Ward Agricultural Officers.</li> <li>• Local district-based NGO's.</li> <li>• Local land preparation contractors (tractor operators).</li> <li>• Local community-based labor.</li> </ul>
Key Activities	<ol style="list-style-type: none"> <li>1. Identify implementation partner in collaboration with District Agricultural Office.</li> <li>2. Assess suitability of land for crop production: <ol style="list-style-type: none"> <li>a. Soil fertility.</li> <li>b. Type of crops.</li> </ol> </li> <li>3. Identify suitable crop type.</li> <li>4. Procure contractors (including local labor) to prepare land.</li> <li>5. Provide appropriate input supplies (fertilizer; seeds).</li> <li>6. Prepare and plant land and provide assistance to harvest crops.</li> <li>7. Monitor crop management activities.</li> <li>8. Provide assistance in delivering harvest to market where required.</li> </ol>
Monitoring and Evaluation	<ol style="list-style-type: none"> <li>1. Yields harvested off prepared lands.</li> <li>2. Income generated off prepared lands.</li> <li>3. Replanting of agricultural land post-harvest.</li> <li>4. Access to food year-round by PAHs.</li> </ol>

**Table 8-11: Livelihood Restoration Activity 2 (LRA2)**

<b>LRA 2</b>	<b>Maize Improvement Program</b>
Context	Maize is the primary crop in the three Project affected districts of Singida Region. Maize is cultivated by 70% of PAHs.
Objectives	<ol style="list-style-type: none"> <li>1. To improve the existing maize and / or other grain production of eligible PAPs</li> <li>2. To increase the yield of existing maize and / or other grain production of eligible PAPs</li> <li>3. To increase the income generated from maize and / or other grain by eligible PAPs</li> <li>4. To improve the drought resilience of eligible PAPs maize and or other grain crops</li> </ol>
Outcomes	<ol style="list-style-type: none"> <li>1. Adoption of improved maize and / or other grain production practices by eligible PAHs</li> <li>2. Improved resilience of eligible PAPs maize crop and / other grain to drought conditions</li> <li>3. Increased the income generated from maize and / or grain by eligible PAPS</li> <li>4. Increased food security of eligible PAHs</li> </ol>
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"> <li>• District Agricultural Officers</li> <li>• Local district-based NGO's</li> <li>• Local land preparation contractors (tractor operators)</li> <li>• Local community-based labor</li> </ul>
Existing Programs (see Section 8.7)	<ol style="list-style-type: none"> <li>1. One Acre Fund</li> <li>2. IMAS (Improved Maize for African Soils)</li> </ol>
Key Activities	<ol style="list-style-type: none"> <li>1. Identify effectiveness of farmer associations as an implementation platform</li> <li>2. Training on improved production practices</li> <li>3. Demonstration plots</li> <li>4. Access to drought resistant seed varieties</li> <li>5. Improved post-harvest storage technologies</li> <li>6. Improved access to markets and efficient processing (milling) facilities</li> </ol>
Monitoring and Evaluation	<ol style="list-style-type: none"> <li>1. Improvement in maize yields</li> <li>2. Increased income from maize crops</li> <li>3. Adoption of improved production practices</li> <li>4. Improved access to food year-round by PAHs</li> </ol>

**Table 8-12: 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. Some participants in the Singida SELI noted diversification opportunities already practiced in some areas, often by CBOs (see Section 8.4.6). These include horticulture (growing of vegetables, which could include red onions) and enhanced cash crop production. All of these opportunities are constrained by knowledge and resource, limitations which could be addressed through targeted support.
Objectives	<ol style="list-style-type: none"> <li>1. To improve crop production of eligible PAPs.</li> <li>2. To increase the yield of crop production of eligible PAPs.</li> <li>3. To increase the income generated from crops by eligible PAPs.</li> <li>4. To improve the drought resilience of eligible PAPs crops.</li> <li>5. To encourage the diversification of cropping practices of PAHs</li> </ol>
Outcomes	<ol style="list-style-type: none"> <li>1. Adoption of improved crop production practices by eligible PAHs</li> <li>2. Improved resilience of eligible PAPs crop to drought conditions</li> <li>3. Increased the income generated from crops by eligible PAPS</li> <li>4. Increased food security of eligible PAHs</li> <li>5. Diversified crop production by PAHs</li> </ol>
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"> <li>• District Agricultural Officials</li> <li>• Local district-based NGO's</li> <li>• Local land preparation contractors (tractor operators)</li> <li>• Local community-based labor</li> </ul>
Existing Programs (see Section 8.7)	<ol style="list-style-type: none"> <li>1. Helvetas KUWAKI project</li> <li>2. World Vision Area Development Programs</li> <li>3. RECODA Tanzania</li> <li>4. FAIDA MALI</li> <li>5. BioSustain Tanzania</li> </ol>
Key Activities	<ol style="list-style-type: none"> <li>1. Identify effectiveness of farmers associations as an implementation platform</li> <li>2. Training on improved production practices</li> <li>3. Demonstration plots</li> <li>4. Access to drought resistant seed varieties</li> <li>5. Improved post-harvest storage technologies</li> <li>6. Improved access to markets and efficient processing (milling) facilities</li> </ol>
Monitoring and Evaluation	<ol style="list-style-type: none"> <li>1. Improvement in crop yields</li> <li>2. Increased income from crops</li> <li>3. Adoption of improved production practices</li> <li>4. Improved access to food, year-round by PAHs</li> </ol>

**Table 8-13: 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. 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, chicken is dominant in Tanzania, with 86% of livestock-keeping households in Tanzania owning 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. There is a thriving indigenous chicken market in Singida, and many CBOs are involved.</p>
Objectives	<ol style="list-style-type: none"> <li>1. To improve poultry production of eligible PAPs</li> <li>2. To increase the income generated from poultry by eligible PAPs, especially women</li> <li>3. To establish poultry enterprises to improve income generation by PAHs</li> <li>4. To encourage the diversification of agricultural practices of PAHs</li> </ol>
Outcomes	<ol style="list-style-type: none"> <li>1. Adoption of improved poultry production practices by eligible PAHs</li> <li>2. Improved resilience of eligible PAPs to drought conditions</li> <li>3. Increased the income generated from poultry by eligible PAPS</li> <li>4. Increased food security of eligible PAHs</li> <li>5. Diversified agricultural production by PAHs</li> </ol>
Spatial Application	Affected Wards along pipeline corridor.
Beneficiaries	<p>Groups 1; 2; 3 &amp; 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 &amp; 6 (i.e. agricultural tenants) will be given access to this as an option).</p>
Potential Partners	<ul style="list-style-type: none"> <li>• District Agricultural Officials and Ward Livestock Officers</li> <li>• Local district-based NGO's</li> </ul>
Existing Programs	<ol style="list-style-type: none"> <li>1. Adapting Livestock Systems to Climate Change Collaborative Support Research Program. Manual for Teaching Poultry skills to Primary and Secondary School Students</li> <li>2. Strengthening food and nutrition security through family poultry and crop integration in Tanzania</li> <li>3. Food for Progress Program</li> <li>4. Rural Livelihood Development Program</li> <li>5. Heifer International</li> <li>6. Fighting poverty in their own backyard (Oxfam)</li> <li>7. SEMA and RECODA support programs</li> </ol>
Key Activities	<ol style="list-style-type: none"> <li>1. Improved access to superior genetic birds</li> <li>2. Training on better husbandry practices</li> <li>3. Facilitate access to feed, vaccinations and medicine</li> <li>4. Improved capacity of livestock extension service</li> <li>5. Facilitate access to improve processing and marketing channels</li> </ol>
Monitoring and Evaluation	<ol style="list-style-type: none"> <li>1. Improved yields</li> <li>2. Increased income</li> <li>3. Adoption of improved production practices</li> <li>4. Improved access to food year-round by PAHs</li> </ol>

**Table 8-14: Livelihood Restoration Activity 5 (LRA5)**

<b>LRA 5</b>	<b>Livestock Improved Husbandry Program</b>
Context	<p>Livestock are found across the Singida Region in varying numbers. Often referred to as “walking capital” livestock are an important source of capital when money is needed to plant fields, buy food or meet unexpected expenses. Opportunities in the livestock market have been identified for milk processing.</p> <p>There is a dual system of livestock keeping in the Project-affected districts. Livestock owners may ‘rent’ livestock to households who do not have them. In exchange for tending these livestock, the renters enjoy access to the products (milk, eggs, manure), and (for cattle) the benefit of animal traction.</p>
Objectives	<ol style="list-style-type: none"> <li>1. To improve livestock production of eligible PAPs</li> <li>2. To increase the potential income generated from livestock by eligible PAPs</li> <li>3. To improve animal husbandry practices amongst PAPs who own livestock</li> </ol>
Outcomes	<ol style="list-style-type: none"> <li>1. Adoption of improved livestock production practices by eligible PAHs</li> <li>2. Improved resilience of eligible PAPs to shocks</li> <li>3. Increased food security of eligible PAHs</li> </ol>
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"> <li>• District Agricultural Officials, District and Ward Livestock Officers</li> <li>• Local district-based NGO’s</li> </ul>
Existing Programs	<ol style="list-style-type: none"> <li>1. Adapting Livestock Systems to Climate Change Collaborative Support Research Program. Manual for Teaching Poultry skills to Primary and Secondary School Students</li> <li>2. Food for Progress Program</li> <li>3. World Vision Area Development Programs</li> <li>4. Rural Livelihood Development Program</li> <li>5. Heifer International</li> <li>6. Fighting poverty in their own backyard (Oxfam)</li> <li>7. RECODA</li> </ol>
Key Activities	<ol style="list-style-type: none"> <li>1. Improved access to superior genetic breeding stock</li> <li>2. Training on better husbandry practices</li> <li>3. Facilitate access to feed</li> <li>4. Improved capacity of livestock extension service</li> <li>5. Facilitate access to improve processing and marketing channels</li> </ol>
Monitoring and Evaluation	Adoption of improved animal husbandry practices.



**Table 8-15: Livelihood Restoration Activity 6 (LRA6)**

<b>LRA 6</b>	<b>Improved Beekeeping Practices</b>
Context	The major areas of honey production in Tanzania are Dodoma, Iringa, Singida and Tabora 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 has been adopted by CBOs in many wards across the affected districts.
Objectives	<ol style="list-style-type: none"> <li>1. To improve honey production of eligible PAPs</li> <li>2. To increase the potential income generated from beekeeping by eligible PAPs</li> <li>3. To improve beekeeping husbandry practices amongst PAPs</li> </ol>
Outcomes	<ol style="list-style-type: none"> <li>1. Adoption of improved beekeeping production practices by eligible PAHs</li> <li>2. Improved resilience of eligible PAPs to shocks</li> <li>3. Increased food security of eligible PAHs</li> </ol>
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	<ul style="list-style-type: none"> <li>• District Agricultural Officials</li> <li>• Beekeeping Officers (district and ward)</li> <li>• Local district-based NGO's</li> <li>• Institute for beekeeping in Tanzania</li> <li>• Tanzania Forest Services (TFS)</li> <li>• Tanzanian Honey Bee Project – Eva Crane Trust</li> <li>• USAID: Women's Beekeeping Initiative</li> <li>• Farmer Managed Natural Regeneration (FMNR)</li> </ul>
Existing Programs	<ol style="list-style-type: none"> <li>1. Institute for beekeeping in Tanzania</li> <li>2. Tanzanian Honey Bee Project – Eva Crane Trust</li> <li>3. USAID: Women's Beekeeping Initiative</li> <li>4. Beekeeping Business Development and Expansion: African People and Wildlife</li> <li>5. Honey Care Africa</li> <li>6. TFS and FMNR training and support programs.</li> <li>7. Worldvision Area Development Programs</li> </ol>
Key Activities	<ol style="list-style-type: none"> <li>1. Improved access to better hives,</li> <li>2. Training on better husbandry practices</li> <li>3. Improved capacity of extension service</li> <li>4. Facilitate access to improve processing and marketing channels</li> </ol>
Monitoring and Evaluation	Adoption of improved beekeeping practices

**Table 8-16: Livelihood Restoration Activity 7 (LRA7)**

<b>LRA 7</b>	<b>Enterprise Development</b>
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 are an area which 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. Opportunities for small groups to produce bee and animal products, processed foods from maize, rice and sunflower, and biomass fuel briquettes from sunflower crop residue and groundnut shells are of particular relevance to the area.
Objectives	<ol style="list-style-type: none"> <li>1. To increase the capacity of entrepreneurs to function more effectively and expand their businesses.</li> <li>2. To provide time-bound business support to self-employed enterprises, aiming to grow them into viable and sustainable businesses.</li> <li>3. To provide seed capital based on viable business plans to PAPs interested in starting or expanding SMEs.</li> <li>4. Re-establishment of business within the ZIA (only applicable to business owners affected in the ZIA).</li> </ol>
Outcomes	<ol style="list-style-type: none"> <li>1. Establishment and / or expansion of SMEs amongst PAPs.</li> <li>2. Support to existing PAP SMEs to access market opportunities and run more efficiently.</li> <li>3. Skills development that promotes the establishment of SMEs.</li> <li>4. Smooth transition between business structure (only applicable to business owners affected in the ZIA).</li> </ol>
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"> <li>• District Officials.</li> <li>• Local district-based NGO's &amp; training facilities.</li> </ul>
Existing Programs	<ol style="list-style-type: none"> <li>1. Tanzanian Local Enterprise Development</li> <li>2. Center for Entrepreneurship Development</li> <li>3. Tanzania's Small Industries Development Organization</li> <li>4. Helvetas KUWAKI project</li> <li>5. SEMA</li> <li>6. FAIDA MALI</li> </ol>
Key Activities	<ol style="list-style-type: none"> <li>1. Identify interested PAPs</li> <li>2. Training on Entrepreneurship and Business Management</li> <li>3. Development of a District-based SME Fund and dispersal mechanism</li> <li>4. Support to participating / potential SME's to develop viable Business Plans</li> <li>5. Mentoring to SME's support by the District-based SME Fund</li> </ol>
Monitoring and Evaluation	<ol style="list-style-type: none"> <li>1. Dispersal of funds from the District-based SME Fund</li> <li>2. Sustainability of SME's established and / or supported</li> </ol>

**Table 8-17: 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 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"> <li>1. To assist PAPs (men and women) to use their cash compensation sensibly to restore their livelihoods and build a sustainable future.</li> <li>2. To increase employment and knowledge opportunities through improved numeracy skills.</li> </ol>
Outcomes	<ol style="list-style-type: none"> <li>1. Interested PAPs and those receiving cash compensation payments open Bank accounts.</li> <li>2. All PAPs and their spouses receive money management training and advice on different options for investment.</li> </ol>
Spatial Application	Affected Wards along pipeline corridor.
Beneficiaries	Groups 1, 2; 3; 4; 5 & 6 PAPs.
Potential Partners	<ul style="list-style-type: none"> <li>• Local Banks.</li> <li>• Local district-based NGO's.</li> <li>• Ward and village leaders, Community Development Officers.</li> <li>• Teachers at primary and secondary schools.</li> </ul>
Existing Programs	<ol style="list-style-type: none"> <li>1. Tanzania literacy program: UNESCO.</li> <li>2. Integrated Community-Based Adult Education (ICBAE).</li> <li>3. FinMark Trust.</li> </ol>
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 has been gathered in the field on active NGOs and CBOs (see Section 8.7) and from meetings that EACOP has held with NGOs based in Dar es Salaam. Some of these organizations may potentially be able to contribute to the design and implementation of specific livelihood restoration initiatives.

Organizations / groups / interventions listed in this section could potentially be brought into a partnership to assist with livelihood restoration programs for this Project <sup>199</sup>. Partnering will eliminate the duplication of efforts and will strengthen current interventions. The fit of these organizations / groups / initiatives with the Projects aim to address Project-induced livelihood impacts will have to be assessed in consultation with the affected districts, wards, and villages.

**Table 8-18: Potential Organizations for Livelihood Restoration Partnerships**

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.
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.
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.

<sup>199</sup> There are many potential partners in Tanzania and the context is dynamic in terms of the activities that such organizations may be focusing on at any one time. The information here is indicative and should not be considered comprehensive.

Other international organizations identified that are active in Tanzania and could play a role in livelihood restoration activities are presented in the Table 8-19.

**Table 8-19: 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.	It 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"> <li>• Food and nutrition security and climate change resilience;</li> <li>• Humanitarian response;</li> <li>• Right to a life free from violence;</li> <li>• Sexual, reproductive and maternal health and rights; and</li> <li>• Women's economic empowerment.</li> </ul>
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"> <li>• Evidence-based agriculture policy, planning, investment and sector coordination;</li> <li>• Increasing agricultural production, productivity for food security and nutrition;</li> <li>• Improving market access for increased incomes; and</li> <li>• Strengthening resilience to natural and man-made threats and crises such as climate change impacts; and unsustainable management of natural resources.</li> </ul>

International NGO	Strategic Objective / Development Focus	Description of aspects of the program that could be beneficial / applicable to livelihoods restoration
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"> <li>• More jobs and development of energy and agricultural markets;</li> <li>• Improved education and increased entrepreneurship; and</li> <li>• Strengthened democratic accountability and transparency, and increased awareness of human rights.</li> </ul>
SwissAid - Socio-Economic Development Initiatives (SEDI), 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 provisions<sup>200</sup> 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 8-200. 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.

**Table 8-200: Transitional Support Entitlements**

Household Category : LR Group	Period of Support	Rationale and Recommendations
Highly Impacted Households: LR Group 1 LR Group 3	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).	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.  One transitional support package per household – where more than one PAP is present in a household only one

<sup>200</sup> This may also include additional cash elements.

Household Category : LR Group	Period of Support	Rationale and Recommendations
		package of support generally for this household will be applicable.
Partially Impacted Households: LR Group 2 LR Group 4  (LR Group 5 (Tenants) will be assessed for eligibility, if determined to be vulnerable may be given access to transitional support.)	Up to six (6) months and/or to end of first harvest, post displacement. (Support will be structured to discourage food dependency).	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.  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.

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 PAPs 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 LR Program 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, 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 criteria<sup>201</sup> 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.

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<sup>201</sup> 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 and IFC Performance Standard 7: Indigenous Peoples

Acknowledging that no single criteria automatically renders a household vulnerable, a number of reports were reviewed, including the Comprehensive Food Security and Vulnerability Analysis Reports<sup>202</sup>, 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 are<sup>203</sup>:

- 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 <sup>204</sup>.
- Percentage of household expenditure on food;
- Number of household income earners and resources available to support dependents; and
- Number of children between 6-14 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, asset, 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.

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<sup>202</sup> 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.

<sup>203</sup> 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.

<sup>204</sup> 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 replacement 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 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. Table 9-2 provides the numbers of vulnerable households, per category, identified in the Singida Region based on the socio-economic baseline survey.

**Table 9-2: Vulnerable Households by Category in the Singida Region**

Ward	Village / Reserve	Category 1	Category 2	Category 3
<b>Iramba</b>				
Mgongo	Mseko	21	11	8
	Kizonzo	3	2	2
Shelui	Nkyala	2	3	3
Mtoa	Kinkungu	3	12	4
	Tyeme	9	14	10
	Masagi	5	2	1
Ulemo	Misigiri	0	10	3
Mukulu	Simbalungwala	9	14	19
	Mukulu	0	2	7
Kyengege	Makunda	5	9	11
Maluga	Ng'Anguli	1	6	11
<b>Mkalama</b>				
Tumuli	Tumuli	3	11	13
	Milade	5	11	14
<b>Singida District</b>				
Msisi	Ntondo	1	11	6
	Nkwae	3	7	7
	Msisi	3	3	11
Ughandi	Misinko	5	14	24
Ntonge	Iguari	0	4	6
	Ifombou	0	4	13
Ilongero	Madamigha	5	6	10
	Ilongero	5	5	4
Mrama	Mrama	3	4	12
	Idisimba	4	4	0
	Makhandi	1	0	2
Kinyagigi	Mitula	0	5	4
	Kinyagigi	4	13	11
Merya	Kinyamwambo	2	3	7

Ward	Village / Reserve	Category 1	Category 2	Category 3
Itaja	Kinyamwenda	4	10	4
Ngimu	Mwighanji	3	1	10
	Ngimu	0	4	10
	Pohama	0	7	11
<b>TOTAL</b>		<b>109</b>	<b>212</b>	<b>258</b>

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 PAH's 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 above 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 138 female headed households that will be impacted by Project pipeline and AGI in Singida 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 Analysis<sup>205</sup> 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)<sup>206</sup> of agricultural land and are identified as vulnerable (refer to Table 9-3). They will need to be monitored closely

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<sup>205</sup> United Republic of Tanzania 2009 / 10 Comprehensive Food Security and Vulnerability Analysis (CFSVA).

<sup>206</sup> 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



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 Singida Region**

District	Iramba	Mkalama	Singida
Female headed household (≤60 years).	41	7	47
Female headed household (>60 years)	10	2	31
Female-headed household, and one or more disabled household members.	6	0	8
Female-headed household, losing >AE of agricultural land.	25	1	19

### 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 receive.

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 Singida Region.

**Table 9-4: Elderly Headed households Identified across the Singida Region**

District	Iramba	Mkalama	Singida
Household head 60 years or older	74	21	182
Household head 60 years or older, and disabled household member	2	3	19
Household head 60 years or older, and farming is main livelihood, and remaining land after land loss is $\leq 2.5$ acres	10	8	42
Household head 60 years or older, and disabled household member, and farming is main livelihood, and remaining land after land loss is $\leq 2.5$ acres	1	1	1

**Figure 9-1: Focus Group Discussion with Elders in Masagi Village, Mtoa Ward**

### 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 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 potential for vulnerability. Conversely, vulnerability is not the sole criteria for recognizing a group as indigenous. As discussed in Chapter 5, many vulnerable ethnic groups 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 in Mkalama, 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 there is one (1) PAH, located in Milade Village, from the Barabaig ethnic group who may self-identify as indigenous. This PAH's potential vulnerability, as per the categories detailed in Section 9.5, is detailed in Table 9-5.

**Table 9-5: Number of Vulnerable Ethnic Group PAHs per Vulnerability Category**

District	Category 1	Category 2	Category 3
	VEG PAHs	VEG PAHs	VEG PAHs
Iramba	0	0	0
Mkalama	0	1	0
Singida	0	0	0
Total	<b>0</b>	<b>1</b>	<b>0</b>

In addition to differences in the socio-economic and demographic indicators utilized in the analysis above, a number of contextual factors may render these groups more vulnerable than other communities to the impacts associated with Project-related land acquisition and displacement<sup>207</sup>:

- 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

<sup>207</sup> African Commission on Human and Peoples' Rights (2104). Report of the African Commission's Working Group on Indigenous Populations / Communities: Research and Information Visit to the Republic of Tanzania, 21<sup>st</sup> January – 6<sup>th</sup> February 2013. URL: [https://www.iwgia.org/images/publications/0719\\_TANZANIA-ENGELSK.pdf](https://www.iwgia.org/images/publications/0719_TANZANIA-ENGELSK.pdf)

such adaptive strategies of pastoralists and other groups with traditional land-based livelihoods 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 Singida 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 in which they are involved;
- 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 self-identify as indigenous people (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 communities hosting vulnerable ethnic groups were sometimes appointed to assist the stakeholder engagement teams and facilitate a point of entry for the teams into IP 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 communities hosting Vulnerable Ethnic Groups was always preceded by engagement with local PAC leaders to request their support, approval and assistance in engagement with the communities. This prior engagement with community leaders demonstrated respect for the status of Vulnerable Ethnic Groups. 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;
- E 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 Singida 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 Plan<sup>208</sup>, 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 are presented in Table 10-2.

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<sup>208</sup> EACOP Stakeholder Engagement Plan. Document Number TZ-MID-60-0120-200299.



**Figure 10-1: Ntondo Village, Msisi Ward, Singida, 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 the 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 (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 form 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 existing social structures; 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 when they move between villages), which is expected to be an unlikely occurrence, given the Project's intention to move PAHs within ward / village boundaries;

- 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 displacement impacts 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 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 where 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 Teams**

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 has 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) and five (5) districts.

One (1) team have been and will be active in the Singida Region. Dedicated CLOs were and will be recruited to support the land acquisition process and other RAP implementation activities.

The team reports to the EACOP Stakeholder Engagement and Social Studies Manager .

#### **10.4.3 Project RAP Planning and Implementation Teams**

Two (2) teams lead land acquisition and resettlement activities 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 4.3.5.



The Stakeholder Engagement team 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 Singida therefore a total of six (6) field-based engagement resources supported the survey activities.

Dedicated engagement resources also formed part of the valuation and disclosure teams that completed the validation and disclosure activities with two (2) engagement resources per team.

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 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 are 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. Where there are groups who speak minority languages, and who do not sufficiently understand the Kiswahili language or cannot respond and ask questions in Kiswahili, resettlement related stakeholder engagement teams include persons who speak the relevant languages, and are familiar with the cultural context and protocol.

Translations were required especially where women were present, with males generally conversant in Kiswahili. 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

### 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 Projects 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;

- Group meetings / interviews with NGOs;
- FGDs / small group meetings with minority groups/ vulnerable ethnic groups;
- Formal one-on-one discussions with PAHs / PAPs; and
- Display / provision of printed information.

All consultations were arranged using the accepted governance structures in place in the Singida 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. The Project has only identified 1 PAH from a vulnerable ethnic group in Singida Region.

The Project will undertake additional consultation and engagement with the vulnerable ethnic groups in the relevant regions to assess the potential impacts on the rights of these groups and to develop any additional mitigation measures required to meet the Project's commitments to international standards and good practices related to FPIC.

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	Group meetings / interviews with NGOs / CSOs.	Discuss issues / livelihood restoration.	Technical information documents / summaries.	Agendas Attendance registers Meeting invitations Meeting notes.

No	Method	Application	Tools / Materials	Deliverables
5	FGDs / 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 Singida RAP.

### 10.6.1 Land Acquisition and Resettlement Working Group Meetings

LARWG meetings have been held since 29<sup>th</sup> 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 details the number of meetings and attendees to date.

**Table 10-4: LARWG Attendees and Meetings to Date**

LARWG Meetings (March 2018-Sept 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 Singida Regional Government focusing on elements of the RPF and pipeline RAP planning. These were held in:

- August 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;
- ;
- July 2019: PA RAP disclosure process and 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 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 seven (7) 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 will be 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.

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	Housing Meeting	SELI Meeting	Disclosure Related Meeting	TOTAL
Regional Level Meetings	1	3	N / A	N / A	2	6

District Level Meetings	4	4	3	20	7	<b>38</b>
Ward Level Meetings	16	17	N / A	17	15	<b>65</b>
Village Level Meetings	61	31	N / A	102	33	<b>227</b>
<b>TOTAL</b>	<b>82</b>	<b>55</b>	<b>3</b>	<b>139</b>	<b>57</b>	<b>336</b>

**Table 10-6: Number of Attendees at Formal RAP Planning Phase Meetings**

Meeting Type	Sensitization Meeting	Validation Meeting	Housing Meeting	SELI Meeting	Disclosure Related Meeting	TOTAL
Regional Level Attendees	53	99	N / A	N / A	69	208
District Level Attendees	29	20	8	38	26	107
Ward Level Attendees	267	189	N / A	190	253	899
Village Attendees	482	279	N / A	1 432	208	1 324
Village Assembly Attendees	2,161	N / A	N / A	N / A	960	4 118
<b>TOTAL</b>	<b>2 992</b>	<b>577</b>	<b>8</b>	<b>1 660</b>	<b>1 516</b>	<b>6 656</b>

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 647 questions and issues raised 371 related to land acquisition and resettlement.

Questions and issues related to land and resettlement from the sensitization to the validation / SELI meetings (validation / SELI meetings happened in parallel) moved from concerns related to land rates to focus on payment on continuation of farming activities in the corridor after the announcement of the cut-off date and employment opportunities. The timeframes for the payment of compensation remained a concern throughout the planning process. Other concerns related to economic loss included concerns about management of cattle tracks, as well as access to the pipeline corridor and the other side thereof during construction and operation. The process of grave removal and associated compensation remained a concern.

**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.	138	35	116	82	371
Livelihoods (economic loss).	18	18	32	10	78
Employment and Supply Chain.	10	4	34	1	49
Environment and Health (nuisances / pollution).	1	1	5	0	7
Safety (transport, explosion).	2	0	10	0	12
Social Conduct and Security.	3	7	4	2	16

Cultural Heritage.	12	1	10	0	23
Social Investment Projects.	27	5	29	2	63
Engagement and Communication.	6	7	11	2	26
Other.	2	0	0	0	2
<b>Total</b>	<b>219</b>	<b>78</b>	<b>251</b>	<b>99</b>	<b>647</b>

## 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 40% females in attendance and 13% of PAP meetings were attended by spouses (10% male and 3% female)
- Where there are groups who speak minority languages, and do not sufficiently understand the Kiswahili language, resettlement related stakeholder engagement teams have included persons who speak the relevant local languages. When necessary, the questions posed during ward and village level engagements were translated into native languages as follows: Kinyaturu (Singida and Mkalama Districts) and Kinyiramba and Kisukuma (Iramba District);
  - Where required, assistance has been provided to transport vulnerable persons to stakeholder engagement meetings, or the Project engagement teams have met with these persons at their place of residence for focused discussions, for example exploring livelihood strategies;
  - 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
  - Implementing a tracking system and keeping records of meetings.

## 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 Kiswahili<sup>209</sup>. 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 Singida 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.

## 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 if found to be necessary 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

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<sup>209</sup> 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).

- 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.

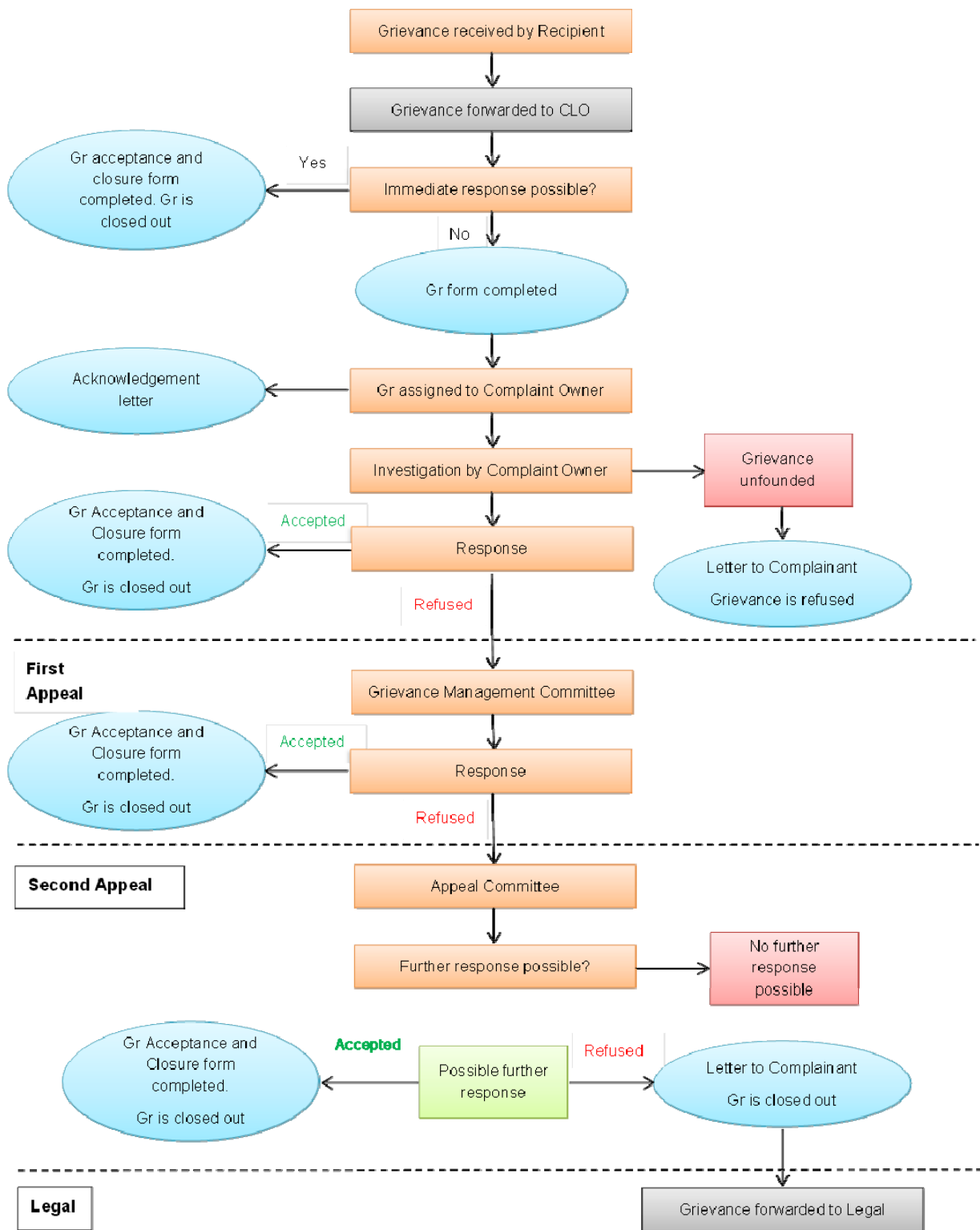


Figure 10-2: Grievance Management Flowchart

### 10.9.2 Summary of Grievances

A total of 33 land acquisition and resettlement related grievances were received in the Singida Region by the RAP Planning Consultant.

- Six (6) were submitted in Ilongero Ward;
- Six (6) in Itaja Ward;
- Five (5) in Mukulu Ward;
- Five (5) in Ngimu Ward;
- Four (4) in Tumuli Ward;
- Three (3) in Mgongo Ward;
- Two (2) in Mtoa Ward;
- One (1) in Ntonge Ward; and
- One (1) in Shelui Ward.

Of these grievances, 31 related to omissions in the Valuation Form No. 3 and included:

- Incorrect crop counts;
- Incorrect number of trees;
- Graves that were not recorded;
- Excluded land including orphan land;
- Excluded land parcels; and
- Excluded / incorrect landholders.

One grievance relates to land conflict, which had to follow the formal processes in place for land conflict resolution and fell outside the responsibilities of the Project. One grievance involved a PAP insisting that all his land be taken since the change in his land size and the presence of the corridor made it impossible for him to execute the plans he had for the land.

These grievances were addressed in consultation with the relevant EACOP CRC / CLO. Grievances were not lodged in eight (8) wards: Ulemo, Kyengege, Maluga, Msisi, Ughandi, Mrama, Kinyagigi, and Merya. Other minor issues and queries were addressed during the engagement process.

### 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.

# 11 IMPLEMENTATION OF LAND ACQUISITION AND RESETTLEMENT

## 11.1 Introduction

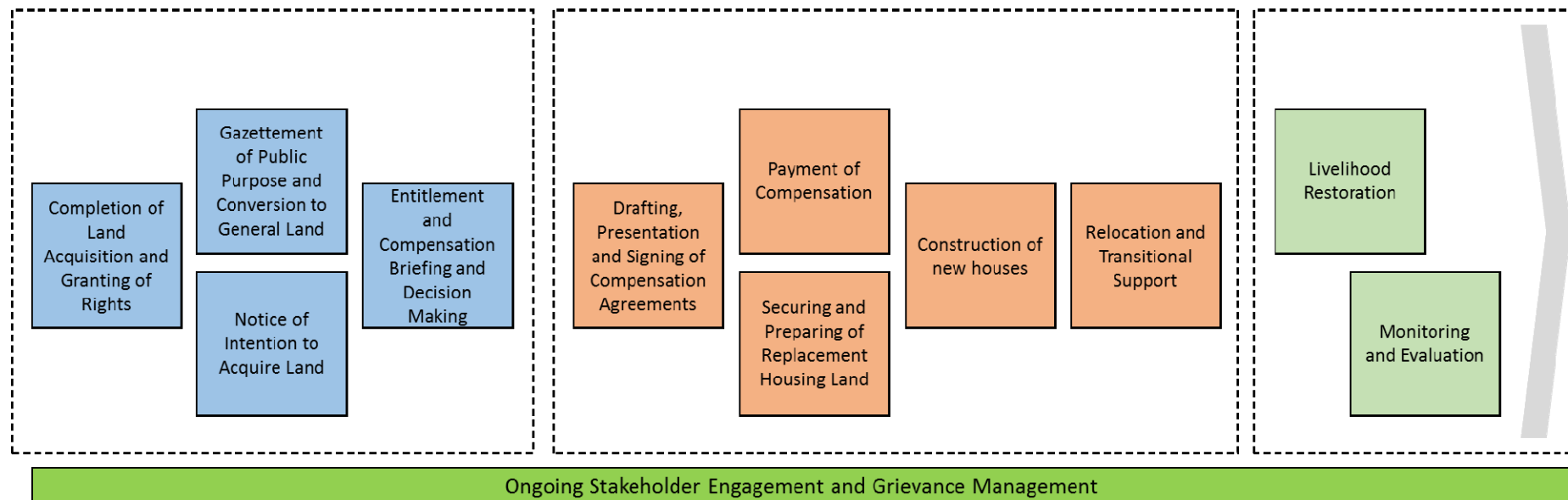
This chapter provides an overview of the key activities and processes required for the implementation of the RAP and the completion of land acquisition and granting of rights. This includes the primary roles and responsibilities of key stakeholders, including both the Project Company and the Government 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 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 program (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 Phasing<sup>210</sup>**

<sup>210</sup> 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 (Steps 5 to 9 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 interest<sup>211</sup>.

The Notice of Intention to Acquire Land will be published in the Government Gazette and presented to the PAPs<sup>212</sup>. 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 4.3.3.3) the Project will conduct additional entitlement briefings<sup>213</sup> 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.

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<sup>211</sup> This falls under the provisions of Section 4 Part II of the Land Acquisition Act (Cap. 118 R.E., 2010) ("LAA").

<sup>212</sup> 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).

<sup>213</sup> 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 will be presented to the PAP. 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 nature<sup>214</sup>.

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 continuously 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 international financing standards (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 agreed<sup>215</sup>, 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

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<sup>214</sup> 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.

<sup>215</sup> 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.



the bank account<sup>216</sup> of the beneficiary and spouse (if married). All payments made will be recorded in an auditable format.

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 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 PAHs can meet their basic needs and maintain their standard of living once access to

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<sup>216</sup> 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

their land has been lost and until they have had 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).

### **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 including:

- 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 land<sup>217</sup>. The relevant Authority will then provide a lease<sup>218</sup> 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 PPT, as well as the GoT (particularly ME, TPDC, TPA, MLHSD, TARURA, TANROADS, TANESCO, REA and Regional and District Authorities will provide strategic input and

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<sup>217</sup> 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).

<sup>218</sup> 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).

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
<b>[Step 5] Gazettement of Public Purpose, and Conversion of Land to General Land.</b>	<ul style="list-style-type: none"> <li>Provide maps and information (including a list of affected villages) of required Project land per section.</li> <li>Review gazettement area and any orders and / or notices prior to publication in the Gazette.</li> <li>Provide timing to the GoT and input to the wording of notices of intention to acquire if possible.</li> </ul>	<ul style="list-style-type: none"> <li>Prepares, issues and publishes necessary orders and / or notices in Gazette required under the LAA.</li> <li>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 Project<sup>219</sup>.</li> </ul>
<b>[Step 6] Compensation Agreements</b>		
Entitlements and Compensation Briefings.	<ul style="list-style-type: none"> <li>Conduct additional entitlement briefings at village level to explain and discuss the entitlements to PAPs.</li> </ul>	<ul style="list-style-type: none"> <li>Support provided by GoT in addition to district, ward and village authorities.</li> </ul>
Drafting and Signing of Compensation Agreements.	<ul style="list-style-type: none"> <li>Lead the engagement with PAPs and communities to reach compensation agreements.</li> <li>Signatories of Compensation Agreements under discussion with GoT.</li> <li>Determine cases where the GoT's further compulsory acquisition powers need to be engaged and facilitate process, where applicable.</li> </ul>	<ul style="list-style-type: none"> <li>Signatories of compensation agreements under discussion with GoT.</li> <li>Provide support should the engagement process continuously fail to gain agreement over compensation.</li> </ul>
<b>[Step 7] Payment of Compensation, Relocation &amp; Implementation of Livelihood Restoration &amp; Assistance Programs.</b>		
Payment of Compensation.	<ul style="list-style-type: none"> <li>Payment of compensation (The arrangements for payment of Tanzanian regulatory entitlements are a matter of discussion between the GoT and the Project).</li> </ul>	<ul style="list-style-type: none"> <li>Acquiring Authority for land acquisition. (The arrangements for payment of Tanzanian regulatory entitlements are a matter of discussion between the GoT and the Project.)</li> <li>Oversight of compensation and relocation process.</li> </ul>

<sup>219</sup> 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
Construction of Replacement Housing.	<ul style="list-style-type: none"> <li>Preparation of replacement plots for construction of replacement houses.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Support with formal land acquisition, transfer and registration as per Tanzanian legislation.</li> </ul>
Relocation and Transitional Support.	<ul style="list-style-type: none"> <li>Provide timing and agree modalities of giving PAPs notice to vacate.</li> <li>Provision of transitional support (where required).</li> </ul>	<ul style="list-style-type: none"> <li>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)<sup>220</sup>.</li> </ul>
Implementation of Livelihood Restoration and Assistance Programs.	<ul style="list-style-type: none"> <li>Refinement of livelihood restoration programs and support to PAPs.</li> <li>Discussions and liaison with regional and district officials &amp; technical staff, NGOs and CBOs.</li> <li>Assess locally based service providers who are able to provide training and post training support.</li> <li>Mobilization of the necessary human, financial and material resources.</li> </ul>	<ul style="list-style-type: none"> <li>Support and potential partnerships with District Agricultural Office.</li> <li>Project to liaise with regional and district official and technical staff.</li> </ul>
<b>[Step 8] Granting of Rights and [Step 9] Lease to Land.</b>		<ul style="list-style-type: none"> <li>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.</li> </ul>
		<ul style="list-style-type: none"> <li>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).</li> </ul>

## 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;

<sup>220</sup> 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.

- 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;
- Ensure that meetings and information are accessible, specifically for affected stakeholders;
- Ensure the identification and participation of vulnerable 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.

**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"> <li>• Provide updates on activities completed;</li> <li>• Discuss upcoming activities;</li> <li>• Seek guidance on regulatory requirements;</li> <li>• Provide feedback on grievances received and resolved; and</li> <li>• Solicit feedback and adapt plans accordingly.</li> </ul>	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"> <li>• Provide updates on activities completed;</li> <li>• Discuss upcoming activities;</li> <li>• Seek guidance on regulatory requirements;</li> <li>• Provide feedback on grievances received and resolved; and</li> <li>• Solicit feedback and adapt plans accordingly.</li> </ul>	Minutes of meetings. Attendance registers. Meeting invitations.
Engagement with PAPs (incl. PAHs and PACs).	Engagement will include: <ul style="list-style-type: none"> <li>• Disclosure of resettlement agreement information and notification to PAPs and PAHs regarding resettlement options;</li> <li>• 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;</li> <li>• Record options / preferences of PAPs / PAHs;</li> <li>• Notification to PAPs of key activities in relation to payment of compensation and commencement of the construction of replacement housing;</li> <li>• Accompanying PAPs to the site / s where replacement housing is being constructed (as per agreed schedule of visits);</li> <li>• One-to-one engagement with PAPs to support understanding of an agreement on compensation / support packages;</li> <li>• Management of complaints and grievances process;</li> <li>• Ongoing monitoring and evaluation related engagement with PAPs, RAP implementation partners and other related stakeholders; and</li> <li>• Discussions and activities related to livelihoods restoration.</li> </ul>	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 Singida 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 below. 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.	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. Replacement of adequate housing is required under the international standards, and costs for provision of 'adequate housing' have been included in the budget. 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).
Crops and Economic Trees.	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. 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%.

Budget Main Component	Summary Description
Allowances.	<ul style="list-style-type: none"> <li>• 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);</li> <li>• 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"> <li>○ 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</li> <li>○ Transport Allowance: i.e., the amount equivalent to transporting 12 tons either by rail / road for 20 kilometers from the point of displacement.</li> </ul> </li> </ul>
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"> <li>• Compensation to relatives of the deceased for reasonable expenses associated with rituals involved in exhumation of graves; and</li> <li>• 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).</li> </ul> <p>The budget includes the costs for moving the (224) affected graves in the Singida 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"> <li>• 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.</li> <li>• 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</li> <li>• 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.</li> </ul>
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 Singida 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	
<b>Development of the Resettlement Policy Framework</b>																												
<b>Step 1: Resettlement Policy Framework</b>																												
Finalization and disclosure of the RPF																												
<i>(RPF will remain disclosed on the EACOP website)</i>																												
<b>Step 2: Detailed Surveys and Valuation</b>																												
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																												
<b>Step 3: Final Valuation Reports</b>																												
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																												
<b>Step 4: RAP and LRP Development</b>																												
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	
<b>Step 5: Public Purpose and Conversion to General Land (Government of Tanzania)</b>																						
Necessary Documentation by GoT for Gazettement & Notice of Intention to Acquire	■	■	■																			
Conversion of Village Land & Reserved Land to General Land (Inc. required Notices)				■	■	■	■	■	■	■	■											
<b>Step 6: Compensation Agreements</b>																						
Serving Notice of Intention to Acquire Land		■	■	■																		
Preparation of Entitlement Briefings and Compensation Agreements	■	■	■	■																		
PAP Entitlement Briefings			■	■	■	■	■	■														
PAP Compensation Agreements					■	■	■	■	■													
<b>Step 7: Payment of Compensation, Relocation &amp; Implementation of LRP</b>																						
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)										■	■	■	■	■	■	■	■	■	■	■	■	■
<b>Step 8: Rights Granted to GoT</b>																						
Right of occupancy/rights to GoT															■	■	■	■	■			
<b>Step 9: Lease for Land to Project</b>																						
Lease																					■	■

Final Investment Decision

## 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**

<b>Relevance</b>	Are we doing the right thing? How important is the relevance or significance of the intervention regarding local and national requirements and priorities?
<b>Efficiency</b>	Are the objectives being achieved economically by the development intervention? How big is the efficiency or utilization ratio of the resources used?
<b>Effectiveness</b>	Are the objectives of development interventions being achieved? How big is the effectiveness or impact of the project compared to the objectives planned?
<b>Impact</b>	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?
<b>Sustainability</b>	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 / L RP / 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
<b>Relevance</b>	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.
<b>Efficiency</b>	Have the outputs and related activities been implemented in a timely and cost-effective manner? Have resources been utilized cost effectively? Do the quantitative and qualitative results justify resources used?	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. Records will be kept of those attending and completing training provided. Overall costs per individual for changes in the outputs and related activities will be disaggregated and tracked.	Internal ME. External ME.
<b>Effectiveness</b>	What changes in resettlement behavior, relationships or activities of the key service providers and PAPs is the project generating? To what extent have the RAP outputs been achieved and are contributing to these changes? What barriers and constraints have affected the outputs? What can be learned from this to date and what improvements could be made and by whom?	These questions will be answered through a combination of guided key informant interviews and focus group discussions on significant changes. These will be administered with all PAPs and with representatives of the host community, and key stakeholders at the district level. 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. 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. Direct contributions to gender equity and women's empowerment will also be considered in answering these questions.	Internal ME, External ME Participatory Inquiry.



Question area	Learning Questions	Approach	Data collection
<b>Impact</b>	<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
<b>Sustainability</b>	<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 ongoing;
- 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"> <li>• Number of households physically resettled including:               <ul style="list-style-type: none"> <li>- resettled to replacement houses (where selected);</li> <li>- resettled who selected cash compensation.</li> </ul> </li> </ul>	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"> <li>• Number of households economically resettled.</li> </ul>			
Compensation	<ul style="list-style-type: none"> <li>• Number of PAPs to whom the compensation packages have been disclosed;</li> <li>• Number of households that have signed the compensation agreement;</li> <li>• Number of households that have received their cash compensation payments and other entitlements;</li> <li>• Number of households allocated replacement houses if applicable.</li> </ul>			
	<ul style="list-style-type: none"> <li>• Compensation has been delivered to all as per entitlements and can be demonstrated to have achieved replacement;</li> <li>• Has community infrastructure been replaced?</li> </ul>	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"> <li>Household demographic profile;</li> <li>Educational status of household members;</li> <li>Health status of household members;</li> <li>Food security;</li> <li>Asset ownership;</li> <li>Access to services;</li> <li>Land holding;</li> <li>Income and expenditure.</li> </ul>	Baseline survey.	Monitoring survey conducted by compliance monitor.	Annual compliance monitoring.
Replacement land and plots	<ul style="list-style-type: none"> <li>Number of households allocated replacement land/supported to secure replacement land;</li> <li>Number of new plots of land legally transferred and registered (as appropriate) and documents provided to PAP.</li> </ul>	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"> <li>Number of households enrolled for the livelihood restoration program;</li> <li>Status on ongoing income restoration activities;</li> <li>Food security of PAPs from handover to 6-months.</li> </ul>	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.
	<ul style="list-style-type: none"> <li>Have livelihoods been restored?</li> </ul>			
Vulnerability	<ul style="list-style-type: none"> <li>Number of vulnerable households supported during the transition period;</li> <li>Type of support given to vulnerable households.</li> </ul>	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"> <li>Evaluation of assistance given to vulnerable categories.</li> </ul>	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"> <li>Number of grievances received;</li> <li>Number of grievances resolved;</li> <li>Number of grievances pending;</li> <li>Number of Project grievances forwarded to the Court;</li> <li>Number of Project grievances resolved at the District Land and Housing Tribunal.</li> </ul>	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"> <li>RAP entitlement delivered in a timely fashion to works contractor and to budget.</li> </ul>	Implementation management records.	Process monitoring.	Monthly for process monitoring.
Data Management.	<ul style="list-style-type: none"> <li>Use of data and logical storage;</li> <li>Accessibility of files and security;</li> <li>Completeness of records.</li> </ul>	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"> <li>Overview of lessons learned.</li> </ul>	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 ongoing 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 <sup>221</sup> .	<ul style="list-style-type: none"> <li>• Provide periodic feedback using a structured report to authorities; and</li> <li>• Develop monitoring database (this will form part of the social performance monitoring carried over from the construction phase).</li> </ul>	<ul style="list-style-type: none"> <li>• CLOs;</li> <li>• PAPs;</li> <li>• PACs;</li> <li>• Village and ward councils; and</li> <li>• NGOs and CBOs.</li> </ul>	<ul style="list-style-type: none"> <li>• Regular village-level meetings to ensure that the information provided is considered as part of the monitoring process; and</li> <li>• Monitoring database to track progress against set criteria and objectives.</li> </ul>
2.	Monitor vulnerable groups' ability to adapt to their new environment <sup>222</sup> .	<ul style="list-style-type: none"> <li>• Establish and manage feedback structures.</li> </ul>	<ul style="list-style-type: none"> <li>• Village and ward councils; and</li> <li>• Vulnerable groups.</li> </ul>	<ul style="list-style-type: none"> <li>• Focus group meetings;</li> <li>• CLOs who will return periodically to vulnerable households to determine how well they are able to re-establish themselves;</li> <li>• Suggestion boxes;</li> <li>• Grievance records; and</li> <li>• Capacity building initiatives.</li> </ul>
3.	Ongoing consultation with resettled households and host communities (monitoring period to be determined by Project).	<ul style="list-style-type: none"> <li>• Develop a schedule for setting up regular meetings;</li> <li>• Determine important aspects to discuss with PACs, NGOs, etc. based on trends observed in the grievances received; and</li> <li>• Develop printed materials and reports for distribution that provide updates on post-implementation RAP activities.</li> </ul>	<ul style="list-style-type: none"> <li>• PACs;</li> <li>• PAPs;</li> <li>• Regional and district authorities; and</li> <li>• Relevant NGOs and CBOs.</li> </ul>	<ul style="list-style-type: none"> <li>• Focus group meetings;</li> <li>• Posters / notice boards;</li> <li>• Pamphlets;</li> <li>• CLOs; and</li> <li>• Grievance records.</li> </ul>

<sup>221</sup> 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.

<sup>222</sup> 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.

## 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;
- 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:

- PAP 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 (3<sup>223</sup>) 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.

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.

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<sup>223</sup> The ex-post evaluation timing will be determined by the completion audit.

- **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
<b>Economic trees</b>		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
Msihi.....	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 ( <b>specify</b> ).....	13

**Religion**

Islam.....	1
Christian.....	2
Animism.....	3
Other (specify).....	4

**Nationality**

Tanzanian.....	1
Malawian.....	2
Kenyan.....	3
Ugandan.....	4
Other ( <b>specify</b> ).....	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 ( <b>more</b> than 5 days per month) .....	2
Lives here irregularly ( <b>less</b> 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 – Singida Region***

**Total East Africa Midstream B.V.**

**Valuation Consultants**

**Date:** 8<sup>th</sup> May, 2019



This document has been prepared by **Whiteknights Real Estate Investment Analysts Company Limited**

<b>Report:</b>	<b>Market Survey for Compensation Rates – Singida Region</b>
<b>Project Name:</b>	<b>Social and Resettlement Services for the East African Crude Oil Pipeline, Tanzanian Section</b>
<b>Project Code:</b>	<b>TOT5212</b>

<b>Name</b>	<b>Responsibility</b>	<b>Signature</b>	<b>Date</b>
Dr. M. Geho	Author		08/05/2019
Dr. C. Ndjovu	Review		08/05/2019

*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.*

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# 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 9<sup>th</sup> 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 finalised on 3<sup>rd</sup> April, 2018 and approved by the Chief Valuer on 11<sup>th</sup> 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 kilometres 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 Sensitisation 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 6<sup>th</sup> to 8<sup>th</sup> December 2018, a team of Senior Valuers from Whiteknights Real Estate Investment Analysts Company Limited conducted consultations with District Valuers (DVs) for Singida Rural, Iramba and Mkalama Districts in Singida Region. Engagement with the DVs was made at the District Headquarters and augmented with site visits to selected sites in the pipeline corridor. The main aim of the engagement of District Valuers 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 District Valuers' 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 (General) Regulations, 2018.



## 2 OBJECTIVES OF THE MARKET SURVEY

The overarching objective of the market survey undertaken from 16<sup>th</sup> May – 20<sup>th</sup> 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 Chief Valuer'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 are 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 three Districts in Singida Region (Singida Rural, Iramba and Mkalama) were systematically analysed 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 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 getting 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 Singida 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 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 metres and simply pacing the length and width of the land parcels using footsteps. The transaction medium was mainly in Tanzania shillings but in some instances it was cows and goats and other forms of in-kind payment. These varied transaction media were appropriately converted into Tanzania shillings having ascertained the actual market or selling prices of in-kind compensation in Tanzanian shillings at the time of the transaction. These transacted prices were divided by the land area to produce price per “acre” or price per square metre for building land, which was taken as a unit of analysis. Later on these analysed prices were aggregated at the ward level to arrive at the Land Value Rate for the ward in question.

During the analysis, all the relevant wards in a district were sequentially arranged from the first to the last ward in a district in order to observe the relativity of values across wards. 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 see in Figure 1 (see page 13), 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. These outliers were then picked up as areas requiring further research and consultations with District Valuers were made to understand or adjust the 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. 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 appreciate the spatial dimension of the land value rates across the pipeline route in Singida Region, land value maps for the 18 relevant wards in Singida Rural, Iramba and Mkalama Districts were prepared. The 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, description of 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 only 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 labour charges".

Building construction rates are average rates established by dividing the overall cost of construction of a building by the Gross External Area (G.E.A.) of the building. Basically, the building rate represents 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 labour and transport of building materials to the site where buildings were erected. Labour and transport costs for building materials were 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 costed 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 (see pages 15-26).

### 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 15<sup>th</sup> August, 2018. While conducting pipeline route surveys, additional economic trees were found and proposals on their compensation rates are presented in Table 4-6 (see pages 33-34). 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 are 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 Chief Valuer in 2012 or the subsequent list of approved compensation rates for additional crops and trees issued by the Chief Valuer for the EACOP project in August, 2018<sup>1</sup>.

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. 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 reinterment".

Accordingly, Whiteknights made an item by item cost estimate related to grave removal and re-burial, depending on whether or not the grave has a construction around it or not. 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 should be paid to the District Medical Officer (DMO) or Contractor who would engage a District Medical Officer 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 per grave. Itemized grave removal costs are found in Table 4-7 (see page 35). It is noteworthy that where the cost of grave

<sup>1</sup> Letter Reference No: BA.391/466/01/58 of 15<sup>th</sup> August 2018



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.

The approach which has been adopted for compensating a grave in the EW/PA sites differs slightly from the approach adopted for the pipeline route. While in the EW/PA sites a flat all-inclusive rate of T.Shs. 500,000 is payable for grave removal, in the pipeline route valuations, we have made a split of compensation payable and specified how much of the compensation is payable to the custodian of the grave and how much is payable to the District Medical Officer (DMO) or a contractor. Furthermore, in the pipeline route, graves with a construction have been considered. While in the EW/PA sites there were virtually no graves with a construction, some of the graves found in the pipeline route have a construction around them, hence the costing of such graves has been done.

## 4 SURVEY RESULTS

### 4.1 Land Rates

Having carried out the analysis explained above, the results of the land value rates are summarized in Table 4-1 below, for Singida Region wards relevant to the EACOP Project. The proposed land value rates for wards located in Singida Region show a fairly smooth profile with land values peaking in Ilongero and Kinyagigi wards in Singida Rural District (see *Figure 1 on page 11*). Land value maps for relevant wards in Singida Region are shown in *Figure 2 (see page 42)*, *Figure 3 (see page 43)* and *Figure 4 (See page 44)*.

The approved land value rate for the Priority Area site MCPY-11 located at Ntondo Village, Misisi Ward, and Singida Rural District is T.Shs. 500,000 per acre.

**Table 4-1: Proposed Land Value Rates for Relevant Singida Region Wards**

Region	District	Ward	Rate per Acre for Agricultural Land (T.Shs.)
SINGIDA	Iramba	1. Mgongo	500,000
		2. Shelui	500,000
		3. Mtoa	500,000
		4. Ulemo	500,000
		5. Mukulu	500,000
		6. Kyengege	500,000
		7. Maluga	500,000
		Mkalama	1. Tumuli

**Table 4-1 Continued**

Region	District	Ward	Rate per Acre for Agricultural Land (T.Shs.)
SINGIDA	Singida Rural	1. Msisi	500,000
		2. Ughandi	800,000
		3. Ntonge	800,000
		4. Ilongero	800,000
		5. Mrama	500,000
		6. Kinyagigi	800,000
		7. Merya	800,000
		8. Itaja	550,000
		9. Ngimu	450,000

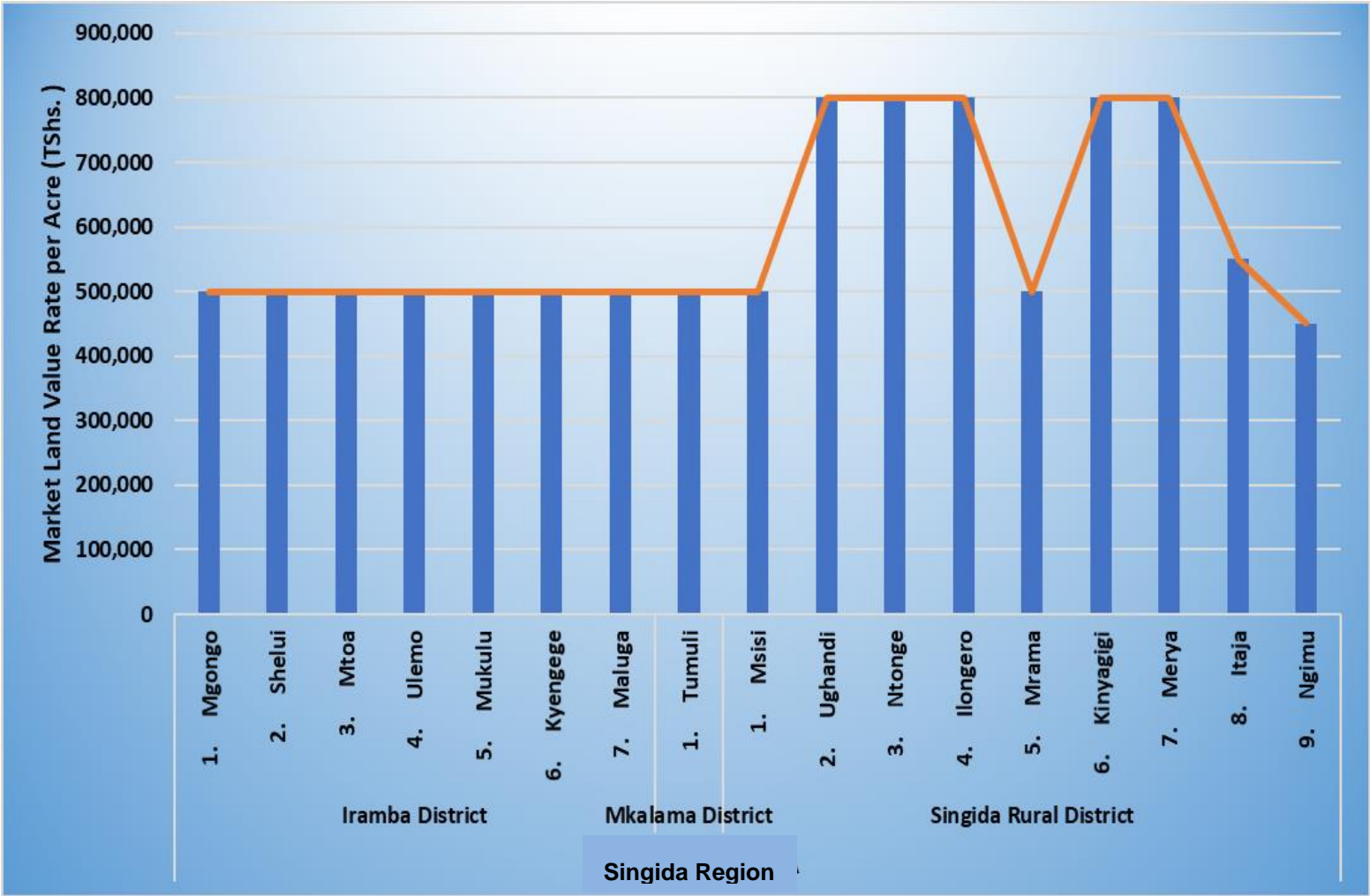








Figure 1: Land Value Rates for Relevant Wards in Singida Region




## 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 (see *pages 15-26*).




Table 4-2: Construction Rates for Main Building Types

CATEGORY	WALL	ROOF	DOORS & WINDOWS	FLOOR	RATE PER SQ.M. (TSHS.)	PHOTOGRAPH
CAT. NO. A	Sand Cement	Corrugated Iron Sheets (CIS)	Wooden/CIS	Cement Floor	448,400	
				Earth	395,920	
		Thatch	Wooden/CIS	Cement Floor	399,640	
				Earth	337,120	
CAT. NO. B	Burnt mud Bricks	CIS	Wooden/CIS	Cement Floor	336,000	
				Earth	317,790	
		Thatch	Wooden/CIS	Cement Floor	299,000	
				Earth	266,220	





CATEGORY	WALL	ROOF	DOORS & WINDOWS	FLOOR	RATE PER SQ.M. (TSHS.)	PHOTOGRAPH
<b>CAT. NO. C</b>	Unburnt mud bricks/ Sun baked clay bricks	CIS	Wooden/CIS	Cement Floor	<b>207,100</b>	
				Earth	<b>203,640</b>	
		Thatch	Wooden/CIS	Cement Floor	<b>165,330</b>	
				Earth	<b>157,000</b>	
		<i>Tembe</i>	Wooden/CIS	Earth	<b>63,240</b>	




CATEGORY	WALL	ROOF	DOORS & WINDOWS	FLOOR	RATE PER SQ.M. (TSHS.)	PHOTOGRAPH
<b>CAT. NO. D</b>	Monolithic Mud wall	CIS	Wooden/CIS	Cement Floor	<b>182,400</b>	
				Earth	<b>136,220</b>	
		Thatch	Wooden/CIS	Cement Floor	<b>89,100</b>	
				Earth	<b>80,580</b>	
		Tembe	Wooden/CIS	Earth	<b>53,040</b>	







CATEGORY	WALL	ROOF	DOORS & WINDOWS	FLOOR	RATE PER SQ.M. (TSHS.)	PHOTOGRAPH
CAT. NO. E	Mud Poles &	CIS	Wooden/CIS	Cement Floor	118,750	
				Earth	117,600	
		Thatch	Wooden/CIS	Cement Floor	65,650	
				Earth	61,200	
		Tembe	Wooden/CIS	Earth	48,960	
		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	COST	PHOTOGRAPH
Water Ponds	Traditional Water Pond	Open to sky	Small size (<700m <sup>3</sup> )		300,000	
			Medium Size (700m <sup>3</sup> - 1,000m <sup>3</sup> )		500,000	
			Large Size (> 1,000 m <sup>3</sup> )		700,000	
	Purposely Designed fishing Pond	Open to sky	Small size (<250m <sup>3</sup> )		600,000	
			Medium Size (250m <sup>3</sup> - 550m <sup>3</sup> )		1,300,000	
			Large Size (550m <sup>3</sup> )		2,000,000	
Wells and Bore holes	Shallow wells	Traditional	Open		60,000	
			Covered with concrete slab		150,000	
	Deep	Traditional	Covered		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	COST	PHOTOGRAPH
Pit Latrine	Grass / Mat walling	Open to sky, traditional	Compacted earth or arranged brick	Earth screed	352,000	
	Mud & Poles		Compacted earth or arranged brick	Cement screed	380,000	
	Cement/ Burnt Bricks		Compacted earth or arranged brick	Cement screed	383,500	
	Mud & Poles	Thatch	Compacted earth or arranged brick	Earth screed	370,000	
		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	COST	PHOTOGRAPH	
Shower room	Grass	Open to sky, traditional	No windows	Earth screed	<b>60,000</b>		
			No windows	Earth screed	<b>80,000</b>		
	Mud & Poles	Grass	No windows	Earth screed	<b>150,000</b>		
		CIS	No windows	Cement screed	<b>250,000</b>		
	Burnt Bricks	Grass	Window opening only	Window opening only	Earth screed	<b>168,000</b>	
				CIS	Window opening only	Cement screed	<b>350,000</b>

TYPE	WALLING TYPE & SPECIFICATIONS	ROOFING & ASSET MODE	SIZE & COVERINGS	FLOORING	COST	PHOTOGRAPH
<b>Kitchen</b>	Roof supporting poles	Grass/mats/ Tarpaulins	none	Earth screed	<b>30,000</b>	
	Mud & Poles	Grass	Window opening only	Earth screed	<b>126,000</b>	
		CIS	Window opening only	Earth screed	<b>210,000</b>	
	Burnt Bricks	Grass	Window openings only	Earth screed	<b>262,500</b>	
		CIS	small wooden	Earth screed	<b>399,000</b>	

TYPE	WALLING TYPE & SPECIFICATIONS	ROOFING & ASSET MODE	SIZE & COVERINGS	FLOORING	COST	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	165,000	
		CIS	Ground level	Earth screed	275,000	
	Mabanzi/Wooden Planks walling	Grass	Ground level	Earth screed	380,000	
		CIS	Erected on stilts	Flooring: Mabanzi/Planks	500,000	






TYPE	WALLING TYPE & SPECIFICATIONS	ROOFING & ASSET MODE	SIZE & COVERINGS	FLOORING	COST	PHOTOGRAPH
Granary/ Kihenge	Reed/Bamboo woven walls	Grass thatch	Erected on stilts/ground	Medium sized, 2m diameter	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 (TSHS.)	PHOTOGRAPH
Solid wall fencing, Size: 2m high	Block wall / Burnt brick		Running metre	144,200	
	Stonewall	Bonded by cement mortar	Running metre	200,000	
	Mud brick / monolithic wall	Bonded by mud mortar	Running metre	16,500	
Wire fencing	4 strand barbed wire on concrete poles		Running metre	17,000	
	4 strand barbed wire on wooden poles		Running metre	12,000	
	Chicken wire mesh		Running metre	30,000	
Foundation Wall including foundation footing	Stone (Approximately 3 feet high) with cement mortar	Bonded by cement mortar	Running metre	58,200	

## 4.3 Market Rental Rates

Market rental rates for relevant wards in Singida Region are shown in Table 4-5 below (see pages 27-32).

**Table 4-5: Market Rental Rates for Residential Properties – Relevant Singida Region Wards**

District	Ward	Cat. No.	Construction Details	Type of Room	Monthly Rent (T.shs.)			
					One Room	Two Rooms	Three Rooms	Four Rooms
Iramba	Mgongo	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	7,000	14,000	21,000	28,000
		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	3,000	6,000	9,000	12,000
		6	Grass thatch, unburnt bricks, earth/mud screed floor	Independent Room	2,000	4,000	6,000	8,000
		7	Grass thatch, mud and poles, earth/mud screed floor	Independent Room	2,000	4,000	6,000	8,000
	Shelui	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	5,000	10,000	15,000	20,000
		3	CIS, burnt bricks, cement screed floor	Independent Room	8,000	16,000	24,000	32,000
		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	3,000	6,000	9,000	12,000
		6	Grass thatch, unburnt bricks, earth/mud screed floor	Independent Room	2,000	4,000	6,000	8,000
		7	Grass thatch, mud and poles, earth/mud screed floor	Independent Room	2,000	4,000	6,000	8,000
	Mtoa	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	7,000	14,000	21,000	28,000
		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	3,000	6,000	9,000	12,000
6		Grass thatch, unburnt bricks, earth/mud screed floor	Independent Room	2,000	4,000	6,000	8,000	
7		Grass thatch, mud and poles, earth/mud screed floor	Independent Room	2,000	4,000	6,000	8,000	

District	Ward	Cat. No.	Construction Details	Type of Room	Monthly Rent (T.shs.)			
					One Room	Two Rooms	Three Rooms	Four Rooms
Iramba	Ulemo	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	7,000	14,000	21,000	28,000
		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	3,000	6,000	9,000	12,000
		6	Grass thatch, unburnt bricks, earth/mud screed floor	Independent Room	2,000	4,000	6,000	8,000
		7	Grass thatch, mud and poles, earth/mud screed floor	Independent Room	2,000	4,000	6,000	8,000
	Mukuli	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	7,000	14,000	21,000	28,000
		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	3,000	6,000	9,000	12,000
		6	Grass thatch, unburnt bricks, earth/mud screed floor	Independent Room	2,000	4,000	6,000	8,000
		7	Grass thatch, mud and poles, earth/mud screed floor	Independent Room	2,000	4,000	6,000	8,000
	Kyengega	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	7,000	14,000	21,000	28,000
		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	3,000	6,000	9,000	12,000
		6	Grass thatch, unburnt bricks, earth/mud screed floor	Independent Room	2,000	4,000	6,000	8,000
		7	Grass thatch, mud and poles, earth/mud screed floor	Independent Room	2,000	4,000	6,000	8,000

District	Ward	Cat. No.	Construction Details	Type of Room	Monthly Rent (T.shs.)			
					One Room	Two Rooms	Three Rooms	Four Rooms
Iramba	Muluga	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	6,000	12,000	18,000	24,000
		3	CIS, burnt bricks, cement screed floor	Independent Room	9,000	18,000	27,000	36,000
		4	CIS, burnt bricks, earth/mud screed floor	Independent Room	4,000	8,000	12,000	16,000
		5	Grass, burnt bricks, earth/mud screed floor	Independent Room	3,000	6,000	9,000	12,000
		6	Grass thatch, unburnt bricks, earth/mud screed floor	Independent Room	2,000	4,000	6,000	8,000
		7	Grass thatch, mud and poles, earth/mud screed floor	Independent Room	2,000	4,000	6,000	8,000
Mkalama	Tumuli	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	7,000	14,000	21,000	28,000
		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	3,000	6,000	9,000	12,000
		6	Grass thatch, unburnt bricks, earth/mud screed floor	Independent Room	2,000	4,000	6,000	8,000
		7	Grass thatch, mud and poles, earth/mud screed floor	Independent Room	2,000	4,000	6,000	8,000

District	Ward	Cat. No.	Construction Details	Type of Room	Monthly Rent (T.shs.)			
					One Room	Two Rooms	Three Rooms	Four Rooms
Singida Rural	Msihi	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	5,000	10,000	15,000	20,000
		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	4,000	8,000	12,000	16,000
		5	Grass, burnt bricks, earth/mud screed floor	Independent Room	3,000	6,000	9,000	12,000
		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
	Ughandi	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	5,000	10,000	15,000	20,000
		3	CIS, burnt bricks, cement screed floor	Independent Room	7,000	14,000	21,000	28,000
		4	CIS, burnt bricks, earth/mud screed floor	Independent Room	3,000	6,000	9,000	12,000
		5	Grass, burnt bricks, earth/mud screed floor	Independent Room	3,000	6,000	9,000	12,000
		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
	Ntonge	1	CIS, cement block, cement screed floor	Independent Room	20,000	40,000	60,000	80,000
		2	Grass thatch, cement blocks, cement screed floor	Independent Room	15,000	30,000	45,000	60,000
		3	CIS, burnt bricks, cement screed floor	Independent Room	15,000	30,000	45,000	60,000
		4	CIS, burnt bricks, earth/mud screed floor	Independent Room	10,000	20,000	30,000	40,000
		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	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	

District	Ward	Cat. No.	Construction Details	Type of Room	Monthly Rent (T.shs.)				
					One Room	Two Rooms	Three Rooms	Four Rooms	
Singida Rural	Ilongero	1	CIS, cement block, cement screed floor	Independent Room	25,000	50,000	75,000	100,000	
		2	Grass thatch, cement blocks, cement screed floor	Independent Room	20,000	40,000	60,000	80,000	
		3	CIS, burnt bricks, cement screed floor	Independent Room	22,000	44,000	66,000	88,000	
		4	CIS, burnt bricks, earth/mud screed floor	Independent Room	20,000	40,000	60,000	80,000	
		5	Grass, burnt bricks, earth/mud screed floor	Independent Room	10,000	20,000	30,000	40,000	
		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	3,000	6,000	9,000	12,000	
		Mrama	1	CIS, cement block, cement screed floor	Independent Room	20,000	40,000	60,000	80,000
	2		Grass thatch, cement blocks, cement screed floor	Independent Room	13,000	26,000	39,000	52,000	
	3		CIS, burnt bricks, cement screed floor	Independent Room	15,000	30,000	45,000	60,000	
	4		CIS, burnt bricks, earth/mud screed floor	Independent Room	10,000	20,000	30,000	40,000	
	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	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	
		Kinyagigi	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	13,000	26,000	39,000	52,000	
	4		CIS, burnt bricks, earth/mud screed floor	Independent Room	9,000	18,000	27,000	36,000	
	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		

District	Ward	Cat. No.	Construction Details	Type of Room	Monthly Rent (T.shs.)			
					One Room	Two Rooms	Three Rooms	Four Rooms
Singida Rural	Merya	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	5,000	10,000	15,000	20,000
		3	CIS, burnt bricks, cement screed floor	Independent Room	7,000	14,000	21,000	28,000
		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	3,000	6,000	9,000	12,000
		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	2,000	4,000	6,000	8,000
	Itaja	1	CIS, cement block, cement screed floor	Independent Room	20,000	40,000	60,000	80,000
		2	Grass thatch, cement blocks, cement screed floor	Independent Room	15,000	30,000	45,000	60,000
		3	CIS, burnt bricks, cement screed floor	Independent Room	17,000	34,000	51,000	68,000
		4	CIS, burnt bricks, earth/mud screed floor	Independent Room	13,000	26,000	39,000	52,000
		5	Grass, burnt bricks, earth/mud screed floor	Independent Room	9,000	18,000	27,000	36,000
		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
	Ngimu	1	CIS, cement block, cement screed floor	Independent Room	18,000	36,000	54,000	72,000
		2	Grass thatch, cement blocks, cement screed floor	Independent Room	13,000	26,000	39,000	52,000
		3	CIS, burnt bricks, cement screed floor	Independent Room	15,000	30,000	45,000	60,000
		4	CIS, burnt bricks, earth/mud screed floor	Independent Room	10,000	20,000	30,000	40,000
		5	Grass, burnt bricks, earth/mud screed floor	Independent Room	7,500	15,000	22,500	30,000
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	

## 4.4 Unlisted Crops and Trees

Proposed compensation rates for unlisted crops and trees are shown in Table 4-6 below (see pages 33-34).

**Table 4-6: Proposed Compensation Rates for Unlisted Crops and Trees**

S/n.	Common Name	Latin Name	Potential Use	Proposed Rate (T.Shs.)	Remarks
1	Chumvi Chumvi		Medicinal tree	0	Valued with the land. Ordinarily found tree of no particular economic value.
2	Migligisida		Medicinal tree	0	Valued with the land. Ordinarily found tree of no particular economic value.
3	Mikababu	Acacia Albida	Beehives, bee plant, charcoal, domestic uses (soap, tool handles), fencing (posts), firewood, fodder, food (pods =condiment), fruits (famine food), gum, land improvement (nitrogen fixing, windbreaks), medicine, salt, shade, tannin, timber (soft).	20,000	Acacia Albida. Family Name: Leguminosae (Subfamily Mimosoideae) Common Names: mapagola, kababu, apple ring acacia, winterthorn. Also known as Mugunga in Nyaturu and Pare languages. Has been valued at Shs. 20,000 in the 2018 CV approved compensation rates for unlisted trees for EACOP Early Works Priority Area sites.
4	Mikole	Grewia Bicolor, Family Name: Tiliaceae	Bee plant, building materials, domestic uses (arrows, bows, spoons, tool handles, walking sticks/canes), fibre (tope), firewood, fodder, food, fruit, medicine, ritual, shade, soap (leaves = capon).	0	Valued with the land. Ordinarily found tree of no particular economic value.
5	Mikongolo	Acacia Albida or Brachystegia Bussei or Commiphora Mollis or Commiphora Ugogoensis	Beehives, bee plant, charcoal, domestic uses (tools), fibre (rope), firewood, medicine, timber.	20,000	Valued as Acacia Albida as per the 2018 CV approved compensation rates for unlisted trees for EACOP Early Works Priority Area sites.
6	Milade		Fruit/fuel wood	0	Valued with the land. Ordinarily found tree of no particular economic value.
7	Mingale/Minangale	Euphorbia Candelabrum	Naturally growing, softwood timber tree	60,000	Same as Minangale, Valued at T.Shs. 60,000 in the 2018 CV approved Compensation Rates for unlisted trees for EACOP Early Works Priority Area sites.
8	Mitogo	Malvaceae	Building materials (small uses), domestic uses (spoons, walking sticks, tool handles, bows), fibre (rope), fodder, food (Masai soup), fruit, land improvement (green manure, mulch).	0	Valued with the land. Ordinarily found tree of no particular economic value.



S/n.	Common Name	Latin Name	Potential Use	Proposed Rate (T.Shs.)	Remarks
9	Mitondo	Haya Anthotheca (K. Nyasica)	Naturally growing Hard wood, timber. Building materials (flooring), dye (bark =red, brown), firewood, furniture, land improvement (windbreaks), medicine, shade, timber (boats; hard, termite, borer resistant).	80,000	Valued as the equivalent of Mvule, T.Shs 80,000 in 2018 Crop Compensation Rates approved by the CV for EACOP Early Works Priority Area sites.
10	Mkaranga Poli		Fruit tree	0	Valued with the land. Ordinarily found tree of no particular economic value.
11	Mpama		Naturally growing, hardwood, timber tree	80,000	Valued as the equivalent of Mvule, T.Shs 80,000 in 2018 Crop Compensation Rates approved by the CV for EACOP Early Works Priority Area sites.
12	Mpome		Naturally growing, Soft wood timber tree.	70,000	Valued as the equivalent of Msonobari (Pine tree), T.Shs 70,000 in 2018 Crop Compensation Rates approved by the CV for EACOP Early Works Priority Area sites.
13	Msingiza		Fuel wood	0	Valued with the land. Ordinarily found tree of no particular economic value.
14	Olbiri		Medicinal tree	0	Valued with the land. Ordinarily found tree of no particular economic value.
15	Olive oil tree	Genus	Fruit tree	72,720	Valued as the equivalent of Pears T.Shs 50,000 in 2012 Crop Compensation Rates Schedule for the Northern Zone, adjusted for inflation at 45.44% <sup>2</sup>
16	Olmokolikolo		Naturally growing, hardwood, timber tree	80,000	Valued as the equivalent of Mvule, T.Shs 80,000 in 2018 Crop Compensation Rates approved by the CV for EACOP Early Works Priority Area sites.
17	Palelei		Medicinal tree	0	Valued with the land. Ordinarily found tree of no particular economic value.

<sup>2</sup> 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%.

## 4.5 Graves

Standard grave size: 6 feet depth, 2.5 metres wide, 8 feet long<sup>3</sup> 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.)
<b>(a) Grave Without a Construction</b>				
<b>1. Amount Payable to Custodian of the Grave</b>				
	Amount Payable to Family of the deceased for Placatory and Expiatory Rites, and ceremony.			<b>300,000</b>
<b>2. Amount Payable to District Medical Officer/Graves Removal Contractor</b>				
	Amount payable to District Medical Officer to cover exhumation of the dead body and re-interment costs			<b>200,000</b>
				<b>Total</b>
				<b>500,000</b>
<b>(b) Grave With a Construction</b>				
<b>1. Amount Payable to Custodian of the Grave</b>				
	Amount Payable to Family of the deceased for Placatory and Expiatory Rites, and ceremony.			<b>300,000</b>
<b>2. Amount Payable to District Medical Officer/Graves Removal Contractor</b>				
	Amount payable to District Medical Officer to cover exhumation of the dead body and re-interment costs, as above.			
				<b>Sub-Total</b>
				<b>200,000</b>
<b>Add: Amount for Grave Re-Construction</b>				
	<b>Expenditure Item</b>	<b>Units</b>	<b>Unit Rate</b>	
	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 litre drums 4	500	2,000
	Msalaba/Headstone/Monument			25,000
	<b>Labour</b>			
	Kujenga Tofali moja/Construction Rate per Block	50 Blocks	500	25,000
	Zege/Concrete			20,000
	Plastering of the grave			20,000
				<b>Sub-Total</b>
				<b>200,000</b>
	<b>Total Amount Payable to the DMO</b>			<b>400,000</b>

<sup>3</sup> International Cemetery, Cremation and Funeral Association, www.iccfa.com. Last viewed on 16<sup>th</sup> January, 2019.

## 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% (seven percent) which has been effective from August 2018.

In view of the prevailing disparity between the expressly stated aspirations of the law and the current state of the money market dealing with trading in short term financial instruments and following consultations with the Ministry of Lands, Housing and Human Settlements Development, an interest rate of 7% will be used in pipeline valuations for the EACOP project.<sup>4</sup>

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<sup>4</sup> 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 24<sup>th</sup> 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 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 and the occasional value "spikes" and troughs are explicable. The survey results also seem to conform to findings of other studies on land values in the districts covered by the study<sup>5</sup>. On account of this, District Valuers for Singida Rural, Iramba and Mkalama Districts in Singida 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 eighteen wards covered by the study. We therefore, unreservedly, put forward our proposal on compensation rates for Singida Region for approval by the Chief Valuer as per the legal requirements for endorsement of compensation rates as specifically set out in *The Valuation and Valuers (General) Regulations, 2018*.

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<sup>5</sup> Other studies include the Chief Valuer's Research on Land Rates in Tanzania, 2016.

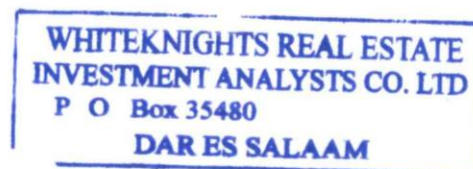
## 6 CERTIFICATION OF THE MARKET STUDY

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 analysed 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 behaviour 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: Land Rates for EACOP Early Works/Priority Area Sites**

<b>MCPY/ District</b>	<b>Type of Land</b>	<b>DV's Rate per Acre</b>	<b>Proposed Rate per Acre (T.Shs.)</b>
MCPY-05: Missenyi	Peri-urban, agricultural	500,000-1,000,000	<b>1,000,000</b>
MCPY-06: Muleba	Agricultural	500,000-800,000	<b>800,000</b>
MCPY-07: Chato	Agricultural	400,000-500,000	<b>500,000</b>
MCPY-08: Bukombe	Building plots, urbanised	No D.V.	<b>800,000</b>
MCPY-09 and CY-KP701: Nzega	Agricultural	400,000-800,000	<b>850,000</b>
MCPY-10: Igunga	Rural, agricultural	No D.V.	<b>400,000</b>
MCPY-11: Singida	Agricultural, fertile, ripe for development	450,000	<b>500,000</b>
MCPY-12: Kondoa	Agricultural	350,000-600,000	<b>500,000</b>
1MC-13 and PY-13: Kiteto	Agricultural, (fertile)	600,000-1,200,000	<b>1,200,000</b>
MCPY-14: Kilindi	Rural, remote	50,000-80,000	<b>350,000</b>
MCPY-15: Handeni	Agricultural, Ripe for development	300,000-800,000	<b>800,000</b>
MCPY-16: Muheza	Commercial farming	700,000-1,000,000	<b>1,250,000</b>

## **Appendix B: Land Value Maps for Relevant Wards in Singida Region**



Market Survey for Compensation – Singida Region

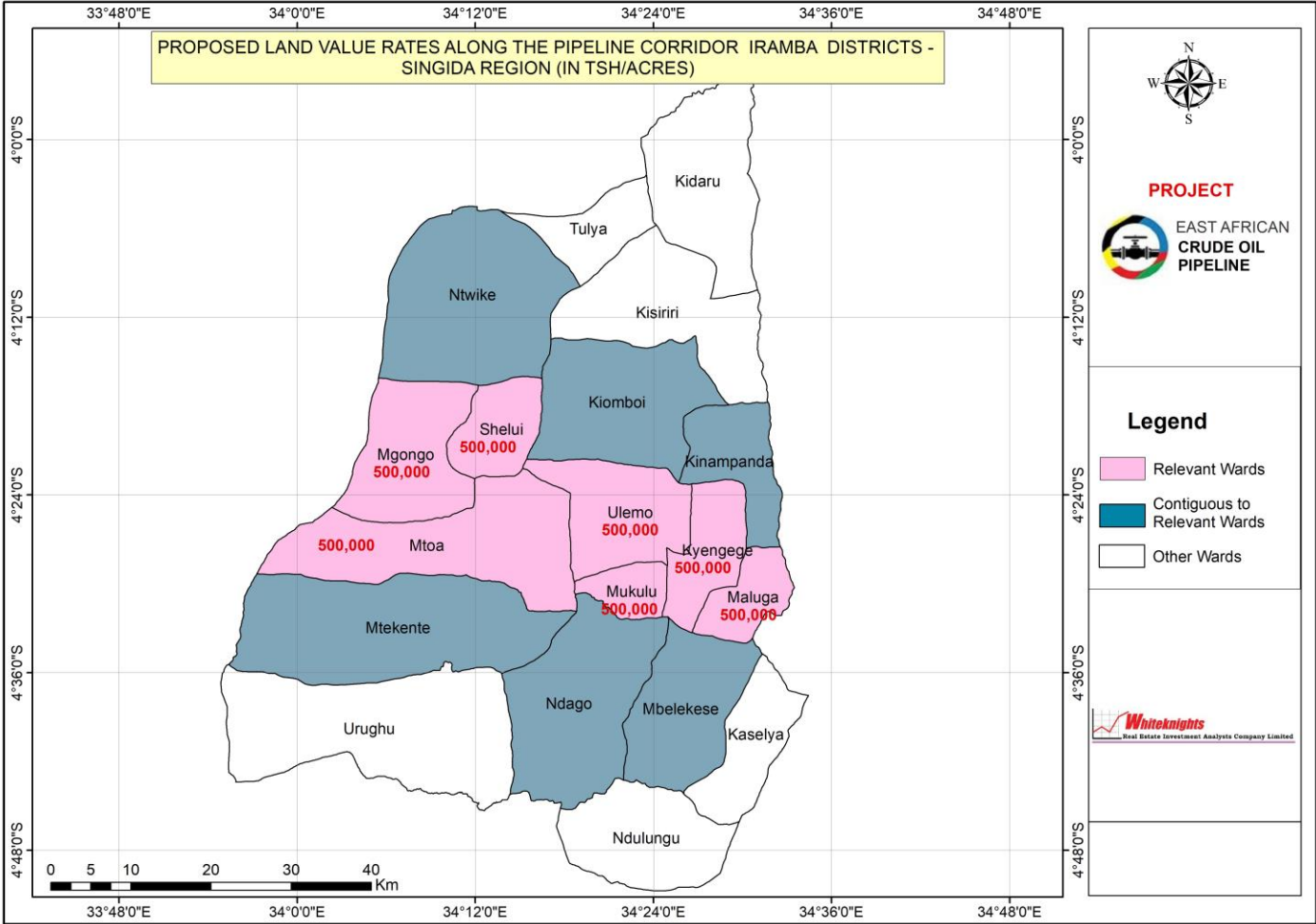


Figure 2: Land Value Map for Relevant Wards in Iramba District, Singida Region

Market Survey for Compensation – Singida Region

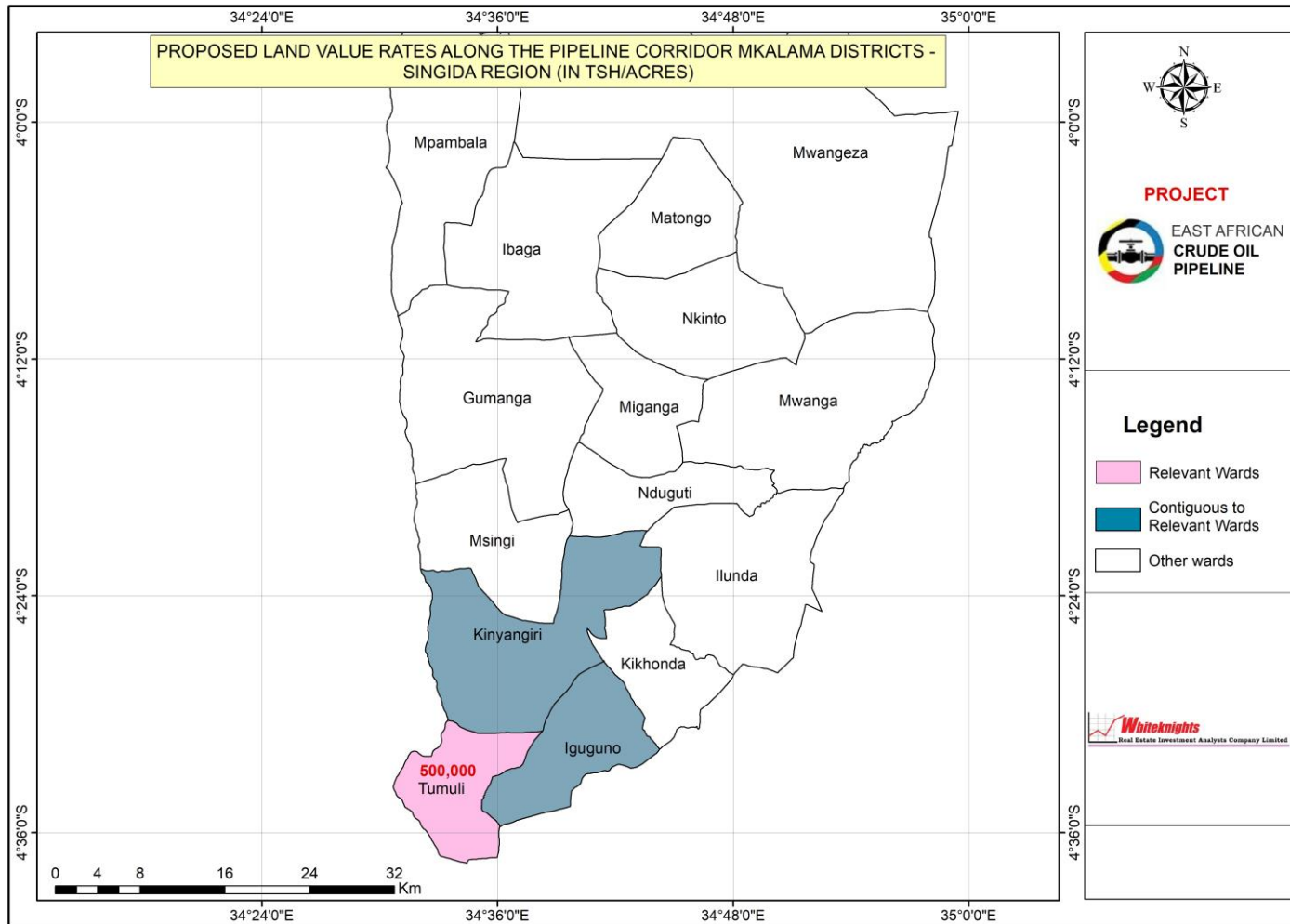


Figure 3: Land Value Map for a Relevant Ward in Mkalama District, Singida Region

Market Survey for Compensation – Singida Region

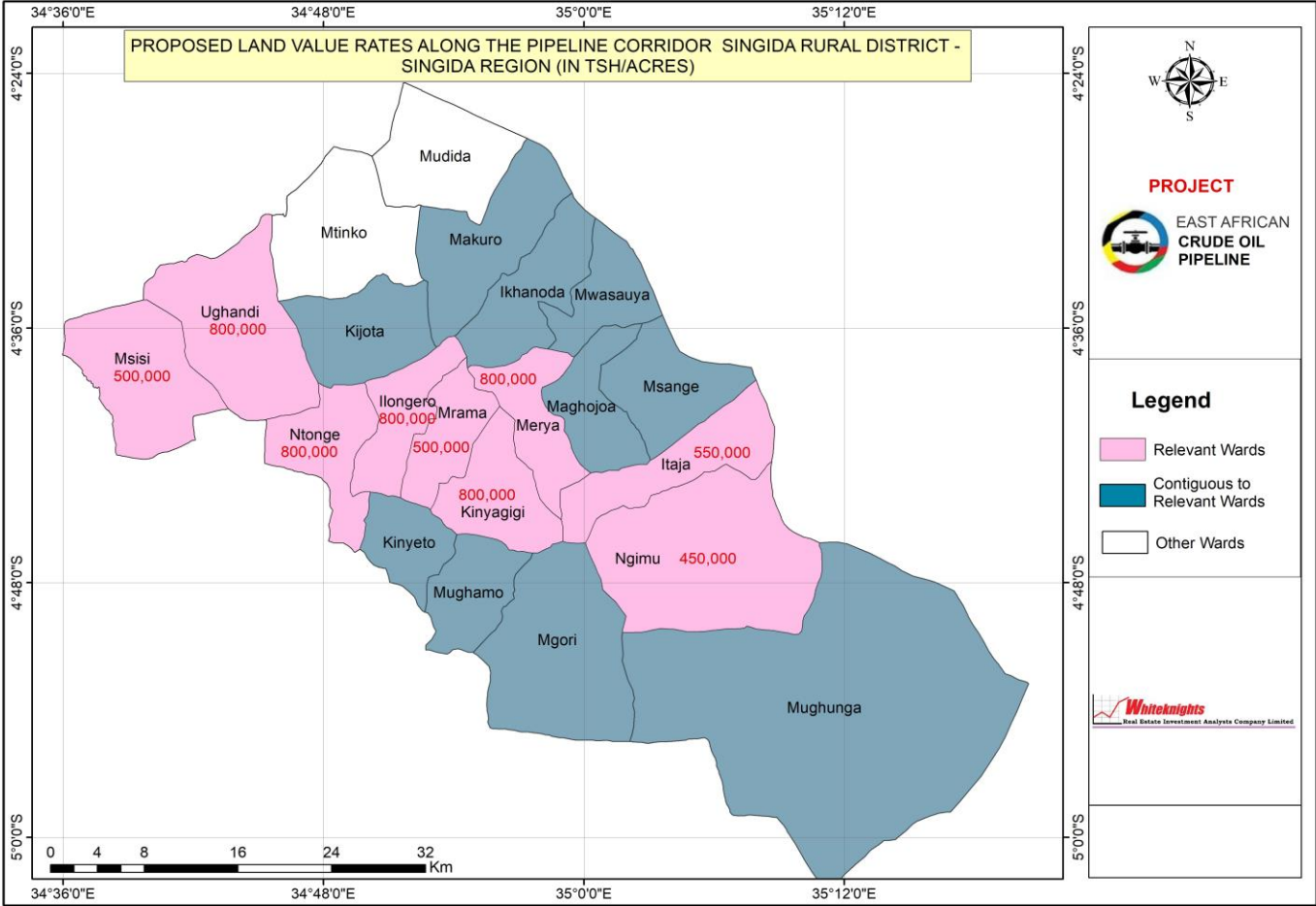


Figure 4: Land Value Map for Relevant Wards in Singida Rural District, Singida Region

## Appendix C: Crop Rates 2012

**CROP RATES IN NORTHERN ZONE ( KANDA YA KASKAZINI)**

<b>I</b>									
<b>TABLE NO.1C - PERENNIAL CROPS -SUMMARY OF VALUE RATES</b>									
<b>CROP VALUE IN T.SHS.</b>									
	<b>TYPE OF CROP</b>	<b>Per Hectare</b>		<b>Per Acre</b>	<b>Per Stem or Cluster</b>				
<b>S/N.</b>		<b>Plant Popula- tion per Hectare</b>	<b>Average Cared Matured Crop</b>	<b>Plant Popula- tion per Acre</b>	<b>Average Cared Matured Crop</b>	<b>Seedling Crop (30%)</b>	<b>Mature crop (60%)</b>	<b>Optimum producing crop (100%)</b>	<b>Aged Crop (15%)</b>
<b>A</b>	<b>CASH CROPS</b>								
1	Mnazi	125.00	18,750,000.00	50.61	7,591,093	45000	90000	150000	22,500.00
2	Mikorosho	100.00	9,000,000.00	40.49	3,643,725	27000	54000	90000	13,500.00
3	Michikichi	150.00	4,800,000.00	60.73	1,943,320	9600	19200	32000	4,800.00
4	Miwa (8 hadi 10)	12,500.00	62,500,000.00	5,060.73	25,303,644	1500	3000	5000	750.00
5	Misufi	200.00	10,000,000.00	80.97	4,048,583	15000	30000	50000	7,500.00
6	Katani	5,000.00	25,000,000.00	2,024.29	10,121,457	1500	3000	5000	750.00
7	Cocoa	1,000.00	25,000,000.00	404.86	10,121,457	7500	15000	25000	3,750.00
8	Kahawa (Arabika)	2,000.00	120,000,000.00	809.72	48,582,996	18000	36000	60000	9,000.00
<b>B</b>	<b>FRUITS</b>								
1	Miparachichi (Asili)	100.00	8,000,000.00	40.49	3,238,866.40	24,000.00	48,000.00	80,000.00	12,000.00
2	Miparachichi (Improved)	150.00	9,750,000.00	60.73	3,947,368.42	19,500.00	39,000.00	65,000.00	9,750.00
3	Chenza	250.00	8,750,000.00	101.21	3,542,510.12	10,500.00	21,000.00	35,000.00	5,250.00
4	Chungwa (Asili)	250.00	15,000,000.00	101.21	6,072,874.49	18,000.00	36,000.00	60,000.00	9,000.00
5	Chungwa (Improved)	277.00	16,620,000.00	112.15	6,728,744.94	18,000.00	36,000.00	60,000.00	9,000.00
6	Ndimu (Asili)	250.00	5,000,000.00	101.21	2,024,291.50	6,000.00	12,000.00	20,000.00	3,000.00
7	Ndimu (Improved)	250.00	5,000,000.00	101.21	2,024,291.50	6,000.00	12,000.00	20,000.00	3,000.00
8	Limao (Asili)	250.00	5,000,000.00	101.21	2,024,291.50	6,000.00	12,000.00	20,000.00	3,000.00
9	Limao (Improved)	250.00	5,000,000.00	101.21	2,024,291.50	6,000.00	12,000.00	20,000.00	3,000.00

10	Mwembe (Asili)	75.00	7,125,000.00	30.36	2,884,615.38	28,500.00	57,000.00	95,000.00	14,250.00
11	Mwembe (Dodo)	100.00	15,000,000.00	40.49	6,072,874.49	45,000.00	90,000.00	150,000.00	22,500.00
12	Mwembe (Improved)	150.00	24,000,000.00	60.73	9,716,599.19	48,000.00	96,000.00	160,000.00	24,000.00
13	Mpera (Asili)	150.00	1,500,000.00	60.73	607,287.45	3,000.00	6,000.00	10,000.00	1,500.00
14	Mpera(Improved)		-	-	-	9,900.00	19,800.00	33,000.00	4,950.00
15	Mifenesi	75.00	3,000,000.00	30.36	1,214,574.90	12,000.00	24,000.00	40,000.00	6,000.00
16	Migomba (Improved)		-	-	-	15,000.00	30,000.00	50,000.00	7,500.00
17	Migomba (Asili)	750.00	33,750,000.00	303.64	13,663,967.61	13,500.00	27,000.00	45,000.00	6,750.00
18	Nanasi	10,000.00	10,000,000.00	4,048.58	4,048,583.00	300.00	600.00	1,000.00	150.00
19	Papai (Pawpaw)	800.00	12,000,000.00	323.89	4,858,299.60	4,500.00	9,000.00	15,000.00	2,250.00
20	Mkweme	150.00	4,500,000.00	60.73	1,821,862.35	9,000.00	18,000.00	30,000.00	4,500.00
21	Komamanga	250.00	2,500,000.00	101.21	1,012,145.75	3,000.00	6,000.00	10,000.00	1,500.00
22	Stafeli	350.00	5,250,000.00	141.70	2,125,506.07	4,500.00	9,000.00	15,000.00	2,250.00
23	Mtende	125.00	1,125,000.00	50.61	759,109.31	4,500.00	9,000.00	15,000.00	2,250.00
24	Passion fruit	11,111.00	14,999,850.00	4,498.38	6,072,813.77	405.00	810.00	1,350.00	202.50
25	Pears	156.00	7,800,000.00	63.16	3,157,894.74	15,000.00	30,000.00	50,000.00	7,500.00
26	Apple	156.00	7,800,000.00	63.16	3,157,894.74	15,000.00	30,000.00	50,000.00	7,500.00
27	Peaches	156.00	5,460,000.00	63.16	2,210,526.32	10,500.00	21,000.00	35,000.00	5,250.00
28	Plums (Matunda damu)			-	-	12,000.00	24,000.00	40,000.00	6,000.00
29	Tikiti maji (Water melon)			-	-	4,500.00	9,000.00	15,000.00	2,250.00
30	Tango (Cucumba)			-	-	1,500.00	3,000.00	5,000.00	750.00
31	Mzambarau			-	-	15,000.00	30,000.00	50,000.00	7,500.00
32	Mkwaju			-	-	9,000.00	18,000.00	30,000.00	4,500.00
33	Mforosadi			-	-	3,600.00	7,200.00	12,000.00	1,800.00
34	Mbuyu			-	-	15,000.00	30,000.00	50,000.00	7,500.00

35	Topetope			-	-	4,500.00	9,000.00	15,000.00	2,250.00
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II									
TABLE NO. 2C - SEASONAL CROPS-SUMMARY OF VALUE RATES									
TYPE OF CROP		MARKET VALUE IN T.SHS.							
		Per Hectare		Per Acre		Per Stem or Cluster			
S/N.		Plant Popula- tion per Hectare	Average Cared Matured Crop	Plant Popula- tion per Acre	Average Cared Matured Crop	Seedling Crop (30%)	Mature crop (60%)	Optimum producing crop (100%)	Aged Crop (15%)
<b>A</b>									
<b>CASH CROPS</b>									
1	Tobacco	13,000.00	8,645,000.00	5,263.16	3,500,000.00	378	756	665	189.00
2	Cotton	40,000.00	9,880,000.00	16,194.33	4000000	255	510	247	127.50
<b>B</b>									
<b>CELEASE</b>									
1	Maize ( Mahindi) Monocropping	10,000.00	1,976,000.00	4,048.58	800000	59.28	118.56	197.6	29.64
2	Maize ( Intercropping)	10,000.00	1,482,000.00	4,048.58	600000	44.46	88.92	148.2	22.23
3	Paddy (Asili) (Mpunga)	10,000.00	5,928,000.00	4,048.58	2400000	177.84	355.68	592.8	88.92
4	Paddy (Improved) (Mpunga)	10,000.00	1,605,500.00	4,048.58	650000	48.165	96.33	160.55	24.08
5	Sorghum (Mtama)	10,000.00	1,482,000.00	4,048.58	600000	44.46	88.92	148.2	22.23
6	Ulezi	10,000.00	889,200.00	4,048.58	360000	26.676	53.352	88.92	13.34
7	Uwele	10,000.00	370,500.00	4,048.58	150000	11.115	22.23	37.05	5.56
8	Ngano	10,000.00	2,778,750.00	4,048.58	1125000	83.3625	166.725	277.875	41.68
9	Barley (Shairi)	10,000.00	1,803,100.00	4,048.58	730000	54.093	108.186	180.31	27.05
<b>C</b>									
<b>BEANS</b>									
1	Mbaazi	10,000.00	1,358,500.00	4,048.58	550000	40.755	81.51	135.85	82,500.00
2	Choroko	10,000.00	-	4,048.58		0	0	0	-
3	Maharage (Monocropping)	10,000.00	1,983,410.00	4,048.58	803,000	59.5023	119.0046	198.341	120,450.00

4	Maharage ( Intercropping)	10,000.00	1,000,350.00	4,048.58	405,000	30.0105	60.021	100.035	60,750.00
5	Kunde	10,000.00	-	4,048.58		0	0	0	-
6	Njegere	10,000.00	-	4,048.58		0	0	0	-
7	Njugu mawe (Bambara nuts)	10,000.00	-	4,048.58		0	0	0	-
8	Ngwara/Fiwi nuts	10,000.00	1,976,000.00	4,048.58	800,000	59.28	118.56	197.6	120,000.00
9	Dengu	10,000.00	1,111,500.00	4,048.58	450,000	33.345	66.69	111.15	67,500.00
<b>D</b>	<b>MIZIZI</b>								
1	Magimbi (Cocoyams)	10,000.00	60,000,000.00	4,048.58	24,291,497.98	1800	3600	6000	900.00
2	Mihogo	10,000.00	50,000,000.00	4,048.58	20,242,914.98	1500	3000	5000	750.00
3	Viazi vikuu (Yams)	10,000.00	100,000,000.00	4,048.58	40,485,829.96	3000	6000	10000	1,500.00
4	Viazi vitamu (Sweet potatoes)	10,000.00	3,458,000.00	4,048.58	1,400,000.00	103.74	207.48	345.8	51.87
5	Viazi mviringo (Irish potatoes)	10,000.00	4,199,000.00	4,048.58	1,700,000.00	125.97	251.94	419.9	62.99
<b>E</b>	<b>VEETABLES</b>								
1	Bilinganya	10,000.00	790,400.00	4,048.58	320,000	23.712	47.424	79.04	11.86
2	Kabichi	10,000.00	8,398,000.00	4,048.58	3,400,000	251.94	503.88	839.8	125.97
3	Karoti	10,000.00	6,669,000.00	4,048.58	2,700,000	200.07	400.14	666.9	100.04
4	Maboga	10,000.00	-	4,048.58		0	0	0	-
5	Matango	10,000.00	666,900.00	4,048.58	270,000	20.007	40.014	66.69	10.00
6	Mchicha	10,000.00	-	4,048.58				0	-
7	Nyanya	10,000.00	5,557,500.00	4,048.58	2,250,000	166.725	333.45	555.75	83.36
8	Pilipili hoho	10,000.00	889,200.00	4,048.58	360,000	26.676	53.352	88.92	13.34
9	Vitunguu maji	10,000.00	3,211,000.00	4,048.58	1,300,000	96.33	192.66	321.1	48.17
10	Vitunguu saum	10,000.00	10,374,000.00	4,048.58	4,200,000	311.22	622.44	1037.4	155.61
11	Calflower	10,000.00	8,398,000.00	4,048.58	3,400,000	251.94	503.88	839.8	125.97
12	Nyanya chungu	10,000.00	1,123,850.00	4,048.58	455,000	33.7155	67.431	112.385	16.86



13	Spinachi	10,000.00	2,167,425.00	4,048.58	877,500	65.02275	130.0455	216.7425	32.51
<b>F</b>	<b>MAUA</b>								
1	Maua ya nje (Out door)					2,400,000.00	4,800,000.00	8,000,000.00	1,200,000.00
<b>III</b>	<b>TABLE NO.3C SUMMARY - FOREST PERENNIAL CROPS</b>								
	<b>TYPE OF CROP</b>	<b>Per Stem</b>							
<b>S/N.</b>	<b>TYPE OF CROP</b>	<b>Seedling Crop (60%)</b>	<b>Mature crop (100%)</b>	<b>Mature trees (30%)</b>					
1	Shade trees	6,000.00	12,000.00	3,000.00					
2	Miti ya mbao Ngumu i.e Mninga	90,000.00	180,000.00	45,000.00					
3	Mvule	90,000.00	180,000.00	45,000.00					
4	Mkongo	90,000.00	180,000.00	45,000.00					
5	Mpingo	90,000.00	180,000.00	45,000.00					
6	Mloliondo	90,000.00	180,000.00	45,000.00					
7	Mringaringa	90,000.00	180,000.00	45,000.00					
8	Mruka	90,000.00	180,000.00	45,000.00					
9	bamboo	6,000.00	12,000.00	3,000.00					
10	Mkungu	9,000.00	18,000.00	4,500.00					
11	Mkaratusi	15,000.00	30,000.00	7,500.00					
12	Mwarobaini	10,500.00	21,000.00	5,250.00					
13	Mng'ong'o	7,500.00	15,000.00	3,750.00					
14	Mpira (Rubber)	13,500.00	27,000.00	6,750.00					
15	Mkrismass	6,000.00	12,000.00	3,000.00					
16	Mpilipili	1,500.00	3,000.00	750.00					
17	Lucina	6,000.00	12,000.00	3,000.00					
18	Ashock trees	6,000.00	12,000.00	3,000.00					

19	Misonobari	15,000.00	30,000.00	7,500.00					
20	Grvellia	45,000.00	90,000.00	22,500.00					
21	Mgundi	13,500.00	27,000.00	6,750.00					
22	Mtiki	21,000.00	42,000.00	10,500.00					
23	Mchongoma	180.00	360.00	90.00					
24	Mjohoro	6,000.00	12,000.00	3,000.00					
25	Mnyaa	90.00	180.00	45.00					
26	Mlonge	13,500.00	27,000.00	6,750.00					
27	Jakaranda	18,000.00	36,000.00	9,000.00					
28	Mfurufuru	13,500.00	27,000.00	6,750.00					
29	Mgude	9,000.00	18,000.00	4,500.00					
30	Myombo	18,000.00	36,000.00	9,000.00					
31	Mkuyu	10,500.00	21,000.00	5,250.00					
32	Msesewe	12,000.00	24,000.00	6,000.00					
33	Cederella/Mvujagenge	18,000.00	36,000.00	9,000.00					
34	Mlebanon	45,000.00	90,000.00	22,500.00					
35	Mbambakofi	12,000.00	24,000.00	6,000.00					

**CROP RATES IN LAKE ZONE ( KANDA YA ZIWA)**

<b>I</b>									
<b>TABLE NO.1D - PERENNIAL CROPS -SUMMARY OF VALUE RATES</b>									
<b>CROP VALUE IN T.SHS.</b>									
	<b>TYPE OF CROP</b>	<b>Per Hectare</b>		<b>Per Acre</b>	<b>Per Stem or Cluster</b>				
<b>S/N.</b>		<b>Plant Popula- tion per Hectare</b>	<b>Average Cared Matured Crop</b>	<b>Plant Popula- tion per Acre</b>	<b>Average Cared Matured Crop</b>	<b>Seedling Crop (30%)</b>	<b>Mature crop (60%)</b>	<b>Optimum producing crop (100%)</b>	<b>Aged Crop (15%)</b>
<b>A</b>	<b>CASH CROPS</b>								
1	Coconut (Minazi)	125.00	22,500,000.00	50.61	9,109,311.74	54,000.00	108,000.00	180,000.00	27,000.00
2	Cashewnuts (Mikorosho)	100.00	6,000,000.00	40.49	2,429,149.80	18,000.00	36,000.00	60,000.00	9,000.00
3	Oil palm (Michikichi)	150.00	15,000,000.00	60.73	6,072,874.49	30,000.00	60,000.00	100,000.00	15,000.00
4	Sugar cane (Miwa)	12,500.00	37,500,000.00	5,060.73	15,182,186.23	900.00	1,800.00	3,000.00	450.00
5	Cloves (Mikarafuu)	200.00	12,000,000.00	80.97	4,858,299.60	18,000.00	36,000.00	60,000.00	9,000.00
6	Msufi	200.00	10,000,000.00	80.97	4,048,583.00	15,000.00	30,000.00	50,000.00	7,500.00
7	Sisal	5,000.00	15,000,000.00	2,024.29	6,072,874.49	900.00	1,800.00	3000	450.00
8	Cocoa	1,000.00	3,000,000.00	404.86	1,214,574.90	900.00	1,800.00	3000	450.00
9	Coffee (Arabica)	2,000.00	60,000,000.00	809.72	24,291,497.98	9,000.00	18,000.00	30000	4,500.00
10	Coffee (Robusta)	2,000.00	50,000,000.00	809.72	20,242,914.98	7,500.00	15,000.00	25000	3,750.00
<b>B</b>	<b>FRUITS</b>								
1	Ovacado (Mparachichi)	100.00	6,000,000.00	40.49	2,429,149.80	18,000.00	36,000.00	60,000.00	9,000.00
2	Tangarine (Mchenza)	250.00	602,500.00	101.21	243,927.13	723.00	1,446.00	2,410.00	361.50
3	Oranges (Machungwa)	250.00	11,500,000.00	101.21	4,655,870.45	13,800.00	27,600.00	46,000.00	6,900.00
4	Lemon (Ndimu)	250.00	5,500,000.00	101.21	2,226,720.65	6,600.00	13,200.00	22,000.00	3,300.00
5	Mlimau (Lemon )	250.00	5,500,000.00	101.21	2,226,720.65	6,600.00	13,200.00	22,000.00	3,300.00
6	Mango (mwembe)	75.00	7,500,000.00	30.36	3,036,437.25	30,000.00	60,000.00	100,000.00	15,000.00

7	Mango(Mwembe) improved	150.00	32,250,000.00	60.73	13,056,680.16	64,500.00	129,000.00	215,000.00	32,250.00
8	Guava (Mpera)	150.00	3,000,000.00	60.73	1,214,574.90	6,000.00	12,000.00	20,000.00	3,000.00
9	Jackfruit (Mifenesi)	75.00	3,525,000.00	30.36	1,427,125.51	14,100.00	28,200.00	47,000.00	7,050.00
10	Bananas(Migomba 6)	750.00	24,000,000.00	303.64	9,716,599.19	9,600.00	19,200.00	32,000.00	4,800.00
11	Pinaples (Minanasi)	10,000.00	15,000,000.00	4,048.58	6,072,874.49	450.00	900.00	1,500.00	225.00
12	Pawpaw (Mipapai)	800.00	16,000,000.00	323.89	6,477,732.79	6,000.00	12,000.00	20,000.00	3,000.00
13	Mikweme (Oyster nuts)	150.00	2,700,000.00	60.73	1,093,117.41	5,400.00	10,800.00	18,000.00	2,700.00
14	Komamanga	250.00	3,000,000.00	101.21	1,214,574.90	3,600.00	7,200.00	12,000.00	1,800.00
15	Mistafeli (Custard apple)	350.00	8,400,000.00	141.70	3,400,809.72	7,200.00	14,400.00	24,000.00	3,600.00
16	mitende (Date palm)	125.00	4,000,000.00	50.61	1,619,433.20	9,600.00	19,200.00	32,000.00	4,800.00
17	passion fruits	11,111.00	111,110,000.00	4,498.38	44,983,805.67	3,000.00	6,000.00	10,000.00	1,500.00
<b>C</b>	<b>SPICES</b>								
1	Cardamon (Iliki)	800.00	8,000,000.00	323.89	3,238,866.40	1500	3,000.00	10,000.00	750.00
2	Cinamomum (Mdalasini)	1,500.00	15,000,000.00	607.29	6,072,874.49	1500	3,000.00	10,000.00	750.00
3	Black pepper (Pilipili Manga)	1,500.00	10,500,000.00	607.29	4,251,012.15	2400	4,800.00	7,000.00	1,200.00
4	Tangawizi (Ginger)	5,000.00	20,000,000.00	2,024.29	8,097,165.99	1500	3,000.00	4,000.00	750.00
5	Macademia nuts	100.00	4,500,000.00	40.49	1,821,862.35	13500	27,000.00	45,000.00	6,750.00
6	Flowers					1500	3,000.00	5,000.00	750.00
7	Arovela					1200	2,400.00	4,000.00	600.00
8	Rosela					1050	2,100.00	3,500.00	525.00

<b>II</b>									
<b>TABLE NO. 2D - SEASONAL CROPS-SUMMARY OF VALUE RATES</b>									
<b>MARKET VALUE IN T.SHS.</b>									
	<b>TYPE OF CROP</b>	<b>Per Hectare</b>		<b>Per Stem or Cluster</b>			<b>Per Stem or Cluster</b>		
<b>S/N.</b>		<b>Plant Popula- tion per Hectare</b>	<b>Average Cared Matured Crop</b>	<b>Plant Popula- tion per Acre</b>	<b>Average Cared Matured Crop</b>	<b>Seedling Crop (30%)</b>	<b>Mature crop (60%)</b>	<b>Optimum producing crop (100%)</b>	<b>Aged Crop (15%)</b>
<b>A</b>	<b>CASH CROPS</b>								
1	Tobacco	13,000.00	8,645,000.00	5,263.16	3,500,000	378	756	665	189.00
2	Cotton	40,000.00	9,880,000.00	16,194.33	4,000,000	255	510	247	127.50
<b>B</b>	<b>CEREALS</b>								
1	Maize ( Mahindi )	10,000.00	1,729,000.00	4049	700,000	51.87	103.74	172.9	25.94
2	Paddy (Mpunga)	10,000.00	3,952,000.00	4049	1,600,000	118.56	237.12	395.2	59.28
3	Sorghum (Mtama)	10,000.00	1,482,000.00	4049	600,000	44.46	88.92	148.2	22.23
4	Ulezi	10,000.00	1,729,000.00	4049	700,000	51.87	103.74	172.9	25.94
5	Uwele	10,000.00	1,729,000.00	4049	700,000	51.87	103.74	172.9	25.94
<b>C</b>	<b>BEANS</b>								
1	Choroko	10,000.00	2,470,000.00	4049	1,000,000	74.1	148.2	247	37.05
2	Beans (Maharage)	10,000.00	1,803,100.00	4049	730,000	54.093	108.186	180.31	27.05
3	Mbaazi	10,000.00	1,111,500.00	4049	450,000	33.345	66.69	111.15	16.67
4	Kunde	10,000.00	1,136,200.00	4049	460,000	34.086	68.172	113.62	17.04
5	Njegere	10,000.00	2,470,000.00	4049	1,000,000	74.1	148.2	247	37.05
6	Bambara nuts (Njugumawe)	10,000.00	3,952,000.00	4049	1,600,000	118.56	237.12	395.2	59.28
7	Fiwi nuts	10,000.00	3,952,000.00	4049	1,600,000	118.56	237.12	395.2	59.28
8	Dengu	10,000.00	1,482,000.00	4049	600,000	44.46	88.92	148.2	22.23
<b>D</b>	<b>MIZIZI</b>								

1	Cocoyams (Magimbi)	10,000.00	1,729,000.00	4,049	700,000	51.87	103.74	172.9	25.94
2	Cassava(Mihogo)	10,000.00	1,729,000.00	4,049	700,000	51.87	103.74	172.9	25.94
3	Sweet potatoes (Viazi vitamu)	10,000.00	1,235,000.00	4,049	500,000	37.05	74.1	123.5	18.53
4	Irish Potatoes (Viazi mviringo)	10,000.00	2,964,000.00	4,049	1,200,000	88.92	177.84	296.4	44.46
5	Viazi vikuu (yams)	10,000.00	901,550.00	4,049	365,000	27.0465	54.093	90.155	13.52
<b>E</b>	<b>VEGETABLES</b>								
1	Bamia	10,000.00	7,500,000.00	4,049	3,036,437.25	225	450	750	112.50
2	Bilinganya	10,000.00	10,000,000.00	4,049	4,048,583.00	300	600	1000	150.00
3	Kabichi	10,000.00	10,000,000.00	4,049	4,048,583.00	300	600	1000	150.00
4	Karoti	10,000.00	5,000,000.00	4,049	2,024,291.50	150	300	500	75.00
5	Koliflawa	10,000.00	10,000,000.00	4,049	4,048,583.00	300	600	1000	150.00
6	Maboga	10,000.00	12,000,000.00	4,049	4,858,299.60	360	720	1200	180.00
7	Matango	10,000.00	10,000,000.00	4,049	4,048,583.00	300	600	1000	150.00
8	Matikiti maji	10,000.00	30,000,000.00	4,049	12,145,748.99	900	1800	3000	450.00
9	Mchicha	10,000.00	720,000.00	4,049	291,497.98	21.6	43.2	72	10.80
10	Nyanya	10,000.00	10,000,000.00	4,049	4,048,583.00	300	600	1000	150.00
11	Pilipili hoho	10,000.00	20,000,000.00	4,049	8,097,165.99	600	1200	2000	300.00
12	Pilipili kali	10,000.00	4,000,000.00	4,049	1,619,433.20	120	240	400	60.00
13	Nyanya chungu	10,000.00	6,000,000.00	4,049	2,429,149.80	180	360	600	90.00
14	kisamvu	10,000.00	9,000,000.00	4,049	3,643,724.70	270	540	900	135.00
15	Saladi/Lecture/Chinese	10,000.00	12,350,000.00	4,049	5,000,000.00	370.5	741	1235	185.25
16	Vitungu maji/Onion	10,000.00	14,820,000.00	4,049	6,000,000.00	444.6	889.2	1482	222.30
17	Vitungu saumu/Garlic	10,000.00	24,700,000.00	4,049	10,000,000.00	741	1482	2470	370.50
18	Matembele	10,000.00	494,000.00	4,049	200,000.00	14.82	29.64	49.4	7.41
<b>F</b>	<b>OIL SEEDS</b>								

1	Sunflower (Alizeti)	10,000.00	1,803,100.00	4,049	730,000.00	54.093	108.186	180.31	27.05
2	Ground Nuts (Karanga)	10,000.00	1,235,000.00	4,049	500,000.00	37.05	74.1	123.5	18.53
3	Ufuta (simsim)	10,000.00	2,470,000.00	4,049	1,000,000.00	74.1	148.2	247	37.05
4	Castor Nyonyo	10,000.00	864,500.00	4,049	350,000.00	25.935	51.87	86.45	12.97

III **TABLE NO.3D SUMMARY - FOREST PERENNIAL CROPS**

TYPE OF CROP		Per Stem							
S/N.	TYPE OF CROP	Seedling Crop (30%)	Mature crop (60%)	Mature trees (100%)					
1	Shade trees	6,000.00	12,000.00	20,000.00					
2	Miti ya mbao Ngumu i.e Mninga	13,500.00	27,000.00	45,000.00					
3	Mfuru	15,000.00	30,000.00	50,000.00					
4	Mpira	9,600.00	19,200.00	32,000.00					
5	Mkungu	12,600.00	25,200.00	42,000.00					
6	Miboyo	13,500.00	27,000.00	45,000.00					
7	Mwarobaini	7,500.00	15,000.00	25,000.00					
8	Mng'ong'o	9,000.00	18,000.00	30,000.00					
9	Mpira(rubber)	9,600.00	19,200.00	32,000.00					
10	Mkrismasi	6,900.00	13,800.00	23,000.00					
11	Mpilipili (mti)	28,500.00	57,000.00	95,000.00					
12	Lucina trees	7,800.00	15,600.00	26,000.00					
13	Ashok trees	6,000.00	12,000.00	20,000.00					
14	Misonobari	21,000.00	42,000.00	70,000.00					
15	Gravelia	13,500.00	27,000.00	45,000.00					
16	Mikaratus	13,500.00	27,000.00	45,000.00					
17	Mgundi(Gum)	6,000.00	12,000.00	20,000.00					

18	Mitiki	21,000.00	42,000.00	70,000.00					
19	Topetope	6,000.00	12,000.00	20,000.00					
20	Michongoma	600.00	1,200.00	2,000.00					
21	Mjohoro	7,800.00	15,600.00	26,000.00					
22	Mnyaa	1,200.00	2,400.00	4,000.00					
23	Mtangalala	3,900.00	7,800.00	13,000.00					
24	Mkwaju	21,000.00	42,000.00	70,000.00					
25	Mlonge	9,000.00	18,000.00	30,000.00					
26	Mbuyu	12,000.00	24,000.00	40,000.00					
27	Sungwi	4,500.00	9,000.00	15,000.00					
28	Mkoma	4,500.00	9,000.00	15,000.00					
29	Mbula	13,500.00	27,000.00	45,000.00					
30	Mjani mapana	6,000.00	12,000.00	20,000.00					
31	Panga uzazi	6,000.00	12,000.00	20,000.00					
32	Albizi	4,500.00	9,000.00	15,000.00					
33	Mhale	6,000.00	12,000.00	20,000.00					
34	Mijune	6,000.00	12,000.00	20,000.00					
35	Muzo	1,500.00	3,000.00	5,000.00					
36	Mshasha	6,000.00	12,000.00	20,000.00					
37	Msomoro	4,500.00	9,000.00	15,000.00					
38	Mjujune	3,000.00	6,000.00	10,000.00					
39	Mfausiku (Mtangala)	4,500.00	9,000.00	15,000.00					
40	Mlumba	9,000.00	18,000.00	30,000.00					



**Appendix D: 2018 Crop Rates Approved by CV**

THE UNITED REPUBLIC OF TANZANIA  
MINISTRY OF LANDS, HOUSING AND HUMAN SETTLEMENTS  
DEVELOPMENT

Tel.: +255 2629633/09/13/14  
Fax :+255 262 963 316  
E-Mail: [km@ardhi.go.tz](mailto:km@ardhi.go.tz)  
Website: [www.ardhi.go.tz](http://www.ardhi.go.tz)



University of Dodoma Road,  
National Audit Office Building,  
6th Floor,  
P.O. BOX 2908,  
40477-DODOMA.

In reply please quote:  
Ref. No. BA.391/466/01/58

15<sup>th</sup> August, 2018

Managing Director,  
WhiteKnights,  
Real Estate Investment Analyst Co. Ltd,  
P.O. Box 35480,  
DAR ES SALAAM.

**REF: DERTAMINATION OF VALUES OF ECONOMIC TREES AND CROPS NOT  
APPEARING IN THE GOVERNMENT COMPENSATION SCHEDULE, 2012**

Reference is made to your letter Ref No. WHTS/CV/2707/001 dated 27<sup>th</sup> July, 2018 regarding the above captioned matter.

Crop rates of 2012 are virtually outdated, this year Chief Government Valuer's Office have carried research on crops rate values in 2018 which still in final process of approval whereby soon will be released to be used.

Kindly, therefore find attached crop rate schedules for Northern and Lake Zones which is correspondence to your request to Government Chief Valuer to endorse unlisted crops as per your suggestion. **Table "I"** is a list of trees which are found in crop schedule of 2012, therefore we advise you to use the list as it was researched by Government District Valuers in 2018.

**Table "II"** is a crop list which are found to be of economic value as per your field research and is not found in 2012 crop schedule. In this list we have made some changes in crop value submitted and advised to use the current list as it appears in **Table "II"**.

Thanks for your corporation

A handwritten signature in blue ink, appearing to read 'Evelyne B. Mugasha'.

Evelyne B. Mugasha  
**For: PERMANENT SECRETARY**

S/N.	English	Swahili	Matured Crop "A" (100%)	proposed by Whiteknight (Lake)	proposed by Whiteknight (Northern)
<b>TABLE "I"</b>					
<b>CROP RATES 2018</b>					
1	Plum	Mzambarau	40,000.00	25,000.00	25,000.00
2	Alovera	Shubiri	5,000.00	5,000.00	5,000.00
3	Jatropher	Mibono	50.00	25,000.00	25,000.00
4	Albisia	Mkenge	120,000.00	20,000.00	20,000.00
5	Cordia Africana	Mringaringa	120,000.00	45,000.00	45,000.00
6	Croton Macroytachyus (Black Plam)	Mfunufuru/Mfuru	27,000.00	90,000.00	90,000.00
7	Fever Tree	Mchongoma (Uzio)	3,000.00	360.00	360.00
8	Lucina Trees	Lucina	26,000.00	12,000.00	12,000.00
9	Magnolia Caffira	Mbambakofi	24,000.00	40,000.00	40,000.00
10	Pines	Misonobari	70,000.00	45,000.00	45,000.00
11	Quinine tree	Msesewe	24,000.00	40,000.00	40,000.00
12	Shade trees	Shade trees(panga uzazi)	20,000.00	20,000.00	20,000.00
13	Sycamue	Mkuyu	45,000.00	45,000.00	80,000.00
14		Mkoma	15,000.00	20,000.00	20,000.00
15		Mbula	45,000.00	20,000.00	20,000.00
16		Sungwi	15,000.00	20,000.00	20,000.00
17		Mtantalala	13,000.00	20,000.00	20,000.00
18		Majani Mapana	20,000.00	20,000.00	20,000.00
19		Muhare	20,000.00	20,000.00	20,000.00
20	Acacia Albida	Mgunga	20,000.00	20,000.00	20,000.00
21		Mijune	20,000.00	20,000.00	20,000.00
22		Muzo	5,000.00	20,000.00	20,000.00
23		Mshasha	20,000.00	20,000.00	20,000.00
24		Mjijune	10,000.00	20,000.00	20,000.00
25		Mrumba	30,000.00	20,000.00	20,000.00
26	Sisal	Katani	5,000.00	6,000.00	6,000.00
27	Baobab	Mbuyu	50,000.00	60,000.00	50,000.00
28	Tamarind	Mkwaju	50,000.00	60,000.00	30,000.00
29	Wild custard Apple	Topetope	15,000.00	19,000.00	15,000.00
30	Bamboo	Mianzi	25,000.00	30,000.00	30,000.00
31	Cederella	Mvujagenge	60,000.00	30,000.00	30,000.00
32	Fuel wood	Mruka	120,000.00	45,000.00	45,000.00
33	Jakaranda	Jakaranda	30,000.00	30,000.00	30,000.00
34	Magnolia	Mlebanon	50,000.00	45,000.00	45,000.00
35	Mahogany Tree	Mkongo	120,000.00	60,000.00	60,000.00
36	Millicia excelsa	Mvule	80,000.00	50,000.00	50,000.00
37	Moringa Oleifera	Mlonge	30,000.00	32,000.00	27,000.00
38	Olea carpensis	Mliiondo	120,000.00	45,000.00	45,000.00
39	Sterculia Appendiculate	Mgude	30,000.00	30,000.00	30,000.00
<b>TABLE "II"</b>					
<b>crop rates hazipo kwenye schedule ya 2018</b>					
1	mbanga			45,000.00	45,000.00
2	mharala			15,000.00	15,000.00
3	muhumula			30,000.00	30,000.00
4	miboyo			45,000.00	20,000.00
5	mihale			20,000.00	20,000.00
6	misambia			50,000.00	50,000.00
7	misule			20,000.00	20,000.00
8	mitundu			45,000.00	45,000.00
9	mizima			20,000.00	20,000.00
10	mkola			30,000.00	30,000.00
11	mkurunge			30,000.00	30,000.00
12	mnagale			60,000.00	60,000.00
13	mpogoro			30,000.00	30,000.00
14	mpondo			50,000.00	50,000.00
15	msana			45,000.00	45,000.00
16	mtalali			19,000.00	19,000.00
17	mugu			20,000.00	20,000.00

# 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 <sup>1</sup>
<b>Key Agencies:</b>		
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"> <li>Review and verification of the valuation rates, process and Valuation Reports (VRs), including the Compensation Schedules, through the Office of the CV;</li> <li>Regulation and oversight of the land acquisition process, including ensuring compensation is paid or resettlement undertaken as agreed in the approved Valuation Reports; and</li> <li>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.</li> </ul>
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)<sup>2</sup> within the ministry, provide guidance on corridor routing, 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 resides 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 which run through and / or are adjacent to the corridor.</p>
<b>Other Relevant National-level Government Agencies</b>		
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).
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.

<sup>1</sup> Project specific roles are set out under the Project land acquisition process.

<sup>2</sup> 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 <sup>1</sup>
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 meetings. They participate in sensitization meetings at the ward and village 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 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.
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.

Name of Government Body	Summary of Overall Responsibilities	Summary of Involvement in Land Acquisition and Resettlement <sup>1</sup>
Ministry of Works, Transportation and Communication.	<p>Oversees the development and maintenance of roads, bridges and government property. Coordinates the development of infrastructure, including marine, aviation, roads, and other construction projects.</p> <p>The Tanzania Ports Authority (TPA), Tanzania Railways Corporation (TRC) and the Tanzanian National Roads Agency (TANROADS) fall under this ministry.</p> <p>The TANROADS and Tanzanian Rural Roads Agency (TARURA) deal with all road infrastructure, construction and maintenance.</p> <p>The TRC is responsible for railway construction and maintenance.</p> <p>TTCL is responsible for telecommunication and cable networking.</p>	<p>TANROADS (and TARURA) must approve any disruption to the road network or infrastructure, including the planning and building of any new roads.</p> <p>Provides permission to crossroads / railway lines.</p> <p>Provides permission for activities at the port.</p> <p>Advise through relevant agencies (e.g. TANROADS and TRC, etc.) on reserves associated with existing roads and railways lines, telecommunication lines or cable lines (buried cables) adjacent to / crossing the corridor.</p>
Ministry of Natural Resources and Tourism.	<p>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.</p> <p>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.</p>	<p>Advises on matters related to protected areas, including on unpermitted land uses within reserve areas.</p> <p>TFS will have a role in land acquisition matters in forestry areas including in reserved lands.</p> <p>Similar to TFS, TAWA will have a role in land acquisition through specifically reserved lands.</p>
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.	Provide coordination and guidance to land acquisition processes ensuring it is undertaken in accordance with Tanzanian law.	<p>The relevant role of the RC's Office includes:</p> <ul style="list-style-type: none"> <li>• In collaboration with District Councils and Village Assemblies, playing an oversight role in valuation surveys;</li> <li>• 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;</li> <li>• Assisting with the resolution of grievances wherever practicable; and</li> <li>• Providing direct assistance to adjoining regions impacted by the Project if no regional land officers and or / valuers are available.</li> </ul>
District Authorities.		<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"> <li>• Notifying the affected Ward Development Councils (WDCs), Village Development Councils (VDCs), Mtaa Development Councils of the proposed Project;</li> <li>• Advising the VDC on the management of village land;</li> <li>• Participating in the land and asset valuation process in an oversight role and verification of the Compensation Schedule produced by the valuers;</li> <li>• Supporting on issues regarding land acquisition and transfer and preparation of title documents for relocation sites (if required); and</li> <li>• Where District Land and Housing Tribunals exist, attending to all grievances of a civil nature regarding land whose pecuniary value is less than TShs. 50 million.</li> </ul> <p>Wards, which are part of District Councils, play a key role as follows:</p> <ul style="list-style-type: none"> <li>• 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;</li> <li>• Advisory services to VDCs; and</li> <li>• Attending to all grievances of a civil nature regarding land whose pecuniary value is less than TShs. 3 million are responsible for coordinating development activities and planning in the ward and linking these with the district level plans.</li> </ul>



**Table C-3: Key Village Level Stakeholders**

Name of Village Body	Summary of Overall Responsibilities	Summary of Involvement in Land Acquisition and Resettlement
Village and Mtaa Assemblies / Development Councils.	<p>Key authority in village matters.</p> <p>The Village Assembly is composed of all adult members residing in the village. A village may be made up of hamlets.</p>	<p>VDC: Relevant Village / Mtaa Assemblies / Councils, who are the supreme authority in village matters, can encourage villagers 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"> <li>• Participate in Project sensitization and disclosure meetings;</li> <li>• Mobilize affected households and provide feedback / notification to PAPs on Project-related issues;</li> <li>• Participate in identification of affected households and witness the property valuation exercise;</li> <li>• Participate and witness the land survey and mapping of the Project area;</li> <li>• Support PAPs during the preparation and submission of their compensation claims;</li> <li>• Witness the compensation payment process; and</li> <li>• Support in the land acquisition process and during the registration of any relocation sites (if required).</li> </ul> <p>Village / Mtaa Assembly:</p> <ul style="list-style-type: none"> <li>• Participate in Project sensitization and disclosure meetings;</li> <li>• Approve relevant aspects of the land acquisition program (e.g. with regard to the transfer of village land); and</li> <li>• Resolve property ownership disputes within households prior to land acquisition or escalate them to the VDC for guidance.</li> </ul> <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 at 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
<b>Singida District</b>			
1	Ilongero, Mrama, Mtinko, Mudida, Msisi, Kinyeto, Maghojoa, Merya and Kinyagigi	Action Aid	Land, education, good governance and women and children's rights
2	Mtinko, Msisi, Ughandi and Kijota	World Vision	Education, health, water, agriculture, children's rights, environmental conservation, entrepreneurship capacity building
3	Mtinko, Kijota, Kinyagigi, Mughamo, Itaja, Ilongero, Msisi, Kinyeto, Makuro, Mrama and Ntonge	SEMA	Public health, water, nutrition, para legal education, capacity building and entrepreneurship
4	Ilongero, Ikhanoda, Mrama, Makuro, Ntonge and Kijota	RECODA	Horticulture and livestock keeping
5	Ngimu, Mighunga and Msisi	SICD	Capacity building on budgeting enquiries on education
6	Ilongero, Mughunga, Mgori, Ngimu, Mrama, Mkuro, Ntonge, Kijota, Mtinko, Itaja, Mughamo, Msisi and Kinyeto.	Save the Children	Maternal health nutrition, right to children, horticulture, livestock keeping and entrepreneurship
7	Mughunga, Mgori, Ngimu, Itaja and Msange	CCT	Sexual abuse and entrepreneurship
8	Ilongero, Mughunga, Mgori and Mkuro	Bio Sustain	Agriculture especially on cotton
9	TBC	Faida Mali	Sensitization on sunflower agriculture
10	Mughamo	CARITAS	Agriculture and health
11	All 21 wards	MEDO	Education
12	Mitinko and Ilongero	Vision Fund	Loans to peasants and entrepreneurs
13	All 21 wards	WIRWANA	Education, health, agriculture and legal advice
14	All 21 wards	HELVETAS	Youth empowerment
15	All 21 wards	HAPA	Improved pit latrines, school classrooms and reading assessments
<b>Mkalama District</b>			
16	Tumuli Ward	Trees for the Future	Reforestation
17	Tumuli Ward	HELVETAS / Kuwaki	Horticulture

No.	District / Ward / Village	Group name	Activities
	<b>Iramba District</b>		
18	Kyengege Ward	CIMYTT	Improved seeds (maize) to CBOs
19	Mkulu Ward	Faida Mali	Increasing sunflower crop yield by improving farming methods
20	Ulemo Ward	WaterAid	Construction of improved pit latrines at schools
21	Ulemo Ward	Dugu Organization	Donation of school uniforms, books, soap; construction of a library at secondary school; provision of saplings for firewood

**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 <sup>th</sup> March 2018	ME MLHHS TPDC TPA.	<ul style="list-style-type: none"> <li>• LARWG organization;</li> <li>• Updated land acquisition process;</li> <li>• PAs survey progress;</li> <li>• Compensation rates for PAs;</li> <li>• PAs RAP planning;</li> <li>• Reserved land including roads; and</li> <li>• Mining interfaces.</li> </ul>
2	10 <sup>th</sup> April 2018	ME TPDC MLHHS (Office of CV).	<ul style="list-style-type: none"> <li>• Land acquisition changes and encumbrances;</li> <li>• Fieldwork including verification, in-kind compensation and livelihood restoration investigations;</li> <li>• Confirmation of land rates (by CV);</li> <li>• Gazettement schedule / timetable;</li> <li>• Provision of Marine Storage Terminal (MST) land acquisition data;</li> <li>• Access to mining cadastral data; and</li> <li>• Road issues.</li> </ul>
3	24 <sup>th</sup> April 2018	ME MLHHS TANESCO TANROADS TARURA TPDC TRC.	<ul style="list-style-type: none"> <li>• Road and rail reserve encumbrances;</li> <li>• Power line and water utilities infrastructure;</li> <li>• Land rates;</li> <li>• Provision of MST land acquisition data;</li> <li>• Access to mining cadastral data;</li> <li>• Engagement at regional level;</li> <li>• Fieldwork including verification, in-kind compensation and grievances;</li> <li>• Data format required for gazette submission;</li> <li>• Gazettement process;</li> <li>• VRs; and</li> <li>• RAP implementation.</li> </ul>

LARWG Meeting Number	LARWG Meeting Date	Ministries in Attendance	Relevant Issues Discussed
4	8 <sup>th</sup> May 2018	ME MLHHS TANESCO TARURA TPA TPDC.	<ul style="list-style-type: none"> <li>• Powerline utility;</li> <li>• Land and crop rates;</li> <li>• Provision of MST land acquisition data;</li> <li>• Access to mining cadastral data;</li> <li>• Road issues;</li> <li>• RPF;</li> <li>• VR templates;</li> <li>• Compensation schedules;</li> <li>• Gazettement information;</li> <li>• Payment of compensation;</li> <li>• Grievances; and</li> <li>• RAP implementation.</li> </ul>
5	22 <sup>th</sup> May 2018	MWTC TANROADS TPA TRC MLHHS.	<ul style="list-style-type: none"> <li>• Confirm width of road reserves, classification approach and compensation approach to roads that require upgrades;</li> <li>• Gazettement procedure and transfer;</li> <li>• Provision of MST land acquisition data;</li> <li>• Access to mining cadastral data;</li> <li>• RAP field work update;</li> <li>• Progress in VRs, gazettelement and compensation payments;</li> <li>• Above the line and below the line terminology;</li> <li>• Unlisted trees of economic value;</li> <li>• RAP implementation Expression of Interest; and</li> <li>• Replacement housing.</li> </ul>
6	12 <sup>th</sup> June 2018	ME MLHHS TANESCO MWTC.	<ul style="list-style-type: none"> <li>• Provision of land MST acquisition data;</li> <li>• Access to mining cadastral data;</li> <li>• Submission of RPF and disclosure;</li> <li>• RAP survey;</li> <li>• Housing strategy;</li> <li>• Valuation methodology and reports;</li> <li>• Government verification process;</li> <li>• Gazettement plan; and</li> <li>• RAP implementation Expression of Interest.</li> </ul>

LARWG Meeting Number	LARWG Meeting Date	Ministries in Attendance	Relevant Issues Discussed
7	10 <sup>th</sup> July 2018	TARURA TPDC MLHHS.	<ul style="list-style-type: none"> <li>• Provision of MST land acquisition data;</li> <li>• Access to mining cadastral data;</li> <li>• Gazettement letter;</li> <li>• Compensation letter;</li> <li>• Unlisted trees;</li> <li>• RAP survey;</li> <li>• Housing strategy;</li> <li>• VRs;</li> <li>• Government verification process; and</li> <li>• RAP implementation Invitation to Tender.</li> </ul>
8	7 <sup>th</sup> August 2018	MLHHS MWTC TARURA TPDC.	<ul style="list-style-type: none"> <li>• Provision of MST land acquisition data;</li> <li>• Access to mining cadastral data;</li> <li>• Gazettement progress;</li> <li>• Unlisted trees;</li> <li>• RAP survey;</li> <li>• Housing strategy;</li> <li>• VRs; and</li> <li>• Government verification process.</li> </ul>
9	4 September 2018	ME MLHHS TPDC.	<ul style="list-style-type: none"> <li>• RPF comments received from MLHHS;</li> <li>• Land acquisition process including declaration and gazettelement for public purpose;</li> <li>• Survey requirements and timing for land transfer and issuing of consolidated Right of Occupancy (ROO);</li> <li>• Provision of MST land acquisition data;</li> <li>• Access to mining cadastral data;</li> <li>• Regional engagement; and</li> <li>• RAP progress.</li> </ul>
10	18 <sup>th</sup> September 2018	ME MLHHS TPDC	<ul style="list-style-type: none"> <li>• Provision of MST land acquisition data;</li> <li>• Access to mining cadastral data;</li> <li>• RAP progress on the VRs, cadastral surveys, disclosure and verification progress and RAP development; and</li> <li>• Regional engagement.</li> </ul>

LARWG Meeting Number	LARWG Meeting Date	Ministries in Attendance	Relevant Issues Discussed
11	10 <sup>th</sup> December 2018	ME MLHHSD TPDC FB Attorneys.	The following topics discussed have bearing on the Singida RAP development and process: <ul style="list-style-type: none"> <li>• Arrangements for the transfer of land;</li> <li>• Compensation Agreement and Payment of Compensation; and</li> <li>• Requirement of Issuing of ROO.</li> </ul>
12	18 <sup>th</sup> January 2019	ME TPDC MLHHSD TPA FB Attorneys.	The following topics discussed have bearing on the Singida RAP development and process: <ul style="list-style-type: none"> <li>• Interest rate – disturbance allowance;</li> <li>• Gazettement and Notice of Intention to Acquire;</li> <li>• Conversion of Village Land and Reserved Land to General Land;</li> <li>• Clarity on the Notice to Yield Possession; and</li> <li>• Reserve Land data.</li> </ul>
13	1 <sup>st</sup> April 2019	ME TPDC MLHHSD FB Attorneys.	The following topics discussed have bearing on the Singida RAP development and process: <ul style="list-style-type: none"> <li>• Confirmation of Public Purpose;</li> <li>• Gazettement and Notice of Intention to Acquire;</li> <li>• Notice to Yield Possession;</li> <li>• Reserved Land matters;</li> <li>• Land / boundary matters;</li> <li>• Mining Commission meeting;</li> <li>• Regional and district engagements; and</li> <li>• Pipeline and resettlement planning process.</li> </ul>
14	17 <sup>th</sup> July 2019	ME TPDC MLHHSD	<ul style="list-style-type: none"> <li>• PA Planning Progress;</li> <li>• Land access and project schedule;</li> <li>• Pipeline and Above Ground Installations (AGIs) progress;</li> <li>• Regional and district engagement;</li> <li>• Reserved Land issues;</li> <li>• Outstanding boundary disputes; and</li> <li>• Meeting with Mining Commission.</li> </ul>



**Table C-7: Summary of Meetings with National & Regional GoT Stakeholders**

Meeting Date	Government Ministry / Department / Region	Purpose / Objectives	Issues / Topics Discussed
<b>As part of the PA RAP</b>			
17 <sup>th</sup> 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"> <li>Replacement land where affected people can be moved to should be identified;</li> <li>The VRs should be submitted to the CV;</li> <li>Vulnerable groups should be identified and receive special consideration;</li> <li>A workshop between the Project, RAP planning consultant and the CV should be held prior to the commencement of field surveys;</li> <li>The pipeline corridor should be confirmed; and</li> <li>Communication with the government should follow the proper protocols.</li> </ul>
31 <sup>th</sup> August 2017	Attendees included the RAS; DCs; DEDs; and RAS members.	<ul style="list-style-type: none"> <li>Introduction to the Project and the scope of work of the RAP planning consultant;</li> <li>International Financial Institutions requirements pertaining to resettlement and compensation;</li> <li>Upcoming surveys of PAs;</li> <li>Typical roles of regional and district authorities during valuation and resettlement. Working relationship and interaction between national, regional and district authorities;</li> <li>Constraints relevant to planning and implementation of valuation and resettlement;</li> <li>Knowledge of other resettlement projects where international standards were applied; and</li> <li>Views on differences between international and Tanzanian resettlement standards.</li> </ul>	<ul style="list-style-type: none"> <li>Request for provision of meeting dates well in advance;</li> <li>Hadzabe people reside in the region; and</li> <li>Valuation methodology.</li> </ul>
<b>As part of the Pipeline RAP</b>			
02 <sup>nd</sup> August 2018	Attendees included the RC; RAS; DCs; and DEDs.	<p>Provide information on the RAP progress and timeframes on the:</p> <ul style="list-style-type: none"> <li>Surveys;</li> <li>Compensation approach;</li> <li>Valuation;</li> <li>Land acquisition / compensation process; and</li> </ul>	<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"> <li>Ensure that local people are aware of / benefit from employment opportunities, and the process that is required to be followed to apply for</li> </ul>

Meeting Date	Government Ministry / Department / Region	Purpose / Objectives	Issues / Topics Discussed
		<ul style="list-style-type: none"> <li>• Planned future engagements in the region on the resettlement process.</li> </ul> <p>The objectives were that regions would be able to:</p> <ul style="list-style-type: none"> <li>• Convey the progress of the Project, the key milestones already achieved and yet to be achieved to other stakeholders;</li> <li>• Verbally and actively provide continued support for the Project;</li> <li>• Determine and plan for the resources required to meet requirements of the Project from the region; and</li> <li>• Communicate key messages to stakeholders.</li> </ul>	<p>positions.</p> <ul style="list-style-type: none"> <li>• Procurement and supply contracts need to be simplified for local companies. Local companies and service providers must be informed about EACOP requirements in order for them to prepare, e.g. catering.</li> <li>• <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.</li> <li>• <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.</li> <li>• <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.</li> <li>• <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.</li> <li>• <u>Compensation amounts and process</u>: <ul style="list-style-type: none"> <li>- The ways in which valuations based on the 2012 crop and tree rates would be handled when the new rates were available were queried;</li> <li>- Differences between national and international compensation standards and reasons for adhering to both were clarified;</li> <li>- Concerns that international standards seemed to slow down the process were addressed;</li> <li>- Clarification about the process followed to compensate for affected roads and rail was sought;</li> <li>- Compensation methods for cultural sites, graves, historical sites and churches / mosques were discussed;</li> <li>- Valuations to account for the difference in age of crops and trees should be reflected in the PAP compensation amounts;</li> </ul> </li> </ul>

Meeting Date	Government Ministry / Department / Region	Purpose / Objectives	Issues / Topics Discussed
			<ul style="list-style-type: none"> <li>- The basis for compensation amounts for structures;</li> <li>- The comment was made that compensation should be paid before the start of the local elections in 2019;</li> <li>- 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;</li> <li>- PAP refusals would be treated with sensitivity and sufficient engagement to ensure that PAPs understood the process and compensation procedure;</li> <li>- Compensation should be paid prior to the commencement of construction in adherence with national laws to avoid conflict with PAPs;</li> <li>- Comment was made that compensation should not be given in the form of cash but rather in-kind or using a cheque account;</li> <li>- 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;</li> <li>- The approval process of the VRs was confirmed; and</li> <li>• 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.</li> </ul>
21 <sup>th</sup> September 2018	Attendees included the RAS and RAS members.	<ul style="list-style-type: none"> <li>• Discuss the PA compensation schedule disclosure process; and</li> <li>• Pipeline validation process.</li> </ul>	<ul style="list-style-type: none"> <li>• Process to be followed to sign-off of the schedules.</li> </ul>

Meeting Date	Government Ministry / Department / Region	Purpose / Objectives	Issues / Topics Discussed
13 <sup>th</sup> December 2018	Attendees included the RC and the RAS.	<ul style="list-style-type: none"> <li>• Project overview and status;</li> <li>• Stakeholder Engagement;</li> <li>• ESIA;</li> <li>• Land acquisition process;</li> <li>• Local content;</li> <li>• Community development</li> <li>• Questions that needed clarification from the presentations;</li> <li>• Issues and concerns from the invited regional members, and</li> <li>• Advice and guidance from the RC and various other regional heads of departments and committee members.</li> </ul>	<ul style="list-style-type: none"> <li>• Continuation of farming activities;</li> <li>• Frequency of progress updates to the district;</li> <li>• Security of EACOP facilities;</li> <li>• In-kind compensation recommended;</li> <li>• Skills development to commence in preparation for construction;</li> <li>• Sills requirements to be communicated;</li> <li>• Pipeline crosses an irrigation dam; and</li> <li>• Region to be provided of a copy of the ESIA.</li> </ul>
5 <sup>th</sup> March 2019	Attendees included the ME; MLHSD; TFS; Tanzania National Parks Authority (TANAPA); TAWA; MNRT; and NEMC.	<ul style="list-style-type: none"> <li>• Confirmation of protected / reserve areas traversed by pipeline corridor;</li> <li>• 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"> <li>- Gazettement Notices;</li> <li>- Status of Talamai Open Area;</li> <li>- Restricted activities under the Wildlife Conservation Act 2009 (WCA 2009) and permits for licensed activities and/or customary Right of Occupancy's (ROO) issued;</li> <li>- Valuation and compensation process within these reserves / areas;</li> <li>- Compensation entitlements of the Management Authority / Reserve Land Authorities;</li> <li>- Confirmation of boundaries and management arrangements of community / village forests;</li> </ul> </li> <li>• Conversion of land within protected / reserve areas to General Land – process and timing; and</li> </ul>	<ul style="list-style-type: none"> <li>• Boundary information of protected / reserve areas;</li> <li>• Valuation and compensation process for PAPs within protected / reserve areas;</li> <li>• Compensation of land within protected / reserve areas;</li> <li>• Type, status and ownership of forest reserves;</li> <li>• Biharamulo Forest Reserve in the process of becoming a National Park;</li> <li>• Biharamulo Forest reserve boundaries;</li> <li>• Swagaswaga Game Reserve;</li> <li>• Villages in close proximity to the Swagaswaga Game Reserve;</li> <li>• Talamai Open Area does not have protected / reserve area status;</li> <li>• Talamai Open Area management;</li> <li>• Kitwai and Handeni Game Controlled Areas boundaries;</li> <li>• Minziro, Ruiga River, Biharamulo, Uyovu, Ngogwa Busangi. Mkwani Hills and Mwakalundi Forest Reserves;</li> <li>• Agreement that was previously made to convert Reserved Land within the pipeline corridor to General Land;</li> <li>• International Finance Corporation (IFC) standards;</li> <li>• Spiritual and cultural sites; and</li> <li>• List of villages crossed by the pipeline route within the boundaries of protected / reserve areas.</li> </ul>

Meeting Date	Government Ministry / Department / Region	Purpose / Objectives	Issues / Topics Discussed
		<ul style="list-style-type: none"> <li>Management of pipeline corridor through the protected / reserved areas.</li> </ul>	
14 <sup>th</sup> March 2019	Attendees included the Acting RC; DAS; DED; and RAS members.	<ul style="list-style-type: none"> <li>Project Overview and status;</li> <li>Stakeholder engagement;</li> <li>The ESIA;</li> <li>Land acquisition and resettlement planning; and</li> <li>Land acquisition and resettlement implementation.</li> </ul>	<ul style="list-style-type: none"> <li>Grievances process;</li> <li>Provision of land data to the regional office;</li> <li>Road maintenance during construction;</li> <li>Provision of road crossings to TANROADS and TARURA;</li> <li>Lifetime of the Project and decommissioning;</li> <li>Mitigating informal land use around camps;</li> <li>Dealing with land conflicts;</li> <li>Benefits to the villages;</li> <li>Feasibility of having a security contract with villages; and</li> <li>When compensation will be paid.</li> </ul>
11 <sup>th</sup> July 2019	Attendees included the RC; RAS; RAS members; TANESCO; TARURA; TRA; DC and DAS of each of the three (3) districts.	<ul style="list-style-type: none"> <li>Project Overview and status;</li> <li>Stakeholder engagement;</li> <li>The ESIA;</li> <li>Land acquisition and resettlement planning; and</li> <li>Land acquisition and resettlement implementation.</li> </ul>	<ul style="list-style-type: none"> <li>Safety and security of communities and EACOP assets;</li> <li>Land dispute resolution; and</li> <li>Pipeline depth at road crossings.</li> </ul>
		<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>
3 <sup>rd</sup> October 2019	Attendees included the RC; RAS; DCs; DEDs; DAS'.	<ul style="list-style-type: none"> <li>Project update;</li> <li>RAP Planning and implementation update;</li> <li>ESIA status;</li> <li>Grievance management; and</li> <li>Stakeholder engagement.</li> </ul>	<ul style="list-style-type: none"> <li>Provision of RAP related documents to the districts; and</li> <li>Land conflict at Nkhala Village.</li> </ul>
Ongoing discussions from September 2017 to date	Attendees included the MLHSD and the CV.	<ul style="list-style-type: none"> <li>Discuss and finalize land and crop rates, and rates for economic trees not listed in the 2012 schedule and</li> <li>Discuss VRs and Compensation Schedules.</li> </ul>	<ul style="list-style-type: none"> <li>Discussions revolve around the valuation process, compensation rates, application of the new Valuation &amp; Valuers (General) Regulations 2018 (released after the valuation surveys and during the preparation of the VRs) and the valuation of unlisted trees<sup>3</sup>.</li> </ul>

<sup>3</sup> 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 <sup>th</sup> May-20 <sup>th</sup> June 2018.	District sensitization meetings.	Generally attended by the: DC and DED.	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 <sup>th</sup> May-22 <sup>nd</sup> 2018	Land delineation, asset inventory and socio-economic household survey.	PAPs / Project Affected Households (PAHs).	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; 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.
10 <sup>th</sup> December 2018-current	District validation meetings.	Generally attended by the: DC;RAS; DED, Valuers; and Surveyors.	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 Completion of pipeline and the need for mitigation measures.	See Table C-10.

Meeting Date	Engagement	Stakeholders	Purpose	Issues / Topics Discussed
	WDC Validation meetings.	WDC members.	Create awareness of the crude oil pipeline project in general and validation process in particular; and Role of the WDC in the validation process.	See Table C-10.
	VDC, Village Assembly and individual validation meetings.	VDC members and PAPs / PAHs.	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.
21 <sup>st</sup> November 2018-9 <sup>th</sup> March 2019	Interviews and / or focus groups by SELI teams.	PAPs / PAHs and District / Ward / Village / Mtaa 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): Current livelihoods and implication for livelihood restoration requirements and implementation, with consideration of gender differences:</p> <ul style="list-style-type: none"> <li>• Use of land in the district, challenges and process to gain access to land;</li> <li>• Type of agricultural crops cultivated;</li> <li>• Agricultural seasons for these crops, including land preparation, planting and harvesting time;</li> <li>• Land and cash income required for household use;</li> <li>• Agricultural projects and programs active in the area, challenges experienced and responses to these;</li> <li>• Recommended livelihoods restoration approaches;</li> <li>• Mining practices;</li> <li>• Vulnerability: <ul style="list-style-type: none"> <li>○ Definition of vulnerability in the local context;</li> <li>○ Assistance rendered to the vulnerable;</li> </ul> </li> <li>• Natural resource use and access to natural resources;</li> <li>• Replacement land (building on studies already done):</li> <li>• Availability of replacement land;</li> <li>• Community development activities;</li> <li>• Community dynamics:</li> <li>• Settlement patterns;</li> <li>• Ethnic groups;</li> <li>• Role and status of women;</li> <li>• Conflict resolution;</li> <li>• Religious and spiritual beliefs;</li> <li>• Celebrations and rituals; and</li> </ul>	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"> <li>Burial practices;</li> <li>Access to, and challenges with social services (education, health, financial, commercial) and facilities (water, sanitation, electricity); and</li> <li>Type and role of NGOs, community based organizations (CBOs) and community associations.</li> </ul>	
22 <sup>nd</sup> July 22 <sup>nd</sup> September 2019	Disclosure of Compensation Schedule meetings.	Introductory meeting with the DC, sometimes combined with the DED or alternatively a separate meeting with the DED. WDC and VDC meetings with PAPs separate or combined.	<ul style="list-style-type: none"> <li>Communicate the intention to disclose the compensation schedules.</li> </ul>	See Table C-10.
22 <sup>nd</sup> July 2019-24 <sup>th</sup> September 2019	Compensation Schedule disclosure to PAPs: Personal, private meetings and focus group meetings.	PAPs.	<ul style="list-style-type: none"> <li>Disclosure of the compensation schedules;</li> <li>Sign acknowledgment that schedule was seen and discussed;</li> <li>Identify and solve issues;</li> <li>Submit grievances; and</li> <li>Discuss general concerns and questions in a group.</li> </ul>	See Table C-10.
27 <sup>th</sup> April to 29 <sup>th</sup> May	In-kind compensation approach to those losing dwellings.	Attendees included the DAS; DCs.	<ul style="list-style-type: none"> <li>Impacted dwellings;</li> <li>In-kind compensation approach; and</li> <li>Housing market research.</li> </ul>	Included in Table C-10 as part of disclosure column.



**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)
1	10 <sup>th</sup> November 2018	Singida	Singida District	Msisi	Ntondo	VDC.	Mixed	9
2	11 <sup>th</sup> November 2018	Singida	Singida District	Msisi	Ntondo	CBOs.	Mixed	23
3	11 <sup>th</sup> November 2018	Singida	Singida District	Msisi	Ntondo	PAPs.	Mixed	29
4	11 <sup>th</sup> November 2019	Singida	Singida District			DEO (District Economic Officer).	Male	1
5	11 <sup>th</sup> November 2019	Singida	Singida District			District Land and Natural Resources Officer (DLNRO).	Female	1
6	21 <sup>st</sup> November 2018	Singida	Singida District			DC, DAS.	Male	2
7	22 <sup>nd</sup> November 2018	Singida	Singida District			DED.	Male	1
8	22 <sup>nd</sup> November 2018	Singida	Singida District			Acting District Land and Natural Resources Officer (Ag. DLNRO).	Female	1
9	22 <sup>nd</sup> November 2018	Singida	Singida District			Senior Community Development Officer (SCDO).	Female	1
10	22 <sup>nd</sup> November 2018	Singida	Singida District			District Environmental Management Officer (DEMO).	Male	1
11	23 <sup>rd</sup> November 2018	Singida	Singida District	Ughandi	Ughandi	WDC.	Mixed	14
12	23 <sup>rd</sup> November 2019	Singida	Singida District	Msisi	Msisi	WDC.	Mixed	9
13	26 <sup>th</sup> November 2018	Singida	Singida District			Productive Social Safety Net Coordinator and TASAF.	Mix	2
14	26 <sup>th</sup> November 2018	Singida	Singida District			District Livestock and Fisheries Officer (DLFO)	Male	1
15	26 <sup>th</sup> November 2018	Singida	Singida District			District Agriculture, Irrigation and Cooperation Officer (DAICO).	Male	1

No.	Date	Region	District	Ward	Village	Position / Representatives	Gender (Female / Male / Mixed)	Number of Participants (excluding SELI)
16	26 <sup>th</sup> November 2018	Singida	Singida District			Data Officer.	Male	1
17	26 <sup>th</sup> November 2018	Singida	Singida District			District Medical Officer (DMO).	Male	1
18	27 <sup>th</sup> November 2018	Singida	Singida District	Msisi	Msisi	VDC.	Mixed	14
19	28 <sup>th</sup> November 2019	Singida	Singida District	Msisi	Msisi	PAPs.	Males	10
20	28 <sup>th</sup> November 2019	Singida	Singida District	Msisi	Msisi	PAPs.	Females	8
21	29 <sup>th</sup> November 2019	Singida	Singida District	Msisi	Msisi	Elders.	Mixed	7
22	30 <sup>th</sup> November 2019	Singida	Singida District	Msisi	Msisi	CBOs.	Mixed	13
23	1 <sup>st</sup> December 2018	Singida	Singida District	Msisi	Nkwae	PAPs.	Mixed	27
24	3 <sup>rd</sup> December 2018	Singida	Singida District	Msisi	Nkwae	VDC.	Mixed	16
25	4 <sup>th</sup> December 2018	Singida	Singida District	Msisi	Nkwae	PAPs.	Mixed	14
26	4 <sup>th</sup> December 2018	Singida	Singida District	Msisi	Nkwae	Dispensary staff.	Mixed	4
27	4 <sup>th</sup> December 2018	Singida	Singida District	Ughandi	Misinko	PAPs.	Mixed	19
28	5 <sup>th</sup> December 2018	Singida	Singida District	Msisi	Nkwae	Elders.	Mixed	18
29	6 <sup>th</sup> December 2018	Singida	Singida District	Msisi	Nkwae	CBOs.	Mixed	14
30	6 <sup>th</sup> December 2018	Singida	Singida District	Msisi	Nkwae	CBOs.	Mixed	18
31	11 <sup>th</sup> December 2018	Singida	Singida District	Ughandi	Misinko	CBOs.	Mixed	12
41	14 <sup>th</sup> December 2018	Singida	Singida District	Ilongerero	Ilongerero	WDC.	Mixed	13
42	14 <sup>th</sup> December 2018	Singida	Singida District	Ntonge	Ntonge	WDC.	Mixed	9
43	14 <sup>th</sup> December 2018	Singida	Singida District	Ntonge	Igauri	VDC.	Mixed	16
44	14 <sup>th</sup> December 2018	Singida	Singida District	Ntonge	Igauri	Medical staff.	Mixed	2
45	14 <sup>th</sup> December 2018	Singida	Singida District	Ntonge	Igauri	Primary school staff.	Mixed	2
46	14 <sup>th</sup> December 2018	Singida	Singida District	Ntonge	Igauri	CBOs.	Mixed	25
47	15 <sup>th</sup> December 2018	Singida	Singida District	Ntonge	Igauri	PAP.	Mixed	23
48	17 <sup>th</sup> December 2018	Singida	Singida District	Ntonge	Ifombou	VDC.	Mixed	16
49	17 <sup>th</sup> December 2018	Singida	Singida District	Ntonge	Ifombou	PAPs.	Mixed	49

No.	Date	Region	District	Ward	Village	Position / Representatives	Gender (Female / Male / Mixed)	Number of Participants (excluding SELI)
50	18 <sup>th</sup> January 2019	Singida	Singida District	Mrama	Mrama	WDC.	Mixed	13
51	19 <sup>th</sup> December 2018	Singida	Singida District	Ntonge	Ifombou	CBOs.	Mixed	14
52	21 <sup>st</sup> January 2019	Singida	Singida District	Ilongero	Ilongero	PAP.	Mixed	34
53	22 <sup>nd</sup> January 2019	Singida	Singida District	Ilongero	Ilongero	VDC.	Mixed	9
54	22 <sup>nd</sup> January 2019	Singida	Singida District	Ilongero	Ilongero	CBOs.	Mixed	18
55	23 <sup>rd</sup> January 2019	Singida	Singida District	Ilongero	Madamigha	VDC.	Mixed	7
56	23 <sup>rd</sup> January 2019	Singida	Singida District	Ilongero	Madamigha	CBOs.	Mixed	22
57	24 <sup>th</sup> January 2019	Singida	Singida District	Ilongero	Madamigha	PAPs.	Mixed	20
58	25 <sup>th</sup> January 2019	Singida	Singida District	Mrama	Mrama	VDC.	Mixed	11
59	25 <sup>th</sup> January 2019	Singida	Singida District	Mrama	Mrama	PAPs.	Mixed	13
60	26 <sup>th</sup> January 2019	Singida	Singida District	Mrama	Mrama	CBO.	Mixed	23
61	28 <sup>th</sup> January 2019	Singida	Singida District	Kinyagigi	Kinyagigi	WDC.	Mixed	7
62	28 <sup>th</sup> January 2019	Singida	Singida District	Merya	Merya	WDC.	Mixed	11
63	29 <sup>th</sup> January 2019	Singida	Singida District	Ngimu	Ngimu	WDC.	Mixed	15
64	29 <sup>th</sup> January 2019	Singida	Singida District	Itaja	Itaja	WDC.	Mixed	14
65	30 <sup>th</sup> January 2019	Singida	Singida District	Kinyagigi	Kinyagigi	VDC.	Mixed	13
66	30 <sup>th</sup> January 2019	Singida DC	Singida District	Kinyagigi	Kinyagigi	PAPs.	Mixed	56
67	31 <sup>st</sup> January 2019	Singida	Singida District	Itaja	Kinyamwenda	VDC.	Mixed	17
68	31 <sup>st</sup> January 2019	Singida	Singida District	Itaja	Kinyamwenda	PAPs.	Mixed	18
69	1 <sup>st</sup> February 2019	Singida	Singida District	Merya	Kinyamwambo	VDC.	Mixed	18
70	1 <sup>st</sup> February 2019	Singida	Singida District	Merya	Kinyamwambo	PAPs.	Mixed	19
71	2 <sup>nd</sup> February 2019	Singida	Singida District	Kinyagigi	Mitula	VDC.	Mixed	9
72	2 <sup>nd</sup> February 2019	Singida	Singida District	Kinyagigi	Mitula	PAPs.	Mixed	9
73	2 <sup>nd</sup> February 2019	Singida	Singida District	Kinyagigi	Mitula	CBOs.	Mixed	11
74	4 <sup>th</sup> February 2019	Singida	Singida District	Ngimu	Mwighanji	VDC.	Mixed	14
75	4 <sup>th</sup> February 2019	Singida	Singida District	Ngimu	Mwighanji	PAPs.	Mixed	11

No.	Date	Region	District	Ward	Village	Position / Representatives	Gender (Female / Male / Mixed)	Number of Participants (excluding SELI)
76	5 <sup>th</sup> February 2019	Singida	Singida District	Ngimu	Ngimu	VDC.	Mixed	16
77	5 <sup>th</sup> February 2019	Singida	Singida District	Ngimu	Ngimu	PAPs.	Mixed	30
78	6 <sup>th</sup> February 2019	Singida	Singida District	Ngimu	Pohama	VDC.	Male	13
79	6 <sup>th</sup> February 2019	Singida	Singida District	Ngimu	Pohama	PAPs.	Mix	20
80	7 <sup>th</sup> February 2019	Singida	Singida District	Itaja	Kinyamwenda	CBOs.	Mixed	18
81	7 <sup>th</sup> February 2019	Singida	Singida District	Merya	Kinyamwambo	CBOs.	Mixed	16
82	8 <sup>th</sup> February 2019	Singida	Singida District	Kinyagigi	Kinyagigi	CBOs.	Mixed	20
83	12 <sup>th</sup> February 2019	Singida	Singida District	Mrama	Makhandi	VDC.	Mixed	10
84	12 <sup>th</sup> February 2019	Singida	Singida District	Mrama	Makhandi	PAPs.	Mixed	7
85	13 <sup>th</sup> February 2019	Singida	Mkalama			DEMO.	Male	1
86	13 <sup>th</sup> February 2019	Singida	Mkalama			DCDO.	Male	1
87	13 <sup>th</sup> February 2019	Singida	Mkalama			District Health Secretary (DHS).	Male	1
88	13 <sup>th</sup> February 2019	Singida	Mkalama			DEO, District Statistics Officer (DSOs).	Mixed	2
89	13 <sup>th</sup> February 2019	Singida	Mkalama			District Planning Officer (DPLO).	Female	1
90	14 <sup>th</sup> February 2019	Singida	Singida District	Mrama	Idisimba	PAPs.	Mixed	12
91	14 <sup>th</sup> February 2019	Singida	Singida District	Mrama	Idisimba	VDC.	Mixed	8
92	15 <sup>th</sup> February 2019	Singida	Mkalama	Tumuli	Milade	VDC.	Mixed	18
93	15 <sup>th</sup> February 2019	Singida	Mkalama	Tumuli	Milade	PAP.	Mixed	18
94	16 <sup>th</sup> February 2019	Singida	Mkalama	Tumuli	Tumuli	PAP.	Mixed	17
95	16 <sup>th</sup> February 2019	Singida	Mkalama	Tumuli	Tumuli	VDC.	Mixed	17
96	18 <sup>th</sup> February 2019	Singida	Iramba			DED.	Male	1
97	18 <sup>th</sup> February 2019	Singida	Iramba			DAS.	Male	1
98	18 <sup>th</sup> February 2019	Singida	Iramba			SCDO.	Male	1

No.	Date	Region	District	Ward	Village	Position / Representatives	Gender (Female / Male / Mixed)	Number of Participants (excluding SELI)
99	18 <sup>th</sup> February 2019	Singida	Iramba			Planning office (Statistician and Economists).	Mixed	3
100	18 <sup>th</sup> February 2019	Singida	Iramba			District Land Officer (DLO).	Male	1
101	18 <sup>th</sup> February 2019	Singida	Iramba			District Agricultural officers (DAOs).	Male	1
102	19 <sup>th</sup> February 2019	Singida	Iramba	Mkulu	Mukulu	WDC.	Mixed	5
103	19 <sup>th</sup> February 2019	Singida	Iramba	Mkulu	Mukulu	VDC.	Mixed	11
104	19 <sup>th</sup> February 2019	Singida	Iramba	Mkulu	Mukulu	PAPs.	Mixed	10
105	19 <sup>th</sup> February 2019	Singida	Iramba	Mkulu	Simbalungwala	VDC.	Mixed	11
106	19 <sup>th</sup> February 2019	Singida	Iramba	Mkulu	Simbalungwala	PAPs.	Mixed	19
107	19 <sup>th</sup> February 2019	Singida	Iramba	Mkulu	Simbalungwala	CBOs.	Mixed	16
108	20 <sup>th</sup> February 2019	Singida	Mkalama	Tumuli	Tumuli	WDC.	Mixed	15
109	20 <sup>th</sup> February 2019	Singida	Mkalama	Tumuli	Tumuli	CBOs.	Mixed	8
110	20 <sup>th</sup> February 2019	Singida	Mkalama	Tumuli	Tumuli	Primary and secondary school staff.	Mixed	2
111	20 <sup>th</sup> February 2019	Singida	Mkalama	Tumuli	Milade	CBO.	Mixed	28
112	20 <sup>th</sup> February 2019	Singida	Iramba	Mkulu	Mukulu	CBOs.	Mixed	14
113	20 <sup>th</sup> February 2019	Singida	Iramba	Mkulu	Mukulu	Secondary school staff.	Male	1
114	20 <sup>th</sup> February 2019	Singida	Iramba	Mkulu	Mukulu	Primary school staff.	Male	1
115	20 <sup>th</sup> February 2019	Singida	Iramba	Mkulu	Mukulu	Medical staff.	Female	1
116	20 <sup>th</sup> February 2019	Singida	Iramba	Mkulu	Simbalungwala	Primary school staff.	Male	1
117	21 <sup>st</sup> February 2019	Singida	Iramba	Maluga	Maluga	WDC.	Mixed	9
118	21 <sup>st</sup> February 2019	Singida	Iramba	Maluga	Ng'ang'uli	VDC.	Mixed	10
119	21 <sup>st</sup> February 2019	Singida	Iramba	Maluga	Ng'ang'uli	PAPs.	Mixed	19
120	21 <sup>st</sup> February 2019	Singida	Iramba	Maluga	Ng'ang'uli	CBOs.	Mixed	20
121	22 <sup>nd</sup> February 2019	Singida	Iramba	Kyengege	Kyengege	WDC.	Mixed	8
122	22 <sup>nd</sup> February 2019	Singida	Iramba	Kyengege	Makunda	VDC.	Mixed	17

No.	Date	Region	District	Ward	Village	Position / Representatives	Gender (Female / Male / Mixed)	Number of Participants (excluding SELI)
123	22 <sup>nd</sup> February 2019	Singida	Iramba	Kyengege	Makunda	PAPs.	Mixed	22
124	22 <sup>nd</sup> February 2019	Singida	Iramba	Kyengege	Makunda	CBOs.	Mixed	7
125	22 <sup>nd</sup> February 2019	Singida	Iramba	Kyengege	Makunda	Secondary school staff.	Male	1
126	25 <sup>th</sup> February 2019	Singida	Iramba	Shelui	Nkyala	VDC.	Mixed	23
127	25 <sup>th</sup> February 2019	Singida	Iramba	Shelui	Nkyala	PAPs.	Mixed	20
128	25 <sup>th</sup> February 2019	Singida	Iramba	Shelui	Nkyala	CBOs.	Mixed	11
129	26 <sup>th</sup> February 2019	Singida	Iramba	Ulemo	Ulemo	WDC.	Mixed	13
130	26 <sup>th</sup> February 2019	Singida	Iramba	Ulemo	Misigiri	Medical staff.	Male	3
131	26 <sup>th</sup> February 2019	Singida	Iramba	Ulemo	Misigiri	Mill staff.	Female	1
132	26 <sup>th</sup> February 2019	Singida	Iramba	Ulemo	Misigiri	Secondary school staff.	Female	1
133	26 <sup>th</sup> February 2019	Singida	Iramba	Ulemo	Misigiri	Primary school staff.	Male	2
134	26 <sup>th</sup> February 2019	Singida	Iramba	Shelui	Shelui	WDC.	Mixed	15
135	27 <sup>th</sup> February 2019	Singida	Iramba	Ulemo	Misigiri	VDC.	Mixed	15
136	27 <sup>th</sup> February 2019	Singida	Iramba	Ulemo	Misigiri	PAPs.	Mixed	16
137	27 <sup>th</sup> February 2019	Singida	Iramba	Ulemo	Misigiri	CBOs.	Mixed	13
138	28 <sup>th</sup> February 2019	Singida	Iramba	Mgongo	Mgongo	WDC.	Mixed	11
139	28 <sup>th</sup> February 2019	Singida	Iramba	Mtoa	Mtoa	WDC.	Mixed	9
140	1 <sup>st</sup> March 2019	Singida	Iramba	Mgongo	Mseko	VDC.	Mixed	7
141	1 <sup>st</sup> March 2019	Singida	Iramba	Mgongo	Mseko	PAPs.	Mixed	15
142	1 <sup>st</sup> March 2019	Singida	Iramba	Mgongo	Mseko	PAP.	Male	1
143	2 <sup>nd</sup> March 2019	Singida	Iramba	Mgongo	Kizonzo	VDC.	Mixed	9
144	2 <sup>nd</sup> March 2019	Singida	Iramba	Mgongo	Kizonzo	PAPs.	Mixed	8
145	4 <sup>th</sup> March 2019	Singida	Iramba	Mtoa	Tyeme	PAPs.	Mixed	14
146	4 <sup>th</sup> March 2019	Singida	Iramba	Mtoa	Tyeme	VDC.	Mixed	11
147	4 <sup>th</sup> March 2019	Singida	Iramba	Mtoa	Tyeme	Primary school staff.	Male	1
148	4 <sup>th</sup> March 2019	Singida	Iramba	Mtoa	Tyeme	Medical staff.	Male	1

No.	Date	Region	District	Ward	Village	Position / Representatives	Gender (Female / Male / Mixed)	Number of Participants (excluding SELI)
149	4 <sup>th</sup> March 2019	Singida	Iramba	Mtoa	Tyeme	Secondary school staff.	Male	1
150	4 <sup>th</sup> March 2019	Singida	Iramba	Mtoa	Tyeme	Primary school staff.	Female	1
	4 <sup>th</sup> March 2019	Singida	Iramba	Mtoa	Tyeme	PAPs.	Male	2
	5 <sup>th</sup> March 2019	Singida	Iramba	Mtoa	Kinkungu	PAPs.	Mixed	15
	5 <sup>th</sup> March 2019	Singida	Iramba	Mtoa	Kinkungu	CBOs.	Mixed	9
	6 <sup>th</sup> March 2019	Singida	Iramba	Mtoa	Masagi	PAPs.	Mixed	13
	6 <sup>th</sup> March 2019	Singida	Iramba	Mtoa	Masagi	CBOs.	Mixed	6
	8 <sup>th</sup> March 2019	Singida	Singida DC			Ag DED, District Environmental Management Officer (DEMO), (DAICO).	Male	3
	8 <sup>th</sup> March 2019	Singida	Singida District			Ag RAS, Ag ADS (Town & Rural Planner), Regional Natural Resource Officer, Local Government Officer.	Mixed	4
	8 <sup>th</sup> March 2019	Singida	Singida District			DAS.	Male	1
	9 <sup>th</sup> March 2019	Singida	Singida District			RC, Personal Assistant to the RC (PA-RC).	Mixed	2

**Table C-10: Summary of Issues Raised at District, Ward, Village and PAP Meetings<sup>4</sup>**

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
<b>Land (access and/or acquisition), housing and livelihoods.</b>					
Compensation of a water tank.			X		
Process to be followed when a PAP dies.		X	X	X	
Compensation and ownership process if more than one wife owns affected land.		X			
Depth the pipeline will be buried.				X	
Time period between cut-off and payment of compensation.		X			
Time period between cut-off and notice to evacuate.			X	X	
When land should be vacated.		X			
Request for assistance to Songela Association members to own their land.		X			
Laws to be used for compensation and for agreements.		X			
Method of valuation.				X	
Compensation rates to be used.		X		X	
Differences in compensation rates.		X			
All land in the corridor, irrespective of size, will be valued and compensated.		X			
Valuation of land without crops.		X			
Details of crops / land and rates will be provided.		X			
Compensation amount for mineral reserves.		X			
Compensation of planted seeds.		X			
Harvesting will be allowed before construction when possible.		X			
Compensation of seasonal crops.		X		X	

<sup>4</sup> 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
Valuation of land with consideration of its fertility.		X			
Approach to land acquisition if there is conflict over the same piece of land.		X	X	X	X
Compensation rates that will be applied.				X	
Dissatisfaction with rates.					X
The size for land to be orphaned and the compensation associated with orphan land.		X			
Explanation of orphan land.		X		X	
Who qualifies for a replacement house.				X	
When will replacement house be built.				X	
Party responsible for providing replacement land.				X	
Party responsible for providing replacement house.		X			
Party responsible for demolition of structures.				X	
Difference between compensated house and old house.				X	
Location of replacement house.		X			
Do not want to lose / sell land / rather lease land from PAP.				X	
Conditions to be eligible for a replacement house.				X	
The method of payment to people without identity cards / the necessary legal documents / a title deed.		X	X		
Appointment of a personal lawyer to assess the agreement.				X	
The method of payment.		X	X	X	
When payment will happen.		X	X	X	
People do not have bank accounts to receive the payment.				X	
Opening a bank account for a small amount.				X	
Challenges to open a bank account.				X	
May representatives be identified to attend surveys e.g. when the PAP is sick.		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
When payment for camp areas will happen.		X			
Approach to compensation where the pipeline passes through public land.				X	
Approach to compensation where the pipeline passes through an institution.		X			
Compensation to those without a title deed.		X			
Compensation allocation if land is sold by PAP before compensation payment.			X		
Use of land for grazing during operation.		X	X	X	
Use of land during operation.		X			
Compensation of grazing land.		X			
Crossing of the corridor will be possible after construction and during construction pathways will be made available, also for pastoralists.		X	X	X	
Compensation of cattle tracks.				X	
Village was not compensated by previous contractor for destruction of forest land.				X	
Treatment of compensation of village land / clan land.		X	X	X	
Treatment of compensation of school / hospital land.				X	
What happens if replacement land is not available close by.		X		X	
If a PAP does not have a spouse, he / she should come alone for survey.		X			
If PAP has more than one spouse, who is to accompany the PAP during the survey.		X			
Process followed if living in one area and has land in another.			X		
Dealing with encumbrances.		X			
When must farming activities stop.				X	
Confirmation that cultivation may continue.	X		X	X	X
Will crops planted after cut-off be compensated.			X	X	
Consideration of vulnerable people.		X		X	
Conditions for in-kind compensation for land as opposed to cash compensation.		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
Compensation is low compare to the actual cost.		X			
Compensation of fence only.		X			
Compensation of trees.		X		X	
Compensation of indigenous trees.		X	X		
Compensation of indigenous trees on abandoned land.		X			
<b>Cultural heritage</b>					
Compensation of trees used for ritual purposes.		X		X	
Process to be followed if owners of graves are not known.			X		
Procedures for moving graves.		X			
Method of valuation of graves.		X			
<b>Employment and supply chain.</b>					
Transport costs of PAP.				X	
Allowances to the villages representatives for attending meetings for the Project.			X	X	
Compensation for village representatives assisting with coordinating fieldwork.	X				
Qualifications required for casual employment of members of affected villages.			X		
Opportunity for employment of people with no education.		X			
Opportunity for employment of youth.		X			
Employment opportunities for local people in general.				X	
Employment opportunities.		X			
Environmental effects during construction and operation.			X		
<b>Other project related issues.</b>					
Security of the villages during implementation.		X			
Type of oil and access to oil.	X	X		X	
Size of the pipeline.		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
Size of the pump station.		X			
Date of commencement of the Project / construction.		X	X	X	
Route of pipeline.		X	X		
Implications of a buffer zone outside of the corridor.		X	X	X	
Other impacts apart from loss of land.		X			
Location of camp.		X			
Use of corridor for recreational activities.		X			
Type of oil that will be transported.		X			
<b>Engagement and Social conduct and security.</b>					
Role of village leaders during survey.		X			
Grievance procedure.	X		X	X	
Display of rates on a notice board regarded as unsafe.		X		X	
<b>Social Investment Projects.</b>					
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 ward / village level.	X	X	X	X	
Benefits to young people.		X			

# **Appendix D**

## **Replacement Housing and Ancillary Structures Designs**

### House Type A – 25m<sup>2</sup>

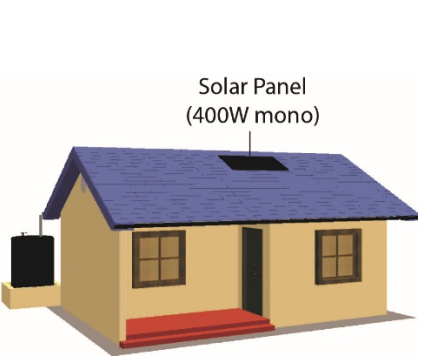

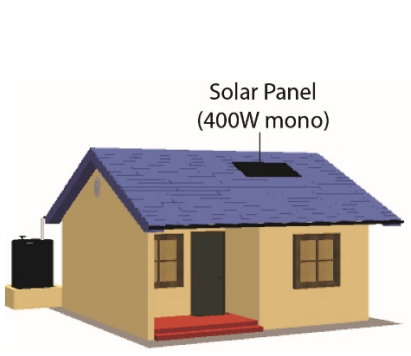

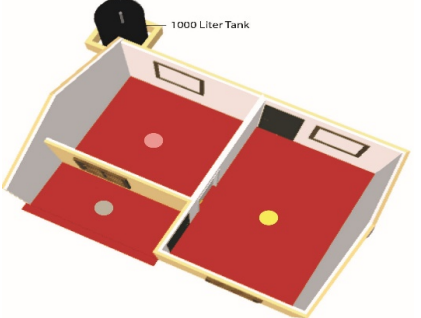
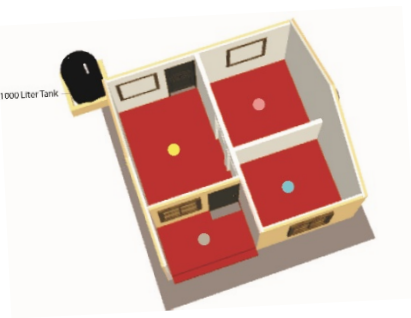
**Description:** Type A is the smallest of the house types at 25 m<sup>2</sup>. These houses are well lit with natural light through four (4) windows which allows for good cross ventilation, Type A1, A2 and A3 have two (2) external doors and a small covered veranda. Type A1 has two (2) rooms with Type A2 and A3 have three (3) rooms.

**Eligibility:** Replaces all units less than or equal to 25 m<sup>2</sup> 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 m<sup>2</sup> (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 – 25m<sup>2</sup> (2 Rooms)

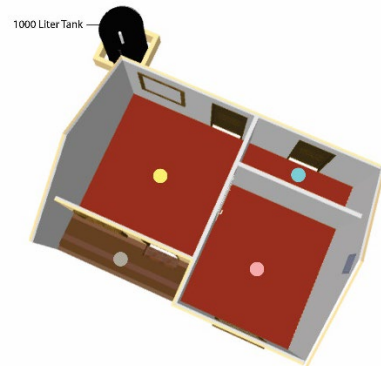
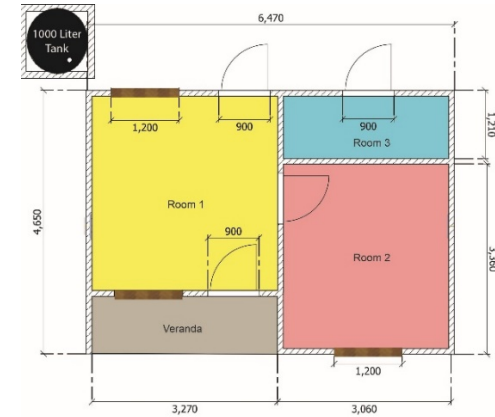
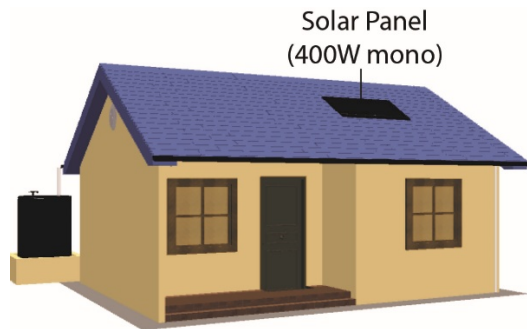
#### A2 - 25m<sup>2</sup> (3 Rooms)

																	
	<p style="text-align: center;"><b>Areas</b></p> <table border="0"> <tr> <td>Room 1</td> <td>14.33m<sup>2</sup></td> </tr> <tr> <td>Room 2</td> <td>10.64m<sup>2</sup></td> </tr> <tr> <td>Veranda</td> <td>3.55m<sup>2</sup></td> </tr> </table>	Room 1	14.33m <sup>2</sup>	Room 2	10.64m <sup>2</sup>	Veranda	3.55m <sup>2</sup>		<p style="text-align: center;"><b>Areas</b></p> <table border="0"> <tr> <td>Room 1</td> <td>9.2m<sup>2</sup></td> </tr> <tr> <td>Room 2</td> <td>8.0m<sup>2</sup></td> </tr> <tr> <td>Room 3</td> <td>8.0m<sup>2</sup></td> </tr> <tr> <td>Veranda</td> <td>3.6m<sup>2</sup></td> </tr> </table>	Room 1	9.2m <sup>2</sup>	Room 2	8.0m <sup>2</sup>	Room 3	8.0m <sup>2</sup>	Veranda	3.6m <sup>2</sup>
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Room 3	8.0m <sup>2</sup>																
Veranda	3.6m <sup>2</sup>																

**House Type A – 25m<sup>2</sup> (CONT)**

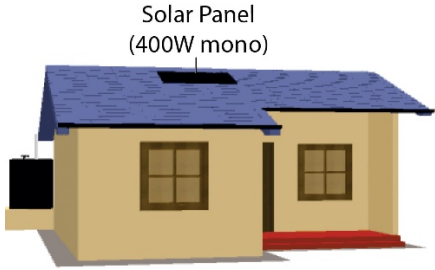

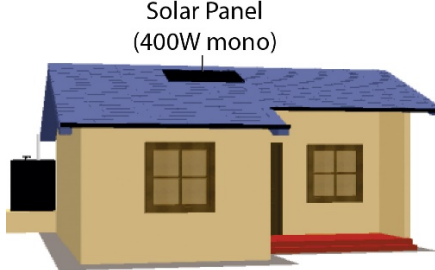
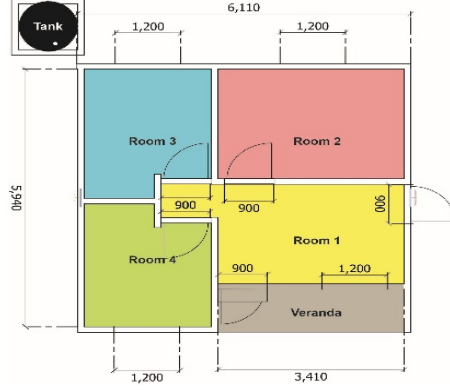
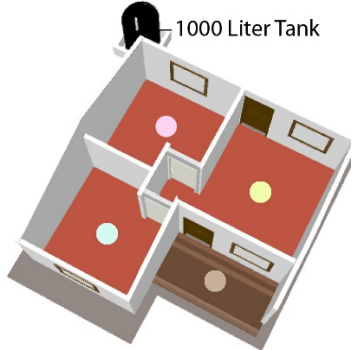
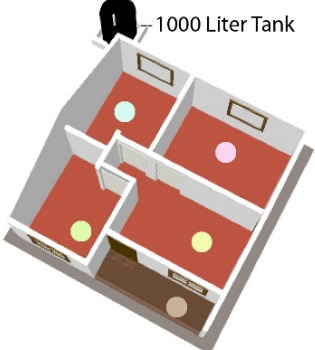
**A3 – 25m<sup>2</sup> (3 Rooms)**

**Description:** Type A3 has two (2) rooms designed for human habitation and a third smaller room (4 m<sup>2</sup>), 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 m<sup>2</sup> structure will enable protection for livestock whilst also providing clear separation from sleeping areas within the structure.



**Areas**

Room 1	11.00m <sup>2</sup>
Room 2	10.00m <sup>2</sup>
Room 3	4.0 m <sup>2</sup>
Veranda	3.20m <sup>2</sup>

<b>House Type B – 33m<sup>2</sup></b>																					
<p><b>Description:</b> Type B is 33 m<sup>2</sup> 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.</p>																					
<p><b>Eligibility:</b> Replaces all residential dwellings greater than 25 m<sup>2</sup> but less than or equal to 33 m<sup>2</sup>.</p>																					
<p><b>Alternative:</b> 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.</p>																					
<b>B1 – 33m<sup>2</sup> (3 Rooms)</b>		<b>B2 - 33m<sup>2</sup> (4 Rooms)</b>																			
 <p>Solar Panel (400W mono)</p>		 <p>Solar Panel (400W mono)</p>																			
 <p>1000 Liter Tank</p>	<p><b>Areas</b></p> <table border="0"> <tr> <td>Room 1</td> <td>13.00m<sup>2</sup></td> </tr> <tr> <td>Room 2</td> <td>10.16m<sup>2</sup></td> </tr> <tr> <td>Room 3</td> <td>10.16m<sup>2</sup></td> </tr> <tr> <td>Veranda</td> <td>3.15m<sup>2</sup></td> </tr> </table>	Room 1	13.00m <sup>2</sup>	Room 2	10.16m <sup>2</sup>	Room 3	10.16m <sup>2</sup>	Veranda	3.15m <sup>2</sup>	 <p>1000 Liter Tank</p>	<p><b>Areas</b></p> <table border="0"> <tr> <td>Room 1</td> <td>9.18m<sup>2</sup></td> </tr> <tr> <td>Room 2</td> <td>7.9m<sup>2</sup></td> </tr> <tr> <td>Room 3</td> <td>7.9m<sup>2</sup></td> </tr> <tr> <td>Room 4</td> <td>8.3m<sup>2</sup></td> </tr> <tr> <td>Veranda</td> <td>3.6m<sup>2</sup></td> </tr> </table>	Room 1	9.18m <sup>2</sup>	Room 2	7.9m <sup>2</sup>	Room 3	7.9m <sup>2</sup>	Room 4	8.3m <sup>2</sup>	Veranda	3.6m <sup>2</sup>
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Room 4	8.3m <sup>2</sup>																				
Veranda	3.6m <sup>2</sup>																				



### House Type C – 39m<sup>2</sup>

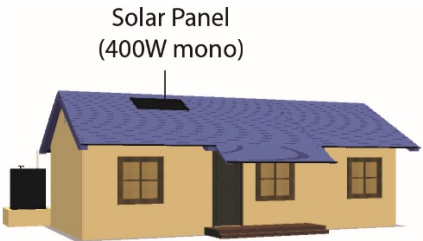
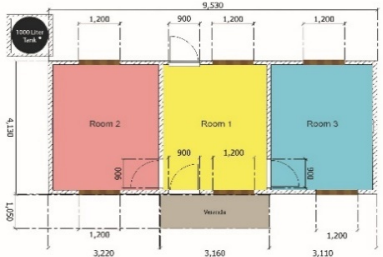
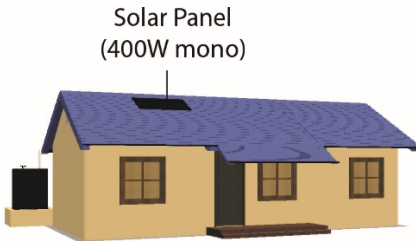

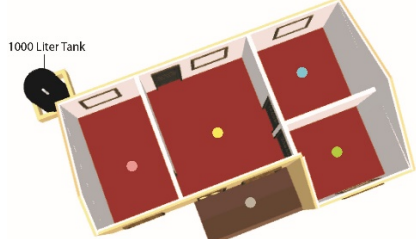
**Description:** House Type C is 39 m<sup>2</sup> and is well lit with natural light through six (6) windows, which also allows for good cross ventilation and two (2) external doors. Type C1 has three (3) rooms and C2 has four (4) rooms as shown below.

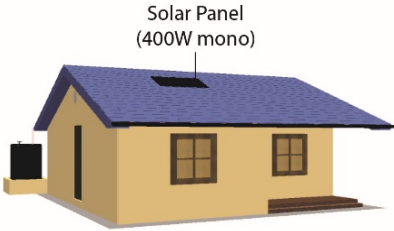

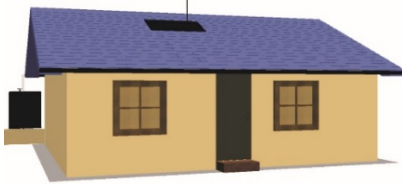
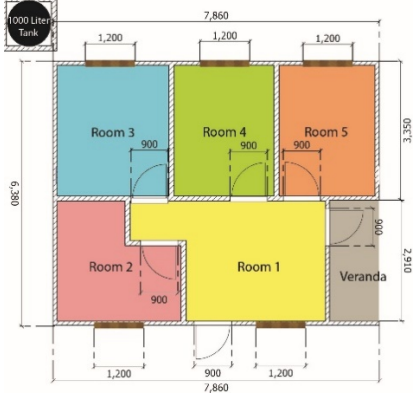
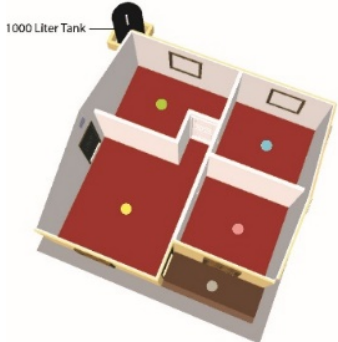
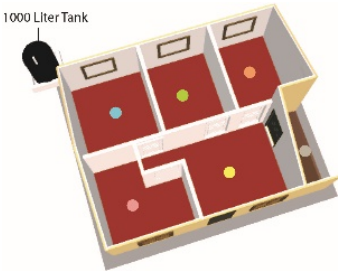
**Eligibility:** Replaces all residential dwellings greater than 33.1 m<sup>2</sup> but less than or equal to 39 m<sup>2</sup>.

**Alternative:** There is a choice between the three (3) room Type C1 and the four (4) room Type C2 configuration.

#### C1 – 39m<sup>2</sup> (3 Rooms)

#### C2 - 39m<sup>2</sup> (4 Rooms)

 <p>Solar Panel (400W mono)</p>		 <p>Solar Panel (400W mono)</p>																			
 <p>1000 Liter Tank</p>	<p><b>Areas</b></p> <table border="0"> <tr> <td>Room 1</td> <td>12.96m<sup>2</sup></td> </tr> <tr> <td>Room 2</td> <td>13.00m<sup>2</sup></td> </tr> <tr> <td>Room 3</td> <td>13.00m<sup>2</sup></td> </tr> <tr> <td>Veranda</td> <td>3.00m<sup>2</sup></td> </tr> </table>	Room 1	12.96m <sup>2</sup>	Room 2	13.00m <sup>2</sup>	Room 3	13.00m <sup>2</sup>	Veranda	3.00m <sup>2</sup>	 <p>1000 Liter Tank</p>	<p><b>Areas</b></p> <table border="0"> <tr> <td>Room 1</td> <td>12.18m<sup>2</sup></td> </tr> <tr> <td>Room 2</td> <td>10.00m<sup>2</sup></td> </tr> <tr> <td>Room 3</td> <td>8.40m<sup>2</sup></td> </tr> <tr> <td>Room 4</td> <td>8.40m<sup>2</sup></td> </tr> <tr> <td>Veranda</td> <td>4.60m<sup>2</sup></td> </tr> </table>	Room 1	12.18m <sup>2</sup>	Room 2	10.00m <sup>2</sup>	Room 3	8.40m <sup>2</sup>	Room 4	8.40m <sup>2</sup>	Veranda	4.60m <sup>2</sup>
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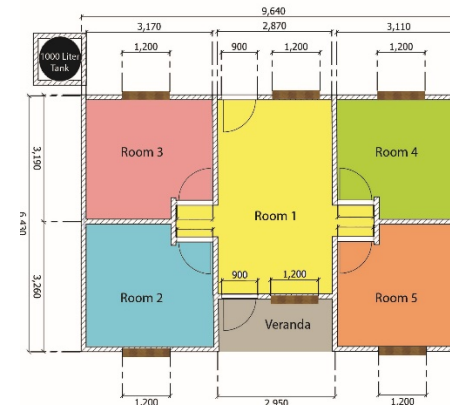
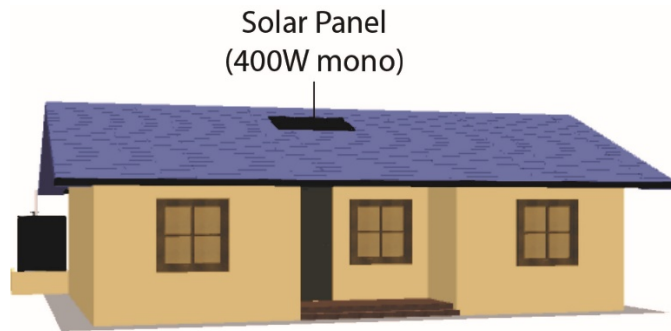
<b>House Type D -47m<sup>2</sup></b>																									
<p><b>Description:</b> House Type D is 47 m<sup>2</sup> and is well lit with natural light through four (4) windows in D1 and five (5) windows in D2 allowing for good cross ventilation. Both have two (2) external doors and Type D1 has four (4) rooms and D2 has five (5) rooms, as shown below.</p>																									
<p><b>Eligibility:</b> Replaces all residential dwellings greater than 39.1 m<sup>2</sup> but less than or equal to 47 m<sup>2</sup>.</p>																									
<p><b>Alternative:</b> There is a choice between the four (4) room Type D1 and the five (5) room Type D2 configuration.</p>																									
<b>D1 – 47m<sup>2</sup> (4 Rooms)</b>		<b>D2 - 47m<sup>2</sup> (5 Rooms)</b>																							
 <p>Solar Panel (400W mono)</p>		 <p>Solar Panel (400W mono)</p>																							
 <p>1000 Liter Tank</p>	<p><b>Areas</b></p> <table border="0"> <tr> <td>Room 1</td> <td>16.86m<sup>2</sup></td> </tr> <tr> <td>Room 2</td> <td>10.28m<sup>2</sup></td> </tr> <tr> <td>Room 3</td> <td>10.28m<sup>2</sup></td> </tr> <tr> <td>Room 4</td> <td>10.296m<sup>2</sup></td> </tr> <tr> <td>Veranda</td> <td>4.00m<sup>2</sup></td> </tr> </table>	Room 1	16.86m <sup>2</sup>	Room 2	10.28m <sup>2</sup>	Room 3	10.28m <sup>2</sup>	Room 4	10.296m <sup>2</sup>	Veranda	4.00m <sup>2</sup>	 <p>1000 Liter Tank</p>	<p><b>Areas</b></p> <table border="0"> <tr> <td>Room 1</td> <td>12.7m<sup>2</sup></td> </tr> <tr> <td>Room 2</td> <td>8.8m<sup>2</sup></td> </tr> <tr> <td>Room 3</td> <td>8.6m<sup>2</sup></td> </tr> <tr> <td>Room 4</td> <td>8.4m<sup>2</sup></td> </tr> <tr> <td>Room 5</td> <td>8.6m<sup>2</sup></td> </tr> <tr> <td>Veranda</td> <td>3.8m<sup>2</sup></td> </tr> </table>	Room 1	12.7m <sup>2</sup>	Room 2	8.8m <sup>2</sup>	Room 3	8.6m <sup>2</sup>	Room 4	8.4m <sup>2</sup>	Room 5	8.6m <sup>2</sup>	Veranda	3.8m <sup>2</sup>
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Room 5	8.6m <sup>2</sup>																								
Veranda	3.8m <sup>2</sup>																								

### House Type E - 58m<sup>2</sup>

**Description:** Type E is 58 m<sup>2</sup> 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.

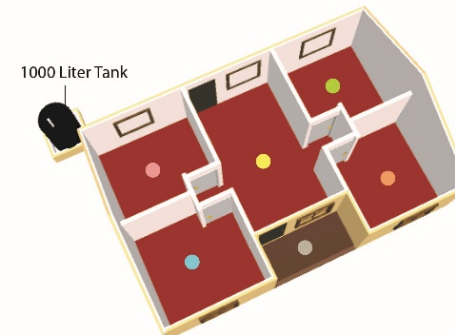
**Eligibility** - Replaces all residential dwellings greater than 47.1 m<sup>2</sup> but less than or equal to 58 m<sup>2</sup>.

**Alternative** - There are no alternative choices in floor plan.



**Areas**

Room 1	18.0m <sup>2</sup>
Room 2	10.0m <sup>2</sup>
Room 3	10.0m <sup>2</sup>
Room 4	10.0m <sup>2</sup>
Room 5	10.0m <sup>2</sup>
Veranda	3.15m <sup>2</sup>

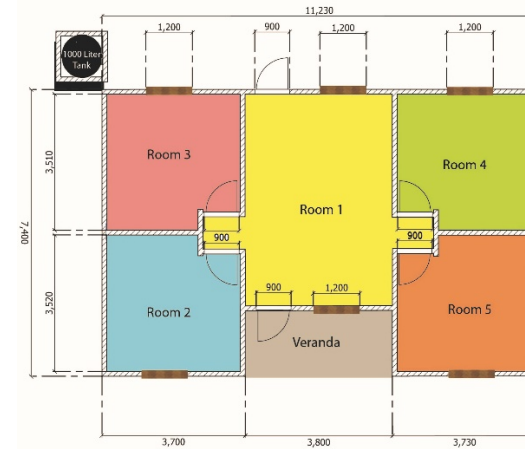
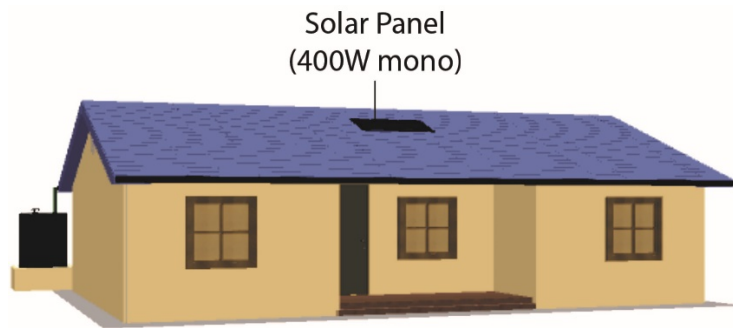


### House Type F - 75m<sup>2</sup>

**Description:** Type F is 75m<sup>2</sup> 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.

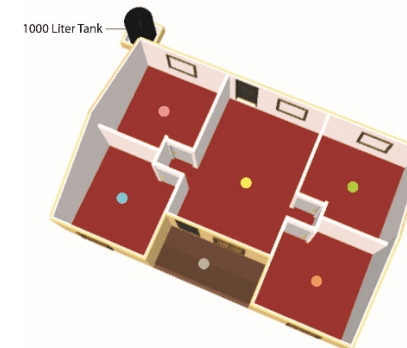
**Eligibility** – Replaces all residential dwellings greater than 58.1 m<sup>2</sup> but less than or equal to 75 m<sup>2</sup>

**Alternative** - There are no alternative choices in floor plan.



**Areas**

Room 1	23.5m <sup>2</sup>
Room 2	12.9m <sup>2</sup>
Room 3	12.9m <sup>2</sup>
Room 4	12.9m <sup>2</sup>
Room 5	12.9m <sup>2</sup>
Veranda	6.66m <sup>2</sup>

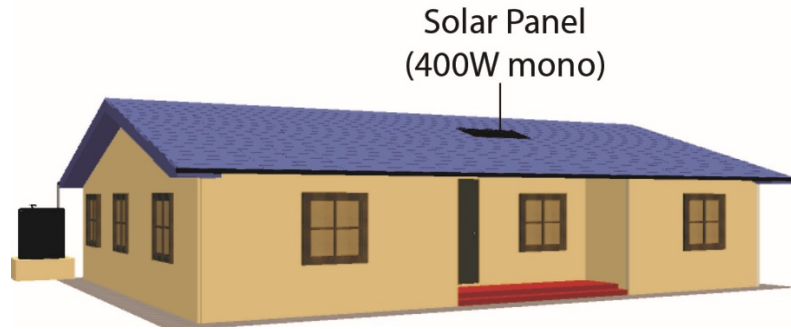


### House Type G - 105m<sup>2</sup>

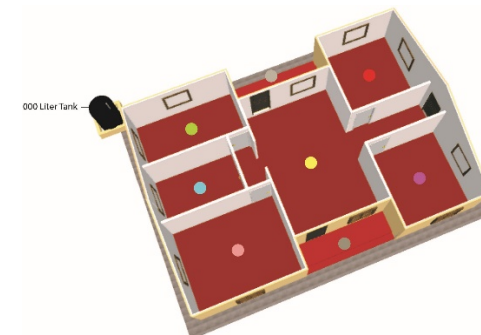
**Description:** Type G is a 105 m<sup>2</sup> house and consists of six (6) rooms and two (2) small covered verandas as shown below. This house is well lit with natural light provided from eleven (11) windows that also allow for good cross ventilation with three (3) external doors.

**Eligibility:** Replaces all residential dwellings greater than 75.1 m<sup>2</sup> but less than or equal to 105 m<sup>2</sup>.

**Alternative:** There are no alternative choices in floor plan.



Areas			
Room 1	28.86 m <sup>2</sup>	Room 4	14.75 m <sup>2</sup>
Room 2	14.75 m <sup>2</sup>	Room 5	14.45 m <sup>2</sup>
Room 3	11.86 m <sup>2</sup>	Room 6	14.45 m <sup>2</sup>
Veranda	10.4 m <sup>2</sup>	Corridor	8 m <sup>2</sup>

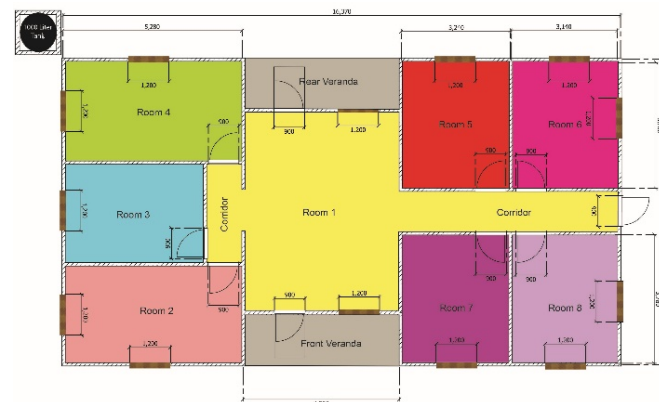
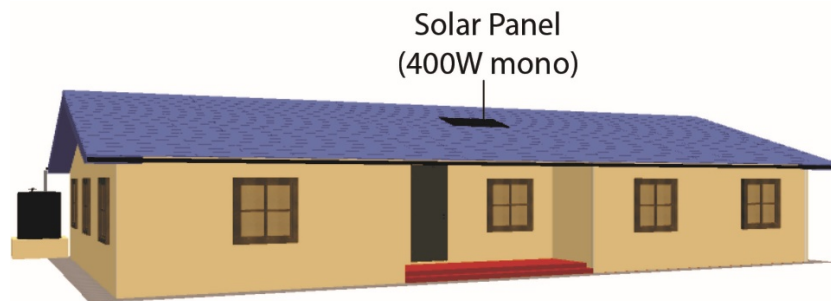


### House Type H 145m<sup>2</sup>

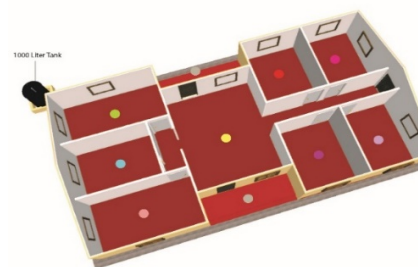
**Description:** Type H is the biggest (145 m<sup>2</sup>) of the house types and consists of eight (8) rooms and two (2) small covered verandas as shown below. This house is well lit with natural light provided from thirteen (13) windows that also allow for good cross ventilation with three (3) external doors.

**Eligibility** – Replaces all residential dwellings greater than 105.1 m<sup>2</sup> but less than or equal to 145 m<sup>2</sup>.

**Alternative** - There are no alternative choices in floor plan.



Areas			
Room 1	30.10 m <sup>2</sup>	Room 5	13.90 m <sup>2</sup>
Room 2	17.30 m <sup>2</sup>	Room 6	13.90 m <sup>2</sup>
Room 3	12.73 m <sup>2</sup>	Room 7	13.90m <sup>2</sup>
Room 4	17.30 m <sup>2</sup>	Room 8	13.90m <sup>2</sup>
Corridor	12.10	Veranda	13.5 m <sup>2</sup>



### Kitchens

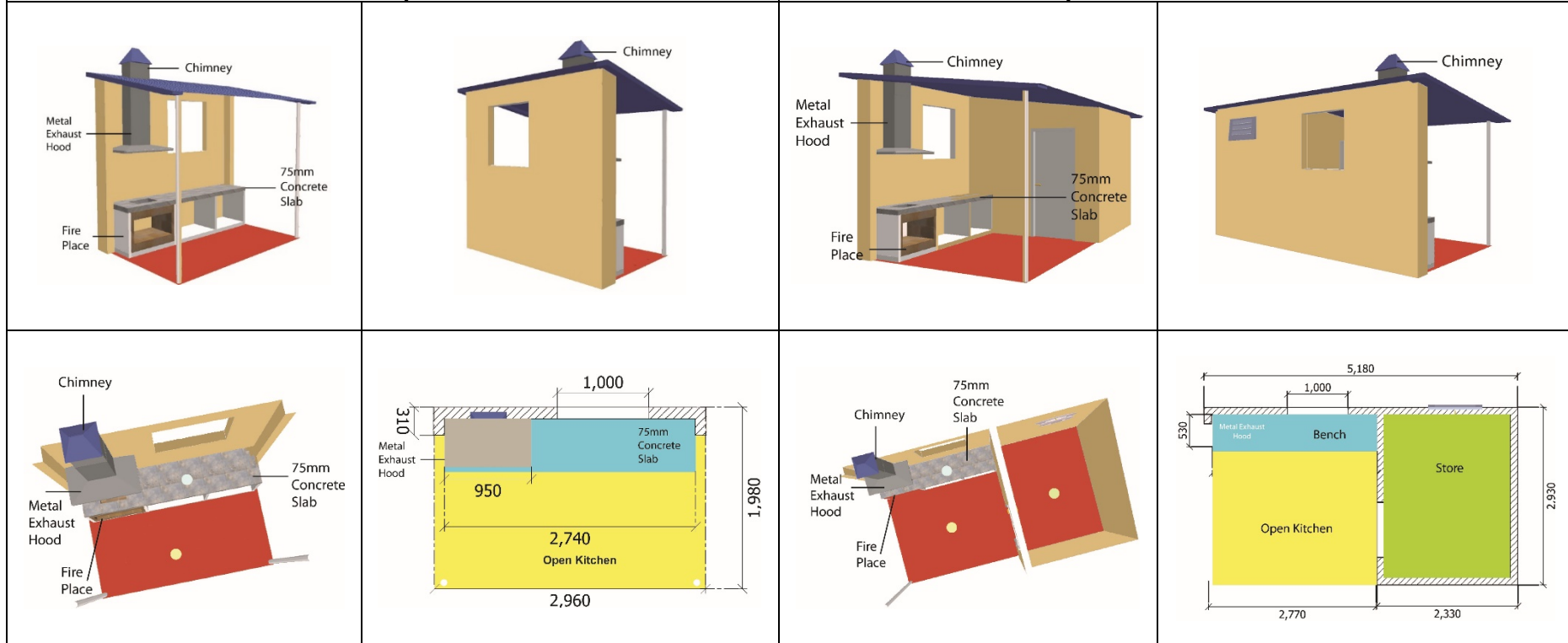
**Description:** Type A and Type B kitchens are covered open structures with a raised cooking platform and fireplace with a metal flue. Type B has an additional connecting store. Both kitchens have mono-pitched roof structures covered with corrugated iron sheets.

**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**

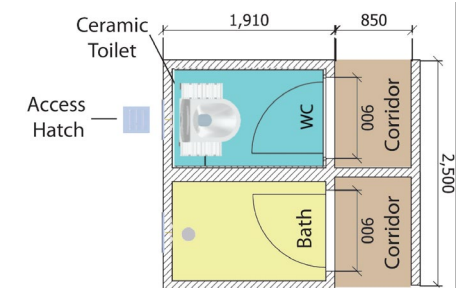
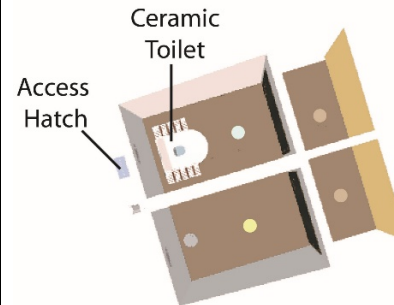
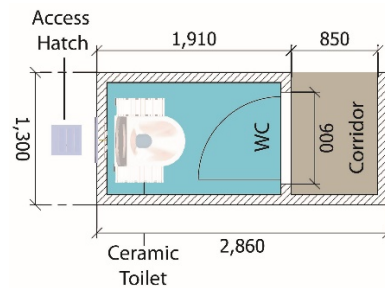
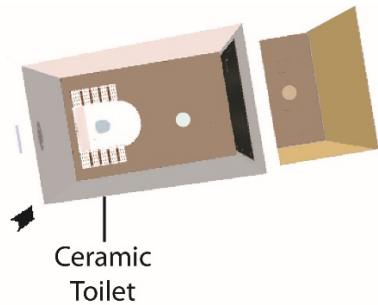
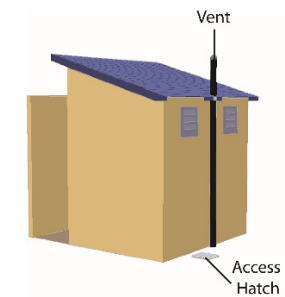
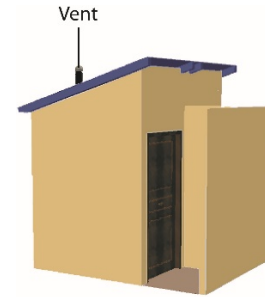
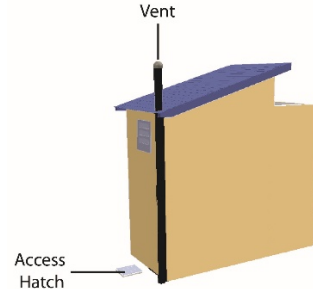
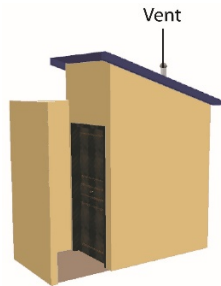
**Description:** Both VIP latrines have a mono-pitched roof, non-slip ceramic matt tiles with a high wall skirting. The walls will be painted in a high gloss enamel finish, hardwood varnished doors, white glazed squatting type pan. Type B will also have a connecting washing space with door.

**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**

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