



Government of Malawi
Ministry of Energy



Mpatamanga Hydro Power Limited

Mpatamanga Hydropower Project

Resettlement Policy Framework

(Draft for Consultation - Revision B.3 – 10 September 2024)



Mpatamanga Hydropower Project

Resettlement Policy Framework

Prepared for



Draft - Revision B.3
10 September 2024



Revision Record

Revision	Date	Prepared by:	Checked by:	Description:
A	07 May 2024	V. Bester, M. Groarke, G. Habtegabriel, L. Morel, L. Seguin, G. Huggins, C. Repussard	C. Repussard	First draft, for MHPL review
B	31 July 2024	G. Habtegabriel C. Repussard	C. Repussard	Second draft, addressing comments on revision A received from MHPL, the GoM PIU and IFC.
B.2	23 August 2024	C. Repussard	C. Repussard	Third Draft, addressing comments on the revision B from the GoM PIU and GoM
B.3	10 September 2024	C. Repussard	C. Repussard	Fourth Draft for public disclosure of the draft RPF, addressing comments on the revision B.2 from the GoM PIU and GoM

Citation: SLR Consulting (2024). Mpatamanga Hydropower Project: Resettlement Policy Framework, Revision B.3, September 2024.

Disclaimer:

This document has been prepared by SLR with reasonable skill, care and diligence, and taking account of the timescales and resources devoted to it by agreement with MHPL (the Client) as part or all of the services it has been appointed by the Client to carry out. It is subject to the terms and conditions of that appointment.

SLR shall not be liable for the use of or reliance on any information, advice, recommendations and opinions in this document for any purpose by any person other than the Client. Reliance may be granted to a third party only in the event that SLR and the third party have executed a reliance agreement or collateral warranty.

Information reported herein may be based on the interpretation of public domain data collected by SLR, and/or information supplied by the Client and/or its other advisors and associates. These data have been accepted in good faith as being accurate and valid.

The copyright and intellectual property in all drawings, reports, specifications, bills of quantities, calculations and other information set out in this report remain vested in SLR unless the terms of appointment state otherwise.

This document may contain information of a specialised and/or highly technical nature and the Client is advised to seek clarification on any elements which may be unclear to it.

Information, advice, recommendations and opinions in this document should only be relied upon in the context of the whole document and any documents referenced explicitly herein and should then only be used within the context of the appointment.

SLR Consulting France SAS
2 Square Roger Genin, 38000 Grenoble, France
T: +33 4 85 58 11 00
www.slrconsulting.com



Table of Contents

Glossary	xii
Summary.....	xiv
1 Introduction.....	1
1.1 Project Overview	1
1.2 Why a Resettlement Policy Framework?	2
1.3 Overview of Methodology	3
1.4 Principles and Objectives Governing Resettlement Preparation and Implementation	3
1.5 Structure of the Report.....	6
2 Scope of Land Acquisition and Resettlement	7
2.1 Project Facilities	7
2.2 Project’s Land Requirements.....	8
2.3 Alternatives Considered to Minimise Resettlement	27
3 Legal Framework and Applicable Standards	31
3.1 Applicable Standards.....	31
3.2 National Legislation on Land Ownership and Expropriation.....	31
3.3 World Bank ESS5 and IFC PS5.....	35
3.4 Gap Analysis between National Framework and Applicable Standards	35
4 Socioeconomic Profile of the Affected Communities.....	41
4.1 Methodology.....	41
4.2 Socioeconomic Profile of Affected Communities.....	55
5 Estimation of Impacts.....	153
5.1 Overview of Estimated Potential Impacts	153
5.3 Estimated impacts of the 400kv and 132kV Transmission Lines	178
5.4 Estimated Impacts of the S137 Road Works.....	182
5.5 Estimated Impacts of the Proposed Biodiversity Conservancy Area	184
6 Eligibility and Entitlements.....	185
6.1 Eligibility	185
6.2 Entitlements.....	186
7 Valuation Methodology	195
7.1 Valuation Methodology and Compensation principles.....	195
7.2 Compensation Process	208
8 Assistance to Resettlement.....	211
8.1 Resettlement Sites	211



8.2	Assisted Self-Relocation	222
8.3	Timing of Displacement	225
8.4	Psychosocial support.....	225
8.5	Support for Vulnerable Households	225
9	Livelihood Restoration Measures	226
9.1	Overview	226
9.2	Individual Livelihood Restoration Measures	227
9.3	Collective Livelihood Restoration Measures	232
9.4	Livelihood Restoration Measures for Vulnerable Households.....	240
10	Implementation Arrangements.....	242
10.1	Principles.....	242
10.2	Roles and Responsibilities.....	243
11	Information Disclosure, Consultation and Participation	256
11.1	Previous Stakeholder Engagement related to Land Acquisition and Compensation	256
11.2	Consultation during the Preparation of the Resettlement Policy Framework.....	258
11.3	Resettlement Policy Framework Information Disclosure	264
11.4	Stakeholder Engagement Programme for the Phased RAPs.....	266
12	Grievance Redress Mechanism.....	273
12.1	Grievances Management Process	273
12.2	Access Points for Raising a Grievance	277
13	Implementation Schedule	279
14	Monitoring and Evaluation	284
14.1	Monitoring	284
14.2	Evaluation	287
14.3	Schedule of Monitoring and Evaluation	288
15	Funding and Estimated budget.....	290
15.1	Funding	290
15.2	Estimated Budget.....	290

ANNEXES

Annex 1 – References

Annex 2 – Estimation of Impacts along the 400kV and 132 kV Transmission Lines

Annex 3 – Estimation of Impacts along the S137 Road

Annex 4 – Vulnerability Assessment

Annex 5 – Quantitative Household Socioeconomic Survey Questionnaire

Annex 6 – Draft trees species rates from the Department of Forestry

Annex 7 – Mpatamanga Relocation Sites Inspection Report



List of Tables

Table 1: Project’s Land Requirements	9
Table 2: Project’s Land Requirements, disaggregated by District and Traditional Authority	10
Table 3: Number of Landowners receiving a disturbance allowance for the Geotechnical investigations.	26
Table 4: Gap Analysis between the National Framework and WB and IFC Requirements	36
Table 5: Villages Potentially Affected by the Project Land Requirements.....	42
Table 6: Summary of the 2023 Qualitative Social Investigations (Focus Group Discussions and key informants interviews).....	47
Table 7: Summary of the 2023 Qualitative Social Investigations (Key Informant Interview)	49
Table 8: Summary of the 2023 Qualitative Social Investigations (Informal Discussions).....	50
Table 9: Summary of the 2023 Qualitative Social Investigations (Institutional Meetings).....	51
Table 10: Sample of affected households surveyed for the Household Socioeconomic Survey ...	54
Table 11: Types of Land Uses within the Project Land Requirements Areas.	56
Table 12: Proportion of public, private and customary lands at district level.....	65
Table 13: Types of land conflict and means of resolution	68
Table 14: Ownership of Land Surveyed Households Reside on. All Households.....	68
Table 15: Ownership of Land Surveyed Households Reside on. Male Headed Households.....	69
Table 16: Ownership of Land Surveyed Households Reside on. All Households. Female Headed Households.....	69
Table 17: Age Groups of the Population within the Surveyed Sample	79
Table 18: Age Distribution of Household Heads disaggregated by Gender.	79
Table 19: Marital Status of Household Heads within the Surveyed Sample, disaggregated by gender of household head.....	81
Table 20: Average age, min and max age of the households’ head, disaggregated by gender of household head	81
Table 21: Ethnic groups at District and National Level.....	83
Table 22: Social Organisation within the Study Area (Berge et al. 2014)	86
Table 23: Type of Marriage within the Study Area	87
Table 24: Overview of Activities Performed by Women, Men, Boys, and Girls	90
Table 25: Economics Activities Practised by Men and Women in the Study Area	91
Table 26: Employment status declared by the households members surveyed, disaggregated by gender	92
Table 27: Employment status declared by the households members surveyed, disaggregated by TA	92
Table 28: Summary of Ranches in the Project Land Requirements.....	116



Table 29: Charcoal Production Process Activities by Gender.....	125
Table 30: Assets owned by the households surveyed.....	130
Table 31: Self-evaluation of the households social conditions.....	133
Table 32: Average number of meals the households declared having per day.....	133
Table 33: Fishing activities amongst the surveyed households.....	137
Table 34: Distribution of vulnerable households in the households surveyed.....	148
Table 35: Overview of Estimated Involuntary Resettlement Impacts.....	153
Table 36: Estimated number of households potentially affected by physical displacement.....	154
Table 37: Estimated number of households affected by economic displacement only.....	155
Table 38: Number of individual landowners and tenants potentially affected (Main Reservoir and Construction Works)	158
Table 39: Estimation of households physically and economically displaced for the Main reservoir and the Main works.	159
Table 40: Farms or Ranches affected by the Main Reservoir and Main Works areas and number of workers	168
Table 41: Elements of Cultural Heritage Affected by the Main Reservoir and Main Works.....	174
Table 42: Estimation of the 400kV Transmission Line impacts per village	179
Table 43: Estimation of the 132kV Transmission Line impacts per village	179
Table 44: Estimation of impacts for the S137 Road Works.....	183
Table 45: Categories of People Affected by the Project Land Acquisition Process.....	185
Table 46:Entitlement Matrix	187
Table 47: Activities performed to inform the Valuation Methodology.....	195
Table 48: Comparison of Leasehold Land Values	202
Table 49: Compensation Rates for Structures	203
Table 50: Proposed Replacement Cost for Timber Trees.....	205
Table 51: Market prices for Crops Chikuli Market January 2024.....	207
Table 51: Key characteristics of the pre-identified resettlement sites	212
Table 52: Summary of the pre-identified resettlement sites characteristics.....	215
Table 53: Focus Groups Discussions with households potentially affected by physical displacement.....	219
Table 54: Next Activities for the Development of the Resettlement Sites.....	222
Table 55: Overview of Livelihood Restoration Measures.....	226
Table 56: MHPL resources mobilised for the RAP development and implementation.....	243
Table 57: Summary of Consultations Performed during the 2020-2021 Field Investigations.....	257
Table 58: Community Sensitisation Meetings at the start of the Resettlement Policy Framework	259
Table 59: November 2023 ESIA Scoping Meetings	262
Table 60: July 2024 ESIA Disclosure Meetings	262



Table 61: Collective Public Disclosure Activities for the Resettlement Policy Framework.....265

Table 62: Information Disclosure and Engagement Activities during the Preparation of the Phased RAP266

Table 63: Information Disclosure and Engagement Activities during the Implementation of the Phased RAP269

Table 64: GVGRC established in 2023275

Table 65: GRM Access Points277

Table 66: RAP Monitoring Indicators 285

Table 67 – Schedule of monitoring and reporting activities 288



List of Figures

Figure 1: Project’s Situation and Components.....	5
Figure 2: Project Land Requirements.....	11
Figure 3: Right of Access to the Reservoirs during operation.....	13
Figure 4: Project Facilities in the Main Works Areas.	16
Figure 5: Safety buffer areas around construction sites.....	17
Figure 7: Typical cross section for the Operational Stage.....	19
Figure 8: Sections of the S137 to be upgraded and created	20
Figure 9: Land requirements for a 9.2m width section to be upgraded.....	20
Figure 10: 400kV TL wayleave.....	22
Figure 11: 132kV TL wayleave.....	22
Figure 12: 400kV and 132kV Transmission Lines Routes and Substations Location.....	23
Figure 13: Location of the Pre-identified Resettlement Sites.....	25
Figure 14: View of Geotechnical Investigations during the Basic Design.....	26
Figure 15: Comparison between the previous 100m buffer area around the upper part of the Main Reservoir and the Basic Design land needs	28
Figure 16: Alternatives for the new sections of the S137 road in Neno District	29
Figure 17: Resettlement Policy Framework Study Area	43
Figure 18: Views of Focus Group Discussions and Key Informant Interviews.....	46
Figure 19: Qualitative Interviews	52
Figure 20: Quantitative Socioeconomic Households Surveys.....	53
Figure 21: Land Use Map (Atlas).....	57
Figure 22: Land Use Map (Page 1).....	58
Figure 23: Land Use Map (Page 2)	59
Figure 24: Land Use Map (Page 3).....	60
Figure 25: Land Use Map (Page 4).....	61
Figure 26: Land Use Map (Page 5)	62
Figure 27: Brickmaking in Dzikupi, Blantyre District (top). Shrublands in Liyenda, Neno District (bottom).	63
Figure 28: Rain-Fed Subsistence Agriculture under the proposed 132 KV Transmission Line, Dzikupi Village (Left). Chinere commercial ranch on the right bank of the main reservoir (Right).64	
Figure 29: Map of Water Uses in the upper part of the Main Reservoir.....	71
Figure 30: Map of Water Uses in the lower part of the Main Reservoir and in the Regulating Dam Reservoir	72
Figure 31: Cattle Watering along the Shire River at the Proposed Main Dam Site (Dec 2023).....	73



Figure 32: Static Irrigation in Feremu (Dec 2023).....	73
Figure 33: Shire River Crossing Point Close to Kambalame (Dec 2023).....	74
Figure 34: Typical Water supply Borehole at Chaswanthaka (Dec. 2023).....	74
Figure 35: Fishing Equipment in Kambalame (Dec. 2023).....	75
Figure 36: Proportion of households that have / have not always resided in their current village..	76
Figure 37: Settlements in the Project Area.....	77
Figure 38: Population Density in the Project Area.....	78
Figure 39: Age Pyramid of Malawi (National Statistical Office 2019a).....	80
Figure 40: Age Pyramid of the Surveyed Population in Neno District.....	80
Figure 41: Age Pyramid of the Surveyed Population in Blantyre District.....	80
Figure 42: Average Size of Households per Gender of Household Heads within the Surveyed Sample.....	81
Figure 43: Languages spoken at home by the surveyed households.....	82
Figure 44: Ethnicity within surveyed sample disaggregated by District.....	83
Figure 45: Ethnicity within surveyed sample disaggregated by village.....	84
Figure 46: Education Levels of Households Heads, disaggregated by Gender.....	85
Figure 47: Education Levels of Households Members, disaggregated by Gender and Age group	86
Figure 48: Number of Income Sources Per Household.....	93
Figure 49: Categories of Surveyed households' sources of income, disaggregated by gender of household head.....	94
Figure 50: Categories of Surveyed households' sources of income disaggregated by District.....	94
Figure 51: Average estimated levels of monthly household income, by gender of household's head.....	95
Figure 52: Estimated monthly income levels declared by surveyed households, by income source.....	95
Figure 53: Example of Slash-and-Burn Agriculture in the Study Area.....	97
Figure 54: Average size of cultivated land declared by surveyed households.....	99
Figure 55: Number of agricultural land plots affected per affected household.....	100
Figure 56: Type of annual or seasonal crops cultivated by the households surveyed.....	100
Figure 57: Maize Riverbank Field in Chikira Village (Main Reservoir, Left Bank).....	101
Figure 58: In-Land Field in Kambalame Village (Main Reservoir, Right Bank).....	101
Figure 59: Pigeon Pea Field (Neno District).....	102
Figure 60: Perennial Crops and Trees.....	102
Figure 61: Mango Tree in a Riverbank Field in Chikira Village (Main Reservoir, Left Bank).....	103
Figure 62: Average Number of livestock heads declared by the households.....	103
Figure 63: Cattle Grazing in Low Fertility Grazing Areas Near July Village (Neno District).....	105
Figure 64: Free-Range Chicken in Dzikupi Village (Blantyre District).....	105
Figure 65: Cattle Enclosure in 'Mlipa' Commercial Farm in Chikaya (Neno District).....	105



Figure 66: Free Range Indigenous Goats in Dzikupi Village (Blantyre District).....	105
Figure 67: Pig House (<i>Khola</i>) in Daelo Village (Neno District).....	105
Figure 68: Poultry Housing (<i>Khola</i>) on the Left And Goat, Ducks and Sheep Housing, Near Houses in Chinkwynia Village (Blantyre District).	105
Figure 69: Maize Rotation During a “Good” Agricultural Year on a Riverbank Field	107
Figure 70: Maize Rotation During a “Bad” Agricultural Year on a Riverbank Field	107
Figure 71: Maize Mill in Nkhwali Village (Neno District).....	108
Figure 72: Proportion of Crops Sold	109
Figure 73: Simplified Annual Crops Calendar in the Study Area.....	111
Figure 74: Simplified Perennial Crops Calendar in the Study Area	112
Figure 75: Livestock Calendar in the Study Area	113
Figure 76: Commercial Farms and Ranches locations	115
Figure 77: Ranch workers accommodation on Chiyabi ranch.....	117
Figure 78: Crops at Kuphedi ranch.....	119
Figure 79: Crops on the Musa ranch.....	120
Figure 80: Solar panel that powers four water sprayers to irrigate the crops at Titani Ranch.....	120
Figure 81: Goat shed at Kuphuka ranch	121
Figure 82: A breeding bull at Mulipa ranch.....	122
Figure 83: Goat shed on Kamwendo ranch.....	122
Figure 84: Ranch workers accommodation on Zagaf ranch.....	123
Figure 85: A worker’s house at Mlomba ranch	124
Figure 86: Categories of small businesses declared by surveyed households, by gender of household’s head.....	124
Figure 87: Mpatamanga “dock” for Charcoal Collection Close to Kambalame (Dec 2023)	128
Figure 88: Typical Housing Structures within the Study Area.....	131
Figure 89: Average of monthly expenses by category declared by the households surveyed	132
Figure 90: Ranges of estimated monthly food expense by gender of the household’s head.....	133
Figure 91: Households with a loan taken out during the last year	134
Figure 92: Organisations used to take out a loan.....	134
Figure 93: Distribution of fisher by Group Village and fishing gear used	137
Figure 94: Proportion of fish sold.....	137
Figure 95: Sources of energy used for cooking.....	138
Figure 96: Electricity Distribution Lines in the Project Area.....	139
Figure 97: Sources of drinking water declared by the affected households surveyed, disaggregated by GVH.....	141
Figure 98: Sources of drinking water declared by the affected households surveyed, disaggregated gender of the household’s head.....	141
Figure 99: Time needed to collect water, as declared by the surveyed households.	141



Figure 100: Typical Water Sources of Affected Households	142
Figure 101: Household Sanitation Facility within Surveyed Sample, Disaggregated by GVH.....	143
Figure 102: Household Sanitation Facility within Surveyed Sample, disaggregated by gender of Household's head	144
Figure 103: Typical Latrine (Feremu, Neno District).....	144
Figure 104: Location of Health Facilities, Schools and Markets.....	146
Figure 105: Overview of the Location of Elements of Cultural Heritage Identified in or close to the Project's Land Requirements	150
Figure 106: Graveyard in Chinkwinya.....	151
Figure 107: A Boabab tree in Kambalame (left) and its hole where offering are disposed	151
Figure 108: Overview of estimated Involuntary Resettlement Impacts	156
Figure 109:- Estimation of affected households for the Main reservoir and the Main works, disaggregated by gender of the household's head and District	160
Figure 110: Proportion of vulnerable households amongst the potentially affected households for the Main reservoir and the Main works, disaggregated by District.....	160
Figure 111: Distribution of estimated economic and physical displacement impacts by village	161
Figure 112: Overview of Physical Displacement Impacts at Chaswanthaka village	162
Figure 113: Overview of Physical Displacement Impacts at Kambalame village	163
Figure 114: Overview of Physical Displacement Impacts at Mpindo village	164
Figure 115: Overview of Physical Displacement Impacts at Lisangwi village	165
Figure 116: Overview of Displacement Impacts at the tail of the Main Reservoir	166
Figure 117: Overview of impacts on ranches.....	169
Figure 118: Number of physically displaced households who declared a small business activity.	170
Figure 119: Map of Affected Land Plots Identified in Nov.-Dec. 2023.....	171
Figure 120: Elements of Cultural Heritage Affected by the Main Reservoir and Main Works	175
Figure 121: Location of Mpatse abwile primary school	177
Figure 122: Example of potential double displacement along the 400kV Transmission Line	181
Figure 123: Potential Physical Displacement Impacts for the Proposed Biodiversity Conservancy Area	184
Figure 124: Preference between cash and in-kind compensation amongst affected households surveyed in 2023, disaggregated by gender of household's head	196
Figure 125: Views of the Chaswanthaka Resettlement site.....	213
Figure 126: Views of the Kambalame Resettlement site.....	214
Figure 127: Distance of Resettlement Sites with Existing Community Infrastructures	218
Figure 128: Typical homestead layout according to the FGD	220
Figure 129: Ideal resettlement plots configuration as per the FGD	220
Figure 130: Mpatamanga HPP GoM PIU Structure	247
Figure 131: Community Sensitisation Meeting in Kaliati GVH.....	260



Figure 132: Community Sensitisation Meeting in Nsalawatha GVH..... 260

Figure 133: Location of Community Sensitisation Meetings..... 261

Figure 134: Areas covered by the four phased RAPs.....280

Figure 135: General schedule of the phased RAPs aligned with construction activities..... 281

Figure 136: Schedule of the Early Works RAP..... 282

Figure 137: Schedule of the Main Works RAP..... 283



Acronyms

Acronym	Full text
AIDS	Acquired Immunodeficiency Syndrome
CDSS	Community Day Secondary Schools
CIA	Central Intelligence Agency
CPW	Child Protection Workers
CSS	Conventional Secondary Schools
DoMM	Department of Museums and Monuments
DSS	District Secondary Schools
DTDA	Danish Trade Union Development Agency
EMIS	Education Management Information System
EPC	Engineering Procurement Construction
ESIA	International Environmental & Social Impact Assessment
ESMMP	Environmental and Social Management and Monitoring Plan
ESS	World Bank's Environmental & Social Standards
FGD	Focus Group Discussion
FSL	Full Supply Level of the reservoirs
GBV	Gender Based Violence
GoM	Government of Malawi
GVH	Group Village Head
GVGRC	Group Village Grievance Redress Committee
GRM	Grievance Redress Mechanism
HH	Household
HHH	Household Head
HIV	Human Immunodeficiency Virus
HPP	HydroPower Project
IFC	International Finance Corporation
JCE	Junior Certificate of Education
MHPL	Mpatamanga Hydro Power Limited
MOL	Minimum Operating Level of the reservoirs
MoL	Ministry of Lands
MSCE	Malawi School Certificate of Education
MWK	Malawian Kwacha
NGO	Non-Governmental Organisation
NSO	National Statistical Office
NSS	National Secondary Schools
NWRA	National Water Resources Authority
PPA	Power Purchase Agreement
PSLCE	Primary School Leaving Certificate Examination
RAP	Resettlement Action Plan
RPF	Resettlement Policy Framework
SLR	SLR Consulting Ltd
STD	Sexually Transmitted Disease
TA	Traditional Authority
TTC	Teacher Training College
TVET	Technical and Vocational Education Training
UN	United Nations
UNDP	United Nations Development Programme
VLOM	Village Level Operation and Maintenance
WB	World Bank
WHO	World Health Organisation
GVGRC	Group Villages Grievance Redress Committee



Glossary

This Resettlement Policy Framework uses several terms in a technical sense that may be different from their use in everyday language. Some key terms are defined below.

Term	Meaning
Adequate housing	Defined by the following criteria: security of tenure; availability of services, materials, and infrastructure; affordability; accessibility; habitability; location; and cultural adequacy.
Affected person	Person experiencing either physical or economic displacement (See also displaced person and project-affected person).
Compensation	Payment in cash or in-kind for loss of an immovable asset or loss of access to resources and livelihoods that is acquired or affected by the project.
Customary right holder	Refers to those who do not have formal legal rights to land or assets but have customary or traditional rights recognized or recognizable under the laws of the host country.
Cut-off date	The date after which anyone who moves into the Project area is no longer entitled to compensation and/or assistance. In practice, the cut-off date is usually the date of completion of the census of people and inventory of assets in the Project-affected area, unless there are local legal provisions for another arrangement. Persons found occupying the Project area after the cut-off date are not eligible to Project compensation or other resettlement benefits. Similarly, fixed assets (such as built structures or crops) established after the cut-off date will not be compensated.
Displaced person	Same as affected person
Economic Displacement	Loss of assets (including land) or access to assets that leads to loss of income sources or means of livelihood as a result of project-related land acquisition or restriction of access to land and natural resources.
Physical Displacement	Loss of dwelling or shelter as a result of project-related land access, which requires the affected person(s) to move to another location.
Entitlement	Range of measures comprising compensation, income restoration, transfer assistance, income substitution, and relocation which are due to Project Affected People, depending on the nature of their losses, to restore their economic and social base.
Forager	Gatherer of non-timber forest products, such as berries, mushrooms, wild fruit, herbs, and medicinal plants.
Gender-based violence	Any form of violence, including physical and verbal abuse, related to social and cultural expectations of gender roles and relationships, often for the purpose of sustaining power.
Household	One person or a group of persons who share a dwelling unit, and for a group, share at least one meal a day.
In-fill resettlement	Involves relocating displaced persons into existing neighbourhoods rather than development of resettlement sites.
Informal settlers	Person or group of persons with no recognizable legal right to the land they use or occupy; commonly referred to as squatters.
Involuntary resettlement	Physical and/or economic displacement whereby affected persons or communities do not have the right to refuse land acquisition or restrictions on land use resulting in their relocation. This occurs in cases of lawful expropriation or restrictions on land use based on eminent domain; and in cases of negotiated settlements in which the buyer can resort to expropriation or impose legal restrictions on land use if negotiations with the seller fail.
Land Acquisition	Land acquisition refers to all methods of obtaining land for Project purposes, which may include outright purchase, expropriation of property and acquisition of access rights, such as easements or rights of way.



Term	Meaning
	Land acquisition may also include: (a) acquisition of unoccupied or unutilised land whether or not the landholder relies upon such land for income or livelihood purposes; (b) repossession of public land that is used or occupied by individuals or households; and (c) project impacts that result in land being submerged or otherwise rendered unusable or inaccessible. 'Land' includes anything growing on or permanently affixed to land, such as crops, buildings and other improvements.
Land requirements	All lands to be acquired for the project (see land acquisition above) and all restrictions on land use (see definition below) which are needed by the Project or imposed by the Project for safety reasons or other operational needs.
Livelihood	Livelihood is the full range of means that individuals, families, and communities utilize to make a living, such as wage-based income, agriculture, fishing, foraging, other natural resource-based livelihoods, petty trade, and bartering.
Livelihood restoration	The process of restoring (or improving) affected persons' livelihoods to preproject levels (or better).
Livelihood restoration plan	A planning document that outlines the necessary activities and measures to be implemented to restore livelihoods.
Non-resident	Affected landowner who owns land affected by the Project land requirements, but are not residing in the areas or villages directly affected by the Project land requirements.
Opportunistic settlers	People who encroach in the area after the establishment of the cutoff and are therefore not eligible for compensation.
Orphan land	Unacquired parts of a land parcel which are left unusable or undevelopable (either temporarily or permanently) as a result of the project's land acquisition or expropriation. Also referred to as severed land.
Project-affected person	Same as affected person
Replacement cost	The replacement cost is the market value of the asset (with no depreciation) plus transaction costs.
Resettlement action plan	A planning document that outlines the process, activities, and measures to be implemented for resettlement-affected persons.
Resettlement or livelihood restoration framework	A resettlement or livelihood restoration framework is a document that outlines the general principles for managing resettlement and livelihood restoration when the exact nature or magnitude of the land acquisition or restrictions on land use are unknown due to the stage of project development.
Restriction on land use	Limitations or prohibitions on the use of agricultural, residential, commercial, or other land that is directly introduced and put into effect as part of the project. These may include restrictions on access to common property or natural resources (such as water bodies), restrictions on land use within utility easements, or safety zones.
Security of tenure	A right of resettled individuals or communities that are resettled to a site that they can legally occupy and where they are protected from the risk of eviction.
Transaction costs	All costs that may be incurred because of the transaction or transfer of assets, such as taxes, stamp duties, legal and notarization fees, registration fees, travel costs.
Transition period	Period between the occurrence of the displacement and the time when affected livelihoods are restored.
Vulnerable groups	These groups include people who, by virtue of gender, ethnicity, age, physical or mental disability, economic disadvantage or social status, may be more adversely affected by displacement than others and who may be limited in their ability to take advantage of resettlement assistance and related development benefits.



Summary

This report is the draft Resettlement Policy Framework (RPF) of the Mpatamanga Hydropower Project. The RPF is currently a draft made available for public disclosure. Feedback from affected communities and stakeholders during the public disclosure process may result in some changes in the final RPF.

The proposed Mpatamanga hydropower Project (the Project) is being developed by Mpatamanga Hydropower Project Limited (MHPL) and the Government of Malawi under a Public Private Partnership (PPP) framework. The Project is located in the Southern Region within the Blantyre and the Neno Districts, on the Shire River, the largest river in Malawi, between the existing Tedzani and Kapichira hydropower schemes. A main dam (55 m high) on the Shire River will create a 20.2 km² reservoir at full supply level, with a total storage volume of 272 million m³. Water from the main reservoir will drop by approximately 66 m to a 301 MW powerhouse located 1 km downstream of the main dam. The water discharged from the main powerhouse into the Shire River (installed capacity of 550m³/s) will then flow into a 1.35 km² and 11.15 million m³ regulating reservoir (at full supply level) created by a 45 m high regulating dam located 6 km downstream on the Shire River. Water from the regulating reservoir will be discharged into the Shire River through a 57.5 MW powerhouse located at the foot of the dam (installed capacity of 388 m³/s). From the upper part of the main reservoir to the regulating dam, the Project footprint will extend over 29 km of river length.

The following studies were performed for the Project:

- Between 2015 and 2018 a first feasibility study was performed,
- An Environmental and Social Impact Assessment (ESIA) was performed in 2018 (Agri-Pro 2018). It was not formally submitted to the environmental authorities. To address stakeholder's concerns raised during this ESIA process, a regulating dam was added to the Project.
- Additional hydraulic studies and environmental flows studies were performed in 2018-2019, aiming to fill gaps not covered in the original ESIA.
- In 2019, a Preliminary ESIA was prepared with a Regulating Dam. This was the first impact assessment considering the Project with a regulating reservoir. A draft Resettlement Policy Framework (RPF) was also prepared (Multiconsult 2019).
- In 2020 and 2021, a new draft RPF was prepared, and the census and surveys of affected households were initiated (Mott MacDonald 2021). However, they were not completed. The preparation of the RAP stopped, and the data collected was not analysed.
- At the end of 2022 and early 2023, the Project has selected Consultants to update or finalise the previous E&S studies. The studies prepared in the course of 2023 and 2024 are:
 - An ESIA and ESMMP,
 - A Biodiversity Action Plan,
 - A Cumulative Impact Assessment, and
 - A Resettlement Policy Framework (this report).

As the Mpatamanga HPP is a large and complex project, it was decided to phase the land acquisition, compensation and resettlement process. Several separated Resettlement Action Plans will be prepared, as follows:

- This Resettlement Policy Framework is prepared as part of the 2024 Environmental and Social Studies needed for the World Bank and other Project's Lenders appraisal of the Mpatamanga HPP. This document assesses potential involuntary resettlement impacts and defines resettlement principles, organisational and implementation arrangements to be applied to the phased RAP and during project implementation.



- Phase 1: Early Works RAP for the S137 access road refurbishment work in Blantyre District. It will also include the acquisition of the Chaswanthaka and Mpindo resettlement sites.
- Phase 2: Main works RAP: Area covering all project main facilities, as well as construction facilities, and the regulating reservoir area. Any area located in the main reservoir but to be used for construction facilities will also be acquired at that time (upstream coffer dam and diversion tunnel works). The Main works RAP will also include the new sections of the S137 road in Neno district and the Kambalame Resettlement site.
- Phase 3: Transmission Lines RAP (400kV TL and 132kV TL)
- Phase 4: Main reservoir RAP.

A Project Facilities and Project Land Requirements

The Project's facilities are composed out of:

- The permanent facilities required for the Project's operation. They include:
 - The main dam,
 - The main reservoir,
 - The access road to the main dam, which will use the existing S137 road, and will require the creation of new sections of the road in Blantyre and Neno District.
 - The main powerhouse and its substation,
 - The 400 KV Transmission Line connecting the main powerhouse substation to the existing Phombeya sub-station in Balaka District,
 - The regulating reservoir,
 - The regulating dam with its powerhouse,
 - The substation of the regulating dam powerhouse,
 - The 132 KV Transmission Line connecting the regulating dam powerhouse to the existing Tedzani-Kapichira Transmission Line,
 - The operator's village,
 - A services road from the main powerhouse to the regulating dam, and
 - The resettlement sites.
- The temporary facilities required for the construction period only. They include:
 - Cofferdams and river diversion works,
 - Construction camps and facilities (such as batching plants, laydown areas)
 - Quarries and spoil disposal areas,
 - Access roads and tracks to be used during construction of the Transmission Lines and the main facilities.

As part of the Biodiversity Offset Strategy, the Project proposes to create a conservancy area on the right bank of the Shire River between the Main Dam and the Regulating Dam to offset the Project biodiversity impacts. This conservancy area is the preferred option for the biodiversity offset strategy at the time of writing, but its boundaries are yet to be formally approved by the Project stakeholders.

The Project's 'Land requirements' includes:

- All lands to be acquired for the project. "Land acquisition" refers to all methods of obtaining land for project purposes, which may include outright purchase, expropriation of property, and acquisition of access rights, such as easements or rights of way. Land acquisition may also include: (a) acquisition of unoccupied or unutilized land whether or not the landholder relies upon such land for income or livelihood purposes; (b) repossession of public land that is used or occupied by individuals or households; and (c) project impacts that result in land being submerged or otherwise rendered unusable or



inaccessible. “Land” includes anything growing on or permanently affixed to land, such as crops, buildings and other improvements, and appurtenant water bodies.

- “Restrictions on land use” which are limitations or prohibitions on the use of agricultural, residential, commercial, or other land that is directly introduced and put into effect as part of the project. These may include restrictions on access to common property or natural resources (such as water bodies), restrictions on land use within utility easements, or safety zones.

The land requirements for the Mpatamanga HPP include:

- The areas needed for all permanent facilities,
- The areas needed for temporary facilities during construction,
- The areas where restriction of use will be established, either for operational reasons or for safety reasons.

The land requirements not yet defined include the temporary land needs during construction (access tracks and construction camps for the S137, 400kV and 132kV TL), and any area necessary for the sediment management strategy (area needed to store sediment removed or dredged from the Main Reservoir). These Project’s land requirements consist in seven main areas, summarised in Table A below. Some of the lands needed temporarily for the construction period will not be needed for the operation (for instance construction camps, quarries, any lay-down or working areas required by the Contractors). Where feasible considering operational constraints, these lands could be transferred by MHPL to the GoM after the demobilization of the contractor at the end of the construction. The possibility for the Government to then transfer some of these lands back to the local communities will be studied by the Project.

Table A: Project’s Land Requirements

Project Facilities	Total Area (identified or defined at the time of writing)	Comment
Main reservoir	2,045ha	The whole area is a permanent land requirement. The entire Main Reservoir area will be acquired permanently. Access to the shore of the main reservoir will not be permitted in the 500m area immediately upstream of the main dam and the 500m stretch downstream of the end of the tail or the main reservoir, from Tedzani HPP tailrace.
Main Works	794ha	The main works area includes the footprint of the construction and operation facilities. At the Basic Design stage, the Project Technical team identified a general area to be allocated to the EPC contractor to establish the permanent (operation) and temporary (construction) facilities. Access will be allowed to the regulating reservoir on the Blantyre side, except between the main powerhouse outlet and the minimum operating level (MOL) of the regulating reservoir. On the Neno side, no access to the regulating reservoir will be possible, because of the proposed conservancy area.
S137 Access Road	106ha	For the Sections of the S137 which will be upgraded, the Ministry of Transports and Public Work already owns the road and the land of the existing road reserve (18 metres from each side of the centre of the road). For these existing sections to be upgraded, the lands requirements will be limited to the areas needed for the road upgrade. This includes the road platform itself, the road banks and drainage channels along the road. The upgraded road width will be 9.2m, except when crossing the Chikuli market, where it will be 12.2m ¹ . Along the sections of the S137 road to be upgraded, local villagers are using the land in the 18m width constituting the land

¹
(GIBB 2024)



Project Facilities	Total Area (identified or defined at the time of writing)	Comment
		reserve on both sides of the road central alignment. This land reserve is already the property of the MTPW. As per the Public Roads Act (2017 Amendment), compensation is due for damages caused to land and surface rights on parcels occupied in the road reserve for roads works (i.e. buildings, crops and trees). No compensation is due for the land in the existing road reserve. For the new section to be constructed, the entire road reserve (18m of each side of the central line of the road) will be acquired.
400kV Transmission Line	345 ha	The footprint of the pylons will be permanently used: they are a permanent land requirement. In the 400kV Transmission Line wayleave, the area needed for the pylons will be acquired permanently. Outside of the pylons' footprints, the wayleave will not be acquired, but some restriction on land use will be established. It will not be permitted to build houses in the wayleave, or to grow crops other than annual crops. Temporary land requirements (access tracks, construction camp(s), laydown areas) will be defined at the Detailed design stage. Some access tracks may remain permanent.
132kV Transmission Line	38 ha	The footprint of the pylons will be permanently used: they are a permanent land requirement. Outside of the pylons' footprints, the wayleave will not be acquired, but some restriction on land use will be established. It will not be permitted to build houses in the wayleave or to grow crops other than annual crops. Temporary land requirements (access tracks, construction camp(s), laydown areas) will be defined at the Detailed design stage. Some access tracks may remain permanent.
Resettlement Sites	387 ha	Temporary land requirement: The Project will acquire the land to develop the resettlement sites, but as they are an in-kind compensation option, the land plots allocated to affected households and communities on these resettlement sites will be transferred to them after the displacement. At the time of writing the Chaswanthaka and Kambalame resettlement site had been selected, but the Mpindo resettlement site was yet to be identified and selected.
Proposed biodiversity conservancy area	1,910 ha	Permanent land requirement: the proposed biodiversity conservancy area will be acquired and fenced before the start of construction and maintained throughout operation ² .
Total	5,625 ha	

B Applicable Standards

The Project complies with Malawi environmental and social laws regulations and standards. The national framework applicable to land acquisition is described in section 3.2. The Project will also comply with the following international standards related to land acquisition and involuntary resettlement:

- The IFC Performance Standards (2012), notably the IFC Performance Standard 5 (PS5) on Land Acquisition and Involuntary Resettlement,
- The World Bank Environmental and Social Framework (ESF) (2018), and its Environmental and Social Standard 5 (ESS5) on Land Acquisition, Restrictions on Land Use and Involuntary Resettlement,

² At the time of writing, this conservancy area was the preferred option of the Project's biodiversity offset strategy. However, it had not yet been validated and the limits of this conservancy area were yet to be formally defined. When this area is approved and defined, it will be included in the RAP for the Main Works. Therefore, this RPF considers it as land requirements.



- The Equator Principles 4 (EP4) (July 2020), which are referring to the IFC PS5 regarding land acquisition and involuntary resettlement.

The World Bank ESS5 and IFC PS5 are similar in substance.

C Socioeconomic Profile of the Affected communities

Qualitative socioeconomic surveys (Focus groups discussions and key informants' interviews) were performed in the communities potentially affected by the Project. Quantitative socioeconomic surveys (identification of affected land plots and households socioeconomic survey) were performed between September and December 2023 in the communities affected by the Project land requirements in the Main Reservoir and the Main works area. Direct observations were done along the S137 road and the 400kV and 132kV Transmission Lines. Table C hereafter provides the list of the villages potentially affected by the Project land requirements, distributed by Project component.

C.1 Socioeconomic surveys methodology

Informed consent of all interviewees was obtained at the start of each interview. The following surveys were performed:

- Focus groups discussions and key informant interviews: 44 focus groups discussion were held with 432 individuals, of whom 51% were male and 49% were women,
- Ad-hoc informal interviews were performed "on the spot" during site observations: a total of 14 ad-hoc informal interviews were held, with the majority of the respondents being male (86%).
- Meetings were also organised with District Councils (DCs) Officers and representatives of Non-Governmental Organisations (NGOs) in Blantyre and Neno districts: a total of 7 meetings were held, with 43 respondents, of whom 51% were female.
- Two agronomists performed individual interviews with about 40 farmers as well as Agricultural Extensions Officer from the District Agricultural Departments in December 2023 (these interviews are included in the institutional interviews, key informant interviews and informal interviews listed above).
- A quantitative survey was performed amongst the households affected by the Project's land requirements in the Main reservoir and the Main Works areas. These quantitative surveys consisted in three activities performed concurrently:
 - A verification and update of the preliminary census performed in 2020-2021,
 - An update of the identification of the affected land plots already surveyed in 2020-2021 in the main reservoir, and a survey of the affected land plots in the main works area.
 - A quantitative household socioeconomic survey performed on a sample of the households affected. Some of the households identified by the preliminary census were not available for the quantitative household socioeconomic survey, or not willing to participate in this survey. A total of 419 households were surveyed, representing 68% of the identified Project-affected households (economically or physically displaced).



Mpatamanga HPP – Resettlement Policy Framework

Table C: Villages Potentially Affected by the Project Land Requirements

District	Traditional Authority	Group Villages	Villages	Main Reservoir	Main works and regulating reservoir	400kV TL	132kV TL	S137 Access Road	Proposed biodiversity conservancy area		
Balaka	TA Phalula	GVH Phombeya	Phombeya			■					
		GVH Kuthambo	Yonamu, Chikwewe			■					
Neno	TA Symon	GVH Somi Somi	Chikapa, Kamwamba, Phokoso			■					
		GVH Zalewa	Kandoje, Salafosi, Patasoni			■					
		GVH Ngwenyama	Chitsoso, Ntingala Joseph			■					
			Nkoka, Liyenda		■		■				
	TA Mlauli	GVH Nsalawatha	Petulo, Jonathan		■		■				
		GVH Feremu	July		■		■				
			Feremu / Andivuta		■		■		■		
			Kambalame		■				■		
		Nkhwali						■			
Blantyre	TA Kuntaja	GVH Nkata	Singano, Nkata, Botomani					■			
		GVH Solomoni	Solomoni, Mwasamba, Jelani, Ntatha					■			
	TA Kunthembwe	GVH Mbanda	Beni, Magombo, Mvundula						■		
		GVH Chikumbu	Chikumbu, Malire, Mbanda						■		
		GVH Kadikira	Mkwezalamba, Chikhandwe, Kadikira, Galufu, Nkhumba						■		
		GVH Makunje	Makunje						■		
		GVH Kunthembwe	Kunthembwe, Adikachina, Chakhumbira, Chisembwere						■		
		GVH Gwadani	Gwadani, Ngoleka, Goliati, Simon						■		
		GVH Kaliati	Juma, Jelasi, Kaliati							■	
			Lisangwi, Inosi		■					■	
			Chilaulo, Chaswanthaka		■	■				■	
			Mpindo			■					
			Divala				■ [TBC]				
		Mbwinja				■			■		
		GVH Mzigala	Mzigala, Mwazilinga		■						
GVH Namputu	Chimphanda, Baluwa, Chikira, Namputu, Kwapita, Chinkwinya		■								
GVH Dzikupi	Dzikunika, Kabuluzi, Gumeni, Dzikupi						■				
TOTAL	5 TA	19 GVH	70 villages	20 villages	5 to 6 villages	17 to 18 villages	5 villages	36 villages	1 village		



C.2 Profile of the Affected Communities

Customary land, governed by customary practices, is the most widespread land tenure category across the surveyed areas, mostly following matrilineal practices. It is primarily subsistence oriented and is overseen by traditional authorities, group village headmen and village headmen.

The land use in the Project’s land requirements is characterised by a large proportion of shrublands (83%) and a low population density with scattered settlements. The Shire River is used by the affected communities for watering their cattle, small-scale manual irrigation of some farming plots on the riverbanks, fishing, transportation, drinking water.

The population surveyed is young, with more than half (54%) of the population below 18 years old. The average size of affected households is 5.3 members.

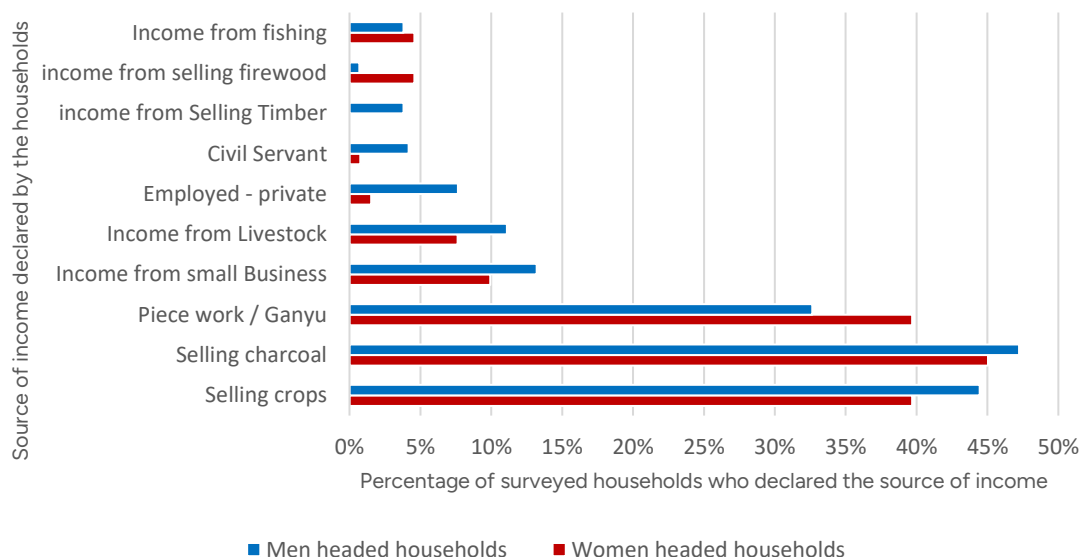
Malawi is characterised by a diverse ethnic composition, and this is reflected in the population surveyed: The Mang’anja are the main ethnic group within the surveyed area, representing 63% of the overall surveyed sample, followed by the Ngoni (16%) and minorities of Chewa (12%), Yao (3%), Lomwe (3%) and Nyanja (1%).

More than half of the household’s heads, and the majority of the households’ members of all age groups have not completed the 8 years of Primary Education.

C.3 Sources of Income

About 7% of the population of working age surveyed declared being employed, about 60% declared being self-employed (i.e. farmers or other similar subsistence activity), and 27% declared relying on piece work (*ganyu*). Only 6% declared they did not have any economic activity. Most of the affected households (78%) have more than one source of income. The means of livelihoods of the affected communities in the Project’s Land Requirement are mostly land-based and rely on their access to natural resources, as indicated in Figure A below.

Figure A: Categories of surveyed households’ sources of income, disaggregated by gender of household head.



In the Main Reservoir and Main Work area, the main sources of income are charcoal making, selling crops and piece work (*ganyu*). Small scale subsistence farming is the main agricultural activity for the households, with maize as the main staple crop. Rain-fed agriculture is the main form of crop farming, but some fields along the riverbanks are cultivated all year long with small-scale manual irrigation. Almost half (46%) of surveyed households declared they own livestock, with an average number of cows between 5 heads (in Blantyre District) and about 12 heads in (Neno District). On both banks, 42% of households reported cows mainly graze on the riverbanks and 43% for goats, followed by lands close-by the village (35% of households for cows and 39% for



goats) or in the hills surrounding the villages. Cows and goats are conducted for grazing to low fertility soils near villages by hand workers or household members. More than 70% of the interviewed households declared they take their livestock to the Shire River to water them. Other rivers or tributaries to the Shire are also used. Only a minority (5%) declared they water their cattle using the village borehole.

Fifteen commercial farms or ranches are also located in the Project Lands requirements.

About one-third of the surveyed households (32%) declared they have a small business, such as a small shop or grocery, transport services with motorcycle or bicycle, or hawker. Most of them (80%) conduct their small business activities within their village. Most of the households who do have a small business (85%) do not have any employee.

C.4 Standards of Living

During direct field observations in 2023 a mix of permanent, semi-permanent and traditional housing structures were noted. Housing units were mainly built with clay or burnt/unburnt bricks and roofing made of thatch or corrugated iron sheets. Cement for walls or flooring was occasionally, if not rarely, observed. Individual houses usually included a latrine pit dug outside of the dwelling, either built out of hay or clay bricks. More durable structures made of cement and shipping containers were at times observed for schools, shops and official buildings, especially along main roads.

Buying food was the main expense declared by the surveyed households. The importance of food within the households' expenses reflects the general social conditions they experience. When they were asked to self-evaluate their social condition, more than half of the households declared they were struggling to have 3 basic meals per day. Only one third of them declared they were regularly having 3 meals per day on average, with 8% declaring that they could only afford one meal per day.

The formal financial services in the study area are in-existent in most villages and only exists in towns or small urban centres. Airtel money, a system of money transfer via phone, seems to be used by those who have phones. At the village level, the main financial service is a type of community based "bank" called "Nkhonde".

C.5 Use of natural resources

The surveyed households rely on their access to natural resources for the following activities:

- Making and selling charcoal to obtain cash income. Although this activity is done illegally by the households it is one of the key means of livelihood in the affected area. Trees suitable for charcoal production are becoming increasingly scarce and people are now also using saplings, coppices and digging up tree stumps to make charcoal. Some people migrate from one village to another or find trees in other villages to produce charcoal. Therefore, it is possible that some of the affected household produce charcoal on lands which are not affected by the Project. The charcoal producers do move their charcoal making activities wherever they can find trees.
- Collecting firewood, which is the main source of energy used for cooking (more than 90% of the surveyed households).
- Collecting herbs and medicinal plants, wood for construction, but also clay soil and sand.
- Hunting, for a minority of the households: less than 9% of surveyed households (36 out of 419) declared at least one of their members did hunt.
- Fishing: about 38% of the affected households surveyed declared fishing, mostly in the Shire River.
- The main sources of drinking water of the affected households are boreholes and the river (Shire or tributary). The affected households are often using both sources.
- About half of the affected households' surveys declared they use rivers to wash clothes (64% of households surveyed), dishes (42%) or bath (45%). Out of those who declared using the rivers for these activities, more than half (from 54 to 59%) declared they use the Shire River. The other respondents declared they use other rivers.



As there is no electricity distribution line in most of the villages surveyed, very few households (20 out of 419, or 5%) declared they were connected to the electricity grid. Some households have solar panel to produce electricity.

C.6 Vulnerable Groups

As part of the RPF, a vulnerability assessment was prepared to identify the vulnerable groups. The vulnerability assessment identified an overall context of high vulnerability across the whole population, with four criteria identified as exposing to heightened levels of vulnerability for the Mpatamanga HPP:

- Criteria 1: Woman-headed households - Compared to their male counterparts, female household heads are less likely to access remunerated jobs and suffer from a heightened risk of sexual abuse and assault, disproportionate caring responsibilities and a higher exposure to sexually transmitted diseases and sex work.
- Criteria 2: Households headed by people unable to work, communicate or understand information due to old age, disability or chronic illness - People who are unable to work or communicate due to illness, disability or old age are perceived as vulnerable due to their reduced ability to understand and process information, sustain a productive livelihood, dependence on the household or community for care, higher exposure to illness and reduced mobility, as well as an increased risk of exploitation, abuse, assault and discrimination.
- Criteria 3: Landless households - Landlessness is a factor of vulnerability because it heightens a household's dependence on other people for cash, while significantly limiting the household's productivity, capacity for livelihood diversification and resilience to external shocks.
- Criteria 4: Orphan-headed households - Orphans are considered extremely vulnerable due to their lower levels of education, dependence on the community and reduced ability to sustain a productive livelihood, as well as their heightened exposure to violence, assault, exploitation and forced labour.

These vulnerability criteria are based on the focus groups discussions and interviews performed during the qualitative social surveys performed in the affected villages in the Main Reservoir and Main Works areas in September and October 2023. They may be adjusted after they are presented to and discussed with the affected communities and the affected households themselves during the public disclosure process.

The vulnerability criteria have been identified at the household level. One household can have one or more vulnerability criteria. For instance, a female-headed household can also be a landless household. The vulnerable households represent 39% of the households surveyed.

C.7 Cultural Heritage

The following Tangible Cultural Heritage elements have been identified by the Department of Museums and Monuments inside the Main Reservoir Area and the Main Works Area:

- Fifty-one (51) potential archaeological sites or sites with historical significance,
- One sacred tree,
- Five cemeteries or graveyards.

In addition, during SLR field investigations in November and December 2023, the following additional elements of cultural heritage were identified in the Project's land requirements, or just next to them:

- Four additional graves in the Main Reservoir area,
- One cemetery along the 400kV Transmission Line, but outside its wayleave (i.e. not directly affected),
- Three cemeteries along the S137 road in Blantyre District, on the edge of the S137 road upgrade works.
- One church in the 400kV Transmission Line wayleave.



Regarding intangible cultural heritage, during the interviews and informal discussions carried out in 2023 along the river, none of the informants reported any perception of the Shire River as holding a particular aesthetic, spiritual, religious or cultural value for the population.

The cultural heritage practices/events are organised on the riverbanks by some villages because of the proximity to water. About 26% of the affected households surveyed declared that baptism ceremonies can be practiced along the Shire riverbanks. But the presence of crocodiles in the river was mentioned by several interviewees to explain that they do not practice a lot of cultural ceremonies on this stretch of the Shire River nowadays. Other interviewees explained that their cultural practices such as the initiation ceremonies were not linked to one specific place in particular.

The land surveys performed in November and December asked for each affected land plot in the Main Reservoir and the Main works area if cultural elements or cultural practices were performed on the affected lands. There was no mention of such practices on the banks of the Shire River inside the Project land requirements, except for the sacred tree and the cemeteries mentioned above.

D Estimation of Potential Impacts

The figures of potential impacts summarised in this section are an estimate based on the information available at the time of writing. They should be considered as an indication of the order of magnitude of the impacts. They are not definitive figures, as the Project aims at further minimising the impacts during the Detailed Design stage, and as some of the land needs of the Project are yet to be defined.

At the time of writing, the physical and economic displacement impacts can be estimated for the Main Reservoir and the Main works areas based on the socioeconomic survey and the survey of affected land plot performed in November and December 2023. For the S137 Road works, the 400kV and 132 kV transmission line and the proposed biodiversity conservancy area, estimates can be produced from site observations and interpretation of aerial imagery. An overview of the estimated impacts is given in Figure B and Table D below.

Access to natural resources is not expected to be significantly changed along the S137 road and along the transmission lines. Access to natural resources may be affected in the villages affected by the Main Works and the Main Reservoir as follows:

- At the village level, it is likely that the reduction of areas available to produce charcoal will increase pressure on terrestrial natural resources outside of the Project lands requirements. As there are no defined boundaries between villages or Group Villages, it is difficult to estimate precisely which village is likely to be more affected than other. However, the villages losing a more significant part of their lands than others are those located close to the main dam and main powerhouse: Chaswanthaka, Inosi and Mpindo in GVH Kaliati in Blantyre District, and Kambalame village in GVH Feremu in Neno District. The other villages will lose lands adjacent to the river. Pressure on natural resources could also increase because of Project-induced in-migration, and from the influx of workers.
- Access to the regulating dam reservoir will be allowed on the Blantyre side, except between the main powerhouse outlet and the minimum operating level (MOL) of the regulating reservoir. On the Neno side, no access to the regulating reservoir will be possible, because of the proposed conservancy area. This means Nkhwali village will no longer have access to the Shire River.
- In the Main Reservoir, access to the banks of the main reservoir may also be hindered by the change induced by the change from a river with flowing water to a reservoir with still water. The new lentic (still water) ecosystem in the Main Reservoir may cause an increase in the crocodiles and hippos population. The banks of the Main Reservoir may also see the development of new riverine vegetation (such as aquatic weed) a few years after the lake is created. These two aspects may hinder the accessibility of the riverbanks for the riverine villages a few years after impoundment of the Main Reservoir.



Collective Livelihood Restoration measures are defined to address these impacts on access to natural resources.

Table D – Overview of Estimated Involuntary Resettlement Impacts

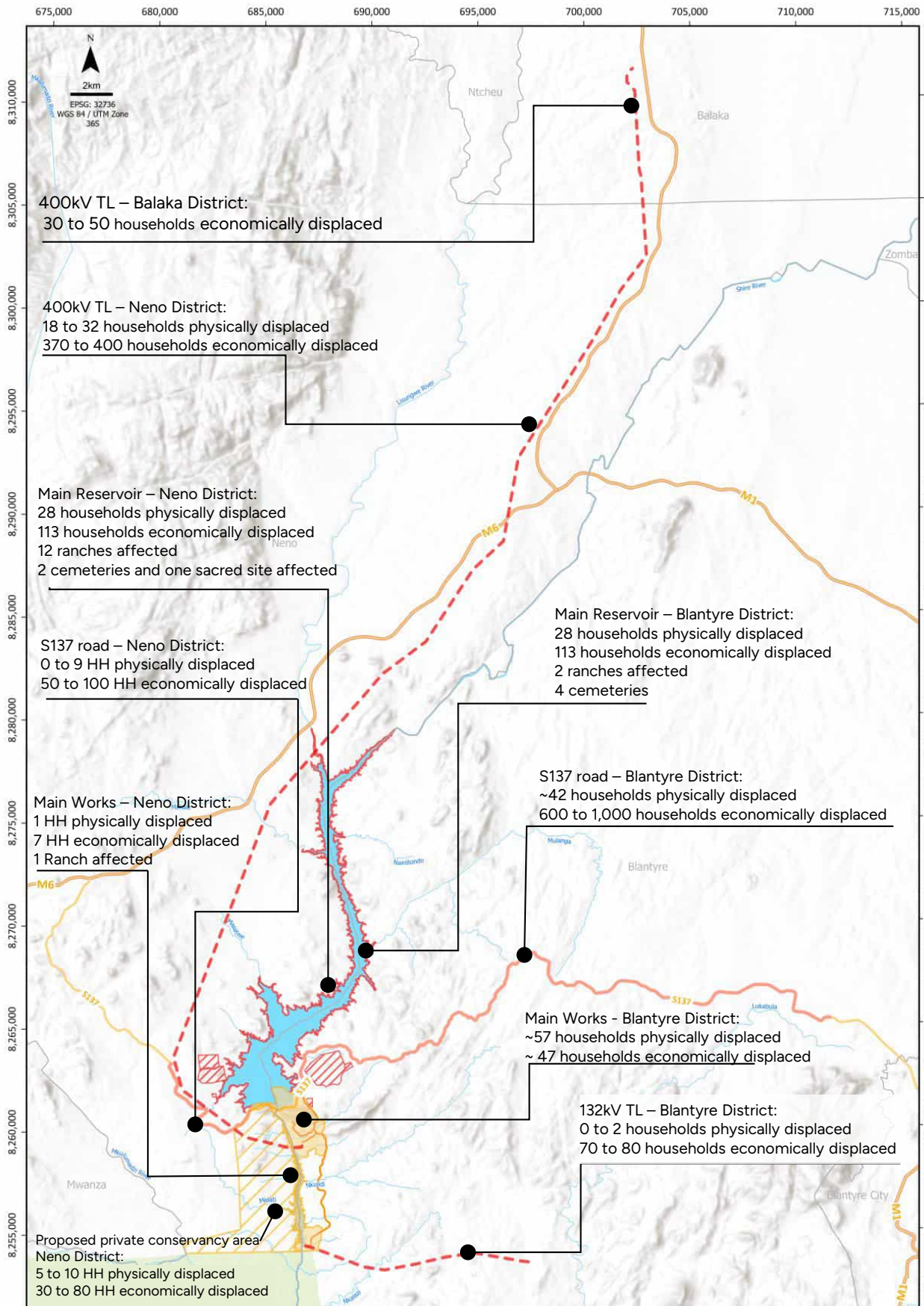
Project Components	Estimated physical displacement		Estimated Economic displacement		Other estimated impacts
	Num. of households	Num. of persons ^a	Num. of households	Num. of persons ^a	
Main Works Area	58 households	About 300 persons	54 households and 1 ranch affected	About 290 persons	
Main Reservoir	41 households	About 220 persons	471 households and 14 Ranches or commercial farms affected	About 2,500 persons	<ul style="list-style-type: none"> • 6 cemeteries and one sacred site affected • 2 community boreholes will be flooded
S137	42 to 51 households	About 220 to 270 persons	650 to 1,100 households (including about 75 businesses and shops)	About 3,450 to 5,800 persons	
400kV TL	18 to 32 households	About 100 to 170 persons	400 to 450 households	About 2,100 to 2,400 persons	<ul style="list-style-type: none"> • One church affected
132kV TL	0 to 2 households	About 0 to 12 persons	70 to 80 households	About 370 to 430 persons	
Proposed Biodiversity Conservancy Area	5 to 10 households	About 27 to 53 persons	30 to 80 households	About 160 to 430 persons	
Resettlement Sites	--	--	6 to 10 households ^b	About 40 to 60 persons	
Total all components	160 to 200 households	About 850 to 1,060 persons	1,600 to 2,200 households	About 8,500 to 11,700 persons	<ul style="list-style-type: none"> • 6 cemeteries and one sacred site affected • 2 community boreholes will be flooded • One church affected

^a The number of individuals affected is estimated using the average number of households members documented in the households socioeconomic survey performed in 2023 (i.e. 5.3, see Section 4.2.6.2). It is then rounded up.

^b The households economically displaced by the resettlement sites are also displaced by the Main Works or the Main Reservoir



Figure B: Overview of estimated potential involuntary resettlement impacts





E Eligibility and Entitlements

The Lenders’ policies define three categories of people eligible to compensation and/or livelihood restoration measures:

- Persons with formal legal rights to land lost in its entirety or in part;
- Persons who lost the land they occupy or use in its entirety or in part who have no formal legal rights to such land, but who have claims to such lands that are recognized or recognizable under national laws;
- Persons who lost the land they occupy in its entirety or in part who have neither formal legal rights nor recognized or recognizable claims to such land.

These 3 categories of affected people are considered as displaced people, either economically or physically affected.

- People are considered physically displaced if they lose their pre-Project home, defined as place of permanent residence.
- Economic displacement means “loss of assets or access to assets that leads to loss of income sources or other means of livelihood as a result of Project-related land acquisition and/or restrictions on land use”.

E.1 Cut-off date

A cut-off date for determining eligibility for compensation or other assistance is intended to help prevent encroachment by opportunistic settlers. It is most effective when it is well communicated, documented, and disseminated, including by providing clear demarcation of areas designated for resettlement. Individuals taking up residence in, or use of, the project area after the cut-off date are not eligible for compensation or resettlement assistance.

One cut-off date will be established for each of the four phased RAPs. This cut-off date will be the date of the end of the census of affected persons and the inventory of their affected land plots and assets. This is the usual practice in Malawi.

The cut-off date will be announced and disseminated in the areas covered by each phased RAPs in advance of the start of the census of affected persons:

- Public Community Sensitisation meetings will be organised in each group village affected by the Project land requirements, at least two weeks prior to the start of the census.
- In each village directly affected by the Project land requirement, the village chief will be asked to disseminate the information about the census, and a public meeting will be held in each village to explain the RAP process, the census and cut-off date principles, disclose the Project Grievance Redress Mechanism.

E.2 Entitlements

Table E below presents the entitlement matrix. The paragraphs following this table provide additional assistance measures for some specific cases.



Mpatamanga HPP – Resettlement Policy Framework

Table E: Entitlement Matrix

Type of impact	Eligible Party	Entitlements	
		Compensation in Cash <u>OR</u> Compensation in Kind	Livelihood Restoration
Loss of land	Landowners with legal land rights (both under customary law and/or with formal documentation)	<ul style="list-style-type: none"> • Compensation in cash at full replacement cost <p>OR</p> <ul style="list-style-type: none"> • The households <u>physically displaced</u> (i.e. losing their home) by the Main Reservoir and Main Works from Kambalame, Chaswanthaka and Mpindo villages will be offered in-kind replacement land on the resettlement sites. The households physically displaced in the other villages will be offered assisted self-relocation on a plot they will chose in the same village or GVH. • The Households <u>economically displaced</u> (i.e. losing land without losing their house) will be offered the possibility to choose in-kind replacement land to be identified in the same village or group village over cash compensation, <u>if</u> they are losing productive lands, and <u>if</u> they are in one of the three categories below: <ul style="list-style-type: none"> ◦ Affected vulnerable household (as defined in section 4.2.15); ◦ Losing either the entirety or a more than 30% of their land; ◦ Residing in the affected villages or group villages (i.e. non-resident affected persons will not be offered replacement lands). <p>AND</p> <ul style="list-style-type: none"> • When a land plot is only partially lost, the landowner will have the possibility to request the Project to acquire the entirety of the land plot if the remaining part is not economically viable (to be decided on a case-by-case approach) • Disturbance allowance 	<ul style="list-style-type: none"> • Livelihood Restoration support defined in Section 9 (except non-resident PAP) • Transitional support (except non-resident PAP)
Loss of access to land	Tenant of rented land	<ul style="list-style-type: none"> • No compensation for land • Advance notice to vacate the land (no less than 2 months), • Compensation for unexpired portion of the lease for the land lost • Crops, trees and structures compensated as per the entitlements below. 	<ul style="list-style-type: none"> • Livelihood Restoration support defined in Section 9 • Transitional support
	Land users without recognisable rights	<ul style="list-style-type: none"> • No compensation for land. • Advance notice to vacate the land (no less than 2 months). • Crops, trees and structures compensated as per the entitlements below. 	<ul style="list-style-type: none"> • Livelihood Restoration support defined in Section 9 • Transitional support
Decrease of land value due to permanent	Landowners with legal land rights (both under customary law and/or with formal documentation)	<ul style="list-style-type: none"> • Easement Agreement: Compensation equivalent to 10% of the value of affected lands. • Disturbance allowance 	<ul style="list-style-type: none"> • Livelihood Restoration support defined in Section 9 (except non-resident PAP)



Mpatamanga HPP – Resettlement Policy Framework

Type of impact	Eligible Party	Entitlements	
		Compensation in Cash <u>OR</u> Compensation in Kind	Livelihood Restoration
restriction of use on the land (easement in the Transmission Lines wayleave)			<ul style="list-style-type: none"> • Transitional support (except non-resident PAP)
Loss of residential structure	House owner residing in the house (Physical displacement)	<p>The affected households physically displaced will have the choice between cash compensation and in-kind compensation.</p> <ul style="list-style-type: none"> • Cash compensation: Compensation at full replacement cost, at least be sufficient to enable purchase or construction of housing of similar or better standing and quality that the house lost, and as a minimum, of housing that meets acceptable minimum community standards of quality and safety. Right to salvage materials before the land is vacated. • <u>OR</u> In-kind compensation: <ul style="list-style-type: none"> ○ For the households physically displaced by the Main Reservoir and Main Works from Kambalame, Chaswanthaka and Mpindo villages: in-kind replacement housing on one of the two resettlement sites, built by the Project. ○ For the physically displaced households in the other villages by the other Project components, assisted self-relocation and Project-organised construction of replacement housing (the affected person identifies a replacement land plot in the same village or group village, the Project pays for this land using the land rate defined, and the Project then construct a house on the replacement plot for the affected household). <p>AND</p> <ul style="list-style-type: none"> • Moving allowance • Disturbance allowance 	<ul style="list-style-type: none"> • Livelihood Restoration support defined in Section 9 • Transitional support
	Landlord of affected house (not residing in the affected house – no physical displacement)	<ul style="list-style-type: none"> • Cash compensation at replacement cost, • Compensation for unexpired portion of the lease for the residency, as applicable. • Disturbance allowance 	-
	Tenant of affected house	<ul style="list-style-type: none"> • No compensation for the structure, • Compensation for unexpired portion of the lease for the residency, as applicable. 	-



Mpatamanga HPP – Resettlement Policy Framework

Type of impact	Eligible Party	Entitlements	
		Compensation in Cash <u>OR</u> Compensation in Kind	Livelihood Restoration
		<ul style="list-style-type: none"> • Advance notice to vacate the house (no less than 2 months), • Moving allowance 	
Loss of uninhabited private structures, such as commercial structures, churches, mosques, and/or ancillary structures not used as housing (foundations, uncompleted buildings)	Structure owner	<ul style="list-style-type: none"> • Compensation at full replacement cost • Right to salvage materials before displacement occurs. • Disturbance allowance 	-
Loss of annual crops, perennial crops and trees	Landowner cultivating/owning crops and trees	<p>Trees will be compensated at full replacement cost. The Project will schedule the land acquisition process to avoid or minimise as much as possible impacts on crops. When and where it will not be possible to avoid impacts on crops, the following principles will apply:</p> <ul style="list-style-type: none"> • Compensation at full replacement cost for crops and trees • No less than 2 months advance notice to vacate the land and right to harvest the crops before the date the land shall be vacated. • Compensation at full replacement cost for improvements on the land made by the landowner • Disturbance allowance 	<ul style="list-style-type: none"> • Livelihood Restoration support defined in Section 9 • Transitional support
	Tenants or sharecroppers cultivating/owning crops and trees	<p>The Project will schedule the land acquisition process to avoid or minimise as much as possible impacts on crops. When and where it will not be possible to avoid impacts on crops, the following principles will apply:</p> <ul style="list-style-type: none"> • Compensation at full replacement cost, allocation of compensation according to the arrangement (formal contract or informal arrangement) between the landowner and the tenant or sharecropper. 	<ul style="list-style-type: none"> • Livelihood Restoration support defined in Section 9 • Transitional support



Mpatamanga HPP – Resettlement Policy Framework

Type of impact	Eligible Party	Entitlements	
		Compensation in Cash <i>OR</i> Compensation in Kind	Livelihood Restoration
		<ul style="list-style-type: none"> No less than 2 months advance notice to vacate the land and right to harvest the crops before the date the land shall be vacated. Compensation at full replacement cost for improvements on the land made by the tenant / sharecroppers Disturbance allowance 	
Loss of business revenue	Immovable and formal businesses owners (Including commercial farms or ranches)	<ul style="list-style-type: none"> In addition to the compensation for the loss of land, structures and/or crops/trees, as compensation for the loss of income for the time required to re-establish the business, one-off allowance equivalent to 3 months of their average net revenue <i>to be based on the documented average net income for the past 2 years.</i> 	-
	Movable and informal businesses owners	<ul style="list-style-type: none"> In addition to the compensation for the loss of land, structures and/or crops/trees, as compensation for the loss of income for the time required to re-establish the business, one-off allowance equivalent to 3 months of the average net revenue <i>estimated for the business category, based on a business survey.</i> 	-
Loss of income due to loss of employment	Employees or regular workers of the businesses (including ranches workers)	<ul style="list-style-type: none"> One time allowance equivalent to 3 months minimum wage income in rural areas³ to cover the time needed to find another employment. 	-
Loss of Community Assets	Communities losing assets or structures	<ul style="list-style-type: none"> No Compensation in Cash Replacement in-kind or relocation of community assets and structures (such as schools, borehole). 	-
Restriction or loss of access to natural resources	Communities losing access to natural resources – all components	-	<p>Collective Livelihood Restoration Measure for all Phased RAPs</p> <p>The following collective livelihood restoration measure will apply to all affected villages, including those affected by the Early Works RAP and the Transmission Lines RAP:</p> <p>[LR 8] Collective support to improve agricultural production, one measure</p>

³ As defined by the Ministry of Labour, the minimum rural wage is MK 90,000 per month as of Feb. 2024 (Ministry of Labour 2024). This amount will be updated if and as required during the phased RAPs.



Mpatamanga HPP – Resettlement Policy Framework

Type of impact	Eligible Party	Entitlements	
		Compensation in Cash <u>OR</u> Compensation in Kind	Livelihood Restoration
			<p>possible per village, to be chosen amongst the three measures below:</p> <ul style="list-style-type: none"> • Farmer Field Schools, trainings on improved fallow and demonstration plots, OR • Support to development of small agro-processing units, OR • Support to development of micro-businesses producing agricultural •
	<p>Villages affected by restriction of access to the Main Reservoir and Regulating Reservoir</p> <p>In Blantyre District:</p> <ul style="list-style-type: none"> • In GVH Kaliati, Lisangwi, Inosi, Chilaulo, Chaswanthaka, Mpindo, Divala and Mbwinja villages, • In GVH Mzigala, Mzigala and Mwazilinga villages, • In GVH Namputu, Chimphanda, Baluwa, Chikira, Namputu, Kwapita and Chinkwinya villages, <p>In Neno District:</p> <ul style="list-style-type: none"> • In GVH Feremu, July, Feremu, Andivuta, Kambalame and Nkhwali villages, • In GVH Nsalawatha, Petulo and Jonathan villages, and • In GVH Ngwenyama, Nkoka, Liyenda villages. 	-	<p>In addition of the collective livelihood restoration measures above:</p> <ul style="list-style-type: none"> • [LR 9] Support to sustainable and green charcoal production • [LR 10] Restoration of access to water for domestic and drinking purposes • [LR 11] Restoration of livestock access to water • [LR 12] Support to develop small scale irrigation • [LR 13] Support to fisheries activities for affected communities around the Main Reservoir
Loss of Grave	Grave rightsholder / custodian	<ul style="list-style-type: none"> • No compensation in cash • The Project will cover all costs for grave relocation 	-
Loss of sacred site	Sacred site rightsholders / custodians	<ul style="list-style-type: none"> • No compensation in cash • The Project will cover all costs for necessary ceremonies and rituals 	-
All impacts	Vulnerable households	<ul style="list-style-type: none"> • Compensation for the loss of land and/or assets (structures, trees, crops) as defined above, plus additional livelihood restoration support. 	<p>Additional Assistance and Livelihood Restoration support for Vulnerable Households (See Section 6.2.4)</p> <ul style="list-style-type: none"> • [LR 14] Assistance to land-clearing and/or preparation of agricultural fields



Mpatamanga HPP – Resettlement Policy Framework

Type of impact	Eligible Party	Entitlements	
		Compensation in Cash <u>OR</u> Compensation in Kind	Livelihood Restoration
			<ul style="list-style-type: none">• [LR 15] Provision of Small Livestock (Goat or sheep)• [LR 16] Support to Develop Beekeeping
<p>Note: Entitlements are presented by category of loss and category of affected person. One affected household may qualify for entitlement in more than one category (for example, one household may lose one land plots they own, and at the same time losing access to another land plot they are renting, while losing trees and crops on both land plots. Some households are physically displaced and losing agricultural land at the same time).</p>			



a Acquisition of Orphan Lands

Orphan lands are unacquired parts of land parcels which are left unusable or undevelopable (either temporarily or permanently) as a result of the Project. When residual non-affected sections of a plot become inaccessible, unusable or economically unviable after acquisition, the totality of the affected land plot will be acquired if the owner so wishes. A residual land plot will be considered unusable or economically unviable when its size (too small), shape or topography are such that the remainder cannot be cultivated or physically accessed, and/or the existing activities that were conducted on the entire land plot cannot be continued after the land acquisition. This will be decided on a case-by-case basis through discussion with the right-holders of the unacquired parts of land parcels.

b Livelihood Restoration

Livelihood restoration support will be offered to all affected households. Transitional assistance will be provided as part of the livelihood restoration activities.

c Gender

In the Project affected areas surveyed so far, the land tenure is predominantly organised through matrilinear systems. There are however patrilinear practices or mixed systems in place in some places. Despite the prevalence of matrilinearity in the Main Reservoir and Main Works area, women make less than half of the affected landowners identified during the surveys performed in November and December 2023 (43% or 290 out of 666)

Even in villages where matrilinearity prevails, gender inequalities can be translated into risks of land grabbing or tentative of appropriation of compensation by male members of the family (for instance male 'nkhoswe' or male siblings). The following measures will be implemented to minimise and mitigate these risks:

- Gender specific measures are defined for the consultation with affected households during the phased RAPs.
- MHPL will recruit a Gender-Based Violence (GBV) service provider to manage potential cases of GBV, provide support to victims. This GBV Service provider will be presented to the affected communities during the public consultations as part of the phased RAPs process.
- The Grievance Redress Committees will be trained on GBV (the Grievance Redress Committees already established in 2023 have already been trained), and on potential gender-related risks for the compensation process (such as land grabbing by men or misuse of households' compensation by men).

In addition, the following measures will be implemented during the interaction with affected households during the phased RAPs:

- To ensure women participate in the compensation process and are aware of the compensation provided to the households, the individual disclosure of the compensation packages will be done during one meeting with both spouses and all adults members of the households (including daughters and sons).
- It will be offered to affected households to establish compensation agreements in the names of both spouses or heads of household,
- The Project will ensure that both spouses are informed of the household's entitlements, compensation amount and payment process during individual meetings.
- Training on the sustainable management of received compensation will be provided to affected households. This training will include women-only sessions, as well as sessions where both spouses will participate together.

F Valuation Methodology

Replacement Cost will be used as the compensation principle. A high-level market survey was performed in January 2024 to define the Valuation methodology to be used and to estimate the



compensation budget. During the preparation of each phased RAP, a valuation exercise will be performed, and compensation rates will be updated as necessary, based on market surveys.

The affected households' livelihoods are predominantly land-based, as indicated in section 4.2. Therefore, the project will offer a choice between in-kind compensation and cash compensation to compensate the loss of land and housing for physically and economically displaced households.

F.1 Approach for compensation in kind for land and housing.

a Physically displaced households

For physically displaced households, two approaches will be proposed:

- For the households physically displaced by the Main Reservoir and Main Works from Kambalame, Mindo and Chaswanthaka villages: **in-kind replacement land and housing** will be offered as in-kind compensation **on the resettlement sites** (see Section 8.1.1). The Chaswanthaka and Kambalame resettlement sites are located in the two villages where a whole part of the village will be impacted by physical displacement (more than 30 households physically displaced in Chaswanthaka village, about 30 in Kambalame village). About 10 to 25 households could also be physically displaced by the Main Works in Mpindo village. The Project will identify a third resettlement site for Mpindo village, as indicated in section 8.1.
- Apart from Chaswanthaka, Mpindo and Kambalame villages, physical displacement impacts will (i) either be limited to a small number of households per village for the Main Reservoir and Main Works (1 to 6 households, see Table 36) (ii) or be caused by linear components (S137 road and the two transmission lines). For these other physically displaced households, **assisted self-relocation** will be offered as in-kind compensation. This assisted self-relocation will include the steps outlined below:
 - Identification of suitable replacement land in the same village or GVH with the affected household. The replacement land should respect several criteria: productive potential and locational advantages, minimum and maximum size (0.1ha for residential area for households physically displaced, 0.5ha as a minimum for farming lands, for a household of 2 persons, then 0.2ha per person, with 5 ha as a maximum for replacement farming lands). The replacement land could be from available un-used community land or privately used land under customary tenure.
 - Acquisition of the replacement land by the Project, limited to 0.1ha for residential land and a maximum of 5 ha for farming lands,
 - Construction of replacement housing on the replacement land by the Project,
 - Hand-over of the replacement housing and land to the affected household, with security of tenure.

b Economically displaced households

For economically displaced households losing land, a choice between cash and in-kind compensation will be offered only for cultivated and productive lands. Unused lands will be compensated in cash. The process will be the same as the assisted self-relocation outlined above, without the construction of replacement housing.

c Identification of Replacement Lands

The identification of replacement lands for physically and economically displaced households will be performed village by village as follows:

- In the villages affected by the Main Works and Main Reservoir: from the start of the Public Disclosure of this RPF up to the start of the preparation of the Main Works RAP and Main Reservoir RAP,
- In the villages affected by the S137 road works: from the start of the preparation of the Early works RAP,



- In the villages affected by the 400kV and 132kV Transmission Lines, from the start of the preparation of the Transmission Lines RAP.

It must be noted that replacement lands may be limited or not available in some villages. The assessment of the feasibility of this approach will be done village by village through a participatory process.

Community structures and government owned structures will be re-built and replaced in-kind.

F.2 Compensation in Cash

Replacement cost will be the basis for cash compensation, following the methods outlined below:

- Compensation for land will consider 2 land categories: (i) customary land used as agricultural or residential land, and (ii) private lands (lands under leasehold or freehold). Compensation rates are estimated based on the profit method for the customary lands, and on the Comparable Sales Method for private lands.
- Private structures will be compensated at replacement cost, based on a rate per square meter for each category of structure,
- Timber trees will be compensated based on the type of tree (indigenous or exotic) and trunk base diameter.
- Fruit trees and perennial crops: Seedlings of productive fruit trees (mango, tangerine) or perennial crops (banana, sugarcane) will be compensated at seedling price. Replacement cost for productive fruit trees or perennial crops is defined as lost revenue until a new planted seedling will reach its highest productivity state (age).
- Annual or Seasonal Crops: The Project will schedule the land acquisition process to avoid or minimise as much as possible impacts on crops. When and where it will not be possible to avoid impacts on crops, impacted crops will be compensated at the prevailing market value of the crops irrespective of their level of maturity at the time of the asset inventory.
- Loss of business revenue:
 - For immovable and formal businesses (including ranches), in addition of compensation for land and structures, the business owners will receive a one-off allowance equivalent to 3 months of their average net revenue *to be based on the documented average net income for the past 2 years*.
 - For movable and informal business, the owners will receive a one-off allowance equivalent to 3 months of the average net revenue estimated for the business category, based on a business survey.
- The employees of the affected businesses will receive for loss of employment revenue a one-time allowance equivalent to 3 months of the minimum wage income in rural areas.
- In addition to the compensation above, a disturbance allowance of 20% of compensation for land and assets will be calculated.
- Households physically displaced will also receive a moving allowance of 250 USD.

G Assistance to resettlement

Assistance to resettlement will be provided through the following activities:

- Provision of in-kind replacement land and housing to the affected households choosing in-kind compensation over cash compensation,
 - On the resettlement sites for physically displaced households of Kambalame, Mpindo and Chaswanthaka villages,
 - Through assisted self-relocation for other physically displaced households and economically displaced households losing farmlands they are cultivating.
- Scheduling the timing of the relocation to minimise impacts on farming activities and support the preparation of replacement lands for farming activities, and



- Psychosocial support to the displaced household to help them adjust to the resettlement process.
- In kind assistance will also be provided to vulnerable households physically displaced to move their belongings during their relocation.

H Livelihood Restoration

Livelihood restoration support will be offered to all affected households. The livelihood restoration measures include:

- Individual (household-level) livelihood restoration support:
 - [LR 1] Support to open a bank account
 - [LR 2] Training for sustainable management of compensation
 - [LR 3] Transitional Support
 - [LR 4] In-kind Provision of Agricultural Inputs to Restore Crops Production
 - [LR 5] Provision of one bicycle per affected household
 - [LR 6] Support to Development of Off-Farm Economic Activities
 - [LR 7] Preferential Hiring and Skills Training
- Collective (village-level) livelihood restoration support for all phased RAPs:
 - [LR 8] Collective support to improve agricultural production, one measure possible per village, to be chosen amongst the three measures below:
 - Farmer Field Schools, trainings on improved fallow and demonstration plots, OR
 - Support to development of small agro-processing units, OR
 - Support to development of micro-businesses producing agricultural inputs.
 - ,
 - ,
- Collective (village-level) livelihood restoration support for villages affected by the Main works and Main Reservoir:
 - [LR 9] Support to sustainable and green charcoal production,
 - [LR 10] Restoration of access to water for domestic and drinking purposes,
 - [LR 11] Restoration of livestock access to water,
 - [LR 12] Support to develop small scale irrigation,
 - [LR 13] Support to fisheries activities for affected communities around the Main Reservoir,
- Livelihood restoration measures for vulnerable households:
 - [LR 14] Assistance to land-clearing and/or preparation of agricultural fields,
 - [LR 15] Provision of Small Livestock (Goat or sheep), and
 - [LR 16] Support to Develop Beekeeping.

I Implementation Arrangements

The proposed Mpatamanga HPP is being developed by Mpatamanga Hydro Power Limited (MHPL). On 24th August 2022, the Government of Malawi signed an agreement to progress the development of the Mpatamanga Project as a Public Private Partnership (PPP). This agreement was signed with a private sector consortium comprised of Electricité de France International (fully owned by EDF; a French multinational electric utility company owned by the French Government) and SN Malawi BV whose shareholders are SCATEC (a Norwegian publicly listed company), BII and Norfund.

The Government of Malawi has established a Steering Committee, a Task Force Committee and a Project Implementation Unit so support the development of the Mpatamanga project.

The joint EDFI-SN Malawi BV Consortium has developed Mpatamanga Hydro Power Limited (MHPL) as the Project Company that will lead the development of the Project, working in close



coordination with the GoM Project Implementation Unit (PIU) and the IFC. In the future it is expected the GoM (represented by EGENCO) and IFC will become MHPL shareholders.

The specific roles and responsibilities of the MHPL and the GoM will be described in an Implementation Agreement to be signed before Financial Close along with other project and financing agreements. The main principles of this Implementation Agreement related to the land acquisition, compensation and resettlement process are outlined below.

- The land acquisition and compensation process is managed jointly by MHPL and the GoM,
- All compensation (in cash or in-kind) will be paid by the GoM, using funds from the World Bank,
- The GoM will develop the resettlement assets (land titling plan, levelling, access roads, lighting, water supply, replacement houses), as this development is necessary for the provision of in-kind compensation (i.e. replacement land and replacement housing) and the community assets and structures (such as schools, boreholes) to be rebuilt. The GoM, through the Ministry of Energy, delegated in July 2024 to MHPL acting as Owner's Engineer the management of the construction of the resettlement sites, the replacement housing and the public infrastructures affected by the Project. This includes: planning, designing, procurement of construction contractor(s), and supervision of the construction works.
- The livelihood restoration program will be funded and implemented by MHPL.

The lands needed for the Project will be acquired by the Government. The Government will retain the ownership of these lands, and then grant to MHPL the following land rights:

- For the Main Dam reservoir lower part (the part close to the Main Dam and needed for operation activities), and for all Project permanent facilities required for operation in the Main Works areas (dams, power stations, operator's village): exclusive right of access and use for the term of the Power Purchase Agreement (with access authorised to the Project's roads for the households residing along them),
- For the Transmission Lines and all construction facilities in the Main Works areas: exclusive right of access and use up to the total demobilisation of the EPC contractors and subcontractors, the land for the Pylons will then be transferred to ESCOM.
- For the Main Dam Reservoir (except for the 500m area immediately upstream of the main dam and the 500m stretch downstream of the end of the tail or the main reservoir, from Tedzani HPP tailrace): non-exclusive right of access and use for the term of a Power Purchase Agreement
- For the Regulating Dam Reservoir: on the entire Neno bank, exclusive right of access and use for the term of the Power Purchase Agreement, On the Blantyre bank, exclusive right of access and use for the term of the Power Purchase Agreement between the main powerhouse outlet and the minimum operating level (MOL) of the regulating reservoir, and non-exclusive right of access and use for the term of a Power Purchase Agreement for the other areas of the Regulating Reservoir Banks on Blantyre side.
- For the lands requirement for the S137 road works: non-exclusive right of access and use up to the taking-over of the Public Access Roads by the Government.

Section 10 of the RPF provides the distribution of institutional responsibilities for the phased RAP preparation and implementation.

J Information Disclosure and Consultation

Several rounds of consultations and engagement with the local communities and institutional stakeholders were undertaken by the Project between 2016 and 2021. Since September 2022, regular engagement with the local communities in the Main Reservoir and Main Works areas is performed by the GoM PIU and MHPL (MHPL 2023a):

- Monthly community meetings: Conducted in each of the five Group Villages directly impacted by the Main Dam facilities (as identified during the 2020-2021 resettlement surveys).



- Quarterly stakeholder meetings: Hosted in Blantyre and Lilongwe and including National and regional government ministries, departments, and agencies (MDAs); District Councils (Project-affected districts and potentially project affected districts); national, regional and district Non-Governmental Organisations (NGOs); non-community-based PAPs; Public, Private and Public Private Partnership (PPP) entities and programs; other Hydro Power schemes in the Project area.
- Weekly presence of MHPL Grievance Officer and Community Liaison Officers (CLOs) in directly affected Group Villages to collect feedback submitted via MHPP Suggestion boxes.

A round of public consultation meetings has been organised in July 2024, to present the results of the 2024 E&S studies, present the updated Project status and schedule. The Project disclosed the impacts and mitigation measures defined in the 2024 ESIA, including the approach for the land acquisition, compensation, resettlement and livelihood restoration. This round of public consultation was organised at the group-village level.

The following documents will be made publicly available on MHPL website:

- The RPF in English,
- The executive Summary of the RPF in English and in Chichewa,

A series of public disclosure meetings will then be organised to disclose the Draft RPF in the Project area. These activities will be organised and coordinated with the 2024 ESIA Public Disclosure process.

All the information and disclosure material listed above will be anonymised. Individual personal information on project affected persons or their compensation packages will not be publicly disclosed. Such information shall remain confidential.

No individual disclosure of any information (compensation packages) will be done during the public disclosure of the Draft RPF. Individual engagement with affected persons and households will happen during the phased RAPs.

After the public disclosure, the Draft RPF will be finalised, to include and document feedback obtained from the affected communities. A Guide on Land Acquisition and Compensation (GLAC), in English and in Chichewa, will also be prepared. This GLAC will summarise the valuation, compensation and resettlement process for the affected persons, and outline the principles applied to all phased RAP. The resettlement process will be phased over several years, a first GLAC will be prepared with the final RPF. It will then be updated for each RAP, with updated compensation rates as needed. The GLAC will be distributed to the PAP during each phased RAP preparation. The report includes in its section 11 the list of disclosure and consultations activities to be undertaken for the RPF and then during the preparation and implementation of each of the phased RAPs.

K Grievance Redress Mechanism

The Mpatamanga HPP Grievance Redress Mechanism (GRM) is defined in the Project Stakeholder Engagement Plan (MHPL 2023a). RAP-related grievances will be managed through the Project GRM. This GRM is described in Section 12 of this report. The Project GRM has the objective of helping third parties to avoid resorting to the judicial system for as many grievances as possible. This mechanism includes three successive tiers of extra-judicial amicable grievance review and resolution: (i) the first is the Group Village Grievance Redress Committee, (ii) the second being the Project Grievance Redress Committee and (iii) the third is a Grievance Review Board. Complainants can resort to judiciary channels at any time. The three-tier process does not deter them from doing so.

L Schedule

The construction activities schedule is expected to extend over about 54 months, as follows (EDF 2024b):



- The construction activities will start with a first sequence of ‘early works’ with the preparation of the Chaswantaka and Mpindo resettlement sites and with the upgrade of the S137 road in Blantyre District in 2025,
- The main works will start in 2026, with (i) the construction of the main project facilities (Main Dam and Main Powerhouse, Construction camp and other construction facilities, Service Road, Regulating Dam), (ii) the new section of the S137 road in Neno District, (iii) the preparation of the Kambalame resettlement site and (iv) the acquisition and fencing of the proposed biodiversity conservancy area on the Neno side between the Main Dam and the Regulating Dam,
- The Transmission Lines construction would then start in 2027,
- Finally, the impoundment of the Main Reservoir would start in 2029,
- Each powerhouse (main powerhouse and regulating dam powerhouse) will be commissioned unit by unit from the fourth quarter of 2029 to the first semester of 2030.

It is envisaged to prepare several Resettlement Action Plans instead of one only RAP for the entire project for the following reasons:

- The detail design of some components – which will define the final land requirements – may come in different periods. For instance, the detail design of the transmission lines may come after the detail design of the main works.
- Phasing the RAPs will also help avoid delays between the cut-off date (defined by the census and valuation of affected assets) and payment of compensations and then the actual start of construction activities across various Project components.

At the time of writing, it was envisaged to organise the Mpatamanga HPP land acquisition, compensation and resettlement process into four main phases, articulated with the schedule of Project’s construction activities. Four separated Resettlement and Livelihood Restoration Plan will be prepared, as follows:

- Phase 1: Early Works RAP for the S137 access road refurbishment work in Blantyre District. It will also include the acquisition of the Chaswanthaka and Mpindo resettlement sites. (preparation planned in 2024, and implementation in 2025)
- Phase 2: Main works RAP: Area covering all project main facilities, as well as construction facilities, and the regulating reservoir area. Any area located in the main reservoir but to be used for construction facilities will also be acquired at that time (upstream coffer dam and diversion tunnel works). The Main works RAP will also include the new sections of the S137 road in Neno district and the Kambalame Resettlement site. (preparation planned for 2025, and implementation in 2025-2026)
- Phase 3: Transmission Lines (RoW 400kV TL and 132kV TL) (preparation planned for 2025, and implementation in 2026)
- Phase 4: Main reservoir. (preparation planned for 2026-2027, and implementation in 2027-2028).

This general approach may be modified if and as necessary to reflect any change in the construction schedule. It may also be adapted based on the feedback received from the affected communities during the public disclosure process.

M Monitoring and Evaluation

The monitoring and evaluation activities are synthesised in Table F below.

Table F: Summarised monitoring and evaluation activities

Monitoring and evaluation activities	Reporting	Frequency / schedule
Internal monitoring	Monitoring on phased RAPs implementation from MHPL Social Team to Mpatamanga Project Management (MHPL and PIU)	Monthly during phased RAP implementation, until completion report (at least two years after payment of compensation, and no longer than 3



Monitoring and evaluation activities	Reporting	Frequency / schedule
		years after displacement of affected persons)
	Quarterly RAP implementation monitoring reports, to Mpatamanga Project Management (MHPL and PIU) and Lenders	Quarterly during RAP implementation, until completion report (at least two years after payment of compensation, and no longer than 3 years after displacement of affected persons)
External monitoring	Six-monthly reports from witness NGO to Mpatamanga Project Management (MHPL and PIU) and Lenders	Six-monthly, during RAP implementation, until completion report (at least two years after payment of compensation, and no longer than 3 years after displacement of affected persons)
Internal Close-out report	For each of the four phased RAP: one close-out report from MHPL Social Team unit to Lenders.	For each of the four phased RAP: at least one year after payment of compensation, and no longer than 3 years after displacement of affected persons. <ul style="list-style-type: none"> • The first three internal close-out reports for the Early Works RAP, Main Works RAP and Transmission Lines RAP will conclude on the completion of each RAP. • The fourth internal close-out report for the Main Reservoir RAP will conclude on the completion of all activities and achievement of objectives for the Main Reservoir RAP, but also for the three other RAPs
Independent Completion audit	For each of the four phased RAP: one completion audit report from independent consultant to Mpatamanga Project Management (MHPL and PIU) and Lenders	After submission of the internal close-out reports to the Lenders. As for the internal close-out reports, there will be 4 independent completion audit reports.

N Funding and Estimated Budget

N.1 Funding

The Government of Malawi will fund the following activities of the phased RAP:

- Payment of all compensations in cash and compensation in kind defined in Sections 5.5 and 7,
- Assistance to resettlement:
 - Development of the resettlement sites (MHPL acting as Owner Engineer for the GOM),
 - Assisted self-relocation,
 - In-kind support to relocation for vulnerable households physically displaced.
- Establishment and operation of the Resettlement Working Groups (first-tier and second-tier),
- Implementation costs for the Government-funded Activities, including disclosure of the compensation principles and schedules, payment of compensation, as well as the Government PIU participation to stakeholder engagement, grievances management and monitoring.

MHPL will fund the following activities of the phased RAP:

- The Psychosocial support defined in section 8.4,



- All livelihood restoration measures defined in Section 9,
- Monitoring and Evaluation activities defined in Section 14,
- Implementation costs for the activities funded by MHPL, but also for MHPL participation in the disclosure of the compensation principles and schedules, payment of compensation participation to stakeholder engagement, and grievances management.

N.2 Estimated Budget

The estimated budget for the preparation and implementation of the four phased RAP is under discussion. This estimated budget will be distributed amongst the four phased RAPS:

- Early Works RAP, including the development of the Chaswanthaka and Mpindo resettlement sites,
- Main Works RAP, including the development of the Kambalame resettlement site and the acquisition of the land for the proposed conservancy area,
- Transmission Lines RAP, including the 400 kV and 132 kV transmission lines, and
- Main reservoir RAP.

This estimated budget will be included in the final version of the Resettlement Policy Framework (RPF).

The actual budgets for each of the four phased RAPs will be prepared in alignment with the eligibility and entitlements principles defined in this RPF, during the preparation of each phased RAP, as indicated in Section L – Schedule.



1 Introduction

1.1 Project Overview

The proposed Mpatamanga hydropower Project (the Project) is being developed by Mpatamanga Hydropower Project Limited (MHPL) and the Government of Malawi under a Public Private Partnership (PPP) framework. The Project is located in the Southern Region within the Blantyre and Neno Districts, on the Shire River, the largest river in Malawi, between the existing Tedzani and Kapichira hydropower schemes. A main dam (55 m high) on the Shire River will create a 20.2 km² reservoir at full supply level, with a total storage volume of 272 million m³. Water from the main reservoir will drop by approximately 66 m to a 301 MW powerhouse located 1 km downstream of the main dam. The water discharged from the main powerhouse into the Shire River (installed capacity of 550m³/s) will then flow into a 1.35 km² and 11.15 million m³ regulating reservoir (at full supply level) created by a 45 m high regulating dam located 6 km downstream on the Shire River. Water from the regulating reservoir will be discharged into the Shire River through a 57.5 MW powerhouse located at the foot of the dam (installed capacity of 388 m³/s). From the upper part of the main reservoir to the regulating dam, the Project footprint will extend over 29 km of river length. No fish pass is planned to be built and operated on either dam. Figure 1 maps the Project facilities.

The project is expected to contribute to reducing energy shortages and enhancing energy security in Malawi. The 301 MW plant with its main reservoir storage is designed to provide much needed energy during peak demand hours of the day and overall grid stability with its ability to ramp up or down production to meet actual demand. The targeted average annual energy production is 1,544 GWh (MHPL, 2023).

The electricity generated by the Project will be delivered to the grid through two transmission lines: a 63 km long 400 kV transmission line from the main powerhouse to the existing Phombeya sub-station, and an 10.5 km long 132 kV transmission line that will connect the regulation dam powerhouse to the existing Tedzani-Kapichira Transmission Line (Loop-In-Loop-Out).

Part of the S137 road - which links Blantyre to Mwanza - will be flooded by the future Mpatamanga main reservoir. A new section of the S137 road will be built by the Project. The future Chileka-Mwanza/M6 S137 road will be ~46 km long and out of these, 12 km will be newly constructed by the Project to bypass the main dam and the reservoir, and about 34 km will be upgraded on the Blantyre side.

For the operation phase, a permanent operators' village will be built close to the main powerhouse, to accommodate the operators of the two dams. A new 6 km long service road will be built by the Project from the main powerhouse to the regulating dam. The workforce will be accommodated in one construction camp during the construction period.

A four-year construction schedule has been estimated for the Project, starting in 2026. The powerhouses' commissioning should take place in 2030. Non-physical works such as geotechnical investigations are ongoing. With early works of construction of the camps, laydown areas, access roads are planned to be executed from 2025.

The Project is to be developed on a build-own-operate-transfer (BOOT) basis by MHPL and the Government of Malawi (GoM). MHPL is the Project Company. MHPL will be responsible for constructing and operating the Project for a period of 30 years, after which time it will be transferred to GoM for continued operation and maintenance. An Implementation Agreement, which stipulates the responsibilities of MHPL and GOM, will support the BOOT agreement. The BOOT approach allows GOM to be protected from construction costs and operating risk, while at the same time allowing it to benefit significantly from a 30% share in the Project through



EGENCO⁴. The remaining 70% of MHPL is or will be owned by EDF (27.5%), SCATEC (14%) and its joint venture partners British International Investment (6.75%) and Norfund (6.75%), and the IFC (15%).

Finance will be provided by EDF, Scatec, the IFC, and the Government of Malawi, using funds from the World Bank Group, as well as debt from development finance institutions, to be co-ordinated by the IFC.

1.2 Why a Resettlement Policy Framework?

The following studies were performed for the Project:

- Between 2015 and 2018 a first feasibility study was performed,
- An Environmental and Social Impact Assessment (ESIA) was performed in 2018 (Agri-Pro 2018). It was not formally submitted to the environmental authorities. To address stakeholder’s concerns raised during this ESIA process, a regulating dam was added to the Project.
- Additional hydraulic studies and environmental flows studies were performed in 2018-2019, aiming to fill gaps not covered in the original ESIA.
- In 2019, a Preliminary ESIA was prepared with a Regulating Dam. This was the first impact assessment considering the Project with a regulating reservoir. A draft Resettlement Policy Framework (RPF) was also prepared (Multiconsult 2019).
- In 2020 and 2021, a new draft RPF was prepared, and the census and surveys of affected households were initiated (Mott MacDonald 2021). However, they were not completed. The preparation of the RAP stopped, and the data collected was not analysed.
- At the end of 2022 and early 2023, the Project has selected Consultants to update or finalise the previous E&S studies. The studies prepared in the course of 2023 and 2024 are:
 - An ESIA and ESMMP,
 - A Biodiversity Action Plan,
 - A Cumulative Impact Assessment, and
 - A Resettlement Policy Framework (this report).

This RPF is the Safeguard document assessing involuntary resettlement impacts as per the World Bank and IFC policies. It is prepared as part of the 2024 Environmental and Social Studies needed for the World Bank and other Project’s Lenders’ appraisal of the Mpatamanga HPP.

The Mpatamanga HPP is preparing this Resettlement Policy Framework (RPF) instead of a full Resettlement Action Plan (RAP). To prepare a full RAP, the Project needs to define a cut-off date when the census of affected persons and the inventory of affected assets is completed. When the E&S studies were initiated in 2023, establishing such cut-off date during the preparation of the 2024 E&S studies was not appropriate for the following reasons:

- At the time of preparing this RPF, the ‘Basic Design’ or ‘preliminary design’ of the Project components was being finalised. The final Project’s land requirements were not available to initiate the land acquisition and compensation process. The ‘Detailed Design’ will be prepared when the EPC Contractors will be selected in 2025. Some of the Project components footprints will be optimised during the Detailed Design. This optimisation will be used as much as possible to minimise involuntary resettlement impacts.

⁴ Electricity Generation Company (EGENCO) was established in 2016 with the mandate of generating electricity in Malawi. The Company was formed following the unbundling of the Electricity Supply Corporation of Malawi (ESCOM) into two separate institutions: one for generating electricity (EGENCO) and another one for transmission and distribution (ESCOM). EGENCO currently operates four hydropower stations: Nkula, Tedzani, Kapichira, and Wowwe. The Company also operates thermal power plants in Lilongwe, Mzuzu, and Mapanga, Blantyre. Overall, EGENCO has a total installed generation capacity of 442 MW, with 391 MW from hydropower plants and 51 MW from standby diesel power plants (EGENCO, 2023).



- The funds for the payment of compensation and development of the resettlement sites were not yet available. The Government of Malawi will fund the compensation for the affected persons and the preparation of resettlement sites using funds provided by the World Bank. To agree on this funding, this RPF is needed as part of the E&S safeguards documents appraised by the World Bank. It means that the fund to pay compensation to the affected persons will only be available after this RPF has been appraised and approved by the World Bank.

As the Mpatamanga HPP is a large and complex project, it was decided to phase the land acquisition, compensation and resettlement process. Several separated Resettlement Action Plans (RAP) will be prepared, as follows:

- Phase 1: Early Works RAP for the S137 access road refurbishment work in Blantyre District. It will also include the acquisition of the Chaswanthaka and Mpindo resettlement sites.
- Phase 2: Main works RAP: Area covering all project main facilities, as well as construction facilities, and the regulating reservoir area. Any area located in the main reservoir but to be used for construction facilities will also be acquired at that time (upstream coffer dam and diversion tunnel works). The Main works RAP will also include the new sections of the S137 road in Neno district and the Kambalame Resettlement site.
- Phase 3: Transmission Lines (RoW 400kV TL and 132kV TL), and
- Phase 4: Main reservoir.

This RPF is prepared to assess potential involuntary resettlement impacts, clarify resettlement principles, organisational and implementation arrangements to be applied to the phased RAP and during project implementation.

1.3 Overview of Methodology

Below is an outline of the methodology used for this RPF:

- The incomplete data collected in 2020 and 2021 was reviewed and used as a starting point to prepare subsequent investigations.
- For inclusion in this RPF:
 - Available literature on the socioeconomic context was reviewed (see Annex 1 – References)
 - Qualitative investigations were conducted in September and October 2023 (see sections 4.1 and 4.1.2.2).
 - Quantitative investigations were conducted in November and December 2023, including a preliminary census, socioeconomic survey, and land plot survey (see sections 4.1 and 4.1.2.3)

1.4 Principles and Objectives Governing Resettlement Preparation and Implementation

The principles and objectives adopted in this RPF are governed by the requirements of the Lenders, including the World Bank and the IFC. The fundamental objectives of these policies are basically similar, and include the following principles:

- Avoid, and when it is not possible to avoid, minimize and mitigate impacts of involuntary resettlement on affected persons resulting from the implementation of the project;
- Provide full and accurate information about the project, and afford PAPs meaningful opportunities for participation in design, implementation and monitoring, with particular attention paid to the requirements of vulnerable households and women;



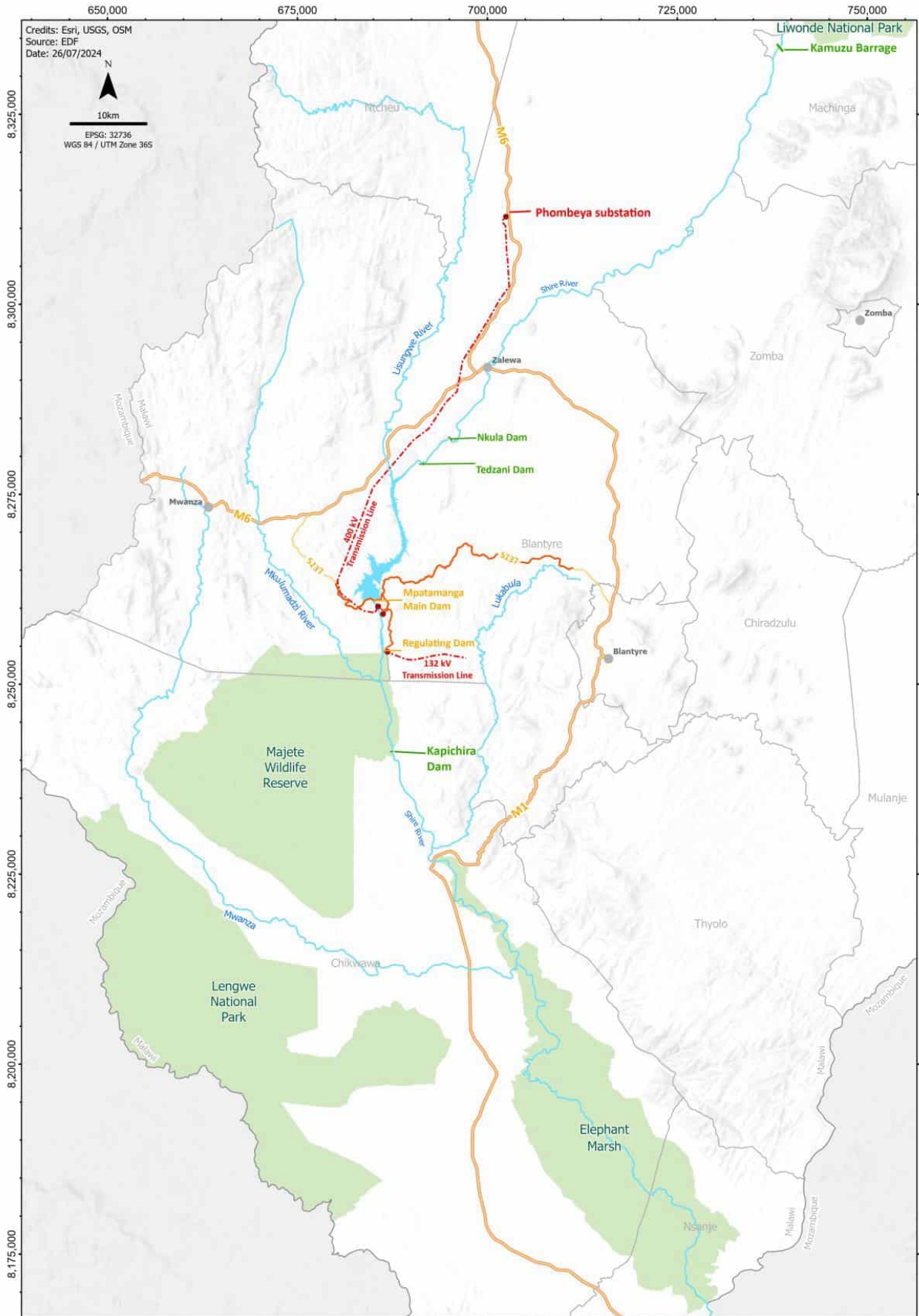
- Ensure that people who are adversely affected are fully compensated and successfully resettled; the livelihoods of economically displaced people are re-established, and that their standard of living is, wherever possible, improved;
- Prevent the impoverishment of affected persons as a consequence of compulsory land acquisition or loss of livelihood due to project activities;
- Make certain that all affected persons are informed of the resettlement process and are aware of the grievance resolution system available through the project, and
- Provide, when needed, additional assistance for vulnerable groups.

These objectives will be achieved through the application of the following guiding principles:

- Avoid, and when it is not possible to avoid, minimize involuntary resettlement through a combination of:
 - Ensuring that design engineers incorporate the need to minimize involuntary resettlement into the design process and introducing flexibility into design standards for placement of project infrastructure, wherever possible, and
 - Holding frequent meetings between the design and resettlement teams, and discussions with affected persons.
- Implement an inclusive approach to entitlements that includes compensation and other assistance for those with no legal right of and occupancy as well as those with legal or recognized customary title to their land and those with land use rights.
- Compensation for land that will be lost will be at full market value, and assets at full replacement value;
- Provide cash compensation and/ or in-kind assistance, including relocation sites where economically feasible, that best suits the needs of affected persons commensurate with the extent of the impacts that they will experience;
- Provide disturbance allowance to mitigate the impact on the livelihoods of affected persons having to relocate their residence and/or business;
- Implement measures to restore the livelihoods affected by the project so that Project Affected Persons who lose income because of project activities will be able to maintain their current standard of living;
- Implement any additional measures to address the relocation needs of vulnerable groups;
- Maintain a continual process of consultation, disclosure, and negotiations with affected persons throughout the entire resettlement process, including establishing an accessible and transparent grievance redress procedure, and
- Implement a clear and transparent process for the disbursement of any monetary compensation.



Figure 1: Project's Situation and Components



© The drawing and its content are the copyright of S.R. Consulting France SAS and may not be reproduced or amended except by prior written permission. S.R. Consulting France SAS accepts no liability for any amendments made by other persons.



1.5 Structure of the Report

This Resettlement Policy Framework is structured into the following main chapters:

- Chapter 1 is the present introduction, and provide the Project description and the principles governing the Project land acquisition, compensation and resettlement process,
- Chapter 2 presents the scope of the Project land acquisition and defines the^o land requirements for the Project’s components,
- Chapter 3 analyses the legal framework and the requirement of the Project Lenders regarding land acquisition and resettlement,
- Chapter 4 describes the socioeconomic profile of the communities affected by the Project land requirements,
- Chapter 5 estimates the involuntary resettlement impacts for the Project Components,
- Chapter 5.5 defines the eligibility and entitlement to compensations,
- Chapter 7 outlines the Valuation Methodology which will be used to define the compensation rates,
- Chapter 8 presents the resettlement assistance measures to be implemented by the Project,
- Chapter 9 describes the livelihood restoration measures to be implemented by the Project,
- Chapter 10 provides the institutional arrangements and the distribution of responsibilities amongst the Project’s stakeholders engaged in the land acquisition, compensation and resettlement process,
- Chapter 11 describes the information disclosure, consultation with and participation of the affected persons,
- Chapter 12 explains the Project Grievance Redress Mechanism,
- Chapter 13 lays out the schedule for the preparation and implementation of the phased Resettlement Action Plans,
- Chapter 14 defines the monitoring and evaluation programme of the phased Resettlement Action Plans.,
- Chapter 15 outlines the funding arrangements and provides the estimated budget for the preparation and implementation of the land acquisition, compensation, resettlement and livelihood restoration processes.



2 Scope of Land Acquisition and Resettlement

The 2024 ESIA provides a detailed description of the Project Definition. The next paragraphs give an overview of the Project facilities (Section 2.1), and a description of the Project's land needs (Section 2.2).

2.1 Project Facilities

The Project's components are composed of:

- The permanent facilities required for the Project's operation. They include:
 - The main dam,
 - The main reservoir,
 - The access road to the main dam, which will use the existing S137 road in Blantyre District and will require the creation of new sections of the road in Neno District and in Blantyre District,
 - The main powerhouse and its substation,
 - The 400 KV Transmission Line connecting the main powerhouse substation to the existing Phombeya sub-station in Balaka District,
 - The regulating reservoir,
 - The regulating dam with its powerhouse,
 - The substation of the regulating dam powerhouse,
 - The 132 KV Transmission Line connecting the regulating dam powerhouse to the existing Tedzani-Kapichira Transmission Line,
 - The operator's village,
 - A services road from the main powerhouse to the regulating dam, and
 - The resettlement sites.
- The temporary facilities required for the construction period only. They include:
 - Cofferdams and river diversion works,
 - Construction camps and facilities (such as batching plants, laydown areas)
 - Quarries and disposal areas,
 - Access roads and tracks to be used during construction of the Transmission Lines and the main facilities.

As part of the Biodiversity Offset Strategy, the Project proposes to create a biodiversity conservancy area on the right bank of the Shire River between the Main Dam and the Regulating Dam to offset the Project biodiversity impacts. This conservancy area is the preferred option for the biodiversity offset strategy at the time of writing, but its boundaries are yet to be formally approved by the Project stakeholders.



2.2 Project's Land Requirements

The Project's 'Land requirements' includes:

- All lands to be acquired for the project. "Land acquisition" refers to all methods of obtaining land for project purposes, which may include outright purchase, expropriation of property, and acquisition of access rights, such as easements or rights of way. Land acquisition may also include: (a) acquisition of unoccupied or unutilized land whether or not the landholder relies upon such land for income or livelihood purposes; (b) repossession of public land that is used or occupied by individuals or households; and (c) project impacts that result in land being submerged or otherwise rendered unusable or inaccessible. "Land" includes anything growing on or permanently affixed to land, such as crops, buildings and other improvements, and appurtenant water bodies.
- "Restrictions on land use" which are limitations or prohibitions on the use of agricultural, residential, commercial, or other land that is directly introduced and put into effect as part of the project. These may include restrictions on access to common property or natural resources (such as water bodies), restrictions on land use within utility easements, or safety zones.

The land requirements for the Mpatamanga HPP include:

- The areas needed for all permanent facilities,
- The areas needed for temporary facilities during construction,
- The areas where restriction of use will be established, either for operational reasons or for safety reasons.

These Project's land requirements consist in seven main areas:

- The Main Reservoir,
- The 'Main Works' area covering the main works for the main dam and the regulating dam and regulating reservoir, as well as the associated construction facilities, the service roads and the operator's village,
- The areas required for the refurbishment of the S137 road,
- The areas for the 400kV transmission line,
- The areas for the 132kV transmission line,
- The Resettlement Sites, and
- The area needed for the Project's proposed conservancy area to be created on the right bank of the Shire River between the Main Dam and the Regulating Dam to offset the Project biodiversity impacts⁵.

These areas are illustrated in Figure 2, and are described in the next paragraphs. They are summarised in Table 1 and Table 2 below.

Some of the lands needed temporarily for the construction period will not be needed for the operation (for instance construction camps, quarries, any lay-down or working areas required by the Contractors). Where feasible considering operational constraints, these lands could be transferred by MHPL to the GoM after the demobilization of the contractor at the end of the construction. The possibility for the Government to then transfer some of these lands back to the local communities will be studied by the Project.

⁵ At the time of writing, this conservancy area was the preferred option of the Project's biodiversity offset strategy. However, it had not yet been validated and the limits of this conservancy area were yet to be formally defined. When this area is approved and defined, it will be included in the RAP for the Main Works. Therefore, this RPF considers it as land requirements.



Table 1: Project's Land Requirements

Project Facilities	Total Area (identified or defined at the time of writing)	Comment
Main reservoir	2,045ha	The whole area is a permanent land requirement. The entire Main Reservoir area will be acquired permanently. Access to the shore of the main reservoir will not be permitted in the 500m area immediately upstream of the main dam and the 500m stretch downstream of the end of the tail or the main reservoir, from Tedzani HPP tailrace.
Main Works	794ha	The main works area includes the footprint of the construction and operation facilities. At the Basic Design stage, the Project Technical team identified a general area to be allocated to the EPC contractor to establish the permanent (operation) and temporary (construction) facilities. Access to the regulating will be allowed on the Blantyre side, except between the main powerhouse outlet and the minimum operating level (MOL) of the regulating reservoir. On the Neno side, no access to the regulating reservoir will be possible, because of the proposed conservancy area.
S137 Access Road	106ha	For the Sections of the S137 which will be upgraded, the Ministry of Transports and Public Work already owns the road and the land of the existing road reserve (18 metres from each side of the centre of the road). For these existing sections to be upgraded, the lands requirements will be limited to the areas needed for the road upgrade. This includes the road platform itself, the road banks and drainage channels along the road. The upgraded road width will be 9.2m, except when crossing the Chikuli market, where it will be 12.2m ⁶ . For the new sections to be constructed, the entire road reserve (18m of each side of the central line of the road) will be acquired.
400kV Transmission Line	345 ha	The footprint of the pylons will be permanently used: they are a permanent land requirement. In the 400kV Transmission Line wayleave, the area needed for the pylons will be acquired permanently. Outside of the pylons' footprints, the wayleave will not be acquired, but some restriction on land use will be established. It will not be permitted to build houses in the wayleave, or to grow crops other than annual crops. Temporary land requirements (access tracks, construction camp(s), laydown areas) will be defined at the Detailed design stage. Some access tracks may remain permanent.
132kV Transmission Line	38 ha	The footprint of the pylons will be permanently used: they are a permanent land requirement. In the 132kV Transmission Line wayleave, the area needed for the pylons will be acquired permanently. Outside of the pylons' footprints, the wayleave will not be acquired, but some restriction on land use will be established. It will not be permitted to build houses in the wayleave or to grow crops other than annual crops. Temporary land requirements (access tracks, construction camp(s), laydown areas) will be defined at the Detailed design stage. Some access tracks may remain permanent.
Resettlement Sites	387 ha	Temporary land requirement: The Project will acquire the land to develop the resettlement sites, but as they are an in-kind compensation option, the land plots allocated to affected households and communities on these resettlement sites will be transferred to them after the displacement. At the time of writing the Chaswanthaka and Kambalame resettlement site had been selected, but the Mpindo resettlement site was yet to be identified and selected.

⁶ (GIBB 2024)



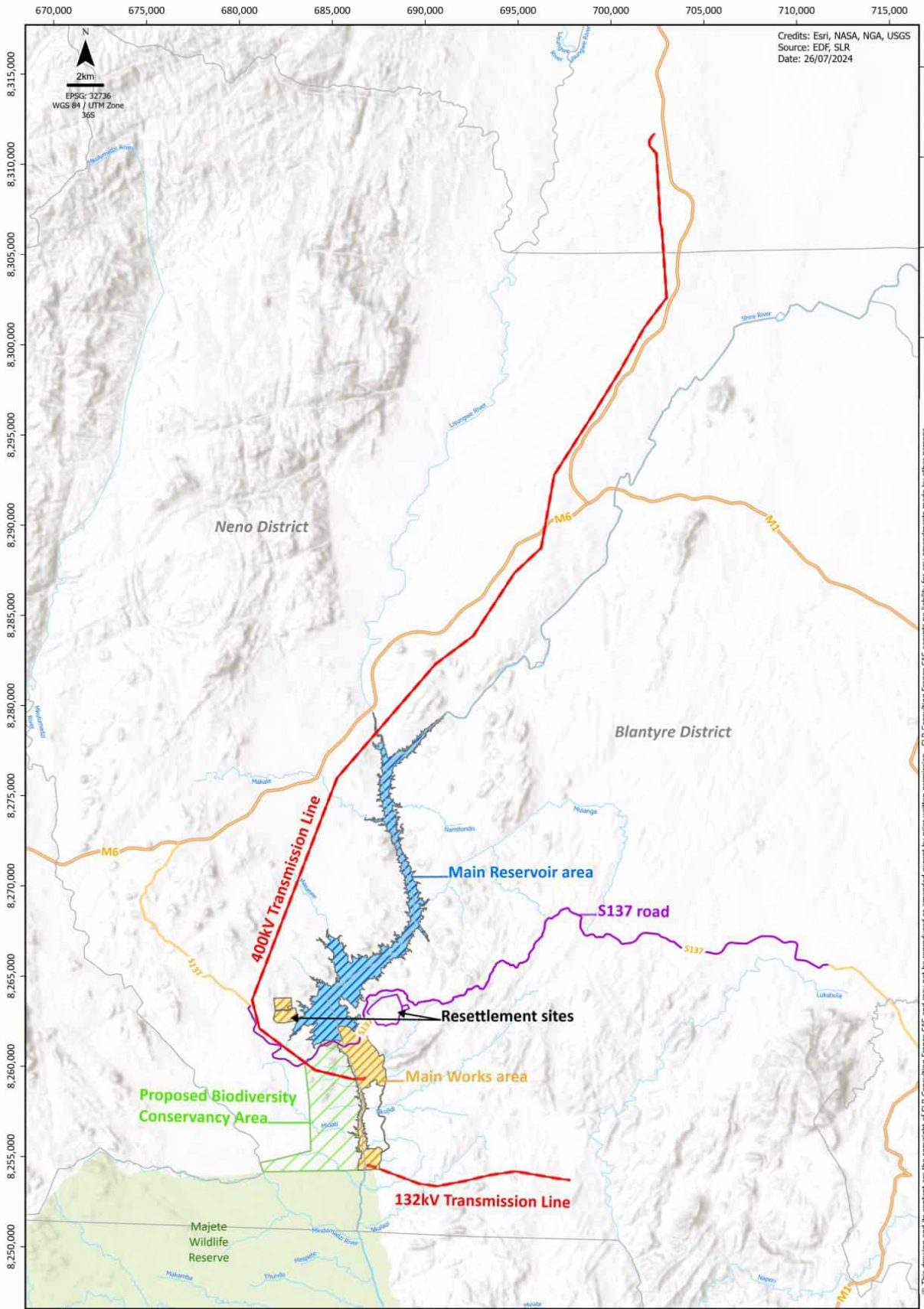
Project Facilities	Total Area (identified or defined at the time of writing)	Comment
Proposed Biodiversity Conservancy Area	1,910 ha	Permanent land requirement: The proposed biodiversity conservancy area will be acquired and fenced before the start of construction and maintained throughout operation.
Total	5,625 ha	

Table 2: Project’s Land Requirements, disaggregated by District and Traditional Authority

Districts	Traditional Authorities	Main Reservoir Ha (%)	Main Works Ha (%)	S137 works Ha (%)	Resettlement Sites Ha (%)	132KV TL Ha (%)	400KV TL Ha (%)	Proposed conservancy area Ha (%)	Total Ha (%)
Blantyre District	TA Kuntaja	-	-	12 (11%)	-	-	-	-	12 (0.2%)
	TA Kunthembwe	939 (46%)	675 (85%)	63 (59%)	243 (63%)	38 (100%)	-	-	1,957 (34.8%)
Neno District	TA Mlauli	1,012 (49%)	119 (15%)	31 (29%)	144 (37%)	-	117 (34%)	1,910 (100%)	3,333 (59.3%)
	TA Symon	95 (5%)	-	-	-	-	188 (55%)	-	283 (5.0%)
Balaka District	TA Phalula	-	-	-	-	-	39 (11%)	-	39 (0.7%)
Total		2045 (100%)	794 (100%)	106 (100%)	387 (100%)	38 (100%)	345 (100%)	1,910 (100%)	5,625 (100%)



Figure 2: Project Land Requirements





2.2.1 Main Reservoir area

The Mpatamanga HPP Technical Working Group has validated the 1,000-year return period flood as the Design Flood Level, which is the water level to be considered for the reservoirs' footprints, including the Main Reservoir. This is the Maximum Water level of the reservoir upstream of the main dam during a 1,000-year return period flood with one spillway gate closed (Q1000 n-1). This defines the land to be acquired based on safety issues related to maximum water level.

The Malawi Water Resource Authority (NWRA) is responsible for defining a "buffer area" around reservoirs (Water Resources Act 2013, art. 6). Section 129 (2) of the Water Resources Regulation 2018 stipulates that "A person shall not cultivate or undertake any development activity within a minimum of 15m from the highest ever or 100-year flood level or as may be determined by the Authority". This buffer area is declared public land, no farming activities are allowed, and this land shall be compensated.

At the time of writing, discussions were ongoing between the Project and the National Water Resources Authority (NWRA) to determine if a horizontal 15m buffer around the 100-year flood level should be considered or if the design flood was sufficient. This will be confirmed and the final extent of the main reservoir will be demarcated prior to the start of the land acquisition process for the main reservoir.

The Main Reservoir area will be acquired permanently.

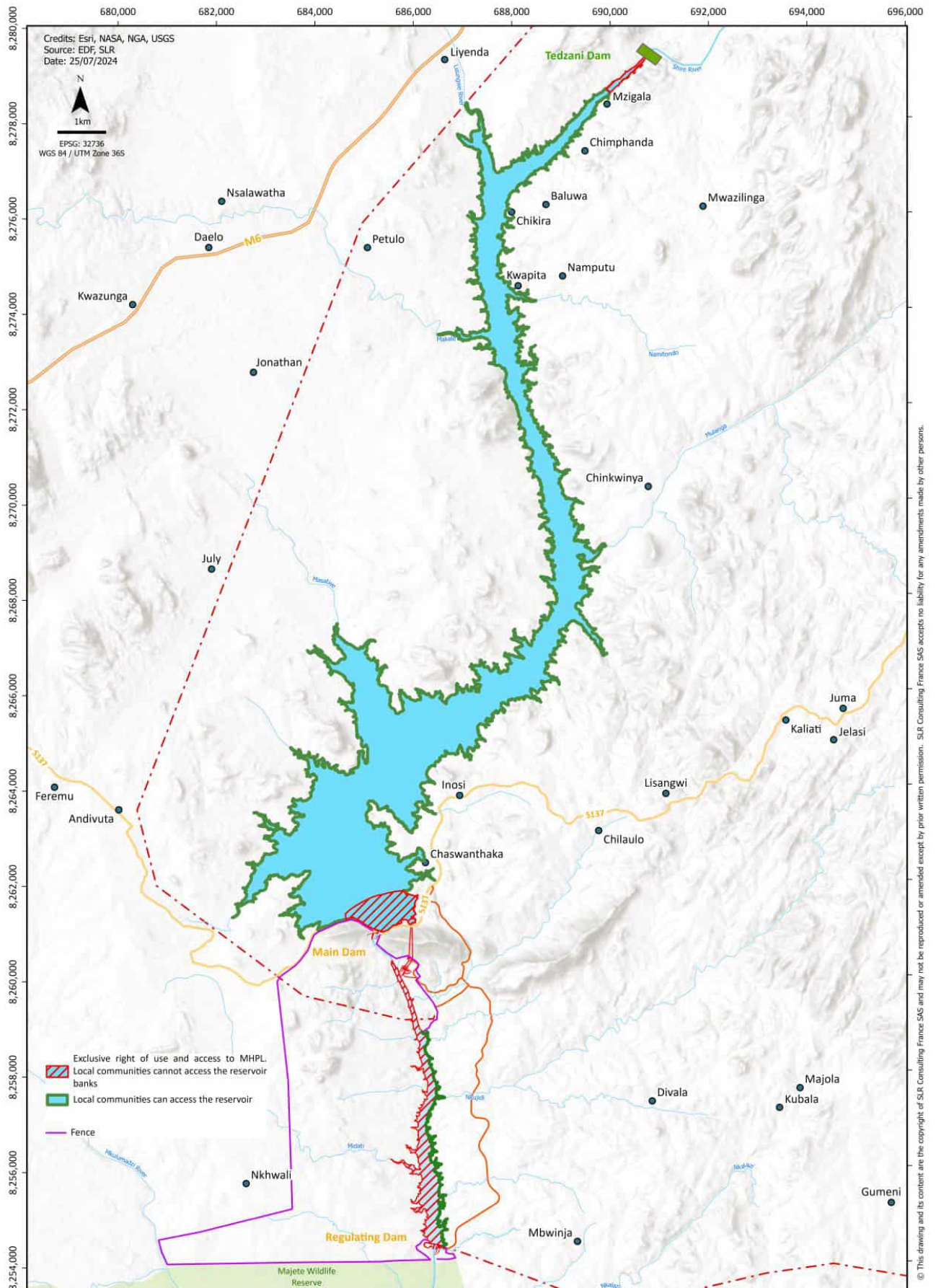
During operation, after the main reservoir impoundment, access to the reservoir will be restricted for safety reasons in 2 areas:

- At the tail of the Main Reservoir, within 500m from the tailrace of Tedzani HPP, and
- Within 500m from the Main Dam, its spillways, its water intake and diversion tunnel.

These areas are illustrated in Figure 3. Between these two areas, local communities will be able to access the main reservoir banks and use its water as they are currently doing with the Shire River (i.e. cattle watering, fishing, or other domestic uses) provided it does not interfere with the dams' operation.



Figure 3: Right of Access to the Reservoirs during operation





2.2.2 Main Works area

The Main Works area is encompassing all project facilities and construction facilities, from the upstream coffer dam and associated access track, down to the regulating dam construction site. The Main Works area the following facilities, illustrated on Figure 4:

- The permanent facilities required for the Project's operation:
 - The main dam,
 - The main powerhouse and its substation,
 - The regulating reservoir, (as for the Main Reservoir, the Regulating Reservoir limits are defined by the Design Flood (1,000 years return flood), but this is pending validation from the National Water Resources Authority).
 - The regulating dam with its powerhouse,
 - The operator's village,
 - A service road from the main powerhouse to the regulating dam, which will be a private road,
 - A transmission line used for operation, connecting the main dam powerhouse to the regulating dam, which will be underground along the service road,
 - Underground inter-sites connections (11 kV line through two independent connections linking the main powerhouse to the main dam; 11 kV line through two independent connections linking the main powerhouse to the main water intake; 33kV line from the Main Powerhouse to the Operator's Village; 33kV line from the Main Powerhouse to the Regulating Powerhouse; and 400kV line from the Regulating Dam Powerhouse to the Regulating Dam).
 - Safety buffer areas or restriction of access around the components above, especially the Service Road.
- The temporary facilities required for the construction period:
 - Cofferdams and river diversion works,
 - Construction camps and facilities (such as batching plants, laydown areas)
 - Quarries and spoil disposal areas,
 - Access roads and tracks (outside of the S137),
 - Safety buffer area or restriction of access around the components above, especially the quarries.

The 2024 ESIA has assessed construction disturbances (noise, dust, vibration, safety). It will be necessary to apply safety buffers as follows:

- A 200m buffer around the service road, and
- A 500m buffer around the quarries.

These areas are illustrated in Figure 5. The households residing in these areas will have to be displaced.

At the Basic Design stage, the Project Technical team has identified a general area to be allocated to the EPC contractor to establish the permanent and temporary facilities listed above. Some of the lands needed temporarily for the construction period will not be needed for the operation (for instance construction camps, quarries, any lay-down or working areas required by the Contractors). Where feasible considering operational constraints, these lands could be transferred by MHPL to the GoM after the demobilization of the contractor at the end of the construction. The possibility for the Government to then transfer some of these lands back to the local communities will be studied by the Project.

Some parts of the Main Works area will be optimised during the Detailed design to minimise involuntary resettlement impacts. This is the case for the service road (see section 2.3.2). The material excavated for the dam's foundations, tunnel excavations and other permanent facilities



will be deposited in designated Spoil Disposal Areas. The quantity and location of Spoil Disposal Areas have yet to be defined, as this will be the responsibility of the EPC Contractor during the detailed design phase.

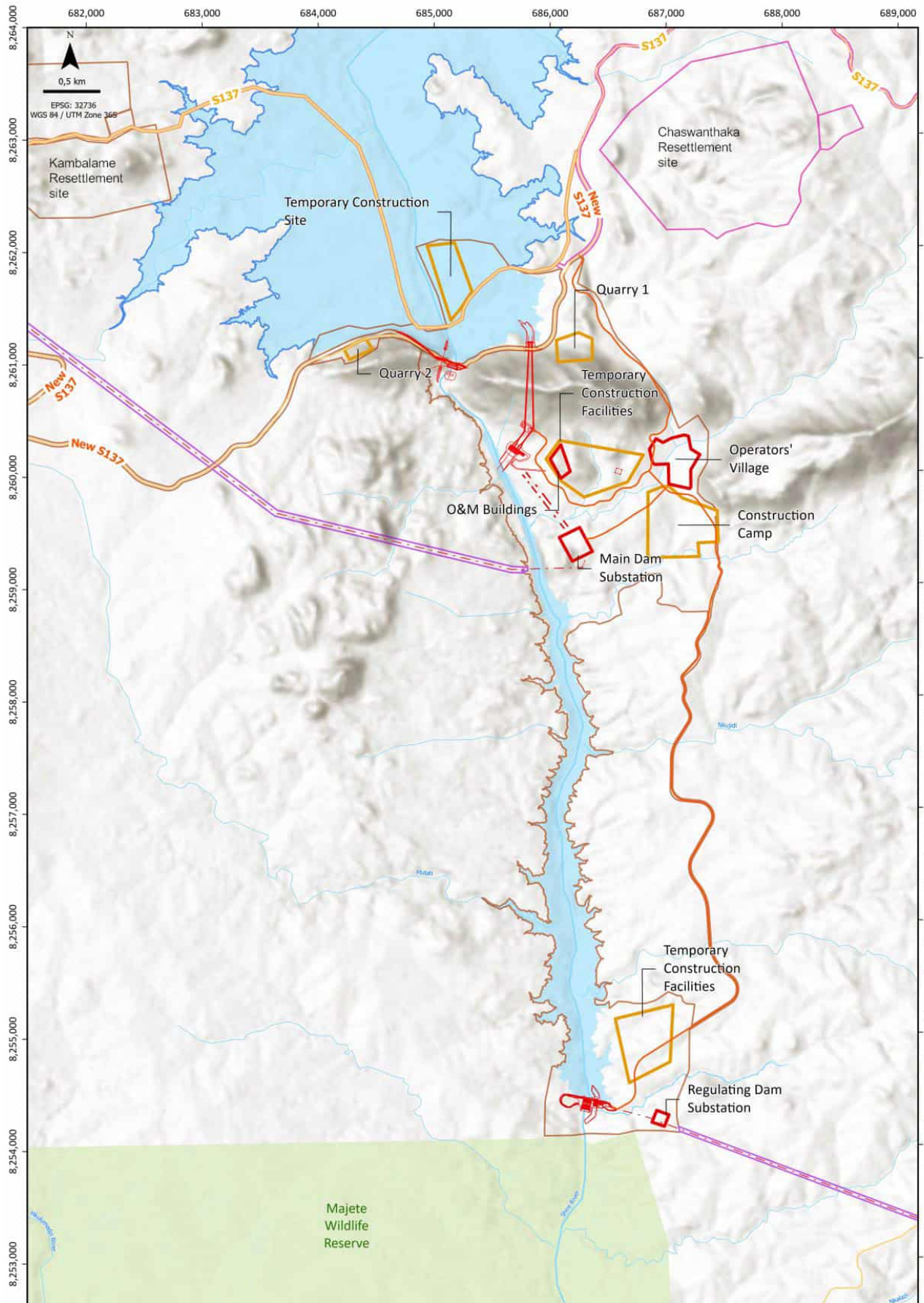
The water level in the regulating reservoir could vary by around 6 to 8m in a few minutes. Therefore, it will not be permitted to access to reservoir body (by boat or for fishing). To prevent risks of drowning, several areas of the Regulating Reservoir will be fenced, and public access to the regulating reservoir will not be permitted (see Figure 3):

- On the Blantyre side (left bank), it will be possible to access the Regulating Dam shore except in the following fenced areas:
 - The area between the main dam and 1.5 km downstream of the main powerhouse, including the main switchyard,
 - The area between the Regulating Dam and the northern boundary of Majete, and the Regulating Dam Switchyard.
- On the Neno Side (right bank), the proposed biodiversity conservancy area will be fenced from the main dam to the limit with Majete Park (see Figure 3). No public access to the Regulating Reservoir shore will be possible.

As the Shire River is used by the local communities, the Project will define measures to restore access to water to the communities using the stretch of the river between the Main Dam and the Regulating Dam where access is impaired (see Section 9).



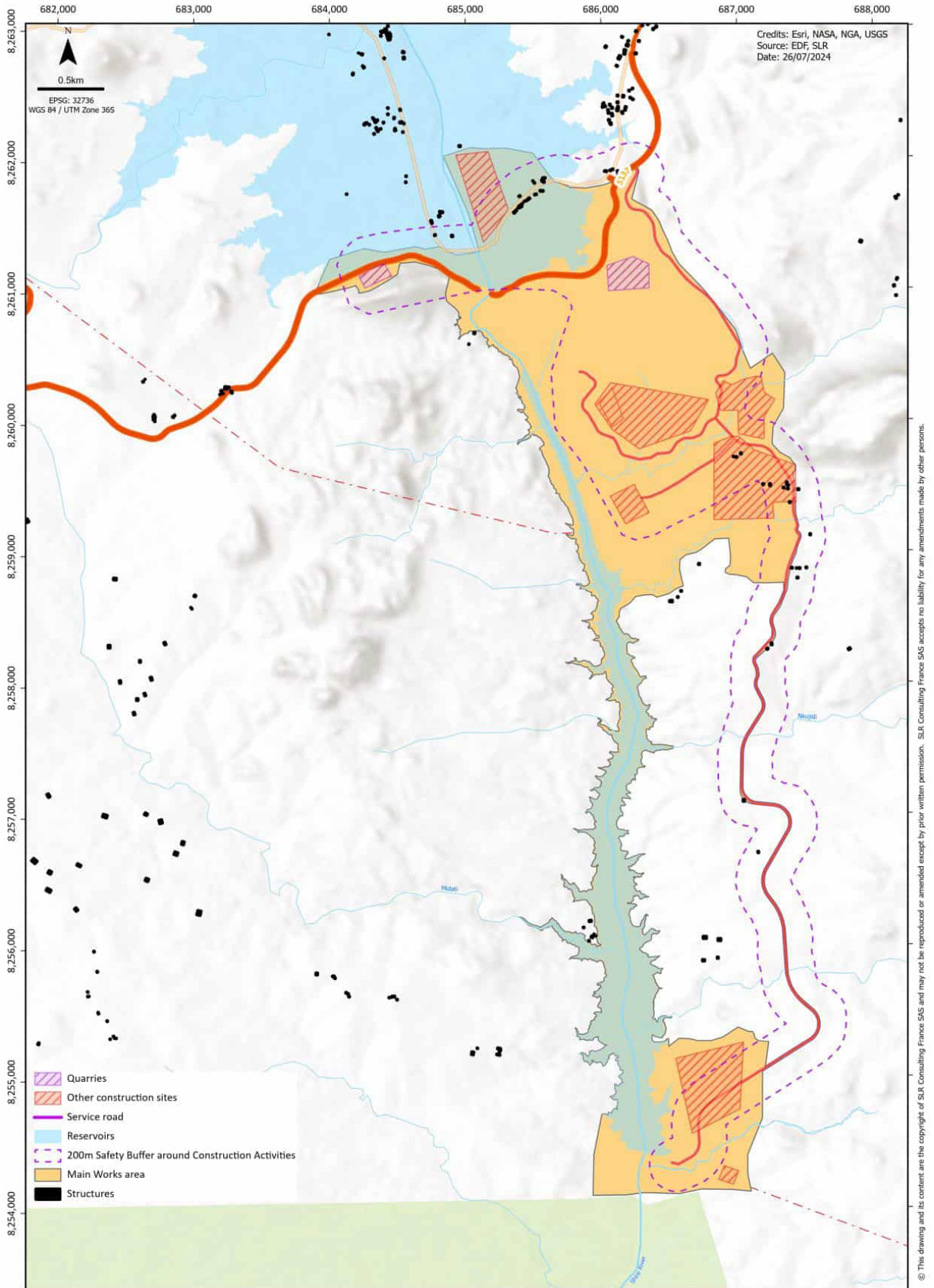
Figure 4: Project Facilities in the Main Works Areas.



© This drawing and its content are the copyright of SLR Consulting France SAS and may not be reproduced or amended except by prior written permission. SLR Consulting France SAS accepts no liability for any amendments made by other persons.



Figure 5: Safety buffer areas around construction sites





2.2.3 Main Reservoir area

The Malawi Water Resource Authority is responsible for defining a “buffer area” around reservoirs (Water Resources Act 2013, art. 6). Section 129 (2) of the Water Resources Regulation 2018 stipulates that “A person shall not cultivate or undertake any development activity within a minimum of 15m from the highest ever or 100-year flood level or as may be determined by the Authority”. This buffer area is declared public land, no farming activities are allowed, and this land shall be compensated. The National Water Resources Authority confirmed that the 100-year flood level should be considered to define this buffer area for the Mpatamanga HPP (National Water Resources Authority 2024).

The Mpatamanga HPP Technical Working Group has validated the 1,000-year return period flood as the Design Flood Level, which is the water level to be considered for the reservoirs’ footprints, including the Main Reservoir. This is the Maximum Water level of the reservoir upstream of the main dam during a 1,000-year return period flood with one spillway gate closed (Q1000 n-1). This defines the land to be acquired based on safety issues related to maximum water level. This 1,000-year return period flood is above the Main Reservoir operating level, and extends therefore beyond the 100-year flood level considered by the Malawi Water Resource Authority

The Main Reservoir area will be acquired permanently.

During operation, after the main reservoir impoundment, access to the reservoir will be restricted for safety reasons in 2 areas:

- At the tail of the Main Reservoir, within 500m from the tailrace of Tedzani HPP, and
- Within 500m from the Main Dam, its spillways, its water intake and diversion tunnel.

These areas are illustrated in Figure 3. Between these two areas, local communities will be able to access the main reservoir banks and use its water as they are currently doing with the Shire River (i.e. cattle watering, fishing, or other domestic uses) provided it does not interfere with the dams’ operation.



2.2.4 S137 Road

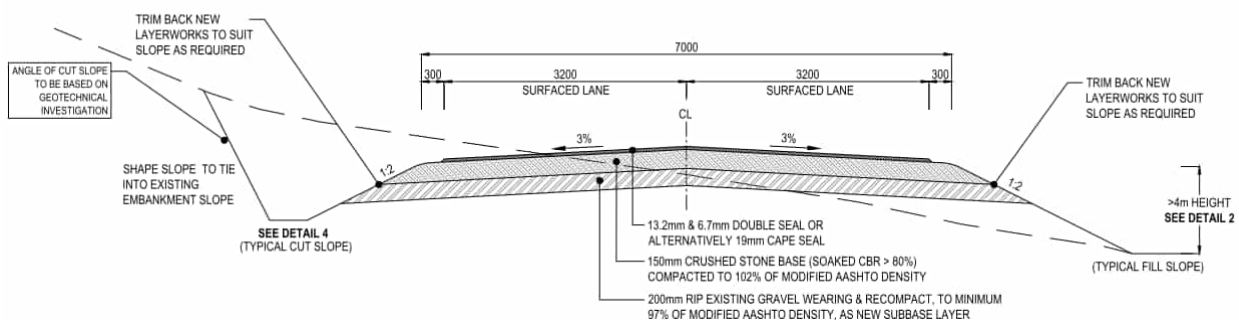
Part of the S137 road - which links Blantyre to Mwanza - will be flooded by the future Mpatamanga main reservoir. A new section of the S137 road will be built by the Project, using the main dam crest as a bridge over the Shire River. The future Chileka-Mwanza/M6 S137 road will be ~46 km long and out of these, 12 km will be newly constructed by the Project to bypass the Main Reservoir, and about 34 km will be upgraded on the Blantyre side. Figure 6 shows a typical cross-section of the road during operation.

The works on the S137 road will include (i) upgrade of existing sections between Chileka airport and the Main Works area and (ii) development of new sections of the road going to the main dam crest in Blantyre district and from the main dam crest to the existing S137 road in Neno district (see Figure 7)

- For the Sections of the S137 which will be upgraded, the Ministry of Transport and Public Work already owns the road and the land of the existing road reserve (18 metres from each side of the centre of the road). For these existing sections to be upgraded, the lands requirements will be limited to the areas needed for the road upgrade. This includes the road platform itself, the road banks and drainage channels along the road (see Figure 8). The upgraded road width will be 9.2m, except when crossing the Chikuli market, where it will be 12.2m². Along the sections of the S137 road to be upgraded, local villagers are using the land in the 18m width constituting the land reserve on both sides of the road central alignment. This land reserve is already the property of the MTPW. As per the Public Roads Act (2017 Amendment), compensation is due for damages caused to land and surface rights on parcels occupied in the road reserve for roads works. No compensation is due for the land in the existing road reserve.
- For the new section to be constructed, the entire road reserve (18m of each side of the central line of the road) will be acquired.

The Land requirements defined by the Basic Design for the S137 works do not include the areas for the construction camps or the laydown areas, or any borrow area to be used for the construction activities. They do not include the drainage works as well. These elements will be defined by the EPC when mobilised at the Detailed Design stage after Financial Close (see section 2.3.2). For the new sections to be created on the Neno side, options will be considered during the Detailed Design to minimised involuntary resettlement impacts.

Figure 6: Typical cross section for the Operational Stage⁸.



⁷ (GIBB 2024)

⁸ Source: (EDF 2024a)



Figure 7: Sections of the S137 to be upgraded and created

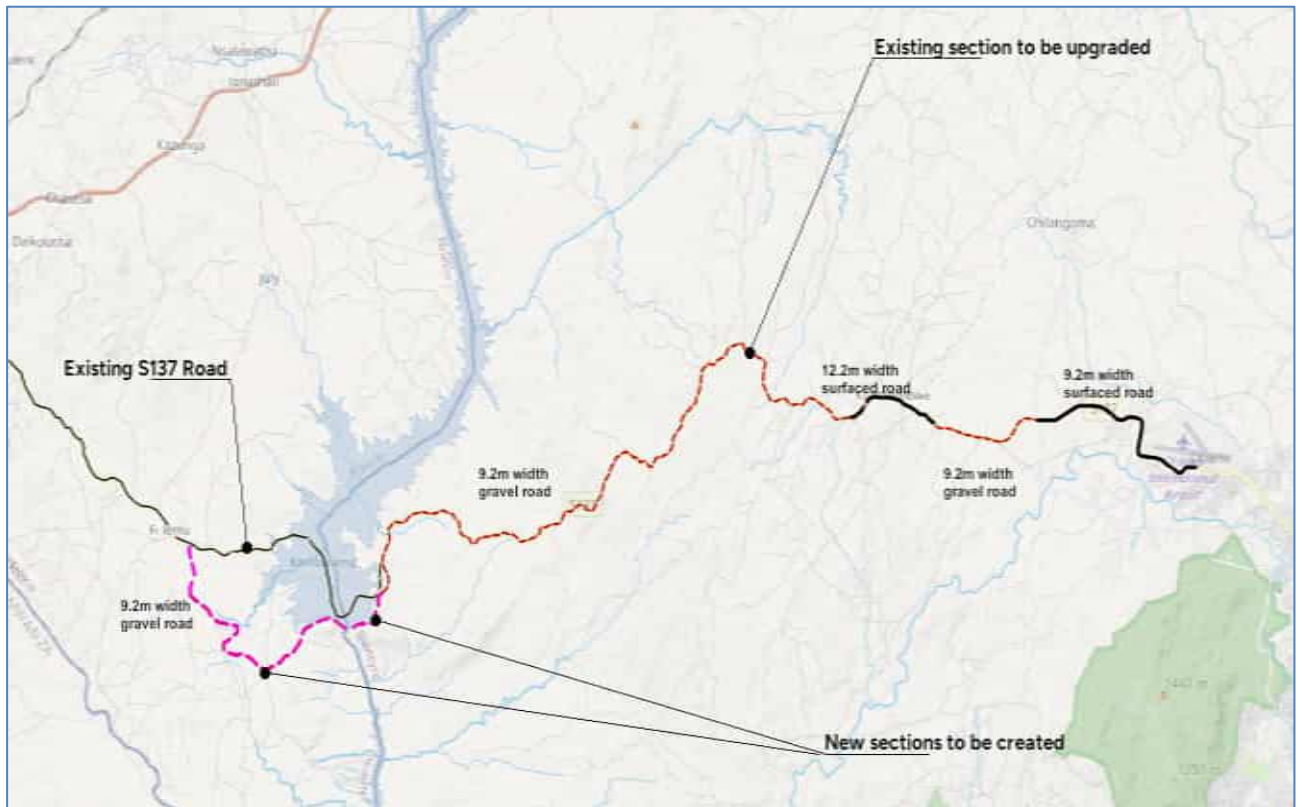
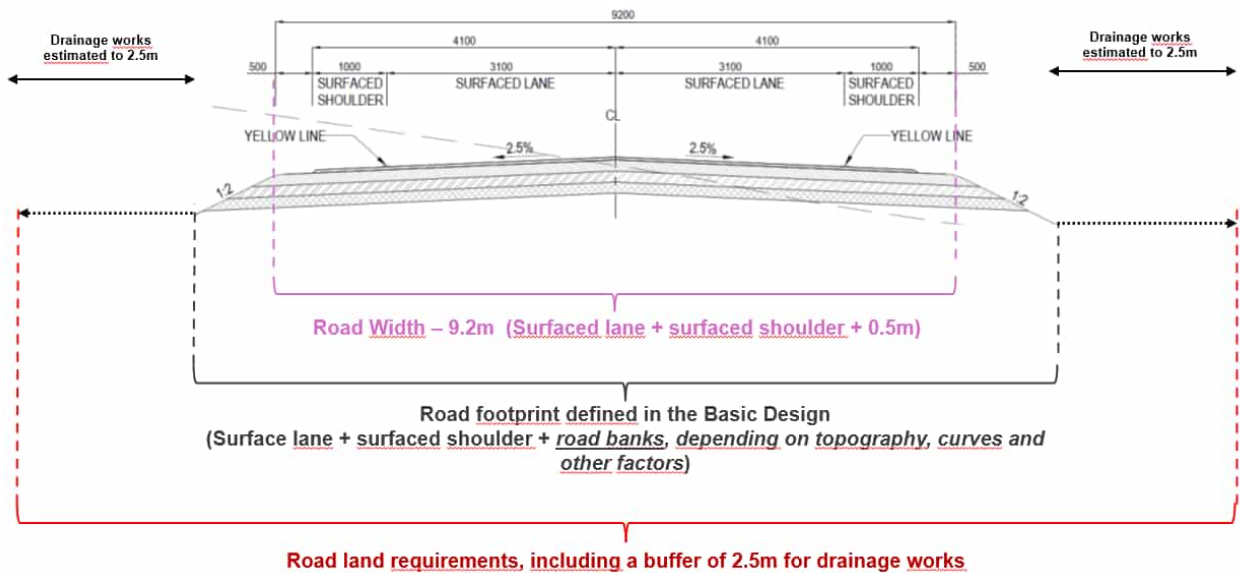


Figure 8: Land requirements for a 9.2m width section to be upgraded⁹



⁹ Adapted from (MHPL 2023b)



2.2.5 Transmission Lines

The power generated by the Project will be evacuated by two Overhead Transmission Lines (OHL) built by MHPL but operated by ESCOM:

- The 400kV transmission line from the Mpatamanga main powerhouse to the existing Phombeya substation. The 400kV Transmission Line will evacuate electricity generated at the main powerhouse and will connect to the national power distribution network. The line has a length of 63 km and extends from the switchyard adjacent to the Mpatamanga main powerhouse to the existing Phombeya substation. It goes parallel to the future Mozambique-Malawi (MOMA) 400kV Interconnection Line for almost two-third of its length (see Figure 11).
- The 132kV transmission line from the Mpatamanga regulating dam powerhouse to the existing Tedzani-Kapichira transmission line (loop-in loop out, no substation). The 132kV Transmission Line will evacuate electricity generated at the Regulating Dam powerhouse and will connect to the national power distribution network. The line has a length of 10.5 km and extends from the switchyard adjacent to the Mpatamanga regulating dam powerhouse to the existing transmission line Tedzani-Kapichira.

The routes of the 400kV and 132kV Transmission Lines and the location of associated substations are illustrated on Figure 11.

The Land requirements for the 400kV and the 132kV Transmission Lines includes the land for the pylons' footprints and the wayleave under the lines:

- This wayleave is 55m wide for the 400kV TL (27.5 meters going either side from the installed circuit line, see Figure 9).
- This wayleave is 36m wide for the 132kV (15 meters going either side of each line, with 6m between the 2 lines, see Figure 10).

A 4m wide track will be established along the Transmission Lines routes, inside their wayleave, in the part offset from the pylon brackets. This track will remain for the operation phase.

During the construction phase, a platform will be built at each pylon to lift the towers, which will require complete clearing. Approximately 300m² will be required for the 400kV Transmission Line pylons, and 200m² for the 132kV Transmission Line pylons.

The land for the pylons will be acquired by the Project and transferred to ESCOM for the operation. Outside the pylons' bases, the land in the wayleave will not be acquired by the Project, but restriction on land use will be established. It will be prohibited to erect buildings in the wayleave, and to grow crops other than annual crops. In addition, tall trees outside the wayleaves, of such height that they could fall within 3 m of Conductors shall be cut. This will be treated on case by case during the TL RAP.

The Land requirements defined by the Basic Design for the Transmission Lines does not include the access tracks, construction camps or the laydown areas for the construction. There is a need to create accesses from the nearest existing road or track to each corner pylon. These elements will be defined by the EPC when mobilised at the Detailed Design stage after Financial Close. Access tracks will be considered permanent land requirements, while construction sites and laydown areas will be temporary land requirements. These elements will be defined during the Detailed Design to minimise involuntary resettlement impacts (see section 2.3.2).

The land acquisition and compensation process will be performed by the Project before construction. Then, at the start of operation, the Transmission Lines and the management of their wayleaves will be transferred to ESCOM who will own the transmission lines.



Figure 9: 400kV TL wayleave¹⁰

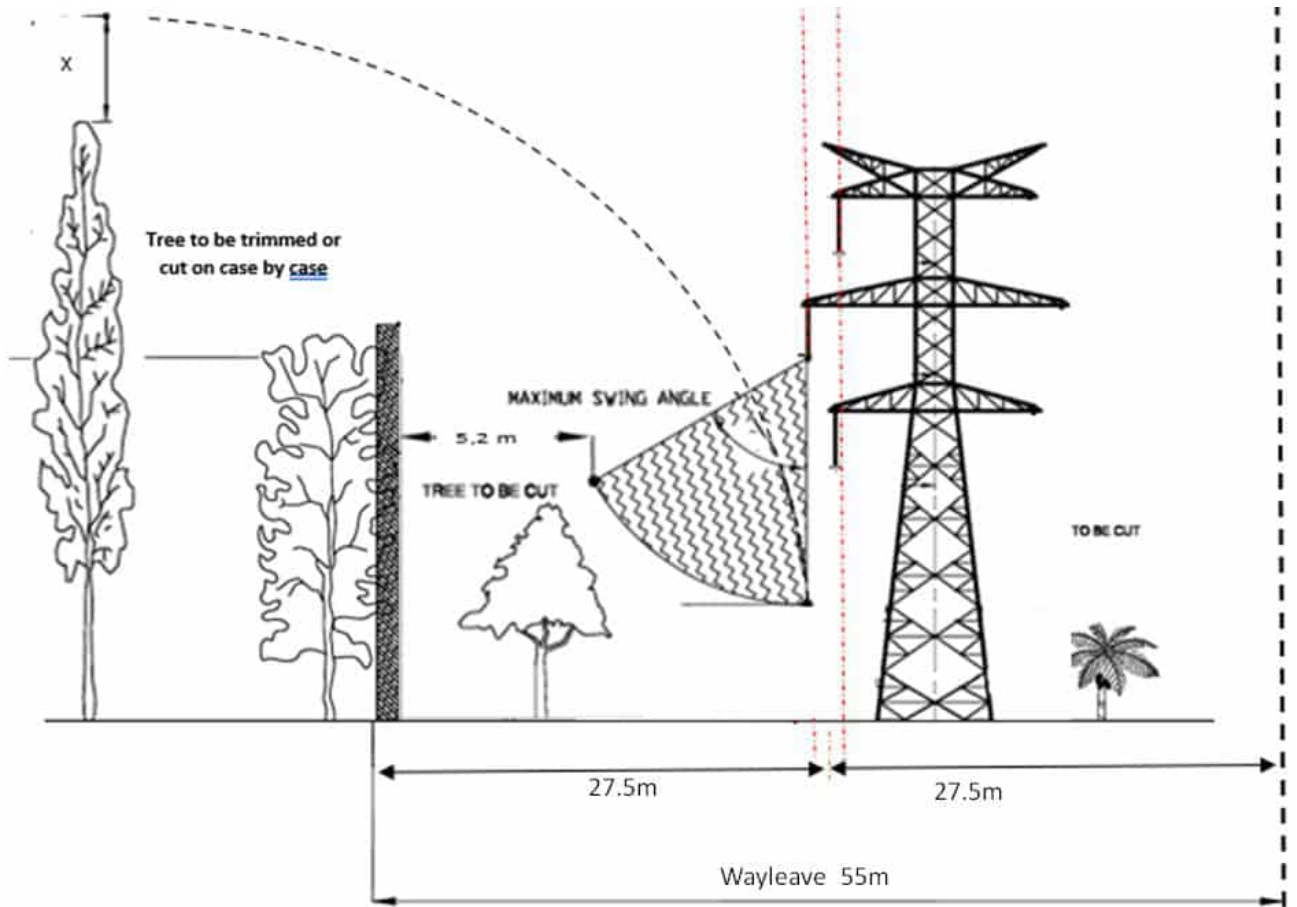
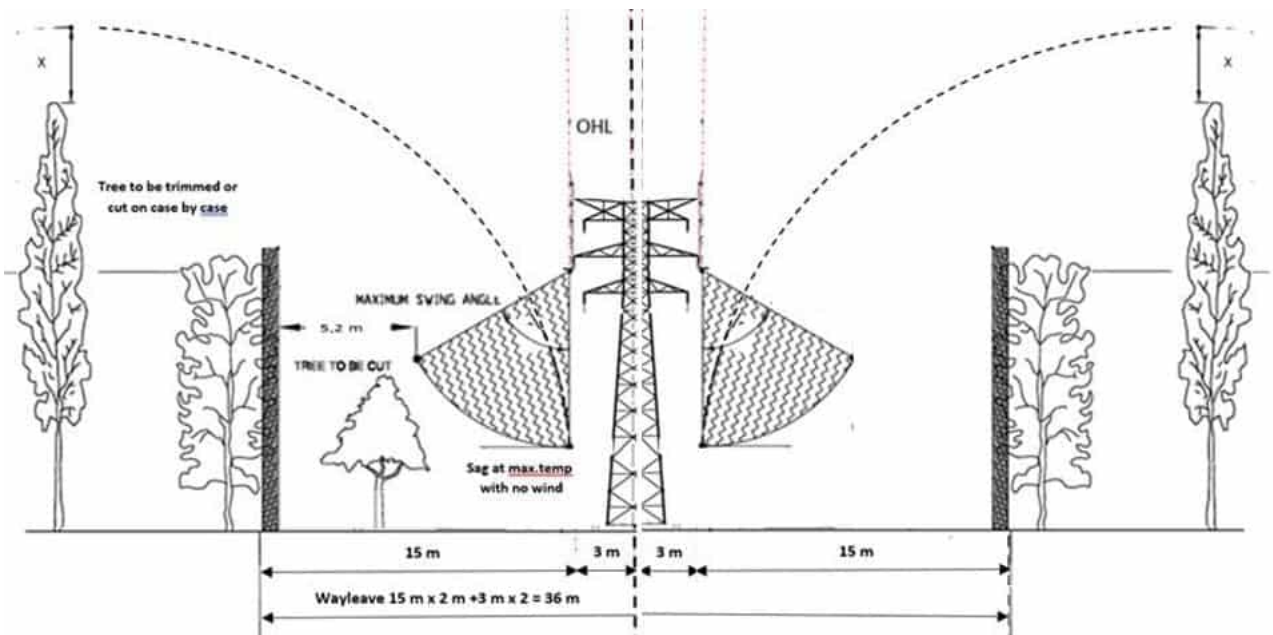


Figure 10: 132kV TL wayleave¹¹

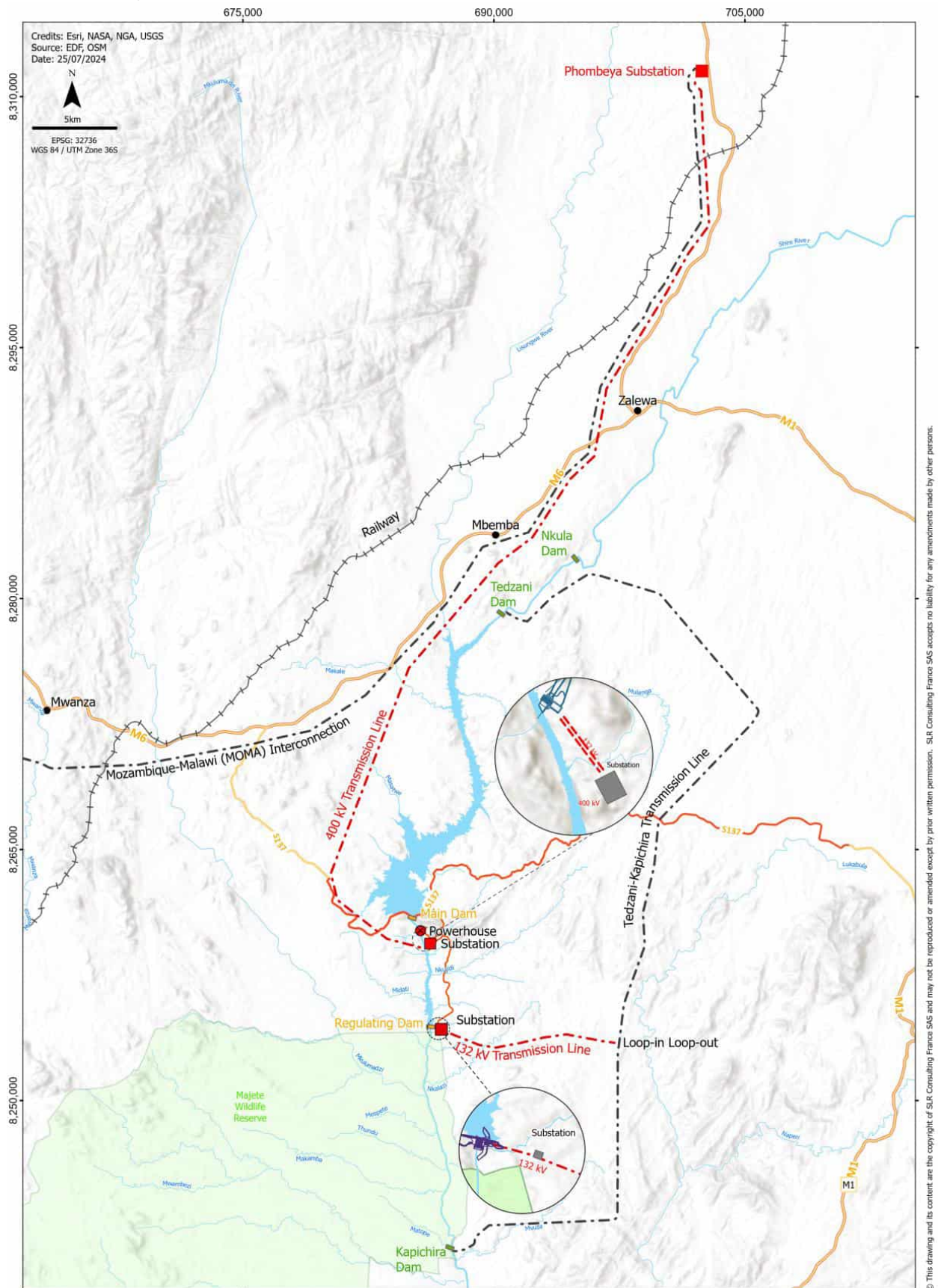


¹⁰ Source: (EDF 2023b)

¹¹ Source: (EDF 2023a)



Figure 11: 400kV and 132kV Transmission Lines Routes and Substations Location



© This drawing and its content are the copyright of SLR Consulting France SAS and may not be reproduced or amended except by prior written permission. SLR Consulting France SAS accepts no liability for any amendments made by other persons.



2.2.6 Resettlement Sites

Two resettlement sites have been pre-identified in September 2022 during a mission by the Regional Commissioner for Land, jointly with the Department of Museum and Monuments and the Land Officers of the relevant District Councils members. The Traditional Authorities (villages chiefs) and Village Development Committee identified the sites. One site is located in Kambalame village (Neno District, TA Mlauli, GVH Feremu) on the right bank, and the other in Chaswanthaka village (Blantyre District, TA Kunthembwe, GVH Kaliati) on the left bank. Each site includes one area to provide replacement land for the households physically displaced by the Project as in-kind compensation, one area for a school, and one area to relocate a graveyard affected. The 2 pre-identified sites are illustrated in Figure 12 next page.

A third resettlement site will be identified for Mpindo village, where some households will be physically displaced by the Main Works. At the time of writing this third resettlement site had not yet been selected, but consultations with the Mpindo village had started to identify potential sites.

No layout plan of these pre-identified resettlement sites has been prepared at the time of writing this report. For the RPF, and as a conservative approach, it is estimated that the entire area of these 2 resettlement sites will need to be acquired.

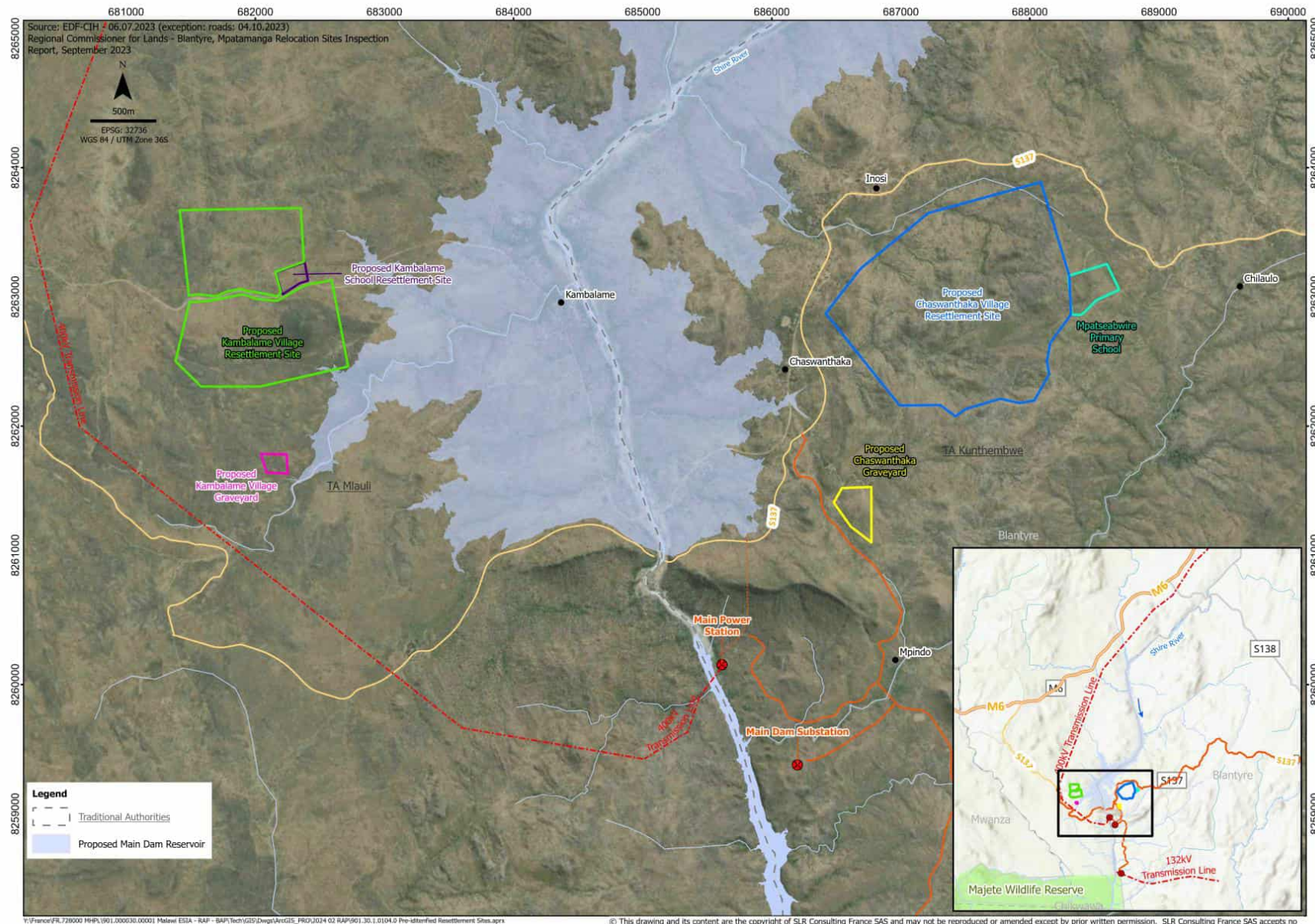
As the resettlement sites are considered as an in-kind compensation option, and as they are intended to provide land-for-land compensation to the households physically displaced, the land plots allocated to affected households and communities on these resettlement sites will be transferred to them after the displacement.

2.2.7 Proposed Biodiversity Conservancy Area

At the time of writing, the preferred option for the Project Biodiversity Offset strategy was to acquire and fence land between the Main Dam and the Regulating Dam in Neno District (right bank) to create a biodiversity conservancy area. The current delineation of this proposed conservancy area is preliminary, the extent and the boundaries of this area will be refined and validated during the finalisation of the **Project Biodiversity Action Plan (BAP) in the second half of 2024**. The objective of the proposed conservancy area is to protect the area against human in-migration and loss of woodland habitat for charcoal production. It will also serve as a biodiversity offset to improve habitat quality and will reduce the human and cattle safety risk posed by drowning due to the significant sub-daily water fluctuations in the Regulating Reservoir. This proposed conservancy area needs to be acquired and fenced prior to commencement of construction. Therefore, the acquisition of this area will be included in the Main Works RAP, prior to the start of construction. All principles, arrangements, entitlements and measures defined in this RPF will apply to the lands needed for this proposed conservancy area.



Figure 12: Location of the Pre-identified Resettlement Sites



Y:\France\FIL720000 HPPs\901.0000\30.00001 Malawi ESIA - RAP - BAP\Tech\GIS\Digit\ArcGIS_PRO\J024 02 RAP\901.30.1.0104.0 Pre-identified Resettlement Sites.aprx

© This drawing and its content are the copyright of SLR Consulting France SAS and may not be reproduced or amended except by prior written permission. SLR Consulting France SAS accepts no liability for any amendments made by other persons.



2.2.8 Land Requirements for the Basic Design Studies

As part of the Basic Design studies, some geotechnical and geophysical investigations were performed around the main dam and main powerhouse site in 2023 by a contractor. Similar geotechnical investigations were performed by another contractor in 2024 along the transmission lines routes and the S137 road. As part of these investigations, some lands were used by the Project temporarily. This temporary use included:

- The establishment of a camp in 2023 for the geotechnical investigation in Chaswanthaka village, close to the main dam site, and
- Areas needed to drill boreholes, and areas needed to access the boreholes sites in 2023 and 2024, as illustrated in Figure 13.

The Project has identified landowners of all the areas where these activities took place, obtained their consent to enter their lands, and allocated them a ‘disturbance allowance’ to compensate the disturbances caused by the Project. This disturbance allowance was established by the Ministry of Lands. The total number of these landowners is indicated in Table 3 below.

In 2023, a total of MKW 4,668,902.17 in disturbance allowances were paid, with the funds sourced from the GoM through the Ministry of Energy. All payments have been completed.

In 2024, a total of MKW 4,095,270 in disturbance allowances were paid, with the funds provided by Mpatamanga Hydropower Limited. All payments have also been completed.

Table 3: Number of Landowners receiving a disturbance allowance for the Geotechnical investigations.

District	Land Requirement area	Number of landowners entitled to disturbance allowance in 2023	Number of landowners entitled to disturbance allowance in 2024	Total 2023+2024
Blantyre District	Main Works	10	-	10
	S137 road	-	43	43
	132kV TL	-	8	8
Neno District	Main Works	2	-	2
	400Kv TL	-	6	6
Total		12	57	69

Figure 13: View of Geotechnical Investigations during the Basic Design





2.2.9 Other Land Needs not yet Defined

At the time of writing, some of the Project land needs were not yet defined or confirmed. These land needs will be included in one of the phased RAPs. They are outlined below.

A Temporary Land Needs during Construction not Defined at the Basic Design Stage

The Basic Design does not include some elements which will only be defined at the detailed design stage. This is the case for:

- The borrow areas, construction camps or laydown areas for the S137 works, which will be defined by the EPC Contractor during the detailed design, and
- The access tracks and construction camps or laydown areas for the 400kV and 132kV Transmission Lines, which will be defined by the EPC Contractor during the detailed design.

These land needs will be included in the phased RAPs.

B Sediment Management

At the time of writing, the Main Reservoir sediment management measures were not finalised. It could be necessary to define one area close to the Main Reservoir bank to store sediments which will be removed or dredged from the Main Reservoir.

Should this option be confirmed, the land needed will be considered as a Project land requirement, and will be included in the RAP for the Main Reservoir. All principles, arrangements, entitlements and measures defined in this RPF will also apply.

2.3 Alternatives Considered to Minimise Resettlement

2.3.1 Minimisation of Resettlement at the Basic Design Stage

Since the previous studies of the Mpatamanga HPP and during the Basic Design stage in 2024, the following elements have been considered to minimise involuntary resettlement impacts:

- The land requirements considered for the main reservoir up to 2020-2021 included a 100m buffer around the banks of the reservoir. A number of settlements were affected by this 100m buffer area without being affected by the main reservoir itself. The definition of the main reservoir land requirements considered by the Basic Design (indicated in Section 2.2.1 above) has reduced this buffer to consider only the 1,000-year return period flood extent (see Figure 14). This allowed to reduce the number of households physically displaced by the Main Reservoir from more than 100 (Mott MacDonald 2021) to about 60 (see Section 5). Similarly, the number of persons losing lands is reduced, as the land requirements for the main reservoir have been reduced. As indicated in section 2.2.1 above, discussions are ongoing with the National Water Authority to confirm the delineation of the reservoirs land requirements. In any case, both options considered (design flood or 100 years return period flood with a 15m buffer) will have less impacts than the first 100m buffer considered by the previous studies.
- The previous studies (Multiconsult 2019) also considered “*all households who reside less than 200 metres from construction areas, access roads, quarries or spoil tips*” will need to be physically displaced. This 200m buffer around some construction areas could have caused some important involuntary resettlement impacts, especially along the linear components of the Project, such as the transmission lines and the access roads. The 2024 ESIA has assessed the community health impacts around the worksites (dust emission, noise, vibration, road safety). The buffers to be applied are illustrated on Figure :



- All households residing within a 200m buffer around the private service road between the Main Dam site and the Regulating Dam will be displaced;
- All households residing within a 500m buffer around the quarries will be displaced.
- In Blantyre District, the planned access road to the Project site will use the existing S137, which will be upgraded between the Chileka airport and the Main Works area. As this section of the S137 road is already existing, the upgrade works will be performed inside the existing road reserve (36m wide, 18m from each side of the centre of the road), which is legally State Land. This existing road reserve will not be cleared in its entirety. The land requirement along the existing 137 road sections to be upgraded will be limited to the footprint of the works. Areas not affected by the upgrade works on these existing sections will not be affected.
- In Neno District, several options have been considered for the new sections of the S137 to be constructed. The less impacting route has been selected, as indicated in Figure 15.

Figure 14: Comparison between the previous 100m buffer area around the upper part of the Main Reservoir and the Basic Design land needs

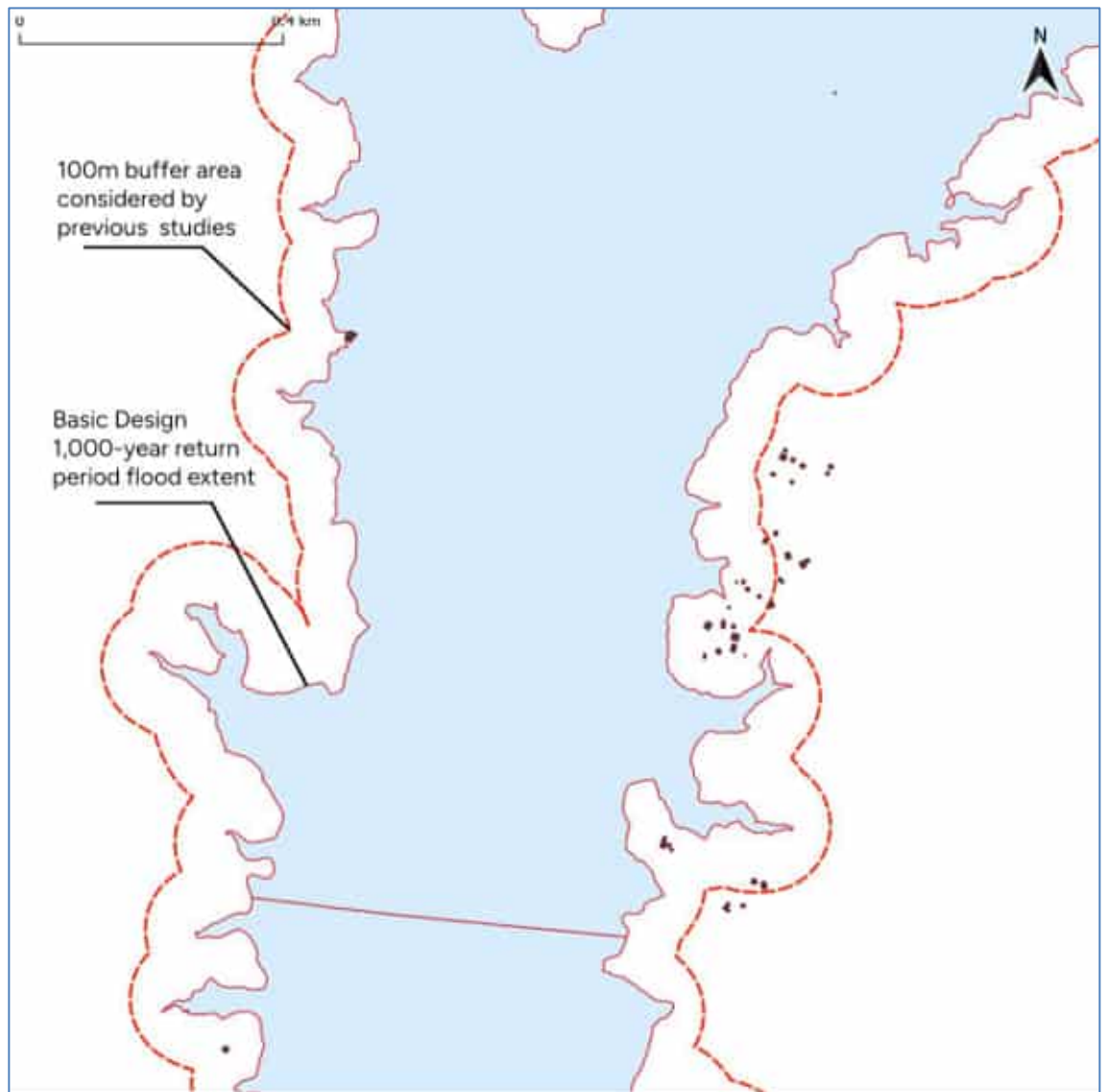
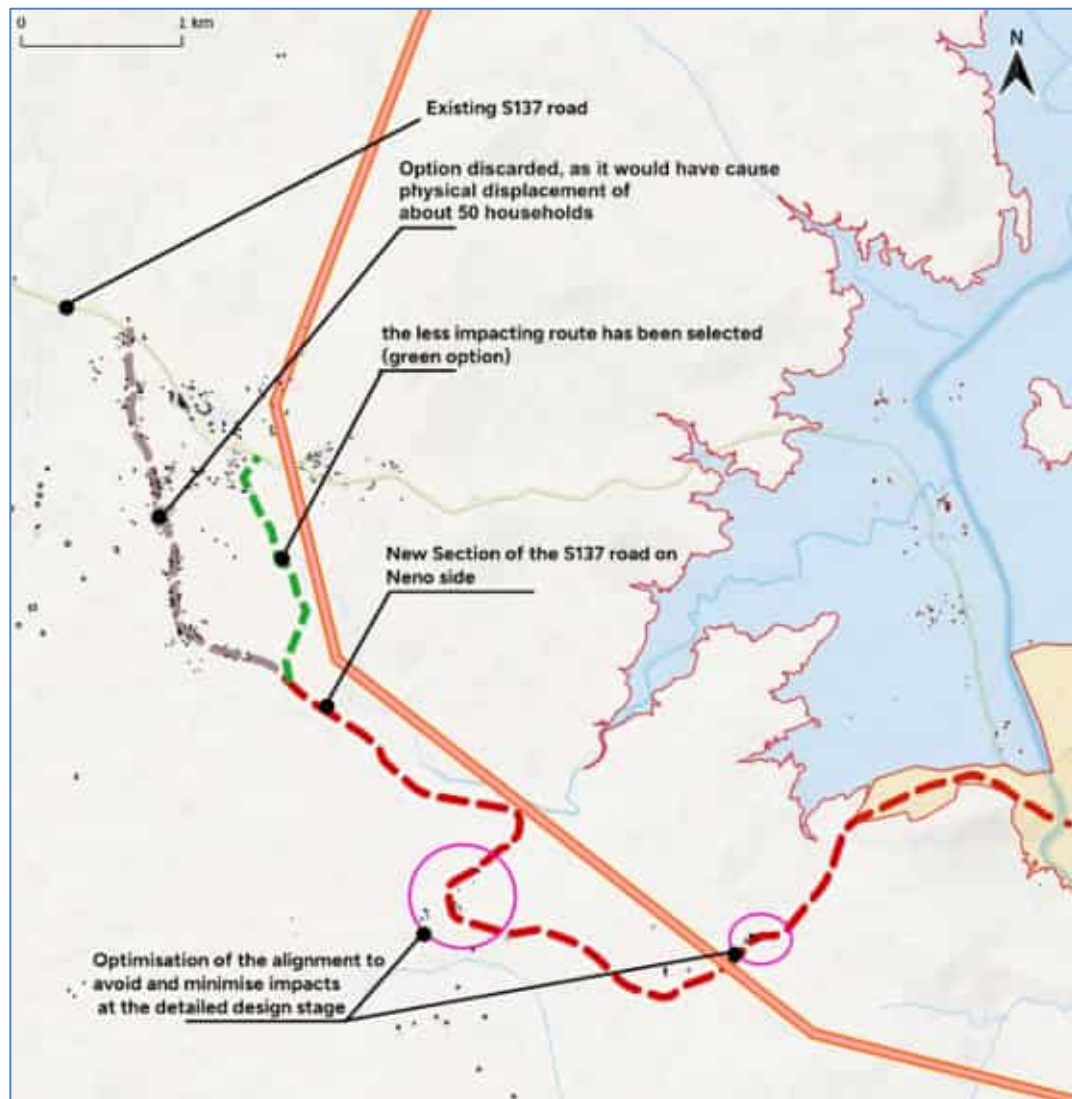




Figure 15: Alternatives for the new sections of the S137 road in Neno District



2.3.2 Minimisation of Resettlement at the Detailed Design Stage

Further optimisation will be performed at the Detailed Design Stage to avoid and minimise involuntary resettlement impacts for the temporary land requirements not defined at the Basic Design stage, for the linear components of the project (transmission lines and roads), and land needs yet to be defined.

A Temporary land requirements during construction

The temporary land requirements which are not defined at the Basic Design stage will be defined during the Detail Design Studies to minimise involuntary resettlement impacts as much as possible. Access tracks, borrow areas, laydown areas or any additional land requirement (temporary or permanent) not defined at the Basic Design stage will be defined with the objective to avoid physical resettlement, and to avoid as much as possible areas used by the local communities.

B Linear components

In Neno District, it will be necessary to construct new sections on the S137 road, to replace the sections which will be flooded, and reconnect the road to the non-affected part of the S137 road.



The Detailed Design will consider some alternatives to minimise involuntary resettlement impacts along these new sections of the S137 road, as illustrated in Figure 15.

The Basic Design has selected the preferred route for the 400kV and 132kV Transmission Lines. During the detailed Design stage, micro-sitting of the pylons will be considered as well as small re-adjustment of the line's route to further minimise involuntary resettlement impacts wherever possible.

The service road between the Main Dam area and the Regulating Dam will be a private road. To minimise involuntary resettlement impacts, the Detailed Design will optimise the definition of this service road.

C Other Land Needs yet to be Defined

For all other Project land needs not yet defined, such as an area for sediment storage (if any), the Project will avoid or minimise involuntary resettlement impacts as much as possible.



3 Legal Framework and Applicable Standards

3.1 Applicable Standards

The Project complies with Malawi environmental and social laws regulations and standards. The national framework applicable to land acquisition is described in section 3.2 hereafter. The Project will also comply with the following international standards related to land acquisition and involuntary resettlement:

- The IFC Performance Standards (2012), notably the IFC Performance Standard 5 (PS5) on Land Acquisition and Involuntary Resettlement,
- The World Bank Environmental and Social Framework (ESF) (2018), and its Environmental and Social Standard 5 (ESS5) on Land Acquisition, Restrictions on Land Use and Involuntary Resettlement,
- The Equator Principles 4 (EP4) (July 2020), which are referring to the IFC PS5 regarding land acquisition and involuntary resettlement.

The World Bank ESS5 and IFC PS5 are similar in substance. Their objectives and requirements are described in section 3.3.

3.2 National Legislation on Land Ownership and Expropriation

3.2.1 Constitution of Malawi

The clauses pertaining to property rights, ownership of land, and expropriations in the Constitution of the Republic of Malawi are outlined in Chapter IV (Human Rights) and Chapter XXII (Transitional Issues). The relevant provisions emphasize the limitations on the government's power to confiscate, condemn, or expropriate property. The constitutional framework places constraints on such actions, restricting them to instances of public good or national emergencies and necessitating adherence to due process.

Individual property rights are explicitly protected by Article 28.1–28.2, affirming that every person has the right to acquire property either independently or in association with others. Furthermore, it prohibits arbitrary deprivation of property.

Article 44.4 in Chapter IV introduces exceptions to these rights, specifying circumstances under which limitations, particularly expropriation of property, are permissible. According to this article, such limitations are allowed only when undertaken for public utility. Moreover, the process requires adequate notification and appropriate compensation. Importantly, individuals retain the right to appeal to a court of law in cases of property expropriation, ensuring a legal recourse mechanism. The constitutional provisions aim to strike a balance between the government's authority and the protection of individual property rights, emphasizing due process and fairness in property-related actions (Republic of Malawi 1966).



3.2.2 National Land Policy, 2002

The National Land Policy acknowledges the government's responsibility to safeguard property rights in land, ensuring fair compensation when the government acquires private property for public use. The policy emphasizes that customary land holds value, and compensation should be based on its open market valuations, including improvements made on land as inadequate compensation often results from excluding certain factors.

The policy also addresses the relocation of displaced people, stressing the importance of thorough consultations between the District Commissioner's office, Traditional Authorities, and the affected individuals. These consultations aim to safeguard the interests of those undergoing relocation, reflecting the policy's commitment to inclusive decision-making. In summary, the Malawi National Land Policy strives to balance the economic development objectives with the protection of citizens' land rights, promoting fairness, equity, and meaningful engagement in land-related matters (Ministry of Lands, Housing and Surveys 2002).

3.2.3 Land Act, 2016

The Land Act, 2016, is the main law governing land administration in Malawi. It covers aspects like land tenure, transfer, use, and compensation. This Act permanently vests all land in the Republic, rather than under the President's control as was the case previously. The Act categorizes land into public and private, with public land including government and unallocated customary land, and private land including freehold, leasehold, or customary estate.

Section 18 of the Land Act, 2016 ensures fair compensation for individuals in case of loss, damage, or disturbance, while Section 19 allows customary land to be registered as private land under the Registered Land Act, ensuring tenure security and encouraging investment.

The Act also allocates land for investment purposes to the Malawi Investment and Trade Centre Limited, recognizing the importance of secure land tenure for socio-economic development.

The Registered Land (Amendment) Act, 2016, aligns with the National Land Policy, recommending changes to the Registered Land Act. It mandates title registration for all land categories, including customary estates. Registration districts are decentralized, and land registers indicate the registered land class. The Act requires obtaining consent from local lands committees for dealings with customary land, replacing the Local Land Boards.

The age for accessing private land is reduced from twenty-one to eighteen, acknowledging early marriages in rural areas. The Act protects beneficiaries of land held in trust, subjecting it to unregistered liabilities. Family land ownership is abolished, following the Land Policy (Republic of Malawi 2016b).

3.2.4 Customary Land Act, 2016 and Lands Acquisition and Compensation Act, 2022

The Customary Land Act addresses the governance of customary land in Malawi, emphasizing administration and adjudication of interests. Customary land is defined to include areas within Traditional Land Management Areas, demarcated land, and land agreed upon by land committees. The Commissioner issues certificates of customary land to Traditional Authorities, ensuring formal recognition of land ownership. Part III focuses on the transfer of customary land to Government or reservation for public interest, while Part IV empowers the Minister to declare hazardous land for protection purposes.

Furthermore, the Act establishes provisions for the allocation and management of customary estates, which are inheritable and subject to conditions outlined in the legislation. It delineates procedures for the grant, surrender, or abandonment of such estates. Dispute resolution mechanisms are outlined, with appeals possible to customary land tribunals, district land tribunals, and ultimately, the Central Land Board. Overall, the Act aims to provide a comprehensive framework for the governance and management of customary land, ensuring



legal recognition, protection, and resolution of disputes in Traditional Land Management Areas (Republic of Malawi 2016a).

The Lands Acquisition and Compensation Act is structured into four parts, with Part 2 focusing on the acquisition of land for public utility. Under this part, the Minister, following preliminary investigation and notice procedures, has the authority to acquire land either compulsorily or by agreement, with compensation determined as per the provisions of the Act. Part IIA specifically regulates compensation, which can be either agreed upon or assessed by an independent valuer appointed by the Minister, and payable in one lump sum. The assessment of compensation considers various factors, including loss of occupational rights, land, structures, businesses, relocation costs, goodwill, professional advice, nuisance, tenure, and disturbances. The (*Lands Acquisition and Compensation (Amendment) Act, 2022: Commencement 2022*) adds that if a person is dissatisfied by the minister appointed valuer, the person may appoint a licensed valuer of his choice provided the person provides the funds for it. Furthermore, assessment for compensations will also be based on these additional grounds: cost of professional advice, injurious affection, and severance.

Section 10A outlines the matters to be taken into account when assessing compensation for alienated land, such as market value, damage, compelled change of residence or business location, potential increase in land value or other benefits, and any relief obtained by the claimant. Additionally, the Act stipulates that once a notice to acquire land is published, the land shall revert to the Government as public land within two months of the publication of the notice. This provision ensures the timely transfer of land to the Government for public use following the acquisition process outlined in the Act (Republic of Malawi 2022)

3.2.5 Lands Acquisition and Compensation Regulations, 2020

The Lands Acquisition and Compensation Regulations, 2020 delineate various forms of notice involved in land acquisition: notice of preliminary investigation, notice of intention to acquire and claim, and notice to yield up possession. Additionally, they specify the timing and method for offering compensation and accepting it. Part IV of the regulations governs dispute resolution procedures (Republic of Malawi 2020).

3.2.6 Public Roads Act and 2017 Amendment

The Public Roads Act primarily addresses the management of road reserves and streets. Part II of the Act delves into land acquisition and resettlement matters. Section 44 stipulates the assessment of compensations payable under this Act, covering both surface and land rights of landowners or occupiers. Additionally, Section 45 outlines compensation for the conversion of land into public use. In cases involving customary land, compensation is provided for disturbances such as potential relocation, loss of land, and the possibility that alternative land may not be as suitable as the land lost. Sections 49 and 50 offer avenues for landowners or occupiers to appeal to the High Court regarding grievances related to resettlement and compensations provided for in the Act.

The Public Roads (Amendment) Act No. 8 of 2017 introduces changes to the governance and management of public roads. Key amendments include the establishment of new definitions such as "customary estate" and "local government authority," alongside modifications to compensation procedures for surface rights. Additionally, the Act grants expanded powers to local government authorities, empowering them to declare road reserves and manage road-related matters more effectively. Provisions for judicial review of compensation awards have been introduced, allowing for recourse to the High Court in cases of dissatisfaction. Furthermore, several sections of the principal Act have been repealed and replaced to streamline administrative processes and enhance clarity in road-related regulations. These changes collectively aim to improve the regulation and governance of public roads.



3.2.7 Electricity Act, 2004 and Amendment Act, 2016

The Electricity Act has provisions for notifying and compensating for land affected by electricity infrastructure development projects. Compensation is required if any structures are affected and for any losses or damages caused. The Act also provides for the regulation of the generation, transmission, wheeling distribution, sale, importation and exportation, use and safety of electricity and related matters. According to the Act, a licensee has the right to enter any land they may need to survey in the course of their duties, subject to giving the landowners/occupiers 14 days' written notice. The same period of notification is required if plants are to be removed. However, a licensee:

- Has to obtain the permission of the occupants of any building under which it wishes to lay an electricity cable or related fixtures.
- Is required by law to give landowners/occupiers a month's notice prior to construction work
- Will make good, to the reasonable satisfaction of local or other authority, or the owner as the case may be, of all public/private roads, streets and paths opened or broken in the course project implementation and operation.
- Will pay fair and reasonable compensation or rent or both for all losses or damage caused in the execution of its powers in the Act
- Is liable for any damages that may result from work carried out on its behalf
- Is required to notify the relevant Minister, of any accident to have caused loss of life or serious injury in connection with transmission lines or other equipment.

On the other hand, a licensee may place any electricity associated structures (substations and towers) in, on, through or over any land or against any building; with the consent of the Authority if, in their opinion, the consent is being unreasonably withheld. In any such cases, the Authority will determine the amount of compensation, whether as lump sum payment, annual rental, or of both to the owner, lessee or occupier.

The Electricity Amendment Act (Government of Malawi 2016) continues the provisions from the 2004 Act concerning the notification and compensation for land affected by electricity infrastructure projects. Licensees are required to give landowners or occupiers a 14-day written notice for surveys and a month's notice before beginning construction work. Additionally, they must compensate for any losses or damages caused by their activities, including making good any public or private roads and paths affected during project implementation. If structures are affected or if plants need to be removed, compensation is mandated. In situations where permission from land occupants for laying cables or other fixtures under buildings is unreasonably withheld, the Authority can intervene to grant consent and determine appropriate compensation. This compensation can be a lump sum, annual rent, or both, ensuring that affected parties are fairly remunerated.

3.2.8 The Monuments and Relics Act, 1991

The Monuments and Relics Act addresses the management and conservation of monuments of significance at both national and local levels. It ensures the proper preservation of such monuments, particularly in cases where land use or development changes are proposed. Additionally, the Act extends to situations where the relocation of graves or graveyards becomes necessary as a result of land acquisition for various projects.



3.3 World Bank ESS5 and IFC PS5

The World Bank's Environmental and Social Standard 5 (ESS5) and the International Finance Corporation's Performance Standard 5 (IFC PS5) are both designed to address the impacts of projects involving land acquisition, restrictions on land use, and involuntary resettlement. The Mpatamanga HPP applies both the World Bank ESS5 and the IFC PS5.

Project-related land acquisition or restrictions on land use may cause physical displacement (relocation, loss of residential land or loss of shelter), economic displacement (loss of land, assets or access to assets, leading to loss of income sources or other means of livelihood), or both. The term "involuntary resettlement" refers to these impacts. Resettlement is considered involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in displacement. The WB ESS5 and IF PS5 apply to permanent or temporary physical and economic displacement resulting from land acquisition or restriction on land use undertaken or imposed in connection with the project implementation.

Affected persons may be classified as persons:

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

The objectives of the World Bank ESS 5 and IFC PS5 are:

- To avoid involuntary resettlement or, when unavoidable, minimize involuntary resettlement by exploring project design alternatives,
- To avoid forced eviction,
- To mitigate unavoidable adverse social and economic impacts from land acquisition or restriction on land use by providing timely compensation for loss of assets at replacement cost and assisting displaced persons in their efforts to improve, or at least restore, their livelihoods and living standards, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.
- To improve living conditions of poor or vulnerable persons who are physically displaced, through provision of adequate housing, access to services and facilities and security of tenure.
- To conceive and execute resettlement activities as sustainable development programs, providing sufficient investment resources to enable displaced persons to benefit directly from the project, as the nature of the project may warrant.
- To ensure that resettlement activities are planned and implemented with appropriate disclosure of information, meaningful consultation and the informed participation of those affected.

3.4 Gap Analysis between National Framework and Applicable Standards

Table 4 next page provides the gap analysis between the legal framework and the requirements of the World Bank and IFC standards on land acquisition and involuntary resettlement.



Table 4: Gap Analysis between the National Framework and WB and IFC Requirements

Topic	National Framework	WB ESS5 and IFC PS5 requirements	How the Gap is or will be bridged
Resettlement Planning	<p>The national framework does not include explicit definitions or requirements regarding involuntary resettlement planning.</p> <p>The land acquisition process is outlined in the Land Acquisition Act. The Minister, upon determining the need to acquire land in the interest of Malawi, can acquire land either compulsorily or by agreement. This process begins with a preliminary investigation to assess the land's suitability, followed by serving a notice of intention to acquire to those with an interest in the land. The notice is also published in the Gazette, inviting claims within two months. Subsequently, the Minister issues a notice to yield up possession, which can be enforced if necessary. Compensation is then assessed and paid based on the acquisition cost, value of improvements, and land appreciation, ensuring fair compensation without exceeding market value</p>	<p>The development of resettlement and land acquisition plan or framework is obligatory in case of involuntary resettlement.</p>	<p>This document (the RPF) is planning the resettlement process. Several phased Resettlement Action Plans will then be prepared, as indicated in Section 1.2.</p>
Avoidance and Minimisation of Displacement	<p>The Land Acquisition Act stipulates that the Minister has discretionary powers of decision relative to land acquisition: <i>"If the Minister resolves that it is desirable or expedient compulsorily to acquire any land under this Act, he shall serve notice upon the persons who are possessed of an interest in the land or upon such of those persons as are after reasonable enquiry known to him".</i></p> <p>The Malawi legal framework focuses on compensations. It does not include detailed and explicit measures for avoidance and minimisation of displacement.</p>	<p>The first objective of the WB ESS5 and IFC PS5 is to avoid involuntary resettlement or, when unavoidable, minimize involuntary resettlement.</p>	<p>The Project has already minimised the impacts of the main reservoir compared to the previous studies. During the Basic design and the Detailed design, further effort will be implemented to continue to minimise involuntary resettlement impacts. See Section 2.3.</p>
Eligibility	<p>Legal and customary claimants are considered eligible for compensation in the legal framework.</p>	<p>Three categories of affected persons shall be considered:</p> <ul style="list-style-type: none"> • Those who have formal legal rights to the land and assets. 	<p>While there is alignment between the National Framework and the World Bank ESS5 / IFC PS5 in considering legal and customary claims, the World Bank / IFC standards provide more detailed guidelines and requirements</p>



Topic	National Framework	WB ESS5 and IFC PS5 requirements	How the Gap is or will be bridged
		<ul style="list-style-type: none"> • Those who do not have formal legal rights to land or assets, but have a claim to land or assets that is recognized or recognizable under national law (including claims derived from adverse possession or from customary or traditional tenure arrangements); or • Those who have no recognizable legal right or claim to the land or assets they occupy or use. Lack of formal ownership does not preclude compensation to bona fide occupants or affected parties. <p>Displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of non-land assets.</p> <p>Those without legal rights to the land should have their livelihoods and standards of living restored as well as other categories of PAP.</p>	<p>for addressing the needs of different categories of affected persons, particularly those without formal legal rights to land. The Mpatamanga HPP will apply the World Bank and IFC eligibility criteria.</p> <p>See Section 5.5.</p>
Census and Socioeconomic Surveys	The national framework does not require socioeconomic surveys	The Resettlement Action Plan shall present the results of a household-level census identifying and enumerating affected persons, and, with the involvement of affected persons, surveying land, structures and other fixed assets to be affected by the Project.	<p>A preliminary census and socioeconomic survey of the households affected by the main reservoir and the main works has been completed in 2023. It is presented in Section 4.</p> <p>A census and socioeconomic surveys will be performed for all phased RAP, as indicated in section Section 1.2.</p>
Cut-Off Date	The Legal Framework does not define explicitly a cut-off date for eligibility. However, as per the Land Acquisition Act (2022) Section 5, a 'Notice of Intent to Acquire' shall be delivered personally to the persons owning the lands to be acquired or having an interest in the lands to be acquired. This Notice shall be published in the <i>Gazette</i> . After the Notice publication, the affected persons have 2 months to submit their claims or ownership or interest in the lands to be acquired.	The establishment of a cut-off date is required. Information regarding the cut-off date should be well documented and will be disseminated throughout the project area at regular intervals in written and (as appropriate) nonwritten forms and in relevant local languages. This will include posted warnings that persons settling in the project area after the cutoff date may be subject to removal.	The cut-off date to be used in the phased RAP will be the end of the census and inventory of affected assets, as defined in Section 6.1.2 . The dissemination of information on this cut-off date within the affected communities is indicated in Section 11.4



Topic	National Framework	WB ESS5 and IFC PS5 requirements	How the Gap is or will be bridged
<p>Valuation and Full Replacement Cost</p>	<p>The basis for valuations is provided for in the legal framework as follows. The Land Acquisition Act :</p> <ul style="list-style-type: none"> • (i) compensation in the case of appropriation of land by the government will be assessed by a valuer appointed by the Minister. If a person is dissatisfied with the Minister appointed valuer, said person can appoint a licensed valuer of his choice provided they pay for the cost of the valuer. • (ii) If a private developer acquires customary land, compensation shall be paid by the developer and valuation assessed by a valuer appointed by the Minister. <p>Compensation is assessed based on the following grounds : Loss of occupational rights, loss of land, loss of structure, loss of business, relocation cost, loss of good will, cost of professional advice, nuisance, injurious affection, severance, loss or reduction of tenure and disturbance. The National Land Policy (2002) states <i>"compensation shall be based on the open market value of the land and all permanent improvements on the land."</i></p>	<p>PAPs should be compensated at full replacement cost in real terms. The replacement cost is a method of valuation yielding compensation sufficient to replace assets, plus necessary transaction costs associated with asset replacement Transaction costs include labour cost, administrative charges or registration or title fees, and any similar costs imposed on affected persons. The valuation method used for determining replacement cost should be transparent and documented.</p>	<p>The national framework does not explicitly require compensation at full replacement cost in real terms, as stipulated by the World Bank ESS5 / IFC PS5. The Valuation Methodology to be applied for the phased RAP considers the full replacement cost, as indicated in Section 7.</p>
<p>Payment of Compensation</p>	<p>The Land Acquisition Act stipulates that the Minister <i>"shall on behalf of the Government pay in respect thereof fair compensation agreed or determined in accordance with the provisions of this Act"</i>. The valuation is done by an accredited valuer. The minister has discretion on whether to pay compensation in one lump sum or in instalments with further discretion on the interest rates of outstanding balances. As per Section 6 of the Land Acquisition Act, the Government may take possession of the land if it is 'urgently required' after the Notice of intent to acquire has been served to the affected owners.</p>	<p>The Project will take possession of acquired land and related assets only after compensation in accordance with ESS5 has been made available and, where applicable, displaced people have been resettled and moving allowances have been provided to the displaced persons in addition to compensation</p>	<p>Both the National Framework and the World Bank ESS5 address the payment of compensation for acquired land. However, the National Framework provides discretion to the Minister regarding the mode of payment and interest rates, while the World Bank ESS5 mandates specific requirements for compensation and resettlement before the Project can take possession of the land. Payment of compensations will be made in compliance with the World Bank and IFC requirements.</p>



Topic	National Framework	WB ESS5 and IFC PS5 requirements	How the Gap is or will be bridged
Resettlement Assistance	The Land Acquisition and Compensation Act (2022) requires in its section 10 that the compensation amount includes “relocation costs”.	The project should offer to displaced persons choices among feasible resettlement options and provide relocation assistance suited to the needs of each group of displaced persons.	The Resettlement Assistance to be provided by the Project is described in Section 8 .
Livelihood Restoration	There is no mention of livelihood restoration in the national framework.	The project should assist displaced persons in their efforts to improve, or at least restore, their livelihoods and living standards, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.	A Livelihood Restoration Programme will be implemented by each of the phased RAPs, as described in Section 9 .
Vulnerable Groups	The 2002 National Land Policy aims to guarantee secure tenure and equitable access to land for all citizens without gender bias or discrimination. Specific measures include ensuring fairness in land transactions and addressing the needs of vulnerable groups, including women, to promote social harmony and economic development.	Vulnerable people must be identified and those who warrant specific assistance must be supported throughout the resettlement and compensation process.	Vulnerable Groups have been identified through a Vulnerability Assessment. See Section 4.2.15 Measures for Vulnerable groups are defined in the Entitlement Matrix in Section 6.2 .
Gender	See above.	The consultation process should ensure that women’s perspectives are obtained, and their interests factored into all aspects of resettlement planning and implementation. Documentation of ownership or occupancy and compensation payments should be issued in the names of both spouses or single heads of households as relevant, and other resettlement assistance, such as skills training, access to credit, and job opportunities, should be equally available to women and adapted to their needs.	Measures to address gender issues in the compensation and consultation processes are defined in Sections 6.2.3 and 11 .
Consultation with Affected Persons	The Constitution guarantees the right to fair administrative action and the involvement of citizens in decisions affecting them, including the right to be heard and to seek redress through legal channels. The Land Acquisition Act mandates the issuance of notices and the holding of public meetings to inform and engage those affected by land acquisition.	Resettlement activities need to be planned and implemented with appropriate disclosure of information, meaningful consultation, and the informed participation of those affected.	The World Bank and IFC requirements for consultation of and engagement with the Project affected persons are applied. The Stakeholder Engagement Programme for the land acquisition, compensation and resettlement process is indicated in Section 11
Grievances Management	The Land Acquisition and Compensation Regulations (2020) defines in its Part IV a Dispute Settlement process when affected	There must be an independent objective appeal mechanism that is open to the public and reported openly. The Project owner should establish a grievance mechanism as early as possible in the	The World Bank and IFC requirements for a Grievance Redress Mechanism are applied.



Topic	National Framework	WB ESS5 and IFC PS5 requirements	How the Gap is or will be bridged
	<p>persons disagree with the compensation. This process is managed through court.</p> <p>The Local Government Act (<i>Local Government Act 2017</i>) stipulates that a person aggrieved by the inclusion or omission of any property in a valuation roll, or by any rule or entry related to assessable property within the valuation roll, can object to the Council within twenty-eight days from the date the rate is first payable. The objection must be in writing and detail the specific grounds for the complaint. Upon receiving an objection, the valuer can adjust the valuation roll if it pertains to inclusion or omission issues, or reassess the property's valuation, potentially altering it or confirming the original valuation, and must provide written reasons for their decision to the objector. Further appeal can be made through the courts.</p>	<p>process to receive/ address in a timely manner the concerns related to physical/ economic displacement.</p>	<p>The Project Grievance Redress Mechanism established by the Mpatamanga HPP is indicated in Section 12</p>
Monitoring and Evaluation	Not defined in the national framework.	Monitoring, evaluation and reporting of livelihood restoration mitigation measures are required. Monitoring and evaluation shall be clearly defined in the resettlement planning instrument.	The Monitoring and Evaluation activities to be implemented for the phased RAPs are defined in Section 14 .



4 Socioeconomic Profile of the Affected Communities

4.1 Methodology

4.1.1 Study Area

This section describes the results of the qualitative and quantitative socioeconomic surveys performed between September and December 2023 in the communities affected by the Project land requirements in the Main Reservoir, the Resettlement Sites and the Main works area.

At the time of these field investigations, the land requirements and the alignment of the works on the S137 road, the 400kV and the 132kV transmission lines and the proposed conservancy area were not defined and/or where being adjusted. Therefore, the identification of the households potentially affected by involuntary resettlement along these components has not been done, to avoid survey fatigue and avoid raising concerns and expectations in the communities. The RPF team has not performed a household's socioeconomic survey along these components. The RPF team has however analysed available aerial imagery along these components and undertook walkovers of these routes to estimate the extent of impacts (number of households physically and economically displaced). Focus Group Discussion and informal interviews were also performed to gather general information at the village or group Village level.

The S137 road, the 400kV and 132kV transmission lines' areas have however been included in the household's socioeconomic surveys done for the Environmental and Social Impact Assessment. These ESIA surveys were performed without identifying the affected households or the exact areas affected by the Project's land requirements along these components. The general socioeconomic context of the local communities along these components is described in the ESIA.

Table 5 on the next page provides the list of the villages potentially affected by the Project land requirements, distributed by Project component. Figure 16 provides the study area of this RPF and the location of the villages listed in Table 5, together with the administrative subdivisions in the Project area.

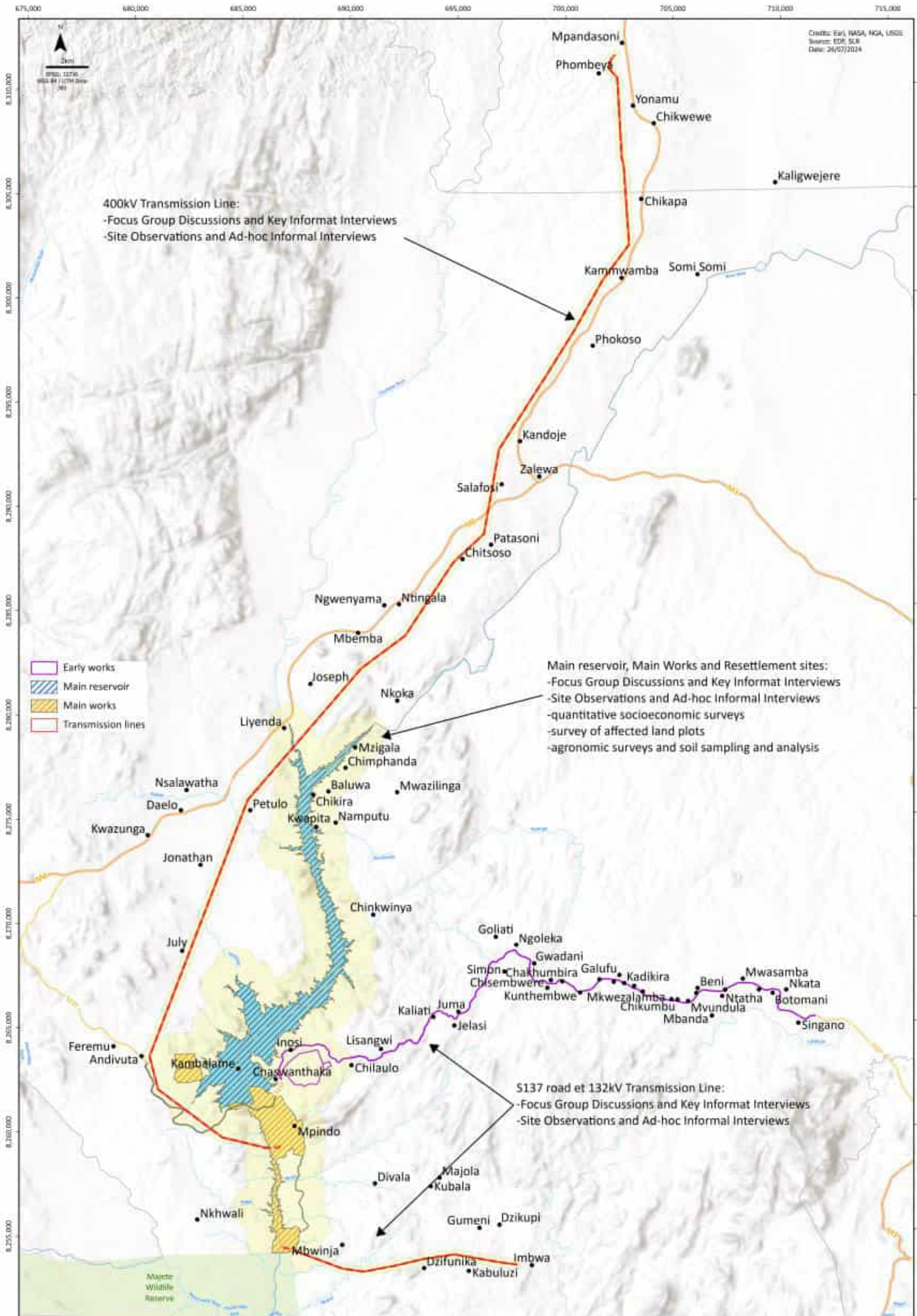


Table 5: Villages Potentially Affected by the Project Land Requirements

District	Traditional Authority	Group Villages	Villages	Main Reservoir	Main works and regulating reservoir	400kV TL	132kV TL	S137 Access Road	Proposed Biodiversity Conservancy Area		
Balaka	TA Phalula	GVH Phombeya	Phombeya			■					
		GVH Kuthambo	Yonamu, Chikwewe			■					
Neno	TA Symon	GVH Somi Somi	Chikapa, Kamwamba, Phokoso			■					
		GVH Zalewa	Kandoje, Salafosi, Patasoni			■					
		GVH Ngwenyama	Chitsoso, Ntingala Joseph			■					
			Nkoka, Liyenda		■		■				
	TA Mlauli	GVH Nsalawatha	Petulo, Jonathan, Nsalawatha		■		■				
		GVH Feremu	July		■		■				
			Feremu / Andivuta		■		■		■		
			Kambalame		■				■		
		Nkhwali						■			
Blantyre	TA Kuntaja	GVH Nkata	Singano, Nkata, Botomani					■			
		GVH Solomoni	Solomoni, Mwasamba, Jelani, Ntatha					■			
	TA Kunthembwe	GVH Mbanda	Beni, Magombo, Mvundula						■		
		GVH Chikumbu	Chikumbu, Malire, Mbanda						■		
		GVH Kadikira	Mkwezalamba, Chikhandwe, Kadikira, Galufu, Nkhumba						■		
		GVH Makunje	Makunje						■		
		GVH Kunthembwe	Kunthembwe, Adikachina, Chakhumbira, Chisembwere						■		
		GVH Gwadani	Gwadani, Ngoleka, Goliati, Simon						■		
		GVH Kaliati	Juma, Jelasi, Kaliati							■	
			Lisangwi, Inosi		■					■	
			Chilaulo, Chaswanthaka		■		■			■	
			Mpindo				■				
	Divala					■ [TBC]					
	Mbwinja							■			
GVH Mzigala	Mzigala, Mwazilinga		■								
GVH Namputu	Chimphanda, Baluwa, Chikira, Namputu, Kwapita, Chinkwinya		■								
GVH Dzikupi	Dzikunika, Kabuluzi, Gumeni, Dzikupi						■				
TOTAL	5 TA	19 GVH	70 villages	20 villages	5 to 6 villages	17 to 18 villages	5 villages	36 villages	1 village		



Figure 16: Resettlement Policy Framework Study Area





4.1.2 Surveys Performed

4.1.2.1 Informed Consent

Before each interview or focus group discussion (FGD), SLR Consulting team (henceforth referred to as SLR) introduced themselves to the interviewees and clarified the purpose of the discussions and field investigations. All interviewees were assured that any details or information collected would be treated as anonymous and that no names would be linked to any details or information. The details of the Project Grievance Redress Mechanism (see Section 12) were also shared with the interviewees.

Before the start of a discussion, all interviewees were informed that they had the right to not answer or even to stop the interview whenever they felt uncomfortable with any of the questions being asked. SLR obtained permission before taking photos of individuals.

The informed consent of the interviewees and informants for the qualitative surveys were recorded as part of the signing of attendance registers. For the quantitative surveys, informed consent was documented at the start of the electronic questionnaires.

4.1.2.2 Qualitative Surveys

A Focus Group Discussions and Key Informant Interviews

During FGDs, the data emerged organically through conversations; these being emic¹² in nature. Interview grids allowed for open-ended topics to be discussed rather than closed questions. An open-ended approach encouraged respondents to provide detailed and personalized responses. They allowed a better understanding of the respondent's perspectives, beliefs, attitudes, and experiences compared to closed questions. The interview grids allowed for an iterative conversation with the interviewees rather than a simple question-and-answer format. It also allowed the opportunity to probe the respondents for more clarity where and when necessary. Interview grids were specifically designed for four main types of FGDs, including those at the village level, with men, with women and workers at Ranches. The FGD were conducted with the help of translators who translated between Chichewa and English (see Figure 17). In total, 44 FGDs were held with 432 individuals, of whom 51% were male and 49% were women (Table 6).

Key Informant Interviews used a semi-structured tool with representatives of ranches, schools, farmers and other community members. A total of 31 KII were undertaken, with 39% of respondents being female (Table 7).

Participants were sampled for FGDs and KIIs from among the following categories of informants: village heads, VDC members, heads of local lineages '*mwini-mbumba*', lineage guardians '*nkhoswe*', immigrant non-lineage residents, widows / widowers, and ordinary farmers. The location of the FGD and KIIs is illustrated on Figure 18.

B Site Observations and Ad-hoc Informal Interviews

Direct observations¹³ were also used as part of the qualitative data collection phase. These observations focussed on the use of the river, but they also included agricultural practices, cultural heritage sites, or any element of value for the local communities. Additional observations were made along the linear infrastructure to document community infrastructure and current land use practices along the routes.

Ad-hoc informal interviews were performed "on the spot" during site observations or walkovers along the banks of the Shire River. A total of 14 ad-hoc informal interviews (Table 8) were held, with the majority of the respondents being male (86%).

¹² The "emic" approach is an insider's perspective, which looks at the beliefs, values, and practices of a particular culture from the perspective of the people who live within that culture (Mostowlansky and Andrea 2020).

¹³ Direct observations are a recognised social sciences qualitative research method (Nieuwenhuis, 2016).



Direct observations on general environmental health and hygiene conditions, such as waste (garbage) management, housing, water supply, availability of sanitation services, markets and street pharmacies were captured during field work.

C Institutional Meetings with District and Local Authorities

Meetings were also organised with District Councils (DCs) Officers and representatives of Non-Governmental Organisations (NGOs) in Blantyre and Neno districts. These meetings were used to understand the district context related to vulnerability, gender, and farming practices, among others. The institutional meetings held as part of the qualitative surveys are summarised in Table 9. A total of 7 meetings were held, with 43 respondents, of whom 51% were female.

D Agronomic Investigations

Two agronomists performed individual interviews with about 40 farmers as well as Agricultural Extensions Officer from the District Agricultural Departments in December 2023 (these interviews are included in the institutional interviews, KII and informal interviews listed in the previous sections).

4.1.2.3 Quantitative Surveys

A quantitative survey was performed amongst the households affected by the Project's land requirements in the Main reservoir and the Main Works areas. These quantitative surveys consisted in three activities performed concurrently:

- A verification and update of the preliminary census¹⁴ performed in 2020-2021 in the main reservoir, to include up-to-date information on the affected persons, and add those affected by the main works land requirements. The results of this preliminary census are given in section 5.
- An update of the identification of the affected land plots already surveyed in 2020-2021 in the main reservoir, and a survey of the affected land plots in the main works area. The results of this land survey are described in section 5.
- A quantitative household socioeconomic survey¹⁵ performed on a sample of the households affected. Some of the households identified by the preliminary census were not available for the quantitative household socioeconomic survey, or not willing to participate in this survey. A total of 419 households were surveyed, representing 68% of the identified Project-affected households (economically or physically displaced). The distribution of this sample is presented in Figure 19 and Table 10. The Socioeconomic questionnaire used is provided in Annex 5.

As the three activities were performed concurrently, the interviews for the quantitative household socioeconomic survey were most of the time held directly on the affected land plot. The interviews were also sometimes conducted in the settlements where the affected households were residing, if they were close to the affected lands. Figure 19 show the location of the interviews, not the location of the affected households' houses. The location of the physical displacement cases is outlined in Section 5.

¹⁴ A census is the process of compiling a 100 per cent sample of individuals, households and businesses (formal or informal) who will be physically and/or economically displaced by a project. It is a list of all the people who will be affected by the loss of assets or access to assets. (EBRD 2016)

¹⁵ The socio-economic survey is used to determine and analyse the socio-economic conditions of individuals, households and businesses (formal or informal) which will be physically and economically displaced by a project. This is in contrast to the objective of the census, which is a list of all those who are eligible to receive compensation and other forms of assistance from the project. The primary purpose of the socio-economic survey is to gain an understanding of the living standards of affected people/ households, their sources of income, their access to services and infrastructure, their social networks and preferences for relocation and livelihood restoration as a basis for determining displacement impacts and designing mitigation measures. (EBRD 2016)



Figure 17: Views of Focus Group Discussions and Key Informant Interviews





Table 6: Summary of the 2023 Qualitative Social Investigations (Focus Group Discussions and key informants interviews)

Date	District	Traditional Authority	GVH	Village	Total Number of Persons Met	Number of Men	Number of Women
26/09/2023	Blantyre	Kunthembwe	Kaliati	Inosi	11	5	6
26/09/2023	Blantyre	Kunthembwe	Kaliati	Chaswanthaka	10	5	5
26/09/2023	Blantyre	Kunthembwe	Gwadani	Gwadani	10	5	5
27/09/2023	Blantyre	Kunthembwe	Kaliati	Chilaulo	11	8	3
27/09/2023	Blantyre	Kunthembwe	Kaliati	Chaswanthaka	12	6	6
27/09/2023	Blantyre	Kunthembwe	Kaliati	Kaliati	11	5	6
27/09/2023	Blantyre	Kunthembwe	Kaliati	Lisangwi	6	6	0
27/09/2023	Blantyre	Kunthembwe	Kaliati	Lisongwe	6	0	6
29/09/2023	Blantyre	Kunthembwe	Namputu	Chikira and Chimphanda	26	11	15
29/09/2023	Blantyre	Kunthembwe	Namputu	Chinkwinya	10	5	5
29/09/2023	Blantyre	Kunthembwe	Namputu	Namputu	14	7	7
30/09/2023	Blantyre	Kunthembwe	Dzikupi	Dzikupi	15	8	7
30/09/2023	Blantyre	Kunthembwe	Kaliati	Mbwinja	13	8	5
01/10/2023	Blantyre	Kunthembwe	Kadikira	Kadikira	11	5	6
01/10/2023	Neno	Mlauli	Feremu	Kambalame	10	5	5
01/10/2023	Blantyre	Kunthembwe	Chikumbu	Mbanda	11	6	5
02/10/2023	Neno	Mlauli	Nsalawatha	Jonathan	10	5	5
02/10/2023	Neno	Symon	GVH Symon		6	4	2
02/10/2023	Neno	Mlauli	Nsalawatha	Nsalawatha	10	5	5
03/10/2023	Blantyre	Kunthembwe	Namputu	Mzingala	4	0	4
04/10/2023	Blantyre	Kunthembwe	Namputu	Baluwa	6	6	0
03/10/2023	Neno	Mlauli	Nsalawatha	Daelo	10	5	5
03/10/2023	Neno	Mlauli	Feremu	Kambalame	12	6	6
03/10/2023	Neno	Mlauli	Nsalawatha	Kwazunga	9	4	5
03/10/2023	Neno	Mlauli	Feremu	Nkhwali	10	5	5
04/10/2023	Neno	Mlauli	Feremu	Feremu	6	4	2
04/10/2023	Neno	Mlauli	Feremu	July	10	5	5
04/10/2023	Neno	Mlauli	Feremu	Kambalame	6	6	0
04/10/2023	Neno	Mlauli	Feremu	Andivuta	10	4	6
04/10/2023	Neno	Symon	Zalewa	Salafosi	9	4	5
05/10/2023	Neno	Symon	Ngwenyama	Nkoka	10	5	5
05/10/2023	Neno	Symon	Ngwenyama	Joseph	8	4	4
05/10/2023	Neno	Symon	Ngwenyama	Liyenda	9	5	4
05/10/2023	Neno	Symon	Ngwenyama	Mbemba	9	4	5
06/10/2023	Balaka	Phalula	Ntengula	Kaligwejere	18	8	10
06/10/2023	Balaka	Phalula	Phombeya	Phombeya	11	3	8
06/10/2023	Neno	Symon	Somisomi	Somisomi	10	5	5
06/10/2023	Balaka	Phalula	Phombeya	Yonamu	10	5	5



Date	District	Traditional Authority	GVH	Village	Total Number of Persons Met	Number of Men	Number of Women
09/10/2023	Neno	Symon	Chavara	Kandeu	10	5	5
09/10/2023	Neno	Mlauli	Nsalawatha	Liwonde	12	5	7
08/11/2023	Blantyre	Kunthembwe	Kaliati	Mpindo	5	2	3
16/11/2023	Blantyre	Kunthembwe	Kaliati	Lisangwi	7	4	3
24/11/2023	Neno	Mlauli	Feremu	Kalibu Ranch	2	2	0
30/11/2023	Neno	Mlauli	Nsalawatha	Chinere Ranch	6	6	0
Total					432	221	211
Percentage of Total					100%	51%	49%



Table 7: Summary of the 2023 Qualitative Social Investigations (Key Informant Interview)

Date	Informant Category	District	Traditional Authority	GVH	Village	Total number of Persons Met	Number of Men	Number of Women
26/09/2023	Ranch	Blantyre	Kunthembwe	Kaliati	Chaswanthaka	6	4	2
04/10/2023	Ranch	Neno	Mlauli	Feremu	Feremu	2	0	2
14/11/2023	Teacher	Blantyre	Kunthembwe	Kaliati	Chaswanthaka	1	1	0
01/12/2023	Ranch	Neno	Mlauli	Feremu	Nkhwali	1	1	0
01/12/2023	Ranch	Neno	Mlauli	Nsalawatha	Musa Ranch	2	1	1
01/12/2023	Ranch	Neno	Mlauli	Nsalawatha	Kuphedi Ranch	1	1	0
01/12/2023	Ranch	Neno	Mlauli	Nsalawatha	Titani Ranch	1	1	0
04/12/2023	Ranch	Neno	Mlauli	Nsalawatha	Mulipa Ranch	1	1	0
04/12/2023	Ranch	Neno	Mlauli	Nsalawatha	Kaphuka Ranch	2	2	0
04/12/2023	Ranch	Neno	Mlauli	Nsalawatha	Kamwendo Ranch	1	1	0
05/12/2023	Villager - Farmer	Blantyre	Kunthembwe	Kaliati	Chaswanthaka	1	0	1
05/12/2023	Ranch	Neno	Mlauli	Feremu	Mlomba Ranch	1	1	0
05/12/2023	Ranch	Neno	Mlauli	Nsalawatha	Kaphuka Ranch	1	0	1
06/12/2023	Villager - Farmer	Blantyre	Kunthembwe	Kaliati	Chaswanthaka	1	1	0
06/12/2023	Villager - Farmer	Blantyre	Kunthembwe	Kaliati	Chaswanthaka	1	1	0
06/12/2023	Villager - Farmer	Blantyre	Kunthembwe	Kaliati	Mpindo	1	1	0
07/12/2023	Ranch owner	Blantyre City				1	1	0
07/12/2023	Villager - Farmer	Blantyre	Kunthembwe	Kaliati	Inosi	1	0	1
07/12/2023	Villager - Farmer	Blantyre	Kunthembwe	Kaliati	Chaswanthaka	1	0	1
07/12/2023	Ranch	Neno	Mlauli	Nsalawatha	Mulipa Ranch	1	1	0
08/12/2023	Villager - Farmer	Blantyre	Kunthembwe	Namputu	Chikira	1	1	0
08/12/2023	Villagers - Farmers	Neno	Mlauli	Feremu	Feremu	3	2	1
09/12/2023	Villager - Farmer	Blantyre	Kunthembwe	Namputu	Chinkwinya	1	1	0
09/12/2023	Villager - Farmer	Blantyre	Kunthembwe	Namputu	Kwapita	1	0	1
11/12/2023	Villager - Farmer	Neno	Mlauli	Feremu	Kambalame	1	0	1
12/12/2023	Villager - Farmer	Neno	Mlauli	Feremu	Kambalame	1	0	1
12/12/2023	Villager - Farmer	Neno	Mlauli	Feremu	Kambalame	1	0	1
13/12/2023	Villager - Farmer	Neno	Mlauli	Feremu	Feremu	1	0	1
13/12/2023	Villager - Farmer	Neno	Mlauli	Feremu	Feremu	1	0	1
16/12/2023	Villager - Farmer	Neno	Symon	Ngwenyama	Liyenda	1	1	0
18/12/2023	Ranch owner	Blantyre City				1	1	0
Total						41	25	16
Percentage of Total						100%	61%	39%



Table 8: Summary of the 2023 Qualitative Social Investigations (Informal Discussions)

Date	District	Traditional Authority	GVH	Village	Total number of persons met	Number of men	Number of women
01/10/2023	Neno	Symon	Zalewa	Zalewa	1	1	0
03/10/2023	Neno	Symon	Ngwenyama	Liyenda	1	0	1
03/10/2023	Neno	Symon	Ngwenyama	Ngwenyama	1	1	0
03/10/2023	Neno	Symon	Ngwenyama	Liyenda	3	3	0
04/10/2023	Neno	Symon	Ngwenyama	Liyenda	1	1	0
04/10/2023	Blantyre	Kunthembwe	Namputu	Chikira	1	1	0
04/10/2023	Blantyre	Kunthembwe	Chileka	Chileka	1	1	
06/10/2023	Neno	Symon	Zalewa	Zalewa	1	1	0
04/12/2023	Blantyre	Kunthembwe	Blantyre City	Blantyre City	1	1	0
08/12/2023	Neno	Mlauli	Feremu	Feremu	1	0	1
09/12/2023	Blantyre	Kunthembwe	Namputu	Chikira	1	1	0
13/12/2023	Neno	Mlauli	Feremu	Feremu	1	1	0
Total					14	12	2
Percentage of Total					100%	86%	14%



Table 9: Summary of the 2023 Qualitative Social Investigations (Institutional Meetings)

Date	Name	District	Traditional Authority	GVH	Village	Total Number of Persons Met	Number of Men	Number of Women
28/09/2023	NGO Save the Poor Foundation	Blantyre	Blantyre	Blantyre	Blantyre	1	0	1
28/09/2023	NGO Hands of Hope	Blantyre	Blantyre	Blantyre	Limbe	1	1	0
28/09/2023	NGO Gender Support Program	Blantyre	Blantyre	Blantyre	Blantyre	1	1	0
28/09/2023	Blantyre DC Social Welfare Service	Blantyre DC	N/A	N/A	N/A	3	1	2
28/09/2023	Blantyre DC Land Service	Blantyre DC	Blantyre City	Blantyre City	Blantyre City	3	1	2
28/09/2023	Blantyre DC Agriculture Service	Blantyre	Blantyre	Blantyre	Blantyre	1	0	1
02/10/2023	Victim Support Unit (Chileka Police Station)	Blantyre	Blantyre	Chileka	Chileka	4	1	3
02/10/2023	Mlauli Area Development Committee and TA	Neno	Mlauli	N/A	N/A	5	3	2
02/10/2023	Gender officer at District Office	Blantyre	Blantyre	Blantyre	Blantyre	1	0	1
05/10/2023	Acting Gender Officer of the Neno District Council	Neno	Neno	Neno	Neno	1	0	1
05/10/2023	Neno DC Social Welfare Service	Neno	Neno	Neno	Neno	1	0	1
11/12/2023	Egenco staff on Tedzani Dam	Blantyre	Kunthembwe	Namputu	Mzingala	9	7	2
14/12/2023	Mark Tandaude (Neno EPA)	Neno	Symon	Zalewa	Zalewa	1	1	0
14/12/2023	Jones Chiteka (Evangelical association of Malawi)	Blantyre	Blantyre City	Blantyre City	Blantyre City	1	1	0
15/12/2023	District Project Coordinator of Malawi Watershed Services Improvement Project (MWASIP)	Blantyre	Blantyre City	Blantyre City	Blantyre City	1	0	1
15/12/2023	Cliffora Malupga (EPA Aedo)	Blantyre	Kunthembwe	Kunthembwe	Kunthembwe	1	1	0
18/12/2023	Egenco staff on Kapichira Dam	Chikwawa	Kasisi	Chikwawa	Chikwawa	8	3	5
Total						43	21	22
Percentage of Total						100%	49%	51%



Figure 18: Qualitative Interviews

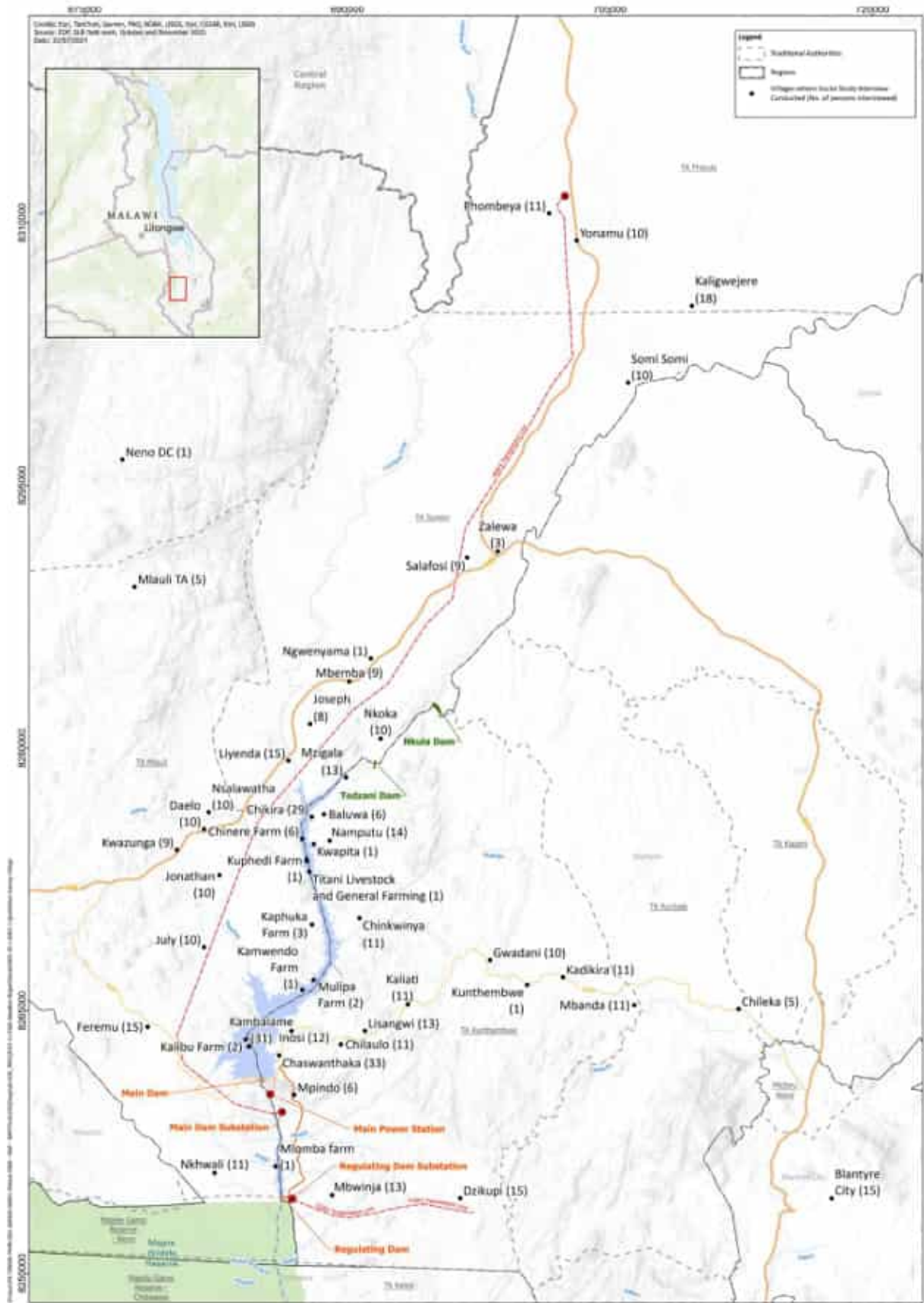




Figure 19: Quantitative Socioeconomic Households Surveys

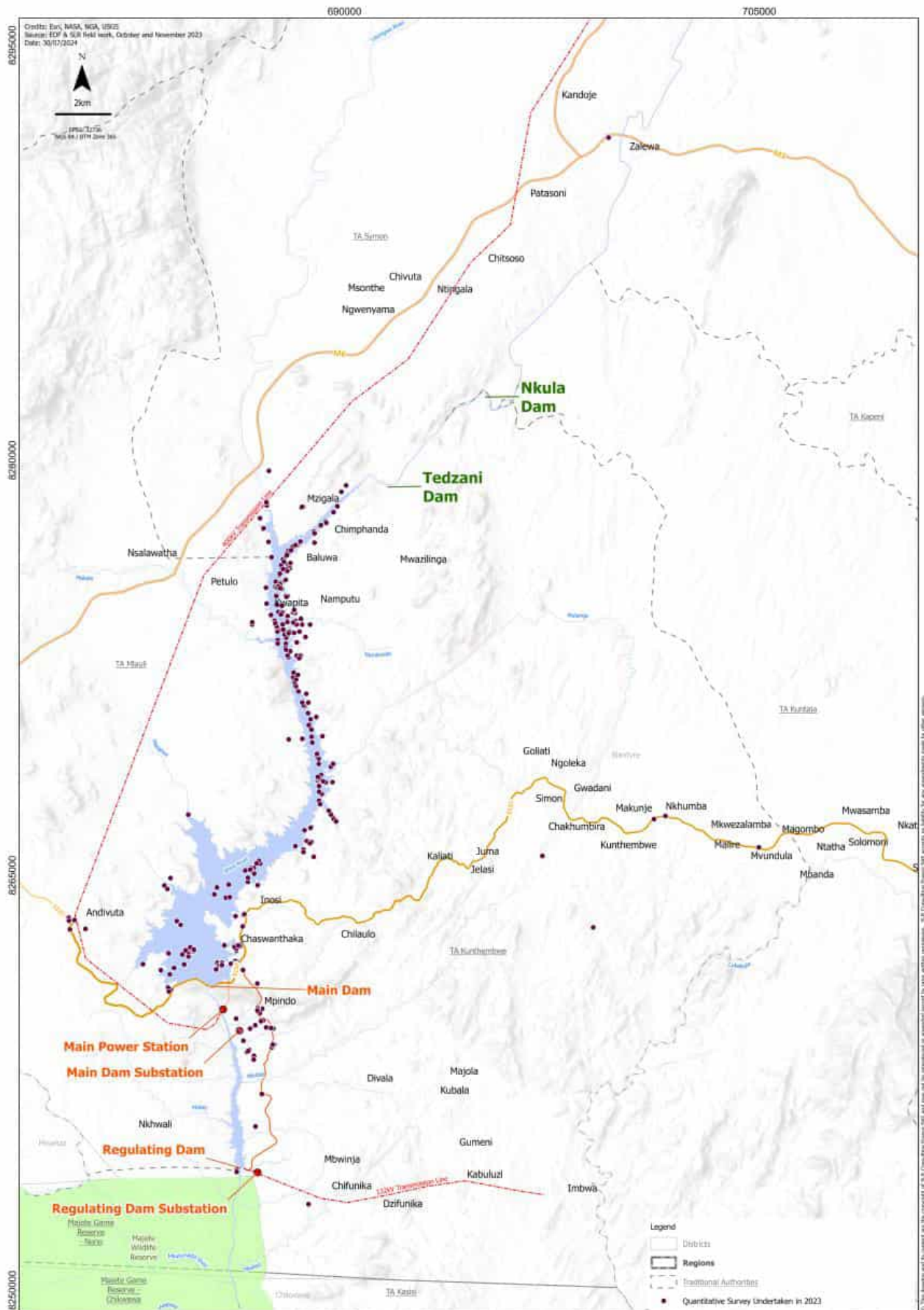




Table 10: Sample of affected households surveyed for the Household Socioeconomic Survey

Residency of the Project affected households*				Number of Project Affected Households (PAH) ^a (Census)	PAH Surveyed by the socioeconomic households' survey ^b		Note
District	Traditional Authority	Group Village	Village		Number	%	
Blantyre City				14	6	43%	** #
Blantyre District	TA Kapeni	GVH Makata	Magasi	1	1	100%	**
		TA Kunthembwe	GVH Gwadani	Gwadani	8	2	25%
	Ngoleka			2	1	50%	**
	GVH Kaliati		Chaswanthaka	106	61	58%	
			Chilaulo	1	1	100%	
			Inosi	19	12	63%	
			Lisangwi	33	23	70%	
			Mbwinja	9	7	78%	
			Mpindo	47	36	77%	
	GVH Kunthembwe	Chakhumbira	1	0	0%	**	
	GVH Mzigala	Mwazilinga	6	3	50%		
		Mzigala	12	11	92%		
	GVH Namputu	Baluwa	5	5	100%		
		Chikira	35	24	69%		
		Chimphanda	19	16	84%		
		Chinkwinya	58	49	84%		
		Kwapita	10	7	70%		
		Namputu	88	65	74%		
	GVH Ntenje	Ntenje	1	1	100%	**	
Neno District	TA Mlauli	GVH Feremu	July	2	1	50%	
			Feremu	2	1	50%	
			Kambalame	107	66	62%	
			Nkhwali	3	2	67%	
	GVH Nsalawatha	Jonathan	11	4	36%		
		Nsalawatha	1	0	0%		
		Petulo	9	9	100%		
	TA Symon	GVH Ngwenyama	Liyenda	9	6	67%	
			Nkoka	3	2	67%	
		GVH Zalewa	Zalewa	2	0	0%	**
Total				624	422	68%	
<p>* The Place of residency of the Project-affected households is sometimes different from the areas affected by the Project land requirements. Some of the affected households are not residing in these areas, and are only economically displaced: they will only lose land and/or assets. They are "non-residents" PAH.</p> <p>^a The Census is the list of all persons affected by the Project land acquisition.</p> <p>^b The socioeconomic survey includes more information than the census. It can be performed on a sample of the affected households. The primary purpose of the socioeconomic survey is to gain an understanding of the living standards of affected people/ households, their sources of income, their access to services and infrastructure, their social networks and preferences for relocation and livelihood restoration as a basis for determining displacement impacts and designing mitigation measures.</p> <p>** denotes « non-resident » PAH, who own lands affected by the Project land requirements, but are not residing in the areas or villages directly affected by the Project land requirements</p> <p># The PAH residing in Blantyre city are the owners of affected commercial farms or ranches located in the Main Reservoir or Main Works areas (see section 4.2.10.4)</p>							



4.2 Socioeconomic Profile of Affected Communities

4.2.1 Administrative sub-divisions

The highest political body at the district level is the District Council (DC). Each DC is subdivided into several Traditional Authorities (TAs), each with its own Area Development Committees (ADCs). TAs are in turn subdivided into several Group Village Heads (GVHs), each with its own Village Development Committee (VDC).

District Councils are responsible for overseeing all infrastructural, economic, and social development in their district through the formulation, approval and execution of a District Development Plan. They are also mandated to promote local democratic institutions and participation, making policies & by-laws for local governance and development, raising funds & mobilising resources, peace and security maintenance in conjunction with the police. The District Executive Committee (DEC) is the technical advisory body of the District Council. It is composed of heads of government departments, civil societies and NGOs, and assists the DC in the design, formulation, and development of projects in the district.

The Area Development Committees (ADCs) oversee all Village Development Committees in their area, and are composed of 20 or so members, namely the TA chief, members of parliament, ward councillors, elected representatives from GVH level VDCs, and representatives from various interest groups. Although data is not available for all TA level ADCs in the study area, SLR experts have conducted institutional interviews with select ADCs where the gender distribution was found to be relatively equal. ADCs are charged with preparing project proposals from VDCs for submission to the DC, mobilizing community resources, overseeing and monitoring the implementation of development projects in the area (e.g., projects that deal with water, hygiene, poverty, education, gender, etc). ADCs are also involved in budget definitions and fund raising.

Finally, at grassroots level, there are Village Development Committees, who report to the ADCs. Most surveyed villages are part of a greater GVH level VDC. Each is composed of the local chief and elected representatives from each village, with roughly equal gender representation. VDCs are responsible for identifying and prioritizing local needs, mobilizing community resources for self-help grassroots initiatives, and coordinating and planning community development projects with TA level ADCs.

Table 5 provides the Districts, Traditional Authorities, Group Villages and Villages affected by the Project's land requirements defined in Section 2.2, and Figure 16 provides their location.

4.2.2 Land Use

The land use categories within the Project land requirements areas defined in Section 2.2 are:

- Illustrated on the land use maps in Figure 20 to Figure 25;
- Quantified in Table 11; and
- Described in Sections 4.2.2.1 to 4.2.2.4.



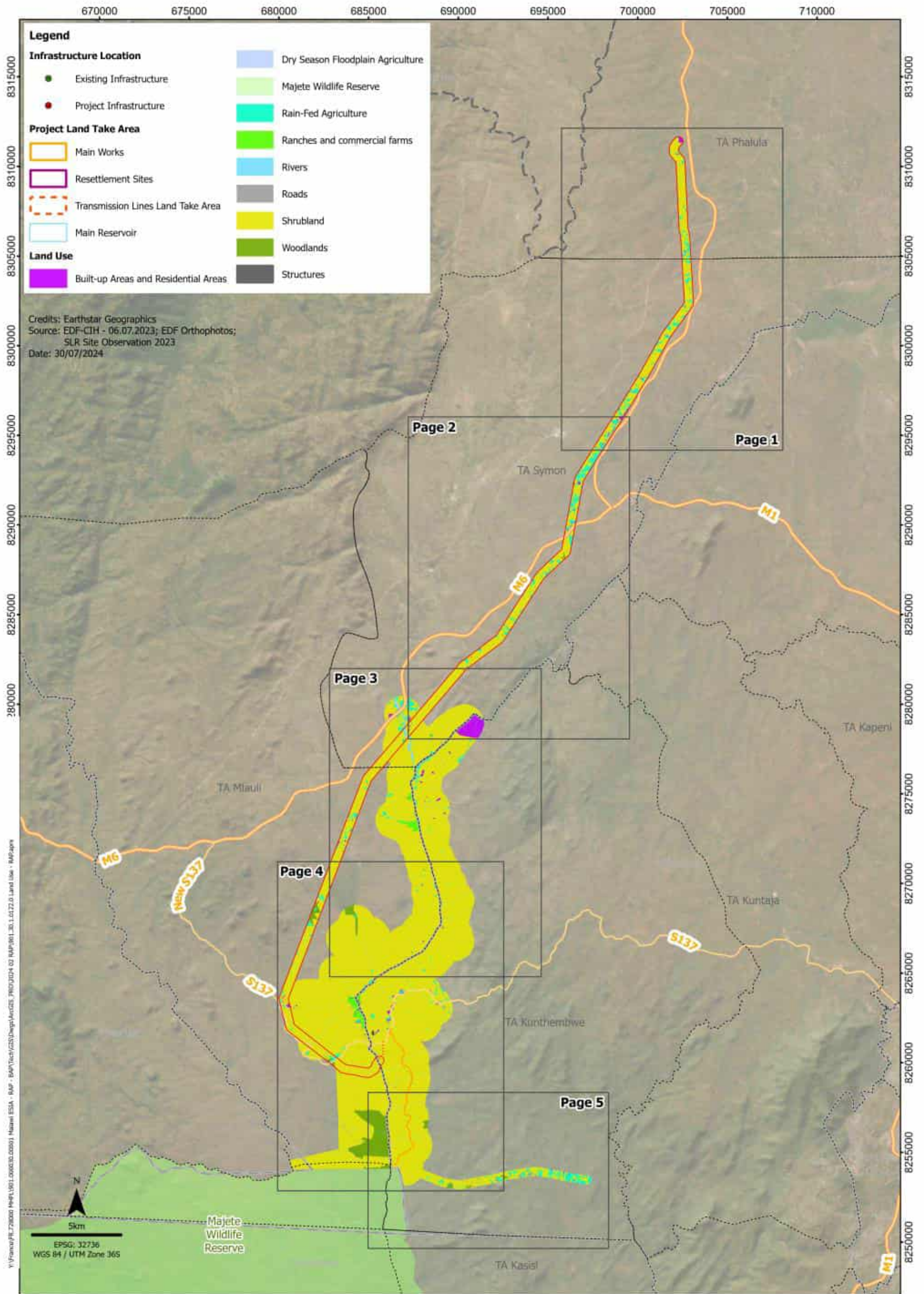
Table 11: Types of Land Uses within the Project Land Requirements Areas.

Type of Land Use	Total Project Land Requirements*		Main Reservoir Land Requirements*		Main Works Land Requirements*		400 KV TL Land Requirements*		132 KV TL Land Requirements*		S137 works Land Requirements*		Proposed Resettlement Sites Land Requirements*		Proposed conservancy area*	
	ha	%	ha	%	ha	%	ha	%	ha	%	ha	%	ha	%	ha	%
Built-up area and residential areas	29	0.5%	11	1%	4	0%	5	1%	0	0%	8	8%	0	0%	1	0.1%
Rain-fed agriculture	118	2.1%	53	3%	0	0%	45	13%	9	23%	11	10%	0.4	0.10%	0	0%
Ranches and commercial farms	91	1.6%	89	4%	0	0%	0	0%	0	0%	0	0%	0	0%	1	0.1%
Rivers	267	4.8%	195	10%	62	8%	1	0%	0	0%	0	0%	0.1	0.04%	10	0.5%
Roads	36	0.6%	3	0%	1	0%	1	0%	0	1%	31	29%	0.2	0.04%	0	0%
Shrubland	4690	83.4%	1689	83%	684	86%	289	84%	27	71%	55	51%	386.3	99.82%	1561	81.7%
Woodlands	394	7.0%	5	0%	44	5%	5	1%	2	4%	1	1%	0	0%	338	17.6%
Total	5625	100%	2045	100%	794	100%	345	100%	38	100%	106	100%	387	100%	1910	100%

* All land requirements are rounded up. As explained in Section 2.2, some of the land requirements may be adjusted or optimised during the detail design.



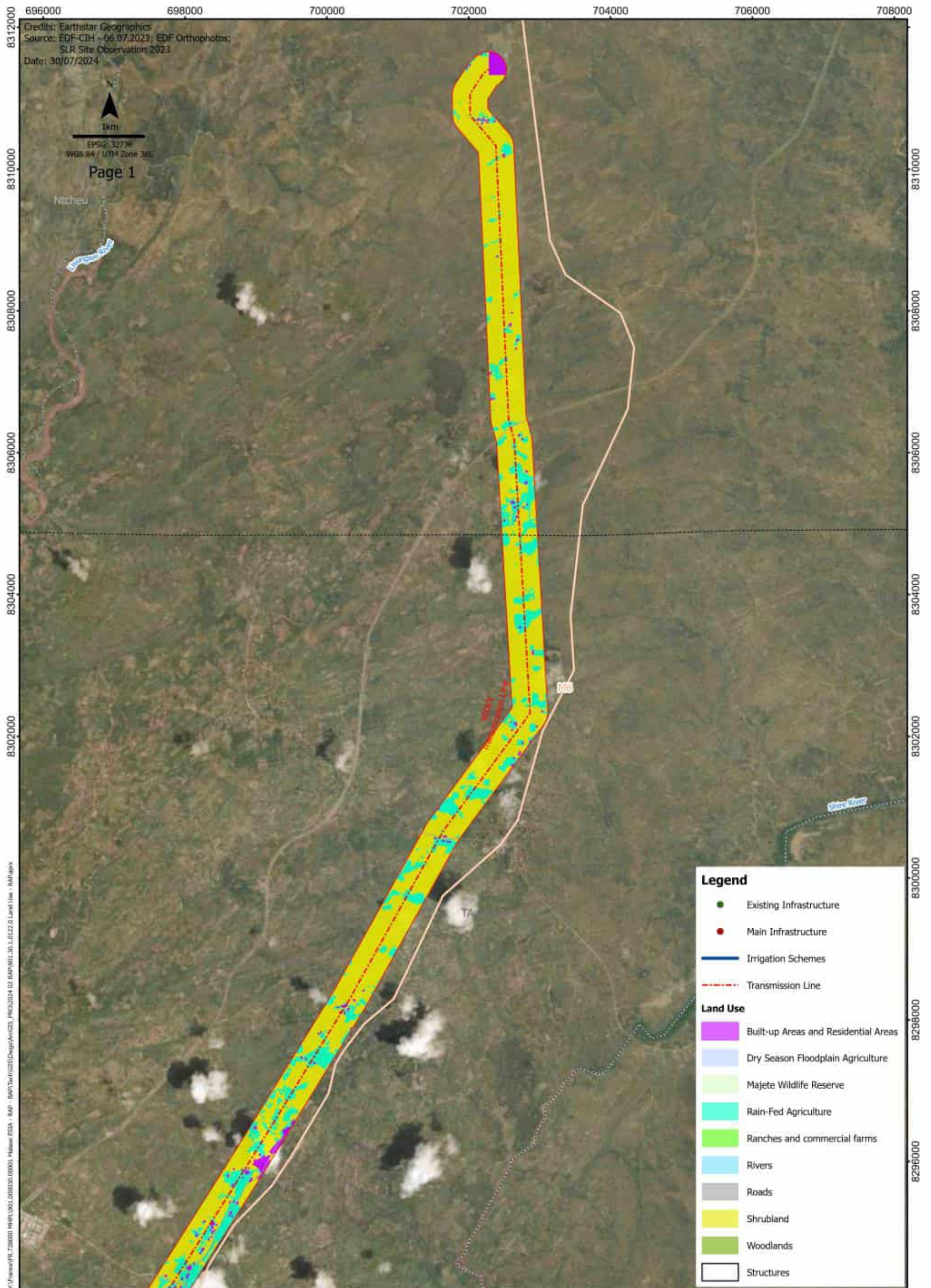
Figure 20: Land Use Map (Atlas)



© This drawing and its content are the copyright of SLR Consulting France SAS and may not be reproduced or amended except by prior written permission. SLR Consulting France SAS accepts no liability for any amendments made by other persons.



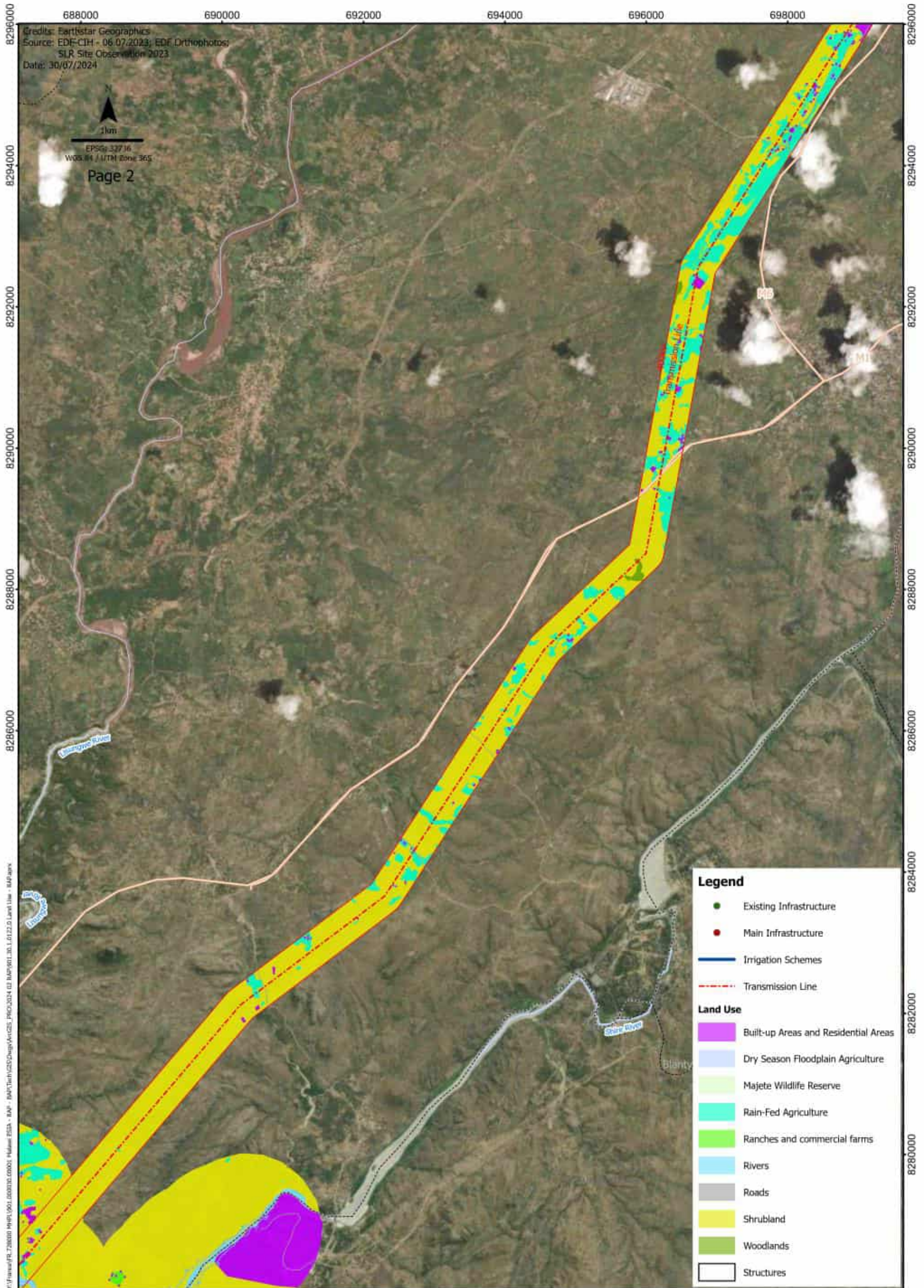
Figure 21: Land Use Map (Page 1)



© This drawing and its content are the copyright of SLR Consulting France SAS and may not be reproduced or amended except by prior written permission. SLR Consulting France SAS accepts no liability for any amendments made by other persons.



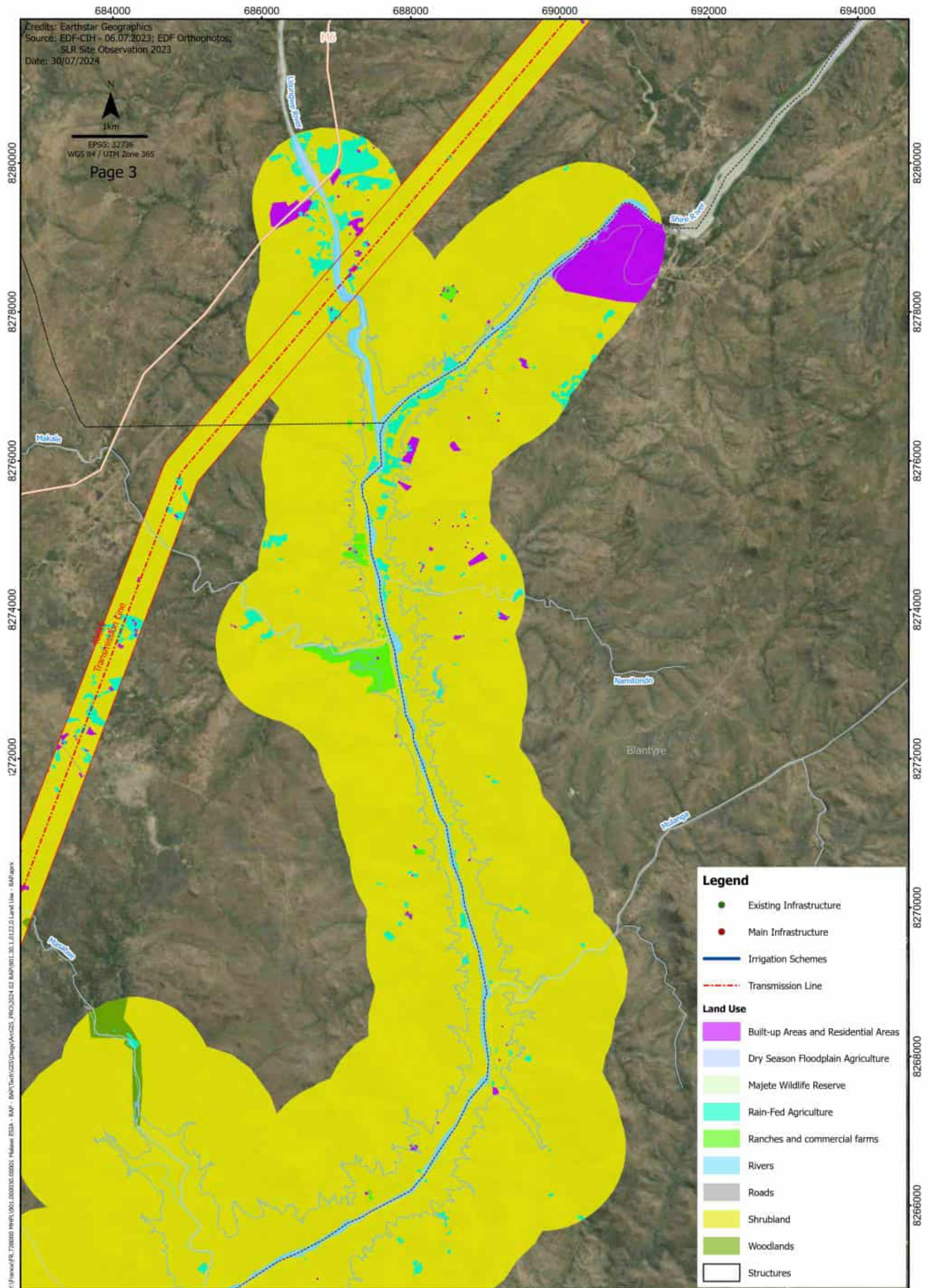
Figure 22: Land Use Map (Page 2)



© This drawing and its content are the copyright of SLR Consulting France SAS and may not be reproduced or amended except by prior written permission. SLR Consulting France SAS accepts no liability for any amendments made by other persons.



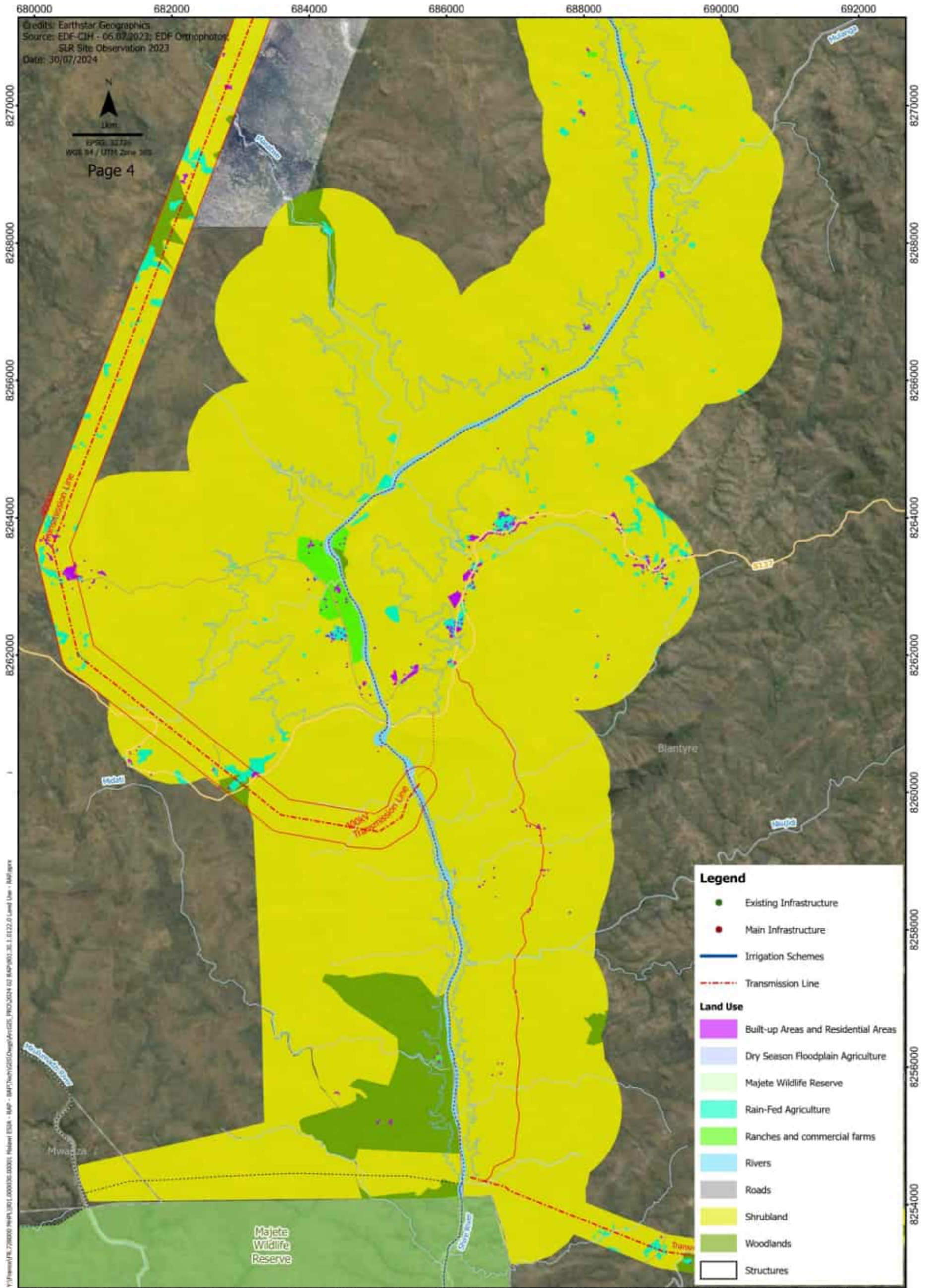
Figure 23: Land Use Map (Page 3)



© This drawing and its content are the copyright of SLR Consulting France SAS and may not be reproduced or amended except by prior written permission. SLR Consulting France SAS accepts no liability for any amendments made by other persons.



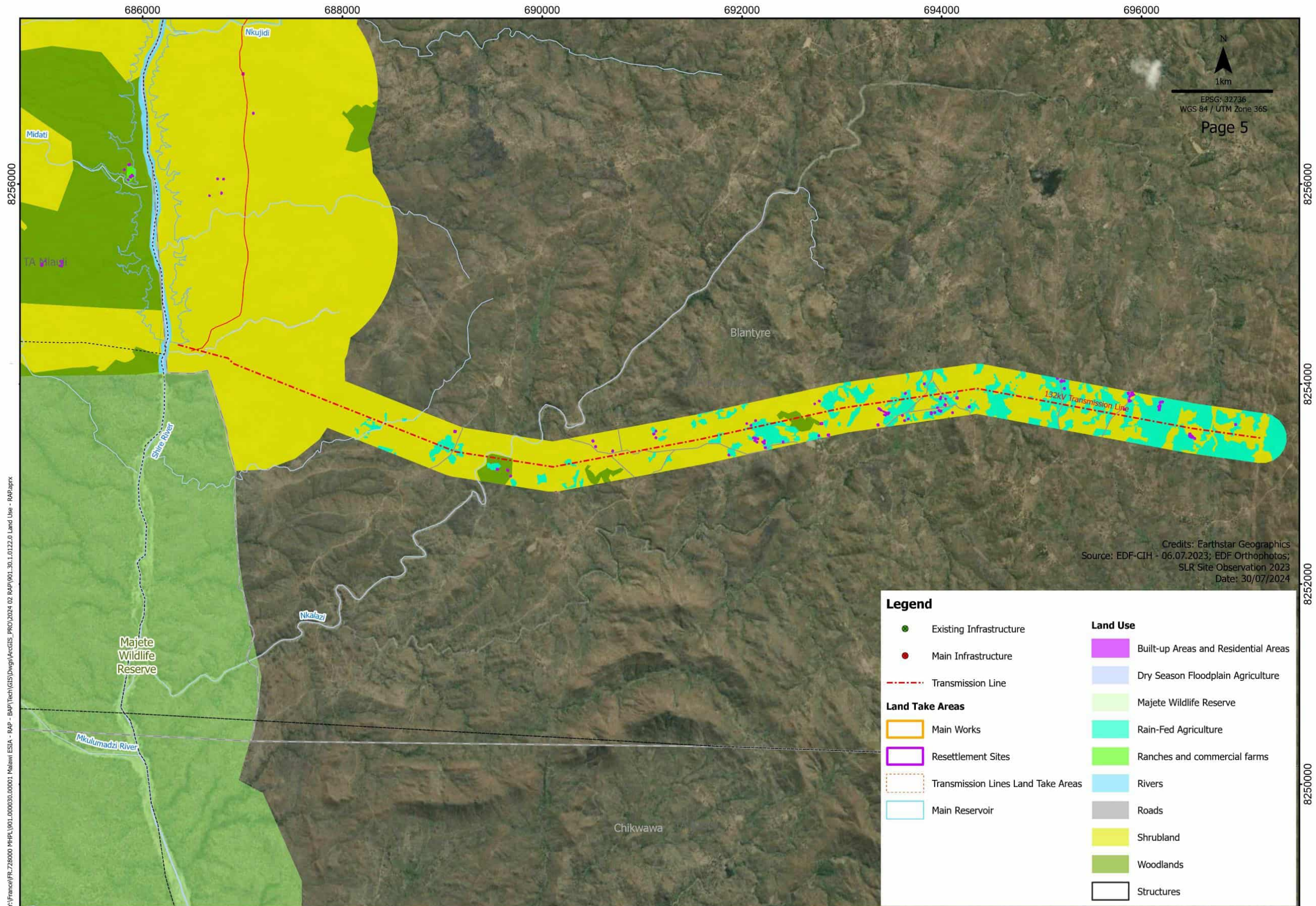
Figure 24: Land Use Map (Page 4)



© This drawing and its content are the copyright of SLR Consulting France SAS and may not be reproduced or amended except by prior written permission. SLR Consulting France SAS accepts no liability for any amendments made by other persons.



Figure 25: Land Use Map (Page 5)



© This drawing and its content are the copyright of SLR Consulting France SAS and may not be reproduced or amended except by prior written permission. SLR Consulting France SAS accepts no liability for any amendments made by other persons.



4.2.2.1 Shrubland

Shrublands predominate both in the Project Land Requirements (83%).

Shrublands have evolved from the degradation of woodlands, largely due to extensive harvesting for charcoal, fuelwood, and subsistence farming. Exhibiting a vegetation structure ranging from low to mid-high, with moderate to dense canopy cover, they host a diverse array of woody shrubs, small trees, and grass-dominated undergrowth. Among these, softwood trees, often left unharvested, stand tall.

Fieldwork conducted in 2023 revealed shrublands play a role in supporting various activities for local communities. These areas are utilized for agricultural purposes, providing spaces for subsistence farming and cultivation of essential crops for livelihoods. They also serve as vital areas for livestock rearing, offering open grazing spaces for cattle, sheep, and goats, and provide access to water sources such as the Shire River and its tributaries (see Section 4.2.10.3). Additionally, shrublands are often utilized for charcoal production, which serves as a fuel source for cooking and heating in households and provides an income stream (see Sections 4.2.10.2 and 0). They further serve as areas for brickmaking, hunting and the collection of firewood and medicinal herbs (See Section 4.2.11.1).

Figure 26: Brickmaking in Dzikupi, Blantyre District (top). Shrublands in Liyenda, Neno District (bottom).





4.2.2.2 Agricultural Areas

Agricultural areas, both rain-fed agriculture (inland and on the riverbanks) and floodplain agriculture (dry season), represent about 2% of the overall Project Land Requirements. Section 4.2.10.3 describes in detail the agricultural practices within the affected communities.

Along the transmission lines, subsistence-based agriculture was mainly observed (Figure 27). In the main reservoir area, agricultural activities were observed on both sides of the riverbanks, with cultivated fields located in the southern and northern parts along the Shire and its tributaries (Figure 23). While the left bank is mostly used for subsistence agricultural and livestock activities, the right bank is characterized by the presence of commercial farms and ranches along the riverbanks (See Section 4.2.10.4).

Figure 27: Rain-Fed Subsistence Agriculture under the proposed 132 KV Transmission Line, Dzikupi Village (Left). Chinere commercial ranch on the right bank of the main reservoir (Right).



4.2.2.3 Built Up and Residential Areas

Built up and residential areas represent 0,5% of Project Land Requirements (the S137 Road is not considered in these figures). Built up and residential structures are scattered across the study area, although they are denser along the roads (see Figure 36)

4.2.2.4 Woodlands

Woodlands represent 7% of Project Land Requirements.

Woodlands are relatively scarce and scattered within the study area but are mainly found in areas on the right bank of the Shire River within or adjacent to the reservoir and regulating dam. They are characterized by a diverse mix of tree and shrub species with a relatively dense canopy cover and an herbaceous understorey dominated by grasses and forbs. Woodlands have historically been cleared for charcoal production and agriculture.

Woodlands are reportedly used for various purposes, including providing sacred spaces, medicinal resources, hunting grounds, and materials for construction and fuel (see Section 4.2.11.1).

4.2.3 Land Tenure

4.2.3.1 District level

As per the legal framework, land is categorized into three main types, namely public, private and customary lands. Of the three categories, customary lands are the most prevalent in the three districts as shown in Table 12.



Public or government lands are held and managed by government institutions and agencies for purposes of national development, security, and tourism. They are generally openly used or accessible to the public at large, and include government buildings, health facilities, schools, game and forest reserves, roads, railways, markets, and police stations.

Private lands are the least prevalent category of lands in the districts. They are made up of freehold lands and lands leased from formally customary lands. They are usually held by individuals, businesses, and institutions for residential, agricultural, or institutional purposes. They include individual small-scale farms, private estates, cattle ranches, and other large scale agricultural or industrial activities.

Customary land, governed by customary practices, is the most widespread category across the surveyed areas. It is primarily subsistence oriented and is overseen by traditional authorities, group village headmen and village headmen.

Table 12: Proportion of public, private and customary lands at district level.

District	Public Land	Private Land	Customary Land
Blantyre	54%	4%	42%
Neno	16%	6%	77%
Balaka	6%	5%	89%

Source: (Blantyre District Council 2017; Neno District Council 2017; Balaka District Council 2020)

4.2.3.2 Customary Land within the Study Area

A Hereditary Land – Malo Alimana Akuntundu

Matrilineal inheritance and matrilineal residence practices prevail in all the surveyed villages within the study area. The Mang'anja, the area's majority ethnic group, adhere to matrilineal norms, and most minority ethnic groups have in turn adopted these norms over successive generations. While there are reported cases of patrilineal, patrilocal, or mixed practices, these remain exceptions.

Under prevailing matrilineal practices, children are firmly affiliated with the maternal side of the family, also called 'matriclan'. Daughters are the rightful inheritors of the land, and men traditionally relocate to their wives' villages upon marriage and engage in the cultivation of their wives' land. In the event of marriage dissolution through separation, men are required to return to their original village, while wives and children continue to reside in their current location. In the case of the wife's passing, the land transfers to the children, and the widower usually returns to his initial village, except when granted permission to remain by the family of his deceased wife. Permission to remain is not usually given, but exceptions can be made due to factors like old age.

It is common practice for parents to distribute land to all their children, including sons, who hold a right of use to the land either (i) on a temporary basis until their matrilineal marriage in another village, at which point the land is entrusted to their sister or closest matriclan heir, or (ii) on a permanent basis, even while married and cultivating their wife's land in a different village. In this scenario, upon the death of the sons, the land typically passes to their nearest matriclan heir, which could be a sister or a sister's children, rather than their own offspring.

These two allocation arrangements seem to be equally prevalent, with the choice influenced by specific family circumstances and local land availability / scarcity. The rationale behind allocating land to sons or brothers often revolves around (i) providing them with a means of livelihood until marriage and (ii) ensuring their livelihood should they return to their original village after a marriage concludes (i.e. death of wife, divorce / separation). In the latter case, returning brothers typically lay claim to or reclaim land from their sisters, a practice that has been recognised as a potential source of conflict within families.

As long as parents are alive, children's ownership of allocated land remains partial, with full ownership realised only upon the parents' passing.

Varying viewpoints were held on the sale of hereditary land. In most cases, it is stipulated that the sale of such land, possible for both sons and daughters, is contingent on an agreement within



the matrilineage. This typically entails consultation with parents (if they are alive), other siblings, the *nkhoswe*, and potentially other extended family members. Furthermore, proceeds from the sale of hereditary land must be shared with parents, siblings, and potentially extended family. Failure to adhere to these steps, including (i) consulting the family before a sale and (ii) sharing the sale proceeds, has been identified as a potential source of conflict within families. Notably, husbands lack the authority to sell their wife's land.

While there was some dispute on this matter, most respondents agreed that hereditary lands can be leased without the need for consultation with the extended family or an obligation to share the rental income. When it comes to cultivation, it is predominantly an individual or household endeavour, and the consumption and sale of crops from the land are not subject to any claims by the extended family. Only one instance (Chilaulo Village within GVH Kaliati) of common clan lands were mentioned. In this case, it was explained that family members, after seeking permission either from the eldest family member or the *nkhoswe*, could freely cultivate common family land.

B Hereditary Land – Patrilineal, Patrilocal or Mixed Exceptions

While most historically patrilineal groups in the study area, such as the Ngoni, Chewa, and Sena, have transitioned to matrilineal practices over time, a small minority who adhere to patrilineal or mixed practices appear to persist in certain villages. These villages include Mbwinja (GVH Kaliati), Kaliyati (GVH Kaliati), Liyenda (GVH Ngwenyama), Baluwa (GVH Namputu).

The rules for patrilineal and patrilocal practices mirror the matrilineal and matrilineal ones, with the difference being that land is transmitted through the male line, or patrilocal, and wives relocate to their husbands' villages. This holds true exclusively for marriages between patrilineal groups. In instances of mixed marriages between patrilineal and matrilineal families, matrilineal rules always prevail.

In Baluwa Village, the increasing occurrence of patrilocal and/or flexible marriages was noted. These marriages are the result of personal choices, driven by whichever arrangement affords greater access to resources (e.g. the husband may have access to more land or more lucrative employment elsewhere, and the family follows). These patrilocal marriages maintain the matrilineal lineage, with children continuing to belong to the matrilineage, and land being passed on through daughters.

In Liyenda Village, male respondents mentioned the possibility of paying a dowry before marriage. It was explained that this practice can transform a marriage, which would have normally been matrilineal, into a patrilineal one. In such cases, the wife and their future children are considered as belonging to the father's side of the family or patrilocal. Consequently, inheritance follows patrilineal rules, with children inheriting their father's land.

C Land Given by the Village Chief

A common method of acquiring land is by making a request to the local chief. The chief may allocate the land for free or sell it, provided land is available in the area.

For freely allocated land, people of any gender and origin may approach a village chief and make a formal request for land. While there is no mandatory fee, it is customary to give an appreciation token to the chief, locally known as '*Chipondetsa Minga*.' This token can take various forms, from gifts of beer and maize to celebratory events. If the person making the request comes from another village, the chief typically initiates a background verification process. This procedure often involves consultation with the requester's previous village chief to ensure they do not have a criminal history or other concerning issues. After completing checks, and provided that land is available, the chief proceeds to grant the land allocation request in the presence of witnesses and ensures clear parcel demarcations. Usually no formal documents are signed, oral agreements being the norm. Land that was given freely by the chief can thereafter be inherited by children in accordance with the local custom.

Although some respondents reported more relaxed restrictions, notably in the absence of the chief, it is generally understood that land allocated freely by the chief cannot be sold. This restriction may endure for several generations, with the understanding that the land must be



returned to the chief if the family chooses to relocate. The possibility of selling the land may arise if (i) the chief grants permission to sell in exceptional cases, or (ii) after several decades or generations, contingent on the family no longer being considered strangers / 'obwera' in the village, or (iii) if a change in chieftaincy occurs (although not always the case). The sale, or attempted sale, of such lands has been mentioned as a source of conflict.

No restrictions have been mentioned in terms of renting out land freely given by the chief.

It is also possible to buy land from the chief. The process is similar to the one described above, with the exception being that when bought, no restrictions are placed on the land. The one who acquires the land can sell, rent out, give away and designate heirs as he or she sees fit.

D Land Given or Lent Out for Free Between Family and Friends

Land can also be informally lent out between friends or relatives. This can be done either for a fixed period time, or for an indefinite period.

If land is being lent out for an indefinite period of time, it can be passed on through inheritance (e.g. Friend A lends out his land to Friend B, the children of Friend B can thereafter inherit this land). In either case, land that are being lent out cannot be sold by the recipients, and an attempted sale would be grounds for conflict. Disputes may also arise when descendants of the original owner (Friend A) attempt to claim back the land from the descendents of the original recipient (Friend B).

E Bought Land – 'Ogula Malo'

Buying land was cited as a solution to supplement small hereditary land plots that have often been divided among too many heirs and as an alternative to asking the chief for land in areas where there are no more land available.

Buying and selling land appears to be a common practice across the surveyed area, save for one notable exception in Mbwinja Village (GVH Kaliati) where the local chief has forbidden all land sales, with the understanding that all hereditary land must return into the custody of the chief should families choose to move away.

The process for buying land is the following: parties reach an agreement among themselves and then go the chief to notify him of the transaction. Although veto powers have been reported in some cases (e.g. due to family disagreements over the sale), there is usually no authorisation required from the chief. He merely acts as a witness and ensures that parcel delimitations are respected. In some cases, a formal document is signed, and in others it is an oral agreement.

Land that has been acquired through purchase is considered fully owned by the buyer. He or she can sell the land, put it out for rent, and designate inheritors without any restrictions.

F Rented Land

Renting land is a common practice throughout the study area. In some instances, obtaining agreement from the rest of the family may be necessary before putting hereditary land for rent, with matrilineal systems typically requiring the wife's consent. The distribution of rental proceeds within the household is considered a private arrangement.

Rental agreements are usually established through verbal agreements and do not involve formal written documentation. Land rental agreements typically last no more than three years. If a rental agreement is renewed after the initial three years, it typically involves a new parcel of land. According to respondents, the rationale for this is to avoid potential ownership disputes, citing provisions in Malawi law that make it possible for renters to claim ownership of a specific parcel of land after a 3 to 5 year period.

Individuals are generally free to offer their land for rent to anyone. Nonetheless, there was one notable exception encountered in Mbwinja Village (GVH Kaliati), where the local chief had imposed a ban on renting land to outsiders. Some villages, such as Chilaulo (GVH Kaliati), and Chinkwinya (GVH Namputu), reported a relatively low prevalence of land rental practices.



G Common/Village Land – ‘Malo Amudzi’

While their overall prevalence in the study area seems to be very low, the presence of communal village land has been occasionally noted. Through common agreement, the land belong to the whole village and cannot be purchased or given away by the chief. They may be used by all villagers for livestock grazing, hunting, collecting firewood, hay and medicinal plants. If a public building such as a school is to be build, this would typically be done on communal land. Villages where communal land were mentioned are Chaswanthaka (GVH Kaliati), Feremu (GVH Feremu), Nkoka (GVH Ngwenyama) and Chinkwinya (GVH Namputu).

H Land Conflicts

Table 13 provides a summary of the most common types of land conflicts and means of resolution.

Table 13: Types of land conflict and means of resolution

Types of Land Conflicts	Means of Resolution
A family or lineage member wants to sell hereditary land while others do not, sparking conflict	Parents can usually resolve land conflicts between siblings
Sale of hereditary land without family consent. This may lead to the disinheritance of the guilty family member	The family Nkhoswe, a role often filled by the Malume / maternal uncle, can act as mediator in conflicts
Conflicts due to unequal sharing of proceeds from a hereditary land sale	Siblings and/or neighbours can resolve issues through private agreement
Conflicts due to a lack of clear parental instructions on land distribution among children	Issues can be escalated to the local chief for further mediation or a final decision
Attempts to sell land given freely by the chief, causing conflicts, especially if the family is still considered strangers or <i>obwera</i> in the village	Issues can be escalated to the Traditional Authority level for further mediation in some cases. A small fee is usually paid (e.g. a chicken)
Conflicts from attempting to sell land lent out or given as a gift from a friend or relative	
Disagreements on parcel demarcations, generating disputes regarding inheritance, sales, and neighbourly crop planting	
Land grabbing by siblings. When returning sons or brothers seek land after a divorce, sparking conflicts with sisters or their children. Similar conflicts may arise with returning daughters or sisters after a separation or divorce.	
Cases of the same land plot sold to multiple buyers	
Cases of chiefs reselling bought land without the owner's knowledge	

4.2.3.3 Land Ownership within the Households Surveyed

Tables Table 14 through to Table 16 below show land ownership trends within the Project affected area. Over half of households own the land they live on (66%), followed by co-ownership with family (13%). Female heads of households own their land most of the time (78%), and more so than male headed households (61%). Male heads of households (17%) co-own land more often than female heads of households (6%).

The majority of surveyed households (92%) did not have documents attesting to their ownership of the land. Only nine (9) of the households surveyed declared they have a formal document of their land ownership, whereas 37 declared they had an informal document.

Table 14: Ownership of Land Surveyed Households Reside on. All Households.

District	Blantyre			Non-Residents	Total
	Kunthembwe	Mlauli	Symon		
Household's head owns the land	67%	66%	44%	50%	66%
The Land belongs to Family	12%	6%	33%	0%	11%



District	Blantyre	Neno		Non-Residents	Total
Traditional Authority	Kunthembwe	Mlauli	Symon		
Spouses co-ownership	14%	9%	22%	50%	13%
Household is renting the land	2%	2%	0%	0%	2%
Land belongs to Spouse	4%	10%	0%	0%	5%
Free Occupation	0%	5%	0%	0%	1%
Other	1%	2%	0%	0%	1%
Total	100%	100%	100%	100%	100%

Table 15: Ownership of Land Surveyed Households Reside on. Male Headed Households

District	Blantyre	Neno		Non-Residents	Total
Traditional Authority	Kunthembwe	Mlauli	Symon		
Household's head owns the land	62%	61%	29%	50%	61%
The Land belongs to Family	11%	2%	43%	0%	10%
Spouses' co-ownership	17%	12%	29%	50%	17%
Household is renting the land	2%	3%	0%	0%	2%
Land belongs to Spouse	6%	14%	0%	0%	7%
Free Occupation	0%	6%	0%	0%	2%
Other	1%	3%	0%	0%	1%
Total	100%	100%	100%	100%	100%

Table 16: Ownership of Land Surveyed Households Reside on. All Households. Female Headed Households

District	Blantyre	Neno		Non-Residents	Total
Traditional Authority	Kunthembwe	Mlauli	Symon		
Household's head owns the land	77%	82%	100%	-	78%
The Land belongs to Family	13%	18%	0%	-	14%
Spouses' co-ownership	7%	0%	0%	-	6%
Household is renting the land	2%	0%	0%	-	2%
Land belongs to Spouse	1%	0%	0%	-	1%
Free Occupation	0%	0%	0%	-	0%
Other	0%	0%	0%	-	0%
Total	100%	100%	100%	-	100%



4.2.4 River Water Uses

The use of the Shire River by local communities depends on several factors, the first being the travel distance to the river. Some villages are located too far from the Shire River and depend on tributaries or smaller streams. Local communities use the Shire River for domestic (washing, bathing, cleaning), drinking, fishing, cattle watering, small irrigation, transportation (river crossing) and cultural or recreational purposes. Other factors that influence the use of the Shire River by local communities include:

- The season or the water level of either the Shire River or its tributaries: During the dry season, villagers are more likely to fish as the water flows slower and the water level is lower.
- The presence of wildlife, mostly hippos and crocodiles, prevents many people from using the water for domestic purposes or for their livestock. In many instances, villagers avoid using the river for cultural ceremonies such as *jando* or baptisms (which requires a full body submersion), due to the threat of attack.

Figure 28 and Figure 29 map the water uses along the Shire River around the Main Reservoir and Main Works areas. Water wells and boreholes are included on these maps for information, Volume 2 'Climate & Hydrology' of the 2024 ESIA Baseline Chapter provides more information on the boreholes within the project-affected area.

Selected examples of various water uses within the study area are illustrated in Figure 30 to Figure 34. Other sections in the present report provides more detail on how the communities living within the study area use the Shire River Water, as follows:

- Drinking water: The main sources of drinking water are boreholes and the rivers (Shire or tributary). Section 4.2.14.2 provides more detail on how the affected communities access to drinking water.
- Fishing: About 38% of the surveyed affected households declared they fish, mostly in the Shire River. Fishing activities practices by the affected households is discussed in Section 4.2.13.
- Irrigation: Villagers living along the Shire River make use of both mobile irrigated agriculture and rain-fed agriculture. Fields located on the riverbanks are irrigated with different mobile irrigating systems (i.e. treadles, water pumps and buckets). Section 4.2.10.3 provides more details on how villagers use the river to irrigate their crop along the Shire River in and along the proposed Mpatamanga reservoirs.
- Cattle watering: the Shire River is used to water cattle by the local communities and the ranches on the banks of the river. This is described in Sections 4.2.10.3 and 4.2.10.4.
- Brickmaking requires the mixing of clay with water. The moulding of bricks often occurs near a water source. The 2023 qualitative surveys confirmed that some villagers were using the Shire River or its tributaries as a source of water for moulding of bricks. More details are provided in Section 4.2.13.
- Cultural or recreational practices: During the field investigations in 2023, it was reported that several cultural practices, such as initiation ceremonies, ceremonial practices such as *Gule-Wamkulu* and baptisms could be practiced on the banks of rivers. There was no mention of such practices on the stretch of the Shire River inside the Project land requirements during the survey of affected land plot in November and December 2023. The presence of crocodiles in the river was mentioned by several interviewees to explain that they do not practice cultural ceremonies on this stretch of the Shire River nowadays.
- Transportation: In some locations, pirogues are used to transport goods and people across the Shire River. These places are mapped in Figure 28 and Figure 29.



Figure 28: Map of Water Uses in the upper part of the Main Reservoir

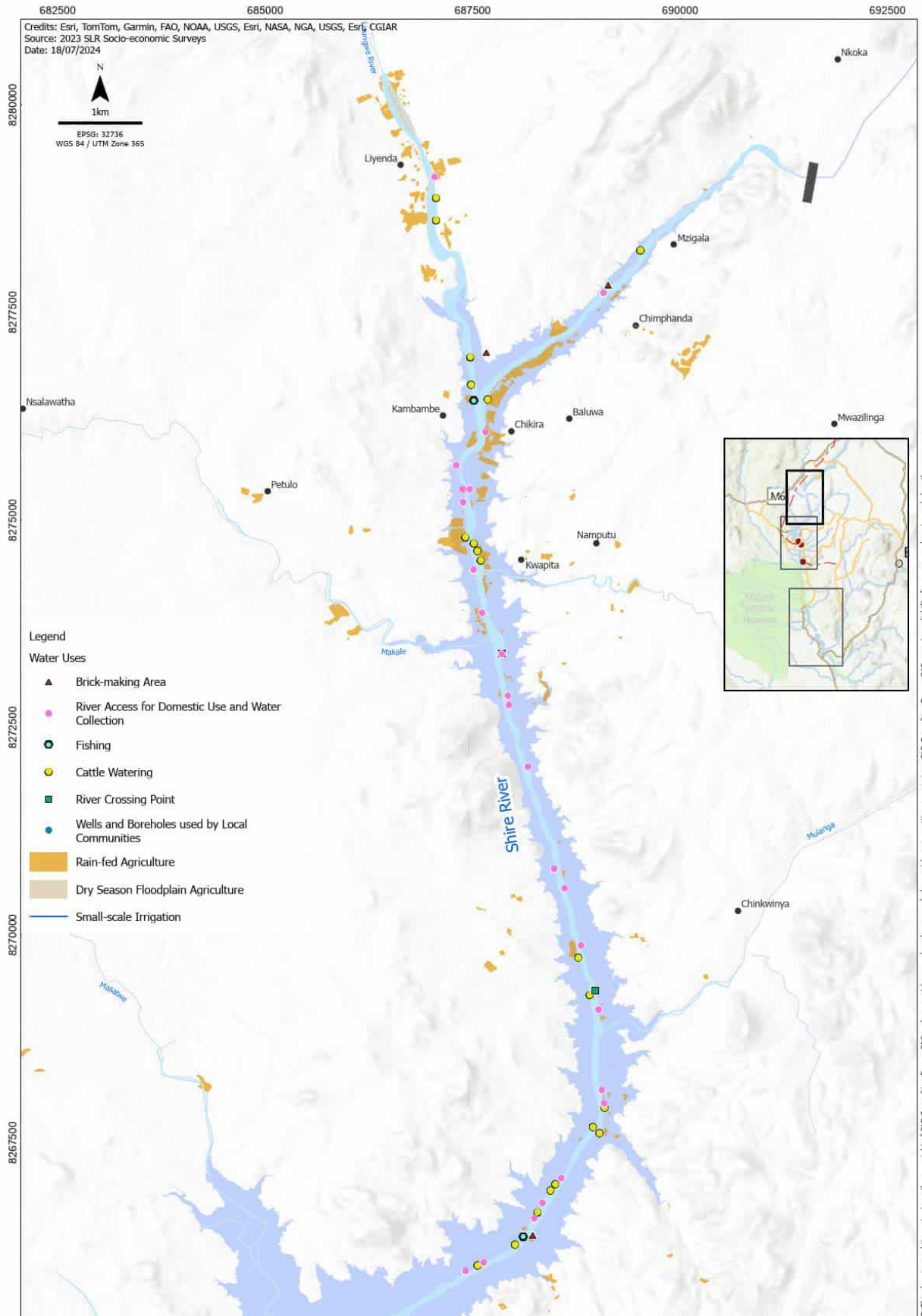




Figure 29: Map of Water Uses in the lower part of the Main Reservoir and in the Regulating Dam Reservoir

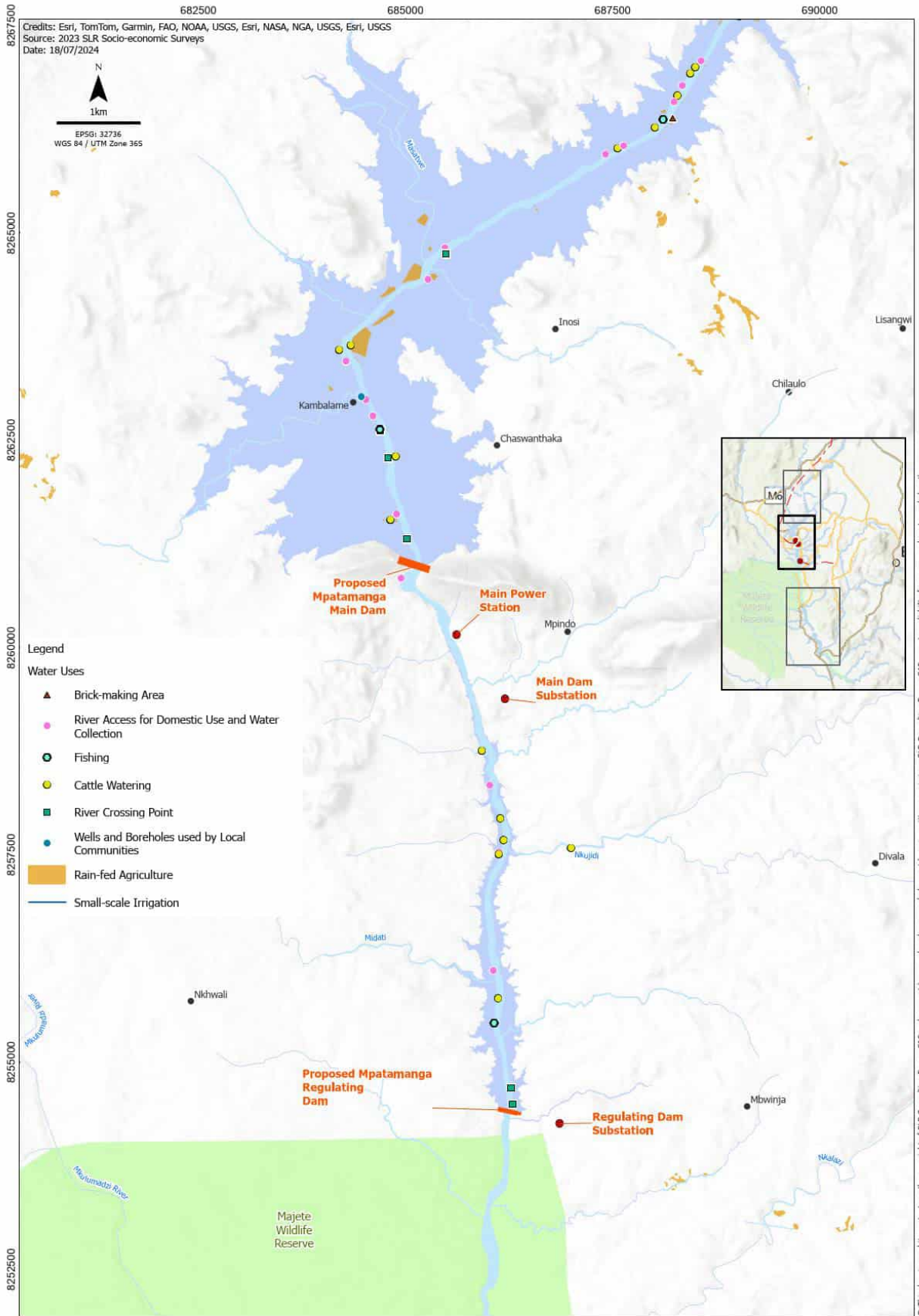




Figure 30: Cattle Watering along the Shire River at the Proposed Main Dam Site (Dec 2023)



Figure 31: Static Irrigation in Feremu (Dec 2023)





Figure 32: Shire River Crossing Point Close to Kambalame (Dec 2023)



Figure 33: Typical Water supply Borehole at Chaswanthaka (Dec. 2023)





Figure 34: Fishing Equipment in Kambalame (Dec. 2023)





4.2.5 Settlement Patterns

According to the qualitative surveys conducted in September and October 2023, villages in Blantyre and Neno District were largely established during the 20th century. Although a number of participants did not know when their village was established, many were able to provide the exact year of its creation, or at the very least an estimate ranging within a decade.

Only 2 villages were reported as not having been created during the 20th century, all of which are in Neno District. According to interviews, the village of Kambalame was created before the 20th century, in 1715. July, in TA Mlauli, was established in 2002. Some Sena people, who had previously been living in Chikwawa District, moved to a village nearby, before then being given the village of July to live in, by GVH Feremu. Similarly, the village of Nkhwali was established after the village of Feremu became too overcrowded, in 1995.

As shown in Figure 35 below, in most group villages, a minority of surveyed households declared to have arrived from outside of the village they currently reside in, with higher proportions found in Ngwenyama and Mzigala. More than half of these households mostly claim to come from a different district.

As illustrated by Figure 36, the settlements in the Project area are denser along the roads and tracks. In the areas around the main reservoir and the main works area away from the main roads, the settlements are more scattered. The Population density varies greatly in the different Project land requirements areas, as indicated in Figure 37, from less than 10 persons per km² in Feremu GVH to more than 500 persons per km² along the S137 road close to Blantyre City.

Figure 35: Proportion of households that have / have not always resided in their current village.

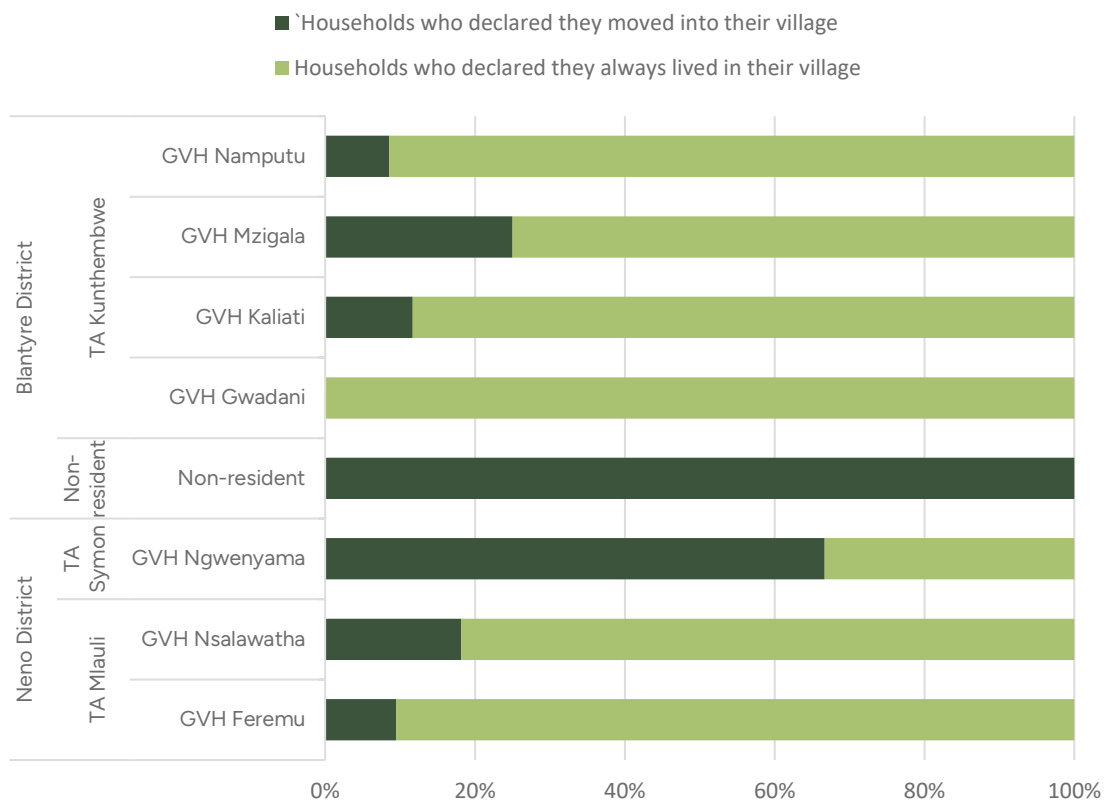
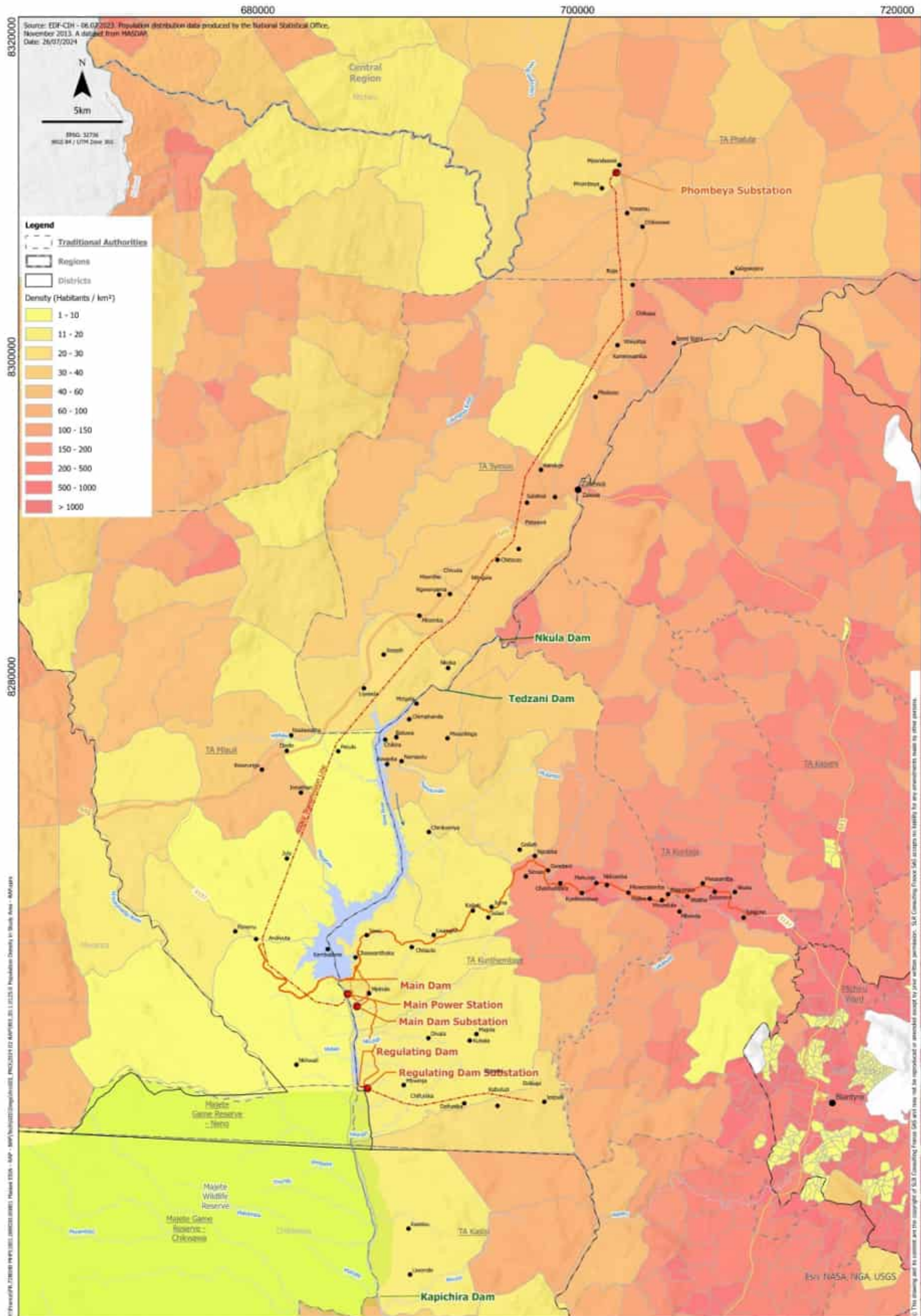




Figure 37: Population Density in the Project Area¹⁶



¹⁶ Source: (National Statistical Office 2023)



4.2.6 Demographic Profile

4.2.6.1 Age Structure of the Affected Communities

By analysing data from secondary sources and the results of the quantitative surveys conducted in the study area, comparisons with broader national demographic trends can be drawn, providing insights into how the study area aligns with or deviates from the broader regional and national context.

The age distribution of the Malawi population in Figure 38 reveals an exceedingly young national population, with over 51% of the population being below 18 years of age (National Statistical Office, 2019). The 2023 socio-economic survey shows that the population distribution in the surveyed sample aligns with broader national averages. As shown in Figure 40 and Table 17 and Table 18 below, the population of affected households in Neno and Blantyre Districts have a similar demographic composition, with the majority (54%) of the population being under 18 years old. However, the proportion of individuals under 6 years old seems to be slightly lower than the national average. The gender distribution is fairly even, with females slightly outnumbering males in the "Children (6 to 18 years)" age group. The elderly population (aged 60 years and above) accounts for 5% of the total population, with both genders being equally represented.

Within the surveyed sample, the majority of household heads (85%) are between the ages of 19 and 59. The remaining 15% are aged 60 and above. There are twice as many male household heads (288) as there are female household heads (131). In the 60+ age group, women are more likely (18%) to be heads of household than men (13%).

Table 17: Age Groups of the Population within the Surveyed Sample

Age Group	Male		Female		Total Both Sexes	
	No.	Percentage	No.	Percentage	No.	Percentage
Children (below 6 years)	204	9%	198	9%	402	18%
Children (6 to 18 years)	383	17%	420	19%	803	36%
Adult (19 to 59 years)	470	21%	456	20%	926	41%
60 years and more	56	3%	52	2%	108	5%
Total	1113	50%	1126	50%	2239	100%

Table 18: Age Distribution of Household Heads disaggregated by Gender.

Age Group	Male Headed Households		Female Headed Households		All Households	
	No.	Percentage	No.	Percentage	No.	Percentage
Children (below 6 years)	0	0%	0	0%	0	0%
Children (6 to 18 years)	0	0%	0	0%	0	0%
Adult (19 to 59 years)	251	87%	107	82%	358	85%
60 years and more	37	13%	24	18%	61	15%
Total	288	100%	131	100%	419	100%



Figure 38: Age Pyramid of Malawi (National Statistical Office 2019a)

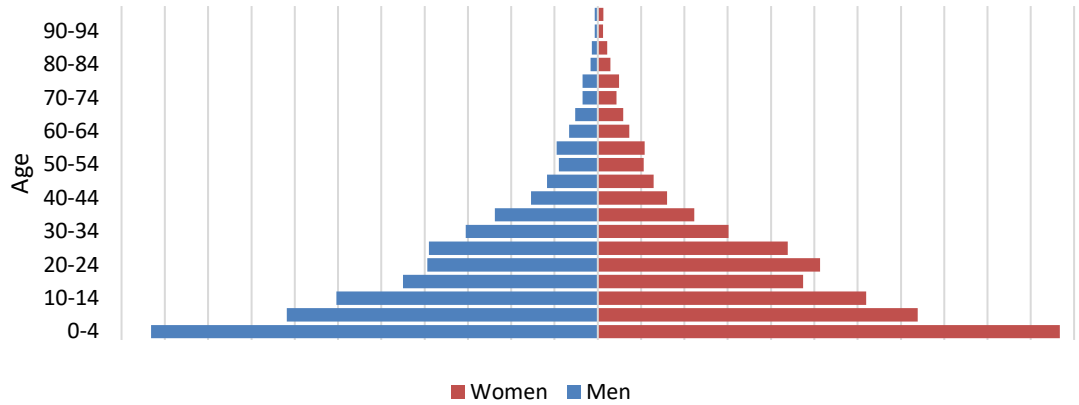


Figure 39: Age Pyramid of the Surveyed Population in Neno District

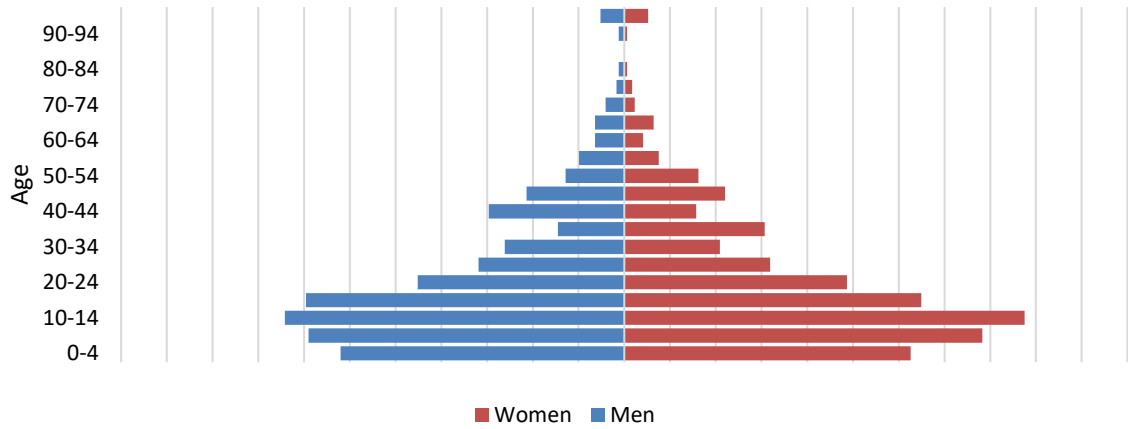
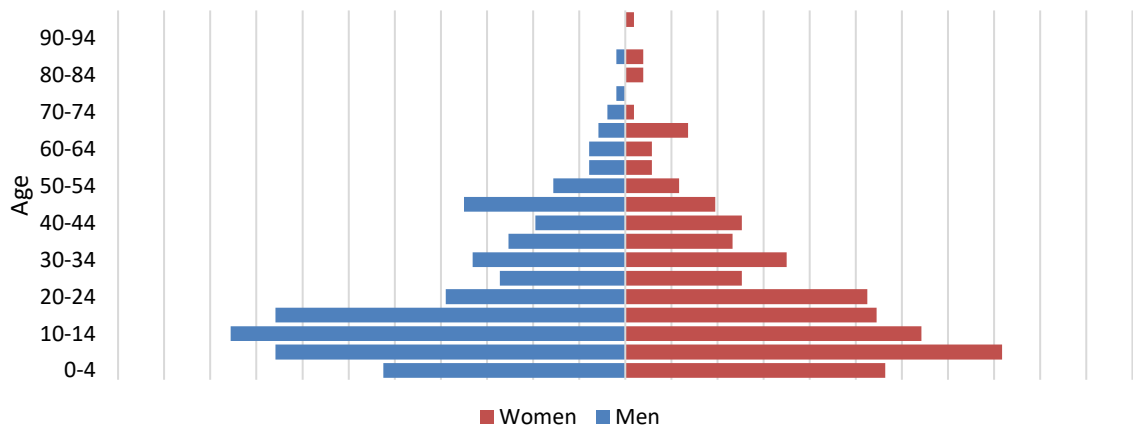


Figure 40: Age Pyramid of the Surveyed Population in Blantyre District





4.2.6.2 Size of Households and Characteristics of Households Heads

Table 19 provides insights into the marital status of the heads of household. The majority of the heads of household are married (81%). However, this figure is heavily skewed by male heads of households, where 97% are married, while female heads of households have a more distributed between married (47%), separated (19%), and widowed (29%). On average, the head of household is 44 years old, with women slightly older than men (45 and 43 years old, respectively) as shown in Table 20. The average size of a household is 5.3 persons. Households led by women are typically smaller than those led by men, with an average of 5.05 members compared to 5.46 members (Figure 41).

Table 19: Marital Status of Household Heads within the Surveyed Sample, disaggregated by gender of household head.

Marital Status	Male-Headed Households		Female Headed Households		All Households	
	No.	%	No.	%	No.	%
Married	278	97%	61	47%	339	81%
Separated / Divorced	4	1%	25	19%	29	7%
Single	5	2%	7	5%	12	3%
Widow / Widower	1	0%	38	29%	39	9%
Grand Total	288	100%	131	100%	419	100%

Figure 41: Average Size of Households per Gender of Household Heads within the Surveyed Sample

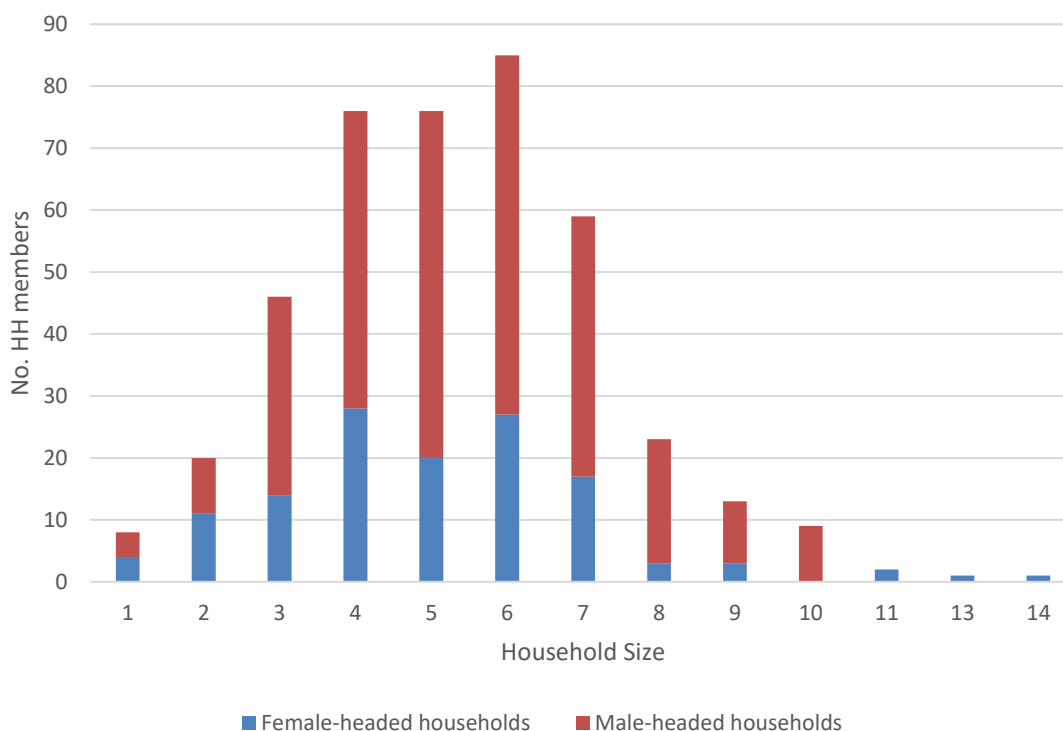


Table 20: Average age, min and max age of the households’ head, disaggregated by gender of household head

Marital status	Female-headed households	Male-headed households	All households
Average age	45	43	44
Minimum Age	20	20	20
Maximum Age	98	90	98



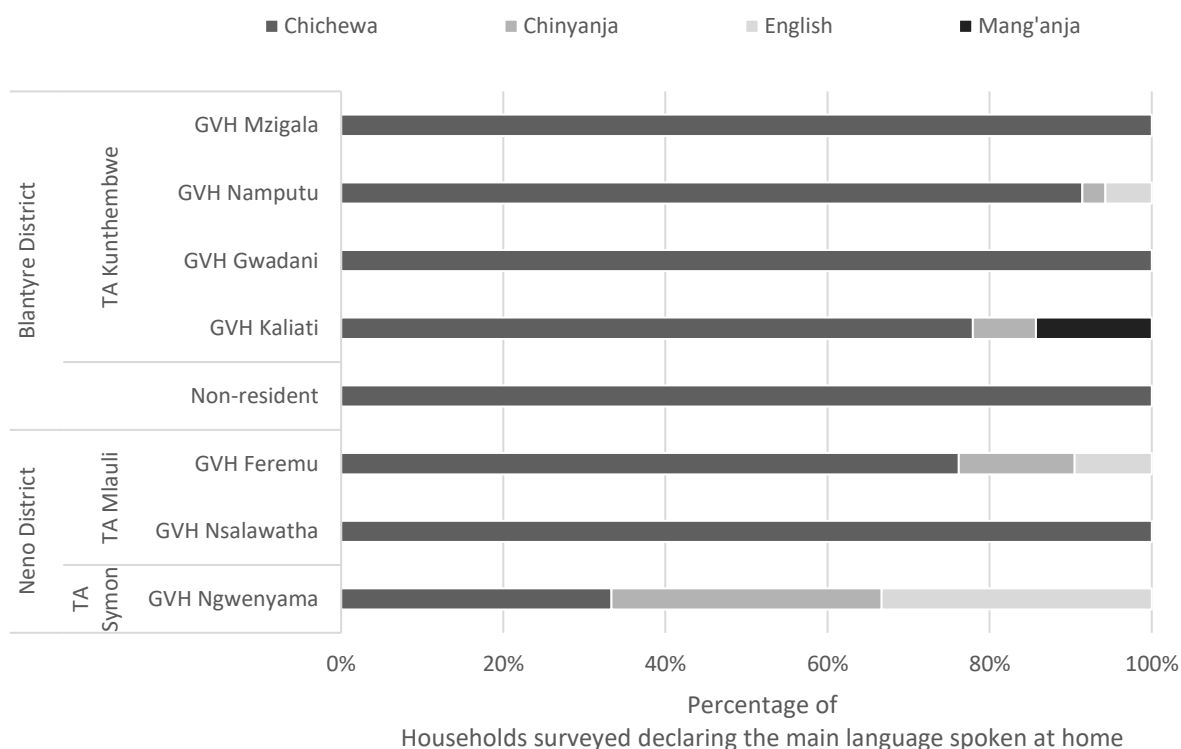
4.2.7 Language and Ethnicity

4.2.7.1 Language

The 1998 Malawi Housing Census (National Statistical Office 1998) revealed a diverse linguistic landscape. While English is the official language, Chichewa emerged as the predominant language of communication for 57% of the total population. Regional variations were notable, as the Northern Region favoured Chitumbuka (65%), the Central Region embraced Chichewa (91%), and the Southern Region exhibited a mix with Chichewa at 42%. While Chichewa is also prevalent in project affected districts, they do exhibit individual linguistic differences. In Chikwawa District, the main languages are Chichewa, Chinsena, and Mang'anja. In rural Blantyre, Chinyanja and Chiyao are also present. In Neno District, Chichewa is predominant as compared to Chichewa, Chiyao and Ngoni in Balaka District (Balaka District Council, 2017; Blantyre District Council, 2017; Chikwawa District Council, 2017; Neno District Council, 2017).

Figure 42 shows the languages spoken at home by the surveyed households. Overall, the most widely spoken language in the study area is Chichewa.

Figure 42: Languages spoken at home by the surveyed households



4.2.7.2 Ethnicity

Malawi is characterised by a diverse ethnic composition (National Statistical Office 2019a) as illustrated by Table 21. At the national level, the largest ethnic group is the Chewa at 34.5%, followed by the Lomwe at 18.9%, and the Yao at 13.3%. Other significant groups include the Ngoni (10.4%), Timbuka (9.2%), and Mang'anja (3.2%). This diversity extends to the district level, where in Blantyre District, the Mang'anja and Yao constitute 60% of the population. Neno District is home to Ngoni's, Mang'anja's, and Ambos, while in Chikwawa District, the main groups are Mang'anja and Sena, with minority tribes like Yao, Lomwe, Ngoni, and Nyungwe present. In Balaka District, the Yao are predominant making up 40% of the population, followed by the Ngoni, Lomwe, Mang'anja, Chewa and Sena (Balaka District Council, 2017; Blantyre District Council, 2017; Chikwawa District Council, 2017; Neno District Council, 2017).



Figure 43 shows that overall the Mang’anja are the main ethnic group within the surveyed area, representing 63% of the overall surveyed sample, followed by the Ngoni (16%) and minorities of Chewa (12%), Yao (3%), Lomwe (3%) and Nyanja (1%). Figure 44 shows the ethnicity per village, and illustrates the diversity of the affected communities.

Table 21: Ethnic groups at District and National Level (National Statistical Office 2019a)

Ethnic Group	District			Malawi
	Balaka	Blantyre	Neno	
Chewa	5.0%	12.8%	9.6%	34.5%
Timbuka	0.6%	1.1%	0.5%	9.2%
Lomwe	25.2%	22.0%	13.1%	18.9%
Tonga	0.2%	0.4%	0.1%	1.8%
Yao	37.2%	18.0%	2.1%	13.3%
Sena	2.4%	3.2%	2.0%	3.8%
Nkhonde	0.1%	0.1%	0.1%	1.0%
Ngoni	24.2%	25.5%	66.4%	10.4%
Lambya	0%	0%	0.1%	0.6%
Sukwa	0%	0%	0%	0.5%
Mang’anja	2.1%	15.6%	4.8%	3.2%
Nyanja	2.8%	0.6%	0.2%	1.9%
Other	0.3%	0.8%	1.0%	1.1%

Figure 43: Ethnicity within surveyed sample disaggregated by District.

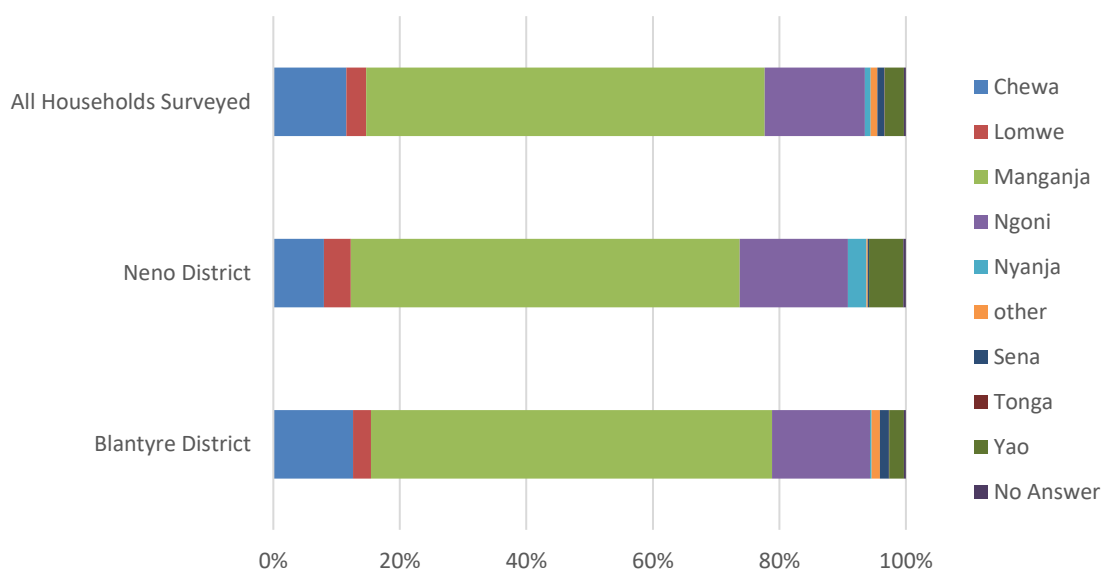




Figure 44: Ethnicity within surveyed sample disaggregated by village





4.2.8 Levels of Education

Malawi's formal education system adheres to an 8–4–4 structure, consisting of 8 years of primary education, followed by 4 years of secondary education, and typically, 4 years of tertiary level education. The progression from primary to secondary education is marked by the Primary School Leaving Certificate Examination (PSLCE), which determines students' eligibility for entry into secondary school. Education is structured into junior primary schools (standards 1-4) and full primary schools (standards 5-8).

The education levels of the affected households surveyed are presented in the figures below. Figure 45 provides the education levels of the households' heads, and Figure 46 of all households' members, disaggregated by age group. More than half of the household's heads, and the majority of the households' members of all age groups have not completed the 8 years of Primary Education.

Figure 45: Education Levels of Households Heads, disaggregated by Gender

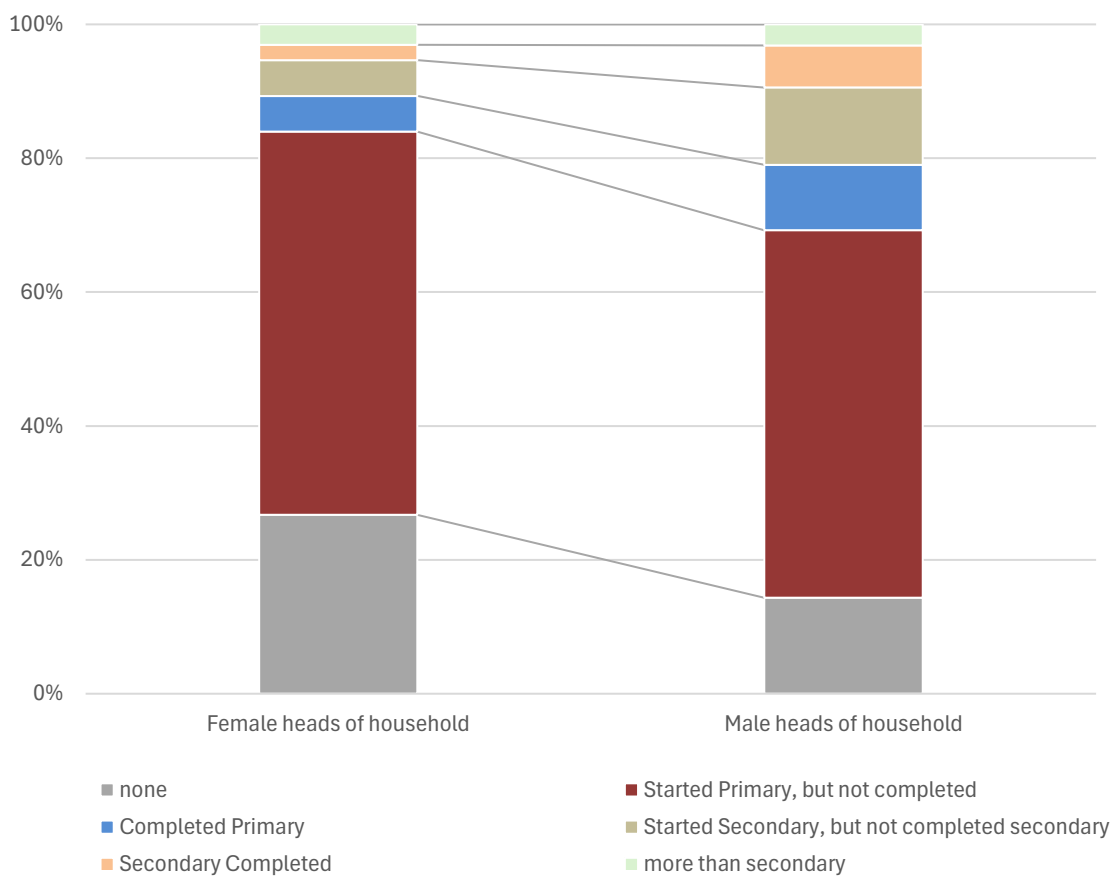
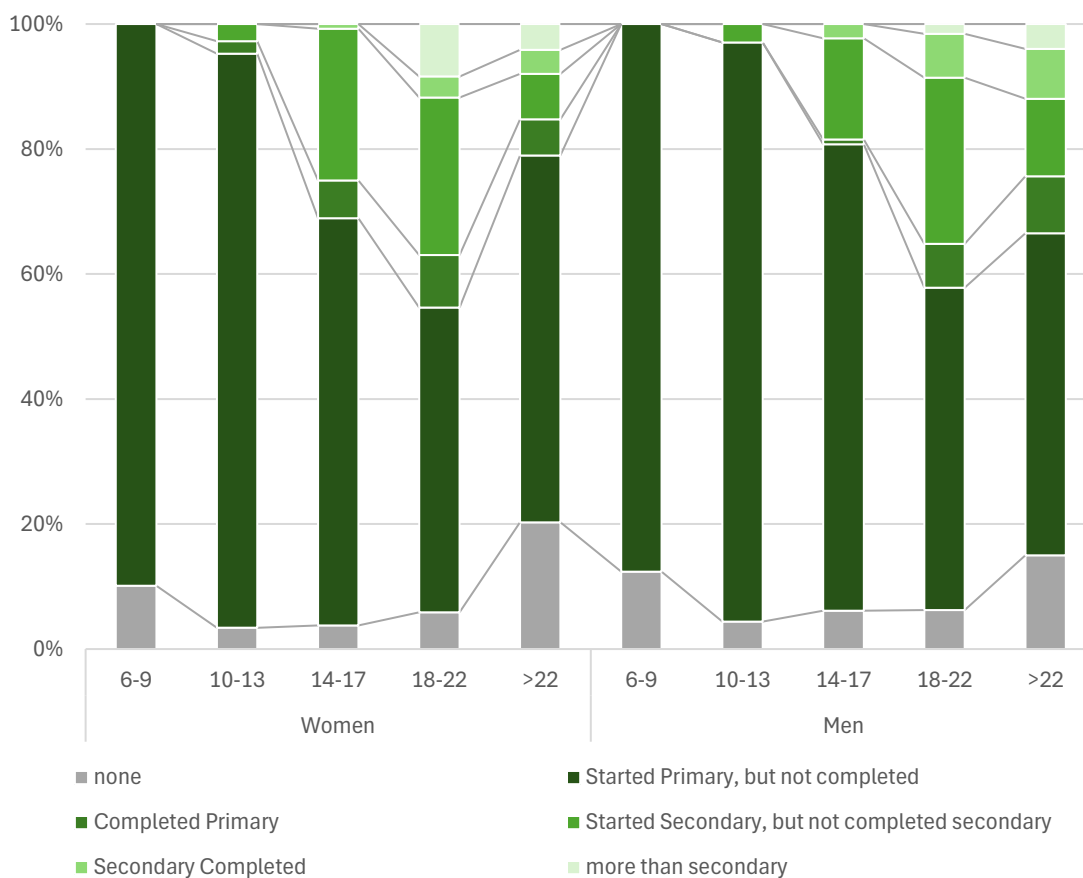




Figure 46: Education Levels of Households Members, disaggregated by Gender and Age group



4.2.9 Social Organisation and Gender

4.2.9.1 Kinship

Matrilineal descent traces a lineage through women to a founding female relative or ancestor. Conversely, patrilineal descent traces a lineage through men, to a founding male relative or ancestor. Systems of tracing descent are important because they might determine certain factors in an individual's life, such as their surname, social status, property inheritances, and residence patterns.

For the ethnic groups identified in the study area, Table 22 indicates which are matrilineal and which are patrilineal.

Table 22: Social Organisation within the Study Area (Berge et al. 2014)

Ethnic group	Social Organisation
Mang'anja	Matrilineal
Ngoni	Mostly matrilineal
Chewa	Matrilineal
Tumbuka	Patrilineal
Sena	Patrilineal
Lomwe	Matrilineal
Yao	Matrilineal

The population in Blantyre, Balaka, and Neno Districts predominantly follow a matrilineal system.



Table 23: Type of Marriage within the Study Area (Berge et al. 2014)

Geographic Area	Lineage System with More Than 50% of Villages	Matrilineal (Uxorilocal ¹⁷ + Neolocal ¹⁸)	Matrilineal and Virilocal ¹⁹	Patrilineal (Virilocal + Neolocal)
Malawi		45.1%	23.7%	29.9%
Blantyre (rural area)	Matrilineal	83.7%	13.7%	0.7%
Neno (included in Mwanza District at the time of the census)	Matrilineal	98.0%	2.0%	0.0%
Balaka	Matrilineal	83.5%	15.7%	0.8%

Intermarriages are common and when a man from a patrilineal tradition marries a woman from a matrilineal tradition, the wife's tradition is generally adopted.

Even if an ethnic group is traditionally patrilineal, they can change their practice to adapt to the dominant social environment. In Neno District, though the Ngoni would typically follow a patrilineal system, this has merged with the matrilineal culture from their surroundings (Neno District Council 2017).

4.2.9.2 Marriage

In the villages located in the study area, most of the marriages are monogamous even if some marriages are polygamist, in particular among the Apostolic and Muslims. The legislation (Rep. Malawi Const. sect. 22) recognises as valid and of the "same legal status" four different forms of marriage: civil marriage, customary marriage, religious marriage, and marriage by reputation or permanent cohabitation. Polygamy in civil marriage is punished by five years of jail and a fine of US\$200 but is allowed in the other forms of marriage. Most marriages in the study area are customary or religious.

The man is always the one choosing his wife. Weddings and engagement ceremonies are organised by both families, who choose a committee of men and women to plan everything. Marriage is perceived as an economic safeguard and the status of a married woman is perceived better because of improved economic incomes and mutual help in the household chores.

In matrilineal ethnic groups, when a couple gets married, they traditionally move into the wife's village in the wife's family land. In many matrilineal societies, a married couple will reside in the wife's natal home with her mother, her mother's siblings, and her own sisters and their children. Most matrilineal groups practice such a matrilineal residence. Such residence patterns often imply labour obligations, with matrilineal families owning the labour of men who marry their daughters. This arrangement can give women greater intra-household bargaining power vis-a-vis their spouses, as well as greater support from their relatives.

In patrilineal ethnic groups, the wife moves into the husband's village in the husband's family land. Women among the Sena people follow their husbands to their village, and if the husband dies, she must go back to her village unless she is too old, in which case the community may let her stay.

Nowadays it seems to be more up to the couple's decision in function of the available opportunities.

When there is a fight in a couple, most of the time the husband has the last word but if the couple still does not agree they call for a third party, generally the wife's uncle or aunt (for matrilineal ethnic group) or both spouse's uncles (*nkhoswe*). *Nkhoswe* is the go-between and acts as a marriage councillor for married couples who are having a conflict. His role on the extended family is very important for matters linked to marriage and inheritance.

¹⁷ Couple settles in the wife's village (referred to as *chikamwini*)

¹⁸ Couple settles in a neutral village (neither wife or husband village)

¹⁹ Couple settles in the husband's village (referred to as *chitengwa*)



4.2.9.3 Divorce

In cases of conflict within a married couple, the two *nkhoswe* attempt to resolve the issue with the married couple. If this is not possible, they will go to the chief, or the TA. If this is still not sufficient, they will go to Social Welfare Office (mostly when violence happens). If they are still not able to agree, the married couple will go to the chief, and get separated as a final solution.

The main reasons mentioned for divorce are:

- The woman or the man is infertile;
- The man does not provide his family with food and/or money;
- The woman had a relation with another man;
- The man has contracted a union with another woman and left behind his first family. This seems to be frequent and to happen mostly when the man obtains money; and
- The man beats his wife “*too much*”.

According to the 2018 Census, women are much more likely to be divorced than men. On average, men in the study area are approximately 2% likely to be divorced, as opposed to 9% of women. The rates for women’s divorce are slightly higher in the study area than in Malawi but are consistent with rates from the Southern Region. Chikwawa District had a lower divorce rate for both men and women than the other areas within the study.

As most marriages are religious or traditional, most of the divorces are not “formal”. This situation happens a lot, even in case of civil marriage because (i) getting a divorce costs money, and (ii) when divorcing the properties belonging to both spouses is equally divided between them irrespective of whether they had been acquired before or during the marriage.

If the couple lives in the wife’s village, if the wife has died or if the husband divorces her, the husband will have to go back in his village. The children will stay with the wife’s family, as well as all of the couple’s belongings. The wife’s family can allow the husband to stay but this is not common. If the couple lives in the husband’s village and the husband dies, the husband’s family will decide if the woman can stay but they can send her back to her village if they so choose.

A woman who heads a household is generally married to a man with a disability, she is divorced, or she is widowed. After a divorce, it is expected for a woman and man to contract another union. A female head of household is not well-perceived socially as she is seen as a “threat” to other married women, or she is thought to be involved in prostitution, whether or not this is true.

4.2.9.4 Parenthood

Husband attendance during labour and delivery rarely occurs in Malawian settings because of cultural norms and taboos (Gennaro et al. 1998). It was reported during the qualitative socio-economic surveys that the father cannot see the baby and the mother for a certain period after the delivery. The existence of a newborn (under six months) specific cemetery has been reported in every village of the study area. Only the women who have been pregnant are allowed to enter this place. Overall, maternity is considered a “women only” matter.

As most of the ethnic groups are matrilineal, the mother makes most decisions regarding the children, and in case of divorce she will assume custody. In case of death, the children are under the custody of the mother’s family.

Even in matrilineal groups, the woman still reports to the man and the man is still the head of the household, however his power in the extended family is limited. The *nkhoswe* (the maternal uncle, or aunt if there is no uncle) is considered as the head of the family. He generally has the last word regarding the marriage of the children or the attribution of land among the family and provides for the household if the husband cannot. During the qualitative socio-economic surveys, a woman mentioned that the *nkhoswe* had refused to send one of her children to secondary school, and even though her husband disagreed, the child had not been sent to secondary school.



4.2.9.5 Gender and Control over Resources

A Overview of Gender roles

Gender roles are a culturally and socially determined set of expected behaviours, attitudes, and characteristics based on concepts of masculinity and femininity. A gender role should not be confused with gender identity, which refers to an individual's internal sense of being masculine or feminine (Payne 2024).

Within the household, men are assigned the role of the provider of money and food, while the women handle the care duties of the household dependents.

In the study area, most of the weddings are monogamous and the informal divorces or family dropouts are frequent. The men do not have much control over their children as the decisions related to them are taken by the mother and the mother's family, especially the mother's uncle (*nkhoswe*).

When possible, both the men and the women will do a remunerated activity, in which case both will also handle the subsistence farming. If remunerated activities are scarce, the men will do it and the women will handle the subsistence farming.

Women and men have different, well-defined roles in each cultural ceremony (e.g. weddings, funerals). Boys and girls are considered as adults after passing initiation ceremonies. Both genders have different taboos and prohibitions, for example, only men are allowed to dig a grave, and only women are allowed to deal with newborn deaths.

Overall, a good woman is seen as hardworking, modestly dressed, able to procreate, and having one partner for life. Bad women are involved in prostitution, disobey their husbands or refuse to talk with their husband. A good man should provide money and food to his family, be a hard worker, be respectful towards his family and the community and avoid scandals (i.e. having fights, affairs). Bad men drink too much alcohol and do not bring money home (or use it to drink).

During the qualitative socio-economic surveys, alcohol abuse and prostitution were frequently mentioned as problems in the study area.

B Gendered Distribution of Activities

Women are generally in charge of most of the household chores and care duties and men are in charge of all tasks involving physical strength. The responsibility of providing the household with food and money falls mostly on men, however, when possible, both men and women will handle remunerated labour. As remunerated jobs are scarce, women mostly handle the subsistence agriculture while men focus on other income generating activities such as charcoal making, brick making, and sand or terrazzo stone selling.

Table 24 gives an overview of women, men, girls, and boys activities based on the answers provided during gender segregated FGDs.

Children start to help their parents with household chores between six and eight years old. Girls generally help in fetching water, cooking, and cleaning, and the boys help in gathering wood. In Malawi, for the year 2020, the UNICEF estimates that 39% of the children are engaged in child labour (5: 17 year). The Neno District Social Welfare Office received 53 reports of boys and 13 reports of girls having experienced child labour in the district (Neno District Council 2017).



Table 24: Overview of Activities Performed by Women, Men, Boys, and Girls

	Women	Men	Girls	Boys
Collecting Resources				
Wood				
Water				
Food From the Market				
Hay For The Livestock				
Agriculture				
Preparing The Ground				
Sowing				
Watering				
Protecting From Diseases and Animals				
Harvesting				
Taking the Harvest to the Market				
Controlling the Money From Crop Sales				
Storing				
Livestock				
Buying the Animals				
Managing the Animals' Health				
Feeding the Animals				
Killing the Animals	Small animals		Big animals	
Domestic Work				
Cooking				
Cleaning the House				
Washing the Clothes				
Managing the Garbage				
Fixing Things (Lights, Roof, etc.)				
Paying Debts				
Managing Waste				
Care				
Taking Care of Children				
Helping Children with Their Homework	Generally the most educated including older brothers or siblings			
Taking Care of the Elders	Mostly women but depends on whose relative is sick			
Taking Care of the Sick				
Community Activities				
Organising Weddings or Funerals	Each gender has their assigned tasks			
Religious Celebrations (Such as Baptisms, Holy Day Celebrations)	Each gender has their assigned tasks			
Association meetings (Water Users, Market Users, Neighbour Association)	More women than men			
Village Meetings (Decision Meetings, Information Meetings, Voting)				

C Remunerated and Non-Remunerated Economic Activities

In Malawi, women are more likely than men to be paid in kind, while men are more likely than women to be paid in cash. Indeed, 3.5% of women and 2.1% of men are paid in kind, while 29.7% of women and 60.9% of men are paid in cash (National Statistical Office 2020a). In addition to subsistence agriculture, women also spend disproportionately more time on unpaid care work than men. Unpaid care work is perceived as a female prerogative, so women spend a large part of their day on meeting the expectations of their domestic and reproductive roles.

Table 25 presents the economic activities practised by men and women in the study area as well as their form of retribution. It is important to note that the reality is not black and white. While men can be involved in agricultural activities and women involved in charcoal making, the table aims to summarise which activities are predominantly done by men or women.



Table 25: Economics Activities Practised by Men and Women in the Study Area

Gender	Activity	Retribution
Men	Piecework in agriculture	Money
	Livestock farming in a ranch	Money
	Sand farming	Money
	Terrazzo stone	Money
	Transport by bicycle	Money
	Transport by boat	Money or crops
	Taking care of someone else's cattle	Money and/or the second newborn cow
	Construction work	Money
	Selling construction wood	Money
	Transporting charcoal	Money
Women	Subsistence farming	Crops
	Vegetable or fish selling	Money/fish or crops
	Beer making	Money
	Washing clothes for people like teachers	Money
	Firewood selling	Money
	Transactional sex	Money
Both	Charcoal making	Money
	Fishing	Money or crops or vegetable
	Maiz farming	Money or maize
	Preparing other peoples' land	Money
	Cultivating other peoples' land	Crops

When a woman wants to start a small-scale business (such as selling nuts, tomatoes, or dried fish) she will face several challenges:

- Lack of capital,
- If she needs to travel to do her business, she will be strongly discouraged by her husband, who will tell her she will be robbed and taken advantage of and/or accuse her of going to prostitute herself,
- Someone needs to look after the kids.

Single-parent households must handle all household responsibilities on their own and have only one person able to generate income. When they find piecework, women are more restricted than men, as they cannot go far to find work due to childcare responsibilities. Men have less social pressure to look after their children and generally do not take care of them if they are single (children stay with the mother's family).

D Control and Use of the Household Financial Capital

According to information at the national level (National Statistical Office 2020b), the most common way for cash earnings to be managed in the household in Malawi, whether it be earned by the woman or the man, was generally managed by both the wife and the husband jointly (47.6%). In cases where cash earnings are not managed jointly, then it is most likely managed by the person who is earning the money. However, this differs greatly between men and women. When dealing with the husband's cash earnings, in 44.1% of cases it is mainly the husband managing his own money, with only 7.9% of cases being mainly the wife managing his earnings. However, when it is the wife's earnings, in only 28.4% of cases it is mainly the woman managing her own money, with it being mainly the husband in 24.3% of cases.

According to the information collected during the focus groups different ways of managing the household capital coexist. In some case the man has full control over the household money, while in others, decisions on money use are taken jointly. One case of the woman managing the household money alone and giving "pocket money" to her husband has been reported. Husbands using the household money to drink alcohol has been widely reported as an issue by the women



in the study area. Money is one of the main sources of conflict in the households and a VSU officer reported that during the harvesting period the number of domestic violence incidents decreases because the households have more money from selling the crops. Most men and women reported that the money obtained from crops is shared and used by both the man and the woman.

4.2.10 Economic and Livelihoods Activities

4.2.10.1 Level of Employment

The level of employment amongst the members of affected households surveyed was measured from the declaration of the interviewees. The quantitative socioeconomic questionnaire asked the employment status for each member of the households of working age. The results are given in Table 26 and Table 27 below. Is considered employed someone who declared being permanently employed either by a company, an NGO, as a civil servant, or on a farm. Self-employment covers various income generating activities such as farming, petty trade, charcoal making and selling. Piece work or *ganyu* means the persons works as a daily worker on someone else land. Unemployed covers those who are no longer economically active and those looking for jobs.

Table 26: Employment status declared by the households members surveyed, disaggregated by gender

	Women	Men	Total both gender
Employed	7%	8%	7%
Self-employed	58%	61%	60%
Ganyu / piece work	31%	25%	27%
Unemployed	4%	7%	6%
Total	100%	100%	100%

Table 27: Employment status declared by the households members surveyed, disaggregated by TA

	Blantyre District		Neno District		Total Surveyed
	Non-resident	TA Kunthembwe	TA Mlauli	TA Symon	
Employed	100%	6%	7%	33%	7%
Self-employed	0%	61%	57%	53%	60%
Ganyu / piece work	0%	26%	31%	7%	27%
Unemployed	0%	6%	4%	7%	6%
Total	100%	100%	100%	100%	100%



4.2.10.2 Income sources and levels of income

A Income sources

About half of the affected households surveyed have one or two different sources of income, as shown in Figure 47. Women headed households tend to have a lower number of different income sources than male headed ones.

Figure 48 shows the distribution of the different categories of income sources declared by the surveyed affected households. Selling charcoal, selling crops and piece work (*ganyu*) are the most frequent sources of income cited by the respondents. Figure 49 distributes the frequency of the declared income sources by District. The surveyed households appear to rely more on charcoal selling and piece work (*ganyu*) in Blantyre District than in Neno District.

There is no significant difference between male-headed and women-headed households regarding the seasonality of their income sources, except for piece work (*ganyu*).

- Selling crops is a permanent source of income for about half of the surveyed households, while the other half only does is from October to March.
- Charcoal tends to be a permanent source of income for about 90% of the households who declared this source of income.
- For the households who use this source of income, Ganyu or piece work, is a permanent source of income for 48% of male-headed households, and for about 68% of female-headed households. Those who do piece work seasonally mostly do it during the rainy season, between November and February.
- Income from small businesses, selling timber, firewood or transformed agricultural products, tend to be permanent source of income for almost all the households who declared using these sources of income.
- Fishing appears to be mostly a seasonal income source.

Figure 47: Number of Income Sources Per Household

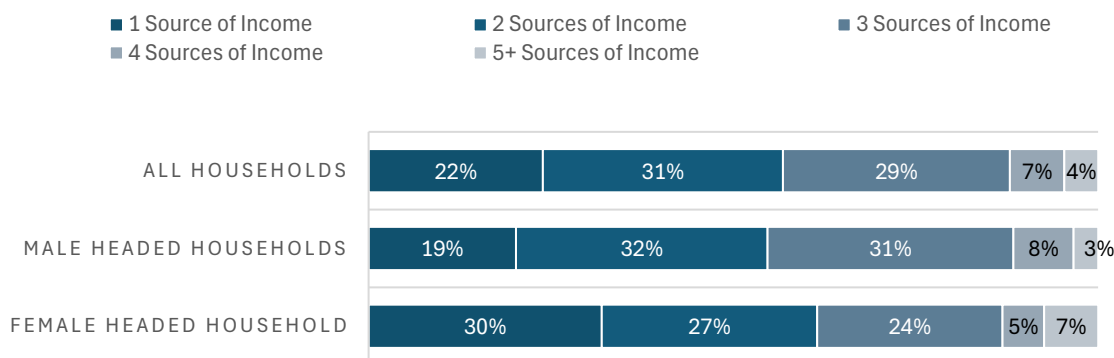




Figure 48: Categories of Surveyed households’ sources of income, disaggregated by gender of household head.

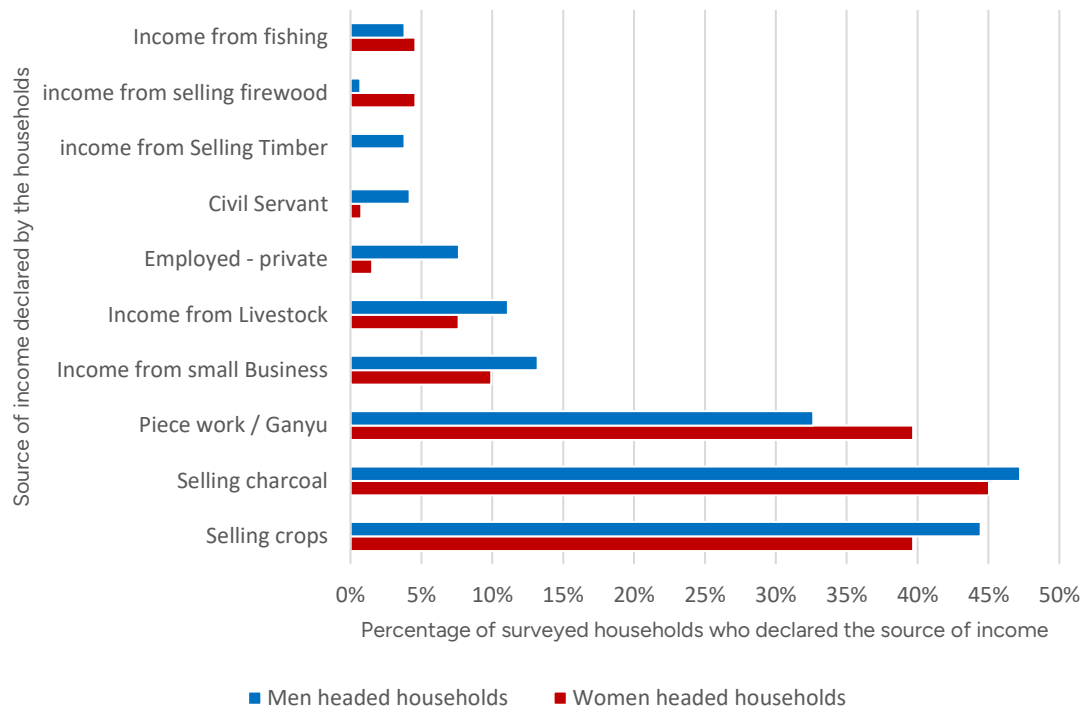
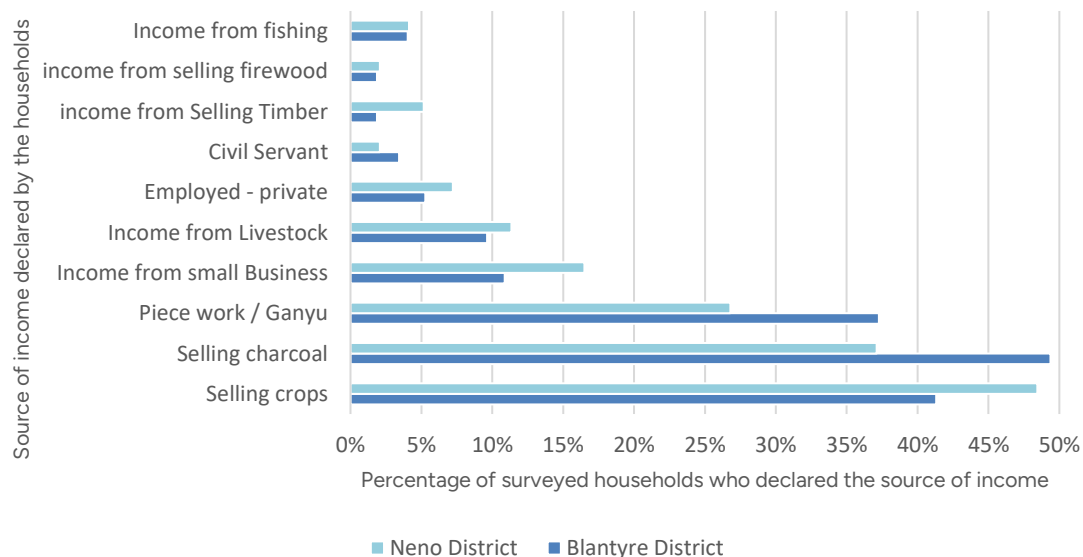


Figure 49: Categories of Surveyed households’ sources of income disaggregated by District



B Income levels

The levels of monthly income have been estimated based on the declaration of the surveyed households. As Figure 50 shows, women-headed households tend to declare lower estimated monthly income than men-headed ones. About half of the surveyed households declared an estimated monthly income below 200,000 Kwacha²⁰. Figure 51 gives the distribution of income levels per income source.

²⁰ At the time of the socioeconomic survey, in November 2023, the conversion rate was around 1 USD = 1,200 MK. 200,000 Kwacha represented about 170 USD.



Figure 50: Average estimated levels of monthly household income, by gender of household’s head

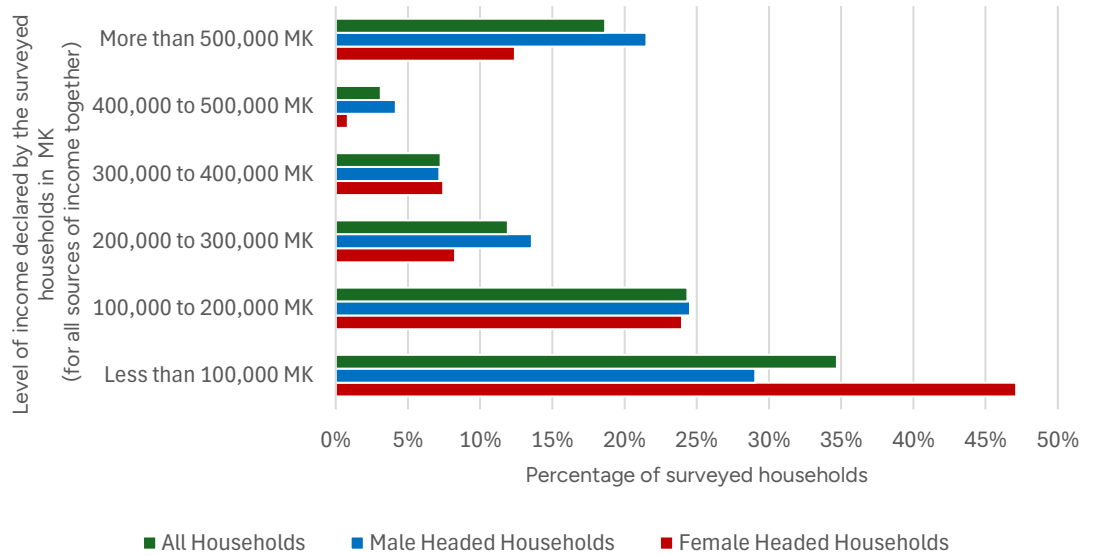
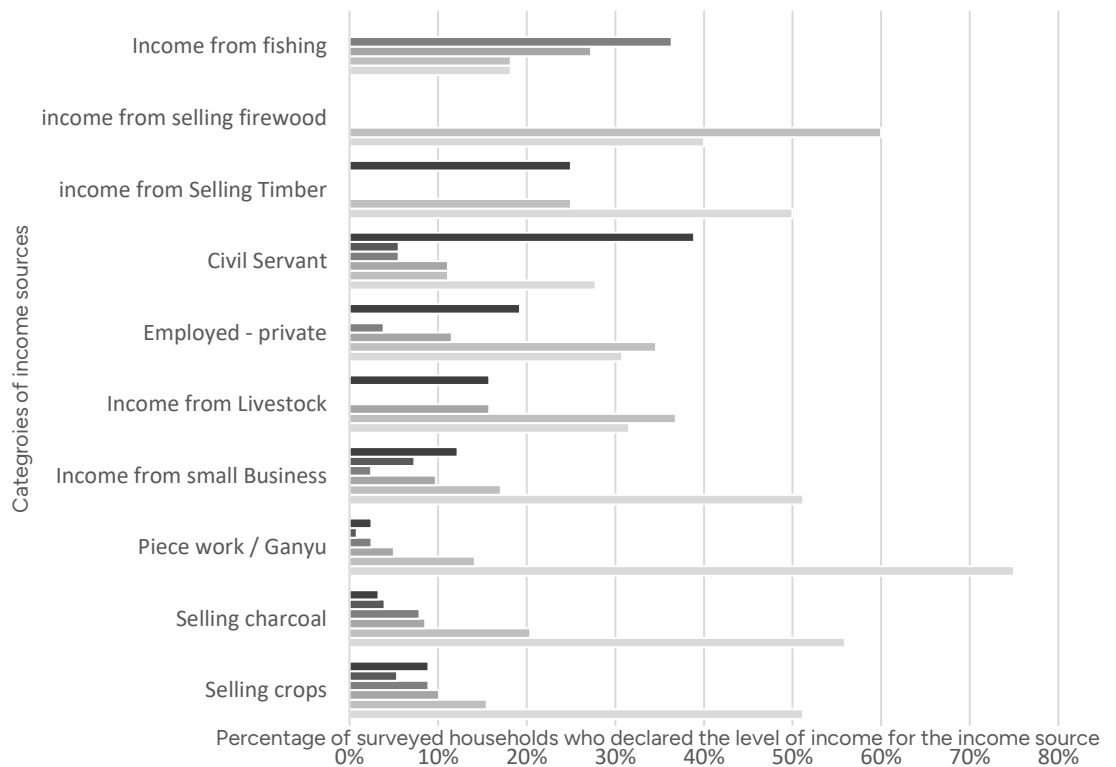


Figure 51: Estimated monthly income levels declared by surveyed households, by income source



	Selling crops	Selling charcoal	Piece work / Ganyu	Income from small Business	Income from Livestock	Employed - private	Civil Servant	income from Selling Timber	income from selling firewood	Income from fishing
More than 500,000 MK	9%	3%	3%	12%	16%	19%	39%	25%	0%	0%
400,000 to 500,000 MK	5%	4%	1%	7%	0%	0%	6%	0%	0%	0%
300,000 to 400,000 MK	9%	8%	3%	2%	0%	4%	6%	0%	0%	36%
200,000 to 300,000 MK	10%	9%	5%	10%	16%	12%	11%	0%	0%	27%
100,000 to 200,000 MK	15%	20%	14%	17%	37%	35%	11%	25%	60%	18%
Less than 100,000 MK	51%	56%	75%	51%	32%	31%	28%	50%	40%	18%



4.2.10.3 Agriculture

This section presents an overview of the agricultural practices in the study area. Most households do practice subsistence farming, and some sell the crops they do not use for their own consumption. This section focuses on the agricultural practices of affected households. A number of commercial farms and ranches are present in the Project area. They are described in Section 4.2.10.4.

The figures included in this section are based on the 2023 quantitative socioeconomic household survey. This survey was also complemented by individual interviews with about 40 farmers in the field, and 100 soils samples were collected in and around the main dam reservoir area and analysed to characterise the soil quality.

A Overview of Agriculture in Malawi and in Blantyre and Neno Districts

Malawi's agricultural land represented more than 64% of total national land in 2021 (World Bank 2023). Thirty-two percent of these agricultural land are suitable for rainfed agriculture (CCARDESA 2018). Agriculture, from smallholder farming to large-scale plantations, is a primary economic activity of Malawi. The agricultural sector is characterised by a strong dichotomy: on the one hand, there is a small number of commercial farms, generating 80% of the country's exports; and on the other hand, subsistence and rain-fed farming, which is not very productive and is highly vulnerable to external shocks (e.g. extreme weather events, epidemics, price volatility) is the most common form of agriculture in the country (Ministère de l'économie, des finances et de la souveraineté industrielle et numérique 2022). Sixty percent of smallholder farmers cultivate less than 1ha of land (CCARDESA 2018).

The main challenge for the agricultural sector is the low agricultural productivity which is partly due to limited access to agricultural services such as trainings, financial support, inputs, irrigation, mechanisation and markets. Low soil fertility and high soil degradation also reduce productivity (UN World Food Programme 2023). For the 2024–2028 country strategic plan, the WFP aims at building on *"its integrated resilience package to move people from subsistence to surplus-producing livelihoods, improving their potential to produce more nutritious food and increasing access to markets while also helping to reduce environmental degradation and restore environments"* (UN World Food Programme 2023).

The majority (approximately 90%) of agriculture in Malawi is rain fed and is therefore very vulnerable to natural events and changes in climate (UN World Food Programme 2023). The main crops grown in all districts are maize, legumes, root crops, fruits and vegetables. These crops are sensitive to climate change impacts. Predictions indicate that certain crops' yield will decrease: maize yield is expected to decrease by almost 11% in 2050 according to predictions, with 2018 as a reference year. In 2050, groundnuts are expected to decrease by 6%, whereas rice crops are expected to increase by a 4.4%. For livestock, an increase in the goat population and a decrease in the poultry population are expected (CIAT and World Bank 2018).

According to the IHS5, approximately 84.7% of all households in Malawi are involved in agricultural activities, with 92.8% of all rural households partaking in these activities. Despite this high number, agricultural extension services are found to be inadequate, with the proportion of rural households that received advice on improving agricultural practices ranging between 5.7% and 14.2% (National Statistical Office 2019b).

The agriculture context in Neno and Blantyre Districts is summarised below:

- Blantyre District is known for the cultivation of a variety of crops, both for subsistence and commercial purposes. The district plays a predominant role in the production of cash crops, with tobacco, sugar cane, tea, and horticultural products. Maize, as a staple food crop, is widely grown by smallholder farmers. This district produced more than 575,00MT in 2022 which represents a 33% decrease from the preceding year (Government of Malawi 2022). Livestock farming is another important facet of the agricultural sector in Blantyre District. Farmers engage in the rearing of cattle, goats, and poultry, providing a source of meat. For small farmers, livestock farming is integrated with crop cultivation, creating a more sustainable and diversified farming system. Government- and NGO-led programmes and projects in this district enhance



agricultural productivity, promote sustainable farming practices, and improve the livelihoods of smallholder farmers. In Blantyre District, the most active NGO is One Acre Fund and the most active governmental programme is MWASIP.

- In Neno District, the Evangelical Association of Malawi, Umodzi and Cadecom are NGOs active in the agriculture sector. At district level, subsistence farming is predominant. However, there are also cash crops such as tobacco. Smallholder farmers play a crucial role in the district's agricultural sector, engaging in the cultivation of staple crops such as maize, sorghum, and millet. These crops are essential for local consumption and contribute to food security. As well as in Blantyre District, Neno District contains livestock farming which contributes to crop production through manure.

B Overview of Agriculture Practices in the RAP Study Area

The most productive farming system in the project area is the “dambo” farming, which is practiced on riverbank fields and relies on manual irrigation. In addition to “dambo” farming, rain-fed agriculture is also practiced in the affected villages. Farmers in the project area have traditionally sustained their agricultural lands through the application of manure, which has enriched the soil and supported crop yields. According to local farmers, the soil fertility near riverbanks is better than elsewhere.

During the field investigations, several slash-and-burn clearing activities were noted in multiple areas (Figure 52). This seems to be the preferred method of land clearing, despite well-known impacts like habitat destruction, erosion, smoke, rapidly falling productivity, and increasing pests in short-fallow systems²¹.

Figure 52: Example of Slash-and-Burn Agriculture in the Study Area



Across the study area, farmers widely cultivate maize which represents the first staple crop. Farmers in the study area mainly till by hand, not using machineries and only very little animal

²¹ Short fallows: it takes one or two years before the land is cultivated again. The regeneration of the land is not complete. Long fallows: the fallow periods are longer, from three to four years. Land regeneration is complete.



traction force. As a complement of maize as the main food, all varieties of beans and vegetables are grown.

Perennial crops are cropped differently according to the water availability and financial resources of the farmers. Certain farmers possess tree orchards in the riverbanks, when other farmers possess only a couple of garden trees (typically pawpaw, banana or mango trees) for their own consumption. The extent of productive years depends on the tree's cycle. Pawpaw trees can be productive for multiple years, while coconut trees are cut after one year once the nut turns sour.

Reproduction and diseases management for owners of large livestock follow a pattern. However, this pattern is not as clearly observed for owners of small livestock. October is a critical month for livestock survival being the driest and warmest month of the year. During this time, animals or poultry are more sensitive to diseases such as Newcastle Disease. October is also a month of reproduction for poultry and cattle, which increases the pressure on livestock survival. Animals are mainly kept by small farmers as financial security and not for consumption. Therefore, there is no specific period for either meat consumption or the sale of livestock.

C Soil Quality across the Study area

The next paragraphs describe the soil characteristics common to both banks in the RAP Study Area. Loamy sand soil is predominant. This type of soil is the most common type of soil in Malawi (Asfaw et al. 2018). Sandy soils are often dry, poor in nutrients, and have low water retention capacity, which negatively impacts agricultural performance. Two categories of the World Reference Base for Soil Resources (WRB)²² soils group are present in the Study area: Cambisols and Lixisols. Cambisols are soils in formation, characterized by the absence of a layer of accumulated clay, humus, soluble salts. They are developed in medium and fine-textured materials derived from a wide range of rocks. Lixisols are soils with subsurface accumulation of low activity clays and high base saturation. They develop under intensive tropical weathering conditions and subhumid to semi-arid climate. Cambisols are more acidic, with a pH of 7, than Lixisols, which have a pH of 7.3. However, these differences do not affect agricultural performance.

Electrical conductivity is linked to the clay and organic matter in the soil. High electrical conductivity increases the soil's capacity to retain humidity, which is key for agriculture. Non-cultivated land has a higher conductivity than cultivated land.

Soil organic matter, mainly organic carbon, is one of the first criteria to consider when assessing soil fertility. The soil analysis shows a very poor rate (under 2%) for non-cultivated land and an even poorer rate for cultivated land. There are no significant differences between Cambisol and Lixisol. An acceptable rate for loamy sand soil should be above 2% (Zuza et al. 2023). Farming without any soil conservation practices may explain this difference: without organic fertilizer, an intensive cropping system will impact the organic matter rate, decreasing it from one cropping campaign to the next.

The total nitrogen (TN) rate follows the same trend. TN is higher in non-cultivated land than in cultivated land. Hence, only a small portion of the nitrogen (+/- 5%) is available for crops. These very low rates impact the growth of crops which can force producers to compensate with chemical fertilizers.

Nutrients are indispensable for crops. The soil analysis showed that in Kambalame village, Phosphorus rates are at the acceptable limit (40 ppm) in both cultivated land as well as uncultivated land. However, in Chaswanthaka, the rates are below the acceptable limit which may impact crops like maize. The Potassium rates seems acceptable for maize. However, the excess of the lack of a nutrient can impact the exchange of other nutrients with plants. For example, the Potassium (K) /Magnesium (Mg) ratio should be between 1 and 2. Uncultivated land and cultivated

²² The World Reference Base (WRB) is an international system for classification of soils. It was designed to cater for any soil in the world. WRB is based on the Legend (FAO-UNESCO, 1974) and the Revised Legend (FAO, 1988) of the Soil Map of the World (FAO-UNESCO, 1971-1981). WRB has come forth from an initiative of the Food and Agriculture Organization of the United Nations (FAO) and the United Nations Educational, Scientific and Cultural Organization (UNESCO), supported by the United Nations Environmental Programme (UNEP) and the International Union of Soil Sciences (IUSS).



land are not balanced. In both cultivated and uncultivated lands the level of Magnesium was found to be too high compared to the Potassium level. This limits the absorption of Potassium, which in turn could reduce yields in maize crops.

The Cationic Exchange Capacity (CEC) illustrates the ability of soil to exchange nutrients with crops. When it is below 10 Cmol/Kg, the quantity of available nutrients is limited. The analysis found that both cultivated and uncultivated land have a limited capacity of nutrients exchange. The level of CEC was aligned with the carbon organic rates, clay percentage and electrical conductivity.

The presence of metals in the soil is essential for plants. However, where they occur in excess, metals can become toxic for plants. The analysis showed that the levels of Copper was low but still within an acceptable range (>1ppm). Iron levels (<40ppm) were limited in both cultivated and cultivated areas. Manganese levels were lower in cultivated land as compared to uncultivated land. Zinc levels were low (less than 2ppm), which may impact maize production.

Overall, on both banks of the Shire River, the soils are generally of poor quality for agricultural activities.

D Farming practices in the Main Reservoir and Main Works areas

The next paragraphs are describing the interviewed households farming practices in the Main Reservoir and Main Works areas, based on the results of the quantitative socioeconomic survey performed in 2023. Based on these interviews results, no significant difference has been noted between male-headed and female-headed households regarding farming practices.

A description of farming practices observed during the qualitative investigations along the Transmission Lines routes and along the S137 road is given in section 4.2.10.3E.

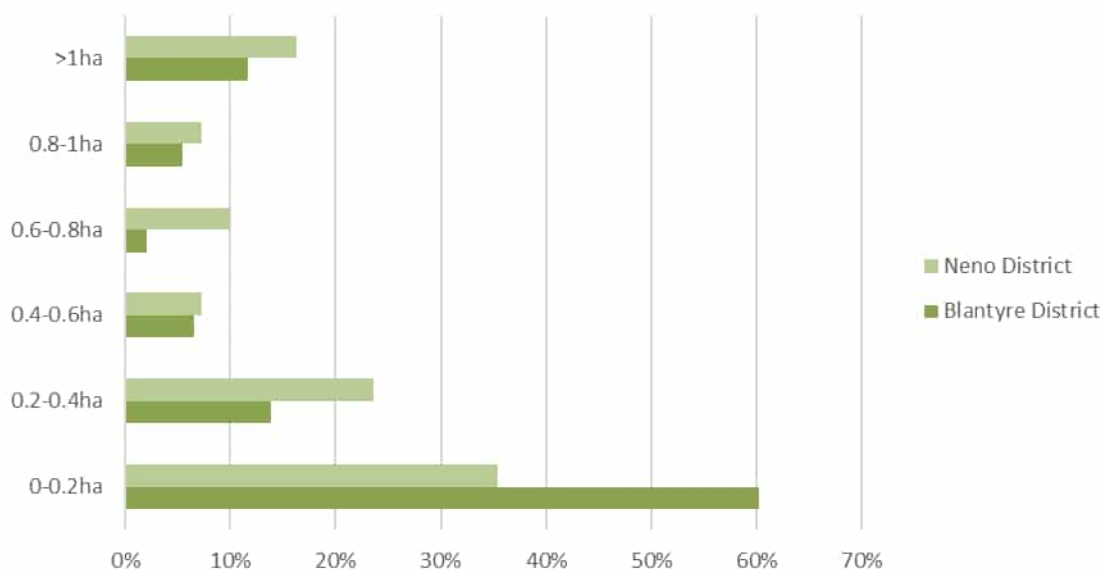
D.1 Size of cultivated plots per household and farming landholding

a Size of cultivated plots

Each household can cultivate one or more plot, with a rotation: they cultivate one plot one year, and another plot the next year. Hence, they do not cultivate all their landholding at once, but only part of the land they own or over which they have customary rights.

The cultivated land plots tend to be smaller on the Left Bank, as indicated in Figure 53: 60% of farmers have fields under 0.2ha whereas in the Right Bank, only 35% of farmers have fields under 0.2ha.

Figure 53: Average size of cultivated land declared by surveyed households.

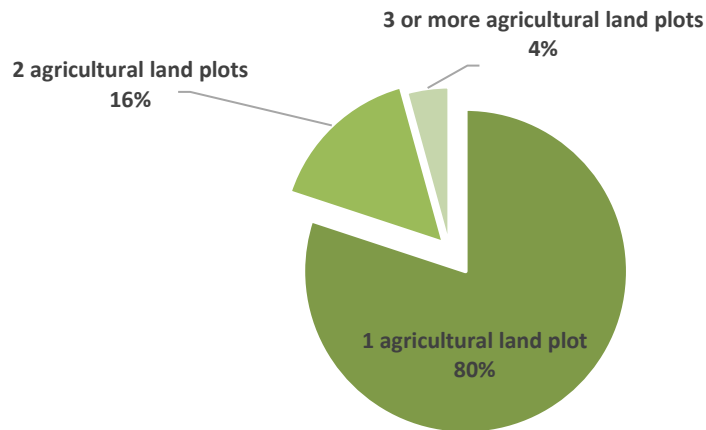




b Size of farming landholding

Based on the survey of affected land plots, the majority (80%) of the surveyed affected households declared only one agricultural land ‘plot’ affected (see Figure 54). As indicated above, they are not cultivating the entirety of their agricultural landholding, but usually rotate their farming activities on their landholding. The average size of the agricultural land surveyed in November and December 2023 is 1.26ha per ‘plot’. Regarding the total agricultural landholding affected, the median total agricultural area per household is about 2ha, with the average being about 5ha.

Figure 54: Number of agricultural land plots affected per affected household



D.2 Annual and Perennial Crops Farmed

Throughout the year, subsistence farmers engage in various agricultural practices, with maize serving as their primary food crop. Figure 55 indicates the main seasonal or annual crops cultivated by the affected households on both banks of the Shire River. When the farmer possesses a riverbank field and an in-land field, maize is grown on the riverbank (Figure 56) during the dry season, and in the village during rainy seasons (Figure 57).

Figure 55: Type of annual or seasonal crops cultivated by the households surveyed

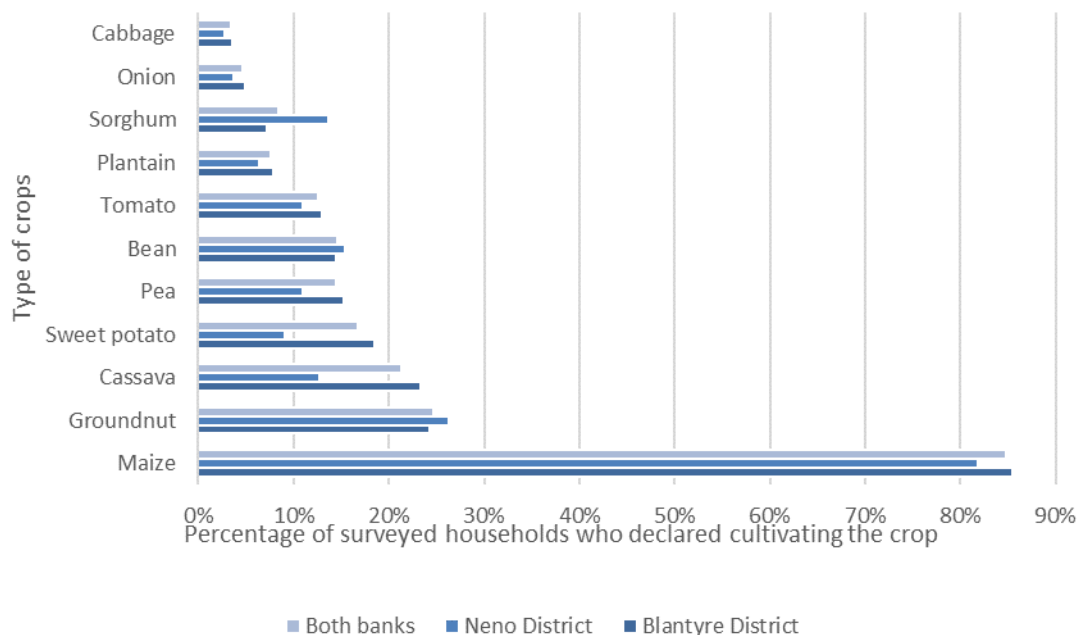




Figure 56: Maize Riverbank Field in Chikira Village (Main Reservoir, Left Bank)



Figure 57: In-Land Field in Kambalame Village (Main Reservoir, Right Bank)





Figure 58: Pigeon Pea Field (Neno District)



More than half of the households interviewed (57%) also grow perennial crops and trees, such as mango and bananas (Figure 59). In some instances, perennial crops are associated with annual crops in agroforestry systems on the riverbanks, but the practice is not common. The few instances where this practice was noted were cases when an NGO had trained people in this technique. Fruit trees that require a constant source of water through the year (e.g. mango trees, Figure 60), are mostly planted in the riverbank fields whereas fruit trees which do not require as much water (e.g. *Ziziphus mauritiana* commonly called Indian Jujube), are mostly located in the in-land villages.

Figure 59: Perennial Crops and Trees

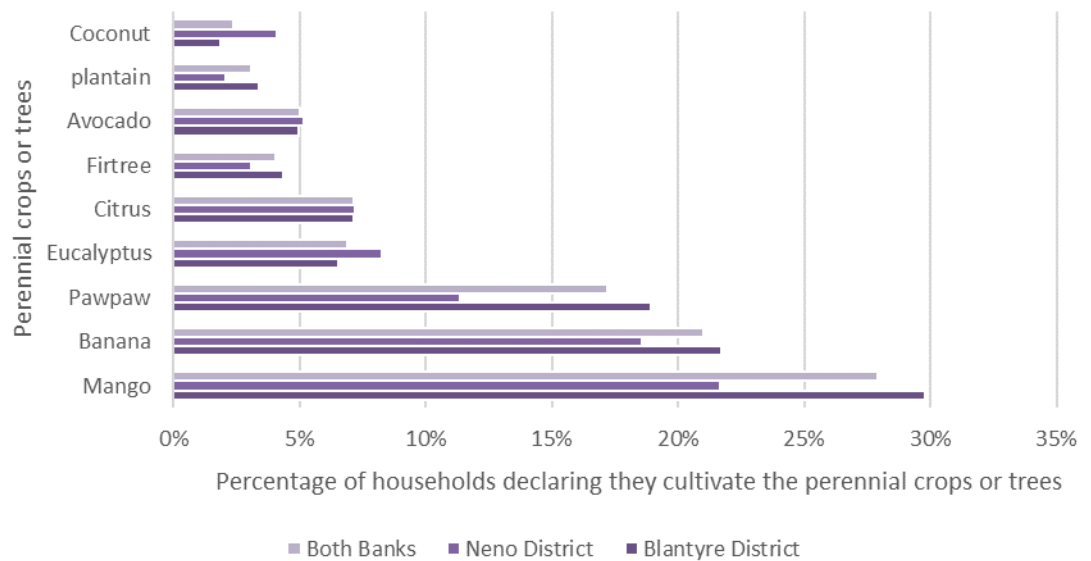




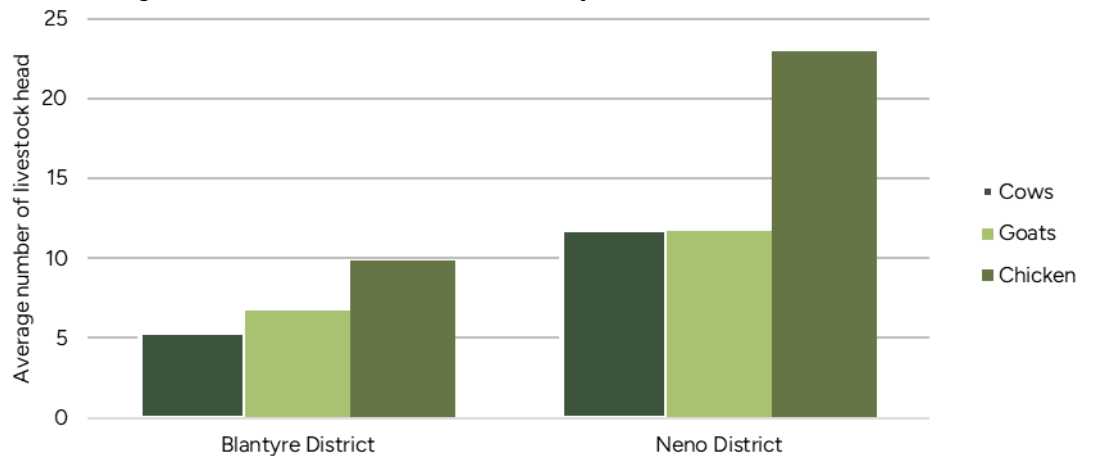
Figure 60: Mango Tree in a Riverbank Field in Chikira Village (Main Reservoir, Left Bank)



D.3 Livestock

Almost half (46%) of surveyed households declared they own livestock (cattle, goats) and poultry (chickens). The average number of animals declared by interviewed households is indicated in Figure 61. Some households also own pigs or sheep.

Figure 61: Average Number of livestock heads declared by the households



When facing financial difficulties, households sell some of their livestock. For example, during the 2022 floods, villagers sold livestock in order to purchase crops for survival. In remote rural villages, the limited market access might discourage farmers from selling their livestock. Livestock also



represents a secure asset compared to money. Bartering can be done with livestock, for instance, goats or chickens are also used to pay a fee at traditional court. Livestock also has a cultural importance, for certain ceremonies. For instance, in Kambalame, a cow is sacrificed each year under a sacred tree.

During the day, cows and goats are conducted to grazing and water points, whereas chickens are left to free-range in the village (see Figure 62 to Figure 67). At night, cows, goats and chicken stay in specific enclosures in the village.

On both banks, 42% of households reported cows mainly graze on the riverbanks and 43 % for goats, followed by lands close-by the village (35% of households for cows and 39% for goats) or in the hills surrounding the villages. Cows and goats are conducted for grazing to low fertility soils near villages by workers or household members. Chickens are fed with harvest wastes or co-products, such as maize seeds and shells.

More than 70% of the interviewed households declared they take their livestock to the Shire River to water them. Other rivers or tributaries to the Shire are also used. Only a minority (5%) declared they water their cattle using the village borehole.

Breeds among livestock herds are not crossed when it is a small-scale livestock farming practice. Only large ranches practice crossbreeding. Therefore, small herd livestock is mostly composed of indigenous breeds, which are more resistant. In terms of medicine supply to livestock, 20% of farmers provide medicine to their chicken, 86% to their cows and 46% to goats. When there is an epidemic for certain diseases, government provides the medicine. The greatest challenge faced by livestock farmers are the hot and dry conditions. However, diseases such as Newcastle Disease (*'chitopa'*) are also known to decimate entire herds especially among poultry.



Figure 62: Cattle Grazing in Low Fertility Grazing Areas Near July Village (Neno District)



Figure 63: Free-Range Chicken in Dzikupi Village (Blantyre District)



Figure 64: Cattle Enclosure in 'Mlipa' Commercial Farm in Chikaya (Neno District)



Figure 65: Free Range Indigenous Goats in Dzikupi Village (Blantyre District)



Figure 66: Pig House (*Khola*) in Daelo Village (Neno District).



Figure 67: Poultry Housing (*Khola*) on the Left And Goat, Ducks and Sheep Housing, Near Houses in Chinkwynia Village (Blantyre District).





Some households mentioned beekeeping as a specific activity Especially on the right bank, in Feremu GVH, close to Majete National Park. African Parks provides training and the equipment to farmers. Once honey is obtained, the beekeepers sell it to African Parks, who resell it at a national level. This activity can provide a complementary income. However, the sustainability of this activity is questioned by the interviewees as droughts disturb flowers booming. Some farmers mentioned that hives died because of a lack of food supply. Farmers who do not sell to African Parks reported they have no other customers to buy their honey.

D.4 Farming techniques

Fields are cultivated individually by farmers themselves, often with help from other households' members (72% in the Left Bank and 66% in the Right Bank). When they have the financial resources, they employ complementary workforce (piece work or *ganyu*, reported to be used by 16% of the farmers surveyed on the Left Bank and 18% on the Right Bank).

In terms of cropping systems, interviewed farmers mentioned the following practices:

- Crops association: Maize crops are often associated with legumes or vegetables, and or tubers; but they can also be grown as a monoculture. Maize is mainly harvested during the rainy season;
- Crops rotation over different fields: according to individual farmers' interviews, crop rotations are not systematically done. Farmers with sufficient field surfaces can practice rotation between cultivated lands and fallow lands. The main reason for having fallow lands is not purely agronomic (to let the field 'rest'), but rather practical. When farmers do not have enough workforce (from family or hired hand), they transform their previously cultivated fields into fallow land;
- Crop rotation within a same field: it is not widely practiced among the interviewed farmers. During focus-group discussions, a few farmers mentioned practicing this agricultural technique, adapting the rotation based on their appreciation of the climate for the year. If the cropping season is considered as a "good year" meaning that the rains are abundant but not destructive, on time and that there is no extreme weather, some farmers opt for the rotation on a same riverbank field presented in Figure 68. On the contrary, if it is a "bad year", much dryer than expected, farmers will opt for less water dependent crops as exposed in Figure 69.



Figure 68: Maize Rotation During a “Good” Agricultural Year on a Riverbank Field

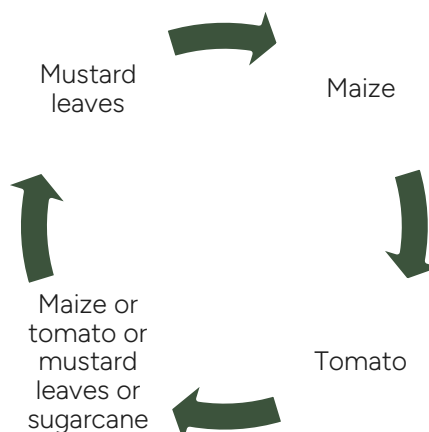
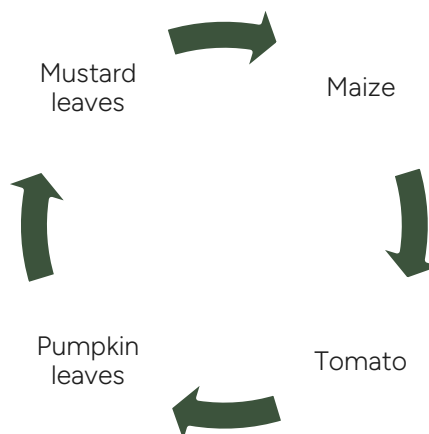


Figure 69: Maize Rotation During a “Bad” Agricultural Year on a Riverbank Field



In terms of technical operations:

- Farmers till their field manually with a traditional wood hoe. Only two farmers mentioned using a tractor or mechanical equipment.
- The majority of farmers (80%) do not apply pesticides due to financial constraints. For the 20% of farmers who apply pesticides, Actellic is used by 33% of them for grain storage. In the fields, those farmers apply Rogor (23%) and Cypermethrin (15%). Rogor and Cypermethrin are used on the riverbanks where weeds and pests are more frequent. More effort is put in crop production as families rely mainly on it for their subsistence.
- On both Banks, more than half of the households surveyed (54%) use fertilizer. Among the farmers who apply fertilizer, urea and NPK are the main ones. These fertilizers are subsidised by MWASIP, whereas the other fertilizers on the market, such as CAN and Booster, are not subsidised by this governmental program. However, some villagers mentioned their struggle to access this MWASIP subsidiary. They consider the process to apply for this subsidy difficult. When farmers have livestock, they can apply manure in the fields during planting, and when farmers do not have livestock but possess the financial resources, they can buy manure from other farmers, who do possess livestock.
- The most productive farming system in the project area is the “dambo” farming, which is practiced on riverbank fields and relies on manual irrigation. The majority (81%) of households interviewed declared they do not irrigate their crops. However, among the 19% of farmers who declared they irrigate their crops and practice “dambo” farming:
 - The Shire River is the main source of water for fields located near the river (68% of the farmers irrigating their crops), and other rivers represent the second source of water (17%),



- Farmers along the Shire River practice both mobile irrigated agriculture and rain-fed agriculture.
- Fields located on the riverbanks are irrigated with different mobile irrigating systems: mostly buckets, with some treadle pumps or other mechanical systems (only 40 farmers). In areas far from the river, some villagers use a rented pump. The renting price depends on the fuel price and on the surface of the plot. The renting price of the pump varies from 1,500 Kwachas (KW) to 20,000KW.
- The irrigation system depends on the financial resources of the household and sometimes on the support from NGOs who provide these resources.
- In riverbank-irrigated fields, vegetables, maize and other highly water-dependent crops (e.g. banana and sugarcane) are grown. Crops are irrigated either to ensure the crops' survival and/or to increase crop yields.

The cooperative system is not common across the surveyed area. However, farmers do rent equipment to each other. In villages of both Districts, it has been observed that renting maize mills (see Figure 70) and irrigation pumps is common practice. Very few processing equipment (mills) have been seen in the villages.

Figure 70: Maize Mill in Nkhwali Village (Neno District)





D.5 Seasonality

Most households do not cultivate the entirety of their landholdings: they rotate and cultivate different areas from one year to the other. When farmers have fields in the riverbanks and live in villages, they can temporarily live in hay houses on the riverbanks during the dry season to prevent wild animals from eating the crops.

Among farmers, the seasonality of their source of first income varies according to the agricultural activity type:

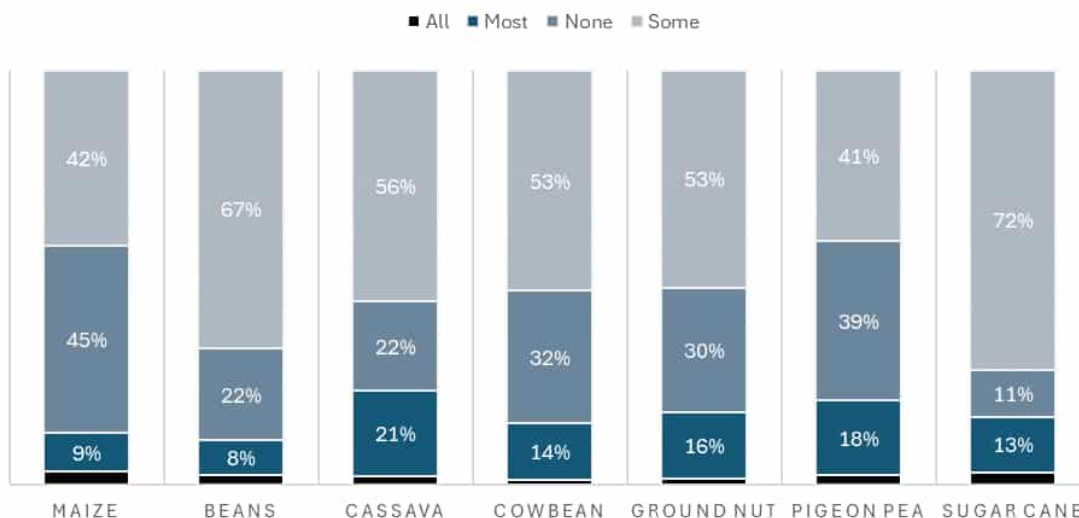
- Income from crops is permanent when farmers manage to have two cropping cycles in a year (during wet season and dry season, “dambo” farming mostly practised on the riverbanks), whereas seasonal farming is for farmers who only have one cropping cycle (during the wet season).
- Agricultural products can be sold all year round. They are generally dried and transformed, which allows farmers to sell their product when they need financial resources and/or when the market price of the product is at its highest value.
- Livestock represents for the majority of households a permanent source of income. In fact, livestock is mostly sold alive, which can be done, all year long.

An annual crops (Figure 72) and perennial crops calendar (Figure 73), as well as a livestock calendar (Figure 74) are provided in the next pages.

D.6 Access to markets

Most farmers reported selling their harvest themselves rather than through a cooperative system. For seven out of the nine main crops, over half of farmers do not sell their yearly harvest in order to provide for the household’s basic needs (Figure 71). Only farmers who manage to obtain a surplus of harvest will sell some of the total harvest. Farmers sell their crops at informal stalls next to shops at local markets such as Chikuli Market along the S137 road in Blantyre District.

Figure 71: Proportion of Crops Sold



D.7 Factor limiting farming activities

The households interviewed mentioned some key elements limiting the agricultural productivity:

- Droughts
- Floods,
- High price of seeds and fertilizers,
- Encounters with wild animals (crocodiles and hippos on the Shire riverbanks).



Some farmers also explained that they are unable to cultivate some of their land plots due to long distances causing accessibility issues. Indeed, farmlands on the riverbanks can be more than a 2-hour walk away from some villages. Others indicated they have no time or capacity to go and cultivate their land plots due to other conflicting obligations, physical impairments, and/ or a lack of other households' members available to provide help.



Figure 72: Simplified Annual Crops Calendar in the Study Area

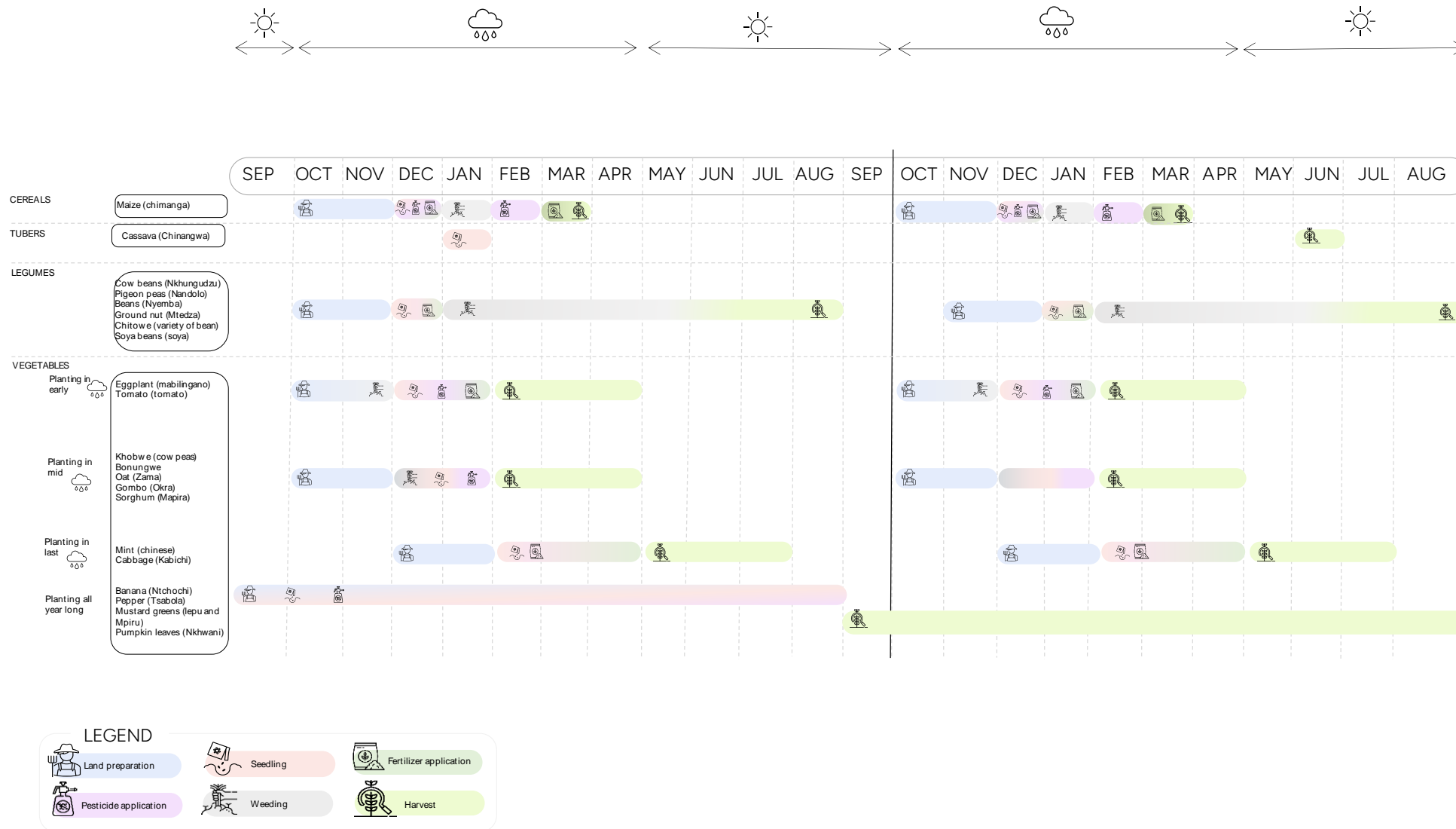




Figure 73: Simplified Perennial Crops Calendar in the Study Area

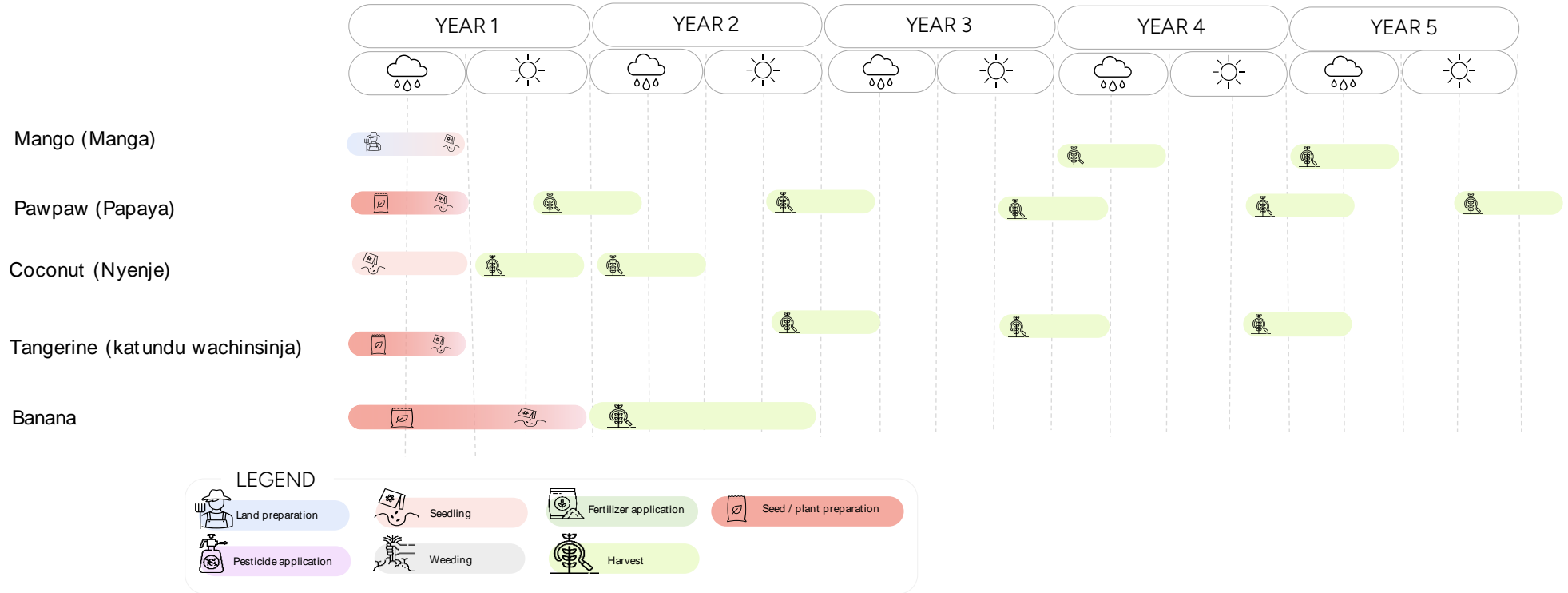
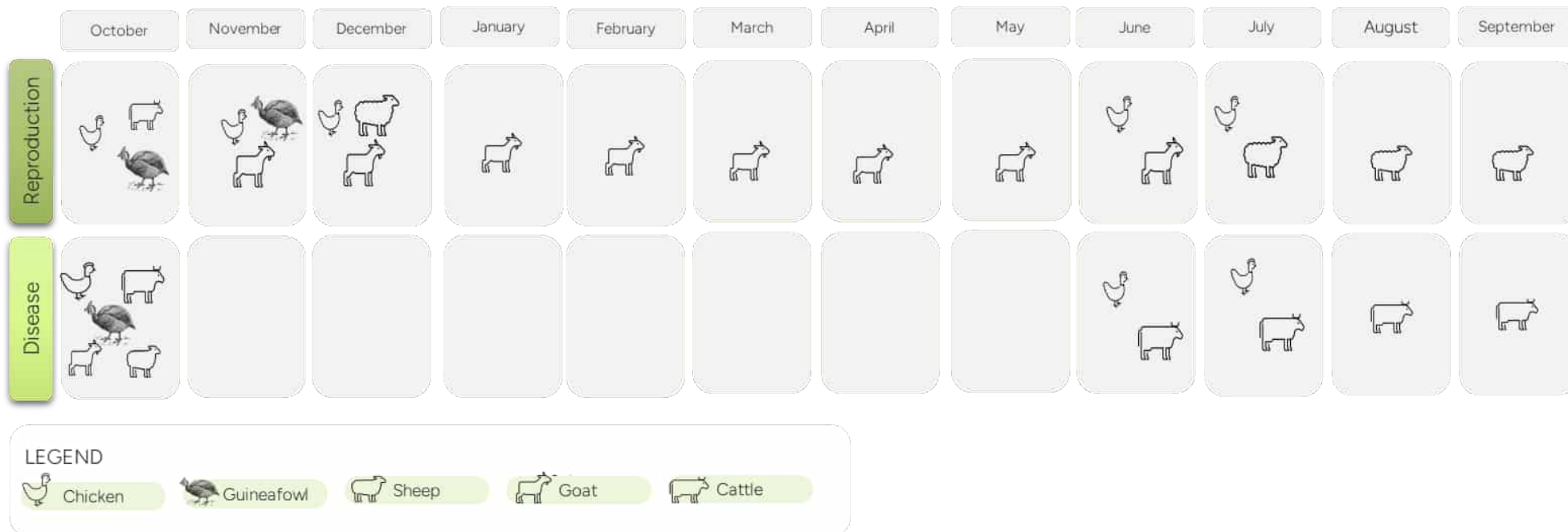




Figure 74: Livestock Calendar in the Study Area

LIVESTOCK CALENDAR





E Agricultural Systems Agricultural Systems along the Transmission Lines and the S137 Road

Along the proposed 400kV Transmission Line, staple rain-fed crops is the main form of agriculture. This type of farming depends heavily on seasonal rainfall distribution, making it exposed to climate variations and droughts. Livestock is done at a small-scale level, mainly to provide manure for the fields, and to ensure financial security.

Along the 132kV Transmission Line, agriculture mainly takes the form of subsistence agriculture as there are no markets near-by to sell the crops. Farmers also possess small-scale livestock for subsistence. When river streams are present, farmers can manually water their crops, if they have the financial resources to buy such equipment like buckets of treadle pumps. However, when fields are far from the streams, the type of agricultural practice is rain-fed agriculture, without irrigation.

Along the S137 road, there are two different agricultural types:

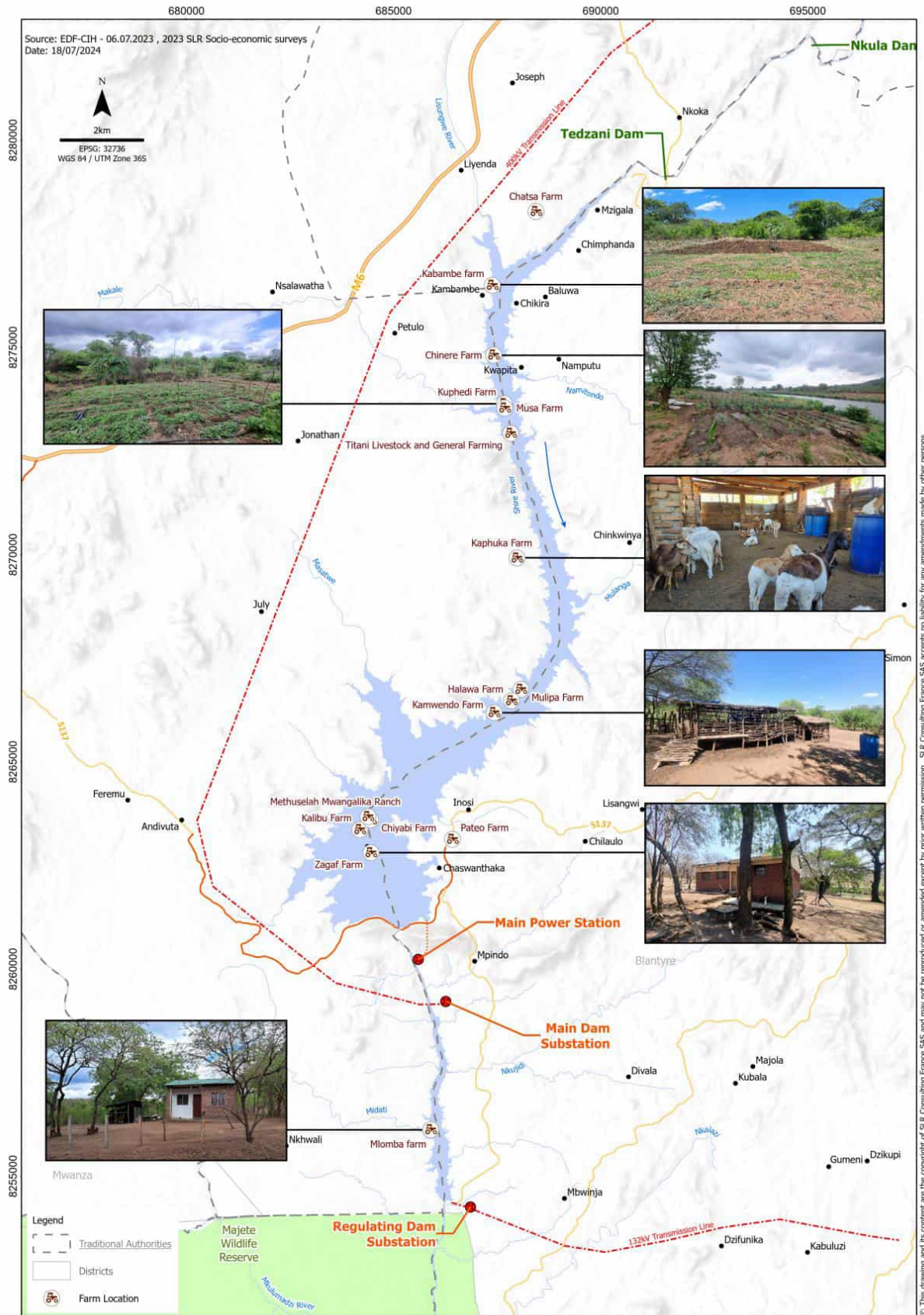
- Near Chileka Airport, the population density is such that households do not always own their own fields and must either rent the land or use someone else's land. In this highly densely populated area, soil fertility is a key challenge for farmers as they do not have enough land to practice crop rotations and have fallow land;
- Closer to the Shire River, agriculture is mainly staple crop farming, with bigger land plots than those near Chileka Airport. However, soil fertility is still a challenge. The main agricultural occupation remains self-employed crop farming.

4.2.10.4 Ranches and commercial farms

The main formal commercial activity in the areas affected by the Project footprints is commercial farming or ranches. Fifteen commercial farms or ranches have been identified in the Project Land Requirements. Their location is given in Figure 75 next page. Key information on all the commercial farms surveyed in 2023 is provided in Table 28, followed by an overview of the key findings per farm.



Figure 75: Commercial Farms and Ranches locations



© The drawing and its content are the copyright of SLR Consulting France SAS and may not be reproduced or amended except by prior written permission. SLR Consulting France SAS accepts no liability for any amendments made by other persons.



Table 28: Summary of Ranches in the Project Land Requirements

District	TA	GVH	Name	No. of Workers	No. of Dependents/ Other Residents	Main Livestock or Agricultural Products	Distance From Shire River	Water Use	
Neno	Symon	Ngwenyama	Chatsa	6	3	Mango	Approximately 1.4 km	Washing clothes, drinking water, and cooking	
	Mlauli	Nsalawatha	Kabambe	5	0	Trees (Acacia, Banana trees and Blue gum), Sugar cane	Approximately 150m	Irrigation, fishing, water for livestock from Lisungwi River	
			Chinere	6	0	Sugar cane, Cassava, Tomatoes, Irish potatoes, Eggplants, Groundnuts, Mango, Pawpaw, Chickens, Hare, Guinea fowl	Approximately 50m	Flood recession, Irrigation pump	
			Kuphedi	1	0	Tomatoes, Cassava, Pawpaw, Eggplant, Bananas, Mango	Approximately 50m	Irrigation pump	
			Musa	3	0	Bananas, Cabbage, Onions, Cassava, Mangoes, Tomatoes, Chickens, Guinea fowl	Approximately 50m	Irrigation pump	
			Titani	6	Approximately 5	Maize, Bananas, Groundnuts, Soya, Pawpaw	Approximately 50m	Solar-powered pump connected to well	
			Kaphuka	4	15	Goats, Sheep, Cattle	Approximately 700m	Borehole	
			Mulipa	5	5	Goats, Sheep, Cattle, Chickens	Approximately 200m	Borehole	
			Halawa	2	0	Crop farming	Approximately 200m	Manual watering	
			Kamwendo	3	1	Goats	Approximately 200m	Manual watering	
			Feremu	Kaliati	Kalibu	2	0	No longer operational	Approximately 100m
	Zagaf	10			Approximately 8	Chicken, cattle, doves.	Approximately 100m	Manual watering	
	Mlomba	8			Approximately 8	Cattle	Approximately 100m	Cattle drinking, manual watering	
	Blantyre	Kunthembwe	Kaliati	Methuselah Mwangalika	3	0	Fruit trees, Cattle	Approximately 100m	Irrigation by treadle pumps.
				Chiyabi	1	1	Fruits (tangerines, bananas, and mangoes), Vegetables, Cattle, Sheep, Goats, Chickens	Approximately 50m	Drinking, subsistence fishing, manual pumps for irrigation, washing clothes, bathing



A Left Bank

A.1 Mwangalika Ranch

The ranch employs three people: the ranch worker and his wife and son. The ranch worker moved to the ranch approximately eight years ago and resides on the farm with his family.

The agricultural activities on the ranch encompass a diverse range of crops, including vegetables, fruits, and orchards, with a specific focus on tangerines, bananas, and mangoes. These agricultural pursuits are entirely for the owner's benefit, with the ranch workers not benefiting from any agricultural activities or resources. Farmwork is the primary source of income for the ranch workers, emphasising the ranch's pivotal role in sustaining their livelihoods. The owner hires seasonal workers irregularly to meet seasonal demands, particularly during crucial phases such as planting and fertilising. There are several fruit trees on the farm, with the mango trees bearing fruit for the first time this year. It yielded 60 kg of produce, which was successfully sold at a local supermarket. The farm employs treadle pumps from the Shire River for efficient tree irrigation.

A.2 Chiyabi Ranch

The ranch has employed one worker since 2019, who is joined on the farm by his wife who primarily focus on household chores. They derive their primary source of income from their employment on the ranch, with their monthly earnings amounting to MWK 27,000. They do not own land in their home village, further underscoring their reliance on the ranch for their livelihood.

The farm cultivates vegetables, fruits, orchards, tangerines, bananas, and mangoes, although these endeavours are solely for the owner's benefit.

The owner allocates plots of land where crops such as tomatoes, vegetables, and pumpkins are cultivated for personal use. The ranch also maintains livestock, including cattle, sheep, goats, and chickens, which graze in permanent grasslands within a two-hour walking distance.

Figure 76: Ranch workers accommodation on Chiyabi ranch



B Right Bank

B.1 Chatsa Ranch

This ranch is home to nine households. While a valuable resource for various domestic activities, the Shire River is not utilised for watering cattle due to the occurrence of crocodiles. Instead, the Shire River is vital for washing clothes, drinking water, and cooking.

B.2 Kabambe Ranch

The ranch has five committed full-time male employees, each with ten years of service. Compensation for their efforts is provided in the form of both cash and crops. The agricultural activities on the ranch are diverse, featuring crops such as pepper, maize, tomatoes, onions, sugar



cane, and bananas, along with goats and cattle primarily raised for commercial purposes. Of economic significance is the cultivation of trees, with the owner selling around 2,000 trees annually. A small blue gum tree is priced at MWK 30,000 each.

The Shire River is a multifaceted resource for the ranch, fulfilling roles in bathing, drinking, irrigation, and fishing for the ranch workers. Lastly, the livestock on the ranch benefit from the Shire River as their water source, showcasing the river's integral role in sustaining various aspects of the ranch's activities.

B.3 Chinere Ranch

The agricultural operations at the ranch involve six employees engaged in various farming activities, primarily centred around cultivating and caring for crops such as sugar cane, cassava, tomatoes, Irish Potatoes, eggplants, and ground nuts. These activities span a land area of approximately 7.5 ha, strategically located closer to the river due to soil quality and water access for irrigation. The workers' families reside in nearby villages like Ntankwe, Makakinga, Selewati, and Magome.

The ranch's farming approach includes crop rotation. For instance, eggplants follow tomatoes in subsequent seasons to optimise soil fertility and minimise depletion. However, certain fields on the farm present challenges due to poor soil quality and rocky terrain, necessitating the use of specialised machinery for land preparation and cultivation.

Furthermore, the farm extends beyond crop cultivation, hosting mango and paw-paw trees while managing livestock consisting of chickens, hares, and guinea fowls. The fruits are transported to the Chifunga Market, with transport costing MKW 3,500 one way, approximately ten times a month or as per crop readiness. Agricultural inputs, including pesticides and fertiliser, are bought from the Limbe Market in Blantyre when needed.

Figure 14: Crops at Chinere ranch on the Shire River bank



B.4 Kuphedi Ranch

The ranch assistant resides on the farm. He assists with various tasks, including the crafting of straw mats that he sells to earn an income since he does not earn a salary from the ranch work. Engaged in farming activities for five years, he contributed to planting tomatoes, cassava, paw paws, eggplants, and bananas. Mango trees have been recently planted.

Prime plots of land is located adjacent to the river, utilising the fertile soil and river water for irrigation. In this area, the primary cultivation is tomatoes across an estimated 150m x 15m area.



Although the assistant owns a small plot where he cultivates maize for personal consumption, he lacks access to farming equipment.

Livestock, comprising goats, chickens, cattle, and guinea fowls, are maintained off-site by the owner which is occasionally sold, but not frequently.

The farm predominantly supplies crops to Chifunga and Manga markets, incurring transport costs of MKW 3,000 (with a motorcycle) or MKW 40,000 (with a car) one way. While an irrigation pump exists, its usage is limited due to fuel expenses. Crop rotation is not a prevalent practice, and fallow land away from the river are reserved for potential sales or rentals. Annual crop inputs are sourced from the Mwanza Market.

Figure 77: Crops at Kuphedi ranch



B.5 Musa Ranch

The ranch employs three male workers who oversee tasks relating to crops and animals, with an emphasis on planting duties. The ranch workers reside on the ranch with their families. The ranch owner does not live on the ranch.

Prime plots adjacent to the river, benefiting from fertile soil and water access, are dedicated to cultivating bananas, cabbage, onions, cassava, and tomatoes. Fertiliser application remains occasional, dependent on crop requirements. Each worker owns a small plot, approximately 1.5 ha which is used for planting maize for consumption. Mangoes serve as worker consumables, while poultry, comprising chickens and guinea fowls, produce eggs for consumption and sale, respectively, with guinea fowl eggs priced at 500 KWA per egg.

Produced crops are sold at the Limbe Market in Blantyre, with the owner managing transportation either monthly or bi-monthly, selling directly or occasionally through intermediaries to local hotels / lodges. The 2022 market prices ranged from MKW 15,000 to MKW 20,000 for tomatoes, cabbage, and bunches of bananas. An irrigation pump is available for supplemental watering during insufficient rainfall but is not offered for rent.



Figure 78: Crops on the Musa ranch



B.6 Titani Ranch

The ranch employs six dedicated employees engaged in various agricultural activities crucial to cultivating and caring for crops and animals. The tasks predominantly revolve around farming activities, encompassing the planting and nurturing of maize, bananas, groundnuts, soya, and recently introduced paw-paws. The cultivated plots are primarily irrigated, emphasising the reliance on a solar-powered system connected to a well. This system efficiently supplies water to four water sprayers, essential for nurturing the crops across the farm.

No planting occurs on the riverbank to mitigate risks associated with the crocodiles in the Shire River. Workers are granted specific portions of land where they grow maize, primarily for personal consumption. They have access to the ranch's equipment, enabling efficient and effective subsistence agricultural practices.

Figure 79: Solar panel that powers four water sprayers to irrigate the crops at Titani Ranch



B.7 Kuphuka Ranch

The ranch employs four men who are dedicated to livestock care and tree preservation against charcoal production and fire hazards. With three of the four men married and residing on the ranch with their wives and 12 children, the ranch serves as a familial space. The workers estimate the size of the land to be approximately 200 ha.



Despite the absence of crop cultivation, a small patch is designated for maize cultivation, meeting the workers' consumption needs. Basic tools such as hoses, panga knives, and wheelbarrows are used. The farm specialises in livestock rearing, with livestock comprising 24 goats, 14 sheep, and 70 cattle. Livestock is sold alive at the owner's discretion.

A borehole supplies water to households via a tank with connected taps, albeit inconsistently. Moreover, the workers expressed ongoing food shortages, indicating a dependence on rain for watering the maize patches, highlighting the challenges in sustenance and water access on the ranch.

Figure 80: Goat shed at Kuphuka ranch



B.8 Mulipa Ranch

The workforce comprises five married men, with their wives also residing on the farm. Periodically, the women assist in cleaning the animal sheds and are compensated MKW 15,000 per day, split among the five workers. Their responsibilities encompass overseeing fellow workers, tending to the animals, and explicitly caring for a bull acquired from Zimbabwe.

The farming activities are solely focused on livestock, with sporadic attempts at crop cultivation for consumption, hindered by hippo-related damage, and reliant on rainfall for irrigation. Livestock management involves 41 goats, 68 sheep, 24 chickens, and 109 cattle, sold alive at the owner's discretion and often collected by the owner or purchased by buyers from Lilongwe and Zalewa. The ranch, spanning 203 ha, was expanded in 2022. A borehole serves as a primary investment for replicating similar operations elsewhere.



Figure 81: A breeding bull at Mulipa ranch



B.9 Halawa Farm

The farm owner lives in Blantyre. Two employees are living on the farm. They are doing crop farming. The farm does not have any borehole. They use the Shire River water to manually water their crops.

B.10 Kamwendo Ranch

The ranch employs three male workers and accommodates the ranch manager and his family, while the families of the other two workers reside in Lunzu and the other proximate to Titani Ranch. The ranch manager has been employed at the ranch for over two decades.

The farm's primary focus is on livestock, which includes 18 cattle, 56 goats, 25 sheep, 30 chickens, and 13 guinea fowl. Livestock are sold alive and either transported to the Zalewa Market or occasionally purchased directly from the ranch, facilitated by the owner.

A designated 0.5 ha plot is dedicated to growing maize and cassava exclusively for the workers' consumption. Despite lacking knowledge about land prices, the manager emphasised the crucial investments required to replicate similar operations in a wild setting, emphasising essentials like water access, fertiliser, an irrigation system, and basic tools such as hoses and panga knives. For irrigation needs, the workers utilise water from the nearby Shire River. Furthermore, the ranch boasts fruit trees bearing oranges and avocados, intended primarily for the workers' consumption.

Figure 82: Goat shed on Kamwendo ranch





B.11 Kalibu Ranch

The ranch underwent a substantial relocation process in 2019 which was concluded around 2020. The owner strategically transferred all livestock and assets to a new farm near the Majete Wildlife Reserve. Previously, Kalibu Ranch was a significant employer, supporting a workforce of up to 15 individuals. However, the current operational team comprises a security guard and a single ranch worker entrusted with maintaining specific on-site assets, primarily focusing on the upkeep of buildings.

The employees currently engaged at the farm rely entirely on their salaries as their primary source of income. During its active phase, Kalibu Ranch cultivated various crops, including maize and cabbage. The workers were allocated individual farm plots, allowing them to cultivate crops for personal consumption. The irrigation of crops was facilitated by utilising the waters of the Shire River, with an established infrastructure that included an irrigation pump. This pump was actively employed during the operational period of the farm, ensuring the cultivation and sustenance of crops on the premises.

B.12 Zagaf Ranch

The ranch was established in 2002 and has since been a reliable source of employment for the local community, significantly contributing to the well-being of the ranch workers' families. All employees, consisting of eight men and two women, reside on the farm. The women mentioned that there are distinct advantages to working on the farm, including a consistent salary and having a piece of land for personal cultivation and crop production, which encompasses maize, papaya, peas, mangoes, and lemons. Recent floods have adversely impacted crop yields. Despite this, they view the farm as a safe place with guards being present. The women would prefer to relocate with the farm, highlighting their dedication to farm work and the community it fosters.

Overall, the ranch plays a pivotal role in the livelihoods of its workers, empowering them to support their families and communities. The farm serves as the primary source of income for all its workers, and they receive a regular salary for their labour.

The Shire River is used for crop irrigation, with watering canes enabling the ranch workers to tend to their crops. The river also serves as a source for washing clothes and bathing, highlighting its significance to their daily routine.

Figure 83: Ranch workers accommodation on Zagaf ranch



B.13 Mlomba Ranch

Established around 2012, this ranch currently employs eight dedicated employees. With a monthly wage of MKW 50,000 per employee, the team manages and cares for livestock, including cattle, sheep and goats. Two designated areas, comprising around 2.5 ha each, are utilised for crop cultivation. The optimal plots for crops are situated away from the riverbank, relying solely on rain-fed irrigation. Along the riverbank, additional areas are earmarked for crops



that benefit from irrigation sourced from the Shire River. Sweet potatoes are intermittently planted in these areas. Moreover, the farm is equipped with a borehole that supply water to the residents. Lastly, the farm benefits from ample grazing land and uses the Shire River to supply the cattle with drinking water.

Figure 84: A worker’s house at Mlomba ranch



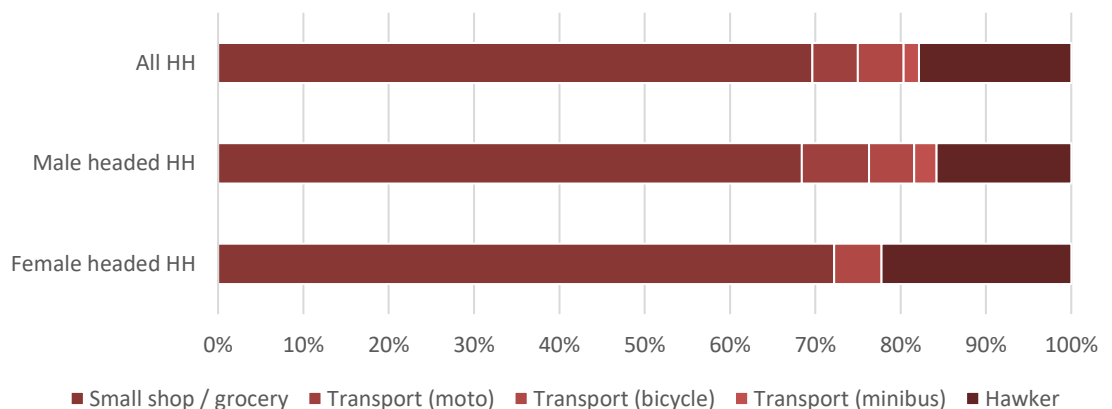
4.2.10.5 Small Businesses

There are two main types of businesses in the area covered by the quantitative households’ survey in the Main reservoir and Main works areas:

- Commercial farms or ranches, described in section 4.2.10.4 above, and
- Small businesses, or petty trade conducted within the villages.

About one-third of the surveyed households (32%) declared they have a small business, with a slightly lower proportion for female-headed households (29%) than male-headed households (33%). Most of them (80%) conduct their small business activities within their village. The nature of these small businesses is indicated in Figure 85 below. Most of the households who do have a small business (85%) do not have any employee.

Figure 85: Categories of small businesses declared by surveyed households, by gender of household’s head





4.2.10.6 Charcoal

The following paragraphs summarise the findings of Charcoal Value Chain Study conducted in December 2023.

A Charcoal Production in the Study Area

The most common charcoal production method amongst the charcoal producers in the study area is the earth kiln²³. This is considered a most rudimentary and unproductive charcoal production process whose efficiency is pegged at 10-15%. The method consists of the following steps: (i) locating suitable trees; (ii) choosing the right place to build the kiln; (iii) cutting the trees and transporting them to the kiln site; (iv) gathering material necessary for kiln construction (grass, clay/sand and when available stones); (v) constructing the kiln; (vi) operating the kiln; (vii) unloading the kiln; (viii) putting the charcoal into bags.

While traditionally the cutting of trees mainly involved men, increasingly women and children are getting involved as presented in Table 29. Female headed households use their own labour to undertake these activities. Married women were said to have their own kilns so that they can control the money they make after selling the charcoal without having to ask their husbands on how the money would be used.

Table 29: Charcoal Production Process Activities by Gender

Steps	Men	Women	Youth
1 Cutting trees	■	■	■
2 Cutting trees into logs	■	■	■
3 Gathering logs on kiln site	■	■	■
4 Digging a pit	■		
5 Parking logs into the pit	■	■	■
6 Sourcing grass for covering	■	■	■
7 Covering the kiln with grass	■	■	■
8 Mudding the kiln	■	■	■
9 Making a place for starting fire and a chimney around the kiln	■		
10 Lighting the kiln	■		
11 Monitoring the charcoal production process in kiln	■		
12 Harvesting	■		

Charcoal production is affected by seasons:

- Charcoal production is conducted during dry season, August, September and October. This is when the soils are dry, and the weather is clear and sunny leading to a successful charcoal production process. These conditions improve charcoal production output. However, during the dry season, the charcoal demand is low as consumers tend to use other alternatives such as dry maize stalks.
- During the rainy season (December to February), the soils are wet, and the charcoal production process is impaired. The charcoal demand is high while the supply is low, leading to increased charcoal prices. In addition, most charcoal producers work on farms for agricultural crop production leading to low number of charcoal producers in the field.

Charcoal production processes require natural, social and financial resources:

- Natural resources include trees as raw materials for charcoal production. Not every tree is suitable for charcoal production. Most preferred tree species are *Pterocarpus rotundifolius* (M'balitsa), *Combretum imberbe* (Mtsimbiti), *Senegalia nigrescens*

²³ Earth pit kilns are the traditional way of making charcoal in Malawi and represents the simplest technology for charcoal production. In brief, the process begins by stacking wood in a pit, sealing it with a layer of grass and soil and starting carbonization by igniting the wood at one end. Earth pit kilns are typically large and large pieces of wood can be used. But these kilns can also be built in small size and can thus, be suitable for families and even individuals (https://energylopedia.info/wiki/Charcoal_Production#Traditional_Kilns).



(Nkunkhu), *Brachystegia spiciformis* (Kachumbe), *Pseudolachnostylis maprouneifolia* (Msolo), *Combretum zeyheri* (Kagolo), and *Colophospermum mopane* (Tsanya). Most of the preferred tree species are becoming increasingly scarce and people are now also using saplings, coppices and digging up tree stumps to make charcoal. Some charcoal makers for (e.g. in Chaswanthaka Village) migrate to other areas to buy tree plots for charcoal production. One respondent bought a tree stand for MKW 100,000 in August 2023 and managed to produce 600 bags of charcoal over a period of 3 months. Another respondent migrated from Chikwawa to Nkwali Village where there are still enough of the preferred trees for charcoal production. A female charcoal producer from Kambalame Village does selective cutting of trees to leave the young ones to grow. This contrasts with communal or protected forest areas, where they cut everything since it is not theirs. Access to trees as a natural asset for charcoal production is key in addition to grasses used to cover the wood in the kiln. Grass is readily available in the communal and individual land. Soil is furthermore used to cover the kiln ready for burning in the kiln site.

- Socially, within the villages, charcoal producers frequently borrow from each other. Others rent their physical assets for free and others for cash or bags of charcoal. There are times where the whole village would volunteer to assist each other in loading and covering large kilns. In terms of human assets, charcoal producers in the study area use either their own labour, child labour or that of skilled individuals. A female respondent from Chikira Village hires men to cut trees, dig the pit for the kiln, as well as load and harvest the charcoal from the kiln. She started the charcoal production on her own, without assistance from her husband due to an admiration of other single mothers who were doing well in the charcoal production business. There is no known formal structures and processes in charcoal production within the study area. However, there are people within the communities who act as informants in market research and identification of collection points. Individuals act as middlemen in charcoal production and they also deliver empty sacks to charcoal producers. When enough charcoal is produced by the charcoal makers, for transporting to markets, these 'rural coordinators' inform the charcoal transporters and buyers who collect charcoal from various collection points to the nearest markets.
- Financial resources are also required. Most physical assets such as axes used to fell trees, sickle for cutting grasses, shovel and hoes for digging a pit for kiln construction, pushing bicycles for transporting charcoal require funds to procure them. Most charcoal producers identified these as physical assets required in charcoal production.

The scarcity of the appropriate tree species has affected charcoal production quantities and quality in the study area. Charcoal producers have been forced to source alternative, and less productive sources of wood. A respondent from Inosi Village reported that good quality wood is now mixed with non-preferred tree species to produce charcoal. Only 40% of the charcoal producers participate in tree planting and natural regeneration in the study area. However, the majority of those that participate in restoration activities is through the help of the Shire River Basin Management Project. No individual initiatives were reported as they do not have enough land on which to grow trees. Availability of wood as raw material for charcoal production also motivates charcoal producers to engage in this business. Respondents from Mpindo Village said: '... As long as trees are available, we shall continue to produce charcoal'. Indeed trees are the main raw material for charcoal production. Almost all villagers born and raised in the study area are aware of the preferred tree species.

As indicated in Section 4.2.10.2, charcoal production is a key livelihood and source of income. The most dominant driver in charcoal production is the availability of markets for charcoal with good prices. People prefer to engage in charcoal production as a source of income for household use and food supplies rather than firewood selling.

Most surveyed households use proceeds from charcoal sales to buy maize as staple food. Other livelihood outcomes from charcoal production include bicycles, livestock such as goats and chickens, basic kitchen utensils such as cooking pots, plates, basins, pails; radios, chairs, mats, axes, shovels, hoes and wheelbarrows. In some cases, households use solar panels for lighting,



presumably purchased with the proceeds of their charcoal sales. Some charcoal makers have motorbikes used to transport charcoal to markets. A respondent from Petulo Village found his charcoal business to be profitable and that it has helped him pay school fees for his three children in secondary schools. He added that his wife sells dry fish and tomatoes along the Blantyre-Mwanza Road. A respondent from Liwonde Village has built two shops from the proceeds of her charcoal sales and is currently generating additional income through rent.. She has turned into a charcoal vendor by only delivering empty sacks and buying from charcoal producers and no longer makes her own charcoal.

There are a number of sources of vulnerability in the charcoal production process. The process itself is long and tiring. The risk of accidents during tree felling is very common (e.g. cuts from axes, burns). Another vulnerability is the chest pains and coughing due to smoke and heat from charcoal harvesting. A respondent from M'bwinja Village keep the charcoal until a customer is found. Due to the difficult access to this area, this can take a long time, leading to periods of hunger or forcing them into debt. In general, charcoal prices are very low in these areas. The biggest vulnerability is that charcoal making is not allowed by the Government. As such they are exposed to meet Forestry officers who confiscates all the bags.

B Actors along the Charcoal Value Chain

Investigations undertaken in selected markets of the city of Blantyre showed that charcoal being sold in Blantyre is from Neno, Blantyre in TA Kunthembwe area, Mulanje, Mozambique, Mangochi and Chikwawa. The markets that were surveyed in Blantyre are Chemusa, (Chinseu) in Ndirande Township, Khama in Machinjiri Township, Bangwe-, Manje- and Zingwangwa markets. Interviews at the Safalawo Market in Ndirande Township were not undertaken because of a hostile reception.

The charcoal value chain consists of several stakeholders, both rural and urban, involving individuals and communities. They operate either legally or in informal groups or as 'charcoal cartels', with different levels of engagement. Once produced, charcoal is packaged into a 50 kg maize bag before being transported to transition markets, wholesale markets, retail markets or direct to consumers.

B.1 Harvesting of Trees and Processing of Charcoal:

The value chain starts with owners of trees who either a) cut down the trees to make charcoal or b) sell trees from which others make charcoal or c) processors of charcoal who buy a piece of land to have tree harvesting rights. During the survey, it was established that in the study area, most charcoal producers were using trees on their own land. Where a charcoal producer lacked access to trees, they buy land from which they cut trees for charcoal making. The activities carried out at this stage involved cutting of trees, building kilns and covering the kiln using grass. Most people learnt charcoal making from their parents. When the charcoal is produced, it is bagged before transporting the commodity to the markets. The bags are filled using often hired labour, mostly men. After packaging, the charcoal is ready for transportation to source markets for people living in TA Mlauli who use the Mpatamanga "dock" (river crossing point close to Kambalame – See Figure 86) as a gateway to the destination markets in Blantyre City. For producers in TA Kunthembwe, the charcoal is bought from their homes or the roadside.



Figure 86: Mpatamanga “dock” for Charcoal Collection Close to Kambalame (Dec 2023)



B.2 Charcoal Collection and Transportation

From the production site, charcoal is collected through some traders in the communities who act as agents to buyers based in Blantyre City. They either own the charcoal to be sold to the urban-based buyers, or they collect it on behalf of those buyers. Charcoal is transported from the production sites to the local markets using motorcycles and one-ton vehicles. During interviews, the respondents indicated that in the Kambalame / Nkhwali area, there were three vehicles transporting charcoal from the production site. The local collectors of charcoal are in most cases men. During the survey, two such collectors were met, and both were also charcoal producers i.e. they produce their own charcoal and also buy from other producers in the area. These buyers can take advantage of families who are financially stressed and therefore engaged in forward-selling of charcoal i.e. sell charcoal upfront, before it is actually made, in order to meet immediate financial needs to buy food, medicine, pay school fees and other needs in what is called stress-selling. Blantyre-based buyers collect charcoal from these local collectors. In some cases, the city buyers have ‘contracts’ with local producers in which they agree when they should come to collect the commodity, as observed in the Mpatamanga “dock”. The other category of



transporters are roaming buyers that use bicycles or vehicles to travel to the area in search of charcoal on offer. Bicycle transporters can transport four to five bags at a time. Some of these are from the area while others are from the city and travel three or four times per week as a full-time employment. Transportation is mainly undertaken by men.

Transportation involves a number of activities mainly loading at the source market and offloading at the transition and destination markets. The charcoal coming from Neno District is either transported through the M6 or through the Mpatamanga “dock” across the Shire River. Within TA Mlauli, vehicles and motorcycles transport charcoal from the production site to the “dock” where canoes are then used to transport the charcoal across the river. The transportation of charcoal is well coordinated; There is usually a vehicle on standby across the river waiting to transport the charcoal to Blantyre City.

Along the M6 Road, the charcoal is usually transported at night and vehicles tend to move in groups. During the transportation of charcoal, transporters face several challenges. First there are established roadblocks which the transporter must ‘manage’. In some cases there are ad hoc or impromptu roadblocks mounted by the Malawi Revenue Authority, a permanent road block by the Directorate of Road Traffic and Safety Services, and Policy Patrol vehicles in Blantyre City. All these must be ‘managed’. It was said that sometimes the Department of Forestry carries out patrols using private cars and are therefore not detected by the charcoal transporters.

Unlike transporters using vehicles, the transporters using bicycles, who often move in groups, are not concerned by the various government agents. However, the major problem they encounter is the breakdown of the bicycles. One transporter interviewed around 9 am narrated that he had left the production area around midnight and was about 16 km away from Blantyre City and that he makes three or four trips per week. On that day, he had had a bicycle breakdown which delayed him.

B.3 Transition, Wholesale and Retail Charcoal Markets

From the initial collection point, the destination markets for charcoal in Blantyre City can be categorised as (i) transitional, (ii) wholesale and (iii) retail markets.

A transitional market links a collection point, i.e. where the charcoal is bought from producers or collectors, and a destination market, where the charcoal is sold at either at wholesale or retail level. In the case of charcoal from TA Kunthembwe and Neno’s TA Mlauli, there is a transitional market at Madulira, which is 2 km before Chileka International Airport.

At the transitional and wholesale markets, the main activities undertaken are offloading, storage and selling. After purchasing charcoal, retailers have to repack the charcoal in smaller plastic bags for onward selling to final buyers.

At the time of the survey in December 2023, about a third of the sellers in the transitional markets were women. Wholesale markets are male dominated (almost 100% in some markets), while the retail market was female dominated.



4.2.11 Standards of Living

4.2.11.1 Households' Assets

Table 30 below illustrates the categories of assets owned by the households surveyed. In general, male-headed households tend to own more assets than women-headed households.

Table 30: Assets owned by the households surveyed

Assets	Female-headed household	Male-headed household	All households
Radio	31%	51%	45%
Phone land line	2%	3%	3%
Mobile phone	56%	72%	67%
Fridge	2%	7%	5%
Motorbike	11%	23%	20%
Bicycle	14%	38%	31%
Access to internet	3%	5%	5%
Car	3%	5%	4%
TV	5%	9%	7%

4.2.11.2 Housing

During direct field observations in 2023 a mix of permanent and semi-permanent housing structures were noted. Housing units were mainly built with clay or burnt/unburnt bricks and roofing made of thatch or corrugated iron sheets. Cement for walls or flooring was occasionally, if not rarely, observed. Individual houses usually included a latrine pit dug outside of the dwelling, either built out of hay or clay bricks. More durable structures made of cement and shipping containers were at times observed for schools, shops and official buildings, especially along main roads. Figure 87 illustrates typical housing structures in the study area.



Figure 87: Typical Housing Structures within the Study Area





4.2.11.3 Expenses

When asked to rank their five main expenses, the interviewees first listed the expenses they perceived as the most important. They were then asked to estimate the estimated monthly amount of the expenses they listed.

A Expenses Ranking

The overwhelming majority of the affected households surveyed declared that food was their first monthly expense (93% of female-headed households and 89% of male-headed households).

The second main expenses mentioned was personal toiletry items (soap, washing powder) (34% of female-headed households and 32% of male-headed households).

The third main expense item cited was clothes (18% of female-headed households and 13% of male-headed households), and the fourth was transport (9% of female-headed households and 13% of male-headed households). They were followed by school fees, medical expenses and agricultural inputs (fertilizers, seeds, pesticides).

B Expenses amount

The estimate of the monthly expenses for each category is solely based on the declaration of the surveyed households. Figure 88 below gives the average estimated expense amount for each category of the main expenses cited by the surveyed households. Figure 89 then provides the ranges of estimated monthly food expense.

Figure 88: Average of monthly expenses by category declared by the households surveyed

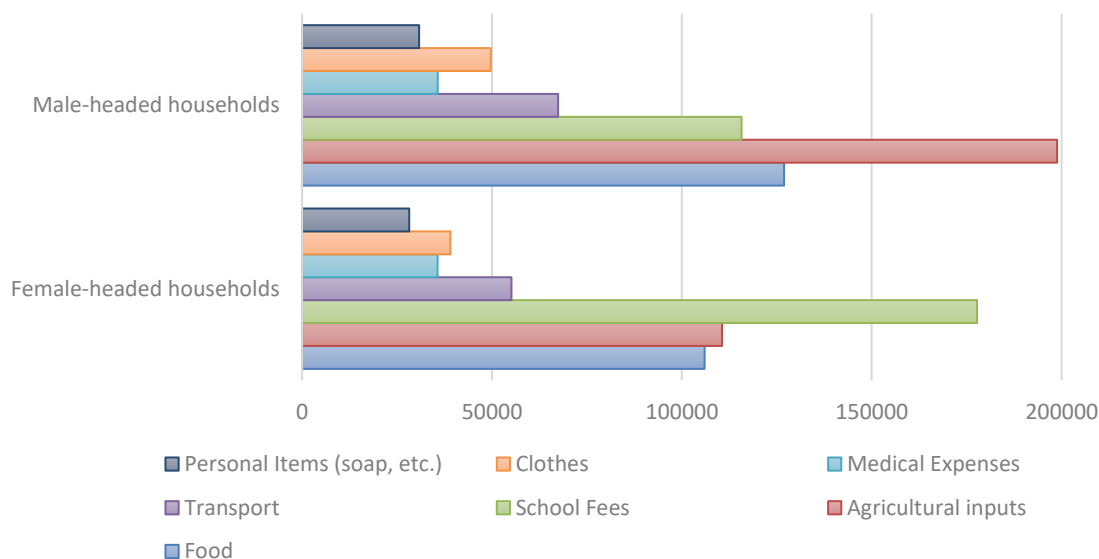
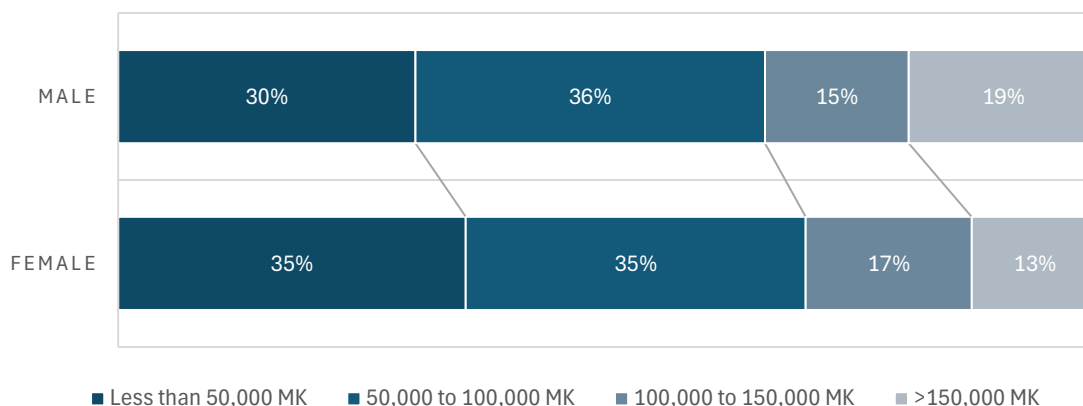




Figure 89: Ranges of estimated monthly food expense by gender of the household’s head



The importance of food within the households’ expenses reflects the general social conditions they experience. As indicated in Table 31, when they were asked to self-evaluate their social condition, more than half of the households declared they were struggling to have 3 basic meals per day. Only one third of them declared they were regularly having 3 meals per day on average, with 8% declaring that they could only afford one meal per day (Table 32).

Table 31: Self-evaluation of the households social conditions

	Female-headed households	Male-headed households	All households
1. Money suffices for everything. We can afford whatever we want and save money regularly.	5%	4%	5%
2. Money suffices both for food and clothing and we can even save some.	5%	7%	6%
3. Money suffices both for food and clothing requirements but we are not able to save anything.	12%	14%	14%
4. Money suffices only for minimum food and clothing requirements.	19%	23%	21%
5. We struggle to have three basic meals per day	58%	52%	54%
6. Do not know	1%	0%	0%
Total all households	100%	100%	100%

Table 32: Average number of meals the households declared having per day

	1 meal	2 meals	3 meals	Total
Female-headed households	13%	52%	35%	100%
Male-headed households	6%	61%	34%	100%
All households	8%	58%	34%	100%

4.2.12 Access to banking and Financial Institutions

The formal financial services in the study area are non-existent in most villages and only exists in towns or small urban centres. Airtel money, a system of money transfer via phone, seems to be used by those who have phones.

At the village level, the main financial service is a type of community based “bank” called “Nkhonde”. These village informal banks are mostly used by the women. A group of people can create a Nkhonde by deciding the bank’s rules in terms of how much money must be given per person per week or month and set the interest rate (usually lower than commercial banks rates). Women use the loans to start small businesses such as selling tomatoes, fish, soap, sugar, and vegetables. In terms of collateral, they must all sign a paper promising to pay their collateral if



they are unable to repay their loans' interest. Collateral includes valuable property and livestock that can be taken if someone is unable to repay their loan. As the aim of the *Nkhonde* is to help and empower people who need it (predominantly women), if someone does not have collateral, they are given a smaller loan.

Problems mentioned about this system are:

- Men taking the money from the loan and running away to start businesses elsewhere,
- Women unable to repay their loans.
- About 15% of the households interviewed declared that at least one person in the household had a formal bank account. This percentage is lower for female headed-households (10%) than for male-headed ones (17%)

About 15% of the households interviewed declared that at least one person in the household had a formal bank account. This percentage is lower for female headed-households (10%) than for male-headed ones (17%)

About 35% of interviewed households declared they had to take out a loan during the previous year to cover their expenses (27% for women-headed households and 38% for male-headed households). The amount of the loans taken out are indicated in Figure 90, and the organisation providing the loan is indicated in Figure 91.

Figure 90: Households with a loan taken out during the last year

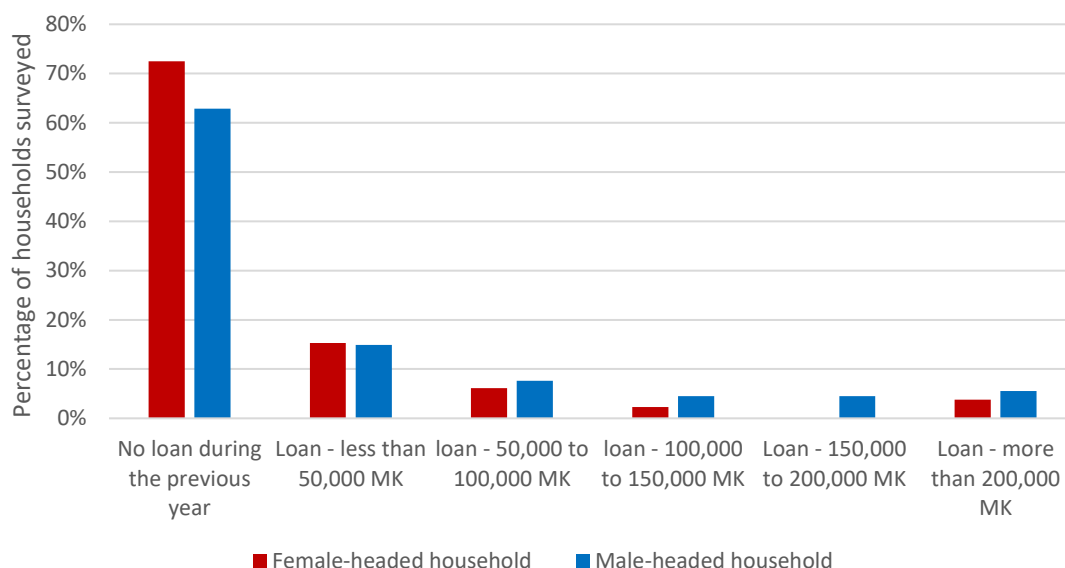
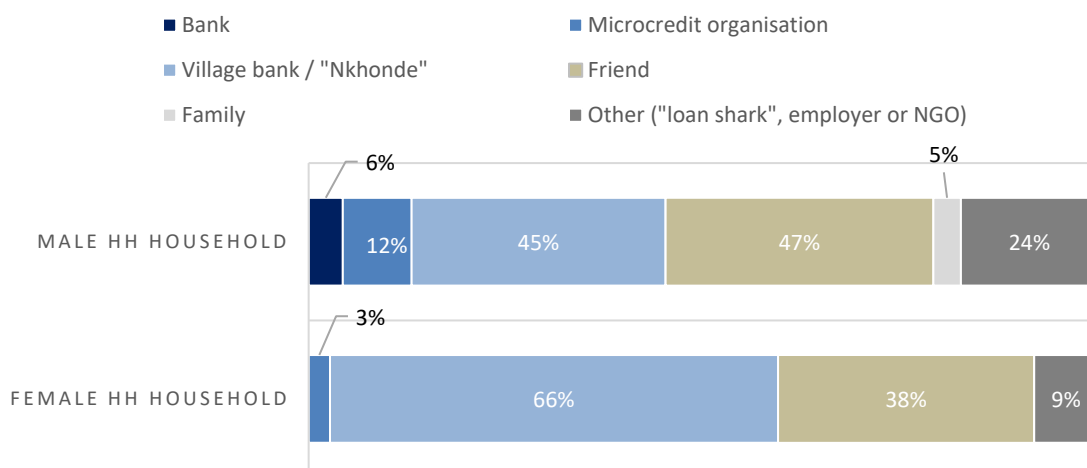


Figure 91: Organisations used to take out a loan





4.2.13 Use of Natural Resources and Ecosystem Services

According to the World Bank Environmental and Social Standard (ESS) n°1, ecosystem services are the benefits that people derive from ecosystems. They are organized into four types:

- Provisioning services are the products people obtain from ecosystems and which may include, but is not limited to, food, freshwater, timbers, fibres, and medicinal plants.
- Regulating services are the benefits people obtain from the regulation of ecosystem processes and which may include surface water purification, carbon storage and sequestration, climate regulation, protection from natural hazards.
- Cultural services are the non-material benefits people obtain from ecosystems and which may include natural areas that are sacred sites and areas of importance for recreations and aesthetic enjoyment.
- Supporting services are the natural processes that maintain the other services, and which may include soil formation, nutrient cycling and primary production.

Ecosystem services valued by humans are often underpinned by biodiversity and impacts on biodiversity can often adversely affect the delivery of ecosystem services. Therefore, the identification of ecosystem services requires both social and environmental expertise and stakeholder consultation. While ecosystem services should be considered across multiple topic areas, with an emphasis on interlinkages between social and environmental aspects, the provisioning and cultural services are more related to social components of the environment.

The 2024 ESIA includes an assessment of impacts on ecosystem services. The use of Cultural Ecosystem Services by the affected communities is described in section 4.2.16 on Cultural Heritage. The following paragraphs describe the use of natural resources and provisioning ecosystem services in the Project's land requirements. Some aspects (for instance charcoal making) have been described in the previous sections and are not described again here.

A Charcoal

The main use of natural resources in the affected community is linked to charcoal production which is one of the main income sources for the affected households, as indicated in Sections 4.2.10.2 and 4.2.10.5.

B Firewood

Collecting wood is a routine activity performed all year round. About 90% of surveyed households declared collecting firewood. Although often performed only by women, it was also reported to be done by both genders in some FGDs. It is often collected on individual lands, but also on common lands and forests around villages, and near riverbanks. It is primarily used for cooking, but also to chase away predators (hyenas, hippos) from crops and livestock during the night. As indicated in section 4.2.10.2, a small percentage of the surveyed households (less than 3%) declared they obtain some income from selling firewood. Those who do so declared they can earn between 100,000 and 200,000 Kacha per month when they conduct this activity (see Figure 51).

C Herbs and medicinal plants

According to interviews and focus group discussions in the area, plants and herbs are often collected in bushes, forests around villages, as well as on riverbanks, all year round. Plants are collected by both men and women. While the bulk of plants are collected for medicinal purposes, other uses were mentioned by FGD participants, such as personal consumption, bamboos on the riverbank for construction (roofs, doors, fences, mattresses), or magical & ceremonial purposes. Overall, the same plants have been recurrently mentioned in all areas. The 2024 ESIA provides a list of plants used by the local communities.

Amongst the affected households surveyed, 38% (161 out of 419) declared they collect medicinal plant or herbs (43% for female-headed households and 34% for male-headed households). More



than of those households collect them near their house (53%) or in the village (63%). One third of these households (30% or 49 out of 161) declared they collect plants along the Shire River banks.

D Wood for construction

According to focus group discussions in the study area, construction timber is collected primarily by men, all year round. It is used for constructing houses and animal pens. It is often collected near villages. However, it has been reported during FGDs that construction quality wood is hard to find, with local forests under strain and at risk of deforestation, causing tensions between villages who rely on the same forests for their timber. For those reasons, construction wood is increasingly bought at market instead. It has been mentioned that pigeon pea stems (*nandolo*) are sometimes used as an alternative.

More than half of the surveyed households (55%) declared that they do collect wood for construction, mostly around the village. As indicated in section 4.2.10.2, some households also declared earning some income by selling timber wood for construction.

E Clay, soil and sand

According to focus group discussions in the study area, collecting soil or clay for brick making is a common activity performed by both men and women. About 25% of the surveyed households (106 out of 419) declared they were making bricks. Some households also reported they could sell bricks.

Bricks are primarily used for construction and house maintenance. Soil and clay is reportedly collected everywhere, mostly close to the settlements where construction activities are undertaken. The main season for brick making would be from June to October. Only 18 out of 419 surveyed households declared they collect clay to do some pottery.

About 5% of the surveyed households (23 out of 419) declared they collect sand, mostly from GVH Kaliati and GVH Namputu, and from GVH Feremu. According to focus group discussions, sand is collected along the riverbanks, along the Shire River or its tributaries. It is usually collected with buckets, although sometimes villagers rent trucks for transportation when larger amounts are needed. Sand is primarily used for constructing houses, making latrine pits and making plaster.

F Hunting

Hunting has been infrequently mentioned during focus group discussions. Less than 9% of surveyed households (36 out of 419) declared at least one of their members did hunt. Those hunters declared they hunt once a month or more often. When performed, it is done by men on communal lands. Although it is performed all year round, it has been mentioned that the dry season is when villagers hunt the most (once or twice a month) rather than the rainy season because it is harder to see animals in the bushes. Species that were mentioned as being hunted were: wild rabbits, antelopes, monkeys, mice, 'gwape', Mbawala', 'ganiani', and 'mbira'. Sometimes, dogs and nets are used as hunting aids.

G Fishing

About 38% of the affected households surveyed declared fishing. This proportion is similar for women-headed households (37%) and male headed households (38%). This activity is widespread across all villages around the Main Reservoir and Main Works area, as shown in Table 33 below and in Figure 28 and Figure 29. However, a smaller proportion of the households (less than 5%) declared fishing as an income source, as indicated in Section 4.2.10.2. Figure 92 gives the distribution of the number of fishers by Group village and by fishing technique used: most fishers used handlines. Almost all the fishers (92%, or 146 out of the 158 households who declared fishing) are fishing from the riverbank. The rest declared they fish from a boat. About 23% of the fisher use their catch for self-consumption and do not sell fish (Figure 93).

A small number of household (5% or 22 out of 419) declared they also sometimes build small ponds to catch or farm fish on the Shire River.



Table 33: Fishing activities amongst the surveyed households

District	Traditional Authority	Group Villages	Households Fishing	Households Not Fishing
Blantyre District	Non-resident		0%	100%
	TA Kunthembwe	GVH Gwadani	25%	75%
		GVH Kaliati	48%	52%
		GVH Mzigala	43%	57%
		GVH Namputu	31%	69%
Neno District	TA Mlauli	GVH Feremu	38%	63%
		GVH Nsalawatha	25%	75%
	TA Symon	GVH Ngwenyama	44%	56%
Total			38%	62%

Figure 92: Distribution of fisher by Group Village and fishing gear used

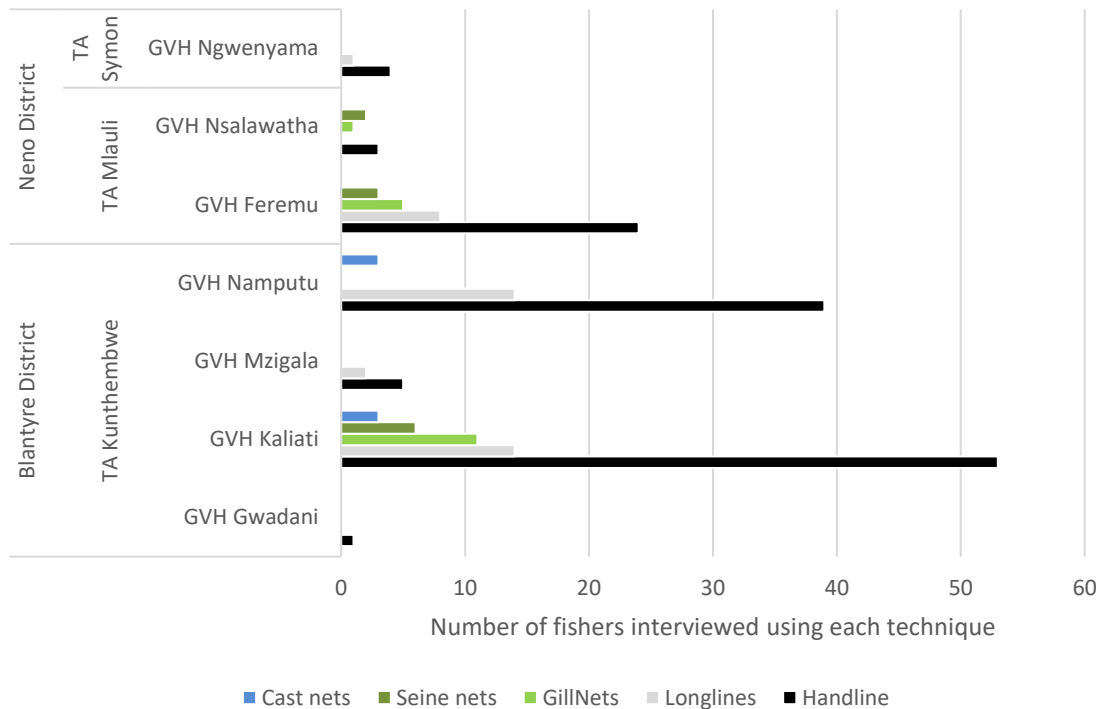
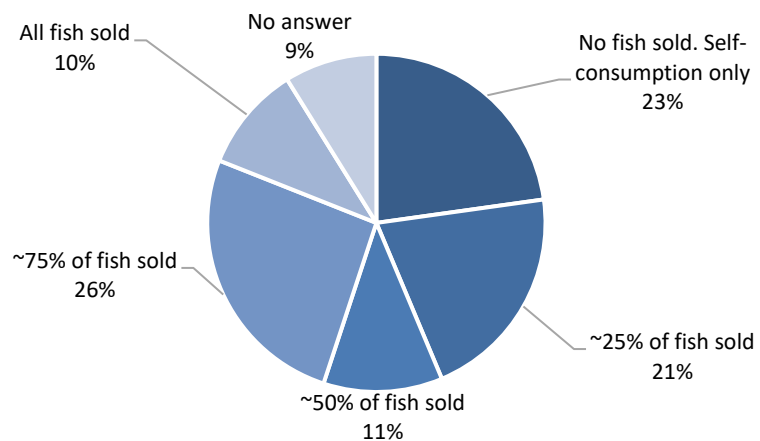


Figure 93: Proportion of fish sold





4.2.14 Community Infrastructures and Services

4.2.14.1 Energy

Very few households (20 out of 419, or 5%) declared they were connected to the electricity grid. This can be explained by the fact that the electricity grid does not serve all villages as illustrated in Figure 95. Some households have solar panel to produce electricity.

As illustrated in Figure 94, the main source of energy used for cooking is firewood, but almost half of the households also use charcoal.

Figure 94: Sources of energy used for cooking

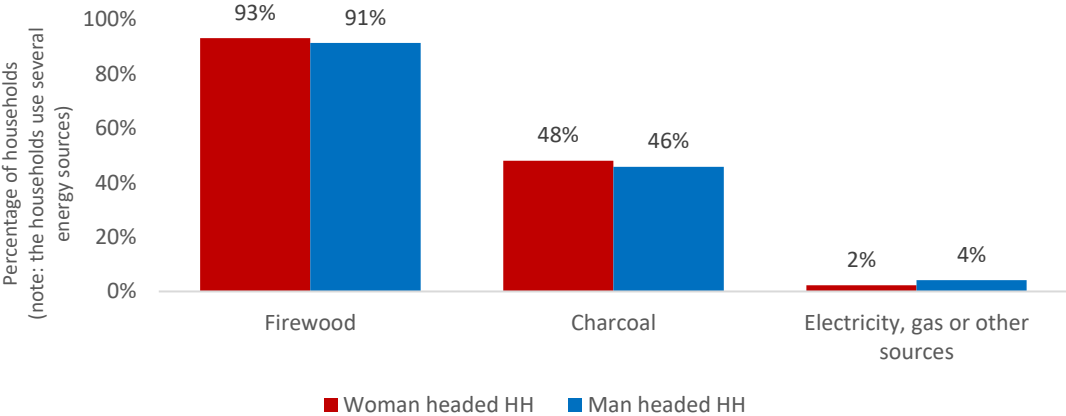
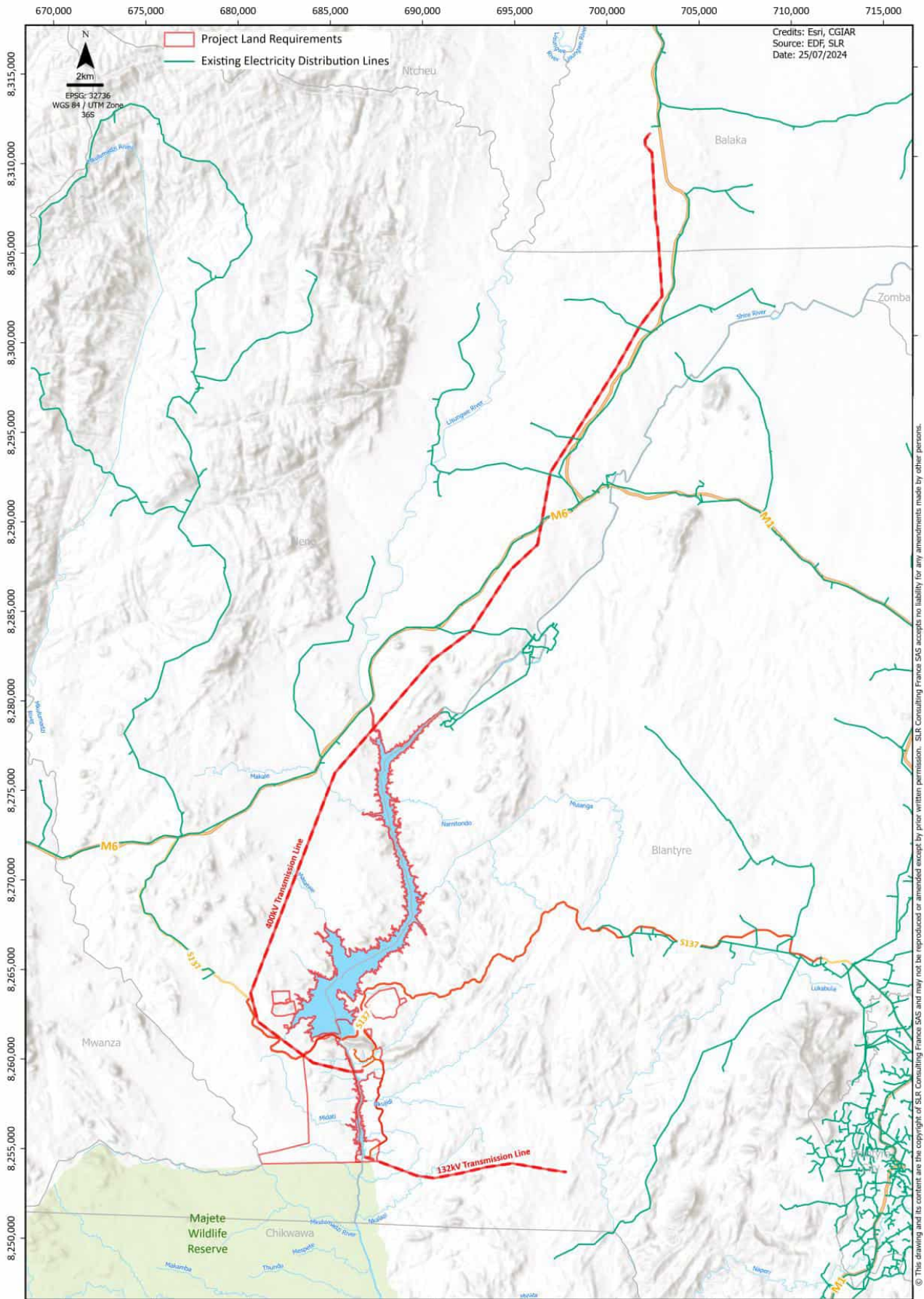




Figure 95: Electricity Distribution Lines in the Project Area





4.2.14.2 Access to Water and Sanitation

A Access to Water

A.1 *Drinking Water*

The main sources of drinking water of the affected households are boreholes and the river (Shire or tributary), as indicated in Figure 96. There is no significant difference between men-headed households and women-headed households. Key informants from a number of villages confirmed to use the Shire River as a source of drinking water during the qualitative interviews in September-October 2023, including villagers from Chaswanthaka, Mbwinja, Kambalame, Joseph, Liyenda, July, Malemia, Nkoka, Gwadani, Chimphanda, Namputu, and Feremu. Many of these villages reported an insufficient number of boreholes, and thus having to resort to drinking river water, despite many being aware of the health risks this poses. One of these water collection point at the Shire River is illustrated in Figure 99.

Protected water sources in all communities would routinely consist of a hand water pump (AFRIDEV hand pump type) connected to a borehole. These facilities are typically shared by multiple families and a monthly fee would be charged by the local water committee that ranged between MWK200 and MWK500 (equivalent to US\$0.12 and US\$0.30 in Jan 2024). The water committee is responsible for the maintenance of the pump. However, the majority of household surveyed households obtain their water free of charge.

Subsequent to the cholera outbreak in 2022 and 2023, blue buckets that contain liquid chlorine were erected at all standpipes, allowing users to disinfect their water containers, as illustrated in Figure 99. Misconceptions around the use of the chlorine dispensers were, however, reported. These misconceptions include the belief that the buckets contained a COVID-19 vaccine. Some informants also noted that the uptake in the use of the chlorine dispensers are considered low, as the disinfectant adversely impacts the taste of the water.

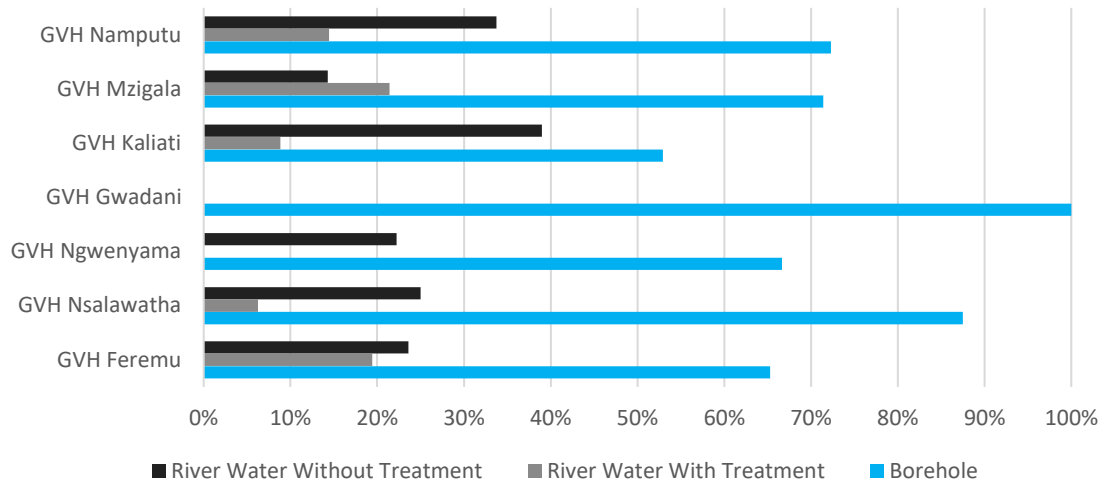
According to interviewees, women are almost always the ones who fetch water for their households. Water collection time takes in average between 5 to 30 minutes (more than half of the surveyed households, see Figure 98), and between 30 minutes to one hour for about 20% of the surveyed households.

A.2 *Use of the rivers for domestic activities*

About half of the affected households' surveys declared they use rivers to wash clothes (64% of households surveyed), dishes (42%) or bath (45%). Out of those who declared using the rivers for these activities, more than half (from 54 to 59%) declared they use the Shire River. The other respondents declared they use other rivers.

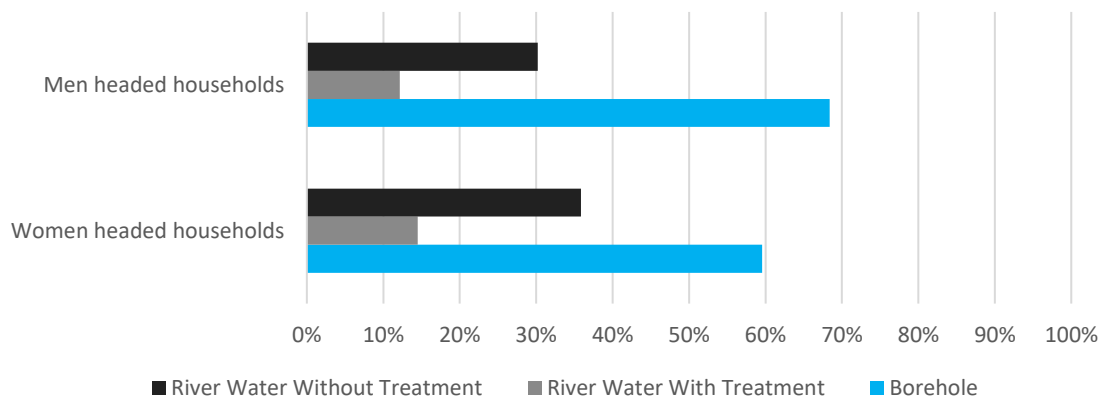


Figure 96: Sources of drinking water declared by the affected households surveyed, disaggregated by GVH



Note: Households may use several sources of water

Figure 97: Sources of drinking water declared by the affected households surveyed, disaggregated gender of the household’s head



Note: Households may use several sources of water

Figure 98: Time needed to collect water, as declared by the surveyed households.

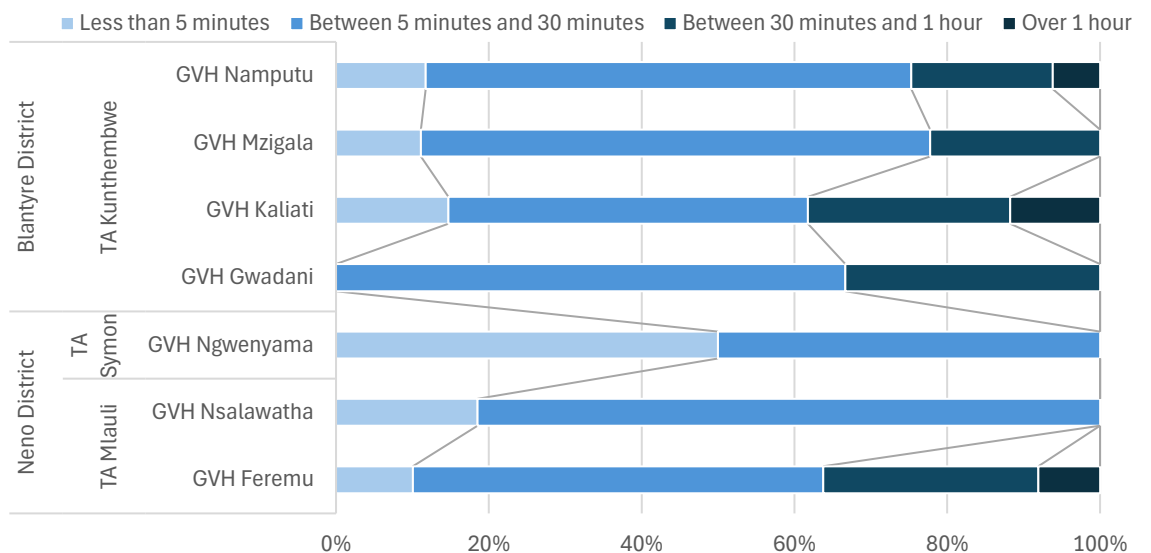




Figure 99: Typical Water Sources of Affected Households



Water Collection Point at the Shire River (Chikira, Blantyre District)



Borehole with Chlorine Dispenser



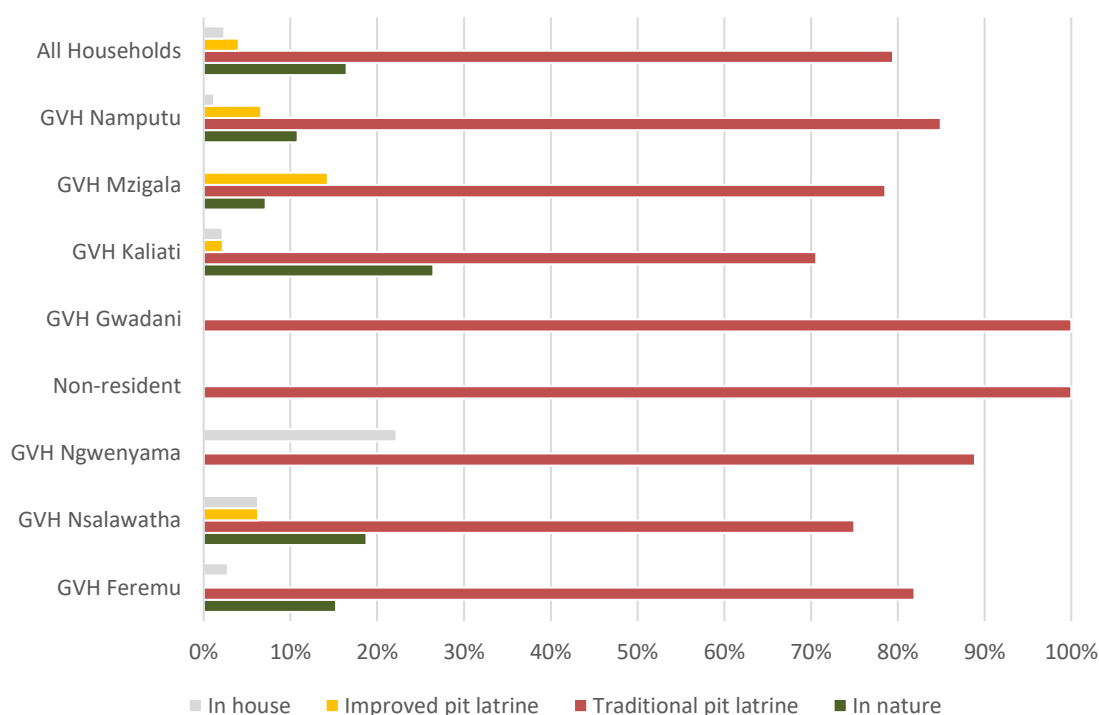
B Sanitation and Waste Management

The socio-economic survey found that most households rely on a traditional pit latrine (see Figure 102), as indicated in Figure 100. There is no significant difference between male and female headed households, as shown in Figure 101.

According to respondents, open defecation was practiced to some degree in all communities, with the exception of Chikira. Mzigala, specifically, was identified as a community where open defecation was commonplace. Respondents from here noted that their latrines routinely fill with water during the rainy season due to their proximity to the river, rendering them unusable. Latrines varied between improved and unimproved upon direct observation. Handwashing facilities were not observed at any of the latrines in the communities. As all households did not have their own latrines, a high degree of sharing was noted in most communities,

No formal domestic waste management was noted in any of the affected communities. Most community members noted that the approach to waste management in their village is mixed, with it either thrown into a pit and burned, or simply thrown away in an open area, away from other houses.

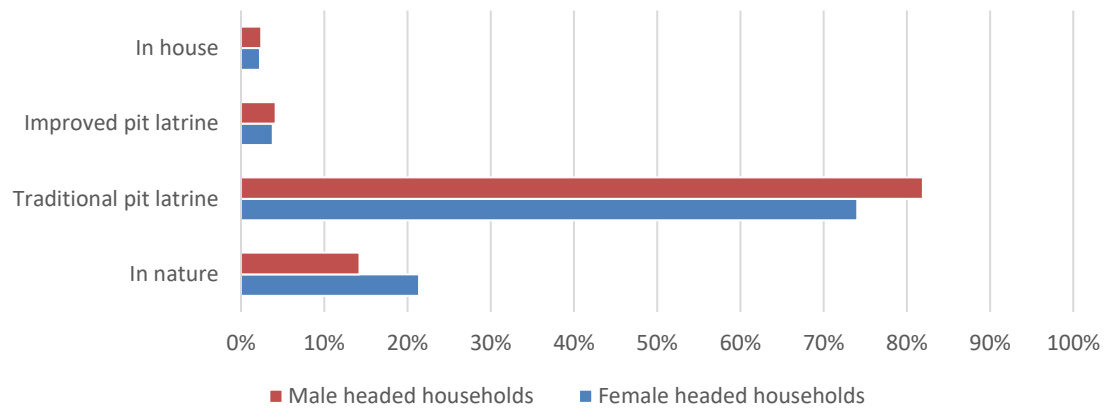
Figure 100: Household Sanitation Facility within Surveyed Sample, Disaggregated by GVH



Note: Households may use several types of sanitation facilities



Figure 101: Household Sanitation Facility within Surveyed Sample, disaggregated by gender of Household's head



Note: Households may use several types of sanitation facilities

Figure 102: Typical Latrine (Feremu, Neno District)





4.2.14.3 Access to Schools, Health Facilities, Markets

Figure 103 locates the schools, health structures and markets close to the Project's components.

4.2.14.4 Transport

The affected households surveyed declared using the following means of transport:

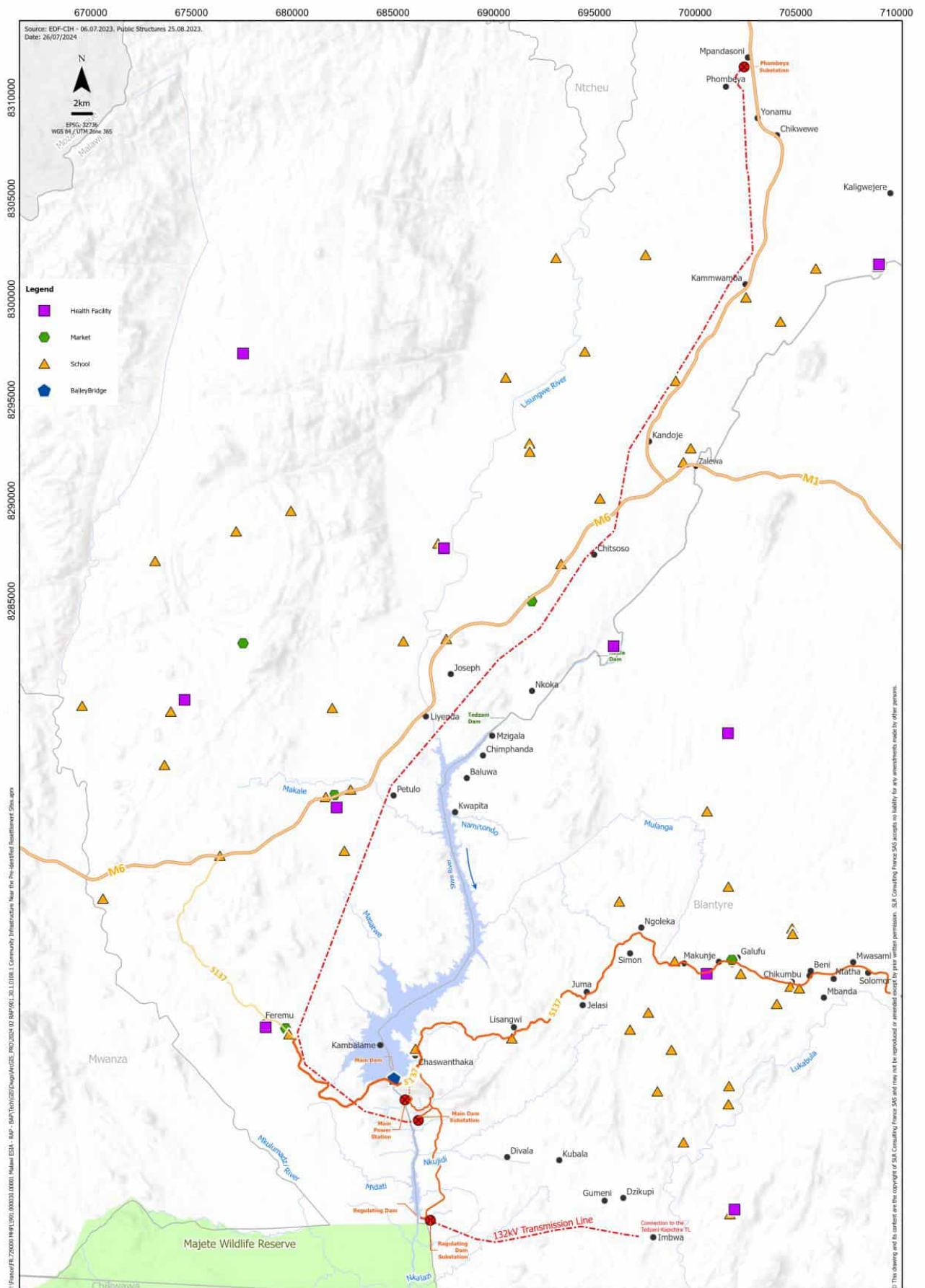
- Walking (69%)
- Motorbikes (51%)
- Bus (38%)
- Bicycle (32%)
- Only a few interviewees (5%) reported using cars.

In terms of transport infrastructure located in the Project land requirements:

- The Bailey Bridge and the section of the existing S137 road will be flooded by the main reservoir, and
- One railway crosses the 400kV Transmission Line wayleave in Balaka district.



Figure 103: Location of Health Facilities, Schools and Markets





4.2.15 Vulnerable Groups

As part of the RPF, a vulnerability assessment was prepared to identify the vulnerable groups. It is provided in Annex 4, and it is summarised in the next paragraphs for the reader's convenience. The definition of vulnerability used by this assessment is the one used by the World Bank Environmental and Social Standard 1 (ESS1) and by the International Finance Corporation Performance Standard 1 (IFC PS1).

- According to these sources, vulnerable people fall into one or more of the following categories:
- People or social groups who are more likely to be adversely affected by project impacts.
- People or social groups who are more limited than others in their ability to take advantage of project benefits.
- People or social groups who are more likely to be excluded from or unable to participate fully in the mainstream consultation process.

4.2.15.1 Vulnerability Criteria

The vulnerability assessment identified an overall context of high vulnerability across the whole population, with four criteria identified as exposing to heightened levels of vulnerability for the Mpatamanga HPP:

- Criteria 1: Woman-headed households - Compared to their male counterparts, female household heads are less likely to access remunerated jobs and suffer from a heightened risk of sexual abuse and assault, disproportionate caring responsibilities and a higher exposure to sexually transmitted diseases and sex work.
- Criteria 2: Households headed by people unable to work, communicate or understand information due to old age, disability or chronic illness - People who are unable to work or communicate due to illness, disability or old age are perceived as vulnerable due to their reduced ability to understand and process information, sustain a productive livelihood, dependence on the household or community for care, higher exposure to illness and reduced mobility, as well as an increased risk of exploitation, abuse, assault and discrimination.
- Criteria 3: Landless households - Landlessness is a factor of vulnerability because it heightens a household's dependence on other people for cash, while significantly limiting the household's productivity, capacity for livelihood diversification and resilience to external shocks.
- Criteria 4: Orphan-headed households - Orphans are considered extremely vulnerable due to their lower levels of education, dependence on the community and reduced ability to sustain a productive livelihood, as well as their heightened exposure to violence, assault, exploitation and forced labour.

These vulnerability criteria are based on the focus groups discussions and interviews performed during the qualitative social surveys performed in the affected villages in the Main Reservoir and Main Works areas in September and October 2023. They may be adjusted after they are presented to and discussed with (i) the Resettlement Working Groups representing the affected communities (see Section 10.2.1.4) and (ii) the affected households themselves during the public disclosure process.

4.2.15.2 Vulnerable Households

The vulnerability criteria have been identified at the household level. The distribution of vulnerable households amongst the affected households surveyed is indicated in Table 34 next page. One household can have one or more vulnerability criteria. For instance, a female-headed household can also be a landless household.

During the census of each phased RAP, all affected vulnerable households will be identified and registered.



Table 34: Distribution of vulnerable households in the households surveyed.

Districts	Traditional Authority	Group Village	Village	All households surveyed		Vulnerable households		Female-headed households		Household headed by disable or elderly person		Landless household	Orphan-headed household
				Number	%	Number	%	Number	%	Number	%		
Neno District	TA Mlauli	GVH Feremu	July	1	100%	1	100%	1	100%	0	0%	-	-
			Feremu	2	100%	1	50%	1	50%	0	0%	-	-
			Kambalame	66	100%	23	35%	18	27%	5	8%	-	-
			Nkhwali	3	100%	1	33%	0	0%	1	33%	-	-
	GVH Nsalawatha	Jonathan	7	100%	3	43%	2	29%	1	14%	-	-	
		Petulo	9	100%	1	11%	0	0%	1	11%	-	-	
	TA Symon	GVH Ngwenyama	Liyenda	7	100%	2	29%	2	29%	0	0%	-	-
			Nkoka	2	100%	0	0%	0	0%	0	0%	-	-
Blantyre District	Non-resident			2	100%	-	-	-	-	-	-	-	-
	TA Kunthembwe	GVH Gwadani	Gwadani	2	100%	0	0%	0	0%	0	0%	-	-
			Ngoleka	2	100%	1	50%	1	50%	0	0%	-	-
		GVH Kaliati	Chaswanthaka	58	100%	29	50%	25	43%	6	10%	-	-
			Chilaulo	1	100%	0	0%	0	0%	0	0%	-	-
			Inosi	12	100%	7	58%	5	42%	3	25%	-	-
			Lisangwi	22	100%	6	27%	4	18%	2	9%	1	-
			Mbwinja	7	100%	2	29%	2	29%	2	29%	-	-
			Mpindo	36	100%	14	39%	9	25%	6	17%	-	-
		GVH Mzigala	Mwazilinga	3	100%	0	0%	0	0%	0	0%	-	-
			Mzigala	11	100%	6	55%	6	55%	0	0%	-	-
		GVH Namputu	Baluwa	5	100%	3	60%	2	40%	1	20%	-	-
			Chikira	24	100%	12	50%	9	38%	4	17%	-	-
			Chimphanda	16	100%	8	50%	5	31%	5	31%	-	-
			Chinkwinya	49	100%	15	31%	14	29%	2	4%	-	-
Kwapita	7		100%	2	29%	2	29%	0	0%	-	-		
Namputu	65		100%	26	40%	23	35%	7	11%	-	-		
Total affected households surveyed				419	100%	163	39%	131	31%	46	11%	1	-



4.2.16 Cultural Heritage

4.2.16.1 Tangible Cultural Heritage

Tangible cultural heritage refers to movable or immovable objects, sites, groups of structures, and cultural or sacred spaces associated with natural features and landscapes with archaeological, ethnological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance (World Bank ESS8).

Malawi's Monuments and Relics Act and the Cultural Policy (Republic of Malawi 1992; 2013a) define cultural heritage in tangible and intangible forms. Graves are regarded as protected monuments under the laws of Malawi, as provided for in the Monuments and Relics Act. Part 1 section 2(c) of the Act defines "Monument" as '...any grave, tumulus, cairn, place of interment, pit, dwelling, trench, excavation, working, rock, rock-shelter, madden, mound, cave, grotto, rock sculpture, rock painting and wall painting' (Republic of Malawi 1992).

Between 2021 and 2024, the Department of Museums and Monuments (DoMM) prepared a Cultural Heritage Impact Assessment for the Mpatamanga HPP (Government of Malawi 2021; 2023; 2023; 2024). The following Cultural Heritage elements have been identified inside the Main Reservoir Area and the Main Works Area:

- Fifty-one (51) potential archaeological sites or sites with historical significance,
- One sacred tree,
- Five cemeteries or graveyards.

In addition, during SLR field investigations in November and December 2023, the following additional elements of cultural heritage were identified in the Project's land requirements, on just next to them:

- Four additional graveyards in the Main Reservoir area,
- One cemetery along the 400kV Transmission Line, close to but outside of its wayleave,
- Three cemeteries just along the S137 road in Blantyre District,
- One church in the 400kV Transmission Line wayleave.

The location of the cultural heritage elements listed above is illustrated in Figure 104.

The DoMM reports highlight the significance of graveyards. Villagers hold these places as sacred. Children's graveyards, distinct from those for adults, cater to infants up to two or three years old. Men are prohibited entry; only women are permitted access in children's graveyards. Some villages allocate specific occasions for graveyard cleansing, a task taken up by the village women. In Nkoka, for instance, the village committee organises collective clean-ups and celebrations. Figure 105 depicts the Chinkwinya graveyard, featuring the children's cemetery on the left and the adults' graveyard on the right.

Baobab trees hold significance in Malawi and serve, in some cases, as gathering points for communal meetings and social events, reinforcing their role in local traditions and cultural practices. One such tree is in Kambalame village, located within the project's reservoir area. During the SLR qualitative field investigations, the participants explained that a ceremony is performed by the community when they require something, such as rainfall. This collective ritual is overseen by the village's chief, who designates the specific moments for these ceremonies. Since this tree is located within the reservoir area, the villagers mentioned that MHPL must supply a cow (or an equivalent symbol) to mark a final celebration for the tree and dispel the spirits dwelling within it. Subsequently, the villagers will decide upon a new location for these spirits in the new setting. Figure 106 shows this Baobab tree.



Figure 104: Overview of the Location of Elements of Cultural Heritage Identified in or close to the Project's Land Requirements

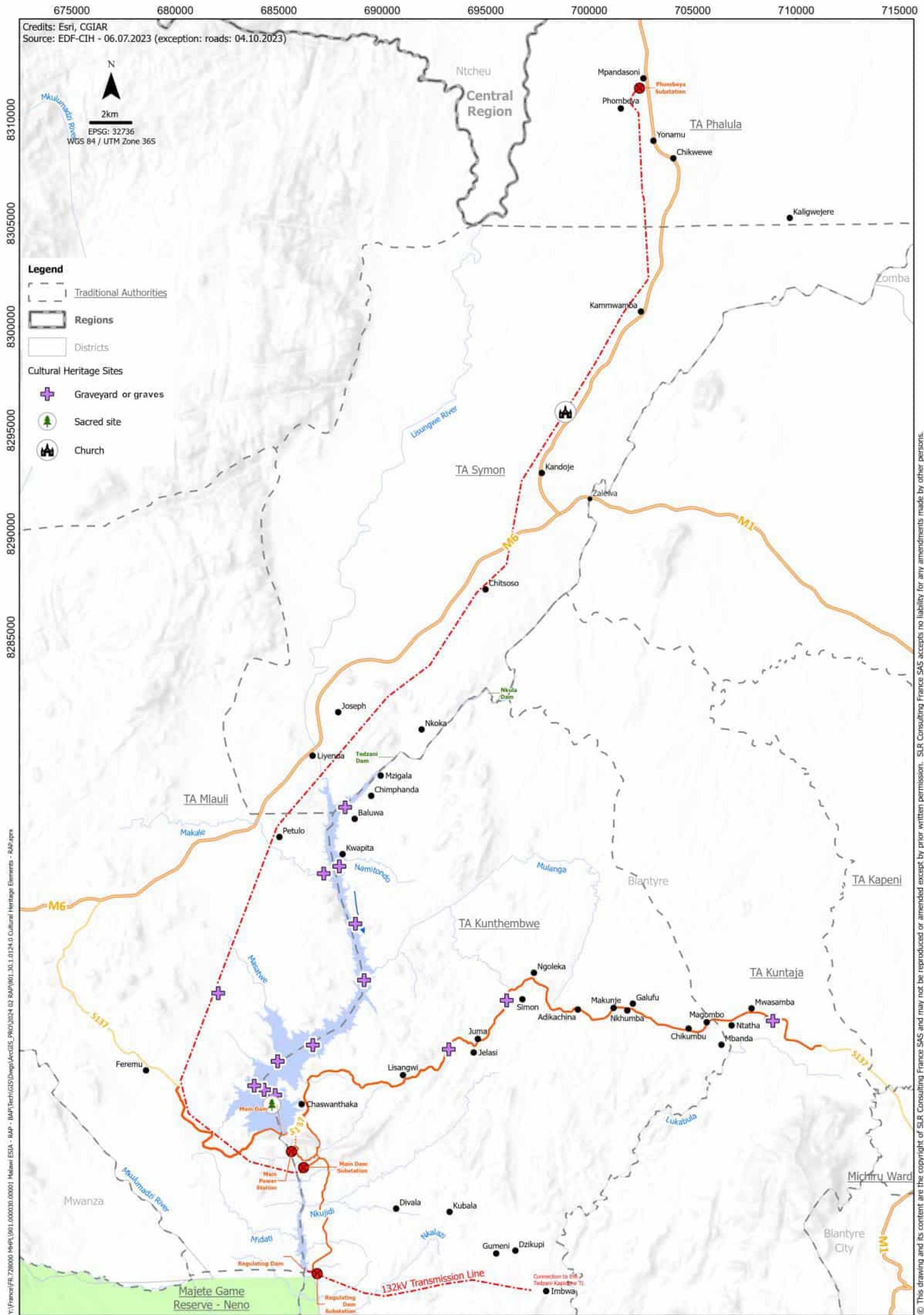




Figure 105: Graveyard in Chinkwinya



Figure 106: A Boabab tree in Kambalame (left) and its hole where offering are disposed





4.2.16.2 Intangible Cultural Heritage

During the interviews and informal discussions carried out in 2023 along the river, none of the informants reported any perception of the Shire River as holding a particular aesthetic, spiritual, religious or cultural value for the population.

The cultural heritage practices/events are organised on the riverbanks by some villages because of the proximity to water. The presence of crocodiles in the river was mentioned by several interviewees to explain that they do not practice a lot of cultural ceremonies on this stretch of the Shire River nowadays. Other interviewees explained that their cultural practices such as the initiation ceremonies were not linked to one specific place in particular.

Intangible Cultural Heritage practices are described in the 2024 ESIA report. During the field investigations in 2023, it was reported that several cultural practices, such as initiation ceremonies, ceremonial practices such as *Gule-Wamkulu* and baptisms could be practiced on the banks of rivers. About 26% of the affected households surveyed declared that baptism ceremonies can be practiced along the Shire riverbanks.

The land surveys performed in November and December asked for each affected land plot in the Main Reservoir and the Main works area if cultural elements or cultural practices were performed on the affected lands. There was no mention of such practices on the banks of the Shire River inside the Project land requirements, except for the sacred tree and the cemeteries mentioned in the previous section.



5 Estimation of Impacts

5.1 Overview of Estimated Potential Impacts

This section estimates the potential involuntary resettlement impacts caused by the Project land requirements defined in Section 2. The figures of potential impacts summarised in this section are an estimate based on the information available at the time of writing. They should be considered as an indication of the order of magnitude of the impacts. They are not definitive figures, as (i) some aspects of the Project's land requirements are yet to be finalised and (ii) the Project aims at further minimising the impacts during the Detailed Design stage (see Section 2.3.2).

At the time of writing, the physical and economic displacement impacts can be estimated for the Main Reservoir and the Main works areas based on the socioeconomic survey and the survey of affected land plot performed in November and December 2023. For the S137 road works as well as the 400kV and 132 kV Transmission Lines and the proposed biodiversity conservancy area, estimates have been produced from site observations and interpretation of aerial imagery.

35 below provide an overview of estimated potential involuntary resettlement impacts, distributed by Project Component. Table 36 and Table 37 on the following pages provide the breakdown of the physical displacement impacts per village and of economic displacement impacts per District, in terms of number of households displaced.

Table 35: Overview of Estimated Involuntary Resettlement Impacts

Project Components	Estimated physical displacement		Estimated Economic displacement		Other estimated impacts
	Num. of households	Num. of persons ^a	Num. of households	Num. of persons ^a	
Main Works Area	58 households	About 300 persons	54 households and 1 ranch affected	About 290 persons	
Main Reservoir	41 households	About 220 persons	471 households and 14 Ranches or commercial farms affected	About 2,500 persons	6 cemeteries and one sacred site affected 2 community boreholes will be flooded
S137	42 to 51 households	About 220 to 270 persons	650 to 1,100 households (including about 75 businesses and shops)	About 3,450 to 5,800 persons	
400kV TL	18 to 32 households	About 100 to 170 persons	400 to 450 households	About 2,100 to 2,400 persons	One church affected
132kV TL	0 to 2 households	About 0 to 12 persons	70 to 80 households	About 370 to 430 persons	
Proposed Biodiversity Conservancy Area	5 to 10 households	About 27 to 53 persons	30 to 80 households	About 160 to 430 persons	
Resettlement Sites	--	--	6 to 10 households ^b	About 40 to 60 persons	
Total all components	160 to 200 households	About 850 to 1,060 persons	1,600 to 2,200 households	About 8,500 to 11,700 persons	6 cemeteries and one sacred site affected 2 community boreholes will be flooded One church affected

^a The number of individuals affected is estimated using the average number of households members documented in the households socioeconomic survey performed in 2023 (i.e. 5.3, see Section 4.2.6.2). It is then rounded up.

^b The households economically displaced by the resettlement sites are also displaced by the Main Works or the Main Reservoir



Table 36: Estimated number of households potentially affected by physical displacement

District	Traditional Authority	Group Village	Village	Main works Area ^a	Main Reservoir Area ^a	S137 Works ^b	400kV ^c	132kV ^c	Proposed Biodiversity Conservancy Area	Resettlement Sites	Total	
Blantyre District	TA Kuntaja	GVH Nkata and GVH Solomoni		-	-	2	-	-	-	-	2	
	TA Kunthembwe	GVH Mbanda, GVH Chikumbu, GVH Kadikira, GVH Makunje, GVH Kunthembwe, GVH Gwadani		-	-	18	-	-	-	-	-	18
		GVH Kaliati	Kaliati	-	-	13	-	-	-	-	-	13
			Inosi/Chilaulo	-	-	1	-	-	-	-	-	1
			Chaswanthaka	29	3	2	-	-	-	-	-	34
			Lisangwi	-	6	6	-	-	-	-	-	12
			Mbwinja	3	-	-	-	-	-	-	-	3
			Mpindo	25	-	-	-	-	-	-	-	25
	GVH Dzikupi	Dzikunika	-	-	-	-	from 0 to 2	-	-	-	from 0 to 2	
	GVH Namputu	Chikira	-	1	-	-	-	-	-	-	-	1
Chinkwinya		-	3	-	-	-	-	-	-	-	3	
Neno District	TA Mlauli	GVH Feremu	Feremu / Andivuta	-	-	from 0 to 4	from 2 to 5	-	-	-	from 2 to 9	
			Kambalame	1	25	from 0 to 5	-	-	-	-	from 26 to 31	
			Nkhwali	-	-	-	-	-	from 5 to 10	-	-	from 5 to 10
	GVH Nsalawatha	Petulo	-	2	-	-	-	-	-	-	2	
		Ntingala	-	-	-	from 1 to 2	-	-	-	-	from 1 to 2	
	TA Symon	GVH Ngwenyama	Liyenda	-	1	-	from 5 to 10	-	-	-	-	from 6 to 11
GVH SomiSomi			-	-	-	from 10 to 15	-	-	-	-	from 10 to 15	
Total				58	41	42 to 51	18 to 32	0 to 2	5 to 10	-	~160 to ~200	

^a Estimate based on SLR surveys Nov. Dec. 2023, based on land requirements available at the time of writing.

^b Estimate based on SLR direct observation on site in Nov. Dec. 2023 and interpretation of aerial imagery. This estimate should be minimised by optimisation during the Detailed Design

^c Estimate based on SLR direct observation on site in Nov. Dec. 2023 and interpretation of aerial imagery, the number of buildings in the TL wayleaves is used as a proxy.



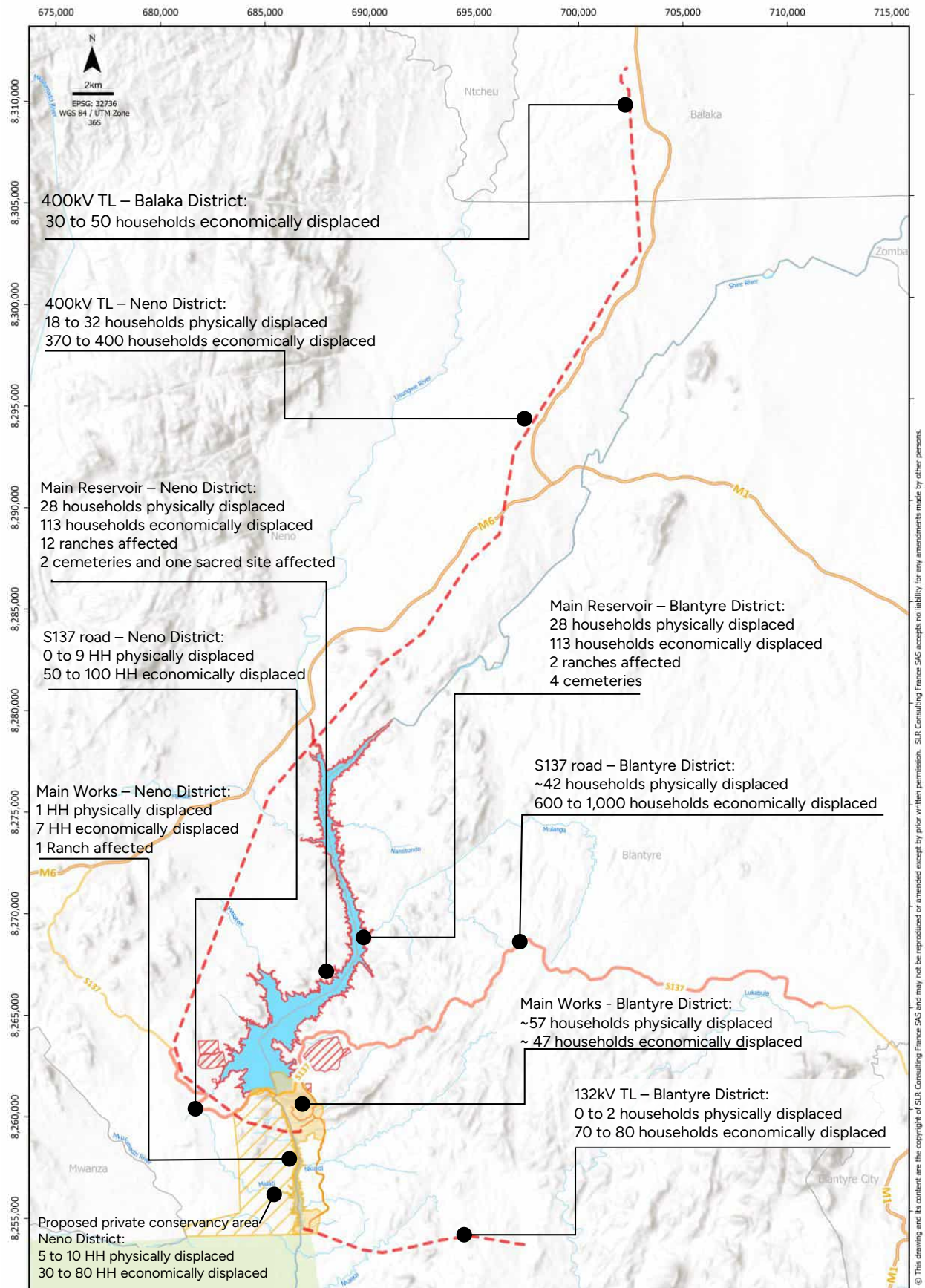
Table 37: Estimated number of households affected by economic displacement only

Number of households affected	RAP Areas							Total ^{d,e}
	Main Works Area ^a	Main Reservoir ^a	S137 ^b	400kV TL ^c	132 kV TL ^c	Proposed Biodiversity Conservancy Area ^d	Resettlement sites ^e	
Blantyre District	47	358	600 to 1,000	--	70 to 80		3 to 5 ^d	~1,100 to ~1,450
Neno District	7	113	50 to 100	370 to 400	--	30 to 80	3 to 5 ^d	~500 to ~700
Balaka District	-	-	-	30 to 50	-		-	~ 30 to 50
Total	54	471	650 to 1,100	400 to 450	70 to 80		6 to 10 ^e	~1,600 to ~2,200

^a Estimate based on SLR surveys Nov. Dec. 2023, based on land requirements available at the time of writing.
^b Estimate based on SLR direct observation on site in Nov. Dec. 2023 and interpretation of aerial imagery.
^c Estimate based on the extrapolation of the MOMA RAP information. For the MOMA project, there was an average number of 7 Project Affected Persons with land plots affected by the transmission line wayleave per linear kilometre. This ratio is applied to the 62 km of the 400kv transmission line and the 11 km of the 132KV transmission line
^d The households economically displaced by the Regulating Reservoir on the Neno side of the Main Works are also affected by the proposed biodiversity conservancy area.
^e The households economically displaced by the resettlement sites are also displaced by the Main Works or the Main Reservoir



Figure 107: Overview of estimated Involuntary Resettlement Impacts





5.2 Estimation of Impacts from the Main Reservoir and Main Works

The involuntary resettlement impacts from the Main Reservoir and Main Works land requirements can be summarised as follows:

- About 624 households could be affected (see Table 39):
 - About 99 households could be physically displaced, mostly from Chaswanthaka and Mpindo villages in Blantyre District and from Kambalame village in Neno District, and
 - About 525 could be economically displaced, about 73% in Blantyre District and 27% in Neno District.
- One land plot owned by the Forest Department in Kambalame village is affected.
- Fifteen ranches or commercial farms are affected by the main reservoir and main works areas (see Section 5.2.1.2).
 - Four farms will be completely flooded by the main reservoir, 7 will lose a significant part of their land, as well as some or all the buildings on the farm, and 4 will only lose a stretch of their land along the river, without having any building affected;
 - Most of the ranch owners are residing in Blantyre city, save for one who resides in Neno District outside of the affected areas .
 - A total of 65 workers are employed on the 15 ranches, out of which 59 are residing in the ranches.
- Six graveyards and one sacred site have been identified by the Department of Museums and Monuments as affected by the main reservoir,
- The Mpatse abwile Primary school in Chaswanthaka village is not affected by the Project land requirements (see Section 5.2.4), but it is envisaged to relocate it next to the Chaswanthaka resettlement site.

5.2.1 Preliminary Census and Categories of Affected Households and Persons

The figures of potential impacts summarised in the next paragraphs are not definitive: they are an estimate based on the information available at the time of writing. The phased RAPs will provide the exact number of affected persons and household.

In the Main reservoir and Main works areas, the impacts are estimated for the following four main categories of affected entities:

- The individual landowners affected, identified based on the surveys performed in 2021 and 2023 (see Table 38 below), and these landowners' households (see Section 5.2.1.1, one household can include one or several individual landowners, for instance when the wife and husband do own separately one plot of land each),
- The tenants using the lands of the landowners (see Section 5.2.1.2).
- The Ranches affected, including the ranch owners and their employees (see Section 5.2.1.2).

Table 38 below gives the estimated number of individual Project-Affected Landowners identified to date for the Main Reservoir and the Main works. One plot of land is owned by the Forest Department (in Kambalame village, GVH Feremu, TA Mlauli, Neno District).

Only 2 cases of land under leasehold (private land) have been identified. The overwhelming majority of the affected land plots are customary lands.



Table 38: Number of individual landowners and tenants potentially affected (Main Reservoir and Construction Works)

PAP categories	PAP gender			Total
	N/A or to be determined	female	male	
Villagers – landowners	-	285	344	629
Tenants	~ 20	-	-	20
Ranch owners	-	5	9	14
Forest Department	1			1
PAP yet to be identified	2			2
Total	23	290	353	666

5.2.1.1 Estimation of the number of Households and Households Members affected by the Main reservoir and Main Works

Table 39 below provides the estimate of the number of households physically and economically displaced by the Main Reservoir and Main works, distributed by TA and GVH. This table does not include all the individual landowners indicated in the previous section, including the ranch owners. The Forest Department is not included in this table. Some of the households affected are owning lands in the villages affected while residing in other non-affected location. This is the case of the owners of the ranches who are residing in Blantyre city, as well as some landowners who are residing in other GVH or TA. The rows of these 'non-residents PAH are tagged with an (*) in Table 39.

The figures provided in Table 39 should be understood as an order of magnitude:

- Because no cut-off date has been established yet, and
- Because some of the Project land requirement are yet to be finalised at the time of writing.

The corresponding number of households members (individuals) can be estimated based on the responses from the socioeconomic survey, and extrapolated from the average size of the household in Blantyre and Neno Districts (Blantyre District Council 2017; Neno District Council 2017). About 2,200 to 2,300 households' members would be affected in Blantyre District and about 700 to 750 in Neno District.

Figure 108 provides the estimated distribution of economically and physically displaced households by gender of the household's head. Figure 109 show the estimated percentage of vulnerable households amongst the affected households surveyed. Figure 110 provides an overview of the impacts for the Main Reservoir and Main Works areas.

The affected vulnerable households will be identified for each RAP during the census and socioeconomic surveys. Their specific impacts will be assessed during the preparation of each phased RAP. The affected vulnerable households are less resilient than others, as they have less resources to cope with the changes associated with involuntary resettlement. They are also most of the time more dependant on land-based livelihoods than other households. Therefore, they are likely to be disproportionately affected by the involuntary resettlement impacts. Specific support and livelihood restoration activities will be implemented to help the affected vulnerable households to restore their livelihoods, as defined in Sections 8 and 9.

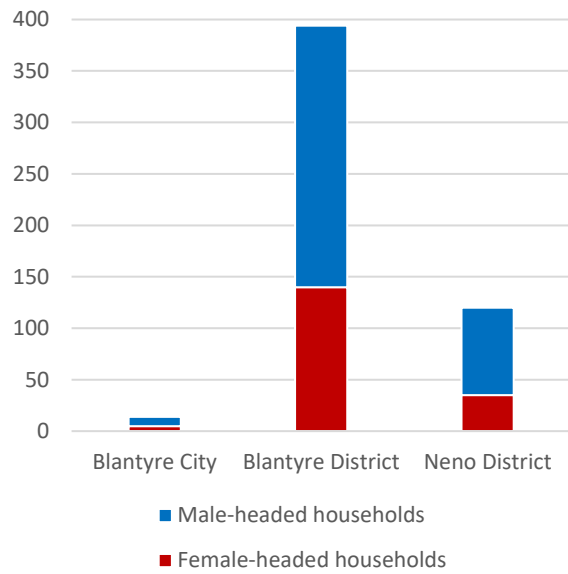


Table 39: Estimation of households physically and economically displaced for the Main reservoir and the Main works.

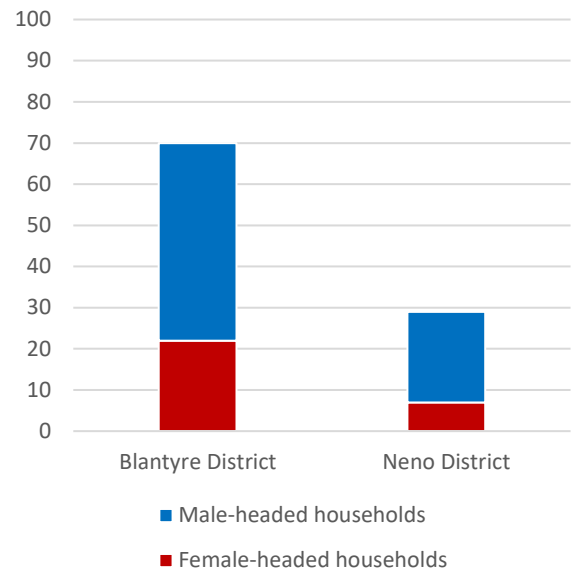
Area		Estimated number of households physically displaced	Estimated number of households economically displaced	Estimated total number of affected households	
Blantyre City*		0	14*	14*	
Blantyre District	TA Kapeni*	0	1*	1*	
	TA Kunthembwe	GVH Gwadani*	0	10*	10*
		GVH Kaliati	66	149	215
		GVH Kunthembwe*	0	1*	1*
		GVH Mzigala	0	18	18
		GVH Namputu	4	211	215
		GVH Ntenje*	0	1*	1*
	<i>Total Blantyre District</i>		70	391	461
Neno District	TA Mlauli	GVH Feremu	26	88	114
		GVH Nsalawatha	2	19	21
	TA Symon	GVH Ngwenyama	1	11	12
		GVH Zalewa*	0	2*	2*
	<i>Total Neno District</i>		29	121	150
Total Affected Households		99	525	624	
* Denotes affected households who are not residing in the lands affected. They are 'non-resident' Project Affected Households.					



Figure 108:- Estimation of affected households for the Main reservoir and the Main works, disaggregated by gender of the household’s head and District

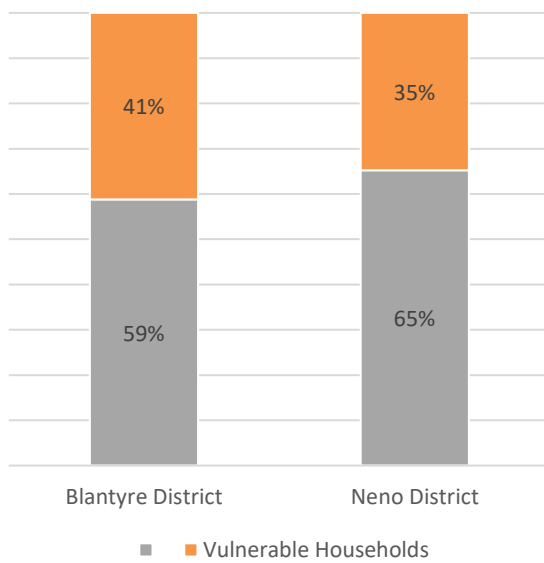


Household only economically displaced

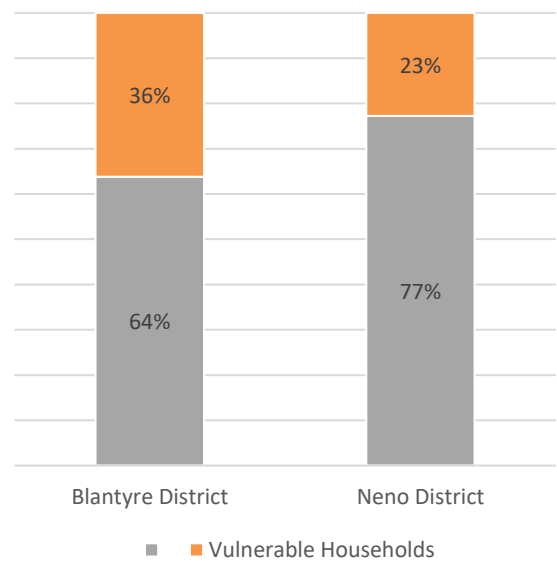


Households physically displaced

Figure 109: Proportion of vulnerable households amongst the potentially affected households for the Main reservoir and the Main works, disaggregated by District



Household only economically displaced



Households physically displaced



Figure 110: Distribution of estimated economic and physical displacement impacts by village

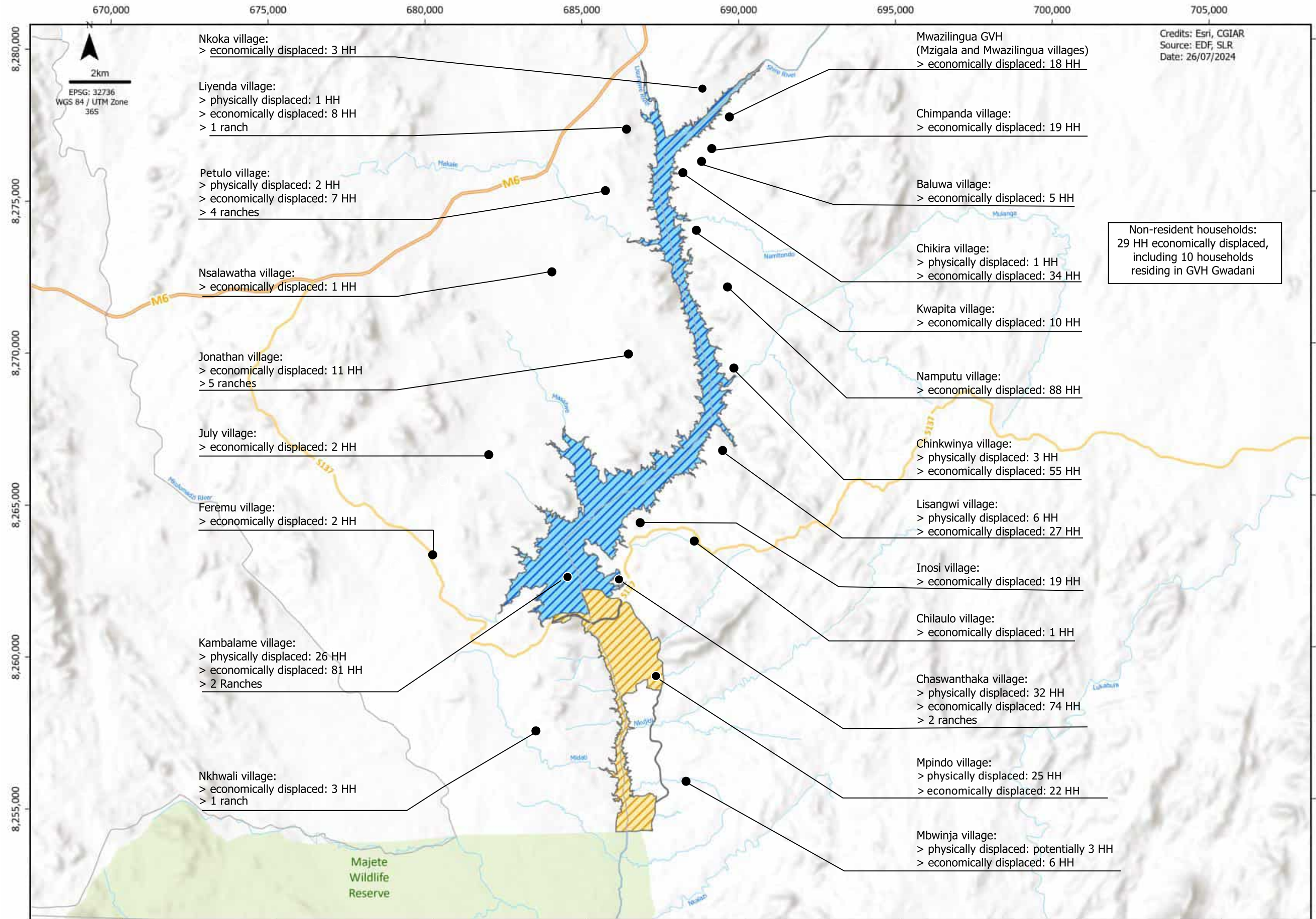
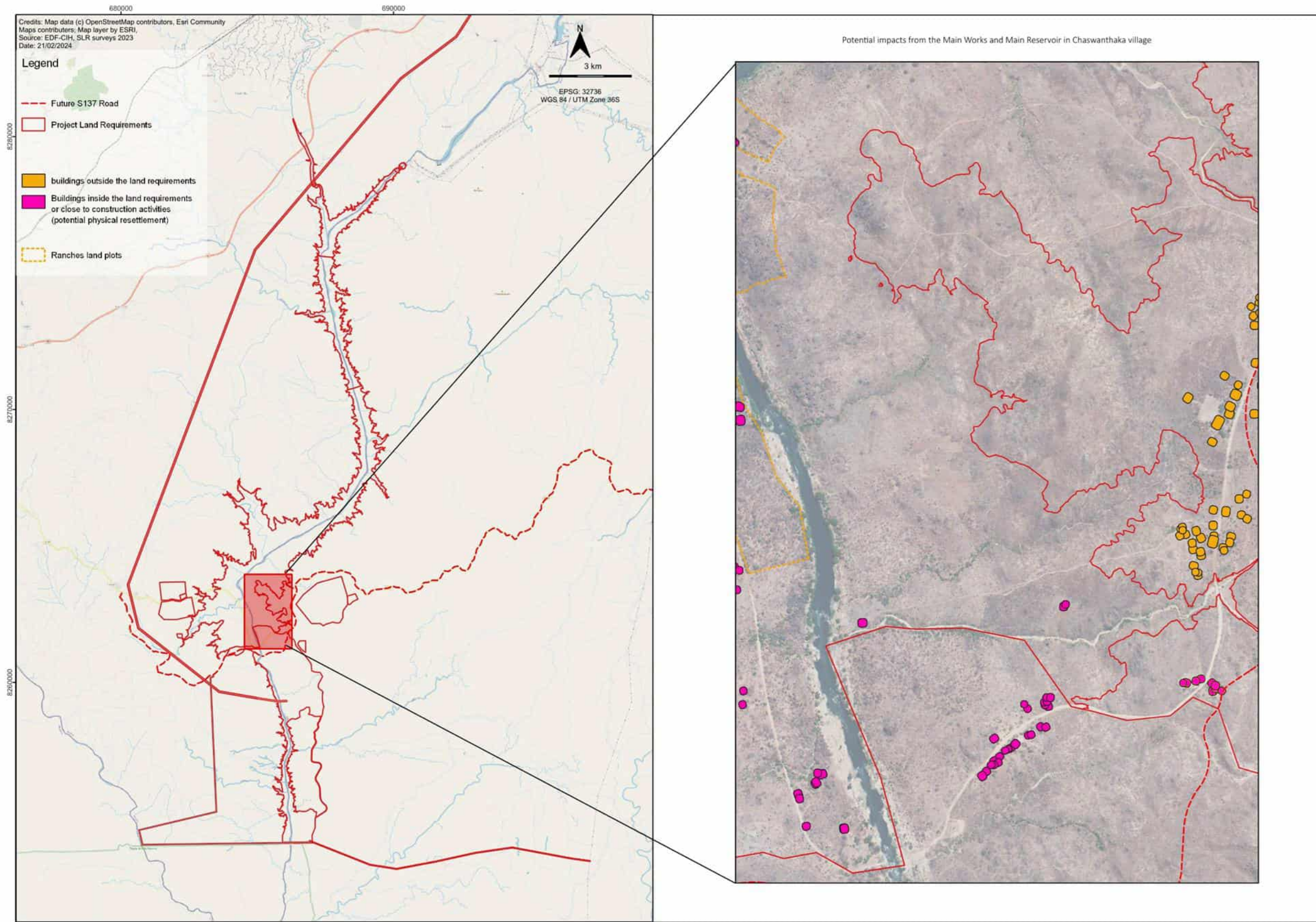




Figure 111: Overview of Physical Displacement Impacts at Chaswanthaka village



© This drawing and its content are the copyright of SLR Consulting France SAS and may not be reproduced or amended except by prior written permission. SLR Consulting France SAS accepts no liability for any amendments made by other persons.



Figure 112: Overview of Physical Displacement Impacts at Kambalame village

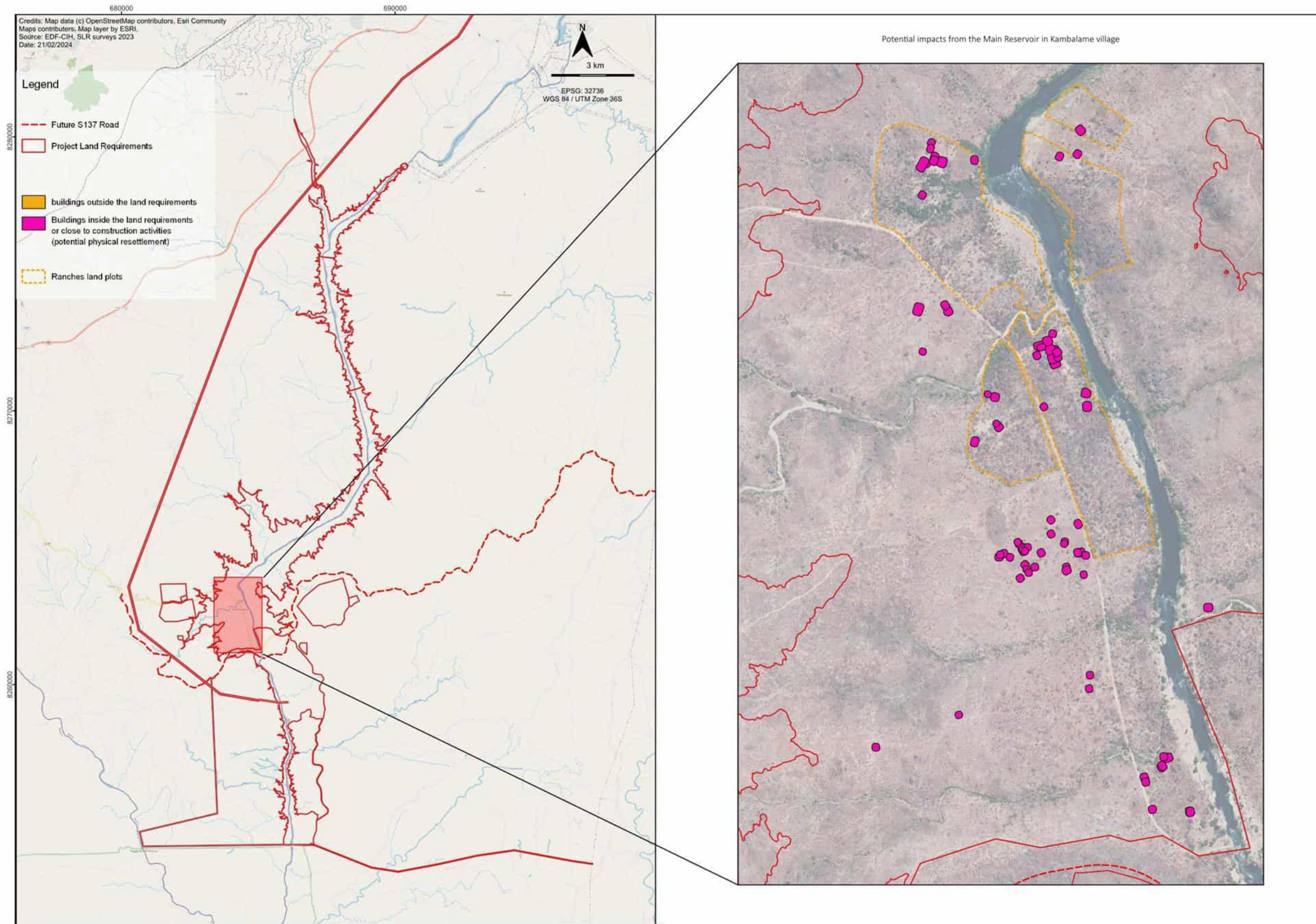




Figure 113: Overview of Physical Displacement Impacts at Mpindo village

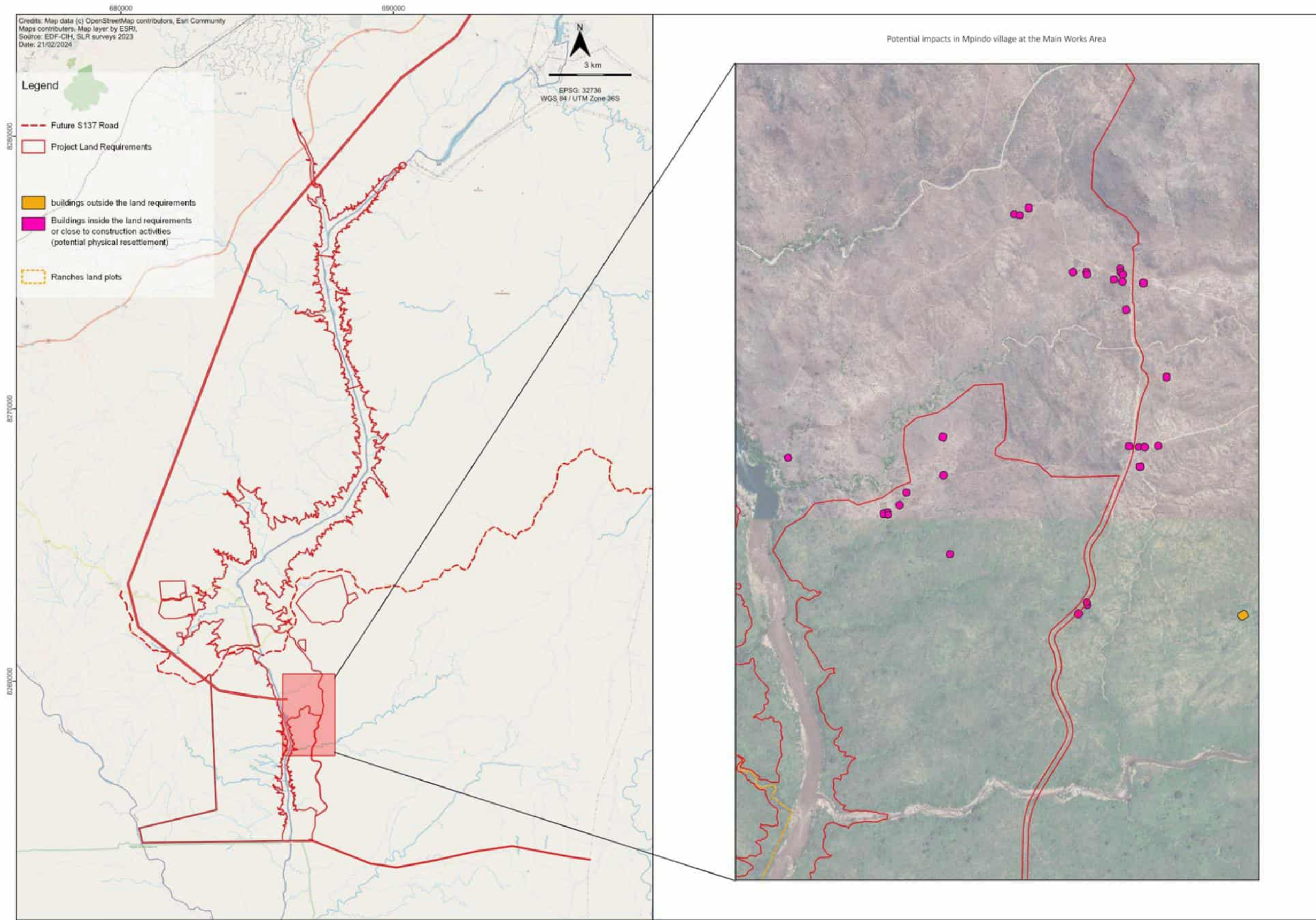




Figure 114: Overview of Physical Displacement Impacts at Lisangwi village

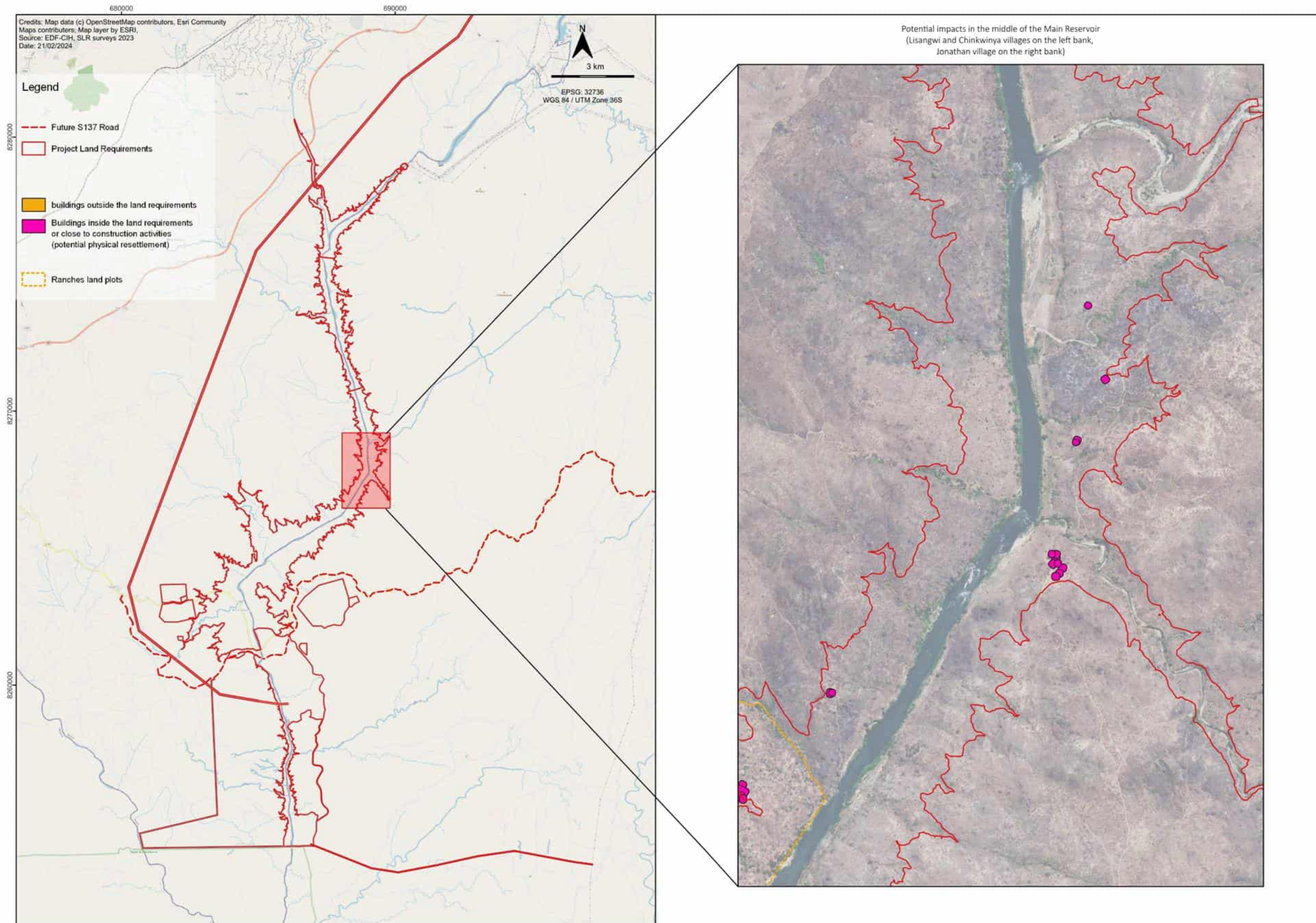
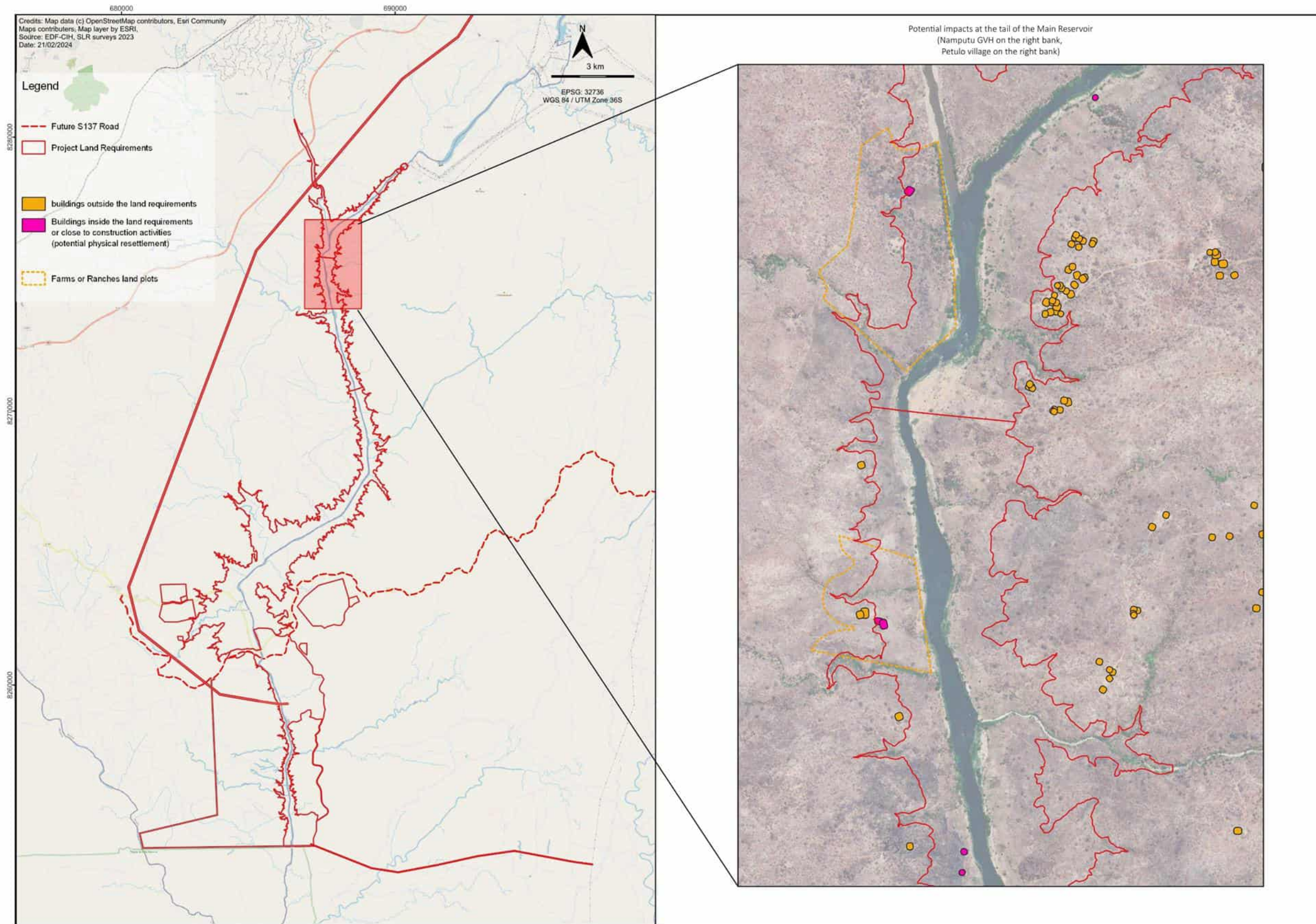




Figure 115: Overview of Displacement Impacts at the tail of the Main Reservoir





5.2.1.2 Estimated number of tenants potentially affected

As indicated in Section 4.2.3, renting land is a common practice in the Project area. Land rental agreements typically last no more than three years. Interviews in some of the affected villages reported a relatively low prevalence of land rental practices during the qualitative socioeconomic surveys.

During the quantitative socioeconomic surveys performed in November and December 2023, about 834 land plots were surveyed. Out of these land plots, 20 were declared as rented by tenants during the surveys. This is equivalent to about 2.4% of the land plots surveyed.

About 2.5% of the potentially affected households declared they were renting the house they were residing in at the time of the survey. However, none of the potentially physically displaced households declared they were renting their house.

The tenants will be identified and included in the census to be performed during the preparation of the phased RAP.

5.2.1.3 Estimation of impacts on Businesses

A Ranches and Commercial Farms

During the field investigations between September and December 2023, 15 commercial farms or ranches have been identified in the Project's land requirements for the Main Reservoir and Main works areas. The fifteen owners of these ranches are all residing in Blantyre City or outside of the villages affected by the Project land requirements. Table 40 provides the list of the 15 farms with the number of workers employed. Almost all workers are residing on the farms, except in Kabambe farm and Titani Ranch. Figure 116 next page illustrates the potential impact on the 15 farms:

- Four farms will be completely flooded by the main reservoir,
- Seven will lose a significant part of their land, as well as some or all the buildings on the farm,
- Four will only lose a stretch of their land along the river, without having any building affected.

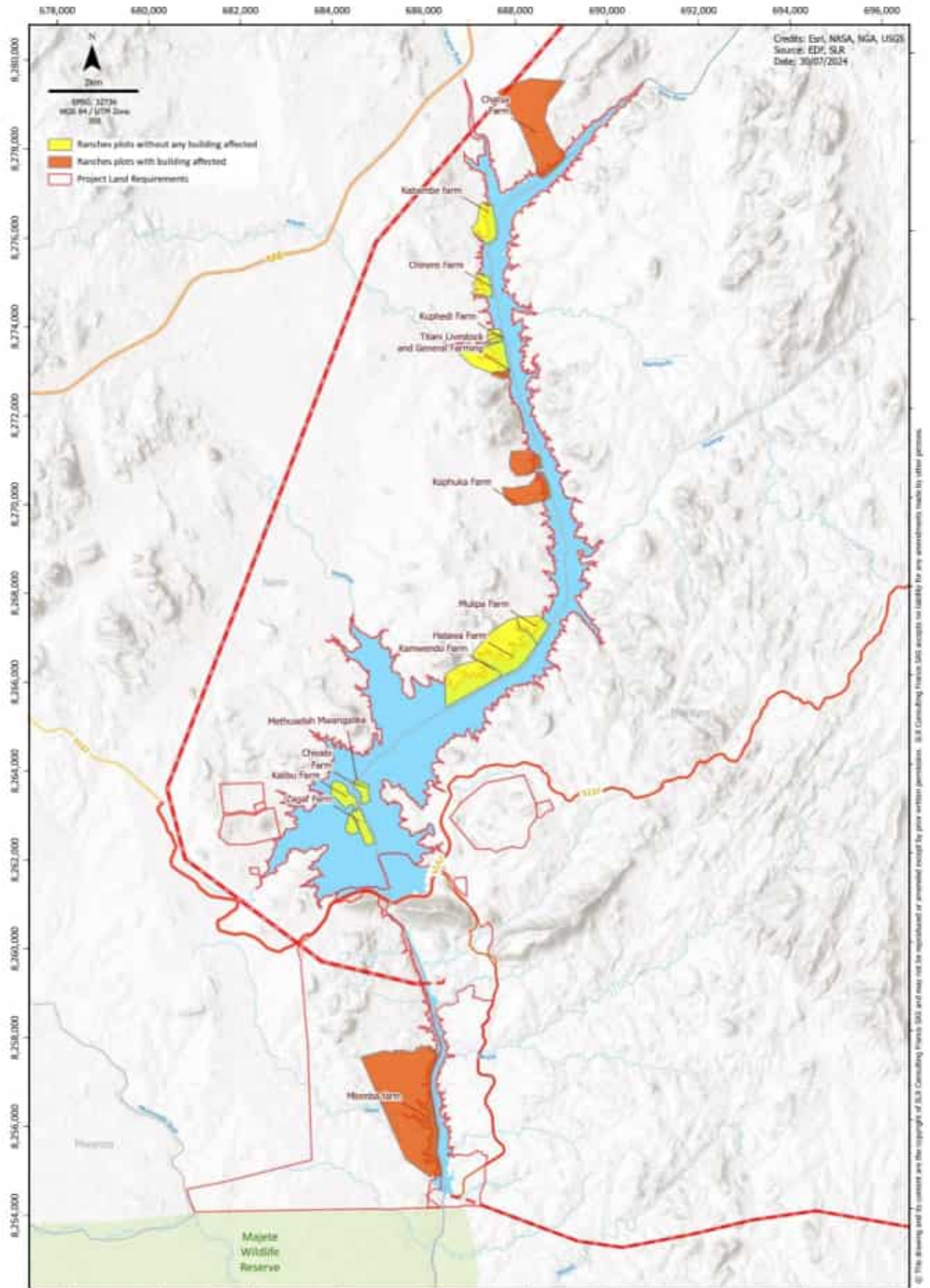


Table 40: Farms or Ranches affected by the Main Reservoir and Main Works areas and number of workers

District	TA	GVH	Villages	Ranch or Farm name	Number of Workers		Number of Other Ranches Residents (workers dependents)	
					employed on the ranch	residing on the ranch (out of the workers employed)		
Neno	Symon	Ngwenyama	Liyenda	Chatsa	6	6	3	
	Mlauli	Nsalawatha	Petulo	Kabambe	5	2	0	
				Chinere	6	6	0	
				Kuphedi	1	1	0	
				Musa	3	3	0	
			Jonathan	Titani	6	3	About 5	
				Kaphuka	4	4	15	
				Mulipa	5	5	5	
				Halawa	2	2	0	
				Kamwendo	3	3	1	
			Feremu	Kambalame	Kalibu	2	2	0
					Zagaf	10	10	About 8
					Nkhwali	Mlomba	8	8
Blantyre	Kunthembwe	Kaliati	Chaswanthaka	Methuselah Mwangalika	3	3	0	
				Chiyabi	1	1	1	
Total				15 ranches	65	59	45 to 50	



Figure 116: Overview of impacts on ranches



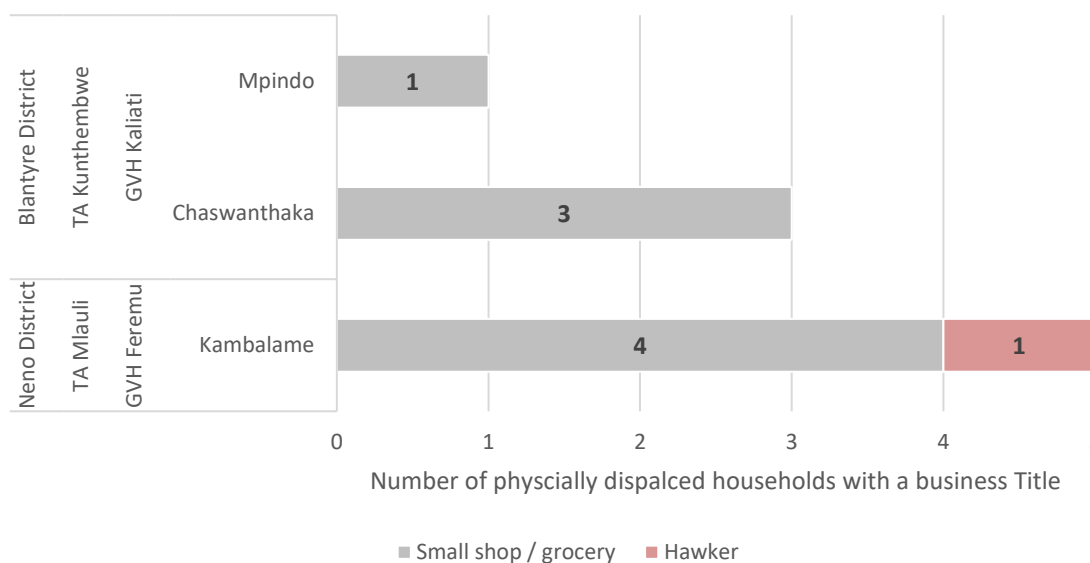


B Other Small Businesses

As indicated in Section 4.2.10.5, about 32% of the affected households surveyed in the Main Reservoir and Main Works areas declared they conducted small businesses activities. Most of them conduct these activities in their village. The small business activities of households economically displaced are unlikely to be affected, as the villages where they are residing will not be displaced. However, the affected households physically displaced who do some small businesses will lose their place of business in addition to their home. The final number of small businesses affected will be defined in the phased RAP.

As Figure 117 shows, 9 of the households physically displaced surveyed declared they have such small businesses. Those who have a small shop will be more affected than the ones conducting hawker activities.

Figure 117: Number of physically displaced households who declared a small business activity



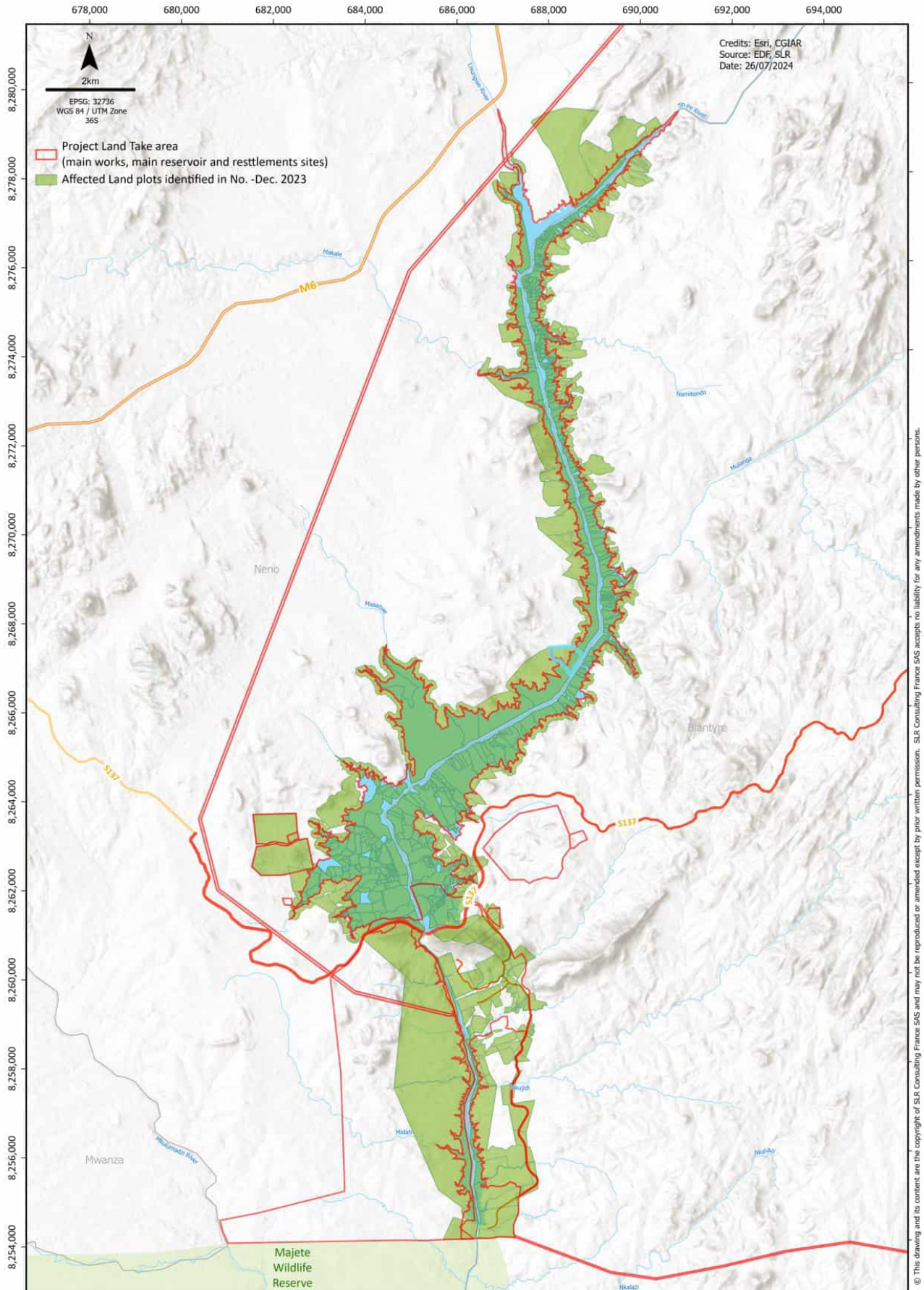
5.2.1.4 Overview of Affected Land Plots

A total of 834 affected land plots have been identified during the land surveys in November and December 2023. These land plots are illustrated in Figure 118. The large majority (75%) of the affected households have only one land plot affected, with 19% having 2 land plots affected, and 6% with 3 or more land plots affected.

The size of the lands affected varies between group villages. In villages where the population density tends to be higher, the size of the affected land plots tends to be much smaller than in others. For instance, in Namputu and Mzigala group villages, at the tail of the main reservoir in Blantyre District, the size of the affected land plots tends to be smaller (about 2ha affected per households on average). In other areas where the population density is lower, such as around the Regulating Dam, or the right bank of the Main reservoir, the size of the affected land plots tends to be bigger (with the largest ones being several hundreds of ha).



Figure 118: Map of Affected Land Plots Identified in Nov.-Dec. 2023





5.2.2 Impacts Related to Restriction of Access to Natural Resources

The World Bank ESS5 states that where project-related restrictions on access to natural resources are envisaged, measures will be implemented to either allow continued access to affected resources or to provide access to alternative resources with equivalent livelihood-earning potential and accessibility. Where common property resources are affected, benefits and compensation associated with restrictions on natural resource usage may be collective in nature²⁴. Impacts related to the loss of access to terrestrial natural resources and restriction of access to some sections of the Shire River during operation are estimated in the next paragraphs. Collective livelihood restoration measures to address these impacts are provided in Section 9.3.

5.2.2.1 Access to Terrestrial Natural Resources

As described in Section 4.2, the affected communities are using natural resources and ecosystem services. They collect medicinal herbs, firewood, timber, clay soils and sands. Some of the affected households (9%) also declared that they hunt. The socioeconomic survey performed in 2023 did not identify any specific location where specific natural resources were collected or used. The affected households use the natural resources they have on their landholdings, and on the village lands.

At the affected household level, one of the key sources of income for about half of the affected households is charcoal making (see Sections 4.2.10.2 and 0). However, only 29 of the affected households (or about 13%) declared that selling charcoal was their sole source of income.

Charcoal making is not limited to one specific location or plot of land for the affected households. As indicated in Section 0, trees suitable for charcoal production are becoming increasingly scarce and people are now also using saplings, coppices and digging up tree stumps to make charcoal. Some people migrate from one village to another or find trees in other villages to produce charcoal. Therefore, it is possible that some of the affected household produce charcoal on lands which are not affected by the Project.

The charcoal producers do move their charcoal making activities wherever they can find trees. Therefore, it will be difficult to assess the impacts of the Project's land requirements on charcoal making at the household level.

Therefore, measures to address impacts from restriction of access to terrestrial natural resources will be collective in nature, rather than directed towards individuals or households²⁵. Households-level livelihood restoration activities will be offered to affected households in addition to the collective ones, including development of alternative sources of income.

At the village level, it is likely that the reduction of areas available to produce charcoal will increase pressure on natural resources outside of the Project lands requirements. As there are no defined boundaries between villages or Group Villages, it is difficult to estimate precisely which village is likely to be more affected than other. However, the villages losing a more significant part of their lands than others are those located close to the main dam and main powerhouse: Chaswanthaka, Inosi and Mpindo in GVH Kaliati in Blantyre District, and Kambalame village in GVH Feremu in Neno District. The other villages will lose lands adjacent to the river.

The impacts on the use of terrestrial natural resources at the village level cannot be assessed solely from the RAP perspective. Pressure on natural resources could also increase because of Project-induced in-migration, and from the influx of workers.

Collective Livelihood Restoration measures are defined in Section 9.3.2 to address this impact.

5.2.2.2 Access to the Shire River Water

The socioeconomic surveys indicates that a large proportion of the affected households use the Shire River for various purposes (see Sections 4.2.4, 4.2.13 and 4.2.14.2). The affected households

²⁴ WB ESS5 §35.

²⁵ As envisaged in IFC PS5 § 28



use the Shire River as a source of livelihood and income (fishing, for 38% of the affected households), to water their cattle, to do some small-scale manual irrigation on the farming fields on the riverbanks.

As indicated in section 2, during operation, after the Main Reservoir impoundment, access to the reservoir will be restricted for safety reasons in 2 areas:

- At the tail of the Main Reservoir, within 500m from the tailrace of Tedzani HPP, and
- Within 500m from the Main Dam, its spillways, its water intake and diversion tunnel.

Between these two areas, local communities will be able to access the main reservoir banks and use its water as they are currently doing with the Shire River (i.e. cattle watering, fishing, or other domestic uses) provided it does not interfere with the dams' operation. The following four villages could be affected by the restriction of access to the main reservoir:

- In Blantyre District (left bank):
 - Chaswanthaka village in GVH Kaliati, close to the Main dam,
 - Close to the tail of the main reservoir and of Tedzani dam: Mzingala an Mwazilingua villages in GVH Mwazilingua.
- In Neno District (right bank): Kambalame village in Feremu GVH, close to the main dam.

Access to the Regulating Reservoir will not be permitted during operation. It means that Mpindo and Mbwinja villages in Blantyre District and Nkhwali village in Neno District will no longer be able to access the Shire River. These three villages mostly use the Shire River to water their cattle.

Access to the banks of the main reservoir may also be hindered by the change induced by the change from a river with flowing water to a reservoir with still water. The new lentic (still water) ecosystem in the Main Reservoir may be cause an increase in the crocodiles and hippos population. The banks of the Main Reservoir may also see the development of new riverine vegetation (such as aquatic weed) a few years after the lake is created. These two aspects may hinder the accessibility of the riverbanks for the riverine villages a few years after impoundment of the Main Reservoir. It is also possible that the Shire River quality changes during impoundment and during the start of operation, rendering it unfit as drinking water. These aspects are assessed in detail in the 2024 ESIA.

The ways villagers use the Shire River differs from one village to another. The villages along the regulating Reservoir mostly use the river to water their cattle, while the villages along the main reservoir mostly use it for their cattle, but also for agriculture and other purposes. The impact will also be different between the Main Reservoir and the regulating reservoir:

- Restriction of access to the Regulating reservoir will start with the Main Works. Therefore, the 3 villages affected by restriction of access along the Regulating Reservoir (Mpindo and Mbwinja villages in Blantyre District and Nkhwali village in Neno District) will no longer be able to access the Shire River from the start of construction and during operation.
- In the Main reservoir:
 - Four villages will only be affected by a partial restriction of access and will be able to continue to access the Shire River outside the 500m safety buffers (In Blantyre District: Chaswanthaka village in GVH Kaliati, Mzingala an Mwazilingua villages in GVH Mwazilingua, and in Neno District: Kambalame village in Feremu GVH).
 - The other villages riverine to the Main Reservoir may be affected by change in the Shire River water quality and potentially hindered access to the riverbanks. seventeen (17) villages could be potentially affected: in Blantyre District: Chaswanthaka, Lisangwi, Inosi, Chilaulo in GVH Kaliati, Chimphanda, Baluwa, Chikira, Namputu, Kwapita, Chinkwinya, in GVH Namputu, in Neno District: Nkoka, Liyenda in GVH Ngwenyama, Petulo and Jonathan in GVH Nsalawatha, and July, Feremu/Andivuta, and Kambalame in GVH Feremu)

Collective Livelihood Restoration Measures are defined to address these impacts and risks (see Section 9.3.2). The Project will define and implement alternative solutions to restore access to



water for the four villages affected by restriction of access to the future reservoirs and maintain access to the Main Reservoir for the 18 riverine villages around the Main Reservoir.

The measures will be defined in a participatory manner with the affected villages, to ensure they are socially acceptable and adapted to the needs and uses of the affected villages.

5.2.3 Tangible Cultural Heritage elements

The impact on archaeological elements identified by the DoMM are covered in the DoMM Cultural Heritage Impact Assessment. At the time of writing, the Department of Museums and Monuments was finalising its Cultural Heritage Impact Assessment and its Graveyards Relocation Plan for the Mpatamanga HPP.

The elements of cultural heritage affected in the Main Reservoir are listed in Table 41 below, and their location is illustrated in Figure 119. The five graveyards identified by the Department of Museums and Monuments were identified and mapped with the participation of the local communities. The DoMM has also identified potential sites to relocate these graveyards. The extent of the affected graveyards, and their potential relocation site are illustrated in Figure 119.

According to the interviews during SLR field investigations in 2023, the impact on the sacred baobab located in the main reservoir in Kambalame village should be managed as follows:

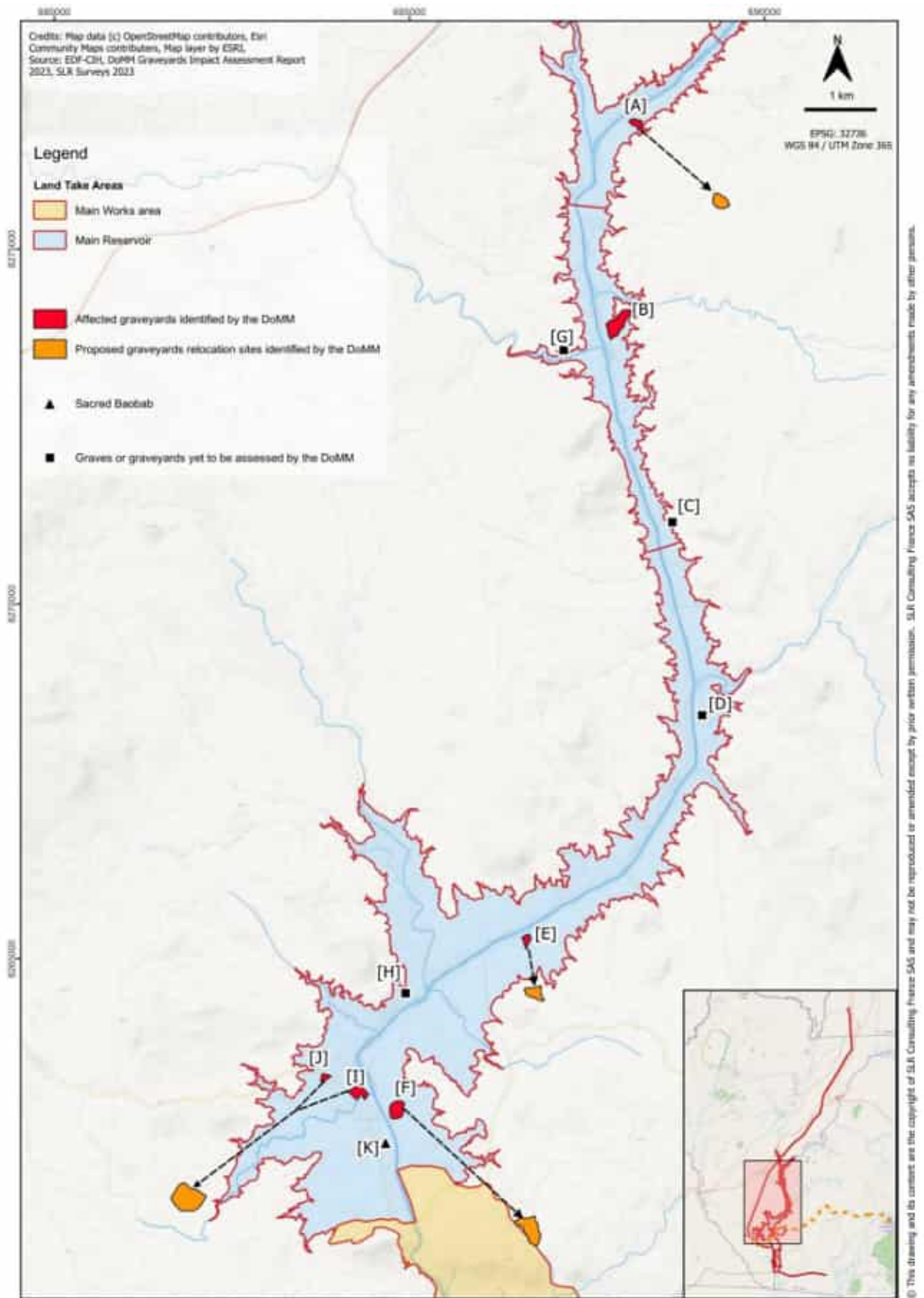
- The villagers should sacrifice a cow (or an equivalent symbol) to mark a final celebration for the tree and dispel the spirits dwelling within it.
- The villagers will then identify a new location (a new tree) for these spirits.

Table 41: Elements of Cultural Heritage Affected by the Main Reservoir and Main Works

District	Traditional Authority	Group Village	Village	Cultural Heritage Element	Relocation site identified
Blantyre District	TA Kuthembwe	GVH Namputu	Chikira	Chikira Graveyard* [A]	yes
			Namputu	Namputu Graveyard* [B]	no
			Chinkwinya	Grave (yet to be assessed by the DoMM)** [C]	no
		GVH Kaliati	Lisangwi	Grave (yet to be assessed by the DoMM)** [D]	no
			Inosi	Livunzi Graveyard* [E]	yes
			Chaswanthaka	Ntumbu Graveyard* [F]	yes
Neno District	TA Mlauli	GVH Nsalawatha	Petulo	Grave (yet to be assessed by the DoMM)** [G]	no
			GVH Feremu	July	Grave (yet to be assessed by the DoMM)** [H]
		Kambalame	Chigogo Graveyard* [I]	yes	
			Chigogo Infant Graveyard* [J]	yes	
			Sacred Baobab* [K]	N/A	
* Identified by the DoMM					
** Identified during SLR surveys in Nov. Dec. 2023 – to be confirmed by the DoMM					



Figure 119: Elements of Cultural Heritage Affected by the Main Reservoir and Main Works





5.2.4 Community Buildings and Infrastructure

The following impacts on community assets or infrastructures have been identified during the 2023 surveys:

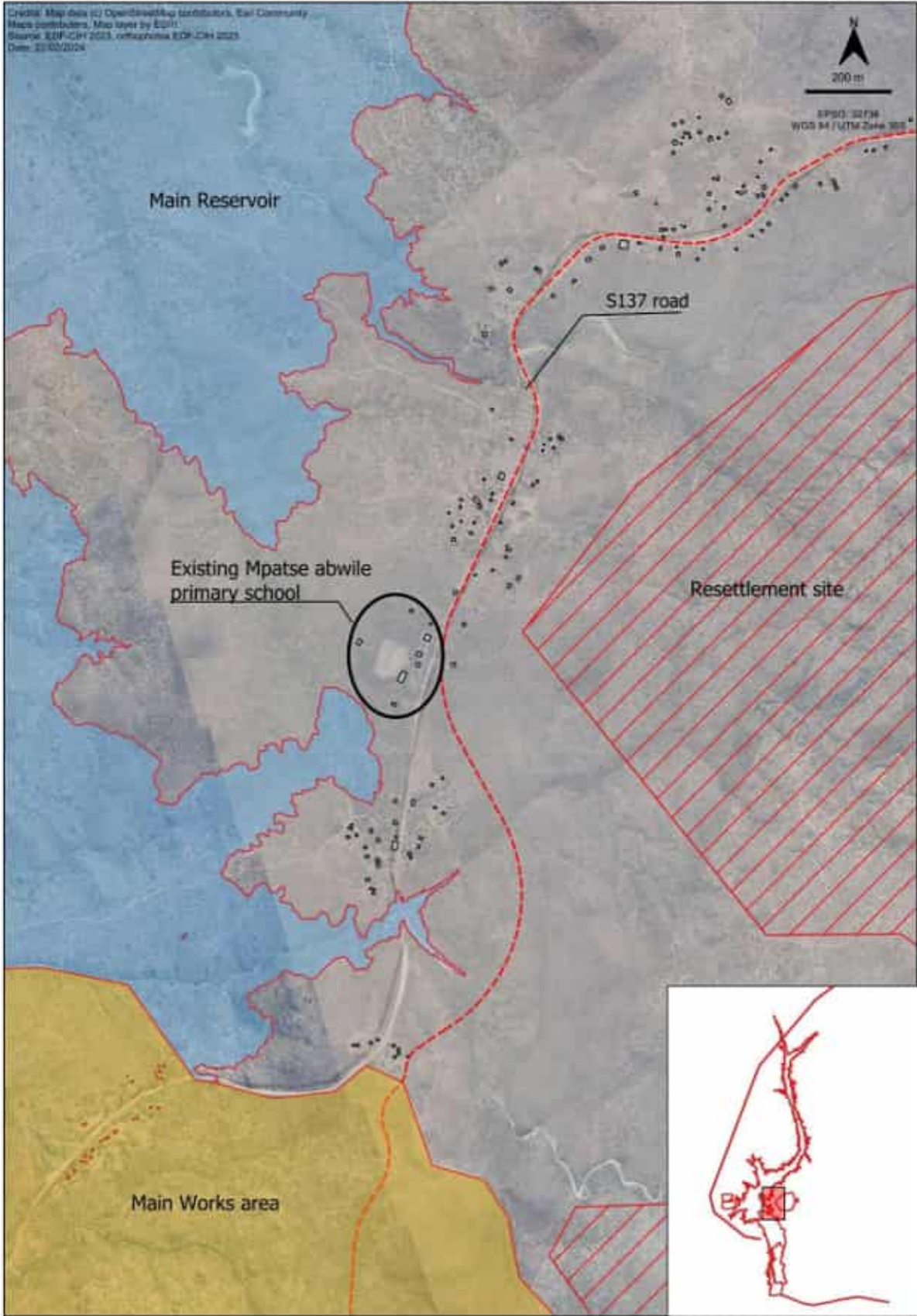
- The bailey bridge allowing the existing S137 road to cross the Shire River was washed away in 2019. It is being re-built. Access to the Bailey Bridge will be maintained during construction. This bridge will then be flooded by the Main Reservoir impoundment. The Project design incorporates a replacement bridge: a new section of the S137 road will use the main dam crest to cross the reservoir.
- Two community boreholes are located inside the Project's land requirements: one in Kambalame village close to the main dam, and another in Chikira village, at the tail of the main reservoir.
- One football playground is inside the Main Works area in Mpindo village,
- The Mpatse abwile Primary school in Chaswanthaka village is not affected by the Project land requirements (see Figure 120). At its current location, the school is next to the S137 road and will be about 100m from the future bank of the man reservoir. As this would be close the reservoir, and to avoid risks related to the proximity with the reservoir (crocodiles, hippos and malaria) it is envisaged to relocate it next to the Chaswanthaka resettlement site, to ensure the safety of the pupils and teachers.

The Mpatse abwile primary school's key characteristics are summarised below, based on an interview with one of the referent teachers in November 2023:

- A total of 567 students are registered (345 girls and 222 boys, 6 to 14 years old)
- Five qualified teachers and 3 assistants
- Two classrooms, and 2 teachers' houses and one office used as room, 8 toilets.



Figure 120: Location of Mpatse abwile primary school





5.3 Estimated impacts of the 400kv and 132kV Transmission Lines

5.3.1 Estimation of Potential Impacts

The potential impacts of the 400kv and 132kV Transmission Lines are estimated based on sites observation performed in November and December 2023 along the routes of the two lines, and analysis of orthophotos dated from July 2023. As indicated in Section 2.3.2, the Detailed Design will minimise involuntary resettlement impacts, especially physical displacement.

The estimation of impacts is:

- Quantified in Table 42 (400kV TL) and Table 43 (132kV TL),
- Illustrated in the maps provided in Annex 2.

The estimated impacts along the 400kV Transmission line can be summarised as follows:

- Between 18 to 20 villages in 7 group villages and 3 Traditional Authorities will be affected by the 400kV TL wayleave,
- Fifty-one (51) residential structures (houses, kitchen, toilets) are located inside the wayleave and could be affected, it is estimated that these structures could represent 18 to 32 households physically displaced,
- Four business structures have been identified in the wayleave,
- One church has been identified in the wayleave,
- About 285 cultivated land plots were identified in the wayleave during walkover and direct observation in November 2023. Considering that on the MOMA project, there was an average number of 7 Project Affected Persons with land plots per linear kilometre of wayleave²⁶, it can be estimated that between 400 and 450 landowners will be economically displaced.

The estimated impacts along the 132kV Transmission line can be summarised as follows:

- Five villages are crossed by the wayleave in 2 group villages and one Traditional Authority,
- Two residential structures were observed in the wayleave during the field observations performed in November and December 2023,
- About 85 cultivated land plots were identified in the wayleave during walkover and direct observation in November 2023. Using the MOMA project ratio indicated above, it can be estimated that between 70 and 80 landowners will be economically displaced.

It must be noted that only the impacts for the pylons footprints and maintenance tracks to be used during operation will be permanent. Outside the pylons' bases, the land in the wayleave will not be acquired by the Project, but restriction on land use will be established. It will be prohibited to erect buildings in the wayleave, and to grow crops other than annual crops.

²⁶ Estimate based on the extrapolation of the MOMA RAP information (ESCOM 2021).



Table 42: Estimation of the 400kV Transmission Line impacts per village

District	TA	GVH	Village	Kilometric Point (KP)	Estimated number of cultivated plots in the wayleave	Residential structures in the wayleave	Business structures in the wayleave	Other structures in the wayleave
Balaka	Phalula	Phombeya	Phombeya	62 to 60	21	-	-	-
		Kuthambo	Yonamu / Chikwewe	60 to 58	5	-	-	-
Neno	Symon	Somi Somi	Chikapa	58 to 54	33	2	-	-
			Kamwamba	54 to 50	30	-	-	-
			Phokoso	50 to 46	42	12	-	-
		Zalewa	Kandoje	46 to 41	60	6	-	1 Church
			Salafosi	41 to 37	45	14	4 (under construction)	-
			Patasoni	37 to 36	0	-	-	-
		Ngwenyama	Chitsoso	36 to 34	2	-	-	-
			Ntingala	34 to 30	8	2	-	-
			Nkoka	30 to 28	1	-	-	-
			Joseph	28 to 25	0	-	-	-
	Mlauli	Nsalawatha	Petulo	21 to 19	2	-	-	-
			Jonathan	19 to 13	10	-	-	-
		Feremu	July	13 to 8	4	-	-	-
			Feremu / Andivuta	8 to 6.5	3	5	-	-
			Kambalame	6.5 to 0	9	-	-	-
TOTAL	3 TA	7 GVH	18 to 20 villages		285	51	4	1 Church

Table 43: Estimation of the 132kV Transmission Line impacts per village

District	TA	GVH	Village	Kilometric Point (KP)	Estimation of number of cultivated plots in the wayleave	Structures in the wayleave	
Blantyre	Kunthembwe	Kaliati	Mbwinja	0 to 4	31	0	
			Dzikupi	Dzikunika	4 to 8	25	2 (residential)
				Kabuluzi	8 to 9	8	0
				Gumeni	9 to 10	14	0
				Dzikupi	10 to 11	7	0
TOTAL	1 TA	2 GVH	5 villages		85	0	



5.3.2 Potential Cumulative impacts with the MOMA Project

The Mpatamanga 400kV Transmission Line route is close to the future transmission line of the Mozambique-Malawi 400kV Interconnection Project (MOMA) for more than half of its length, as illustrated in Figure 11 in Section 2.2.5. For its Malawi section, the MOMA transmission line comes from Mwanza District, and connect to the Phombeya substation, where the Mpatamanga 400kV TL will also connect. From the tail of the main reservoir, approximately at the limit between TA Mlauli and TA Symon in Neno District, the two transmission lines routes are between 500m to 750m from each other. When they progress further north, they are even closer. Starting from Mbemba and Ntingala villages in Ngwenyama GVH, TA Symon, their routes are parallel all the way up to Phombeya substation, with a distance between 50m and 100m.

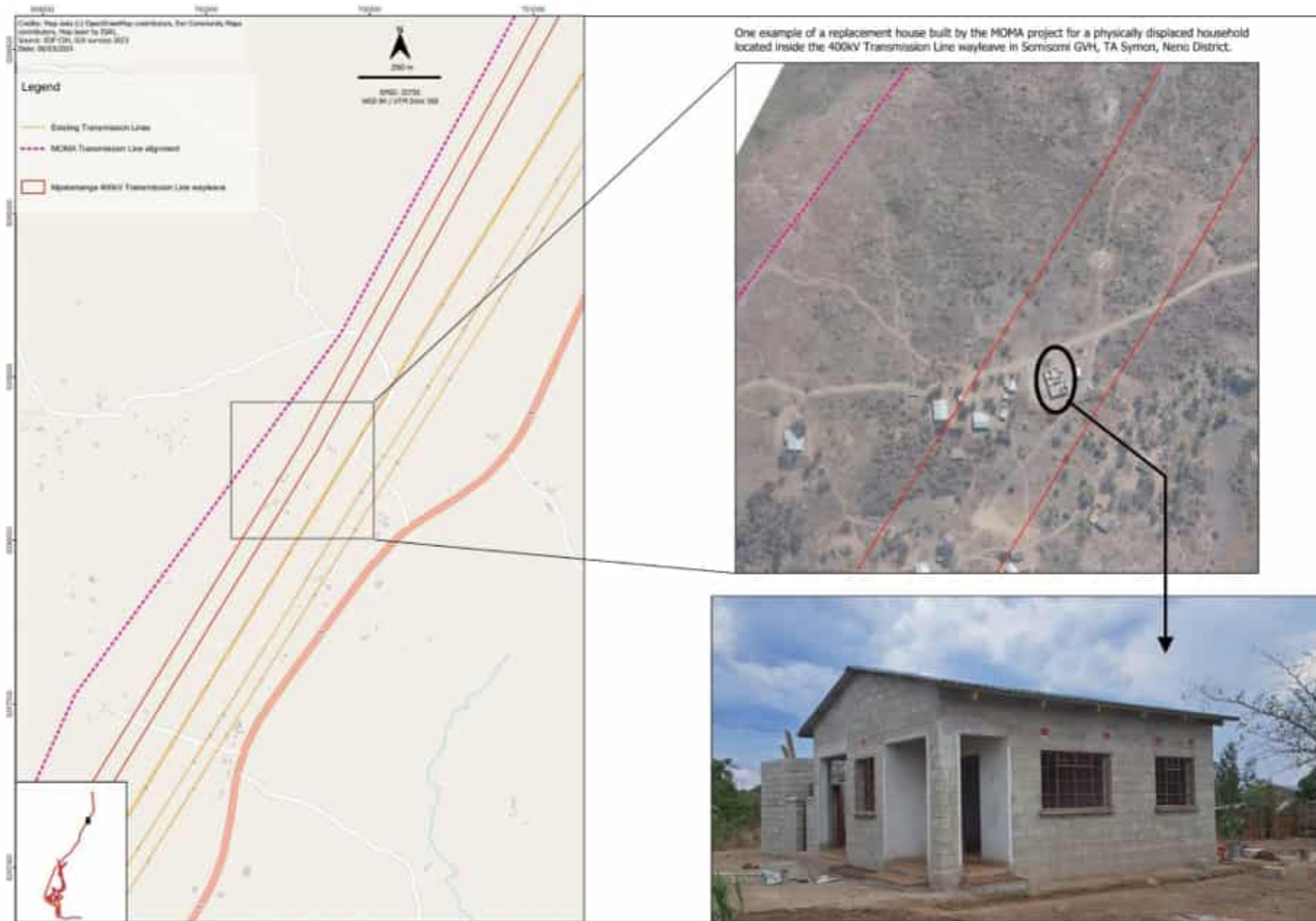
At the time of writing, the implementation of the MOMA Resettlement Action Plan in Malawi was ongoing. The compensation and resettlement process has included some physical displacement: 21 houses in Neno District and one house in Balaka District were impacted (ESCOM 2021). In addition, 358 land parcels were affected by the wayleave in Nena District, and 16 in Balaka District. The MOMA project offered to rebuilt replacement houses to physically displaced households.

As the two transmission lines routes are very close to each other, it is possible that some affected households are relocating themselves just outside the MOMA wayleave and potentially in the Mpatamanga 400kV TL wayleave. This could be the case for physically displaced households, but also for economically displaced households who have purchased replacement land just outside the MOMA wayleave.

During the field observations and walkover along the route of the 400kV TL in November and December 2023, one of the houses rebuilt by the MOMA project was identified inside the proposed Mpatamanga HPP 400kV TL wayleave. This potential 'double displacement' situation is illustrated in Figure 121. MHPL engaged ESCOM and the MOMA project to identify if there could be other potential 'double displacement' cases. Only the case mentioned above and illustrated in Figure 121 has been identified.



Figure 121: Example of potential double displacement along the 400kV Transmission Line



This drawing and its content are the copyright of JICA Consulting Techno DM and may not be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without prior written permission from JICA Consulting Techno DM.



5.4 Estimated Impacts of the S137 Road Works

The potential impacts of the S137 road works have been estimated based on site observations performed in November and December 2023, and analysis of aerial imagery dated from July and November 2023. As indicated in Section 2.3.2, the Detailed Design will consider options to minimise involuntary resettlement impacts, especially – but not only – on the new sections of the S137 road in Neno District. In Blantyre District, some buildings are located right on the border with the S137 road works land requirements. During the Detailed Design, options to avoid impact on these structures will be defined and implemented.

The estimated impacts are:

- Quantified in Table 44 below.
- Illustrated in the maps provided in **Annex 3**.

The estimated impacts can be summarized as follows:

- In Blantyre and Neno Districts, a total of about 30 villages within 10 GVHs and 3 TAs are crossed by the S137 road works. Some buildings or structures will be affected in 23 to 25 villages, as indicated in Table 44.
- One health facility will be impacted in Chikuli Market,
- Between 42 to 51 residential structures (houses) could be impacted.
- About 76 business structures (shops) could be impacted.
- One Church could be impacted.
- Depending on the Detailed Design, the following impacts could be avoided or minimised:
 - Three schools could be partially impacted (only the fencing wall could be touched)
 - Two graveyards, 1 soccer field and 1 playground could be partially impacted.

In Blantyre District, for the Sections of the S137 which will be upgraded, the Ministry of Transport and Public Work already owns the road and the land of the existing road reserve (18 metres from each side of the centre of the road). Along the sections of the S137 road to be upgraded, local villagers are using the land in the 18m width constituting the land reserve on both sides of the road central alignment. This land reserve is already the property of the MTPW. As per the Public Roads Act (2017 Amendment), compensation is due for damages caused to land and surface rights on parcels occupied in the road reserve for roads works (i.e. structures and crops). No compensation is due for the land in the existing road reserve. This was announced to the local communities during the July 2024 meetings along the S137 road for the ESIA (see Section 11.2).



Table 44: Estimation of impacts for the S137 Road Works.

District	TA	GVH	Village	Section (km points)	Residential structures	Business structures	Schools	Health structures	Church / Mosque	Graveyards	Playgrounds		
Blantyre District	TA Kuntaja	Nkata	Singano	0 to 200	-	2	-	-	-	-	-		
			Botomami/Nkata	3000	2	-	-	-	-	-	-		
		Solomoni	Jelani	4800	-	4	-	-	-	-	-		
	TA Kunthembwe	Mbanda	Mbanda	6000	-	-	-	-	-	-	-	1 ^a	
			Mbvundula	7400	-	-	1 ^a	-	-	-	-	-	
		Chikumbu	Chikumbu	7800 to 8400	-	4	1 ^a	-	-	-	-	-	
		Kadikira	Mkwezalamba	9700	2	-	-	-	-	-	-	-	-
			Chinkhandwe	10200 to 10400	1	1	-	-	-	-	-	-	-
			Kadikira	10500 to 11400	4	25	-	1	1	-	-	-	-
		Makunje	Makunje	11600 to 12800	-	12	-	-	-	-	-	-	-
		Kunthembwe	Kunthembwe	13000 to 14600	8	8	-	-	-	-	-	-	-
			Chisembwere	14800 to 15200	1	2	1 ^a	-	-	-	-	-	-
		Gwadani	Gwadani	15600 to 16700	1	4	-	-	-	-	-	-	-
			Ngoleka	17500	1	2	-	-	-	-	-	-	-
			Simon	19300	-	-	-	-	-	-	-	1 ^a	-
			Goliati	20000	-	2	-	-	-	-	-	-	-
Kaliati	Kaliati	20600 to 24900	13	6	-	-	-	-	-	1 ^a	-		
	Lisangwi	26700 to 29500	6	3	-	-	-	-	-	-	1 ^a		
	Inosi / Chilaulo	32200	1										
	Chaswantaka	33200 to 34000	2*	1	-	-	-	-	-	-	-		
<i>Total Blantyre District</i>					42	76	3	1	1	2 ^a	2 ^a		
Neno District	TA Mlauli	Feremu	Nkhwali		-	-	-	-	-	-	-		
			Kambalame		0 to 5	-	-	-	-	-	-		
			Feremu		0 to 4	-	-	-	-	-	-		
<i>Total Neno District</i>					0 to 9	-	-	-	-	-	-		
Total	3 TA	10 GVH	23 to 25 villages		42 to 51	76	3	1	1	2	2		



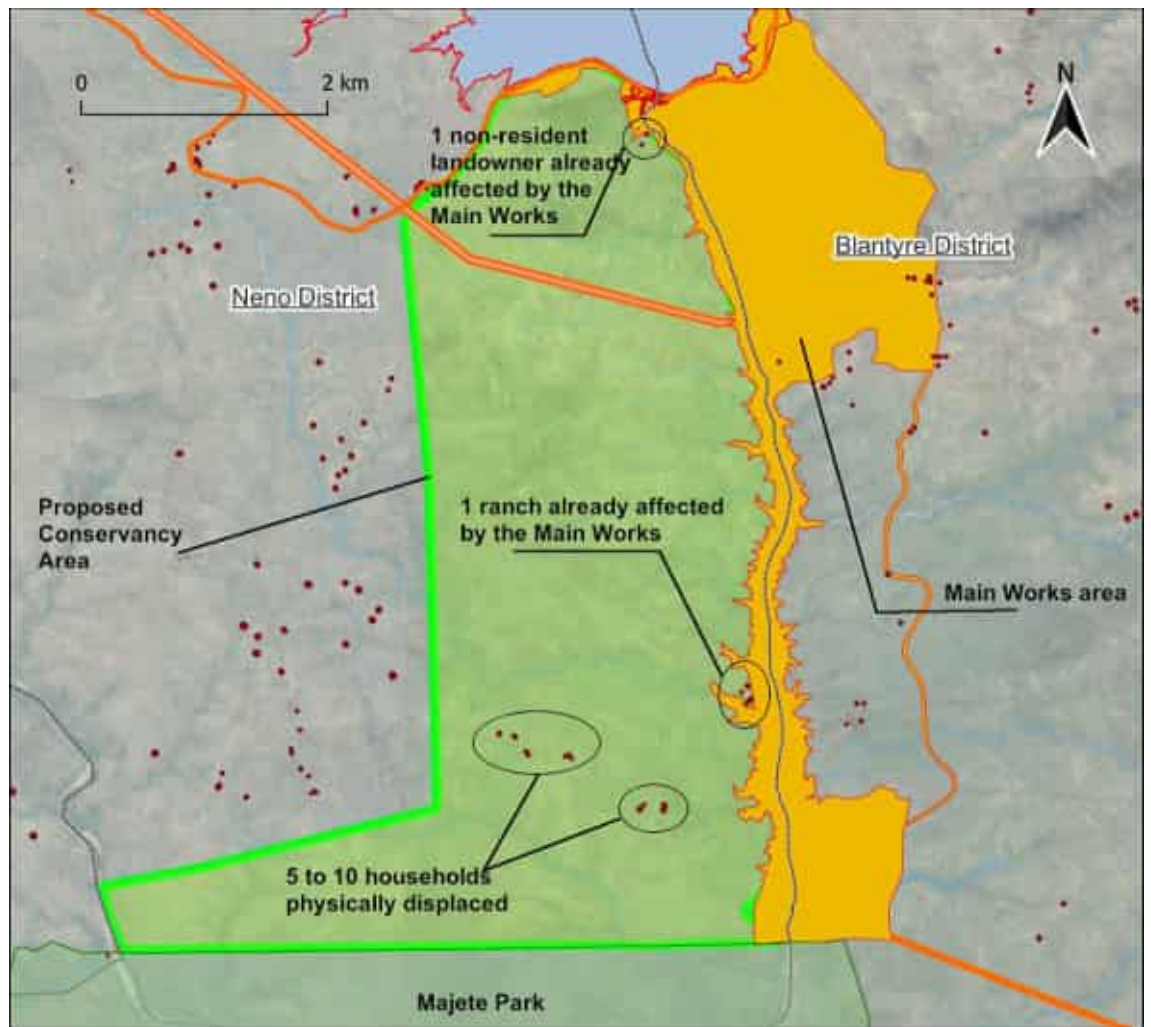
5.5 Estimated Impacts of the Proposed Biodiversity Conservancy Area

The current delineation of the proposed conservancy area is preliminary, the extent and the boundaries of this area will be refined and validated during the finalisation of the Project Biodiversity Action Plan (BAP) in the second half of 2024.

Figure 122 below shows the structures located inside the proposed conservancy area. It is estimated that between 5 and 10 households are residing inside the proposed conservancy area limits. They will be physically displaced. It is estimated that between 30 and 80 households could also be economically displaced. The persons losing lands along the Shire River right banks because of the main works will likely lose the entirety of their land plots, instead of only the part closest to the river affected by the Regulating Reservoir.

In addition, as this conservancy area will be fenced, access to the Sire River from the right bank between the Main Dam and the Regulating dam will not be possible.

Figure 122: Potential Physical Displacement Impacts for the Proposed Biodiversity Conservancy Area





6 Eligibility and Entitlements

6.1 Eligibility

6.1.1 Eligibility Criteria

The Lenders' policies define three categories of people eligible to compensation and/or livelihood restoration measures:

- Persons with formal legal rights to land lost in its entirety or in part;
- Persons who lost the land they occupy or use in its entirety or in part who have no formal legal rights to such land, but who have claims to such lands that are recognized or recognizable under national laws;
- Persons who lost the land they occupy in its entirety or in part who have neither formal legal rights nor recognized or recognizable claims to such land.

These 3 categories of affected people are considered as displaced people, either economically or physically affected.

- People are considered physically displaced if they lose their pre-Project home, defined as place of permanent residence.
- Economic displacement means "loss of assets or access to assets that leads to loss of income sources or other means of livelihood as a result of Project-related land acquisition and/or restrictions on land use".

The categories of affected people described in Section 5 and potentially eligible to the measures of the phased Resettlement and Livelihood Restoration Plans Resettlement Action Plans are presented in Table 45 below. It is important to note that one individual can stand in several distinct categories. For example, one person can lose crops, a home and be a member of a vulnerable household.

Table 45: Categories of People Affected by the Project Land Acquisition Process

Categories of Affected People	Description
Landowners with formal legal rights (leasehold or freehold) and/or persons having a recognized or recognizable customary right to the land	Landowners with a legal land right (both under customary law and/or with formal documentation)
Tenant farmers	Tenants cultivating on affected lands
Informal occupants of land users without recognisable right	Persons using land for which they have no recognised or recognisable ownership right.
Owners of house, dwelling and non-residential structures	Persons who will lose their home (defined as permanent residence), or their structures (ancillary structures, barns, fences, abandoned/derelict houses)
Tenants of residential structures	Persons renting an affected house (either formally or informally)
Custodians of affected cultural heritage elements	People owning or being custodians of affected graves and/or religious structures, such as churches or mosques.
Affected business owners, including owners of Affected Ranches	Business owners who are losing temporarily or permanently their mean of business (shop, or other structure), including owners of the commercial farms or ranches affected by the Project land requirements
Employees of business owners, including employees working on the commercial farms or ranches.	Employees of affected business owners who will lose temporarily or permanently their existing salary



Categories of Affected People	Description
Affected communities	Communities experiencing one of the following impacts: <ul style="list-style-type: none"> • Loss of community structure or assets (such as graveyard, school, borehole or sacred site), • Loss of access to the Shire River, • Loss of communal land (<i>Malo Amudzi</i>, see Section 4.2.3) or communal natural resources.
Vulnerable households	See Section 4.2.15

The resettlement sites identified in Chaswanthaka and Kambalame villages will not impact any host community, as they are in the same village. The Mpindo resettlement site is yet to be identified. Potential impacts of the Mpindo resettlement site on host communities will be assessed in the phased RAP.

6.1.2 Cut-off date

A cut-off date for determining eligibility for compensation or other assistance is intended to help prevent encroachment by opportunistic settlers. It is most effective when it is well communicated, documented, and disseminated, including by providing clear demarcation of areas designated for resettlement. Individuals taking up residence in, or use of, the project area after the cut-off date are not eligible for compensation or resettlement assistance.

One cut-off date will be established for each of the four phased RAPs. This cut-off date will be the date of the end of the census of affected persons and the inventory of their affected land plots and assets. This is the usual practice in Malawi. The cut-off date will be announced and disseminated in the areas covered by each phased RAPs.

Before the start of the census, the cut-off date principles will be explained:

- Public Community Sensitisation meetings will be organised in each group village affected by the Project land requirements, at least two weeks prior to the start of the census.
- In each village directly affected by the Project land requirement, the village chief will be asked to disseminate the information about the census, and a public meeting will be held before the start of the census in each village to explain the RAP process, the census and cut-off date principles, disclose the Project Grievance Redress Mechanism (see Section 11.4.3).

Once the census will be completed, the cut-off date will then be announced and disclosed in each village.

6.2 Entitlements

Table 46 below presents the entitlement matrix. The paragraphs following this table provide additional assistance measures for some specific cases. The Compensation principles are detailed in Section 7, assistance to resettlement is described in Section 8 and the livelihood restoration measures are defined in Section 9.



Table 46:Entitlement Matrix

Type of impact	Eligible Party	Entitlements	
		Compensation in Cash <u>OR</u> Compensation in Kind	Livelihood Restoration
Loss of land	Landowners with legal land rights (both under customary law and/or with formal documentation)	<ul style="list-style-type: none"> • Compensation in cash at full replacement cost <p>OR</p> <ul style="list-style-type: none"> • The households <u>physically displaced</u> (i.e. losing their home) by the Main Reservoir and Main Works from Kambalame, Chaswanthaka and Mpindo villages will be offered in-kind replacement land on the resettlement sites. The households physically displaced in the other villages will be offered assisted self-relocation on a plot they will chose in the same village or GVH. • The Households <u>economically displaced</u> (i.e. losing land without losing their house) will be offered the possibility to choose in-kind replacement land to be identified in the same village or group village over cash compensation, <u>if</u> they are losing productive lands, and <u>if</u> they are in one of the three categories below: <ul style="list-style-type: none"> ◦ Affected vulnerable household (as defined in section 4.2.15); ◦ Losing either the entirety or a more than 30%of their land; ◦ Residing in the affected villages or group villages (i.e. non-resident affected persons will not be offered replacement lands). <p>AND</p> <ul style="list-style-type: none"> • When a land plot is only partially lost, the landowner will have the possibility to request the Project to acquire the entirety of the land plot if the remaining part is not economically viable (to be decided on a case-by-case approach) • Disturbance allowance 	<ul style="list-style-type: none"> • Livelihood Restoration support defined in Section 9 (except non-resident PAP) • Transitional support (except non-resident PAP)
Loss of access to land	Tenant of rented land	<ul style="list-style-type: none"> • No compensation for land • Advance notice to vacate the land (no less than 2 months). • Compensation for unexpired portion of the lease for the land lost • Crops, trees and structures compensated as per the entitlements below. 	<ul style="list-style-type: none"> • Livelihood Restoration support defined in Section 9 • Transitional support
	Land users without recognisable rights	<ul style="list-style-type: none"> • No compensation for land. • Advance notice to vacate the land (no less than 2 months). 	<ul style="list-style-type: none"> • Livelihood Restoration support defined in Section 9



Type of impact	Eligible Party	Entitlements	
		Compensation in Cash <u>OR</u> Compensation in Kind	Livelihood Restoration
		<ul style="list-style-type: none"> • Crops, trees and structures compensated as per the entitlements below. 	<ul style="list-style-type: none"> • Transitional support
Decrease of land value due to permanent restriction of use on the land (easement in the Transmission Lines wayleave)	Landowners with legal land rights (both under customary law and/or with formal documentation)	<ul style="list-style-type: none"> • Easement Agreement: Compensation equivalent to 10% of the value of affected lands. • Disturbance allowance 	<ul style="list-style-type: none"> • Livelihood Restoration support defined in Section 9 (except non-resident PAP) • Transitional support (except non-resident PAP)
Loss of residential structure	House owner residing in the house (Physical displacement)	<p>The affected households physically displaced will have the choice between cash compensation and in-kind compensation.</p> <ul style="list-style-type: none"> • Cash compensation: Compensation at full replacement cost, at least be sufficient to enable purchase or construction of housing of similar or better standing and quality that the house lost, and as a minimum, of housing that meets acceptable minimum community standards of quality and safety. Right to salvage materials before the land is vacated. • <u>OR</u> In-kind compensation: <ul style="list-style-type: none"> ○ For the households physically displaced by the Main Reservoir and Main Works from Kambalame, Chaswanthaka and Mpindo villages: in-kind replacement housing on one of the resettlement sites, built by the Project. ○ For the physically displaced households in the other villages by the other Project components, assisted self-relocation and Project-organised construction of replacement housing (the affected person identifies a replacement land plot in the same village or group village, the Project pays for this land using the land rate defined, and the Project then construct a house on the replacement plot for the affected household). <p>AND</p> <ul style="list-style-type: none"> • Moving allowance • Disturbance allowance 	<ul style="list-style-type: none"> • Livelihood Restoration support defined in Section 9 • Transitional support



Type of impact	Eligible Party	Entitlements	
		Compensation in Cash <i>OR</i> Compensation in Kind	Livelihood Restoration
	Landlord of affected house (not residing in the affected house – no physical displacement)	<ul style="list-style-type: none"> • Cash compensation at replacement cost, • Compensation for unexpired portion of the lease for the residency, as applicable. • Disturbance allowance 	-
	Tenant of affected house	<ul style="list-style-type: none"> • No compensation for the structure, • Compensation for unexpired portion of the lease for the residency, as applicable. • Advance notice to vacate the house (no less than 2 months). • Moving allowance 	-
Loss of uninhabited private structures, such as commercial structures, churches, mosques, and/or ancillary structures not used as housing (foundations, uncompleted buildings)	Structure owner	<ul style="list-style-type: none"> • Compensation at full replacement cost • Right to salvage materials before displacement occurs. • Disturbance allowance 	-
Loss of annual crops, perennial crops and trees	Landowner cultivating/owning crops and trees	<p>Trees will be compensated at full replacement cost. The Project will schedule the land acquisition process to avoid or minimise as much as possible impacts on crops. When and where it will not be possible to avoid impacts on crops, the following principles will apply:</p> <ul style="list-style-type: none"> • Compensation at full replacement cost for crops and trees • No less than 2 months advance notice to vacate the land and right to harvest the crops before the date the land shall be vacated. • Compensation at full replacement cost for improvements on the land made by the landowner • Disturbance allowance 	<ul style="list-style-type: none"> • Livelihood Restoration support defined in Section 9 • Transitional support
	Tenants or sharecroppers cultivating/owning crops and trees	The Project will schedule the land acquisition process to avoid or minimise as much as possible impacts on crops.	<ul style="list-style-type: none"> • Livelihood Restoration support defined in Section 9



Type of impact	Eligible Party	Entitlements	
		Compensation in Cash <u>OR</u> Compensation in Kind	Livelihood Restoration
		When and where it will not be possible to avoid impacts on crops, the following principles will apply: <ul style="list-style-type: none"> • Compensation at full replacement cost, allocation of compensation according to the arrangement (formal contract or informal arrangement) between the landowner and the tenant or sharecropper. • No less than 2 months advance notice to vacate the land and right to harvest the crops before the date the land shall be vacated. • Compensation at full replacement cost for improvements on the land made by the tenant / sharecroppers • Disturbance allowance 	<ul style="list-style-type: none"> • Transitional support
Loss of business revenue	Immovable and formal businesses owners (Including commercial farms or ranches)	<ul style="list-style-type: none"> • In addition to the compensation for the loss of land, structures and/or crops/trees, as compensation for the loss of income for the time required to re-establish the business, one-off allowance equivalent to 3 months of their average net revenue <i>to be based on the documented average net income for the past 2 years.</i> 	-
	Movable and informal businesses owners	<ul style="list-style-type: none"> • In addition to the compensation for the loss of land, structures and/or crops/trees, as compensation for the loss of income for the time required to re-establish the business, one-off allowance equivalent to 3 months of the average net revenue <i>estimated for the business category, based on a business survey.</i> 	-
Loss of income due to loss of employment	Employees or regular workers of the businesses (including ranches workers)	<ul style="list-style-type: none"> • One time allowance equivalent to 3 months minimum wage income in rural areas²⁷ to cover the time needed to find another employment. 	-
Loss of Community Assets	Communities losing assets or structures	<ul style="list-style-type: none"> • No Compensation in Cash • Replacement in-kind or relocation of community assets and structures (such as schools, borehole). 	-
Restriction or loss of access to natural resources	Communities losing access to natural resources – all components	-	Collective Livelihood Restoration Measure for all Phased RAPs: [LR 8] Collective support to improve agricultural production, one measure possible per village, to be chosen amongst the three measures below:

²⁷ As defined by the Ministry of Labour, the minimum rural wage is MK 90,000 per month as of Feb. 2024 (Ministry of Labour 2024). This amount will be updated if and as required during the phased RAPs.



Type of impact	Eligible Party	Entitlements	
		Compensation in Cash <u>OR</u> Compensation in Kind	Livelihood Restoration
			<ul style="list-style-type: none"> Farmer Field Schools, trainings on improved fallow and demonstration plots, OR Support to development of small agro-processing units, OR Support to development of micro-businesses producing agricultural
	<p>Villages affected by restriction of access to the Main Reservoir and Regulating Reservoir</p> <p>In Blantyre District:</p> <ul style="list-style-type: none"> In GVH Kaliati, Lisangwi, Inosi, Chilaulo, Chaswanthaka, Mpindo, Divala and Mbwinja villages, In GVH Mzigala, Mzigala and Mwazilinga villages, In GVH Namputu, Chimphanda, Baluwa, Chikira, Namputu, Kwapita and Chinkwinya villages, <p>In Neno District:</p> <ul style="list-style-type: none"> In GVH Feremu, July, Feremu, Andivuta, Kambalame and Nkhwali villages, In GVH Nsalawatha, Petulo and Jonathan villages, and In GVH Ngwenyama, Nkoka, Liyenda villages. 	-	<p>In addition of the collective livelihood restoration measures above:</p> <ul style="list-style-type: none"> [LR 9] Support to sustainable and green charcoal production [LR 10] Restoration of access to water for domestic and drinking purposes [LR 11] Restoration of livestock access to water [LR 12] Support to develop small scale irrigation [LR 13] Support to fisheries activities for affected communities around the Main Reservoir
Loss of Grave	Grave rightsholder / custodian	<ul style="list-style-type: none"> No compensation in cash The Project will cover all costs for grave relocation 	-
Loss of sacred site	Sacred site rightsholders / custodians	<ul style="list-style-type: none"> No compensation in cash The Project will cover all costs for necessary ceremonies and rituals 	-
All impacts	Vulnerable households	<ul style="list-style-type: none"> Compensation for the loss of land and/or assets (structures, trees, crops) as defined above, plus additional livelihood restoration support. 	<p>Additional Assistance and Livelihood Restoration support for Vulnerable Households (See Section 6.2.4)</p> <ul style="list-style-type: none"> [LR 14] Assistance to land-clearing and/or preparation of agricultural fields [LR 15] Provision of Small Livestock (Goat or sheep)



Type of impact	Eligible Party	Entitlements	
		Compensation in Cash <u>OR</u> Compensation in Kind	Livelihood Restoration
			<ul style="list-style-type: none"> • [LR 16] Support to Develop Beekeeping
<p><i>Note: Entitlements are presented by category of loss and category of affected person. One affected household may qualify for entitlement in more than one category (for example, one household may lose one land plots they own, and at the same time losing access to another land plot they are renting, while losing trees and crops on both land plots. Some households are physically displaced and losing agricultural land at the same time).</i></p>			



6.2.1 Acquisition of Orphan Lands

Orphan lands are unacquired parts of land parcels which are left unusable or undevelopable (either temporarily or permanently) as a result of the Project. When residual non-affected sections of a plot become inaccessible, unusable or economically unviable after acquisition, the totality of the affected land plot will be acquired if the owner so wishes, at the compensation rate defined for lands (see Section 7.1). A residual land plot will be considered unusable or economically unviable when its size (too small), shape or topography are such that the remainder cannot be cultivated or physically accessed, and/or the existing activities that were conducted on the entire land plot cannot be continued after the land acquisition. This will be decided on a case-by-case basis through discussion with the right-holders of the unacquired parts of land parcels.

6.2.2 Livelihood Restoration

Livelihood restoration support will be offered to all affected households. as defined in Section 9.. The livelihood restoration measures include:

- Individual (household-level) livelihood restoration support:
 - [LR 1] Support to open a bank account
 - [LR 2] Training for sustainable management of compensation
 - [LR 3] Transitional Support
 - [LR 4] In-kind Provision of Agricultural Inputs to Restore Crops Production
 - [LR 5] Provision of one bicycle per affected household
 - [LR 6] Support to Development of Off-Farm Economic Activities
 - [LR 7] Preferential Hiring and Skills Training
- Collective (village-level) livelihood restoration support for all villages affected:
 - [LR 8] Collective support to improve agricultural production, one measure possible per village, to be chosen amongst the three measures below:
 - Farmer Field Schools, trainings on improved fallow and demonstration plots, OR
 - Support to development of small agro-processing units, OR
 - Support to development of micro-businesses producing agricultural inputs
 - Collective (village-level) livelihood restoration support for villages affected by the Main works and Main Reservoir:[LR 9] Support to sustainable and green charcoal production,
 - [LR 10] Restoration of access to water for domestic and drinking purposes,
 - [LR 11] Restoration of livestock access to water,
 - [LR 12] Support to develop small scale irrigation,
 - [LR 13] Support to fisheries activities for affected communities around the Main Reservoir,
- Livelihood restoration measures for vulnerable households:
 - [LR 14] Assistance to land-clearing and/or preparation of agricultural fields,
 - [LR 15] Provision of Small Livestock (Goat or sheep), and
 - [LR 16] Support to Develop Beekeeping.

6.2.3 Gender

As indicated in Section 4.2, in the Project affected areas surveyed so far, the land tenure is predominantly organised through matrilineal systems. There are however patrilineal practices or mixed systems in place in some places. Despite the prevalence of matrilinearity in the Main Reservoir and Main Works area, women make less than half of the affected landowners identified



during the surveys performed in November and December 2023 (45% or 285 out of 626, see Section 5.2.1)

Even in villages where matrilinearity prevails, gender inequalities can be translated into risks of land grabbing or tentative of appropriation of compensation by male members of the family (for instance male '*nkhoswe*' or male siblings). The following measures will be implemented to minimise and mitigate these risks:

- Gender specific measures are defined for the consultation with affected households during the phased RAPs (see Section 11).
- MHPL will recruit a Gender-Based Violence (GBV) service provider to manage potential cases of GBV, provide support to victims. This GBV Service provider will be presented to the affected communities during the public consultations as part of the phased RAPs process.
- The Grievance Redress Committees will be trained on GBV (the Grievance Redress Committees already established in 2023 have already been trained), and on potential gender-related risks for the compensation process (such as land grabbing by men or misuse of households' compensation by men).

In addition, the following measures will be implemented during the interaction with affected households during the phased RAPs:

- To ensure women participate in the compensation process and are aware of the compensation provided to the households, the individual disclosure of the compensation packages will be done during one meeting with both spouses and all adults members of the households (including daughters and sons).
- It will be offered to affected households to establish compensation agreements in the names of both spouses or heads of household,
- The Project will ensure that both spouses are informed of the household's entitlements, compensation amount and payment process during individual meetings.
- Training on the sustainable management of received compensation will be provided to affected households. This training will include women-only sessions, as well as sessions where both spouses will participate together.

6.2.4 Vulnerable Households

In addition to other compensation and livelihood restoration measures, the vulnerable households affected by physical or economic displacement will be eligible to the measures below:

- Assistance to Physically displaced vulnerable households in their move, by providing a vehicle to transport their belongings (see Section 8.5),
- Specific livelihood restoration measures (see Section 9.4):
 - [LR 14] Assistance to land-clearing and/or preparation of agricultural fields
 - [LR 15] Provision of Small Livestock (Goat or sheep), and
 - [LR 16] Support to Develop Beekeeping.



7 Valuation Methodology

This section provides the methodology to assess the replacement cost of the affected assets and the compensation principles (Section 7.1) and the process for payment of cash compensation to the affected households (Section 7.2).

The compensation rates provided in the next Section 7.1 are provided to illustrate the valuation methods and to estimate the compensation budget (see Section 15.2). During the preparation of each phased RAP, a valuation exercise will be performed, and compensation rates will be updated as necessary, based on market surveys.

7.1 Valuation Methodology and Compensation principles

7.1.1 Methodology

During the preparation of this Resettlement Policy Framework, a high-level market survey was performed by two Resettlement specialists and one accredited Valuer between the 22 and 29 January 2024. This survey included the following activities:

- Visit and high-level market survey at Chikuli Market (TA Kunthembwe, Blantyre District) and Chifunga Market (TA Mlauli, Neno District), the markets closest to the project site and used by members of the impacted communities,
- Interviews with key informants in the affected communities, to obtain information on cost of local assets, the ruling prices and expenses involved,
- For triangulation purposes, various District Officers were met to collect their experience on compensation processes and information relating to structures, land, trees, crops and movement to and from the area.

These activities are summarised in Table 47 below.

Table 47: Activities performed to inform the Valuation Methodology

Date	Activity
23/01/2024	Interview of Environmental Officer at the District Lands Office - Blantyre
	Interview Extension Planning Area Kunthembwe Agricultural Development Co-ordinating Officer - Blantyre
	Interview with Group Village Head Kaliati (TA Kunthembwe, Blantyre District)
24/01/2024	Visit of Chikuli Market (TA Kunthembwe, Blantyre District) Interview with Market Chair and various stall holders. Documentation of market prices for a basket of goods
	Interview in Group Village Head Feremu (TA Mlauli, Neno District) Interview in a Ranch in Feremu GVH (TA Mlauli, Neno District), interview with shop clerk and foreman Visit of Chifunga (TA Mlauli, Neno District). Documentation of market prices for a basket of goods
26/01/2024	Interview with Forestry Department Regional Planning Officer, on trees compensation rates - Blantyre
	Interview with Plant Specialist Bvumbwe Research Station on trees, and yields of different species
	Interview with Regional Valuation Officer from the Valuation Department of the Southern Region Land Office - Blantyre
29/01/2024	Interview with Blantyre Livestock Officer at Blantyre District Agricultural Office



The prices and rates indicated in the next paragraphs are indicated in Malawian Kwacha (MK). There is an important and continuous inflation in Malawi for the past years²⁸, which led to a devaluation of the Kwacha in November 2023. To facilitate comparison or adjustment of the rates indicated in this report during the phased RAP preparation and implementation, the equivalent of the prices is also given in US Dollar²⁹.

7.1.2 Compensation Principles

7.1.2.1 Choice between cash compensation and In-kind Compensation

In case of physical displacement, the World Bank ESS5 and IFC PS5 require to offer choice between in-kind adequate housing with security of tenure or cash compensation at replacement cost. Compensation in kind should be considered in lieu of cash where livelihoods are land-based. The Lenders policies also require that for persons only economically displaced whose livelihoods are land-based, replacement land that has a combination of productive potential, locational advantages, and other factors at least equivalent to that being lost will be offered where feasible.

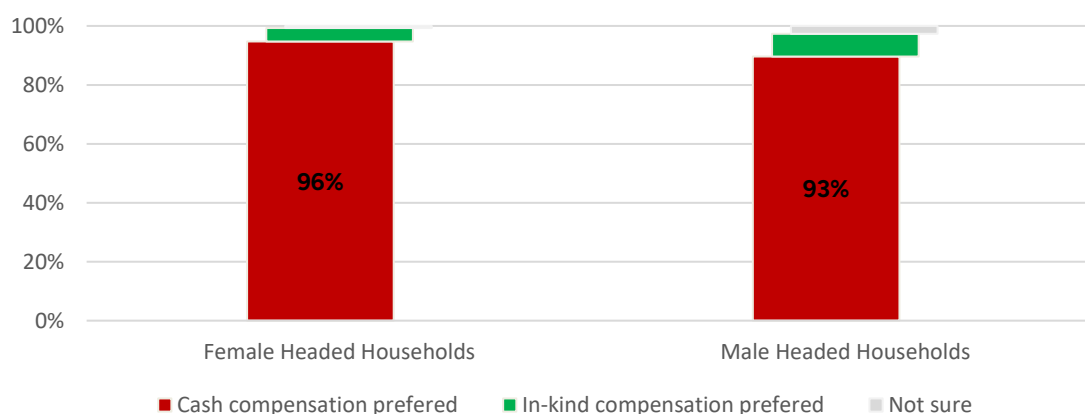
The affected households' livelihoods are predominantly land-based, as indicated in section 4.2. Therefore, the project will offer a choice between in-kind compensation and cash compensation. Replacement cost will be the basis for cash compensation, as indicated in Section 7.1.2.4. Approaches for in-kind compensation are outlined below and are further detailed in Section 8 Assistance to Resettlement.

7.1.2.2 Preferences of Surveyed Affected Households

During the 2023 quantitative socioeconomic surveys, the majority of surveyed affected households (94%) expressed they would prefer cash compensation over in-kind compensation, as indicated in Figure 123. It must be noted that this preference was expressed before the in-kind compensation options were prepared by the Project.

In June 2024, focus groups discussions were organised with men and women physically displaced, to present them the overall approach for the resettlement sites and the principles of in-kind compensation. In most cases, while most men reported their preference for the cash option, most women preferred in-kind compensations, reporting serious concerns that cash compensations would favour the misuse or theft of funds by husbands and/or other parties. In contrast, in-kind compensations, given the prevalent matrilineal systems in place in the area, would safeguard overall security, including in case of separation. Further consultations will be organised (see Section 11) to explain the in-kind options to the affected households.

Figure 123: Preference between cash and in-kind compensation amongst affected households surveyed in 2023, disaggregated by gender of household's head



²⁸ 9.3% in 2021 and 21% in 2022, according to the African Development Bank (<https://www.afdb.org/fr/countries/southern-africa/malawi/malawi-economic-outlook>)

²⁹ Exchange rate used: 1USD ~ 1,683 MK (<https://www.xe.com/currencyconverter/>, 21 March 2024)



7.1.2.3 Approach for Compensation in Kind

For physically displaced households, two approaches will be proposed:

- For the households physically displaced by the Main Reservoir and Main Works from Kambalame, Mpindo and Chaswanthaka villages: **in-kind replacement land and housing** will be offered as in-kind compensation **on the resettlement sites**. Two resettlement sites have already been identified for the Project in Kambalame and Chaswanthaka (see Section 8.1.1). These two resettlement sites are located in the two villages where a whole part of the village will be impacted by physical displacement (more than 30 households physically displaced in Chaswanthaka village, about 30 in Kambalame village). About 10 to 25 households could also be physically displaced by the Main Works in Mpindo village. The Project will identify a third resettlement site in Mpindo village, as indicated in section 8.1.
- Apart from Chaswanthaka, Mpindo and Kambalame villages, physical displacement impacts will (i) either be limited to a small number of households per village for the Main Reservoir and Main Works (1 to 6 households, see Table 36) (ii) or be caused by linear components (S137 road and the two transmission lines). For these other physically displaced households, **assisted self-relocation** will be offered as in-kind compensation. This assisted self-relocation will include the steps outlined below and detailed in Section 8.1.4:
 - Identification of suitable replacement land in the same village or GVH with the affected household. The replacement land should respect several criteria: productive potential and locational advantages, minimum size based on the size of the affected household, maximum size based on the size of the productive land lost by the household. The replacement land could be from available un-used community land or privately used land under customary tenure.
 - Acquisition of the replacement land by the Project, using the land rate defined in Section 7.1.3.
 - Construction of replacement housing on the replacement land by the Project,
 - Hand-over of the replacement housing and land to the affected household, with security of tenure.

For economically displaced households losing land, a choice between cash and in-kind compensation will be offered only for cultivated and productive lands. Unused lands will be compensated in cash. The process will be the same as the assisted self-relocation outlined above, without the construction of replacement housing.

7.1.2.4 Replacement Cost as the Basis for Cash Compensation

The constitution of the Republic of Malawi requires that the project-affected people to be appropriately compensated for the loss of their assets. The World Bank ESS 5 requires that compensation to be on replacement cost basis. The World bank ESS5 defines that replacement cost for assets as: *"a method of valuation yielding compensation sufficient to replace assets, plus necessary transaction costs associated with asset replacement. Where functioning markets exist, replacement cost is the market value as established through independent and competent real estate valuation, plus transaction costs. Where functioning markets do not exist, replacement cost may be determined through alternative means, such as calculation of output value for land or productive assets, or the undepreciated value of replacement material and labor for construction of structures or other fixed assets, plus transaction costs."* (WB ESS5 §2 footnote 6).

Replacement Cost is used as the basis to define the compensation rates, using the methods defined in the next paragraphs.



7.1.3 Compensation for Land

As indicated in Section 2.2.4, the lands in the existing road reserve will not be compensated, as the Ministry of Transport and Public Works already owns the road and the land of the existing road reserve. The lands for the new sections of roads to be created by the Project will be compensated.

For the lands affected by the two Transmission Lines, the lands needed for the pylons will be acquired and compensated. The lands in the Transmission Lines wayleave will not be acquired, but restriction on land used will be established, as indicated in Section 7.1.3.3.

7.1.3.1 Compensation in kind

A choice between compensation in kind and compensation in cash for land will be offered to:

- The households physically displaced (i.e. losing their home) by the Main Reservoir and Main Works from Kambalame, Chaswanthaka and Mpindo villages will be offered in-kind replacement land on the resettlement sites.
- The households physically displaced in the other villages will be offered assisted self-relocation on a plot they will choose in the same village or GVH.
- The Households economically displaced (i.e. losing land without losing their house) will be offered the possibility to choose in-kind replacement land to be identified in the same village or group village over cash compensation, if they are losing productive lands, and if they are in one of the three categories below:
 - Affected vulnerable household (as defined in section 4.2.15);
 - Losing either the entirety or a more than 30% of their land;
 - Residing in the affected villages or group villages (i.e. non-resident affected persons will not be offered replacement lands).

A Replacement land on the resettlement sites

Replacement land on the resettlement sites will be offered to physically displaced households from Kambalame village in Neno District and from Chaswanthaka and Mpindo villages in Blantyre District (see Section 8.1).

At the time of writing this RPF, the Chaswanthaka and Kambalame resettlement sites had been identified (see Section 8.1). A participatory process will be followed to develop the layout of these resettlement sites together with the affected persons and the local authorities. The area to be developed for Chaswanthaka resettlement site will be acquired during the Early Works RAP, to allow a development of the resettlement site before the start of the Main Works (as Chaswanthaka village will be affected by the Main Works). The area to be developed for the Kambalame resettlement site will be acquired during the Main Works RAP, to allow a development of the resettlement site before the start of the Main Reservoir RAP (as Kambalame village will be affected by the Main Reservoir).

The Mpindo Resettlement site was yet to be identified. Some preliminary discussions with the village chief allowed to identify potential areas. Further investigations will be undertaken to assess the different options available, and select the best one, together with the local authorities. The same participatory process will be followed to define the layout of the site and the replacement housing design. The area for the Mpindo Resettlement site will be acquired during the Early Works RAP, to allow a development of the resettlement site before the start of the Main Works (as Mpindo village will be affected by the Main Works).

B Replacement land outside of the resettlement sites:

Preliminary investigations were performed in June and July 2024 to assess if replacement lands were available in the villages affected by the Main Reservoir and the Main Works. Villages chiefs were met to identify if and where potential replacement lands were available. Replacement lands would be available in about half of the villages affected by the Main Reservoir and the Main Works. In the other half, the quantity of land available is not enough for all economically displaced households in the village. Therefore, further investigations will be performed during the



preparation of the phased RAP to identify replacement lands in the affected villages and group villages.

The S137 road upgrade works in Blantyre district will take place inside the existing road reserve, which is the property of the Ministry of Transport and Public Works. As per the Public Roads Act (2017 Amendment), compensation is due for damages caused surface rights on parcels occupied in the road reserve for roads works (i.e. buildings and crops or trees). No compensation is due for the land in the existing road reserve. Therefore, along the existing sections of the S137 road to be upgraded in Blantyre District, replacement lands will be only offered to physically displaced households, as part of the assisted self-relocation package.

Replacement lands outside the resettlement sites will be identified in a participatory manner village by village during the preparation of the phased RAPs. The households who choose to receive replacement land over cash compensation will have to find replacement lands in the same village or group village. The Project will buy the replacement land once they are identified and once the affected persons have chosen this option and selected their replacement lands. The minimum and maximum areas for replacement land (in-kind compensation) per household are outlined below. They are detailed in Section 8.1.4:

- 0.1ha for residential area for households physically displaced
- 0.5ha as a minimum for farming lands, for a household of 2 persons, then 0.2ha per person,
- 5 ha as a maximum for replacement farming lands (75% of the affected households have less than 5ha of land affected).

The identification of replacement lands for physically and economically displaced households will be performed village by village as follows:

- In the villages affected by the Main Works and Main Reservoir: from the start of the Public Disclosure of this RPF up to the start of the preparation of the Main Works RAP and Main Reservoir RAP,
- In the villages affected by the S137 road works: from the start of the preparation of the Early works RAP,
- In the villages affected by the 400kV and 132kV Transmission Lines, from the start of the preparation of the Transmission Lines RAP.

7.1.3.2 Compensation in Cash

This section provides the method to establish the full replacement cost for cash compensation for affected lands.

Two categories of lands will be considered for land compensation:

- Customary lands, used as agricultural as well as residential lands,
- Private lands (leased or freehold).

The replacement cost for each category is indicated in the next paragraphs.

A Customary lands – Agricultural and Residential Lands

In rural settings in Malawi, there is no difference between residential and agricultural lands. Generally, land is for agriculture and the owner decides where to construct his/her house. As such the value of agricultural and residential lands is considered to be the same.

This is applicable and has been confirmed through the surveys for the Main Works and Main Reservoir areas. This will also be the case for the 132kV Transmission Line area, located in a remote rural setting, as well as the 400kV Transmission Line.

This approach will be confirmed - and amended if necessary – during the preparation of the Early Works RAP, for the section of the S137 road close to Chileka international airport, close to Blantyre City, located in a peri-urban setting, and during the preparation of the other phased RAPs.



A.1 Market Value

Several approaches have been used to determine the market value for customary agricultural land:

- Comparable sales method,
- Profit method, and
- Comparison with land compensation rates used by other projects.

These three approaches were used to assess the market value for land, as described in the next paragraphs.

a Comparable Sales Method

The comparable sales approach is the most common method of land valuation. It relies on market information and local transactions to value the land. The underlying concept is that a recent sale from a willing seller to a willing buyer of a property (the comparable property) can best reflect the value of a similar property (the subject property) in the vicinity. This method models the behaviour of the market by comparing the subject property under valuation with similar property or properties that have recently sold or for which offers to purchase have been made. It assumes that a rational and prudent buyer will not pay more for the comparable property, while a seller in the same situation will not accept less for the same property. The sales price finally reached reflects the equilibrium of supply and demand for land in a given market. Therefore, if the subject property under valuation were offered for sale in the same market about the same time, the transaction would be completed at approximately the same price.

However, the survey conducted did not provide true comparable data as sales transactions in the project area are very seldom recorded. Most transactions were found to be informal and could rarely be considered to comply with the market value definition by International Valuation Standards Council³⁰. When asked how much an acre could sell at, Group Village Headmen on both sides of the Shire River tended to agree on a value of MK1,300,000 (~ \$772), translating to approximately MK3, 212,300 (~ \$1,908) per hectare.

b Profit Method

To verify the opinion of the two village headmen on the price of land per acre, a second method of land valuation has been used. This is the profit method, focusing on the productive value of land. It assumes that the value of farmland is directly linked to the income generated from the sale of crops produced on the target land. As this rate is linked to the productive capacity of the land, it is not subject to any speculative development or abuse of land-prices over time. The productive value of land is examined using appropriate agro-economic techniques. This typically work with examining the types of crops prevalent, yields, cost of inputs, and market returns on products. The average crop production yields of the major local crops must be determined using the estimated yields provided by the Department of Agriculture and then validated with local farmers. In this work, local market rates have been determined from market studies in the area and in Blantyre.

During the market survey, current prices of goods were collected. It was observed that most of the gardens/farmed allotments had maize that was growing. This was frequently intercropped with different crops. The dominant being maize, the farming activities considered in the methodology to determine the unit value of land have been those to do with maize growing. The normal farming activities from the start of a growing season were recorded. To estimate the net revenue per acre, the gross revenue and the production cost were estimated.

- Production costs: Each activity has been costed based on farmers' opinion. Through this, the production costs amounting to MK625,000 (~ \$371) per acre has been obtained.

³⁰ The definition of Market Value from the International Valuation Standards Council is: " the estimated amount for which an asset or liability should exchange on the valuation date between a willing buyer and a willing seller in an arm's length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion." Source: <https://www.ivsc.org/standards-glossary/>



- Gross revenue: The typical upper quintile yield of Maize has been determined to be at 1,250kg per acre (as per surveys performed in 2023 and as per the District Agriculture extension worker met). A product of the tonnage and the ruling price per kilogram of maize 'at the farm gate' documented at 800MK per Kg yielded a gross revenue of around MK1,000,000 (~\$594).

The net income of MK375,000 (~ \$223) per acre was obtained (= gross revenue – production cost). This equates to a net income of MK926,644 (~ \$540) per hectare of land.

A capitalisation rate has then been applied. The capitalization rate normally includes both a discount rate and a recapture rate. The discount rate represents the present worth of all future incomes produced by the subject property. The recapture rate represents the annual amount needed to provide a return on the investment over the period the investment is held. If income from a land investment is forecast to be level in perpetuity, or level income is forecast, and little change is expected in the capital value of the income-producing land, then the recapture portion may not be necessary. In such cases, the capitalization rate is the same as the discount rate.

There are basically two methods to derive a discount rate: direct capitalization and yield capitalization. In direct capitalization, the assessor analyses the relationship between current year income and sale price of comparable property to come up with an overall capitalization rate. In yield capitalization, however, many factors (such as degree of risk and the nature of the income stream) are to be considered by the assessor to develop an appropriate discount rate. Compounding interest is often used in deriving the present value of future incomes from an income generating property. Compound interest functions are based on the concept of the time value of money: an amount of money receivable or anticipated as income in the future is always worth less than an equal amount in the hand now. Conceptually, it is the same process as valuation of land under this approach.

Therefore, when using the yield capitalization method, the current lending interest rate is often applied as the discount rate for estimating the present worth of all future income streams to be generated by the land. The current bank lending rate of 26% has been applied to the agricultural land, applied to a 'perpetuity' years purchase (length of time within which the farmer get value for his/her land), as per the formula below:

$$\text{Net annual income from maize cultivation (per ha)} \times \frac{1}{\text{bank lending rate of 26\%}}$$

The end result is a unit value of MK3,560,000 (or ~ \$2,115) per hectare.

c Comparison with other Compensation Processes

The opinions of the community leaders in the area estimated the unit value at MK3,200,000 (~ \$1,901) per hectare. And the profit method has calculated it at Mk3,560,000 (\$2,115). However, according to the Regional Valuation Officer interviewed, other compensation processes like one at Kangankude in Balaka District and Kholongo Dam project in Dowa used a land compensation rate at MK3,500,000 (~ \$2,079) and the recent MOMA Transmission Line Project (in Mwanza, Neno and Balaka District) used MK4,000,000 (~ \$2,376) for customary lands (ESCOM 2021). It is therefore proposed that a unit value of MK3,560,000 (Approx \$2,115) per hectare be adopted as the current indicative rate for customary land used for agricultural and residential purpose. This value is consistent with land values in other areas across the country and when triangulated with the results from the comparable sales approach is also consistent.

This value will be adjusted if and as necessary during the valuation for the phased RAP by:

- Using the inflation rate of the US\$, or
- By adjusting the net annual income from maize cultivation through agronomic and market surveys and adjusting the bank lending rate.

A.2 Transaction cost

In addition to the land value defined above, the transaction costs should be added to obtain the full replacement cost. For Customary lands, it is customary to give an appreciation "token" or



informal gift to the local traditional leader, locally known as '*Chipondetsa Minga*', as indicated in Section 4.2.3. Although this token is expected by the chiefs, as it is a *de facto* practice in Malawi, but is most of the time in the form of in-kind gifts. As there is no rule defining how this 'token' should be offered, or how much it should be, it will be covered by the Disturbance Allowance paid as part of the compensation to affected households (see Section 7.1.7).

B Private and Leased Lands

Two cases of land parcels under leasehold have been identified in the Main reservoir and Main works area. The comparison method was used to determine the value of leasehold lands. This method considered the asking prices for leasehold lands of farms in Blantyre and Thyolo districts, indicated in Table 48 below.

The leasehold land in the Project area is of inferior nature to the available comparable leasehold lands indicated in Table 48. Therefore, due to proximity to the main transportation lines, fertility of the soil, rain patterns and improvements on the land, the land value for leasehold farms/estate without improvements is estimated to MK4,500,000 per ha (~ \$2,674). This amount includes the transaction cost.

Table 48: Comparison of Leasehold Land Values

District where the leasehold land compared is located	Land size (ha)	Total asking price (MK)	Land value per ha	
			MK	USD*
Blantyre District	546	3,500,000,000	6,410,256	~ \$3,809
Thyolo District	700	3,800,000,000	5,428,571	~\$3,226
	500	2,500,000,000	5,000,000	~\$2,971

* Exchange rate used: 1USD = 1,683 MK

7.1.3.3 Easement Agreement for the Restrictions on Land Use under the Transmission Lines

Along the two transmission lines, the land for the pylons will be acquired by the Project and transferred to ESCOM for the operation. Outside the pylons' bases, the land in the wayleave will not be acquired by the Project, but restriction on land use will be established. It will be prohibited to erect buildings in the wayleave, and to grow crops other than annual crops. Even though the affected landowners will retain the property of the land, the land value may decrease because of these restrictions on land use. To compensate this decrease in the land value, an easement agreement will be established, and the landowners will receive a one-off easement fee equivalent to 10% of the affected land value. The land value will be calculated as per the replacement cost methodology defined in the previous sections.

7.1.4 Compensation for Building and Structures

7.1.4.1 Compensation in kind for houses.

Physically displaced households from Kambalame in Neno District and from Chaswanthaka and Mpindo in Blantyre District will be offered a replacement dwelling on the resettlement sites (see Section 8.1).

Households physically displaced in other villages will be offered replacement house as part of the assisted self-relocation as in-kind compensation option.

In both cases (resettlement sites or assisted self-relocation), the Project will use contractors to build the replacement housing. Categories of houses will be defined, based on the size of the affected households, and standards of the affected houses.

The minimum standard for replacement houses will be:

- A minimum size of 35 square meters,
- Construction standards as follows: bricks walls, cement floor, windows glazed in wooden frames, corrugated iron sheets roof (category H6 in Table 49)



Replacement houses will include a kitchen and latrine and bathroom, but they will not include non-residential ancillary structures such as kraal or fences. These non-residential structures will be compensated in cash only, and will be re-built by the affected persons themselves.

7.1.4.2 Compensation in cash for Private Structures

This section provides the method to establish the full replacement cost for cash compensation for affected private buildings and structures. Private structures are all buildings and structures which are not community or Government-owned. This includes residential structures (houses and ancillary structures such as kitchen), as well as commercial buildings (shops).

The most recommended method of valuation for structures is by using the comparison method. However, as stated earlier, this method works where the market is documented and formalised. But this is not the case in the Project area. Therefore, the cost method will be used to determine the unit rates for the structures.

This approach to valuation (also known as the contractor's method) is based on the economic theory of substitution. The underlying theory is that the potential buyer in the exchange described in the market value definition would not pay any more to acquire the asset being valued than the cost of acquiring an equivalent new one. This method involves assessing all the costs of providing a current equivalent asset using pricing at the valuation date. To assess the price that the buyer would pay for the actual asset, depreciation adjustments have to be made to the gross replacement cost to reflect differences between it, and the current equivalent. These differences reflect factors such as the comparative age or remaining economic life of the actual asset and comparative efficiency and functionality. However, to meet the definition of Replacement Cost under World Bank ESS5, depreciation and costs of salvageable materials have not been considered.

Most of the structures in the project area are temporary and semi-permanent, very few are permanent structures (see Section 4.2.11.2). The method for determining the unit cost for a dwelling structure was by proposing a hypothetical dwelling structure typically found in the project area. A dwelling of 7m by 5 m (35m²) was used as the basis. During the high-level market survey in January 2024, gross replacement costs of the buildings were obtained with floor areas measured externally. This Quantities and cost of materials, labour and transport for materials for a construction of a house of 35 square meters were estimated. This generated a gross replacement cost of a new building. This gross replacement cost was divided by the total floor area of the house to obtain a cost of construction per square meter. Different types of structures of different finishings were considered as prevalent in this rural set-up. This also required different amounts and nature of materials which resulted in different unit costs. Table 49 below provides the replacement cost for the different categories of structures.

As per the World Bank ESS5, "in all instances where physical displacement results in loss of shelter, replacement cost must at least be sufficient to enable purchase or construction of housing that meets acceptable minimum community standards of quality and safety" (WB ESS5 §2 footnote 6). Therefore, a minimum compensation package for affected houses should be defined and applied. The house category H4 in Table 49 will be applied as the minimum standard for compensation in cash of all primary residential structures (houses) affected.

Table 49: Compensation Rates for Structures

Structure Category	Description		Unit	Unit rate	
				Kwacha	USD*
Houses and commercial buildings	H1	Walls: mud and wattle -composed of poles, Thatched roof	m ²	20,000	12
	H2	Walls: sundried bricks – earth floor – windows glazed, Thatched roof	m ²	48,000	29
	H3	Walls: burnt bricks – earth floor – windows glazed, Thatched roof	m ²	55,000	33
	H4	Walls: sundried bricks – earth floor – windows glazed in wooden frames, Roof: Corrugated Iron Sheets	m ²	64,000	39



Structure Category	Description		Unit	Unit rate	
				Kwacha	USD*
	H5	Walls: Burnt bricks – earth floor – windows glazed in wooden frames, Roof: Corrugated Iron Sheets	m ²	70,000	42
	H6	Walls: Burnt bricks – cement floor – windows glazed in wooden frames, Roof: Corrugated Iron Sheets	m ²	95,000	57
	H7	Walls: Burnt bricks – cement floor, Plastered inside - windows glazed, Roof: Corrugated Iron Sheets	m ²	110,000	66
	H8	Walls: Burnt bricks – cement floor, plastered inside and outside - windows glazed, Roof: Corrugated Iron Sheets	m ²	120,000	72
	H9	Walls: Burnt bricks – cement floor, plastered inside and outside - painted- windows glazed, Roof: Corrugated Iron Sheets	m ²	130,000	78
Kitchen	K1	Kitchen – Grass-walled with poles	m ²	20,000	12
	K2	Kitchen – Grass-walled with poles and Thatched roof	m ²	25,000	15
	K3	Kitchen – walls: sundried bricks, earth floor and Thatched roof	m ²	35,000	21
	K4	Kitchen – walls: sundried bricks, earth floor and Roof: Corrugated Iron Sheets	m ²	40,000	24
	K5	Kitchen – walls: burnt bricks, earth floor and Roof: Corrugated Iron Sheets	m ²	45,000	27
Latrine	L1	Pit latrine – pole and grass walled	m ²	35,000	21
	L2	Pit latrine – wall: sundried bricks, earth floor, thatched roof	m ²	40,000	24
	L3	Pit latrine – wall: burnt bricks, earth floor, thatched roof	m ²	45,000	27
Bathroom	B1	Bathroom – grass-walled and poles	m ²	10,000	6
	B2	Bathroom walls: sun dried bricks – earth floor, thatched roof	m ²	15,000	9
Fence	F1	Fence- poles and grass	Linear meter	20,000	12
	F2	Fence – sun-dried bricks	Linear meter	25,000	15
	F3	Fence – burnt bricks	Linear meter	30,000	18
Kraal	K1	Poles	m ²	5,000	3
	K2	Reed	m ²	3,500	3
	K3	Trunks	m ²	6,000	4
	K4	Bricks	m ²	10,000	6
Pigsty	P1	Pigsty – trunks	m ²	6,000	4
	P2	Pigsty – sundried bricks and grass	m ²	25,000	15
Pigeonry	Pg	Bamboo and grass thatched	m ²	20,000	12

* Exchange rate used: 1USD = 1,683 MK

7.1.4.3 Community Structures and Government-owned Structures

The Gov. of Malawi will rebuild the affected Government owned structures, such as schools or health centres. Boreholes affected will be replaced in-kind.

7.1.5 Compensation for Crops and Trees

7.1.5.1 Valuation of Timber Trees

According to the Forestry Department Officer met, valuation of trees in protected areas like government forests follows the Forestry gazette. The gazette currently used is that of 2010. However, the Department of Forestry has proposed new rates which await ministerial consent. These rates are indicated in Annex 6. The Project will not affect any protected area.



According to the Forestry Officer at the Regional Forestry Office, valuation of trees on private land follows the normal market approach where supply and demand determine the selling price. As the Forestry Department is yet to introduce new rates, the Project will use the market approach where values are fixed by market forces. As the use of the Forestry Department rates is not required for compensation of private forests or timber trees, the valuation to be done during each phased RAP will have to determine the market value of the timber trees affected.

The price of a tree in the Gazette is per cubic metre of timber. During the assessment for tree compensation in the phased RLRPA, an inventory of the affected timber trees privately owned will be done. A simple method to estimate the value of each tree will be to measure the trunk base diameter. Table 50 below gives the market value of the timber trees for the main trees' species, based on the trunk diameter, given during the interviews with villages heads in January 2024. These rates will have to be updated based on the market value at the time of each phase RAP valuation.

Table 50: Proposed Replacement Cost for Timber Trees

Type of tree (as per the Forestry Department gazette list, see Annex 6)	Trunk base diameter	Cost	
		Kwacha	USD ³¹
Indigenous trees (such as <i>Combretum imberbe</i> or Msimbiti, <i>Trichilia emetica</i> or Msikidzi or Msyunguti, <i>Sterculia</i> species or Msetanyani or Mayamba or Chitondo)	< 10cm	8,000	~ 5
	10 to 20 cm	12,000	~ 8
	> 20 cm	24,000	~ 15
Exotic trees (such as cypress, eucalyptus, pinus)	< 10cm	10,000	~ 6
	10 to 20 cm	15,000	~ 9
	> 20 cm	30,000	~ 18

7.1.5.2 Valuation of Fruit Trees and Perennial Crops

As indicated in Section 4.2.10.3, the affected households cultivate a variety of fruit trees (Mango, Coconut, Tangerine) and perennial crops (Banana, sugarcane, Papaya).

Seedlings of productive fruit trees and perennial crops will be compensated at seedling price.

Replacement cost for productive fruit trees and perennial crops is defined as lost revenue until a new planted seedling will reach its highest productivity state (age). Calculation of this value will be based on:

- Productivity of the different species of tree at the different productive stage or age of the tree (which will be defined with the District Agriculture Officers and a market survey during the valuation done as part of the phased RAP);
- Average net value of the tree product (deduced of inputs) at farm gate market price; and
- Number of years needed to re-grow the tree to its highest productive stage (age). This will be defined with the District Agriculture Officers for each category of fruit tree and perennial crop.

The formula to compensate productive fruit trees or perennial crops will be:

$$C = C_s + (K \times V - M) \times L$$

Where:

- C is compensation value of tree;
- C_s is cost of one seedling;
- K = average annual productivity of one tree of the same species and age group as cut tree (in kg per tree);
- V = market price at farm gate of 1kg of product;

³¹ 1 USD = 1,683 MK



- M = average annual expenses for agricultural works;
- L = years to be compensated (years needed to re-grow the tree to its highest productive stage).

7.1.5.3 Valuation of Annual Crops

The Project will schedule the land acquisition process to avoid or minimise as much as possible impacts on crops. When and where it will not be possible to avoid impacts on crops, impacted crops will be compensated at the prevailing market value of the crops irrespective of their level of maturity at the time of the asset inventory.

With respect to seasonal crops, that constitute the largest share of crop cultivation in the project area, these will be compensated at the prevailing market value of the crops irrespective of their level of maturity at the time of the asset inventory.

Market prices for crops will be sourced from the markets used by the affected persons (i.e. Chikuli market for the Main Reservoir and Main Works areas) The market price used will be the highest of the year (i.e. during the months of January-February or the 'hunger months'). The yield shall be the highest of that particular crop as determined by the Ministry of Agriculture. Land size will be determined by measuring and the area generating yield. The yield will be multiplied by the market price of the crop as prevailing in the market. Crop prices per kilogram are highly variable but an overview as per the market survey at Chikuli Market are set out in Table 5 below. The formula to be used is:

Compensation for 1 square meter of affected crop = average annual productivity (kg per sq.m) × highest market price



Table 51: Market prices for Crops Chikuli Market January 2024

Goods	Unit of measurement	Price per Kg as of 24/1/2024 MK	Low price per Kg during post-harvest period MK
Maize	50 Kg sack	5,500 (~\$3.2)	1,200 (~\$0.7)
Soya	Kg	1,200 (~\$0.7)	450(~\$0.3)
Beans (Red Kidney)	Kg	3,000 (~\$1.1)	1,000(~\$0.6)
Sorghum	Kg	1,500 (~\$0.9)	500 (~\$0.3)
Ground Nuts	Kg	3,000(~\$1.1)	1,200 (~ \$ 0.7)
Pigeon Peas	Kg	2,500 (~\$1.5)	800 (~\$ 0.5)
Cow Peas	Kg	2,500 (~\$1.5)	2,500(~\$1.5) – tends to remain constant
Sweet Potatoes (Sold in bags)	Kg	1,500(~\$0.9)	500(~\$0.3)
Cassava – sold in sticks/stalk/tuber	Kg (100 per piece)	1,000(~\$0.6)	1,000(~\$0.6) - tends to remain constant
Millet	Kg (sold in 1,5kg cup measures)	4,000(~\$2.4)	800 (~\$0.5)

7.1.6 Compensation for Loss of Revenue from Businesses and Employment

In addition to the commercial farms and ranches, the affected households also have small businesses. These owners of businesses which will have to be moved will receive a compensation to cover the loss of revenue during the time needed to move their business to a new location and re-establish it, as indicated in Section 7.1.6.1 below. The employees of these businesses will also be entitled to a compensation, as indicated in Section 7.1.6.2.

7.1.6.1 Compensation for Loss of Business Revenue

A Immovable and Formal Businesses

For immovable businesses, structures will be compensated as indicated in the previous sections. There will be a need to consider the loss of income during the transition to a new place to re-establish the business. The amount of loss of income will depend on the size and type of business. Formal businesses, such as the ranches will have records or documents allowing to establish their net revenue.

During the phased RAP, these documents will be reviewed, and the formal businesses will receive an allowance equivalent to 3 months of their average net revenue documented for the past 2 years.

B Movable and Informal Businesses

Movable businesses (such as small kiosks, stalls, or 'tabletop' businesses) can easily be moved, with appropriate allowances for loss of income during transition. These are informal and seldom, if ever, have records of profit or loss.

During the preparation of the Phased RAP, a business survey will be done amongst informal or small businesses and determine profit per month, or such other periods as required. Small or informal businesses will be grouped into categories. For each category, a fixed amount will be estimated for loss of income during the moves until they are established again. This fixed amount can be calculated through the observation method where to estimate turnover and profit for typologies of business.

This amount will be limited to 3 months of average estimated net revenue for the category of business affected.



7.1.6.2 Allowance for Loss of Employment Revenue

To cover the time needed to find another employment, or the period during which their employers will re-establish their businesses, the employees of the affected businesses will receive for loss of employment revenue a one-time allowance equivalent to 3 months of the minimum wage income in rural areas. As defined by the Ministry of Labour, the minimum rural wage is MK 90,000 per month as of February 2024 (Ministry of Labour 2024). This amount will be updated if and as required during the phased RAPs.

7.1.7 Disturbance and Moving Allowances

A disturbance allowance and a moving allowance will be added to the compensation defined in the previous paragraphs.

- Disturbance allowance: A disturbance allowance is a precedent requirement that is widely used in resettlement projects and entails a set percentage of the fixed asset compensation rates. The intent is to allow for costs and expenses that entities would experience during the course of displacement, and which cannot reliably be forecast. There is no national or international set standard and approach, and it is often subject to the discretion of the Government of Malawi. A rate of 20% is usually applied as disturbance allowance by other projects. Therefore, the Mpatamanga HPP will apply a 20% disturbance allowance on the total compensation amount for all categories of affected persons.
- A moving allowance will be provided to the households physically displaced (either owning the house affected and tenant of the affected house) and to the affected businesses owners. This moving allowance will be a one-off payment of 250 USD. This amount is aligned with the average monthly expenses estimated by the affected households surveyed in 2023 (425,000MK).

7.2 Compensation Process

7.2.1 Disclosure of Compensation Principles to the Affected Persons

The compensation principles and the entitlement matrix will be disclosed to the affected persons:

- During the public disclosure of this RPF, as indicated in Section 11.3, directly and through the Resettlement Working Groups to be established in the Main Reservoir and Main works areas. A Guide on Land Acquisition and Compensation (GLAC) prepared in English and Chichewa will summarise the valuation, compensation, and resettlement process for the affected persons, and outline the principles applied to all phased RAP.
- During the preparation of the phased RAPs the entitlements and compensation principles will be disclosed to the affected persons at the start of the census process, during a round of community Sensitisation meetings, as indicated in Section 11.4. A public disclosure process will also be undertaken for each of the phase RAP.

7.2.2 Endorsement of the Compensation Packages by the Affected Persons

During the implementation of each RAP, after the draft compensation schedule is prepared and approved by the Ministry of Lands (see section 10.2), the individual compensation schedules will be disclosed to each affected person and households as follows:

- The individual disclosure of the compensation packages will be done during one meeting with both spouses and all adults members of the households (including daughters and sons), as indicated in Section 6.2.3. The Project will ensure that both spouses are informed of the household's entitlements, compensation amount and payment process during individual meetings.



- The affected persons will sign-off their compensation schedule, and both spouses will be invited to sign the compensation form.
- One copy of the signed form will be given to the affected household, and another will be kept by the Project.
- In cases where the affected people disagree to the valuation, individual negotiation will be undertaken (i) to explain in detail the methodology followed, (ii) understand the point of view of the affected people and the reasons of the disagreement, and (iii) if necessary, review the valuation in the light of the elements provided by the affected people.
- If the affected persons still disagree with the valuation result, they can resort to the Grievance Redress Mechanism defined in Section 12.

7.2.3 Payment of Compensations

7.2.3.1 Steps of compensation payment

The World Bank ESS 5 specifies that the Project *“will take possession of acquired land and related assets only after compensation in accordance with this ESS has been made available and, where applicable, displaced people have been resettled and moving allowances have been provided to the displaced persons.”* (WB ESS5 §15. Therefore, all compensations will be paid and received by the affected persons prior to the Project taking possession of the land.

The payment of compensation to the affected persons will be undertaken as follows:

- Financial Institutions or banks present in the affected areas will be identified by the Project and a Memorandum of Understanding will be prepared to organise the transfer of compensation payments from the Project to the affected persons.
- The affected persons without a bank account will be assisted to open a bank account to receive their compensations. The costs of opening the bank account will be borne by the Project.
- Training on the sustainable management of received compensation will be provided to affected households. This training will include women-only sessions, as well as sessions where both spouses will participate together.
- Once the payment is available, the affected households will be informed individually through phone calls, and through public announcement in each affected village, to ensure the information is disseminated as much as possible. During these meetings, the Project will inform the affected households they have no less than 2 months to vacate the affected lands.
- The Project will then meet individually each affected household to invite them to sign a receipt stating they have received their compensation and explain the delay to vacate the land. All adult members of the households will have to be present for the signature of this receipt, to ensure the information is transmitted to all households’ members and prevent gender biases.
- After compensation payments have been received by the affected persons, and assistance measures are provided, the Project will then take possession of each affected land plot, clear the land and demarcate its boundaries after each area will have been vacated by its occupants.

7.2.3.2 Instalments for physically displaced households

For the households physically displaced who chose to receive cash compensation rather than in-kind compensation, the Project will offer to pay the compensation in instalments rather than as a one-off payment. This will be done to ensure the compensation is used in a sustainable manner to build replacement housing. Compensation for the replacement land and replacement house will be released in the following instalments:

- First instalment once a plot of land is secured to build the replacement house,
- Second instalment once foundation is prepared,



- Third instalment once the walls and roof are finished, and
- Fourth instalment once the finishes (plastering, doors, windows, latrine) are complete.

7.2.4 Update of Compensation Rates if Payments are Delayed

If compensation is not paid within 6 months of the signature of the compensation agreement by the affected persons, the compensation rates will be adjusted to reflect the inflation.

Inflation rate application will ensure that the PAPs get the equivalent of what they were entitled at the cut-off date or date of valuation. The calculation of the inflation rate to be applied will be as follows:

- Using the compensation value in Malawian Kwacha stipulated in the compensation schedule signed by the affected persons, and applying the variation of the Consumer Price Index published by the National Statistical Office in Malawi, or
- Using the compensation value in US Dollars stipulated in the compensation schedule signed by the affected persons and performing a new market survey to update the rates in USD as applicable.



8 Assistance to Resettlement

In addition to the disturbance and moving allowances defined in Section 7.1.7, assistance to resettlement will be provided through the following activities:

- Provision of in-kind replacement land and housing as outlined in Section 7.1.2 to the affected households choosing in-kind compensation over cash compensation,
 - On resettlement sites for physically displaced households of Kambalame, Chaswanthaka and Mpindo villages (see Section 8.1),
 - Through assisted self-relocation for other physically displaced households and economically displaced households losing farmlands they are cultivating if they are a vulnerable household, and/or are losing more than 30% of their productive lands, and are residing in the affected villages and group villages (Section 8.1.4).
- Scheduling the timing of the relocation to minimise impacts on farming activities and support the preparation of replacement lands for farming activities (Section 8.3), and
- Psychosocial support to the displaced household to help them adjust to the resettlement process (Section 8.4),
- In kind assistance will also be provided to vulnerable households physically displaced to move their belongings during their relocation (Section 8.5).

8.1 Resettlement Sites

At the time of writing, the Chaswanthaka and Kambalame Resettlement sites had been identified. For the Mpindo resettlement site, some preliminary investigations had started, but the site was yet to be selected. Further investigations will be undertaken to assess the different options available, and select the best one, together with the local authorities.

The area to be developed for Chaswanthaka resettlement site will be acquired during the Early Works RAP, to allow a development of the resettlement site before the start of the Main Works (as Chaswanthaka village will be affected by the Main Works).

The area to be developed for the Kambalame resettlement site will be acquired during the Main Works RAP, to allow a development of the resettlement site before the start of the Main Reservoir RAP (as Kambalame village will be affected by the Main Reservoir).

The area for the Mpindo Resettlement site will be acquired during the Early Works RAP, to allow a development of the resettlement site before the start of the Main Works (as Mpindo village will be affected by the Main Works).

The layout of these resettlement sites will be developed through a participatory process with the affected persons and the local authorities.

8.1.1 Characteristics of the two Resettlement Sites Identified

Two resettlement sites were pre-identified by the Regional Commissioner for Land jointly with the Department of Museum and Monuments and the Land Officers of the relevant District Councils members. Members of Traditional Authority and Village Development Committees were also present during the joint site visit realised to identify the sites. The Inspection Report explaining how the sites have been pre-identified is provided in **Annex 7**.

The key information of these sites is summarised in Table 52 below. Figure 12 in Section 2.2 shows the general location of these resettlement sites, and Figure 124 and Figure 125 provide some views of the Chaswanthaka and Kambalame resettlement sites. Table 53 provides a summary of the key characteristics of each pre-identified resettlement sites and Figure 126 indicates the distance between the resettlement sites and the main community infrastructures (Markets, health structures, schools).

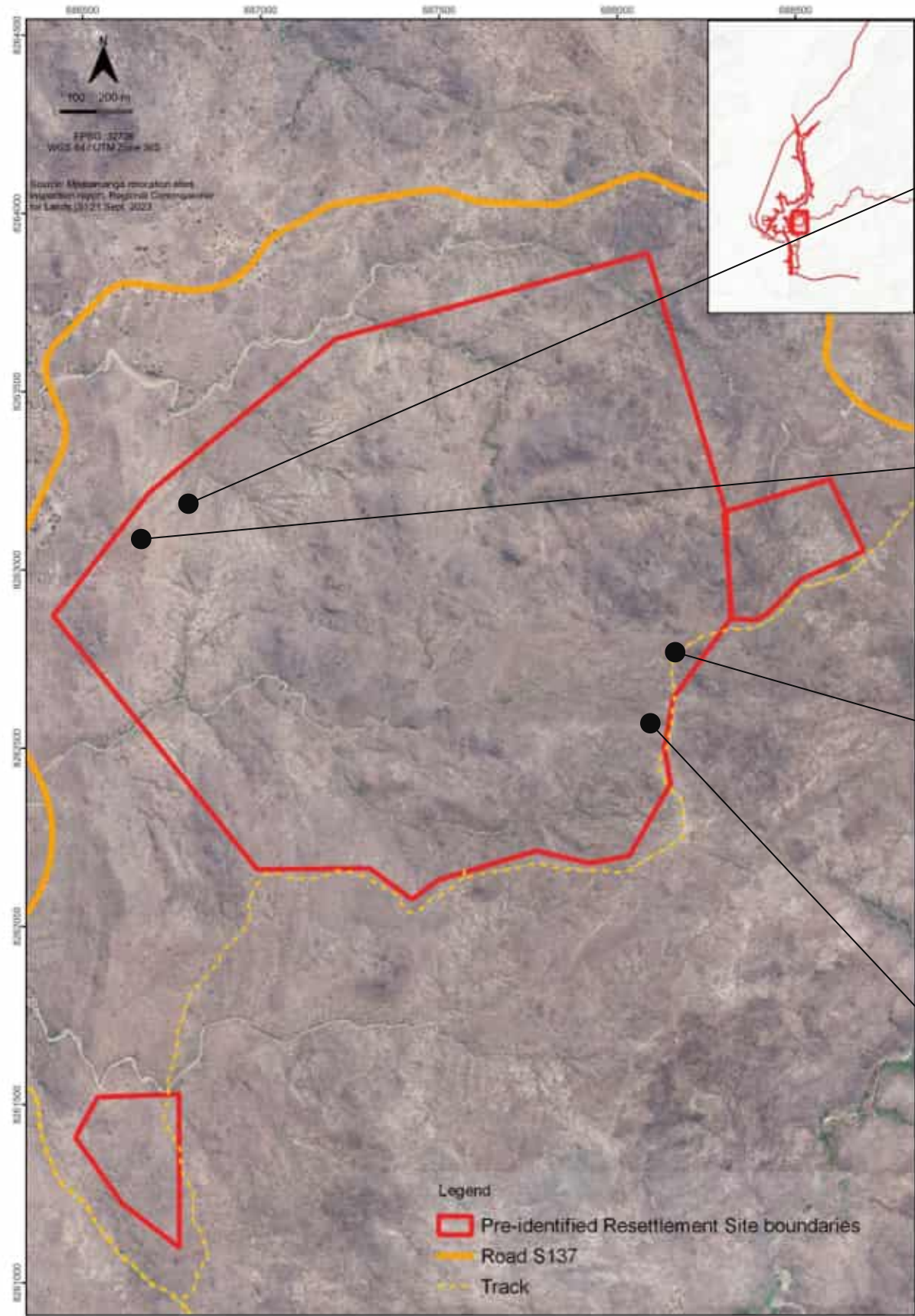


Table 52: Key characteristics of the pre-identified resettlement sites

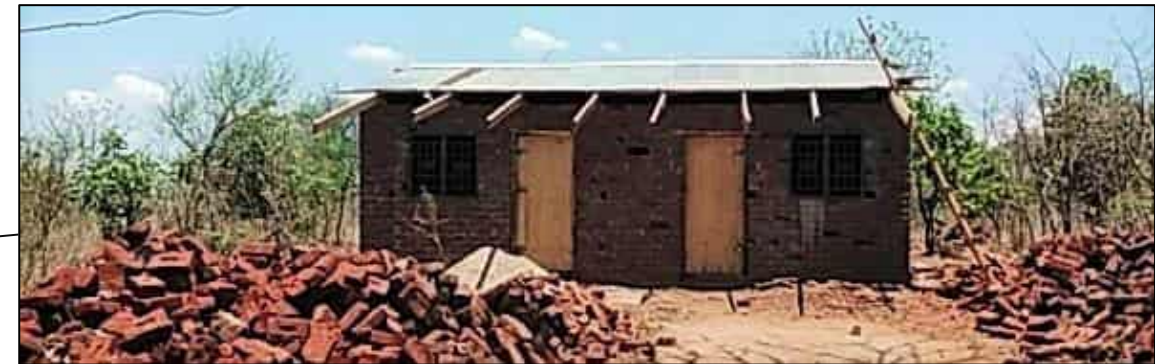
	Chaswanthaka Resettlement Site	Kambalame Resettlement Site	Chaswanthaka School new site	Kambalame School (NEW)	Chaswanthaka Graveyard new site	Kambalame Graveyard new site
Size	230ha	144ha	9ha	3.6ha	8ha	2.6ha
Land ownership*	Mostly communal land	Mostly Communal land	Communal land	Communal land	Individual owner	Individual owner
Actual use*	Largely unoccupied and unused (except one house)	Largely unoccupied and unused (except 3 plots with farming activities crops)	Unoccupied and unused	Unoccupied and unused	Unoccupied and unused	Unoccupied and unused
* According to the socioeconomic surveys performed in Nov. Dec. 2023						



Figure 124: Views of the Chaswanthaka Resettlement site



View from the western boundary of the Chaswanthaka resettlement site, looking East, September 2023



House under construction inside the western boundary of the Resettlement Site (November 2023)



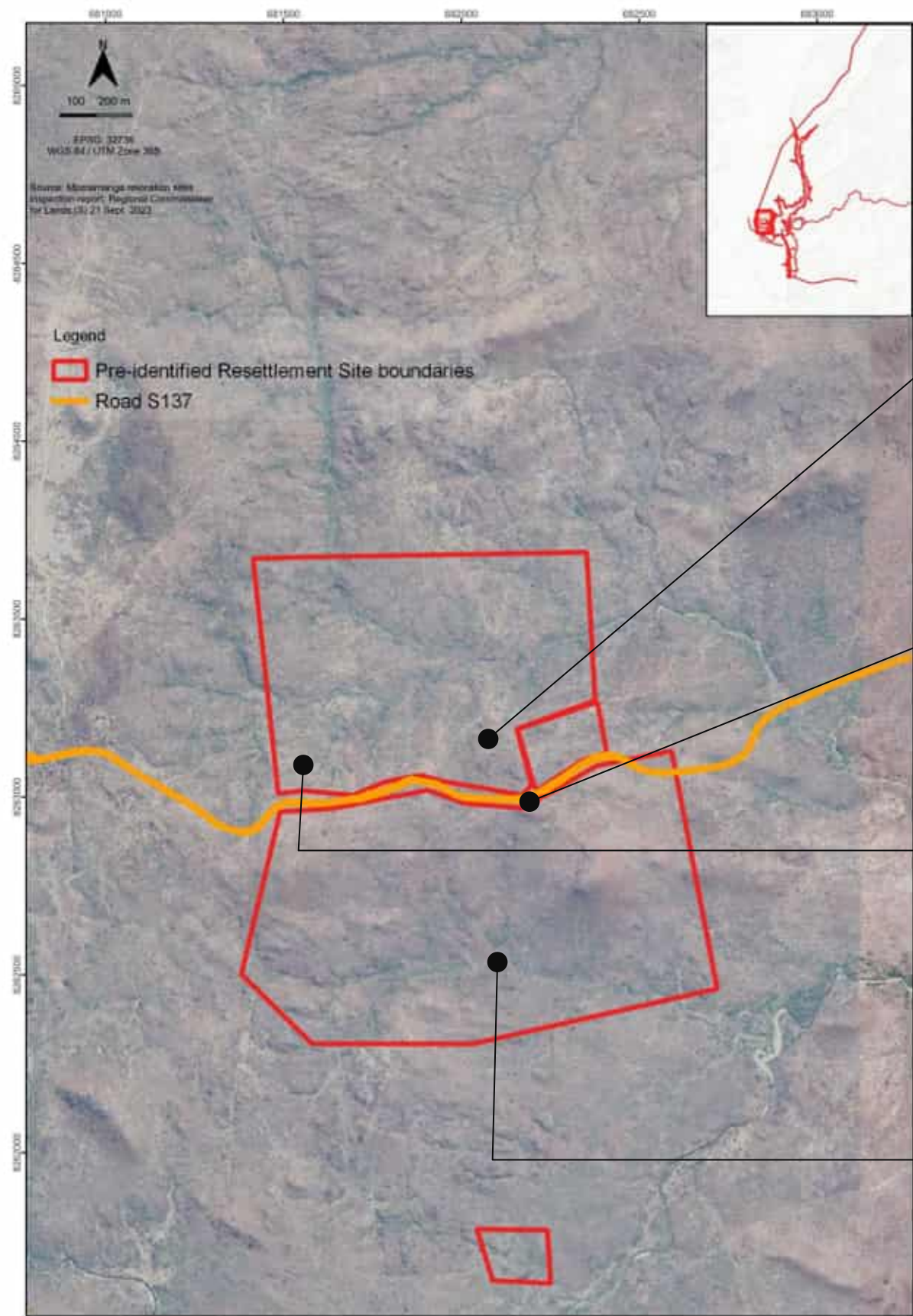
View from the eastern boundary of the Chaswanthaka resettlement site, looking West, December 2023



View from the south-eastern boundary of the Chaswanthaka resettlement site, looking West, September 2023



Figure 125: Views of the Kambalame Resettlement site



View from the eastern boundary of the resettlement site, looking North, December 2023



View from the S137 road in the middle of the resettlement site, looking South, December 2023



View from the western boundary of the resettlement site, looking North, December 2023



Farming activities in the southern part of the resettlement site, looking South, December 2023



Table 53: Summary of the pre-identified resettlement sites characteristics³²

Criterion		Chaswanthaka Resettlement Site	Kambalame Resettlement Site
Livelihoods	Land sufficient in size and potential	<p>Size: On both resettlement sites, the Carrying capacity on flat lands (less than 12% slope gradient) is limited. To ensure a sufficient carrying capacity, grading and levelling will be needed. The topography will require some levelling work to ensure the flatter lands are allocated to agricultural activities.</p> <p>An assessment of the carrying capacity was performed: with some important levelling the Chaswanthaka resettlement site could accommodate about 30 households (residential lands + farming lands), and the Kambalame site could accommodate about 25 households (residential lands + farming lands).</p> <p>Regarding cattle grazing areas, it is necessary that the existing free grazing practices are maintained, and that the households relocating to the resettlements sites can continue (i) to graze their livestock in the communal village lands, and (ii) to access the Shire River banks in the future main reservoir to water their cattle (see Section 9.3).</p> <p>Potential: Agricultural activities have been observed on Kambalame resettlement sites, and past agricultural activities were reported on the Chaswanthaka resettlement site. The soils analysis results can be summarized as follows:</p> <ul style="list-style-type: none"> • On the Chaswanthaka resettlement site, the soil is likely to be less productive than in other areas of Chaswanthaka village, • On the Kambalame resettlement site, the soil appears of slightly better quality for agriculture than in other areas of Kambalame village. <p>The most productive farming system in the project area is the “dambo” farming, which is practiced on riverbank fields and relies on manual irrigation. According to local farmers, the soil fertility near the riverbanks is better than elsewhere. After the main reservoir impoundment, the riverbanks will come close to the two resettlement sites. As indicated in Section 9, livelihood restoration measures will be implemented to support the development of small-scale irrigation systems to foster productive agricultural practices.</p>	
	No significant secondary displacement ³³	<p>One house is under construction at the norther edge of the site. An adjustment of the boundary of the site may avoid this “second displacement”.</p> <p>No agricultural activities have been observed on the site.</p> <p>It is expected that all lands in the site are communal lands, but this is yet to be confirmed.</p>	No secondary physical displacement anticipated, limited economic displacement possible (limited farming activities are located inside the southern part of the site, and 3 landowners are affected by the Kambalame Resettlement site).
	Access to agricultural services and markets	<p>Access to agricultural services and markets is currently done through the S137 road. The Resettlement site is close to the S137 road. As long as access to the S137 road from the resettlement site is maintained, access to agricultural services and markets will be similar on the resettlement site.</p> <p>The nearest market is in Chikuli, 20 kilometres away from the village (see Figure 126).</p>	<p>Access to agricultural services and markets is currently done through the S137 road. The S137 road is going through the resettlement site. Access to agricultural services and markets will be similar on the resettlement site.</p> <p>The main market is located in Chifunga, however a smaller market exists (Chikupi market) in Feremu at approximatively 5 km of the village (see Figure 126).</p>

³² Adapted from (IFC 2023, 77).

³³ Secondary displacement is the displacement of persons occupying the resettlement site, to develop this site for the persons affected by the Project land acquisition. No significant physical or economic secondary displacement should occur, or if limited secondary displacement cannot be avoided, it will give rise to the same compensation entitlements as the primary displacement.



Criterion		Chaswanthaka Resettlement Site	Kambalame Resettlement Site
	Access to potential project employment opportunities	Both resettlement sites are close to the Project main construction activities. This could facilitate access to Project employment opportunities for the households resettled on the resettlement sites.	
	Security of Tenure	Title deeds will be issued to the affected persons opting for the land-for-land compensation on the resettlement sites (see Section 8.1.4 hereafter). All costs for the issuance of a title deed shall be borne by the Project.	
Planning and construction	Geotechnical characteristics, slopes	The two resettlement sites are hillier and have higher slopes gradient than the areas where the neighbouring settlement are located. Grading and levelling work will be necessary.	
	Water availability (drinking water and other uses)	Investigations are necessary to confirm the presence of an underground water table in both resettlement sites. These investigations will be done as soon as possible by the Project. If it is not possible to have productive boreholes on the sites, the option to pump water from the future reservoir could also be considered, given the proximity of the two resettlement sites with the future main reservoir.	
	Access to power	The electricity distribution network stops about 20km east of Chaswanthaka village (see Figure 126). Solar panels could be provided to the resettled households.	The electricity distribution network stops about 4km west of the Kambalame Resettlement site, in Feremu village (see Figure 126). It could be possible to provide electricity on the resettlement site by extending the distribution line, or by providing solar panels to the resettled households.
	Access to sustainable education and health services	The nearest health center in Blantyre District is located about 20km away from Chaswanthaka (Chikowa health center, see Figure 126).). Once the new health center is finished in Feremu village, it will be about 10km away from Chaswanthaka village. The Mpatse abwile primary school is located in Chaswanthaka. It is planned to relocate this school on the resettlement site.	The nearest health center (currently under construction) is located about 3km away from the resettlement site. The second closest is the one located at Chifunga Market (see Figure 126). The nearest primary school is about 2.5 km away from the resettlement site. It is envisaged to build a primary school on the resettlement site.
	Spatial planning and building permits	A layout plan for each Resettlement site will be needed for each resettlement site (see Section 8.1.4 hereafter). The resettled persons could be exempted from individual construction permit, if the layout plan is considered as a global construction permit.	
	No need for the site to be displaced again in the future (future infrastructures or development)	The Resettlement sites are located outside of the proposed Mpatamanga HPP infrastructures, including the future re-aligned S137 road. There is no other known project or plan located in the resettlement sites.	
Sociocultural	Socio-cultural compatibility between resettled and host communities	The resettlement site is located in GVH Kaliati, TA Kunthembwe. The villages where physical resettlement impacts will occur are all located in GVH Kaliati.	No impact anticipated, as the Kambalame resettlement site is located in the same village, GVH, TA and District as almost all households to be physically displaced (i.e. Kambalame).

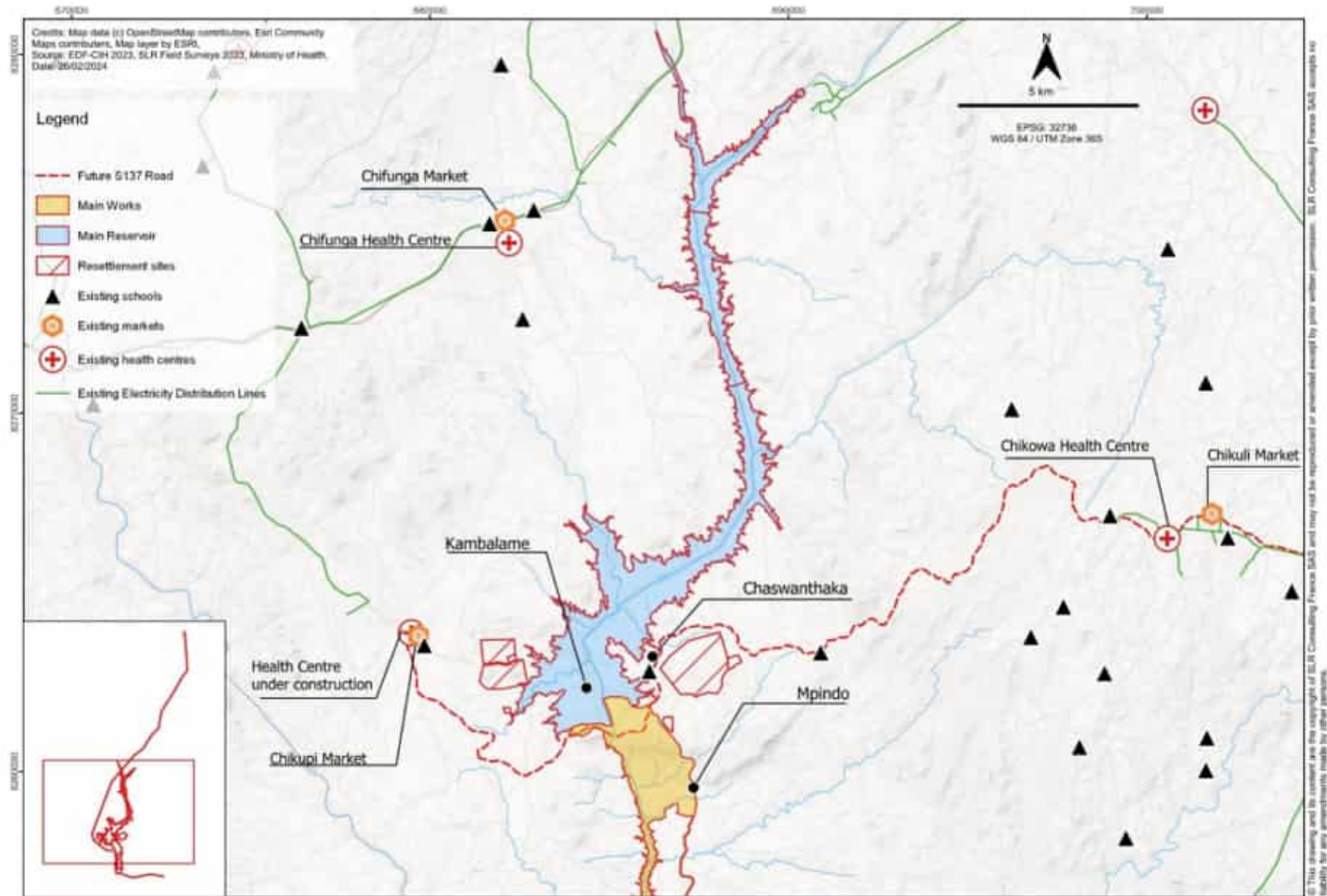


Criterion		Chaswanthaka Resettlement Site	Kambalame Resettlement Site
	Impact to local political balance and demographic balance between administrative subdivisions	Demographic balance between Mpindo and Chaswanthaka could be modified, if households resettled from Mpindo village are resettled in Chaswanthaka village. Although the sociocultural characteristics of the resettled households are similar from one village to another, the willingness to from households coming from different villages to be resettled into one only village is yet to be assessed. Further engagement should confirm (i) if the affected households from Mpindo village are willing to be relocated in Chaswanthaka village, and (ii) if the community of Chaswanthaka village accepts to welcome them. If this is not the case, a third resettlement site would have to be identified in Mpindo village.	
	Access to religious and sacred sites including cemeteries	The affected graveyards will be relocated in the same village (see Section 5.2.3) and will be accessible for the resettled communities.	
Environmental		The sites are not in any protected area or critical habitat. The area is mostly made of secondary shrubland. The ESIA will assess if the development of the resettlement site will cause environmental impact and define mitigation measures if necessary.	



Mpatamanga HPP – Resettlement Policy Framework

Figure 126: Distance of Resettlement Sites with Existing Community Infrastructures





8.1.2 Community Needs expressed during focus groups discussions

Focus groups discussions were performed with households potentially affected by physical displacement, as indicated in Table 54 below.

Table 54: Focus Groups Discussions with households potentially affected by physical displacement

District / TA	GVH	Village	Date	Number of participants	Number of Men	Number of Women
Blantyre District, TA Kunthembwe	GVH Kaliati	Lisangwi	16/11/2023	7	4	3
			20/06/2024	7	4	3
		Mpindo	08/11/2023	4	2	2
			20/06/2024	27	11	16
		Chaswanthaka	26/09/2023	10	5	5
			21/06/2024	24	6	18
Neno District, TA Mlauli, GVH Feremu		Kambalame	01/10/2023	10	5	5
			28/06/2024	29	14	15

The focus groups participants were invited to share their preferences and view regarding resettlement housing and sites. The main points from these discussions are summarised below:

- The new site should be located near the river (or to be equipped with a borehole) as they use it to irrigate their crops and to water their cattle,
- The new site should be equipped with or being close to a health clinic with a maternity unit, a school, a church, and a police station,
- They would need space to grow fruit trees, crops and to keep the cattle,
- They would need a flat soil of good quality to farm,
- They would need trees to have firewood for cooking,
- They wish to stay close to their families,
- They do not want to be too close from each other as they are used to have neighbours far from their house,
- They wish to have replacement land large enough to be able to transfer part of it to their child once they get married. The size of the replacement plot should be the same as what they currently have, to avoid changing what is planned in terms of inheritance,
- They wish to have electricity in the new resettlement site.
- Women indicated that a wash house or wash space would be necessary at the resettlement site to wash clothes.

Focus group participants were also asked to describe the typical homestead in their current settlement they would like to see replicated on the resettlement sites. Figure 127 next page illustrates the typical homestead in the current villages, and Figure 128 illustrates the “ideal” resettlement site configuration based on this participative exercise.

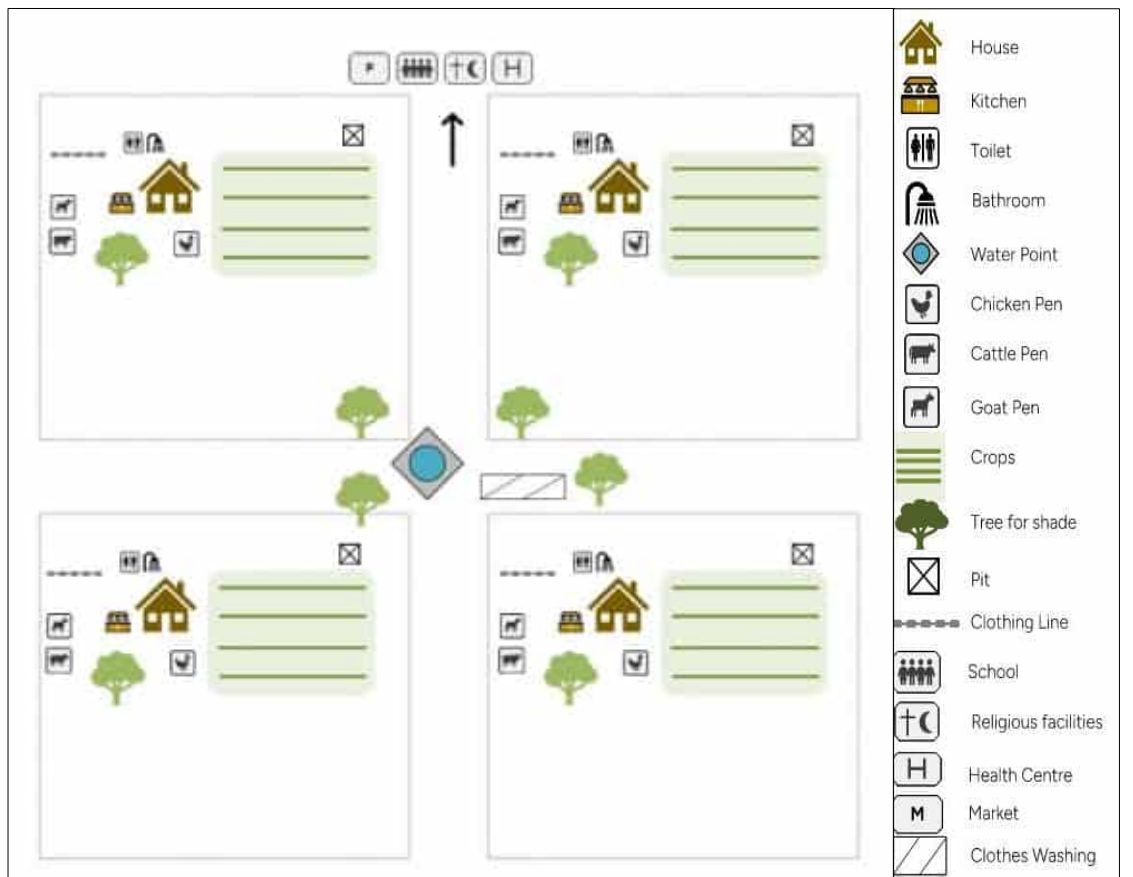
The households indicated that the livestock should be kept at a visible distance from the house to avoid robbery. All the households indicated that they would need, at least, as much space as what they currently have. The space should be commensurate to the size of the households so they can pass on land to their heirs when they get married. Some households also indicated they would not like being “compressed” into a dense settlement, as families are used to reside some distance from their neighbours’ houses. The subsistence agriculture practised by the PAPs rely partially on supplementing soil fertility through the application of manure. Therefore, they will need specific areas for livestock enclosure and grazing.



Figure 127: Typical homestead layout according to the FGD



Figure 128: Ideal resettlement plots configuration as per the FGD





8.1.3 Area of land per household

A Residential areas

The minimum size of a residential land according to the Physical Planning Act (2016) is 15x30m. However, observations conducted in the affected villages and discussion with households potentially physically displaced suggest that the usual residential area per household is more than twice this size. A residential area of 0.1ha per household is what is typically observed in the existing settlements. Therefore, the minimum for residential land for in-kind compensation will be 0.1 ha per household.

B Farming lands

For replacement lands for farming activities, the size of the affected households will be considered. The area of the replacement land for farming activities should ensure a sustainable food security for the displaced households.

According to interviews from the qualitative socioeconomic surveys in 2023, farmers commonly require an annual production of 20 to 35 bags (50kg bags) of maize per household (1,000 – 1,750 kg total), translating to an average of 4 to 6 bags (200-300 kg total) per person. The Agricultural Development Extension Officers (ADEO) met during the 2023 surveys indicated an average yield of 725-815 kg of maize per acre in the project area.

Dietary recommendations consider a caloric intake of 1920-2875 kcal per day per person (West, Pepping, and Temalilwa 1988). Considering maize's energy content of 35 kcal/kg (FAO 2002), one person would require approximately 0.25 to 0.4 acre of maize for sustainable farming practices. Given the fluctuation in agricultural yields, which can be attributed to weather, soil quality, or labour, it is recommended to take a higher range to estimate the minimum theoretical land area required for an individual to sustain themselves agriculturally: **0.5 acre (or 0.2ha) per person could be considered as acceptable.**

Considering a household's size of 5 to 6 persons (the average size documented in the socioeconomic survey is 5.3, see Section 4.2.6.2), a typical affected household would require 2.5 to 3 acres (about 1ha to 1.2ha) of farming land to ensure their food security.

C Minimum and Maximum Replacement Land area per household

The minimum and maximum area for replacement land (in-kind compensation) per household are defined as follows:

- 0.1ha for residential area for households physically displaced
- 0.5ha as a minimum for farming lands, for a household of 2 persons, then 0.2ha per person,
- 5 ha as a maximum for replacement farming lands (75% of the affected households have less than 5ha of land affected)

8.1.4 Planning Requirements

Three District Land Officers were met in Blantyre on 28 September 2023 to clarify the planning process and the steps required to develop a resettlement site. The requirements and steps outlined during the discussion are presented below.

- Step 1: Prepare a "Layout Plan" of the resettlement site. According to the Blantyre District Land Officers met, if a whole village has to be displaced to a resettlement site, a 'Village land use plan' can be prepared, showing the different categories of lands within the site (farming lands, residential lands, markets, common forest lands). If only a part of a village must be resettled, then only a 'Layout Plan' is needed, demarcating individual land plots. This Layout Plan can be prepared by surveyors from the Department of Lands office. It needs to be prepared in a participatory manner with the Village Chief and the beneficiaries. The Layout plan can be accompanied by a "Development Brief" providing guidance on housing construction requirement. This Development Brief can describe the



type of construction materials and standards to be used, or how foundations should be done.

- Step 2: Perform a Cadastral Survey to allocate the Plots Numbers. Land surveyors from the Department of Lands can then perform a cadastral survey. They demarcate the land plots on the ground, using a participatory approach.
- Step 3: Allocate Plots to the Beneficiaries. Once the plots are demarcated and numbered, they can be allocated to the beneficiaries. The Layout Plan could be sufficient for the construction of houses. The resettled persons could be exempted from individual construction permit, if the layout plan is considered as a global construction permit.
- Step 4: Issue of Title Deeds to Beneficiaries. Currently, most of the private lands impacted by the Project are under customary land tenure. After allocation of plots numbers to the beneficiaries, title deeds can be prepared and issued to the PAPs. This can take a long time, so the PAPs should establish themselves on their plots before the deed titles are issued. The Deed Registrars of each District Council Office will register individual land titles for resettles on the resettlement sites.

8.1.5 Next steps for the development of the Resettlement sites

The next activities to be implemented by the Project for the development of the Resettlement Sites are outlined in Table 55 below.

Table 55: Next Activities for the Development of the Resettlement Sites

#	Activity
1	The Project will perform test drills to ensure that productive boreholes can be established on the resettlement sites, or if another water supply option should be developed.
2	As part of the RPF disclosure activities, consultations will be organised with the households to be physically displaced in Mpindo village and the local authorities to identify and select the Mpindo Resettlement site (see Section 11.3)
3	As part of the RPF disclosure activities, a round of consultation will be organised in Chaswanthaka and Kambalame Villages (see Section 11.3) to present the strategy for the resettlement sites development and the entitlements for the physically displaced households who would opt for in-kind compensation on the resettlement sites. The Project will explain the process and provide example of the packages which could be offered on the resettlement sites.
4	The Project will define different models of replacement housing and develop plans and layout of replacement housing to support further discussion with the affected households.
7	The Layout Plan for the resettlement sites will be prepared. This is needed: <ul style="list-style-type: none"> • To define the grading and levelling works needed, • To allocate the residential plots to allow construction of the replacement housing ahead of the move (i.e. before the start of construction activities) and • To allocate farming plots to allow preparation of the agricultural practices before the rainy season (see Section 8.3 hereafter)
8	The preparation of agricultural fields on the resettlement sites shall be planned ahead of the households moving in the sites, to allow production as soon as possible and minimise the duration of the transition assistance period. Preparation of the agricultural fields on the resettlement sites should be done before the rainy season preceding the move (see Section 8.3 hereafter).
9	Contractors will then be selected and contracted by the Project to prepare the resettlement sites and construct replacement housing.

8.2 Assisted Self-Relocation

The Project will adopt a second approach for the households physically displaced affected by the Main works and Main Reservoir who cannot be accommodated in the Chaswanthaka and Kambalame resettlement sites. A complementary “assisted self-relocation” approach will be applied for the other components, and/or where small groups of households or individual



households are physically displaced. Combined with in-fill resettlement³⁴, the assisted self-resettlement can be considered for impacts from linear infrastructures, like roads or transmission lines. This approach will be applied:

- For physically displaced households who cannot be accommodated on the identified resettlements sites in Chaswanthaka and Kambalame and
- For economically displaced households losing cultivated and productive lands. The process will be the same as the assisted self-relocation for physical displaced households, without the construction of replacement housing.

Similar assisted self-resettlement processes are being implemented in Malawi on other projects, including the MOMA Transmission Line project (ESCOM and WSP 2021), and the Accelerated Growth Corridor Project funded by the MCC.

The steps to implement the assisted self-resettlement are outlined in the next paragraphs.

A Step 1 - Identification of Replacement Lands

Available replacement lands outside the resettlement sites will be identified through a participatory process during the preparation of each phased RAP, village by village, involving the Village Heads and affected households. The identification of replacement lands for physically and economically displaced households will be performed village by village as follows:

- In the villages affected by the Main Works and Main Reservoir: from the start of the Public Disclosure of this RPF up to the start of the preparation of the Main Works RAP and Main Reservoir RAP,
- In the villages affected by the S137 road works: from the start of the preparation of the Early works RAP. As indicated in Section 2.2.4, the lands in the existing road reserve will not be compensated, as the Ministry of Transports and Public Work already owns the road and the land of the existing road reserve. The lands for the new sections of roads to be created by the Project will be compensated.
- In the villages affected by the 400kV and 132kV Transmission Lines, from the start of the preparation of the Transmission Lines RAP.

Potential replacement lands will be mapped considering four main criteria:

- Identification of replacement lands in the same community, to minimise social disruption,
- Distance between the replacement lands and the settlements,
- Minimum size of the replacement lands, and
- Productive potential of the replacement lands.

These criteria are described in the next paragraphs. They will be discussed and validated with the affected households during the participatory identification of replacement lands.

A.1 Maintaining Existing Social and Community Links

Replacement lands will be identified preferably in the same village, or if not possible in the same Group Village. Replacement land outside of the Group Village the affected households have their affected lands in will not be considered.

Identifying replacement lands in the same villages and communities the affected households currently live in, as close as possible to their place of residence, will help minimising the risks of social disruption. It will help maintain existing family and social relationships and networks. It will also help maintaining their access to communal lands or natural resources, managed and shared with the same community. Access to markets and public services will also be maintained.

³⁴ In-fill resettlement involves relocating displaced persons into existing neighbourhoods rather than development of resettlement sites (IFC 2023). It can be done for linear projects, where affected persons can move to the remaining non-affected part of a land plot partially affected by a project.



Lands to be considered as replacement lands will be either un-used community lands or customary lands privately used.

A.2 Distance between Replacement Land and Residence of Affected Households

Replacement lands will be primarily used for subsistence farming activities. Relocating farming activities presents multifaceted challenges, with physical distance emerging as a pivotal factor. For impacted farmers, the distance between their homes and their agricultural fields holds significant implications. Traditional farming practices often involve daily trips to the cultivated fields, with considerations for the timing of planting, harvesting, and irrigation.

Farmers interviewed during the qualitative investigations during the 2023 socioeconomic surveys indicated that a distance of two hours by foot from their house to the cultivated plots is considered a maximum. Beyond this threshold, time and effort for daily commutes may arise, potentially impacting the viability of farming activities.

Therefore, replacement lands will have to be at a maximum of 1.5 hour by foot from the place of residence of the affected households.

A.3 Area of Replacement Land per Household

The minimum and maximum area for replacement land (in-kind compensation) per household are the same as on the Resettlement sites (see Section 8.1.3 above):

- 0.1ha for residential area for households physically displaced
- 0.5ha as a minimum for farming lands, for a household of 2 persons, then 0.2ha per person,
- 5 ha as a maximum for replacement farming lands (75% of the affected households have less than 5ha of land affected)

A.4 Productive Potential

As subsistence farming is key for the livelihoods of the affected households, replacement lands to be identified should have at least the same productive potential as the land lost.

The productive potential of replacement lands will be assessed based on three main criteria: soil quality, topography and water availability.

- Soil quality: the replacement lands should not be too rocky nor too sandy.
- Topography: the replacement lands should ideally avoid slopes, or land with important gradient. Erosion is more important on slopes, and the interviewed farmers confirmed they favour flat lands, where productivity is better, and where it is easier to farm crops.
- Water availability: as described in Section 4.2.10.3, two main type of agricultural systems are practices by the local communities: rain-fed crop farming, with one yield per year, and “dambo” farming, which is practiced on riverbank fields and relies on manual irrigation, and gives two yields per year. According to local farmers, the soil fertility near riverbanks is better than elsewhere. Farmers losing land plots on the riverbanks they cultivated following the “dambo” system will require land with an access to water (i.e. close to riverbanks) to reproduce their farming practices.

B Step 2 - Acquisition of Replacement Land by the Project

Once the replacement lands are identified in each village, the Project will identify with each affected household losing land the lands they wish to obtain as replacement land. The landowners will be identified, and the Project team will acquire the replacement lands using the land rate defined in Section 7.

C Step 3 - Construction of Replacement Housing

The Project will select one or more contractors to construct all replacement houses. They will be paid directly by the Project.



D Step 4 - Delivery of Replacement Land and House to the Affected Households

The affected persons then receive the house and land as in-kind compensation. They are only allowed to move into the replacement house once it is completed. The Project will then hand over documents to secure their land tenure to the affected persons.

The affected persons are not allowed to sell the house within one year after they receive the house. They also benefit from livelihood restoration measures and disturbance allowance in cash.

8.3 Timing of Displacement

Displacement should be scheduled to minimise disruption of agricultural production, in order to minimise impacts on subsistence farming production.

Rain-fed farming practices are the main subsistence activities for the affected households, as indicated in Section 4.2, with maize being the main staple food produced. Rainfed maize farming should therefore be considered as the key driver of the displacement schedule to minimise risks to the food security of the displaced households. The calendar for rainfed maize farming is indicated in Figure 72. This calendar may vary depending on the time of the rains, but it can be broadly summarised as follows:

- Land preparation in between October and November,
- Seedling and fertilising in December,
- Weeding in January and February, and
- Harvesting between March and April.

Therefore, displacement should occur after harvesting is completed in the impacted land plots, i.e. after April.

The development of the Resettlement sites and the identification of the replacement lands for the assisted self-relocation will be planned to allow a preparation of the new agricultural fields in October and November.

8.4 Psychosocial support

The Project will recruit social assistance staff to offer psychosocial support throughout the resettlement process to households who wish to receive such support. A service provider will be identified and recruited and will be mobilised to offer voluntary advice and support to those who wish. This service provider will be presented to the affected persons during the compensation process and will establish a presence on site. A dedicated phone number will also be established. This support will be free and anonymous for all affected persons and the project will pay for all costs.

8.5 Support for Vulnerable Households

In-kind assistance will be provided to the vulnerable affected households during relocation, as follows:

- The Project will offer to all physically displaced vulnerable households to assist them in their move, by providing a vehicle to transport their belongings.
- Specific Livelihood Restoration Measures dedicated to vulnerable affected households are also defined in Section 9.4.



9 Livelihood Restoration Measures

9.1 Overview

The Lenders policies on Involuntary Resettlement require that the Projects assists displaced persons in their efforts to improve, or at least restore, their livelihoods and living standards, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.

This section sets out the programme aiming at providing this assistance. The information used to establish the Livelihood Restoration Programme is based on the socioeconomic information summarized in Section 4.2.

The livelihood restoration measures defined in this section complement the moving allowance and disturbance allowance which will be provided as part of the compensation package.

All livelihood restoration activities will be funded and implemented by MHPL.

The livelihood restoration measures are articulated with the measures defined in the previous Section 8, which intend to minimise the disruption caused by the involuntary displacement:

- The option to obtain replacement land in-kind will minimise the risks for the all the affected households whose livelihoods are land-based,
- The timing of the displacement before the rainy season will also reduce the risks related to the disruption of the agricultural production cycle.

An overview of the livelihood restoration measures is provided in Table 56 below. The measures themselves are then presented in the following paragraphs. It must be noted that some of the livelihood restoration measures target only the affected households residing the in affected villages: non-resident affected persons will not be eligible to these livelihood restoration measures.

Table 56: Overview of Livelihood Restoration Measures

Category of Measures	Category of Affected Persons or Households Eligible	Livelihood Restoration Measures
Support during the Compensation and Resettlement Process	All affected households	[LR 1] Support to open a bank account
	All affected households	[LR 2] Training for sustainable management of compensation
	All affected households residing in the affected villages. Non-resident affected households will not be eligible to this measure.	[LR 3] Transitional Support
Support to Existing Farming Activities	Affected households with cultivated plots affected (Non-resident affected households will not be eligible to this measure.)	[LR 4] In-kind Provision of Agricultural Inputs to Restore Crops Production
	All affected households (Non-resident affected households will not be eligible to this measure.	[LR 5] Provision of one bicycle per affected household
Support to develop Alternative Livelihood Activities	All affected households (Non-resident affected households will not be eligible to this measure.)	[LR 6] Support to Development of Off-Farm Economic Activities
	All affected households (Non-resident affected households	[LR 7] Preferential Hiring and Skills Training



Category of Measures	Category of Affected Persons or Households Eligible	Livelihood Restoration Measures
	will not be eligible to this measure)	
Collective Livelihood Restoration Measures	Early Works RAP and Transmission Lines RAP: measure [LR 8] only. Main Reservoir RAP and Main Works RAP: measures [LR 8] to [LR 13].	[LR 8] Collective support to improve agricultural production, one measure possible per village, to be chosen amongst the three measures below: <ul style="list-style-type: none"> The following collective livelihood restoration measure will apply to all affected villages, including those affected by the Early Works RAP and the Transmission Lines RAP: [LR 8] Collective support to improve agricultural production, one measure possible per village, to be chosen amongst the three measures below: Farmer Field Schools, trainings on improved fallow and demonstration plots, OR <ul style="list-style-type: none"> Support to development of small agro-processing units, OR Support to development of micro-businesses producing agricultural inputs. <p style="text-align: center;">These measures are described in the next paragraphs.</p> <ul style="list-style-type: none"> Farmer Field Schools, trainings on improved fallow and demonstration plots
		Support to development of small agro-processing units
		Support to development of micro-businesses producing agricultural inputs
		[LR 9] Support to sustainable and green charcoal production
		[LR 10] Restoration of access to water for domestic and drinking purposes
		[LR 11] Restoration of livestock access to water
		[LR 12] Support to develop small scale irrigation
		[LR 13] Support to fisheries activities for affected communities around the Main Reservoir
		Livelihood Restoration Measures for Vulnerable Households
[LR 15] Provision of Small Livestock (Goat or sheep)		
[LR 16] Support to Develop Beekeeping		

9.2 Individual Livelihood Restoration Measures

9.2.1 Support during the Compensation and Resettlement Process

9.2.1.1 [LR 1] Support to open a bank account

The Project will appoint local financial institutions or banks to manage the payment of compensations to the affected persons (see Section 10.2.2.1).



As indicated in Section 4.2.12, during the 2023 socioeconomic surveys, only about 15% of the affected households interviewed declared that at least one person in the household had a formal bank account.

Therefore, to ensure all affected persons will be able to receive their compensations, MHPL Social Team will work with the local financial institutions or banks to help the households who do not have a bank account to open one.

A national ID Card is needed to open a bank account. The GoM PIU will support affected persons who do not have a national ID Card to obtain one.

During the census of affected persons in each Phased RAP, MHPL Social Team will:

- Establish the list of affected households without a bank account,
- Explain to these households what documents they should provide to have a bank account opened,
- Suggest opening a joint bank account, under the name of both spouses, and explain the bank account management to the affected households.

After the census of affected persons and before the start of the compensation process in each Phased RAP (i.e. before signature of the Compensation Schedule by the affected persons), MHPL Social Team will:

- Collect the necessary documents and deliver them to the bank(s) which will handle the compensation payment,
- Deliver the documents of their bank account to the affected persons and explain them how to access their compensation.

All costs of opening a bank account will be borne by the Project.

The monitoring indicators will be:

- The number of affected persons without a bank account (disaggregated by gender) before the compensation process,
- The number of households with a bank account created with the assistance of MHPL Social Team,
- The number of joint bank accounts, under the name of both spouses, created with the assistance of MHPL Social Team, and
- The number of households with a bank account created who received the documents of their bank account from MHPL Social Team.

9.2.1.2 [LR 2] Training for sustainable management of compensation

The cash compensation provided to households will be an important sum of money in relation to the household's normal earnings. To ensure that compensation money is managed by the households in a sustainable manner, the Project will hire an NGO to perform a series of financial management trainings which affected households will be encouraged to attend. The aim is to support affected people with independent financial advice to help them invest their compensation in such a way as to improve their long-term well-being rather than contribute to a household spending the compensation money in an unplanned and unproductive way.

The trainings will be carried out in each affected village ahead of the payment of compensations, in 2 stages:

- To understand gender-differentiated views, expectations and constraints, the NGO will organise a first series of women-only and men-only seminars. Specific seminars led by a woman will be offered not only to the female heads of women-headed households, but also to the female spouses of men-headed households, in order to ensure that they can express their concerns and constraints without any gender bias.
- A second series of seminars will then be organised, with spouses of both genders invited to attend.



These seminars will include topics such as (i) how to save money, (ii) how to obtain loans, (iii) how to manage wisely family expenses, (iv) how to productively invest in compensation money and (v) how to use livelihood restoration support to diversify their economic activities.

The monitoring indicators will be:

- The number of female and male members of affected households attending separately the first series of trainings, disaggregated by village.
- The number of female and male members of affected households attending together the first series of trainings, disaggregated by village.

9.2.1.3 [LR 3] Transitional Support

Rain-fed crop farming is the main source subsistence activity in the affected communities. Most local farmers are limited to rain-fed practices and only have one harvest of staple crops at the end of the rainy season. They live on this harvest for most of the year. As indicated in Section 8.3, the displacement of affected persons (physical displacement as well as economic displacement) should occur before the rainy season (i.e. in October – November). This will allow the affected persons to move to new farming plots to start preparing them ahead of the rainy season, and ensure they can harvest their crops at the end of the rainy season. The months of the end of the rainy season are known as the 'hunger months' as the stock of the previous harvest are being exhausted before the new harvest is available. This food insecurity period is widespread across the Project area, and could be exacerbated by climatic events, such as extreme drought or cyclones.

The difficulties due to these 'hunger months' will add up to the other difficulties experienced during the displacement. Therefore, a transitional support package will be provided during the first rainy season after displacement. This transitional support will be a staple food basket provided in-kind during 6 months to all affected households residing in the affected villages. Non-resident affected households will not be eligible to this measure.

The size and composition (maize, cassava) of the food basket will be tailored to fit local preferences and the size of the affected households.

9.2.2 Support to Existing Farming Activities

9.2.2.1 [LR 4] In-kind Provision of Agricultural Inputs to Restore Crops Production

This Livelihood Restoration Measure [LR 4] will be provided to the affected households residing in the affected villages who have replacement lands. To help these affected households restore their subsistence crop production, the displacement will be scheduled as much as possible before the start of the rainy season, as indicated in Section 8.3 above. To assist the affected households to re-start their crop farming cycle on their new farming fields, essential agricultural inputs such as seeds and fertilizers will be provided. According to the interviews conducted during the 2023 socioeconomic surveys, obtaining seeds and fertilizers is a significant cost. These inputs are distributed through subsidised programmes (Farm Input Subsidy Program), but are not always available to all households in the Project.

The provision of inputs will be done in-kind, to ensure it effectively supports the transition to new plots. The objective is to mitigate disruptions due to displacement, such as potential changes in soil fertility, leading to lower yield. The objective is to maintain (or improve) yields while producers become used to their new plots. Providing the inputs in kind will help prevent the misuse of the inputs, such as reselling, ensuring they are utilized to restore or possibly enhance agricultural productivity on new plots.

Improved maize and pigeon peas seeds³⁵ or other seeds, along with essential fertilizers like Urea and NPK, will be distributed to the displaced households. The quantity of these inputs provided

³⁵ Maize is the main staple food, and Pigeon Peas are mostly intercropped with maize in the project area. Improved maize seeds can be obtained from private firms such as SeedCo for instance <https://seedcogroup.com/mw/>



to each household will be determined based on the main staple food cultivated by almost all affected households.

A minimum package will be considered made of 10kg of improved maize seeds, 100kg of NPK and 50kg of Urea, corresponding to 0.5ha of maize, according to the surveys performed amongst local farmers in 2023.

Procuring the inputs could take time. To ensure the inputs are available in a timely manner, MHPL Social Team will:

- Identify providers and establish the volumes they can deliver,
- Integrate the procurement of inputs in the overall procurement process and schedule,
- Start procuring the inputs as soon as the socioeconomic surveys for each phased RAP are completed,
- Deliver the inputs after compensation payments, once the affected households have obtained their replacement land (either through provision of in-kind compensation, or after they have bought their replacement land themselves if they opt for cash compensation).

The monitoring indicators will be:

- The volume of agricultural input
- The volume of inputs effectively provided in kind to affected household,
- The number of households who effectively receive the agricultural inputs, disaggregated by gender of the household's head and by village.

9.2.2.2 [LR 5] Provision of one bicycle per affected household

The large majority of the affected household walk or use bicycles as their primary mean of transport (see Section 4.2.14.4). One-third of the affected households surveyed declared owning a bicycle (see Table 30). Only 14% of female-headed households declared owning one, compared to 38% of male-headed households.

Lack of transportation means often leads to a lack of access to basic goods and services, as well as opportunities to improve rural livelihoods. The lack of means of transportation is one of the main constraints limiting the affected households access to markets. Given the importance of transportation to ensure easier access to livelihood improvement opportunities, the project will provide one bike to each affected household.

Offering bicycles to tackle rural mobility issues is an approach already implemented in Malawi (USAID 2023), with some NGO already distributing bicycles in rural areas as a way to help rural communities improve their livelihoods. The Mpatamanga Project will be able to build upon this existing well-developed market to improve rural mobility for the affected households.

One bicycle will provided in-kind to each affected household, after they have signed their receipt of compensation payment. It will help them access market to sell their surplus of crops.

The monitoring indicators will be:

- The number of bicycle procurer by MHPL, and
- The number of affected households who received a bicycle, disaggregated by gender of the household's head and village.

9.2.3 Support to develop Alternative Livelihood Activities

9.2.3.1 [LR 6] Support to Development of Off-Farm Economic Activities

As mentioned in section 4.2.12, access to credit is limited in the Project area. This is limiting the investment opportunities in off-farm activities for the affected households. To unlock investment possibilities, the Project will support the establishment of small micro-credit schemes aimed at helping the households to develop alternative off-farm sources of income. This support to the development of off-farm alternative sources of income will be include two



main activities: (i) offering access to micro-credit schemes to the affected households and (ii) training and assistance to establish a business plan and start alternative off-farm activities.

This livelihood Restoration Measure [LR 6] will be offered to affected households. It means that the members of working age in each affected household will be considered eligible, either individually or collectively. The household can choose to have one person receiving this support: it can be the head of household, or his/her spouse or one of their children of working age. The support to develop off-farm activities can also be delivered to the household as a whole if several persons of working age in the household wish to work together to develop off-farm activities.

A.1 *Micro-credit scheme*

MHPL will identify one or more micro-credit institution(s) already working in the Project-affected areas, or who can establish a presence on-site in these areas. Memorandum of Understanding will be prepared with these micro-credit institutions defining the maximum interest rate applied and the conditions of the micro-loans. MHPL will provide the initial funds and insure the loans for the micro-credit institutions.

The amount of the micro-loans to be offered to the affected households and insured by MHPL will be 1,000 USD (equivalent to 6 months of estimated average income declared by more than half of the affected households during the 2023 socioeconomic surveys, see Section 4.2.10.2). Micro-credits will only be signed after a business plan is submitted by the affected households (see point b. below) and validated by the micro-credit institution.

MHPL will inform individually each affected household of their eligibility to this measure during the presentation of the compensation packages. After the compensation agreement are signed, MHPL will organise information meetings with affected households in each affected group village and a selection of village before compensations are paid, to disclose how the micro-credit scheme will operate.

The monitoring indicators will be:

- The number of Memorandum of Understanding or Agreements signed between MHPL and the micro-credit institutions,
- The number of information sessions organised in the affected area, and the number of affected persons attending, disaggregated by gender and village, and
- The number of micro-loans obtained by affected persons, disaggregated by gender and village, and the loans rates.
- Average amount of microcredit per affected household disaggregated by gender and village, and
- Total amounts of loans provided to affected households by the micro-credit institutions, and total amount insured by MHPL.

A.2 *Training on business plans and assistance to start new activities*

An NGO will be recruited by MHPL to assist the affected households who wish to develop non land-based activities. The NGO will identify with the members of these households the activity they want to develop and establish with them a training and business plan. The activities chosen will vary, they could be as various as hairdresser, carpenter, petty shops, tailor, stock and sale of agricultural commodities or any other off-farm activities

Households who are already engaged in small businesses activities (such as petty trade or transportation activities) will be assisted by the NGO to develop these existing activities with the micro-credit scheme. This could be done through purchase of supplies, vehicles or materials, assistance for marketing or access to markets or business management training.

Households who are not engaged in businesses activities, and who wish to develop such activities will be supported by the NGO as well. The business activities envisaged by the affected households will be reviewed by the NGO, who will assist the affected household to set-up a business development plan. This plan will ensure that the business activities planned by the affected households are feasible and sustainable.



The NGO will provide support to the affected households in 3 stages:

- Initial individual support session to identify the off-farm activities chosen and validate their plans.
- Second support session to establish the business plan to obtain the micro-credit scheme, and
- Third support session when the micro-credit is signed to start the activities.

The monitoring indicators will be:

- Number of support sessions provided by NGO to affected households, disaggregated by gender of the household's head and village, and
- Number of business plans prepared and submitted to the micro-credit institutions, disaggregated by activity category, gender of the household's head and village, and
- Categories and number of off-farm activities effectively started by the affected households, disaggregated by activity category, gender of the household's head and village.

9.2.3.2 [LR 7] Preferential Hiring and Skills Training

Another off-farm activity option for the affected households will be the employment opportunities provided by the Project. The members of working age of the affected families could benefit from employment opportunities on the project during construction. Their employability could be limited by low education levels (see Section 4.2.8) and the lack of skills. In each of the affected households, one nominated person of working age will be eligible to this Livelihood Restoration activity [LR 7]. For instance, the affected households can choose to nominate a daughter or a son instead of the household's head. The following measures will be implemented to assist the nominated members of working age of the affected families who wish to develop wage-based livelihood:

- Amongst the local employment targets specified in the EPC contracts, the members of working age of Project affected households will have the priority in terms of employment on unskilled jobs by the EPC contractor during construction,
- MHPL will prioritise the nominated members of working age Project affected households for the Skills training and vocational trainings to be implemented as part of the Local Area Development Plan,
- A programme of skills training will be developed by the EPC contractor for the members of working age of Project affected households.

The monitoring indicators will be:

- Number of members of affected household of working age who received skill trainings, disaggregated by gender and village, and
- Number of members of affected household of working age employed by the EPC, disaggregated by gender and village

9.3 Collective Livelihood Restoration Measures

This section presents the livelihood restoration measures targeting the affected communities. The beneficiaries will not be the affected households taken individually, but the affected communities, including households physically and economically displaced, but also the member of the communities who may be affected by restriction of access to natural resources (see Section 5.2.2) or loss of community structures (such as boreholes).

These collective impacts will not be the same for the linear components of the Project and for the Main Works and the Main Reservoir. Because of the linear nature of the transmission lines and the S137 road work, it is likely that the collective impacts will be less important than for the Main Works and the Main Reservoir. The loss of land at the village level, and the restriction of access to water will need specific collective livelihood restoration measures. Therefore, some collective



livelihood restoration measures will be applied for all phased RAPs (Section 9.3.1 below), and other will be specific for the Main Works and Main Reservoir RAP (Section 9.3.2 hereafter).

Collective livelihood restoration measures for the communities affected by the S137 road works and the two transmission lines may be revised during the Early Works RAP and Transmission Lines RAP if and as necessary.

9.3.1 Collective Livelihood Restoration Measure for all Phased RAPs

The following collective livelihood restoration measure will apply to all affected villages, including those affected by the Early Works RAP and the Transmission Lines RAP:

[LR 8] Collective support to improve agricultural production, one measure possible per village, to be chosen amongst the three measures below:

- Farmer Field Schools, trainings on improved fallow and demonstration plots, OR
- Support to development of small agro-processing units, OR
- Support to development of micro-businesses producing agricultural inputs.

These measures are described in the next paragraphs.

9.3.1.1 Farmer Field Schools, trainings on improved fallow and demonstration plots

The livelihood restoration measure [LR 4] above addresses short-term issues regarding the restoration of productivity on the new lands after displacement. This provision of fertilisers can act as a temporary substitute for structural soil fertility. But another approach has to be defined for the long term, especially considering that most producers rely on vouchers to purchase fertilizers (the Farm Input Subsidy Program).

Over time, local farmers have developed empirical knowledge season after season. They know their plots very well, their weaknesses, their vulnerability to certain hazards and risks (weather, insects, diseases). The displacement of these producers will inevitably disrupt this empirical knowledge. The farmers may have to observe the characteristics of their new plots, and perhaps discover new risks.

To support this learning and adaptation process, the 'Farmer Field School' approach will be implemented. The 'Farmer Field School' (FFS) has been promoted as an approach for educating farmers on making adaptive farming decisions. It is a technique developed by the FAO that enables learning in the field, under real conditions, thereby limiting biases that result from imposing theoretical practices without considering the local context. In Malawi, the Farmer Field School (FFS) approach has been used to enhance food security within the context of adaptation to climate change (Van den Berg et al. 2023). Examples of projects or programmes having used this approach in Malawi are the FAO KULIMA program³⁶ between 2017 and 2022 (FAO 2022) funded by the European Union or the Sustainable Agricultural Production Programmes (SAPP) funded by the International Fund for Agriculture Development (IFAD 2023). The Sustainable Agricultural Production Programmes did implement the Farmers Field School approach in Balaka and Blantyre Districts. Both programmes involved the District Agriculture Extension Service Systems (DAESS).

The Project will select an NGO with experience with supporting small-scale farmers to implement the 'Farmer Field School' approach in collaboration with the District Agriculture Extension Services. The objective is to identify and disseminate efficient and sustainable farming techniques to maximize yields in the Group Villages affected by the Project land acquisition. Agricultural practices resilient to climate change will also be developed.

One of the main recognised methods to restore fertility is the "improved fallow" approach. It has been recognized by both the scientific community³⁷ and specialized agencies (such as the World

³⁶ See for instance <https://www.fao.org/newsroom/story/Agriculture-outperforms-imagination/>

³⁷ See for instance (Ochire-Boadu et al. 2020; Partey et al. 2017; Maithya et al. 2007)



Bank³⁸ or the FAO³⁹). It has already been introduced in southern Malawi⁴⁰. The "improved fallow" approach involves cultivating leguminous plants such as *Mucuna* for at least 15 months, allowing them to fix atmospheric nitrogen and enhance soil fertility, before planting maize or other crops. Although it requires to increase the area cultivated to rotate between fallow and staple crops cultivation, the improved fallow approach yields higher returns without extensive reliance on external input supplies. It makes the farming system more autonomous but also more sustainable in the long run. It will lay the groundwork for the long-term resilience of the farming systems at the resettlement sites. As leguminous are already farmed in the affected areas, this approach would rely on a change in field management practices by the farmers.

The Farmer Field School approach will be defined by the NGO selected. The expected activities are outlined below. They are expected to be implemented over a period of 4 to 5 years.

- Selection of farmers who would join the Farmer Field School as facilitators. At least one farmer affected by the Project land acquisition should be selected in each village affected, with a maximum of 25 farmer in each Farmer Field School. Selection can be done through lottery to avoid biases and conflicts if necessary. The selection of farmers should be gender sensitive, with an equal distribution of male and female farmers selected.
- Selection of demonstration plots in each Group Village, considering factors such as the geographical representation of villages, the representation of affected individuals, as well as accessibility, in order to facilitate the implementation of trials.
- In each GVH, decide the trials activities to be implemented on the demonstration plots with the farmers and the District Agriculture Extension Services. The NGO will develop protocols outlining the methodology, implementation plan, and monitoring framework for the trials.
- Procurement of necessary resources, equipment, and inputs required for conducting the trials by the FFS on the demonstration plots.
- Capacity building and training of farmers, and implementation of the demonstration plots, with technical support starting the first year after displacement.
- Engage participants in participatory monitoring and evaluation processes to gather feedback and insights.
- The farmers participating to the FFS share results in each affected village.

The monitoring indicators will be:

- Number of farmers selected and trained in the Farmers Field School activities, disaggregated by gender and village, to be documented annually, and
- Number of demonstration plots established,
- Tracking of farmers trained and seeing if their long-term yields increase.

9.3.1.2 Support to development of small agro-processing units

There are few agricultural processing units in the local villages, such as grain mills. Small mills or grinding machines to produce maize flour for instance are not always existing in all villages (see Figure 70). These units are mostly privately owned and managed, and villagers have to pay fees to their owner to use them. To process the maize of other crops and make flour, the villagers often have to travel long distances.

This measure aims to support the development of small agro-processing unit such as grain mills. The processing of agricultural products not only adds value to the raw material but also facilitates transportation and/or prolongs the shelf life of food items, thus reducing losses.

To ensure one processing unit will be established in each village in a sustainable manner, a demand driven approach will be followed. MHPL will identify and support one project holder per

³⁸ See for instance (World Bank 2007)

³⁹ See for instance (Consultative Group on International Agricultural Research Science Council (CGIAR) FAO 2006)

⁴⁰ See (Akinnifesi et al. 2009)



village rather than impose any specific activity. A call for ‘expression of interest’ will be launched in each village to identify the villagers who wish to develop such units, using a small grant provided by the Project. The villagers will be supported to prepare a business plan and the most sustainable project will be selected.

Those who express their interest will receive support to (i) strengthen their management skills and (ii) develop a simplified business plan. The winners will receive a small grant to acquire equipment (up to USD3,000 maximum), but will need to provide a contribution (10%) to ensure that motivated individuals participate. The villagers selected will receive technical support for the operation and maintenance of the equipment during the first two years.

This measure will be implemented with the NGO recruited for the Farmer Field School Approach.

The monitoring indicators will be:

- Number of farmers expressing their interest for receiving a small grant to establish a agricultural processing unit or grain mill in their village, disaggregated by gender and village,
- Number of affected villages where an agricultural processing units or grain mills is established,
- Number of ‘customers’ using the units developed in each village.

9.3.1.3 Support to development of micro-businesses producing agricultural inputs

Access to quality inputs, such as organic pesticides, fertilizers, and seeds, is essential for sustainable agricultural production. The general low organic matter content of the soil in most places in the Project area requires producers to amend their plots with fertilizers. Unfortunately, access to inputs remains problematic. Most farmers do not purchase inputs (organic fertilizers, pesticides) because the cost, burdened by transportation, is often too high. Furthermore, sometimes there is simply no supply available. Similarly, the presence of pest insects such as the armyworm causes significant losses for crops in general and for maize in particular.

Compost is the result of a biological process (composting) that allows for the valorisation of certain organic matter "deposits." During composting, this organic matter is decomposed under the action of bacteria. Quality compost is a stabilized product rich in humic substances, a significant portion of which will be immediately assimilated by plants. The addition of organic matter (via compost) offers multiple benefits.

The addition of organic matter (in the form of compost) helps to mitigate the effects of droughts and heavy rains, thus enhancing resilience to climate change. Organic matter can be likened to a glue that gives the soil a crumbly structure, with aggregates and clumps. Compost helps to improve soil by increasing moisture retention capacity (reducing leaching and evaporation) and releasing water during dry periods (Lefèvre et al. 2017) and reducing erosion risks (Bot and Benites 2005).

As part of the Farmer Field Schools approach , the project will support the development of bio-inputs production at village level. This will be done as part of the demonstration plots, and could involve making compost from animal waste or bio-pesticides from wild flora (like the Neem tree), rich in azadirachtin.

In addition to testing the approach through the demonstration plots and the Farmer Field Schools , the demand-driven approach described for the support the development of grain mills in villages will be replicated to support the production of bio-inputs:

- MHPL will identify and support one project holder per village through a simplified call for ‘expression of interest’ to start this activity,
- Those who express their interest will receive support to (i) strengthen their management skills and (ii) develop a simplified business plan.
- The winners will receive a small grant to acquire equipment (up to USD3,000 maximum) but will need to provide a contribution (10%) to ensure that motivated individuals participate. They will also receive technical support for the operation and maintenance during the first two years.



This measure will be implemented with the NGO recruited for the Farmer Field School Approach

The monitoring indicators will be:

- Number of farmers expressing their interest for receiving a small grant to develop agricultural bio-inputs, disaggregated by gender and village,
- Number of affected villages where bio-inputs projects are developed.

9.3.2 **Collective Livelihood Restoration Measures for the Main Reservoir and Main Works RAP**

The measures [LR 9] to [LR 13] in the next paragraphs target the villages affected by the Main Dam and the Main works:

- In Blantyre District:
 - In GVH Kaliati, Lisangwi, Inosi, Chilaulo, Chaswanthaka, Mpindo, Divala and Mbwinja villages,
 - In GVH Mzigala, Mzigala and Mwazilinga villages,
 - In GVH Namputu, Chimphanda, Baluwa, Chikira, Namputu, Kwapita and Chinkwinya villages,
- In Neno District:
 - In GVH Feremu, July, Feremu, Andivuta, Kambalame and Nkhwali villages,
 - In GVH Nsalawatha, Petulo and Jonathan villages, and
 - In GVH Ngwenyama, Nkoka, Liyenda villages.

9.3.2.1 **[LR 9] Support to sustainable and green charcoal production**

Charcoal is one important source of cash income for the affected households in the Main Works and Main Reservoir areas. The very high demand from cities makes it the quickest source for cash income for most households in the areas surveyed in 2023.

As indicated in Section 5.2.2.1, at the village level, it is likely that the reduction of areas available to produce charcoal will increase pressure on natural resources outside of the Project lands requirements. As there are no defined boundaries between villages or Group Villages, it is difficult to estimate precisely which village is likely to be more affected than other.

As currently practiced (see Section 0), charcoal making is not sustainable because:

- In most villages, there is no or very limited management of wood lots,
- The 'good' tree species which allowed to produce good quality charcoal are becoming increasingly scarce and charcoal makers are now also using saplings, coppices and digging up tree stumps to make charcoal.
- The current charcoal production techniques (earth kiln) are considered unproductive with an efficiency limited at 10-15% of the wood volumes consumed.

The National Charcoal Strategy (Government of Malawi 2017) through its Third Pillar promotes sustainable wood production. This entails support to cultivation of fast growing tree species and/or alternative feedstock suitable for charcoal and commercial firewood production. In alignment with the third pillar of the National Charcoal Strategy, MHPL will support the development of sustainable and green charcoal production in the six group villages riverine to the Main reservoir and Regulating Reservoir (in Blantyre District, GVH Kaliati, GVH Namputu, and GVH Mzigala; and in Neno District: GVH Feremu, GVH Nsalawatha and GVH Ngwenyama).

MHPL will first identify a partner with experience in sustainable and green charcoal production in Malawi. Several initiatives and research projects on this issue have already been implemented and tested in Malawi. For instance, the Malawi University of Business and Applied Sciences has developed a pilot project of commercialization of bamboo for firewood and charcoal production (UNDP 2022), with the support of the United Nations Development Programme (UNDP).



Organisations with similar experience will be identified by MHPL, and a partner will be selected to develop a training and pilot program in the 6 GVH around the Main Reservoir and Regulating Reservoir.

The Partner selected will define a detailed programme. The training programme could be organised around two main themes:

- Sustainable woodlots management practices, and
- Improved trees varieties for charcoal production.

The Partner selected by MHPL will develop and implement a woodlot management training programme, with the following activities:

- Assessment of existing woodlot management practices in the 6 GVH
- Development of training modules to be administrated in the affected group villages and villages,
- Training of local farmers on the best woodlot management techniques from seedling production, plantation, and maintenance up to harvesting techniques.

The Partner selected by MHPL will support the dissemination of improved trees varieties for charcoal production through the following activities:

- Assessment of tree varieties appropriate for supporting climate resilience in the project area,
- Setting up of trial stands for appropriate seeds and setting up of orchards to grow and disseminate improved varieties.

The Partner select will establishment demonstration plots in the 6 GVH to demonstrate woodlot management practices with improved trees species. Some practices of "improved fallow" applied to agroforestry could be disseminated. Some examples inspired by the traditional slash-and-burn cultivation method but incorporating the concept of "improved fallow" are available (Peltier et al. 2010). Practices involving rotation of crop cultivation and tree planting over time on the same plot of land could be demonstrated.

The Partner will also explain how to produce sustainable charcoal as a legal activity. They will support the registration of sustainable charcoal makers, and the branding of their products, so that their sustainable charcoal products can be easily identified by the customers.

As indicated in Section 4 (see Figure 48), selling charcoal is a source of income for about half of women-headed households and men-headed households. Therefore, the Partner implementing this Livelihood Restoration activity [LR 9] will ensure the trainings and support they will provide are distributed equally between both genders. They will ensure that half of the villagers receiving their support are women.

The monitoring indicators will be:

- Number of farmers trained on sustainable Charcoal techniques, disaggregated by gender and village, and
- Number of demonstration plots established.

9.3.2.2 [LR 10] Restoration of access to water for domestic and drinking purposes

As indicated in Section 5.2.2.2, access to the Regulating Reservoir will not be allowed for safety reasons. Mpindo and Mbwinja villages in Blantyre District and Nkhwali village in Neno District will no longer be able to access the Shire River. Restriction of access to the Main Reservoir banks will be limited to 500m upstream of the main dam and 500m downstream of the tailrace of Tedzani HPP. During operation, the villages around the Main Reservoir may however see their access to the Shire River hindered by the development of aquatic weed or an increase of the population of crocodiles or hippos.

All the villages around the Main Reservoir and the Regulating Reservoir use the Shire River to fetch water for domestic purposes (see Section 4.2.4) including for drinking. This is not their only water



source, as most villages also have boreholes and wells, and as they also use the tributaries to the Shire River (see Section 4.2.14.2).

MHPL will ensure access to water for domestic purposes for the villages around the Main Reservoir and the Regulating Reservoir is maintained throughout construction and operation. The approach will include the following activities:

- Inventory of domestic water sources and water needs in each village before the start of construction,
- Identification village by village (i) of the dependency on the Shire River for domestic uses (i.e. if other water sources are available and used or not), (ii) of risks of reduced accessibility to the reservoir during operation (based on the results of the 2024 ESIA assessment on the risks of human-animal conflicts (crocodiles and hippos) and (iii) of the need of provision of additional water sources for domestic purposes. The need will be assessed considering the national Water Policy (Ministry of Water and Sanitation 2022) (for instance, one borehole fitted with a hand pump for 250 people),
- Through a participatory process in each village, identification of preferred option to maintain access to water for domestic purpose. As the villages vary in size and in distance with the reservoir, a range of technical solution may be necessary. They may involve borehole, wells, construction and development of safe access to the river or its tributaries.
- Construction of the solutions chosen in each village.

These activities will be done in the villages affected by the Regulating Reservoir (Mpindo and Mbwinja villages in Blantyre District and Nkhwali village in Neno District) before the start of the main construction. They will be done before impoundment of the Main Reservoir in the other villages affected by the Main Reservoir.

The monitoring indicators will be:

- Availability of the inventory of domestic water sources in each village, and number of alternative solutions needed, and
- Number of alternative access to water for domestic purposes established, disaggregated by village.

9.3.2.3 [LR 11] Restoration of livestock access to water

This measure will be the same as the measure [LR 10] above, but will focus on access to water for livestock. Livestock farming is a key activity for some affected households. The restriction of access to the Regulating Reservoir and the potential hindered access to some areas of the main reservoir need to be mitigated to avoid impacts on the livestock farmers livelihoods.

The approach will be the same as the measure [LR 10] above, but the technical solution may differ, as they will be focused on access to water for the livestock.

Alternative accesses to water for livestock will be developed before the start of the main construction through a participatory process in the villages affected by the Regulating Reservoir (Mpindo and Mbwinja villages in Blantyre District and Nkhwali village in Neno District).

Around the Main Reservoir, it will be needed to assess if the cattle can access the reservoir banks using delineated secured accesses, or if the cattle need to stay away from the reservoir to protect the water quality. The solutions will be assessed through a participatory process during construction to be operational at the impoundment of the main reservoir.

The solutions to be developed may include construction of drinking troughs fed by boreholes or wells, or by systems abstracting water from the regulating reservoir.

The monitoring indicator will be the number of alternative accesses to water for livestock established, disaggregated by village.



9.3.2.4 [LR 12] Support to develop small scale irrigation

As described in Section 4.2, the most productive farmlands in the communities affected by the Main Reservoir and Main works are those located on the banks of the Shire River. These lands benefit from an easy access to water all year long, and alluvial deposits make them more fertile than other lands. The ‘dambo’ farming system, with 2 yields per year instead of one for rain-fed farming, is mostly done on these lands, or along the banks of some tributaries or seasonal streams.

The Project land acquisition will take these lands away. It will be difficult to find replacement lands with the same productivity. The land acquisition will also reduce the amount of farming land available. Therefore, it is necessary to define an approach to improve the agricultural productivity in the remaining lands. The livelihoods of the affected households is at stake, as well as the food security of the local communities.

Access to water is the key issue for farmers in the villages affected by the Main Reservoir and the Main Works. Developing small-scale irrigation systems will ensure a long-term and sustainable improvement of the agricultural productivity in the affected villages. The technical solutions will be defined with the affected communities around the Main Reservoir and Main works through a participatory process.

The small-scale irrigation system will need to be robust and simple. Given the size of the communities and the scattered settlement patterns, no irrigation canals will be developed, as they require important maintenance and careful management of collective water rights. The technical solutions may be different from one village to another, based on the topography, distance with the river, or number of farmers. They can include simple watering of crops by hand, as is currently done by some farmers along the banks of the Shire River.

Boreholes or wells could be developed. In the 2024 ESIA, the Project has committed to reservoir 2m³ per second of the Main Reservoir water for other purposes than hydropower generation. This volume of water could be used to feed the small-scale irrigation systems, through small and simple water abstraction systems.

During the construction period, MHPL will select an NGO to define the small-scale irrigation systems with the villages affected by the Main Reservoir and Main Works. A feasibility study for the small-scale irrigation systems will be prepared to validate the solutions envisaged. The solutions will then be established to be operational as soon as technically feasible after displacement.

The monitoring indicators will be:

- Availability of the small-scale irrigation systems feasibility study,
- Number of small-scale irrigation systems established in the villages affected by the Main Reservoir and the Main works, disaggregated by village,
- Number of farmers benefitting from the small-scale irrigation systems, disaggregated by gender and village.

9.3.2.5 [LR 13] Support to fisheries activities for affected communities around the Main Reservoir

As indicated in Section 4.2.13G, about 38% of the affected households surveyed in 2023 declared fishing. This activity is widespread across all villages around the Main Reservoir and Main Works area. However, very few of the surveyed household (less than 5%) declared fishing as an income source: most of the catch are used for self-consumption.

With the change from a lotic to a lentic ecosystem, the Main Reservoir will create a potential for increased fishing activities. This would happen after impoundment of the main reservoir, at the start of the operation. The fish population could increase, and fish yields could increase, creating opportunities to develop fishing as a mean to improve food security in the riverine communities and to diversify income sources for the fishers.



The Project will support the development of fisheries activities in the villages affected by the Main Reservoir and the Main Dam. This support needs to be prepared during the construction period, to be implemented and produce results from the start of operation. This period will coincide with the demobilisation of construction workers, and will take place after the Livelihood Restoration Measures [LR 4] to [LR 9] defined above are implemented and have produced results.

The Project support to the development of fisheries activities to villages affected by the Main Reservoir and Main Works will include the following activities:

- During Construction, and prior to impoundment of the Main Reservoir:
 - MPHL will retain the services of specialised expert(s) to undertake a Reservoir Fisheries Feasibility study,
 - MHPL will then develop an Initial Reservoir Fisheries Management Plan to cover the first 2 years of operation. This initial plan will describe and analyse the proposed options for fishery development, including analysis of suitable species, and feasibility of aquaculture. It will identify appropriate species and provides an estimate of sustainable yields; identify pest and disease control requirements; establish fishing rights, licences and practices to limit over-exploitation. It will also identify supply chain requirements.
 - MHPL will then consult, receive and consolidate comments on the draft plan from relevant government agencies and riparian communities, and consider them in the revision to this plan.
- During the first 4 years of operation, after impoundment of the Main Reservoir:
 - MHPL will undertake reservoir fish monitoring surveys on a quarterly basis for the first two years after reservoir filling, possibly reducing to biannual surveys for the following 3 years depending on results from the first two years. These surveys will assess catch per unit effort (CPUE) and fish yields in different parts of the reservoir.
 - Local Artisanal fishers will be trained in appropriate fishing techniques to minimise fish mortality and optimise sustainable yields. Training requirements will be specified in the Reservoir Fisheries Management Plan.
 - MHPL will also provide in-kind support (such as fishnets or other fishing or fish processing equipment) in each of the riparian villages for the fishers trained.
 - MHPL will update the Reservoir Fisheries Management Plan as necessary.

To avoid experienced commercial fishers coming from other areas and competing with the local fishers, only villages from the riverine villages affected by the Project Main Reservoir and Main Works will be allowed to fish in the Main Reservoir during the first 10 years after impoundment. This restriction will be widely disseminated to the broad public before impoundment of the Main Reservoir.

The monitoring indicators will be:

- Availability of the Reservoir Fisheries Feasibility study and the Reservoir Fisheries Management Plan before operation,
- Number and results of the reservoir fisheries surveys performed,
- Number of fishers trained, disaggregated by gender and village, and
- Number of fishers who received in-kind support (equipment), disaggregated by gender and village.

9.4 Livelihood Restoration Measures for Vulnerable Households

9.4.1.1 [LR 14] Assistance to land-clearing and/or preparation of agricultural fields

Assistance to land-clearing and/or preparation of agricultural fields after displacement will be provided to vulnerable households. According to interviews performed with farmers during the 2023 socioeconomic surveys, land preparation requires approximately 12 working days per acre



on average for maize cultivated on rain-fed fields. The Project will pay for the vulnerable household the work of one daily worker ('ganyu') during 15 days to clear land to develop agricultural activities after displacement.

The monitoring indicator will be the number of 'ganyu' work days provided by the Project to the vulnerable households to help them prepare the farming activities on their new plot after displacement, disaggregated by gender of the household head and village.

9.4.1.2 [LR 15] Provision of Small Livestock (Goat or sheep)

Livestock is often used in the Project area as a security: it is really used as a live stock which can be sold when needed to quickly obtain cash to address shocks or issues. The Project will support the vulnerable households by providing one small ruminant (goat or sheep) to affected households upon their displacement.

Small ruminants will be provided because they are more robust than cattle. Providing large ruminants (cattle) will require more technical support and more resources from the vulnerable households to care for them, both in terms of nutrition and health, as these animals are much more sensitive to diseases.

The Project will select small ruminant breeding males adapted to extensive farming systems such as the ones practiced in the Project area, demonstrating better disease resistance and heat tolerance.

The monitoring indicator will be the number of vulnerable households who receive a small ruminant, disaggregated by gender of the household's head and village.

9.4.1.3 [LR 16] Support to Develop Beekeeping

Several projects in Malawi have used the development of Beekeeping as a way to provide a sustainable income source⁴¹. This approach is being implemented in Feremu GVH in Neno District (see Section 4.2.10.3D.3). It can also contribute to food security in the households who produce honey.

MHPL will select an NGO with experience in beekeeping development, to implement the following approach:

- Provide beekeeping training to affected vulnerable households, including on health and safety principles, and on how to treat bee stings,
- Provide a start-up package of beekeeping materials (2 wooden beehives, 3000 bees and one queen bee per beehive, Personal Protective Equipment (PPE) per beneficiary, Honey extractor, 20 Glass bottles (1 litre) as containers for storage),
- Oversee the installation of beehives in suitable areas by vulnerable households,
- Support the vulnerable households with their first honey harvest and conduct training on marketing and selling the products,
- Identify markets to sell honey, and link the buyers with the beekeepers.

The monitoring indicators will be:

- Number of vulnerable households trained on beekeeping, disaggregated by gender of household's head and village,
- Number of start-up package of beekeeping materials provided,
- Number of vulnerable households obtaining an income with their products, disaggregated by gender of household's head and village.

⁴¹ See for instance (FAO, IFAD, and GEF 2023)



10 Implementation Arrangements

10.1 Principles

The proposed Mpatamanga HPP is being developed by Mpatamanga Hydro Power Limited (MHPL). On 24th August 2022, the Government of Malawi signed an agreement to progress the development of the Mpatamanga Project as a Public Private Partnership (PPP). This agreement was signed with a private sector consortium comprised of Electricité de France International (fully owned by Electricité de France (EDF) a French multinational electric utility company owned by the French Government) and SN Malawi BV whose shareholders are SCATEC, (a Norwegian publicly listed company), British International Investment (BII) and Norfund.

The Government of Malawi has established a Steering Committee, a Task Force Committee and a Project Implementation Unit to support the development of the Mpatamanga project.

The joint EDFI-SN Malawi BV Consortium has developed Mpatamanga Hydro Power Limited (MHPL) as the Project Company that will lead the development of the Project, working in close coordination with the GoM Project Implementation Unit (PIU) and the IFC. In the future it is expected the GoM (represented by EGENCO) and IFC will become MHPL shareholders. During the development phase, MHPL is also supported by the developers through the following groups for the development phase:

- A Technical working group,
- An Environmental and social working Group,
- A Finance working group, and
- A Legal working group,

The specific roles and responsibilities of the MHPL and the GoM will be described in an Implementation Agreement to be signed before Financial Close along with other project and financing agreements. The main principles of this Implementation Agreement related to the land acquisition, compensation and resettlement process are outlined below.

- The land acquisition and compensation process is managed jointly by MHPL and the GoM,
- All compensation (in cash or in-kind) will be paid by the GoM, using funds from the World Bank,
- The compensations will comply with the principle of full replacement cost,
- The GoM will be responsible for developing the resettlement assets (land titling plan, levelling, access roads, lighting, water supply, replacement houses), as this development is necessary for the provision of in-kind compensation (i.e. replacement land and replacement housing), and the community assets and structures to be rebuilt (such as schools, boreholes). The GoM, through the Ministry of Energy, delegated in July 2024 to MHPL acting as Owner's Engineer the management of the construction of the resettlement sites, the replacement housing and the public infrastructures affected by the Project. This includes: planning, designing, procurement of construction contractor(s), and supervision of the construction works.
- The livelihood restoration program will be funded and implemented by MHPL.

The lands needed for the Project will be acquired by the Government. The Government will retain the ownership of these lands, and then grant to MHPL the following land rights:

- For the Main Dam reservoir lower part (the part close to the Main Dam and needed for operation activities), and for all Project permanent facilities required for operation in the Main Works areas (dams, power stations, operator's village): exclusive right of access and use for the term of the Power Purchase Agreement (with access authorised to the Project's roads for the households residing along them),



- For the Transmission Lines and all construction facilities in the Main Works areas: exclusive right of access and use up to the total demobilisation of the EPC contractors and subcontractors, the land for the Pylons will then be transferred to ESCOM.
- For the Main Dam Reservoir (except for the 500m area immediately upstream of the main dam and the 500m stretch downstream of the end of the tail or the main reservoir, from Tedzani HPP tailrace): non-exclusive right of access and use for the term of a Power Purchase Agreement
- For the Regulating Dam Reservoir: on the entire Neno bank, exclusive right of access and use for the term of the Power Purchase Agreement, On the Blantyre bank, exclusive right of access and use for the term of the Power Purchase Agreement between the main powerhouse outlet and the minimum operating level (MOL) of the regulating reservoir, and non-exclusive right of access and use for the term of a Power Purchase Agreement for the other areas of the Regulating Reservoir Banks on Blantyre side.
- For the lands requirement for the S137 road works: non-exclusive right of access and use up to the taking-over of the Public Access Roads by the Government.

Some of the lands needed temporarily for the construction period will not be needed for the operation (for instance construction camps, quarries, any lay-down or working areas required by the Contractors). Where feasible considering operational constraints, these lands could be transferred by MHPL to the GoM after the demobilization of the contractor at the end of the construction. The possibility for the Government to then transfer some of these lands back to the local communities will be studied by the Project.

The next section defines the roles and responsibilities of the Project stakeholders in relation to the land acquisition, compensation and resettlement process principles of the Implementation Agreement.

10.2 Roles and Responsibilities

10.2.1 Project Organisation

As explained above, during the development phase of the project, the responsibilities for the implementation of the E&S Activities are shared between MHPL and the GoM PIU. The next paragraphs outline the distribution of their responsibilities.

10.2.1.1 MHPL

During the phased RAP development and implementation, MHPL will mobilise a Social and Environmental Management Unit (ESMU). Team members relevant to the RAP activities are references in Table 57 below.

Table 57: MHPL resources mobilised for the RAP development and implementation

Persons / teams	Roles and responsibilities	Stage of the RAP process when this team is needed	Status
Social Lead	Manages MHPL Social Team Reports to MHPL E&S Manager	During the preparation of the Resettlement Policy Framework (RPF) until completion of the resettlement processes	Recruited and mobilised
Resettlement Infrastructure Team	Responsible for the design and planning of resettlement sites, including housing, roads, water supply, electricity	Needs to be established during the preparation of the phased RLRAP (in 2024)	Recruitment planned for 2024



Persons / teams	Roles and responsibilities	Stage of the RAP process when this team is needed	Status
Livelihood and Social development Team	Responsible for Livelihood Restoration Programs (see Section 9)	Needs to be established during the preparation of the phased RAP (in 2024)	Recruitment planned for 2024
Consultation / Stakeholder Management Team	Responsible for the public disclosure of information about the RAP, of the consultation and engagement with affected persons and the management of grievances	During the preparation of the Resettlement Policy Framework (RPF) until completion of the resettlement processes	Team recruited and mobilised. The current team will be expanded during 2024.
Project Lands Team	Manages the database of affected persons and assets and of the compensation program	Needs to be in place at the start of during the preparation of the first phased RAP (in 2024)	Recruitment planned for 2024

During the development of the phased RAPs, MHPL will be responsible to:

- Supervise the RAP Consultant and be involved in the RAP preparation and ensure coordination between the RAP workstream, MHPL Project Management team and MHPL technical team to jointly design and schedule strategies for land acquisition and resettlement.
- Collaborate with GoM entities involved in RAP preparation and implementation,
- Ensure appropriate sensitisation of relevant stakeholders regarding the RAP processes. In so doing they will conduct a process of informed consultation and participation in accordance with good practice for the planning and implementation of the land acquisition and resettlement processes for each component requiring land take for the Project.
- In coordination with the GoM PIU and the RAP Consultant, set out and sensitise the communities on the cut-off date and disclosure of the asset valuation and survey valuation outcomes.
- Financing of the RAP development and planning of livelihood restoration activities.

During the implementation of the phased RAPs, MHPL responsibilities will include:

- With the GoM PIU, co-signing the compensation agreements with the affected persons (for both in-kind and cash compensation arrangements) on behalf of the Project,
- With the GoM PIU, management of stakeholder engagement and grievance redress processes and activities. This will include updating the Stakeholder Engagement Plans (SEP) and Grievance Redress Management (GRM) Procedure information included in the RAP, and ensure they are integrated with the Project SEP and GRM.
- Assisting the affected persons who do not have a bank account to open one,
- Contracting and coordinating the activities of the witness NGO and any psycho-social support services provider appointed to provide additional third-party support to affected persons.
- Where the dossiers of affected persons are incomplete, in coordination with the GoM PIU and MoL, meeting with the affected persons to obtain pending information. Such information may include photographs, sketches, signatures or gaps in the census and/or asset inventory. This information should then be shared with the MoL Valuation Department to allow them to update and correct the Compensation Schedule where appropriate.
- Monitoring the process of compensation payments (including regular audits).



- Providing transitional support to resettled persons and implementing livelihood restoration activities, supervising technical partners recruited for the livelihood restoration activities (NGOs or other organisations).
- Once the GoM PIU provides confirmation that compensation agreements have been duly executed in terms of cash compensation, and that in-kind compensation has been provided, MHPL will authorise the start of works in the areas where all compensations have been paid, and where resettlement has occurred, by issuing a notice granting permission for the construction contractor to proceed. It is anticipated that the maximum time to obtain such notice from the GoM PIU would be 2 weeks after payment of compensations, to ensure there is no delay in the Contractors' access to land.
- Planning, designing, procurement of construction contractor(s), and supervision of the construction works for the resettlement sites and in-kind compensation, as delegated by the GoM PIU.
- Funding the implementation of livelihood restoration activities.
- Performing a close-out report when resettlement activities have been completed.

10.2.1.2 Government of Malawi

For the development of the Mpatamanga HPP, the Government of Malawi has established a Project Steering Committee, a Task Force Committee and a Project Implementation Unit (PIU, under the Ministry of Energy). The GoM Project Implementation Unit (PIU) team that actively collaborates with MHPL in the development of the Mpatamanga project on a day-to-day basis is the PIU. This organisation is illustrated in Figure 129.

During the development of the phased RAPs, the GoM will be responsible to:

- Coordinate the Project-related activities of the various GoM entities involved in the RAPs preparation.
- Ensure the funds and resources (vehicles, relevant equipment, accommodation) necessary for the activities to be performed by the various GoM entities involved in the RAP preparation are mobilised and allocated in a timely manner.
- Ensure appropriate sensitisation of relevant stakeholders regarding the RAP processes. In so doing they will collaborate with MHPL and RAP Consultant to conduct a process of informed consultation and participation in accordance with good practice for the planning and implementation of the land acquisition and resettlement processes for each component requiring land take for the Project.
- In coordination with MHPL and the RAP Consultant, set out and sensitise the communities on the cut-off date and disclosure of the asset valuation and survey valuation outcomes.
- Manage the planning of formal regulatory requirements related to land acquisition and resettlement in a timely manner such as gazettment of land acquisition and issuance of notices to vacate.

During the implementation of the phased RAP, the GoM will be responsible to:

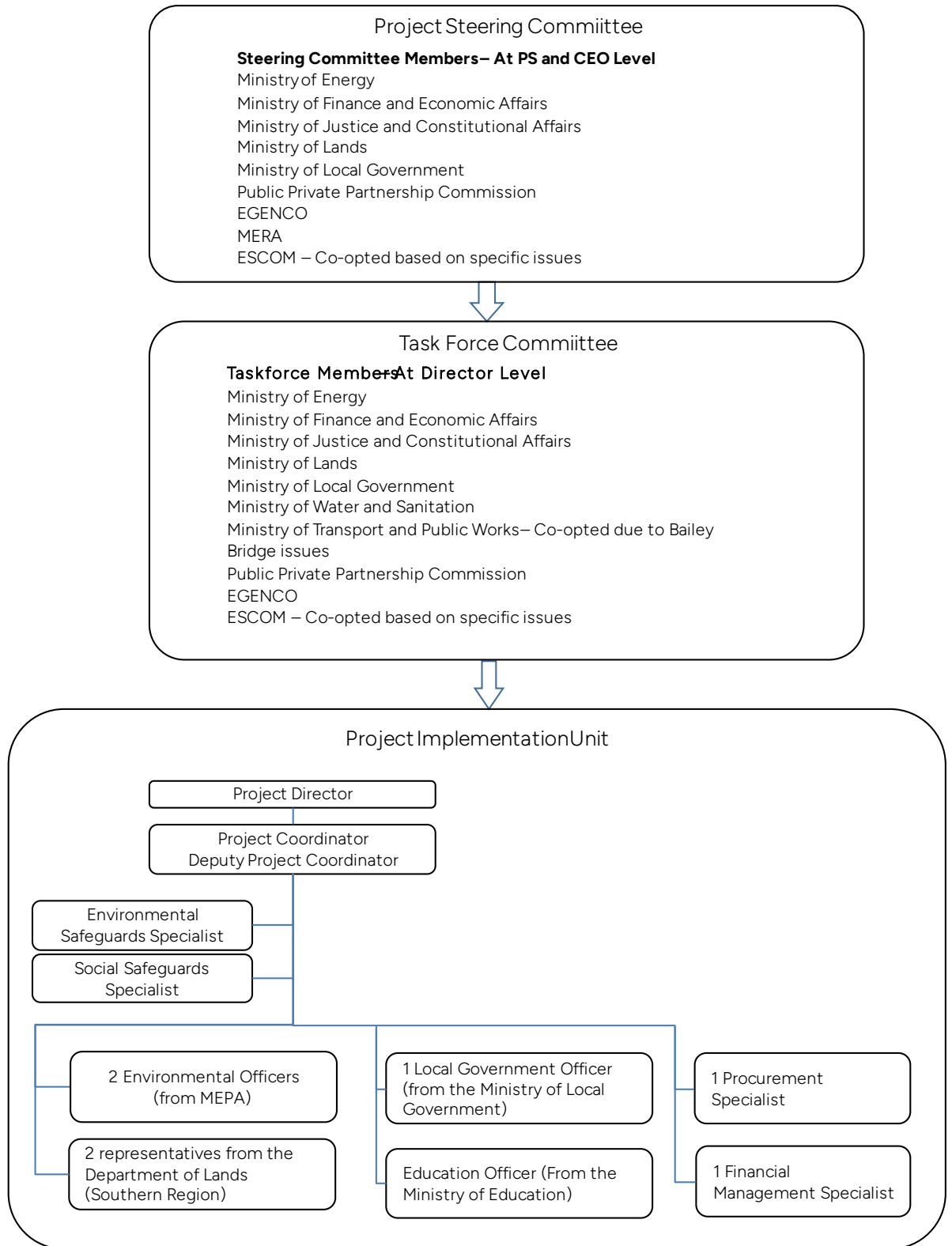
- Support affected persons who do not have a national ID card to obtain one in order for them to open a bank account to receive their compensations.
- Ensure the GoM co-signs the compensation agreements with the affected persons (for both in-kind and cash compensation, as well as livelihood restoration measures) and MHPL. The signature from GoM will be executed through the relevant Ministries at District Commissioner office (the District) Land Officer.
- With MHPL, manage stakeholder engagement and grievance redress processes and activities. This will include updating the Stakeholder Engagement Plan (SEP) and Grievance Redress Management (GRM) Procedure information included in the RAP, and ensuring that the RAP principles and processes are integrated with the Project SEP and GRM.



- Ensure Customary Lands for the Project are registered as necessary by the Ministry of Lands
- Ensure the funds necessary for the activities to be performed by the various GoM entities involved in the RAP implementation are mobilised and allocated in a timely manner.
- Finance the compensations for the Project's land acquisition, in compliance with the principle of full Replacement cost as defined in IFC PS5 and WB ESS5. After compensation has been provided to the affected persons ensure each affected person or household receive a notice to vacate the land within 3 months of receiving the notice.
- After this 3-month period, ensure that the compensation agreements have been duly executed in terms of cash compensation, and that in-kind compensation has been provided before the affected persons vacate their lands.
- Document the areas which have been vacated by the affected persons and provide a notice to MHPL for the areas where these activities have been completed.



Figure 129: Mpatamanga HPP GoM PIU Structure





A Ministry of Energy

The Ministry of Energy is lead implementation agency on behalf of the GoM and is housing the GoM Project implementation Unit.

The Ministry of Energy will make a written request to the Ministry of Lands, Housing and Urban Development on the intention of acquisition of the lands necessary for the Project (Notice of intention to Acquire, as per section 5 of the Land Acquisition Act 2017). This request will initiate the legal land acquisition process.

The Ministry of Energy through the GoM Project Implementation Unit will fund all GoM entities supporting the project in RAP preparation and implementation.

The Ministry of Energy will submit the final approved compensation schedules (prepared by the RAP Consultant and verified and approved by the Department of Lands) to the Ministry of Finance for funding.

The Ministry of Energy will also be responsible (through the PIU) for the relocation of one School in Blantyre District, for the construction of a new school in Neno District, and for the relocation of the drinking water supply systems to be flooded by the Project (see Section 5).

Once compensations have been paid, the Ministry of Energy will provide land rights to MHPL on behalf of the GoM.

B EGENCO

Electricity Generation Company (EGENCO) was established in 2016 with the mandate of generating electricity in Malawi. EGENCO will own 30% of the Project Company after the development phase, on behalf of the GoM. After the 30 years of the build-own-operate-transfer (BOOT) agreement between MHPL and the GoM, EGENCO will fully own, operate and maintain the Mpatamanga HPP. EGENCO will not have any specific role in the Project land acquisition and compensation process.

C ESCOM

Electricity Supply Corporation of Malawi (ESCOM) was established in 2016 with the mandate of transmitting and distributing electricity in Malawi. ESCOM is also the entity buying electricity from producers since 2023. ESCOM will own and operate the transmission lines (400kV and 132KV) after the hand over from MHPL right after the Commissioning Date of the Mpatamanga HPP. ESCOM will own the land for the permanent component of the transmission lines (i.e. the pylons' base footprints).

The land acquisition and compensation and resettlement will occur before MHPL hands over the transmission lines to ESCOM. Therefore, ESCOM will not be involved in the compensation and resettlement process.

D Ministry of Transport and Public Works and Roads Authority

The Ministry of Transport and Public Roads (MTPW) is the owner of public roads. It delegates the management of roads to different entities depending on their classification. The roads to be upgraded as part of the Project's early works (S137 between Chileka airport and the main dam site) or constructed to replace the section of the S137 road to be flooded by the main reservoir, will be managed by the Roads Authority (RA).

For these roads, the MTPW will provide the technical specification to be used to MHPL technical team. The technical feasibility and basic design of these roads will be supervised by the Roads Authority. The works will be delegated by MTPW to MHPL, with the Roads Authority supervising the works on behalf of MTPW.

The other service roads to be constructed for the Mpatamanga HPP will be private roads, linking the main dam, its powerhouse, the operator's village and the regulating dam.

Along the S137 road to be upgraded, local villagers are using the land in the 18m width constituting the land reserve on both sides of the road central alignment. This land reserve is already the property of the MTPW. As per the Public Roads Act (2017 Amendment),



compensation is due for damages caused to land and surface rights on parcels occupied in the road reserve for roads works.

For the section of new public roads to be constructed, the land of the road and its reserve will become public land, to be owned by the MTPW and managed by the Roads Authority.

E Ministry of Finance

The Ministry of Finance has the overall responsibility to allocate the GoM funds necessary for the Project-related activities. This includes:

- The funds for the land acquisition and payment of compensations (cash and in-kind) to be allocated to the Ministry of Energy, who will then pay compensation to affected persons,
- The funds necessary for the GoM PIU activities.

F Ministry of Lands

The Ministry of Lands will initiate the legal land acquisition process and will support the identification of the persons and assets affected, and assessment of the compensation to be paid to the affected persons in compliance with the applicable international standard (IFC PS5 and WB ESS5) and the legal framework. This will be undertaken by the Department of Estates and Valuation.

When the Land acquisition process has been completed, the Ministry of Lands will transfer the lands acquired to the President as public land (as per section 12 of the Land Acquisition Act 2017). The lands and land use rights will then be granted by the Ministry of Lands to the Project.

During the RAP development, through its Survey Department and Department of Estates and Valuation, the Ministry of Lands will be responsible of the following activities:

- The Ministry of Lands will review and approve the survey of affected land plots undertaken by the RAP Consultant,
- The Ministry of Lands will review and approve the inventory of affected assets undertaken by the RAP Consultant, using a registered independent valuer,
- The Ministry of Lands will review and approve the valuation methodology and valuation of affected assets (draft Compensation Schedule) prepared by the RAP Consultant,
- The Ministry of Lands will approve the layout of the resettlement sites to be developed and provide approvals as necessary for their development.
- The Ministry of Lands will review and endorse the draft RAPs.

During the RAP implementation, the Ministry of Lands will be responsible of the following activities:

- The Department of Valuation will verify the compensation schedule prepared by the RAP Consultant,
- Together with MHPL and the GoM PIU and the RAP consultant, the Department of Valuation will:
 - Disclose the individual compensation agreements to the affected persons, and
 - Sign the compensation agreements with affected persons,
- The Ministry of Lands will then send the final Compensation Schedule to the Ministry of Energy,
- The Department of Valuation will maintain the compensation schedules, to incorporate corrections if and when necessary.

G Ministry of Education

It is envisaged to relocate the Mpatse abwile Primary school in Chaswanthaka village in the Blantyre District side of the Project (see Section 5). Safety risks for teachers and pupils have been identified, as the access road to the Main Dam site is just next to this school. Therefore, the



schools should be relocated before the start of the main construction works. A new school is also envisaged to be built in the Neno District side of the Project.

The relocation of this school and the construction of the new one will be the responsibility of the GoM, through the Ministry of Energy.

The Ministry of Education will be consulted to validate the schools plans together with District Councils.

The Ministry of Energy (through the PIU) will fund the school construction and will delegate to MHPL to:

- Prepare the schools plans and tender documents,
- Tender the construction of the schools in a timely manner (i.e. to have the school relocated before the start of the early works),
- Supervise the schools' construction.

H Ministry for Water and Sanitation - District Water Office

Two community boreholes will be flooded by the main reservoir (see Section 5). They will need to be replaced. New drinking water systems will need to be established on the resettlement sites. This will be the responsibility of the GoM through the Ministry of Energy, and will be delegated to MHPL.

The District Water Office will approve the water supply systems on the resettlement sites and the replacement of the ones flooded in the main reservoir.

I Ministry of Justice

During the preparation of the phased RAPs, the Ministry of Justice will be responsible for the gazetting the Notice to Acquire Land (section 5 of the Land Acquisition Act 2017), as part of the legal land acquisition process.

During the implementation of the phased RAPs, the Ministry of Justice will be responsible for the gazetting of land acquisition, transfer from customary land to public land and issuance of 3 months' notice to vacate the land.

J Department of Museums and Monuments

For projects such as the Mpatamanga Project, the Department of Museums and Monuments (DoMM) of the Ministry of Culture usually prepares two separate reports as per the regulatory requirements: (i) a "Graves Impact Assessment" and (ii) a "Cultural Heritage Impact Assessment".

As part of the Project's Environmental and Social Studies, the DoMM prepared a Cultural Heritage Impact Assessment report. They also prepared a Graveyards Impact Assessment for the Graveyards affected (DoMM, 2023).

During the preparation of the phased RAPs, the Department of Museums and Monuments will:

- Update the Cultural Heritage Impact Assessment report and the Graveyards Impact Assessment for the phased RAP as necessary (i.e. for the areas not covered by the previous reports), in coordination with the GoM PIU, MHPL E&S Management Unit and the RAP Consultant,
- Provide in a timely manner the list of the family members or descendants of the deceased buried in the graveyards affected by the Project,
- Update as necessary the Graveyards Exhumation and Relocation Plan(s) in a timely manner for integration in the phased RAPs.

During the implementation of the phased RAP, the Department of Museums and Monuments will implement the Graveyards Exhumation and Relocation Plan(s), in coordination with the District Councils and Traditional Authorities. This will be funded by the GoM through the Ministry of Energy.



K Department of Environment (MEPA)

The Department of Environment will not have any responsibility in the preparation or implementation of the phased RAP. They will review and approve the ESIA, which will have to include the RAP Framework as an appendix.

L Blantyre/Neno/Balaka Districts Local Governments (DC office)

The Local Government line functionaries will play a fundamental role in assisting to develop and monitor the land acquisition process. Specifically, this will include the following activities:

- Ensure notifications of all Traditional Authorities (TAs) within the affected Traditional Land Management Area that resettlement processes are being undertaken.
- Support and advise concerned and affected Land Committees during the land acquisition process.
- Assist in land adjudication particularly in disputes between multiple Traditional Land Management Areas.
- Participate in the Project dispute settling process through the GRM.
- Work with the GoM PIU and MHPL E&S Management Unit to oversee the compensation payments and land reallocation for the displaced households.
- Work with the Ministry of Lands, Housing and Urban Development - Department of Lands and Valuation as well as Department of Surveys to oversee the land transfer process and facilitate land registration for all new allocated land for communities.
- Together with the TAs, provide assistance in identification of opportunistic settlement after the cut-off dates).
- Be consulted to choose the location of the new schools to be constructed.
- Allocate staff for the new school to be constructed in Neno District,
- Support the graves relocation process as necessary.

M Traditional Authorities (TAs)

The Traditional Authorities will act in concert with the District Local Government to carry out and give effect to the following:

- Notification of affected Group Village Land Committees and Village Land Committees that land acquisition and resettlement processes are being undertaken.
- Together with the Village Land Committees, plan for the allocation of alternative customary land to the affected households.
- Counselling and guidance to the directly affected community members.
- Assistance in identification of Project land encroachments after the cut-off dates, and the facilitation of stop work orders for such cases as identified by any of those responsible for assisting in this effort (such as MHPL, District Government, EPCs and their sub-contractors).
- Provide District offices and personnel (including the Community Development Officer, if available) to assist in the GRM processes.
- Active participation in the GRM including serving as an advisory role to the Project Grievance Redress System.
- Participate in the resolution of matters concerning cultural traditions and rituals.
- Advise the Ministry of Lands, Housing and Urban Development on issues regarding land acquisition and transfer within the Traditional Land Management Areas under their jurisdiction.

The Village Chiefs will authorise the graveyards' relocations during the implementation of the Graves Exhumation and Relocation Plan to be implemented by the DoMM.



N District and Customary Land Tribunals and Customary Land Committee (CLC)

The Customary Land (Development) Act (2022) and Customary Land Regulations (2018) have recently established Land Tribunals at the District and TA level, as well as Customary Land Committees at the Groups Village Headman level. Their role is to administer the customary land and resolve disputes over customary land.

At the time of writing, the implementation of these recent regulations is in a pilot phase in some Districts. They have not yet been implemented in the Project area. Therefore, no Customary Land Tribunal or Customary Land Committee exists in the Project area.

Should they be established during the course of the phased RAP preparation and implementation, the relevant Customary Land Tribunals and Customary Land Committees would be gradually involved in the management and resolution of disputes over customary lands.

10.2.1.3 RAP Consultant

A RAP Consultant was recruited to prepare the Resettlement Policy Framework and the phased RAPs under the supervision of MHPL E&S Management Unit. The RAP Consultant is responsible for the following tasks for each of the phased RAP:

- Develop the RAP in compliance with GoM legal framework on land acquisition and resettlement, World Bank and IFC standards for land acquisition and involuntary resettlement,
- Advise MHPL Technical team in the avoidance and minimisation of impacts,
- Work with the Traditional Authorities and Customary Authorities to identify affected households,
- Perform the census of affected persons and undertake a quantitative socioeconomic survey;
- Identify vulnerable households and groups and provide recommendations in terms of representation, engagement and livelihood restoration options,
- Using a registered independent valuer, perform an inventory of affected assets, perform market surveys to update and establish compensation rates aligned with international standards, and share the results with the MoL Valuation Department for review and approval,
- Using a registered independent valuer, undertake the valuation of affected assets and prepare the draft compensation schedule, and share the results with the MoL Valuation Department,
- Together with MHPL and the GoM, engage the Resettlement Working Groups (see section 10.2.1.4 below),
- Draft individual Compensation Agreements for affected persons,
- In coordination with MHPL and the GoM, set out and sensitise the communities on the cut-off date and disclosure of the asset valuation and survey valuation outcomes.
- Support MHPL in Stakeholder Engagement and in the management of grievances related to compensation and resettlement,
- Analysis and reporting of census, socio-economic, land and asset data collected, and management of databases prior to their transition and hand-over to MHPL,
- Draft and submit the RAP to MHPL and its development partners for approval.
- Provide other technical services as requested by MHPL.

10.2.1.4 Resettlement Working Groups (RWGs)

Resettlement Working Groups (RWGs) will be established by the Project to consult collectively with affected households. They will be used as a forum to ensure that the principle of informed consultation and participation is incorporated into key aspects of the RAP processes.

The RWGs will be established during the preparation of each phased RAP.



The number of affected households is significant, and they are distributed in about 70 villages (see Table 5 in Section 4). Therefore, the RWGs will be organised with a two-tier structure:

- The first Tier of the RWGs will be established at the Group Village level. It will include Group Village Heads, Village Heads, and representatives for Project-Affected People (PAP) who will be elected by and amongst them.
- The second Tier of the RWGs will be established at the District level, and will include District Council representatives, relevant Traditional Authorities (TAs), and other relevant stakeholders.

Separate meetings will be held with first-tier and second-tier RWGs members to enable first-tier RWGs members to freely express their opinions and recommendations during the RWGs meetings regarding the resettlement processes.

A First Tier RWG – Group Village level

The Project has already established Group Village Grievance Redress Committees (GVGRCs, see Section 11.4.3). The Project’s regular community meetings held since July 2022 are organised at the same group village level. To avoid creating a new parallel information stream, and ensure key messages are disseminated in a consistent manner, the first tier of the RWGs will be maintained at the same group village level. The 1st Tier RWG will be a sub-committee of the Group Village Grievance Redress Committees.

Therefore, to establish the Group Village level RWG, representatives of the affected households, elected by and amongst the affected households themselves will be invited to join RWGG sub-committees that will be established within the Group Village Grievance Redress Committees (GVGRC) structures. These RWG sub-committees will allow the Project to interact with representatives of affected persons to discuss specific technical issues related to the land acquisition, compensation and resettlement process (eligibility, entitlement matrix, valuation, compensation options, livelihood restoration).

The Project will continue to primarily use the regular Group Village community meetings and quarterly broader stakeholder meetings to disseminate Project update information regarding land acquisition and resettlement matters. Topic-specific information education communication (IEC) materials will be developed as needed, and regular updates will be included in the Project’s quarterly newsletter. Meetings with the first tier RWG will be used to consult with the affected households and collect their feedback on some specific issues (for instance physical resettlement, identification of vulnerable groups).

Specific village-specific working groups will be established as/when needed after the census of each phased RAP to discuss some issues relevant only to one given village. For instance, this will be the case to discuss physical resettlement and host sites relevant only to Kambalame, Chaswanthaka and Mpindo villages.

B Second Tier RWG – District Level

One District-level RWG will be established in each District affected by the Project land acquisition at the start of the phased RAPs. Their members will be:

- From the MHPL Environmental and Social Management Unit:
 - The Environmental and Social Manager,
 - The Social Lead,
 - The Consultation and Stakeholder Management Coordinator,
- The GoM PIU Social Specialist,
- One District Council representative (District Commissioner or Director of Planning or Director of Administration),
- One District Land Officer,
- One District Social Welfare Officer (to represent Project-affected groups identified as vulnerable),



- One representative from a reputable and established Civil Society Organisation (CSO) currently active in the District,
- Traditional Authority from each of the affected TA areas in the District.

10.2.1.5 Contractors

Contractors will be mobilised by the MHPL for the preparation of the resettlement sites and development of in-kind replacement housing. They will be supervised by MHPL E&S Management Unit to ensure the resettlement sites and the replacement housing are developed and delivered in a timely manner.

Other contractors will be mobilised as needed by the MHPL E&S Management unit to implement or support the implementation of livelihood restoration measures and third party services (psycho-social support and other).

The GoM will mobilise relevant GoM agencies (MEPA, NWRA, MoL and DoMM) to monitor the contractors engaged for preparation of the resettlement sites and development of in kind replacement housing.

10.2.2 Other Entities

10.2.2.1 Local Banks

The GoM PIU and MHPL will jointly appoint local banks to manage the payment of compensation to the affected persons. A Memorandum of Understanding (MoU) that has been agreed between the GoM and MHPL will be signed between the GoM PIU on behalf of the **Ministry of Energy** and the selected banks to define the arrangements for transferring and paying individual compensation amounts to the affected persons from the **Ministry of Energy** through the Financial Institutions. The GoM will cover any fees for opening a bank account.

These financial institutions will be responsible for the payment to affected persons, using the compensation funds received from the **Ministry of Energy**.

They will open a bank account for the affected persons who do not have one, in coordination with the MHPL E&S Management Unit. They will use the list of affected persons coming from the RAP database to establish their own list of affected persons for whom they need to make provision for an account to be opened. As part of the service they render, the bank will provide financial literacy training to affected persons, including on how to use a bank account. Furthermore, the appointed financial institution will integrate any gender and social measures, as documented in the MOU payment agreement, into the service they offer (for instance opening the bank accounts in the name of both spouses).

The financial institutions will then make the necessary payments in line with the approved Compensation and Payment Schedules. Taking confidentiality into account, they will provide periodic reports of tracked payments to the GoM and MHPL ESMU which will include account activity and status. This will assist the GoM and MHPL PIU to monitor Project E&S risks.

10.2.2.2 Witness NGO

A witness NGO will be recruited by MHPL to act as independent observer in the implementation of the phased RAPs. This witness NGO will observe the payment process and the management and resolution of grievances, as well as all aspects of the RAP implementation. The witness NGO will prepare quarterly independent observer reports.

10.2.3 Lenders and Investors

The Lenders will monitor the performance of the Project. They will approve the Resettlement Policy Framework and the phased RAPs (before payment of compensations are initiated), as well as internal and external monitoring reports developed during the implementation of the phased



RAP (see section 14.1). They will also approve the internal close-out report and the external completion audit (see section 14.2).



11 Information Disclosure, Consultation and Participation

11.1 Previous Stakeholder Engagement related to Land Acquisition and Compensation

11.1.1 From 2016 to early 2022

The development of the Mpatamanga hydropower Project was initiated in 2016. Several E&S studies were conducted from 2016 to 2021. Each of these studies has been supported by a various range of stakeholder engagement activities. These studies comprised the preparation of a RAP (draft version) for which surveys were conducted with affected communities, as well as dedicated engagement activities. These past stakeholder engagement activities related to the land acquisition and compensation process are summarised in the next paragraphs.

11.1.1.1 Between 2016 and 2017

Between 2016 and 2017, stakeholder engagement activities were undertaken by AGRI-PRO Ambiente Consultores SA and CENOR Consulting Engineers as part of a Preliminary ESIA for the Project. Consultation meetings were held with stakeholders including ESCOM officials, the district executive committees, traditional leaders, members of parliament and councillors for the project area, influential leaders, village heads, and Villages Development Committees (VDC) and Areas Development Committees (ADC).

A first socioeconomic survey was performed in July and in September 2016 to inform a draft preliminary Resettlement Plan (Agri-Pro 2018). This survey covered a total of 39 households (25 in Kambalame and 14 in Chaswanthaka). One Public meeting was organised in Chaswanthaka to present this first ESIA results in November 2017.

11.1.1.2 Between 2018 and 2019

As part of the 2019 Draft RAP Framework (Multiconsult 2019), the following consultation activities were performed by the Project Consultants:

- In January and February 2019:
 - The Blantyre and Mwanza Districts commissioners were met, to present the Project,
 - The Kunthembwe Traditional Authority Chief was met to present the Project,
 - One meeting with villagers in Chaswanthaka village was held.
- In July 2019:
 - Meetings with Blantyre and Neno District officers,
 - Meeting in Kaliati GVH with villages heads from Kaliati, Chilaulo, Mpindo, Inosi, Lisangwi and Chaswanthaka villages.
 - Socioeconomic surveys were performed in Chaswanthaka, Kambalame and Chikira villages. A total of 121 households were surveyed in these villages.

11.1.1.3 Between 2020 and early 2022

A Draft ESIA and start of the Resettlement data collection

In 2020 and 2021, a new draft ESIA was prepared by MottMacDonald. The census and surveys of affected households were initiated. However, they were not completed. The preparation of the RAP stopped, and the data collected was not analysed. The consultation activities related to the resettlement process performed during this period are summarised in Table 58 below.



Table 58: Summary of Consultations Performed during the 2020-2021 Field Investigations

Period	Meetings or Consultation Activities
August 2020	<ul style="list-style-type: none"> Meetings with Neno and Blantyre Districts Councils' officers, Meetings with the following traditional authorities: TA Kunthembwe and TA Mlauli, village heads of Kambalame, Feremu, Kaliati, Chaswanthaka, and Lisangwi.
September 2020	<ul style="list-style-type: none"> local communities were consulted to provide baseline information related to the ESIA. Community development assistants helped the team meet with village heads, group village heads traditional authorities or their representatives in Chikira village, Kunthembwe village, Chaswanthaka village, Mlauli village, Chimbamira village (with a weekly market servicing Kambalame). Ten focus groups were organized based on receptor groups (women, men, youth, boat users, and business owners) or livelihoods (agriculture, livestock, charcoal, fishing, grass and tree use).
November 2020	<ul style="list-style-type: none"> Community Sensitisation meetings were held to announce the start of the resettlement related surveys in Chaswanthaka, GVH Namputu, and Kambalame village.
November 2020 to March 2021	<ul style="list-style-type: none"> Socioeconomic surveys and land surveys amongst the 519 households: <ul style="list-style-type: none"> Blantyre District: 265 households categorised as economically displaced and 120 as physically displaced, Neno District: 100 households categorised as economically displaced, 29 as physically displaced and 5 ranches.

B Feedback from Research done by NGOs on the Project

Some concerns and issues were raised by local communities to NGOs during community-led research performed between October 2020 and March 2021 (International Accountability Project, Coalition for Human Rights in Development, and Center for Human Rights and Rehabilitation 2021) and subsequent consultations in 2022 (Center for Human Rights and Rehabilitation and International Accountability Project 2022b; 2022a) in the Kambalame, Chaswanthaka and Chikira villages:

- Lack of information on the Project, including a lack of clarity on the areas to be affected by the Project, and no information on the Project schedule;
- Uncertainty on the eligibility criteria and the entitlements; and
- Lack of information on the next steps of the land acquisition and compensation process, with some households having stopped cultivating their lands in 2021 as they were expecting the compensation to take place at that time.

These concerns were voiced by NGOs, namely the Coalition for Human Rights in Development (CHRR) and International Accountability Project (IAP). CHRR has addressed a report to the Lenders and GoM 2021 (International Accountability Project, Coalition for Human Rights in Development, and Center for Human Rights and Rehabilitation 2021). The Ministry of Energy has responded to the NGOs (Ministry of Energy 2023) and subsequent stakeholder engagement addresses the concerns raised. The preparation of the E&S Safeguards documents package, including the RPF, also aims at addressing them.

11.1.2 Since 2022

MHPL was established as the Project Company in July 2022. Since September 2022, regular engagement with the local communities in the Main Reservoir and Main Works areas is performed by the GoM PIU and MHPL (MHPL 2023a):

- Monthly community meetings: Conducted in each of the five Group Villages directly impacted by the Main Dam facilities (as identified during the 2020-2021 resettlement surveys).
- Quarterly stakeholder meetings: Hosted in Blantyre and Lilongwe and including National and regional government ministries, departments, and agencies (MDAs); District Councils (Project-affected districts and potentially project affected districts); national,



regional and district Non-Governmental Organisations (NGOs); non-community-based PAPs; Public, Private and Public Private Partnership (PPP) entities and programs; other Hydro Power schemes in the Project area.

- Weekly presence of MHPL Grievance Officer and Community Liaison Officers (CLOs) in directly affected Group Villages to collect feedback submitted via MHPP Suggestion boxes.

MHPL has started a community outreach programme to expand access to information for those who are unable to attend meetings due to reasons such as caring for ill relatives, having illnesses or disabilities themselves, or being unable to leave their business premises.

The information regarding project impacts, including loss of assets, livelihoods, and resettlement, has been communicated to the communities through quarterly project newsletters and monthly GRM brochures. The information has also been presented in graphical format during meetings. Through this regular engagement with the affected communities, the Project explained that no cut-off date had been established yet, and that the affected communities can continue their activities on their lands. It was also explained that the cut-off date will be established and communicated when the land acquisition process will start, during the preparation of each phased RAP.

11.2 Consultation during the Preparation of the Resettlement Policy Framework

The following consultation activities have been performed during the preparation of the RPF:

- Community Sensitisation Meetings were held between the 30 August and the 5 September 2023, before the start of field investigations. During these meetings the current status of the Project was explained. The fact that the Project land acquisition had been put on hold was clarified, and the environmental and social studies to be performed in 2023 and 2024 were explained. Table 59 below provides the list of the 7 meetings organised, and the number of participants. Figure 130 to Figure 132 illustrate these meetings and their location.
- During the qualitative and quantitative surveys described in section 4 from September to December 2023, members of affected communities were met. During interviews and focus group discussions, the Project quarterly newsletters and Monthly GRM brochures (in English and Chichewa) were distributed, as well as contact cards explaining how to raise a grievance (see section 11.4.3). Information on the Project status and the next steps of the land acquisition, compensation and resettlement process were provided.
- As part of the 2024 ESIA:
 - Scoping meetings were also organised in November 2023 in the communities already met for the RPF community sensitisation meetings, except Gwadani GVH. The information on the status and next steps of the land acquisition, compensation and resettlement process were communicated to the communities. The Traditional Authorities leaders were also met, as well as owners of the ranches affected.
 - Disclosure meetings were organised in July 2024, to present the results of the 2024 E&S studies, present the updated Project status and schedule. The Project disclosed the impacts and mitigation measures defined in the 2024 ESIA, including the approach for the land acquisition, compensation, resettlement and livelihood restoration.

These scoping and disclosure meetings are described and summarised in the 2024 ESIA report. Table 60 and Table 61 provide the list of meetings with Project-Affected communities and stakeholders involved in the land acquisition, compensation and resettlement processes.



Table 59: Community Sensitisation Meetings at the start of the Resettlement Policy Framework

Districts	Traditional Authorities	Group Village	Villages	Participants	Female	Male
Blantyre District	TA Kunthembwe	Kaliati GVH	(1) Chaswanthaka, Mpindo, Inosi, Lisangwi	65	36	29
			(2) Kaliati, Divala, M'bwinja, Nyada	93	57	36
		Namputu GVH	Namputu, Chikira, Kwapita, Mwazilinga, Chipanda, Chinkwinya	74	38	36
		Gwadani GVH	Gwadani, Chisembwere, Chitsotso, Chetabulo, Laison, Kapelewela, Mabuleni, Ntenje, Chiotha, Moffat, Zapelewela, Gilbert, Chikong'a, Kanyanda, Simoni, Njanji	146	98	48
Neno District	TA Mlauli	Feremu GVH	Kambalame, Feremu, Jana, Nkhwali, July	81	42	39
		Nsalawatha GVH	Kazunga, Jonathan, Nsalawatha, Dailo, Chifunga	127	75	52
	TA Symon	Ngwenyama GVH	Ngwenyama, Chitsotso, Mtingala, Pajo, Mbemba, Nkoka, Joseph, Liyenda	126	84	42
Total				712	430	282



Figure 130: Community Sensitisation Meeting in Kaliati GVH



Figure 131: Community Sensitisation Meeting in Nsalawatha GVH





Figure 132: Location of Community Sensitisation Meetings

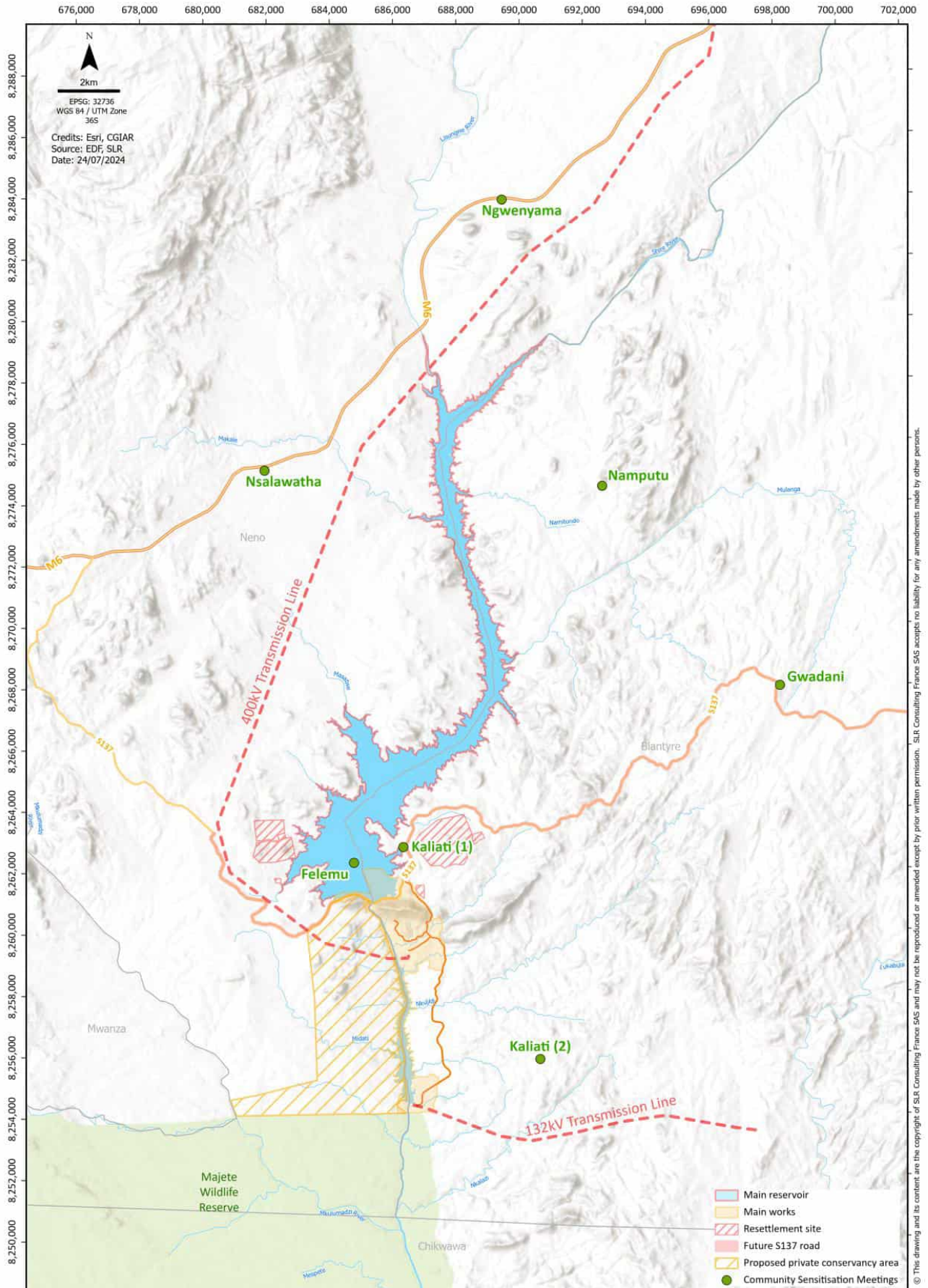




Table 60: November 2023 ESIA Scoping Meetings

Date		Stakeholder	Project-affected Area	Venue	Form of presentation
21- Nov 2023	am	Mbwinja and Divala Community, Blantyre District	Regulating reservoir, Construction facilities	Village Open Space	Verbal in Chichewa
	pm	Chaswanthaka and Mpindo Community, Blantyre District	Main reservoir, Construction facilities	Village School	Verbal in Chichewa
22- Nov 2023	am	Feremu and Kambalame Community, Neno District	Main reservoir	Village Open Space	Verbal in Chichewa
	pm	Nsalawatha Community, Neno District	Transmission line, Main reservoir	Village Open Space	Verbal in Chichewa
23- Nov 2023	pm	Chikira Community, Blantyre District	Main reservoir	Village Open Space	Verbal in Chichewa
	pm	Mbemba and Joseph Community, Neno District	Transmission line, Main reservoir	Village Open Space	Verbal in Chichewa
24- Nov 2023	am	Non-Community-based PAPs (Ranch owners), Blantyre	Transmission line, Main reservoir	Blantyre Hotel	PowerPoint in English
	pm	Leaders Meeting (TA/GVH/VH): Kunthembwe TA, Kuntaja TA (Blantyre District) + Mlauli TA, Symon TA, Phalula TA (Neno + Balaka Districts)	All project facilities	Zalewa Lodge	PowerPoint in Chichewa
27- Nov 2023	am	Southern Region Academic Institutions + NGOs working in Neno and Blantyre Districts	All project facilities	Blantyre Hotel	PowerPoint in English
	pm	Southern Region Key Stakeholders: DCs (Blantyre, Neno, Balaka, Mwanza, Zomba, Chikwawa, Nsanje, Machinga) + Southern Region MDAs	All project facilities	Blantyre Hotel	PowerPoint in English

Table 61: July 2024 ESIA Disclosure Meetings

Date		Stakeholder	Project-affected Area	Venue	Form of presentation
09- Jul 2024	am	Nkhwali Community, Neno District	Regulating reservoir, proposed Neno conservancy Area, S137	Village Open Space	Verbal in Chichewa
	pm	Feremu and Kambalame Community, Neno District	Main reservoir	Village Open Space	Verbal in Chichewa
10- Jul 2024	am	Mbwinja & Divala Community, Blantyre District	Main reservoir	Village Open Space	Verbal in Chichewa
	pm	Chaswanthaka & Mpindo Community, Blantyre District	Main reservoir, Construction facilities	Village Open Space	Verbal in Chichewa
11- Jul 2024	pm	National and Regional Ministries Departments Agencies (MDAs) District Councils and Community Leaders from Key Districts (Blantyre (TA Kuntaja, TA Kunthembwe), Neno (TA Symon, TA Mlauli), Chikwawa (TA Kasisi, TA Katunga), Other World Bank Projects	All project facilities	Blantyre Hotel	PowerPoint in English
	pm	Southern Region Academic Institutions + NGOs working in Neno and Blantyre Districts	All project facilities	Blantyre Hotel	PowerPoint in English



Date		Stakeholder	Project-affected Area	Venue	Form of presentation
12-Jul 2024	am	Non-Community-based PAPs (ranch owners), Blantyre	Transmission line, Main reservoir	Blantyre Hotel	PowerPoint in English
	pm	Chikwawa District Commissionner + TA Kasisi + TA Mlilima	Downstream of Kapichira	Chikwawa, Zonse Lodge	PowerPoint in English
13-Jul 2024	am	Majete Wildlife Reserve/African Parks	Downstream of the Regulating Dam	African Parks Office	PowerPoint in English
	pm	Mkulumadzi Lodge/Robin Pope Safaris	Regulating Dam	Thawale Lodge	PowerPoint in English
15-Jul 2024	am	GVH Nkata	S137 Road (Blantyre District)	Kachere CBO	Verbal in Chichewa
	pm	GVH Solomoni	S137 Road (Blantyre District)	Chigumukire school	Verbal in Chichewa
16-Jul 2024	am	GVH Mchenga	S137 Road (Blantyre District)	Mchenga Headquarters	Verbal in Chichewa
	pm	GVH Mvundula	S137 Road (Blantyre District)	Andiseni Roman Catholic Ground	Verbal in Chichewa
17-Jul 2024	am	GVH Kadikira	S137 Road (Blantyre District)	Chikuli CBO	Verbal in Chichewa
	pm	GVH Mkunje	S137 Road (Blantyre District)	Tagwirizana Orphanage	Verbal in Chichewa
18-Jul 2024	am	GVH Kuthembwe	S137 Road (Blantyre District)	Roman Catholic Church	Verbal in Chichewa
	am	Joseph village	Transmission Line	Mbemba Clinic, Neno	Verbal in Chichewa
	pm	GVH Gwadani	S137 Road (Blantyre District)	Kunthembwe Roman Catholic Church	Verbal in Chichewa
19-Jul 2024	am	GVH Kaliati	S137 Road (Blantyre District)	GVH Kaliati residence	Verbal in Chichewa
19-Jul 2024	am	Chikira Meeting	Transmission Line	Verbal in Chichewa	Verbal in Chichewa
19-Jul 2024	pm	Nsalawatha Meeting	Transmission Line	Nsalawatha Primary School, Neno	Verbal in Chichewa



11.3 Resettlement Policy Framework Information Disclosure

The RPF is currently a draft made available for public disclosure. Feedback from affected communities and stakeholders during the public disclosure process may result in some changes in the final RPF.

After this RPF is approved, the following documents will be made publicly available on MHPL website website:

- The Draft RPF in English,
- The executive Summary of the Draft RPF in English and in Chichewa,

Documents will also be shared through email to stakeholders in the MHPP database with whom the Project already communicates via email.

A series of public disclosure meetings will then be organised by MHPL and the PIU, as indicated in Table 62 next page.

No individual disclosure of any information (compensation packages) will be done during the public disclosure of the Draft RPF. Individual engagement with affected persons and households will happen during the phased RAPs.

After the public disclosure, the Draft RPF will be finalised, to include and document feedback obtained from the affected communities. A Guide on Land Acquisition and Compensation (GLAC), in English and in Chichewa, will also be prepared. This GLAC will summarise the valuation, compensation and resettlement process for the affected persons, and outline the principles applied to all phased RAP. The resettlement process will be phased over several years, a first GLAC will be prepared with the final RPF. It will then be updated for each RAP, with updated compensation rates as needed. The GLAC will be distributed to the PAP during each phased RAP preparation.



Table 62: Collective Public Disclosure Activities for the Resettlement Policy Framework

#	Public Disclosure activity	Description	Information or documents disclosed	Timing	Stakeholders Targeted
1	Round of public consultations with the 2024 ESIA before the public disclosure	Round of public consultations with the 2024 ESIA	<ul style="list-style-type: none"> General information about the Project Schedule and next steps of public disclosure 	July 2024	Group villages stakeholders in the Main Reservoir and Main Works areas
2	Public disclosure of the draft RPF on the Project websites	The Draft RPF will be disclosed on on MHPL website, together with the 2024 ESIA dossier.	<ul style="list-style-type: none"> The Draft RPF in English, The executive Summary of the Draft RPF in English and in Chichewa 	Aug.-Sept. 2024	General Public
3	Public disclosure of hard copies of the draft RPF at the District level	Hard copies of the Draft RPF (in English) and of the executive summary (in English and Chichewa) will be made available in the Neno and Blantyre District offices.	<ul style="list-style-type: none"> The Draft RPF in English, The executive Summary of the Draft RPF in English and in Chichewa, 	Sept. 2024	Stakeholders in the Blantyre and Neno Districts
4	Village-specific public disclosure meetings will be organised in Kambalame village and in Chaswanthaka and Mpindo villages	Village-specific public disclosure meetings will be organised in Kambalame village (GVH Feremu, TA Mlauli, Neno District), and in Chaswanthaka and Mpindo villages (GVH Kaliati, TA Kunthembwe, Blantyre District). These 3 specific meetings will be organised to discuss the physical resettlement process and the options and timing considered to develop the pre-identified resettlement sites.	<ul style="list-style-type: none"> RPF executive Summary in Chichewa and English 	Sept. 2024	PAP physically displaced from Kambalame village and Chaswanthaka and Mpindo villages
		In these villages, separate female-only and male-only meetings will be organised to discuss gender-specific physical resettlement issues.			Women physically displaced
		Specific focus groups will also be organised with the vulnerable households physically displaced.			Vulnerable households physically displaced
5	Consultation with District Councils in Neno and Blantyre Districts	Consultation with District Councils on the entitlement matrix, resettlement sites options and layout, resettlement housing design, livelihood restoration measures. These consultations will be organised together with the ESIA public Disclosure meetings at the District level.	<ul style="list-style-type: none"> RPF executive Summary in Chichewa and English 	Sept. 2024	Neno and Blantyre Districts Councils
6	Village-level consultation in villages affected by the Main	Village-specific public disclosure meetings will be organised to present the			



#	Public Disclosure activity	Description	Information or documents disclosed	Timing	Stakeholders Targeted
	Works and the Main Reservoir to present the entitlements and next steps, as well as identify replacement lands in each village	entitlements and next steps, as well as identify replacement lands in each village Separate female-only and male-only meetings will be organised to discuss gender-specific resettlement issues. Specific focus groups will also be organised with affected vulnerable households	<ul style="list-style-type: none"> RPF executive Summary in Chichewa and English 	Sept. 2024	Villages affected by the Main Works and the Main Reservoir
7	Consultation with other stakeholders	Together with the ESIA public disclosure meetings	<ul style="list-style-type: none"> RPF executive Summary in Chichewa and English 	Sept. 2024	NGOs, Lilongwe and Blantyre -based PAP
8	Disclosure of the Final RPF	The Final RPF will be disclosed on the Ministry of Energy website and on MHPL website, together with the 2024 ESIA dossier.	<ul style="list-style-type: none"> Final RPF (in English), and final executive Summary (English and Chichewa) integrating comments and feedback from stakeholders received during the Public Disclosure. GLAC in English and in Chichewa. 	Nov. 2024.	General Public

11.4 Stakeholder Engagement Programme for the Phased RAPs

11.4.1 Engagement During the Phased RAP Preparation

Table 63 below outlines the information disclosure and engagement activities to be performed during the Phased RAP preparation. The steps listed in this table are presented in chronological order. They will be implemented one by one during the preparation of the Phased RAP, before the final Phased RAP is approved by MHPL and the GoM.

Table 63: Information Disclosure and Engagement Activities during the Preparation of the Phased RAP

#	Activity	Responsible entity	Stakeholders Targeted
0	<u>For the Early Works RAP only:</u> As roads project are considered very important projects in the Districts, specific meetings will be organised at the start of the Early works RAP to announce the upgrade of the S137 Road between Chileka International Airport and the Mpatamanga gorge. Three meetings will be organised:	<ul style="list-style-type: none"> PIU and MHPL 	<ul style="list-style-type: none"> Blantyre District council TA Kuntaja and TA Kunthembe Area Development Committees Village Development Committees of the affected group villages



#	Activity	Responsible entity	Stakeholders Targeted
	<ul style="list-style-type: none"> • Blantyre District Council Meeting: To inform the District Council, comprising of the Council Secretariat, Traditional Leaders, Members of Parliament, Councillors and NGO/CSO representatives about the development. • Area Development Committee (ADC) Meetings: There will be 2 ADC meetings for TA Kuntaja and TA Kunthembwe ADCs. • Village Development Committee (VDC) Meetings in the affected group villages 		
1	Community Sensitisation meetings in each Group Village affected by the Land Requirement of the Phased RAP, before the start of the field investigations. Announce of the cut-off date, dissemination of the GLAC.	• MPHL and PIU / RAP Consultant	• Affected communities and households, at the Group Village level
2	Establishment of Group Village Grievance Redress Committees in the group villages where they have not yet been established (GVGRC already established in the villages affected by the Main Works and Main reservoir, they should be established for the Early Works RAP along the S137 road in Blantyre District, and for the TL RAP along the 400kv and 132kv Transmission Lines)	• MPHL and PIU	• Affected communities and households, at the Group Village level
3	Establishment of Second Tier (District Level) Resettlement Working Groups <ul style="list-style-type: none"> • Early Works RAP: Blantyre District RWG • Main Works RAP: Neno District RWG • TL RAP: Balaka District RWG 	• MPHL and PIU	• District Level Stakeholders
4	Pre-census meeting at the village level Announcement of the cut-off date, delineation of the affected lands, and scheduling of census, land surveys, and assets inventory and valuation. Dissemination of the GLAC.	• MPHL and PIU / RAP Consultant	• Affected villages
5	Gazettement and Notice to Acquire Land	<ul style="list-style-type: none"> • MHPH to prepare Project's Land Requirements • Ministry of Energy to issue a request for the land acquisition to Ministry of Lands • Min. of Justice to Gazette 	• General Public
6	Census, asset inventory and land surveys Distribution of the GLAC to all affected persons	• MPHL and PIU / RAP Consultant	• Affected households and persons
7	Socioeconomic survey and identification of Women-headed affected households and affected vulnerable households	• RAP Consultant	<ul style="list-style-type: none"> • Affected women. • Vulnerable Groups



#	Activity	Responsible entity	Stakeholders Targeted
8	Update or development of a Graveyards Exhumation and Relocation Plan for the phased RAP	• DoMM	• Communities where graveyards are affected
9	Establishment of First Tier Resettlement Working groups (sub-committees of the GVGRG) based on the census results (as the affected persons will elect their representants to the RWGs)	• MPHL and PIU	• Affected households and persons
10	Identification of available replacement lands in each affected village and group village for the in-kind compensation approach	• MPHL and PIU / RAP Consultant	• Traditional Authorities, Village Heads and Group Village Heads • Affected households and persons
11	Draft Phased RAP Public Disclosure (Same steps as steps #2 and #3 in Table 62 above, but for the Phased RAP)	• MPHL and PIU	• General Public • Affected communities and households, at the Group Village level
12	Consultations with First Tier RWG (group village level) to present the entitlement matrix, livelihood restoration measure (household level and community level) and physical resettlement assistance measures	• MPHL and PIU	• Affected communities and households, at the Group Village level
13	Village-specific public disclosure meetings as needed based on the village specific issues (or RWG working groups meetings, as needed)	• MPHL and PIU / RAP Consultant	• Affected households and persons
14	Consultation with the Second Tier RWG (District Level) to present the entitlement matrix, livelihood restoration measure and physical resettlement assistance measures specific to the Phased RAP	• MPHL and PIU	• District-level stakeholders
15	Consultation with other stakeholders as needed	• MPHL and PIU / RAP Consultant	• NGOs, • Lilongwe and Blantyre -based PAP • Other Stakeholders as needed
16	Disclosure of the Final Phased RAP (same step as step #9 in Table 62 above, but for the Phased RAP)	• MPHL and PIU	• General Public



11.4.2 Engagement During the Phased RAP Implementation

Table 64 below outlines the information disclosure and engagement activities to be performed during the Phased RAP implementation.

Table 64: Information Disclosure and Engagement Activities during the Implementation of the Phased RAP

#	Activity	Responsible entity	Stakeholders Targeted	Timing and Frequency
1	Identification of Financial Institutions and/or Banks for payment of compensation to PAPs and signature of a tripartite Memorandum of Understanding for PAP compensation payment	• MHPL and Min. Of Energy	• Financial Institutions or Bnaks	• Once, at the start of the Phased RAP implementation
2	Individual disclosure of the draft individual compensation schedules to affected households. This activity includes an individual briefing of PAP in impacted areas on their choice regarding their entitlement options (including “In kind” compensations and livelihood restoration measures options) See also gender specific activities and activities for vulnerable households in section 11.4.3	MHPL Min. of Lands	GoM PIU RAP consultant with registered valuers and surveyors	• Once, at the start of the Phased RAP implementation
3	Implementation of the Graveyards Exhumation and Relocation Plan for the Phased RAP (if and as needed)	• DoMM	• Villages where a graveyard is affected. • DC • TA • Min. of Health	• As needed and continuously during the duration of the Graveyards Exhumation and Relocation Plan
4	Signature of Compensation Agreements with PAP See also gender specific activities and activities for vulnerable households in section 11.4.3	• MHPL and GoM PIU	• Affected households	• Once the Compensation Schedule is approved by the MoL
5	Individual meetings with the affected households who are opting for in-kind compensation to select in-kind replacement lands and housing options chosen by the PAP, and planning for the delivery of in-kind compensation (provision of replacement land and construction of replacement housing) See also gender specific activities and activities for vulnerable households in section 11.4.3	• MHPL and GoM PIU	• Affected households	• One or several meetings as needed, after signature of the Compensation Agreement
6	Announcement to PAP that compensation payment is available on their bank account and no less than 2 months’ notice to vacate the land	• MHPL and GoM PIU	• Affected households	• Once, after compensation are paid



#	Activity	Responsible entity	Stakeholders Targeted	Timing and Frequency
7	Gazetting of land acquisition and transfer from customary land to public land	<ul style="list-style-type: none"> Ministry of Justice 	<ul style="list-style-type: none"> General Public 	<ul style="list-style-type: none"> Once, after the Compensation Agreements are signed and Compensation Paid
8	Financial Management training provided to PAP	<ul style="list-style-type: none"> NGO recruited by MHPL 	<ul style="list-style-type: none"> Affected households 	<ul style="list-style-type: none"> Once, after compensation are paid
9	Announcement of the date of the displacement	<ul style="list-style-type: none"> MHPL and GoM PIU 	<ul style="list-style-type: none"> Affected households 	<ul style="list-style-type: none"> Once, at least two weeks prior to displacement (i.e. prior to contractors accessing the lands)
10	Meeting to report on the progress of the physical resettlement process and the livelihood restoration activities.	<ul style="list-style-type: none"> MHPL and GoM PIU 	<ul style="list-style-type: none"> First Tier RWG (Group village level) Affected households 	<ul style="list-style-type: none"> Quarterly during the duration of the construction period



11.4.3 Specific Considerations for Engagement with Vulnerable Groups

11.4.3.1 Gender

As indicated in section 6.2.3, the following measures will be implemented to address gender specific risks during the land acquisition, compensation and resettlement process:

- MHPL will recruit a Gender-Based Violence (GBV) service provider to manage potential cases of GBV, provide support to victims. This GBV Service provider will be presented to the affected communities during the public consultations as part of the phased RAPs process.
- The Grievance Redress Committees and the Resettlement Working Groups (RWG) will be trained on GBV (the Grievance Redress Committees already established in 2023 have already been trained), and on potential gender-related risks for the compensation process (such as land grabbing by men or misuse of households' compensation by men).

As indicated in Table 62, Table 63 and Table 64, the following activities will be performed:

- During the Public Disclosure of the Draft RPF:
 - Representatives of the women affected and of vulnerable groups will be included in the Working groups of the first tier RWG (group village level) in the Main Reservoir and Main Works areas,
 - Female-led and women only focus groups will be organised in the settlements affected by physical displacement (Kambalame, Chaswanthaka and Mpindo) to ensure women concerns regarding physical displacement and in-kind compensation options are collected and considered.
- During the preparation of the Phased RAP:
 - Female-led and women only focus groups will be organised during the socioeconomic survey to collect women concerns about involuntary resettlement impacts,
 - Representatives of the women affected will be included in the Working groups of the first tier RWG (group village level)
 - the 400kV and 132kV Transmission Line and the S137 road,
 - During the consultations with the first tier RWG at the group village level, women-only meetings will be organised to present the entitlement matrix, livelihood restoration measures and compensation process.
- During the implementation of the Phased RAP:
 - To ensure women participate in the compensation process and are aware of the compensation provided to the households, the individual disclosure of the compensation packages will be done during one meeting with both spouses and all adults members of the households (including daughters and sons).
 - It will be offered to affected households to establish compensation agreements in the names of both spouses or heads of household.
 - Training on the sustainable management of received compensation will be provided to affected households. This training will include women-only sessions, as well as sessions where both spouses will participate together.

11.4.3.2 Vulnerable Households

The affected vulnerable households are identified in each affected villages after the census of affected persons. Once they are identified, MHPL CLOs will organise a focus group with the affected vulnerable households in each village to present the land acquisition, compensation and resettlement process.



Before each step of the implementation of the phased RAP described in Table 63 and Table 64 above, MHPL CLOs will visit each affected village and announce the next activities, meeting or consultation to the vulnerable households.



12 Grievance Redress Mechanism

The Mpatamanga HPP Grievance Redress Mechanism (GRM) is defined in the Project Stakeholder Engagement Plan (MHPL 2023a). RAP-related grievances will be managed through the Project GRM.

The Project aims to address all grievances received, whether they stem from real or perceived issues. The Project seeks to foster trust in the GRM process and its outcomes. It will therefore communicate the Project GRM in an understandable manner to affected stakeholder groups. Confidentiality will be respected, and the Project will take all reasonable steps to protect parties to the process from any retaliation that may occur due to complainants' decision to use the Project GRM to resolve a grievance.

Grievances could arise with regards to any aspect of the Project, including but not limited to the following:

- Measurement of land and other assets for communities that are to be directly affected;
- Changes in access to natural resources e.g. rivers, forest etc;
- Potential impacts on farming, fishing, and other livelihoods;
- Proposed compensation and other support measures;
- Proposed resettlement sites and housing options;
- Changes in water and air quality;
- Impacts on cultural or religious sites;
- Confusing or insufficient information about the Project;
- Potential impacts to roads, schools, or other infrastructure.

Any person, or group, can make a complaint and the issue will be handled with respect. A grievance can be defined as an actual or perceived problem that might give grounds for complaint.

12.1 Grievances Management Process

The Project GRM has the objective of helping third parties to avoid resorting to the judicial system for as many grievances as possible. This mechanism includes three successive tiers of extra-judicial amicable grievance review and resolution: (i) the first is the Group Village Grievance Redress Committee, (ii) the second being the Project Grievance Redress Committee and (iii) the third is a Grievance Review Board. The next paragraphs describe these three tiers.

Complainants can resort to judiciary channels at any time. The three-tier process does not deter them from doing so.

12.1.1 First Tier - Group Village Grievance Redress Committees

Group Village Grievance Redress Committees (GVGRCs) are formed under the Project at a Group Village Headman (GVH) level in directly impacted communities in proximity to Project infrastructure. These act as the first tier of grievance redress to resolve grievances which may emanate at the community level. The GVGRC members appoint a chairperson and a secretary. The committees consist of the following members:

- Village Head.
- Village Development Committee (VDC) representative (or equivalent) .
- Natural Resources Management Committee (NRMC) member.
- Child Protection Officer.
- Community Policing representative.



- Women’s representative.
- Youth representative.
- Project-Affected Person (PAP) – male.
- Project-Affected Person (PAP) – female.
- Extension worker (representative of District Council).
- Religious organisations’ representative/s (from religious group/s active within the community).

GVGRC roles and responsibilities include but are not limited to:

- ‘Channel’ or ‘Access Point’ for receipt of Project-related feedback from affected communities.
- Receive and screen community queries, concerns, complaints and grievances in accordance with the screening processes outlined in the MHPP GRM. This includes:
 - Referring all incidents and emergencies, and gender-based violence (GBV) and sexual exploitation and abuse (SEASH) issues immediately to the nominated pathways; and
 - Referring grievances that are not within the jurisdiction of the Committee and/or the MHPP GRM to the appropriate authority.
- Address community queries and potential grievances immediately where possible; using information documented in MHPP Frequently Asked Questions (FAQs).
- Record grievances in a MHPP Grievance Registration form, when requested by a Complainant.
- Sensitise affected communities about the MHPP GRM and the GVGRC roles and responsibilities related to the GRM.
- As required, assist in the investigation and resolution of grievances related to the MHPP.
- Participate in MHPP Grievance Review Board (GRB) meetings, only as required and only those members whose community role is relevant to the specific category of grievance being reviewed.
- Distribute official MHPP GRM contact cards and other official GRM awareness-raising materials, as required. E.g. Project Newsletters, Project Brochures.

The GVGRC Chairperson role and responsibilities are:

- To compile two weekly logs: i) a Community Feedback Log; ii) a Grievance Log that summarise information provided immediately by GVGRC members to address community queries and potential grievances.
- To meet weekly with MHPL Grievance Officers and/or Community Liaison Officers to:
 - To provide MHPP weekly community feedback and grievance logs.
 - To provide completed MHPP grievance redress forms.
 - To open the Suggestion Boxes and provide the completed forms or other feedback to the MHPL Grievance Officer and/or MHPL Community Liaison Officer to take and screen.

To commence the implementation of the Project Grievance Redress Mechanism, the following activities were jointly undertaken by MHPL and the GoM PIU:

- November 2022: Election of Group Village Grievance Redress Committees (GVGRC) in each of the five directly impacted Group Villages identified to date.
- December 2022: Development of grievance reporting management forms, training materials and training of Group Village Grievance Redress Committees (GVGRCs)
- April 2023: Refresher training for the GVGRCs.



At the time of writing, the Mpatamanga HPP has established five Group Village Grievance Redress Committees (GVGRCs) and two GVGRC Sub-committees in Blantyre and Neno Districts (MHPL 2024). They are indicated in Table 65 below. Additional GVGRCs will be established when needed.

Table 65: GVGRC established in 2023

District	Traditional Authority	GVH	GVGRC #	Main villages represented in the GVGRC
Blantyre	TA Kunthembwe	GVH Kaliati	1 – GVGRC GVH Kaliati	Mpindo, Inosi, Chaswanthaka, Lisangwi, Chilaulo
			2 – GVGRC GVH Kaliati sub-committee	Mbwinja, Divala
		GVH Namputu	3 – – GVGRC GVH Namputu	Chinkwinya, Chimpanda, Namputu, Chikira, Mwazilinga
Neno	TA Mlauli	GVH Feremu	4 – GVGRC GVH Feremu	Feremu, July, Kambalame
			5 – GVGRC GVH Feremu sub committee	Nkwali
		GVH Nsalawatha	6 – GVGRC GVH Nsalawatha	Nsalawatha, Chikaya, Liyenda, Joathan, Liwonde
		GVH Ngwenyama	7 – GVGRC GVH Ngwenyama	Mbemba, Nkoka, Joseph (1 and 2)

12.1.2 Second Tier – Project Grievance Redress Committee

The Project Grievance Redress Committee (PGRC) comprises key members from the Project Implementation Unit (PIU) and Mpatamanga Hydro Power Limited (MHPL), alongside community representatives.

The PGRC's composition includes:

- Social Safeguards Specialist – Ministry of Energy PIU
- Environmental Safeguards Specialist - Ministry of Energy PIU
- Mpatamanga Hydro Power Project Desk Officer - Ministry of Energy
- Regional Lands Desk Officer for MPHPP – Ministry of Lands PIU
- Malawi Environment Protection Agency Desk Officer for MPHPP – PIU
- Environmental and Social Coordinator – MHPL
- Consultation and Stakeholder Management Coordinator – MHPL
- Environmental Lead – MHPL
- Community Liaison Officers – MHPL
- Chairperson GVGRC (from the Group Village where the grievance originates – if needed)
- Secretary Village Level Committee (from the Group Village where the grievance originates – if needed)
- A Committee member as needed (from the Group Village where the grievance originates – if needed)

Roles and Responsibilities of PGRC`:



- Reviewing grievances submitted through the established channels.
- Participating in investigations and assessing findings.
- Identifying resolution and mediation measures.
- Resolving and addressing grievances referred from the community level.
- Assigning grievances to Responsible Parties for resolution.
- Communicating resolutions to complainants formally and verbally.
- Referring unresolved grievances to the PGRB.
- Building capacity of GVGRC on Grievance Redress Mechanism (GRM) and crosscutting issues.
- Reporting all complaints/grievances handled at community and project levels to the PGRB.
- Documenting the status and resolution of complaints.

The MHPL and PIU convene weekly (online and in-person where possible) to discuss grievances and decide on necessary actions.

The PIU and MHPL members of the PGRC hold weekly meetings to:

- Receive reports from the Community Liaison Officer (CLO) on recorded grievances.
- Review grievances referred to the committee for resolution.
- Co-opt other members based on the grievances under consideration.

Meeting Procedures:

- Chairperson: The Social Safeguards Specialist chairs the committee.
- Secretary: The Consultation and Stakeholder Management Coordinator serves as the committee secretary.
- Chairperson Responsibilities: Presides over meetings, ensures proper conduct, and administers rules and regulations. In the chairperson's absence, an interim chairperson presides.
- Secretary Responsibilities: With the CLO's assistance, calls meetings, takes minutes, circulates signed minutes, and files them.
- Quorum: Two-thirds of committee members eligible to attend constitute a quorum.
- Transparency and Accountability: The committee enforces these principles in all its affairs.
- Complainant Attendance: Depending on the case, complainants or their representatives may be requested to attend hearing sessions but may be excused during other meetings.
- Updates on Grievances: Regular updates on grievances referred to Responsible Parties are provided to track progress on resolution.

12.1.3 Third Tier – Grievance Review Board

The Grievance Review Board is made of MHPL and the GoM PIU, including representative of the relevant line ministries. The Grievance Review Board meets as needed to discuss grievances which have not been solved at the first tier of resolution by the Village Grievance Redress Committees or the second tier Project Grievance Redress Committee



12.2 Access Points for Raising a Grievance

The Project GRM considers communities' literacy levels and focuses on in-person interaction with complainants using Chichewa, and/or other relevant local languages, in addition to English; to ensure that processes, decisions, and outcomes are clearly understood.

There are a number of “channels”, or access points, which can be used by community members and other stakeholders to submit feedback – questions, comments, concerns and/or complaints – regarding the Project. These are summarised in Table 66 below.

Table 66: GRM Access Points

Modality	Access Point
In person:	<ul style="list-style-type: none"> • To a GoM PIU or MHPL representative; e.g. during their visits to local communities. • At regular MHPP stakeholder engagement meetings; for example MHPP Monthly Community Engagement Meetings and Quarterly Stakeholder Engagement Meetings. • At the GoM PIU (Ministry of Energy office in Lilongwe) or MHPL (Blantyre + Site offices): <ul style="list-style-type: none"> • Ministry of Energy, 2nd floor, Capital House, City Center, Lilongwe 3. • MHPL Addresses: <ul style="list-style-type: none"> • <u>Headquarters</u>: 16, 17 and 18 on First Floor, Almira Complex at Plot Number BC1114, Mandala, Blantyre. • <u>Site Office</u>: S137, near Main Dam site, Blantyre District. • To Village focal points; specifically, members of a Group Village Grievance Redress Committees (GVGRCs).
By phone (call, SMS, WhatsApp):	<ul style="list-style-type: none"> • <u>To GoM PIU</u>: +265 1 770 688. • <u>To MHPL</u>: 4265 (Toll Free Number) or 0886 595 369 (Airtel) or 0886 595 369 (TNM). • To members of a Group Village Grievance Redress Committees (GVGRCs).
In writing:	<ul style="list-style-type: none"> • By placing a completed GRM Form or written letter in an MHPP Suggestion Box. These are currently located in directly impacted villages in Blantyre and Neno Districts. Each Box is held by a GVGRC member however boxes are opened by MHPL Grievance Officers; for reasons of confidentiality. • By email to the GoM or MHPL: <ul style="list-style-type: none"> • GoM Email: info@energy.gov.mw • MHPL Email: info@mpatamangahydro.com • By mail to the GoM or MHPL: <ul style="list-style-type: none"> • GoM Postal Address: Ministry of Energy, Private Bag 309, Lilongwe 3, MALAWI. • MHPL Postal Address: P.O. Box 886 Blantyre, MALAWI. • Via the GoM or MHPL websites: <ul style="list-style-type: none"> • GoM website: www.energy.gov.mw • MHPL website: www.mpatamangahydro.com • to Village focal points and/or other members of Project GVGRCs.



To provide feedback or to raise questions or concerns about the Mpatamanga HPP, the affected persons or the general public can contact MHPL or the Government of Malawi using the following contact details:

<u>MHPL Contact Details:</u>	<u>Government of Malawi Contact Details:</u>
<p>Mobile/WhatsApp: Toll free code: 4265 Airtel: +265 986 643 212 TNM: +265 886 595 369 E-mail: info@mpatamangahydro.com Mail: P.O. Box 886 Blantyre, Malawi Office: 16, 17 and 18 on First Floor, Almira Complex at Plot Number BC1114, Mandala, Blantyre Website: www.mpatamangahydro.com</p>	<p>Mobile/WhatsApp: Airtel: +265 999 138 270 or +265 999 922 356 E-mail: info@energy.gov.mw austin.theu@energy.gov.mw khumbolungu@gmail.com Mail: P/Bag 309 Lilongwe 3, Malawi Office: Second Floor, Capital House, Robert Mugabe Crescent, City Centre, Lilongwe Website: www.energy.gov.mw</p>



13 Implementation Schedule

The construction activities schedule is expected to extend over about 54 months, as follows (EDF 2024b):

- The construction activities will start with a first sequence of ‘early works’ with the preparation of the Chaswanthaka and Mpindo resettlement sites and with the upgrade of the S137 road in Blantyre District in 2025,
- The main works will start in 2026, with (i) the construction of the main project facilities (Main Dam and Main Powerhouse, Construction camp and other construction facilities, Service Road, Regulating Dam), (ii) the new section of the S137 road in Neno District, (iii) the preparation of the Kambalame resettlement site and (iv) the acquisition and fencing of the proposed biodiversity conservancy area on the Neno side between the Main Dam and the Regulating Dam,
- The Transmission Lines construction would then start in 2027,
- Finally, the impoundment of the Main Reservoir would start in 2029,
- Each powerhouse (main powerhouse and regulating dam powerhouse) will be commissioned unit by unit from the fourth quarter of 2029 to the first semester of 2030.

It is envisaged to prepare several Resettlement Action Plans instead of one only RAP for the entire project for the following reasons:

- The detail design of some components – which will define the final land requirements – may come in different periods. For instance, the detail design of the transmission lines may come after the detail design of the main works.
- Phasing the RAPs will also help avoid delays between the cut-off date (defined by the census and valuation of affected assets) and payment of compensations and then the actual start of construction activities across various Project components.

At the time of writing, it was envisaged to organise the Mpatamanga HPP land acquisition, compensation and resettlement process into four main phases, articulated with the schedule of Project’s construction activities. Four separated Resettlement and Livelihood Restoration Plan will be prepared, as follows:

- Phase 1: Early Works RAP for the S137 access road refurbishment work in Blantyre District. It will also include the acquisition of the Chaswanthaka and Mpindo resettlement sites. (preparation planned in 2024, and implementation in 2025)
- Phase 2: Main works RAP: Area covering all project main facilities, as well as construction facilities, and the regulating reservoir area. Any area located in the main reservoir but to be used for construction facilities will also be acquired at that time (upstream coffer dam and diversion tunnel works). The Main works RAP will also include the new sections of the S137 road in Neno district and the Kambalame Resettlement site. (preparation planned for 2025, and implementation in 2025-2026)
- Phase 3: Transmission Lines (RoW 400kV TL and 132kV TL) (preparation planned for 2025, and implementation in 2026)
- Phase 4: Main reservoir. (preparation planned for 2026-2027, and implementation in 2027-2028).

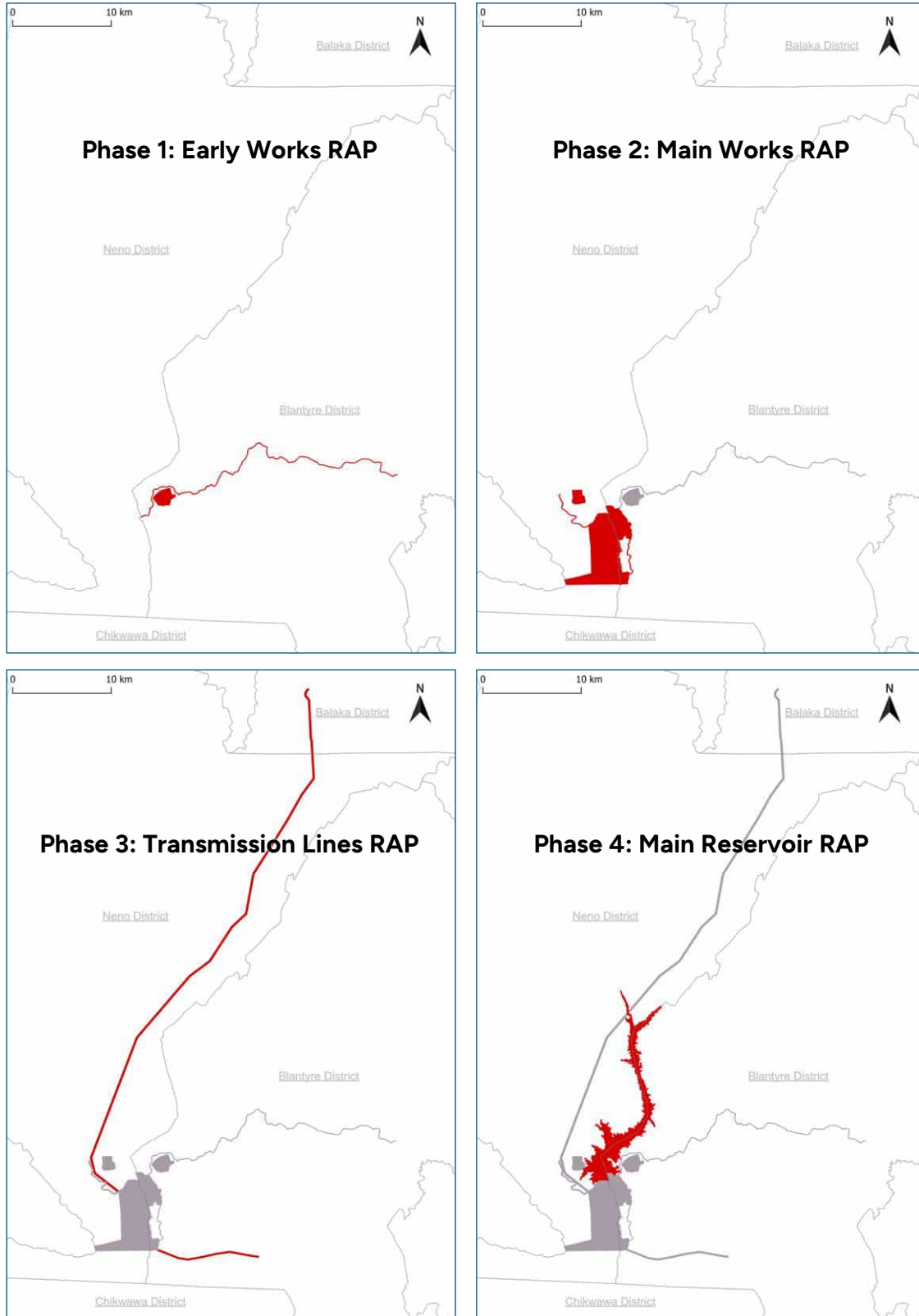
The areas covered by these four phased RAPs are illustrated in Figure 133 below. The general implementation schedule of the four phased RAP articulated with the construction activities is given in the Gant Chart in Figure 134⁴². Figure 135 then provides the detailed schedule for the Early Works RAP, and Figure 136 gives the detailed schedule for the Main Works RAP. The Transmission Lines and Main Reservoir RAPs will follow the same sequence of activities.

⁴² Source of construction schedule : (EDF 2024b)



This general approach may be modified if and as necessary to reflect any change in the construction schedule. It may also be adapted based on the feedback received from the affected communities during the public disclosure process (see Section 11.3).

Figure 133: Areas covered by the four phased RAPs





Mpatamanga HPP – Resettlement Policy Framework

Figure 134: General schedule of the phased RAPs aligned with construction activities.

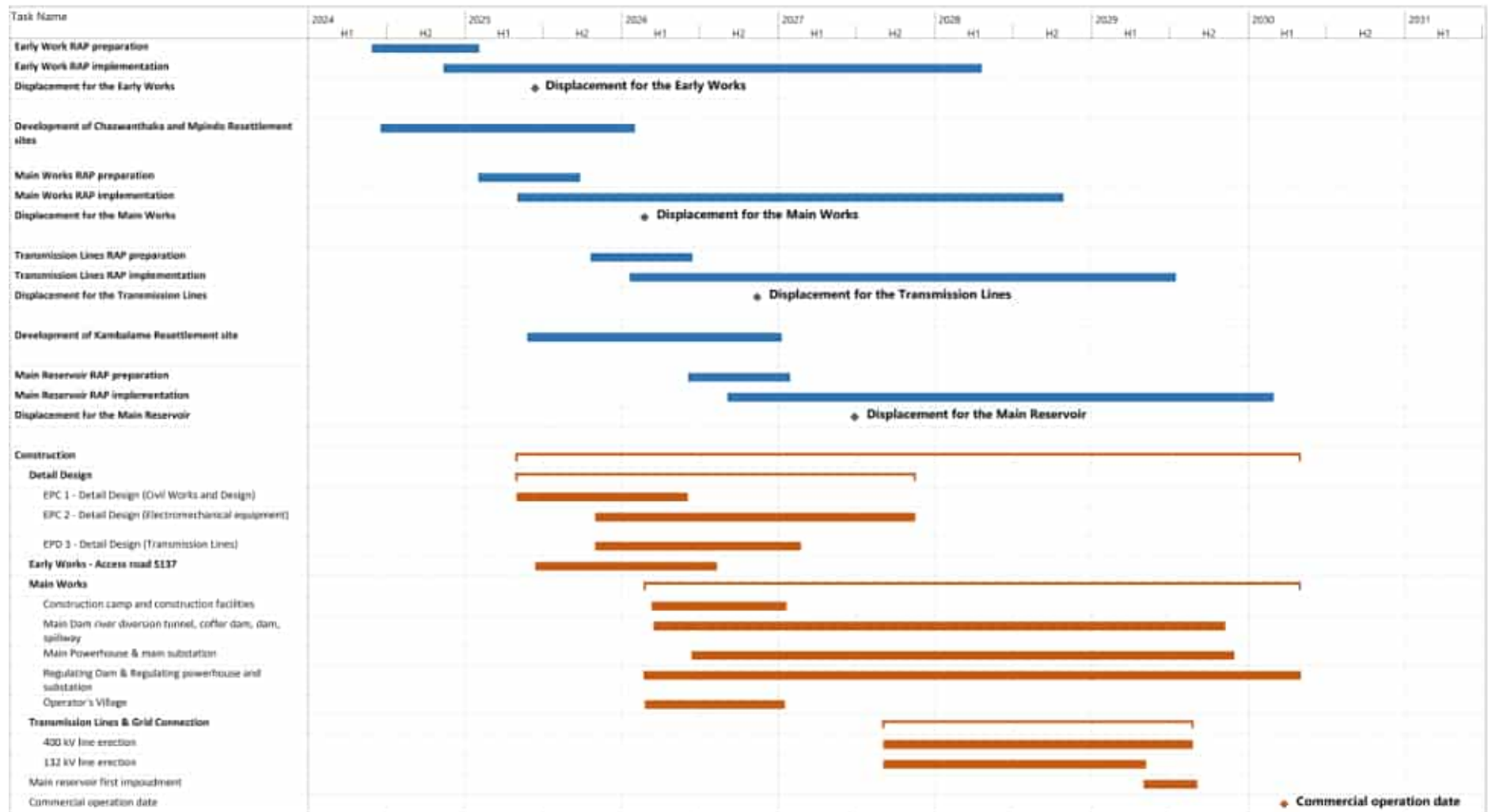




Figure 135: Schedule of the Early Works RAP

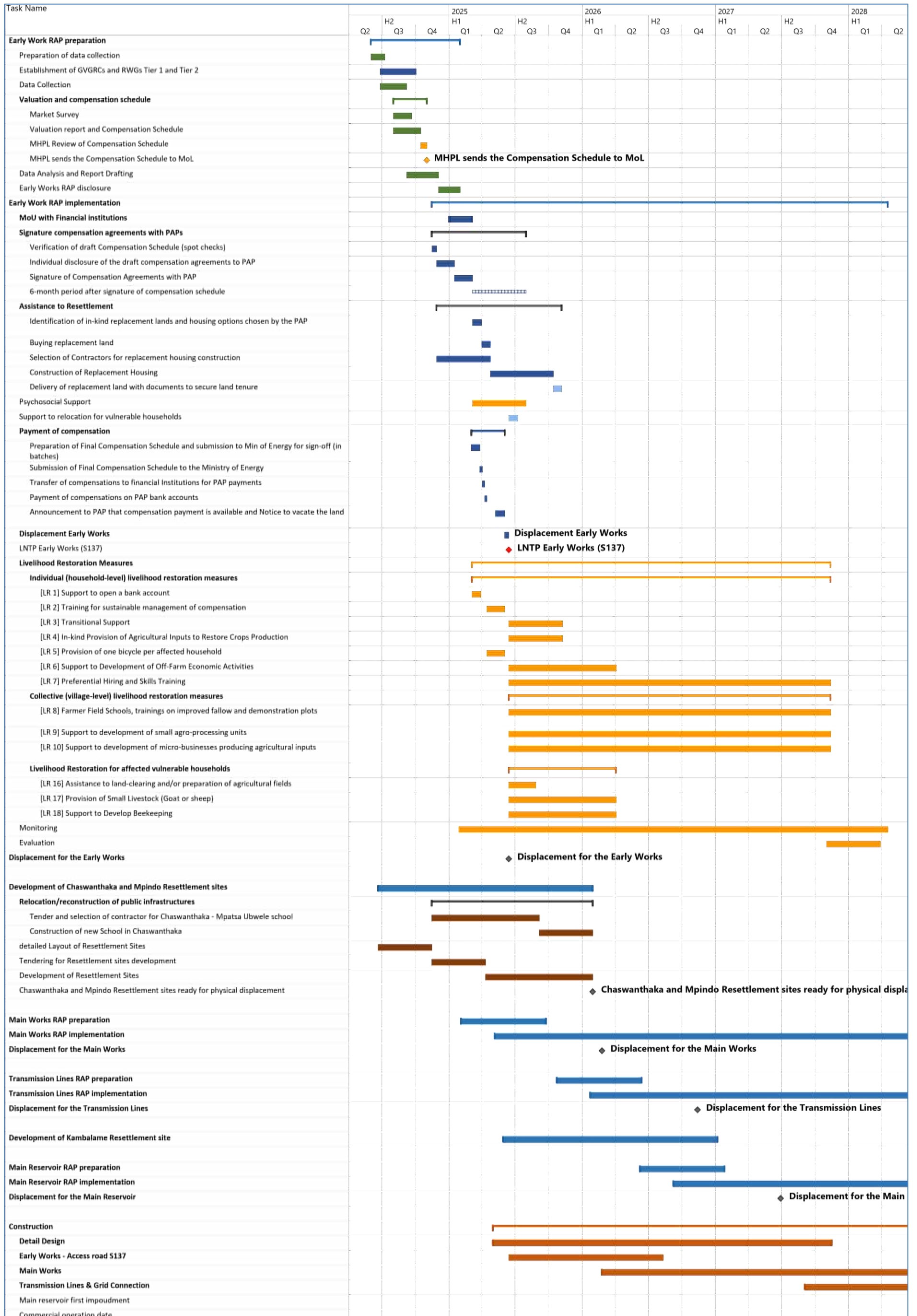
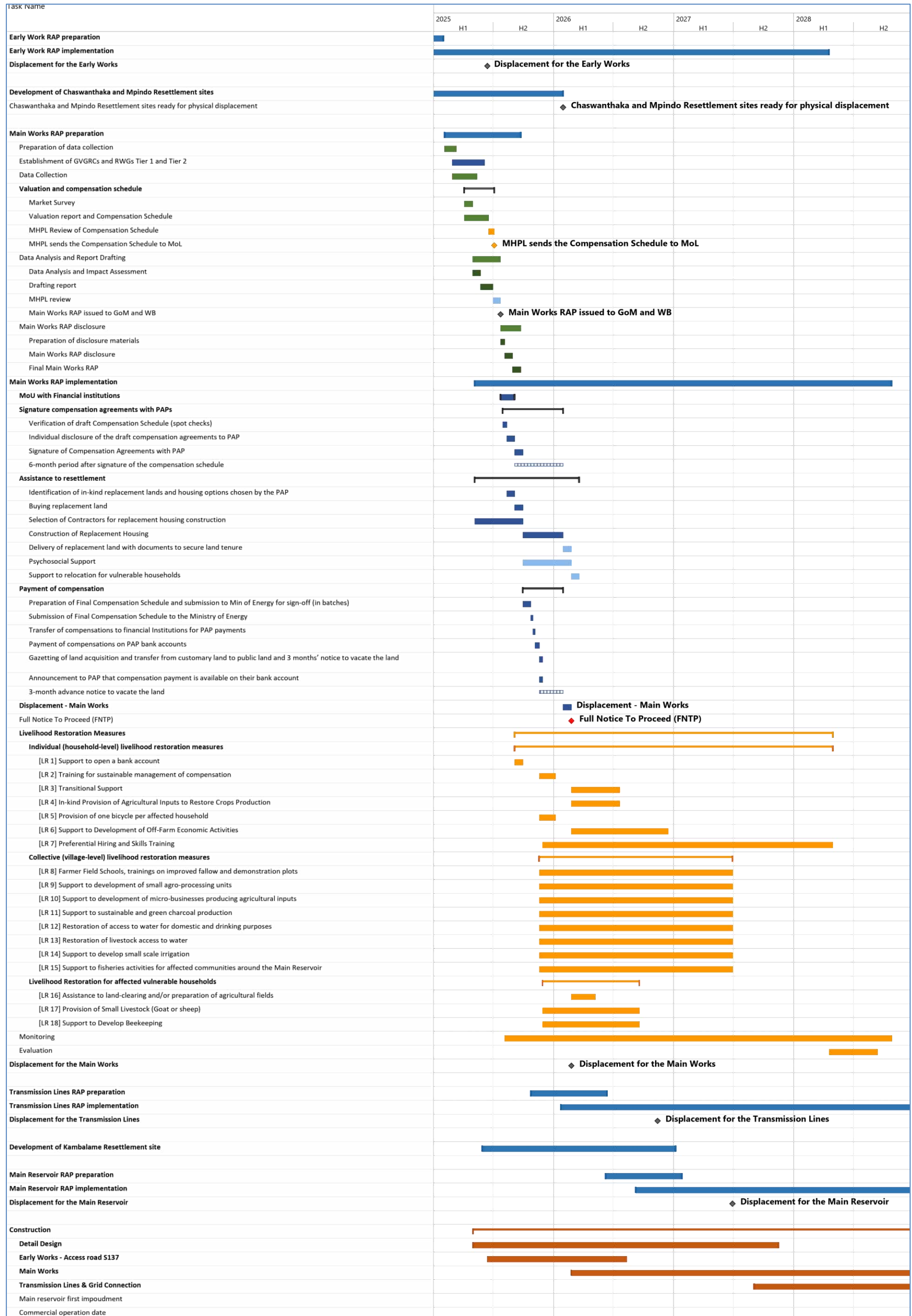




Figure 136: Schedule of the Main Works RAP





14 Monitoring and Evaluation

The objective of the phased RAPs implementation is to ensure that the affected people's standard of living and livelihoods at least remain at their pre-Project level and preferably improve. Monitoring and evaluation are the means of documenting the success in achieving this objective.

- Monitoring is the measurement through time that indicates the movement toward the objective or away from it, to provide the raw data to provide feedback on progress made and allows identifying problems as early as possible in order to facilitate timely adjustment of rehousing and livelihood restoration measures. The objectives are to:
 - Ensure that the standard of living of PAPs are restored or improved,
 - Ascertain whether activities are progressing as per schedule, i.e., the timelines are being met,
 - Assess whether the compensation and rehabilitation measures are sufficient,
 - Identify problems or potential issues and formulate corrective actions to rapidly mitigate them.
- Evaluation is putting this data to use and interpreting it to conclude whether the objectives are achieved and the RAP activities can be considered completed. The evaluation will also include an assessment against the achievement of overall IFC PS5 objectives

The proposed monitoring and evaluation approach considers the 4 phased RAPs preparation and implementation as follows:

- Monitoring activities (internal and external monitoring, see Section 14.1) will be undertaken globally, and will document the progress of the activities across all four phased RAP,
- For each phased RAP, evaluation activities will be performed when all mitigation measures have been substantially completed. An internal close-out report and an independent completion audit will be prepared for each of the four phased RAP (see Section 14.2).

14.1 Monitoring

14.1.1 Internal Monitoring

Internal monitoring will be carried out routinely by the MHPL Social team during the implementation of the phased RAPs. Indicators for internal monitoring will be those related to process, immediate outputs and impacts – number of surveyed affected land parcels, number of compensations in process, number of compensations paid, compensation payments in process and paid, livelihood restoration programs underway, grievances by type and time for resolution. This information will be collected by the MHPL Social Team.

The monthly reports prepared as part of the Project's overall internal E&S reporting will include a section on the RAPs implementation.

Quarterly internal RAP monitoring reports will be prepared from the start of the Early Works RAP implementation until the Completion Report. They will contain:

- Accomplishments to-date.
- Number of compensation agreements signed.
- Number and amount of compensation paid.
- Number and nature of livelihood restoration activities conducted, and number of affected people participating in these activities.



- Number and nature of resettlement assistance activities conducted, and number of affected people participating in these activities.
- Objectives attained and not attained during the period.
- Problems encountered.
- Number of grievances lodged, by type, location and gender of complainant, and number resolved.
- Suggested options for corrective measures.

Interim internal evaluation 1 year after delivery of compensation / livelihood package for each phased RAP.

Monitoring indicators are outlined in Table 67 below. They are divided into three components:

- Input (or process) monitoring, which measures the services, resources or goods that contribute to achieving outputs and, ultimately, desired outcomes.
- Output (or performance) monitoring which measures the direct measurable results of the inputs.
- Outcome (or impact) monitoring define the extent to which the Project inputs and outputs are achieving or are likely to achieve the objectives of the RAP.

Table 67: RAP Monitoring Indicators

Indicators categories	Indicators	Source	Frequency / Schedule
Input	Overall spending of the RAP budget	MHPL and PIU Financial records	Internal monitoring (monthly and quarterly)
	Distribution of spending by: - Cash compensation. - Resettlement assistances. - Consultation and engagement with PAP and other stakeholders. - Vulnerable people assistance. - Livelihood restoration activities. - General implementation & overheads.	MHPL and PIU Financial records + RAP database	Internal monitoring (monthly and quarterly)
	Number of staff mobilised, full-time/part time, in-house or outsourced, disaggregated by gender, responsibility and title.	MHPL and PIU Human Resources	Internal monitoring (monthly and quarterly)
	Number of PAP for each category of the entitlement matrix, disaggregated by gender	RAP database	Internal monitoring (monthly and quarterly)
Output	Number and amount of compensation agreements signed	RAP database	Internal monitoring (monthly and quarterly)
	Number of physically displaced people installed in their new house.	RAP database	Internal monitoring (monthly and quarterly)



Indicators categories	Indicators	Source	Frequency / Schedule
	Number and financial sum of compensations paid.	RAP database	Internal monitoring (monthly and quarterly)
	Number of people having received resettlement assistance and financial amount spent for this purpose.	RAP database	Internal monitoring (monthly and quarterly)
	Number and nature of livelihood restoration activities conducted and number of PAPs participating to these activities.	RAP database	Internal monitoring (monthly and quarterly)
Outcome	Number of grievances opened throughout the whole implementation period.	Grievances management system	Internal monitoring (monthly and quarterly)
	Number of unresolved open grievances.	Grievances management system	Internal monitoring (monthly and quarterly)
	Number of grievances closed throughout the whole implementation period and average time from opening.	Grievances management system	Internal monitoring (monthly and quarterly)
	Average time necessary to close grievances, from the moment they are received and lodged.	Grievances management system	Internal monitoring (monthly and quarterly)
	Satisfaction of PAP regarding the compensations	Socioeconomic survey	Completion audit report
	Levels of income and standards of living of PAP and % of PAP with their livelihoods and level of income restores and/or improved	Socioeconomic survey	Completion audit report
	Type of means of livelihoods and income sources of the PAPs	Socioeconomic survey	Completion audit report

14.1.2 Independent Monitoring by a Witness NGO

As indicated in section 10.2.2.2, a witness NGO will be recruited by MHPL to act as independent observer in the phased RAPs preparation and implementation process. The purpose of external monitoring by the witness NGO is to confirm the findings of internal monitoring procedures and ensure that the Project is compliant with the processes and standards defined in this RPF. External monitoring activities of the witness NGO will include:

- Reviewing and verifying internal monitoring reports.
- Reviewing the census, asset inventory and socio-economic survey of PAPs,



- Reviewing the effectiveness and compliance of compensation procedures, through direct observation of compensations payments and interviews with samples of affected households,
- Reviewing the effectiveness and compliance of the grievance mechanism,
- Performing quarterly site visits and consultations with PAPs, community leaders and local authorities.
- Preparation of quarterly independent monitoring reports and submission to Mpatamanga Project Management (MHPL and PIU) and Lenders.

The witness NGO will prepare six-monthly independent monitoring reports. Should any gaps in the implementation process or noncompliance with Lenders' policies be identified, the Witness NGO will propose time-bound corrective actions.

14.2 Evaluation

14.2.1 Internal Evaluation - Close-out Reports

When all mitigation measures have been substantially completed on a phased RAP, at least two years after payment of compensation, and no longer than 3 years after displacement of affected persons, the MHPL Social Team will prepare an internal Close-out Report. This close-out report will assess whether the objectives of this Phased RAP have been achieved.

The Internal Close-out Report will include the following elements:

- Summary of all activities undertaken to implement the phased RAP,
- Number of people physically and economically affected, by Project Component and entitlement category as per the Entitlement Matrix,
- Satisfaction of PAPs regarding the compensation, resettlement and livelihood restoration processes,
- Number and type of grievances received and resolved,
- Number and type of new economic activities started by affected households thanks to Livelihood Restoration activities,
- Income levels and standards of living of affected households, in comparison with the baseline conditions documented in the Phased RAP.

The first three internal close-out reports for the Early Works RAP, Main Works RAP and Transmission Lines RAP will conclude on the completion of activities and achievement of objectives for each RAP.

The fourth internal close-out report for the Main Reservoir RAP will conclude on the completion of all activities and achievement of objectives for the Main Reservoir RAP, but also for the three other RAP (Early Works RAP, Main Works RAP and Transmission Lines RAP).

14.2.2 Independent Evaluation - Completion Audit

Following each Internal Close-out report, an Independent Completion Audit will be performed by an independent consultant appointed by MHPL and the Lenders. For each phased RAP, this Independent Completion Audit will include a review of mitigation measures implemented, a comparison of implementation measures against agreed objectives and a conclusion as to whether the monitoring process can be ended, or if additional corrective actions have to be implemented to meet objectives not yet achieved.

As part of the Completion Audit, a sample of affected households will be asked to take part into a socioeconomic survey and a satisfaction survey. The sample surveyed will include all households physically displaced, at least half of the affected vulnerable households economically displaced and 10% of all other categories. This sample will also be distributed across affected villages.



As for the internal close-out reports:

- For each phased RAP, the Independent Completion Audit will be undertaken at least one year after payment of compensation, and no longer than 2 years after displacement of affected persons,
- The first three independent completion audits for the Early Works RAP, Main Works RAP and Transmission Lines RAP will conclude on the completion of activities and achievement of objectives for each RAP,
- The fourth independent completion audit performed after the Main Reservoir RAP is implemented will conclude on the completion of all activities and achievement of objectives for the Main Reservoir RAP, but also for the three other RAP (Early Works RAP, Main Works RAP and Transmission Lines RAP).

The Completion Audits will be publicly disclosed on MHPL website.

14.3 Schedule of Monitoring and Evaluation

Table 68 presents the schedule of monitoring and reporting activities⁴³.

Table 68 – Schedule of monitoring and reporting activities

Monitoring and evaluation activities	Reporting	Frequency / schedule
Internal monitoring	Monitoring on phased RAPs implementation from MHPL Social Team to Mpatamanga Project Management (MHPL and PIU)	Monthly during phased RAP implementation, until completion report (at least two years after payment of compensation, and no longer than 3 years after displacement of affected persons)
	Quarterly RAP implementation monitoring reports, to Mpatamanga Project Management (MHPL and PIU) and Lenders	Quarterly during RAP implementation, until completion report (at least two years after payment of compensation, and no longer than 3 years after displacement of affected persons)
External monitoring	Six-monthly reports from witness NGO to Mpatamanga Project Management (MHPL and PIU) and Lenders	Six-monthly, during RAP implementation, until completion report (at least two years after payment of compensation, and no longer than 3 years after displacement of affected persons)
Internal Close-out report	For each of the four phased RAP: one close-out report from MHPL Social Team unit to Lenders.	For each of the four phased RAP: at least one year after payment of compensation, and no longer than 3 years after displacement of affected persons. <ul style="list-style-type: none"> • The first three internal close-out reports for the Early Works RAP, Main Works RAP and Transmission Lines RAP will conclude on the completion of each RAP. • The fourth internal close-out report for the Main Reservoir RAP will conclude on the completion of all activities and

⁴³ The overall reporting requirement of the Project are defined in the 2024 Environmental and Social Management and Monitoring Plan. The results of the RAP monitoring and reporting activities will be included:

- In the ESHS Performance reports in Chichewa and in English disclosed on the Project website, six-monthly during construction and during the first three years of operation and then annually, and
- In the E&S Compliance reports to be submitted to the Lenders six-monthly during construction and during the first three years of operation and then annually.



Monitoring and evaluation activities	Reporting	Frequency / schedule
		achievement of objectives for the Main Reservoir RAP, but also for the three other RAPs
Independent Completion audit	For each of the four phased RAP: one completion audit report from independent consultant to Mpatamanga Project Management (MHPL and PIU) and Lenders	After submission of the internal close-out reports to the Lenders. As for the internal close-out reports, there will be 4 independent completion audit reports.



15 Funding and Estimated budget

15.1 Funding

The Government of Malawi will fund the following activities of the phased RAP:

- Payment of all compensations in cash and compensation in kind defined in Sections 5.5 and 7,
- Assistance to resettlement:
 - Development of the resettlement sites (MHPL acting as Owner Engineer for the GOM),
 - Assisted self-relocation,
 - In-kind support to relocation for vulnerable households physically displaced.
- Establishment and operation of the Resettlement Working Groups (first-tier and second-tier),
- Implementation costs for the Government-funded Activities, including disclosure of the compensation principles and schedules, payment of compensation, as well as the Government PIU participation to stakeholder engagement, grievances management and monitoring.

MHPL will fund the following activities of the phased RAP:

- The Psychosocial support defined in section 8.4,
- All livelihood restoration measures defined in Section 9,
- Monitoring and Evaluation activities defined in Section 14,
- Implementation costs for the activities funded by MHPL, but also for MHPL participation in the disclosure of the compensation principles and schedules, payment of compensation participation to stakeholder engagement, and grievances management.

15.2 Estimated Budget

The estimated budget for the preparation and implementation of the four phased RAP is under discussion. This estimated budget will be distributed amongst the four phased RAPs:

- Early Works RAP: including the development of the Chaswanthaka and Mpindo resettlement sites,
- Main Works RAP: including the development of the Kambalame resettlement site and the acquisition of the land for the proposed biodiversity conservancy area,
- Transmission Lines RAP, including the 400 kV and 132 kV transmission lines, and
- Main reservoir RAP.

This estimated budget will be included in the final version of the Resettlement Policy Framework (RPF).

The actual budgets for each of the four phased RAPs will be prepared in alignment with the eligibility and entitlements principles defined in this RPF, during the preparation of each phased RAP, as indicated in Section 13 – Implementation Schedule.

