



Republic of Uganda
Ministry of Water and Environment



**RESETTLEMENT ACTION PLAN (RAP) FOR KABUYANDA IRRIGATION
DEVELOPMENT AND CLIMATE RESILIENCE PROJECT (IDCRP) IN ISINGIRO
DISTRICT**

FEBRUARY 2019



Version	Final
Intended for:	Ministry of Water and Development, Department of Water for Production
Date	February 2019
Prepared by	Jane Mugano
Checked by	
Approved by	

TABLE OF CONTENTS

LIST OF TABLES	10
LIST OF FIGURES	11
ABBREVIATIONS AND ACRONYMS	12
DEFINITIONS	15
EXECUTIVE SUMMARY	17
1. INTRODUCTION	28
1.1. Background	28
1.2. Overview and Scope of the Proposed Project	28
1.3. Purpose of the Task	29
1.4. Objectives of the Resettlement Action Plan	30
1.5. Scope of the RAP	30
1.6. Approach and Methodology	31
1.6.1. Document review	31
1.6.2. Stakeholder Consultations	31
1.6.3. Socio-economic baseline data collection	32
1.6.4. Asset Surveys and Estimation of Affected Persons	32
1.7. Report Structure	33
2.1. Project Location	34
2.2. Project Components	37
2.2.1. Dam	37
2.2.1.1. <i>Spillway and Stilling Basin</i>	38
2.2.1.2. <i>Intake and Bottom Outlet</i>	38
2.2.2. Control Building	38
2.2.3. Reservoir	39
2.2.4. Irrigation System	39
2.2.4.1. <i>Distribution System and Irrigation Method</i>	39
2.2.4.2. <i>Irrigation Network</i>	39
2.2.4.3. <i>Drainage Network</i>	40

2.2.5.	Access Roads	40
2.3.	Alternatives to Minimize Land Acquisition and Physical Displacement	42
3.	POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK	43
3.1.	Introduction	43
3.2.	Standards for Land Acquisition and Resettlement	43
3.3.	Uganda Policy Framework	43
3.3.1.	Uganda National Land Policy, 2013	43
3.3.2.	Uganda Gender Policy, 2007	44
3.3.3.	National Policy for Older Persons, 2009	44
3.4.	Uganda Legal Framework	44
3.4.1.	Uganda Constitution, 1995	45
3.4.2.	Land Act, Cap 227	48
3.4.3.	Land Acquisition Act, 1965	48
3.4.4.	Access Roads Act, Cap 350	49
3.4.5.	Survey Act, 1964	49
3.4.6.	Local Government Act, 1997	50
3.4.7.	The Water Act 1997 (CAP 152)	50
3.4.8.	Remedies Available to Displaced Persons in the Judicial Process and the Normal Time Frame for such Procedures	51
3.4.9.	Available Alternative Dispute Resolution Mechanisms that may be Relevant to the Project	52
3.4.9.1.	<i>Traditional or Customary Methods</i>	52
3.4.9.2.	<i>Mediation</i>	52
3.5.	Environmental and Social Management Framework (ESMF) - Ministry of Water and Environment	53
3.6.	International Policy Instruments, Guiding Principles and Requirements	53
3.6.1.	The Universal Declaration of Human Rights	53
3.6.2.	The African Charter on Human and people's Rights	53
3.7.	World Bank Operational Policies	54
3.7.1.	Involuntary Policy on Resettlement – O.P 4.12	54
3.7.2.	OP 17.50 Public Disclosure	55

3.8.	Comparison between Ugandan Legislation & World Bank Policies on Resettlement and Compensation	55
3.9.	Institutional Framework	61
3.9.1.	Ministry of Water and Environment, Water for Production Department (MWE-WfP)	61
3.9.2.	Ministry of Agriculture Animal Industry and Fisheries (MAAIF)	61
3.9.3.	The Ministry of Lands, Housing and Urban Development (MoLHUD)	62
3.9.4.	Ministry of Gender Labour and Social Development (MGLSD)	62
3.9.5.	National Environment Management Authority (NEMA)	62
3.9.6.	Uganda Land Commission (ULC)	63
3.9.7.	Office of the Administrator General	63
3.9.8.	Local Governments	63
3.9.9.	Non-Governmental Organizations and Civil Society Organizations	64
3.9.10.	Project Task Team	64
4.	PUBLIC CONSULTATION AND PARTICIPATION	65
4.1.	Introduction	65
4.2.	Objective of Public Consultation and Participation	65
4.3.	Stakeholders Identification and Composition	65
4.3.1.	Directly Affected People	66
4.3.2.	Indirectly Affected Persons	66
4.3.3.	National Stakeholders	66
4.3.4.	Local Government Stakeholders	66
4.3.5.	Other Stakeholders	66
4.4.	Stakeholders Consulted	68
4.5.	Approach and Methods for Public Consultation and Participation	69
4.6.	Involvement of Women and Other Vulnerable Groups	71
4.7.	Issues Raised by Stakeholders	73
4.8.	A Summary of the Salient Issues Raised	77
4.9.	Public Consultation & Disclosure Plan during RAP Implementation	77
5.	SOCIAL ASSESSMENT AND SOCIO-ECONOMIC SURVEYS	81
5.1.	Introduction	81
5.1.1.	Approach and Methodology	81

5.1.2.	Administrative Framework	82
5.2.	Population and Demographic Characteristics	82
5.2.1.	Population	82
5.2.2.	Age of Household Heads	83
5.2.3.	Sex of Household Head	84
5.2.4.	Marital Status	85
5.2.5.	Religious Denominations	86
5.2.6.	Ethnic Composition	87
5.2.7.	Level of Education and Literacy Levels	88
5.2.8.	Vulnerable Groups	89
5.3.	Social Structure	90
5.4.	Social Capital and Mechanisms for Social Cohesion	90
5.5.	Land Tenure System	91
5.6.	Land Ownership	91
5.7.	Settlement Pattern and Nature of Buildings	92
5.8.	Length of Stay in the Project Area	93
5.9.	Livelihoods and Income Sources	93
5.10.	Levels of Income	94
5.11.	Agriculture and Marketing	95
5.11.1.	Crop Production	95
5.11.2.	Livestock Production	99
5.11.3.	Fish Production	100
5.11.4.	Marketing	101
5.12.	Assets Owned	103
5.13.	Social Infrastructure	103
5.13.1.	Education	103
5.13.2.	Health	105
5.13.2.1.	<i>Health Services and Infrastructure</i>	105
5.13.2.2.	<i>Diseases Incidence</i>	107
5.13.2.3.	<i>HIV/AIDS and STDs</i>	107
5.13.3.	Energy	108

5.13.4.	Water Supply	109
5.13.5.	Access to Credit Facilities	110
5.14.	Communication and Access to Information	111
5.15.	Access to and Dependence on Natural Resources	111
5.16.	Gender Relations	111
5.17.	Non-Governmental Organisations / Community Based Organisation	112
5.18.	Existing Government Programs for Livelihood	112
6.	POTENTIAL PROJECT IMPACTS	114
6.1.	Introduction	114
6.1.1.	Estimated Potential Affected Population	114
6.2.	Negative Impacts	114
6.2.1.	Impact on Land	114
6.2.2.	Impact on Structures	115
6.2.3.	Impact on Public Infrastructure and Utilities	117
6.2.4.	Impact on Crops/Trees	118
6.3.	Figure 6-2: Potential Affected Crops/Trees Impact on Cultural Sites and Assets	118
6.4.	Loss of Access to Natural Resources	119
6.5.	Impact on National Forestry Authority (NFA)	119
6.6.	Impact of the construction of the dam for the downstream water users	120
6.7.	Positive Impacts from the Project	120
7.	Mitigation Measures, Valuation and Compensation Framework	121
7.1.	Valuation Methodology in Uganda	121
7.1.1.	Land Surveys	121
7.1.1.1.	Collection of Initial Cadastral Data from Land Offices	121
7.1.1.2.	Land Boundary Surveys	122
7.1.2.	Preparation of a Valuation Methodology	122
7.1.2.1.	Inventory and Registration of Affected Properties and Persons	123
7.2.	Computation of Compensation	124
7.2.1.	General Overview of Computation of Compensation	124
7.2.2.	Valuation Basis Considered in this RAP	126
7.2.2.1.	Land	126

7.2.2.2.	Crops and Trees	128
7.2.2.3.	Buildings & Structures	128
7.2.2.4.	Disturbance Allowance	129
7.3.	Entitlement Framework and Eligibility Criteria	129
7.3.1.	Eligibility Criteria for Land and Developments	129
7.3.2.	Eligibility for Community/Public Property	130
7.3.3.	Vulnerable Groups	130
7.3.4.	Eligibility for relocation	130
7.3.5.	Loss of Income	131
7.3.6.	Proof of Eligibility	131
7.3.7.	Salvage of Materials	131
7.3.8.	Moving Arrangements	131
7.3.9.	Cut-off Date	131
7.3.10.	Entitlement Matrix	132
7.4.	Verification and Disclosure of Entitlements	134
7.4.1.	Validation of Census Data	134
7.4.2.	Verification, Disclosure of Compensation Principles and Unit Rates	134
7.4.3.	Conclusion of Agreements or Attempt at Mediation	135
7.5.	Procedures for Delivering Compensation Entitlements	135
7.6.	Land Acquisition Process	136
7.6.1.	Signing of Land Transfer and Land Mutation Forms	136
7.6.2.	Application for Land Title	137
8.	LIVELIHOOD RESTORATION MEASURES	138
8.1.	Introduction	138
8.2.	Eligibility	138
8.3.	Proposed Livelihood Restoration Programs	139
8.3.1.	Land / Agricultural based livelihoods and support	139
8.3.2.	Access to employment opportunities during project construction	140
8.3.3.	Financial literacy and management training	140
8.4.	PAP Consultations and Disclosure	141
8.5.	Schedule of Implementing Livelihood Restoration Measures	141

9. GRIEVANCE REDRESS MECHANISM	143
9.1. Introduction	143
9.2. Grievance Resolution Mechanism	144
9.3. Grievance Resolution Process	146
9.4. Inclusion of Women and other Vulnerable Groups	148
9.5. Training	148
9.6. The Grievance Database Management	148
10. RELOCATION / RESETTLEMENT	150
10.1. Introduction	150
10.2. Resettlement Options	150
10.3. Relocation Schedule and Assistance	150
10.4. Integration with Host Communities	151
10.5. Moving Arrangements	151
11. ORGANIZATIONAL ARRANGEMENTS	152
11.1. Introduction	152
11.2. Organizational Arrangements and Procedures for Delivery of Entitlements	152
11.3. Actors Involved	152
11.4. Procedures and Responsibilities	153
11.5. Institutional Capacities	158
11.5.1. Ministry of Water and Environment, Water for Production Department (MWE-WFP)	158
11.5.2. The Ministry of Lands, Housing and Urban Development	158
11.5.3. Office of the Administrator General	159
11.5.4. Other Ministries involved in the Execution of RAP Activities	159
11.5.5. The Local Government Authorities	159
11.6. Institutional Capacity Reinforcement	159
11.6.1. National Ministries – Project Task Team	159
11.6.2. Local Governments	160
12. BUDGET AND FUNDING ARRANGEMENTS	161
12.1. Introduction	161
12.2. ESTIMATED TOTAL COMPENSATION BUDGET	161
12.3. SOURCES OF FUNDING	163

13. IMPLEMENTING SCHEDULE	164
13.1. Introduction	164
13.2. Time Schedule for RAP Implementation	164
13.3. Time Schedule, Linking Resettlement Implementation to Civil Works	165
13.4. Potential Risks to the Schedule and Proposed Mitigation Measures	165
14. MONITORING AND EVALUATION ARRANGEMENTS	168
14.1. Introduction	168
14.2. Objectives for Monitoring and Evaluation	168
14.3. Monitoring and Evaluation Plan	168
14.4. Internal Monitoring	173
14.5. External Monitoring and Evaluation	174
14.6. RAP Completion Audit	174
14.7. Reporting	175
APPENDICES	176
A. ATTENDANCE LISTS	176
B. MINUTES OF STAKEHOLDER ENGAGEMENTS	207
C. QUESTIONNAIRES	239
D. GRIEVANCE FORM SAMPLE	263
E. INVENTORY, AND ECONOMIC ASSESSMENT OF ON RWOHO CFR BY THE IRRIGATION AND CLIMATE RESILIENCE PROJECT	264
List of Acronyms	265
1.0: Background	266
2.0: Objective	266
3.0: Materials and Methods	266
3.1: DEMARCATION OF DAM AREA	266
3.2: SAMPLING, DEMARCATION AND ENUMERATION OF SAMPLE PLOTS	266
3.3: Assessment of the amount of carbon sequestered by CDM Project	267
3.4: Assessment of the environmental impacts of economic development	268
4.0: Field Findings	268
4.1: GENERAL	268
TABLE 2: ORGANIZATIONS/INDIVIDUAL THAT WILL BE AFFECTED BY THE PROPOSED PROJECT AND AREA PLANTED IN HECTARES	269

6.0: Conclusion	269
Fig 1: Proposed Location and expanse of the (RWOHO CFR) irrigation and climate Resilient Project for the adjacent forest community	269
Table 3: Current standing volume of the plantations within the affected portion of Rwoho Central Forest Reserve	271
Table 4: Projected stand Volume and Value of the individual plantations within the affected portion	272
Table 5: Standing table of Natural trees within the affected portion	274
Table 8: Seedlings/Saplings derived from belts of natural belts	281
Table 9: Expected biomass from trees tops and branches of Natural trees	281
References	281

LIST OF TABLES

<i>Table 2-1: Main Features of the Dam.....</i>	37
<i>Table 3-1: Comparison between Uganda and World Bank Policies on Resettlement and Compensation</i>	56
<i>Table 4-1 Identified Stakeholders.....</i>	66
<i>Table 4-2- Stakeholders Consulted.....</i>	68
<i>Table 4-3 Schedule of Meetings Held with Stakeholders.....</i>	70
<i>Table 4-4: Summary of Key Issues and Responses.....</i>	73
<i>Table 4-5: Stakeholder Engagement Plan.....</i>	79
<i>Table 5-1 Population Statistics for Affected Sub Counties</i>	82
<i>Table 5-2: Population by Age groups.....</i>	83
<i>Table 5-3: Ethnic composition of the PAPs.....</i>	87
<i>Table 5-4: Educational Attainment amongst the PAPs</i>	88
<i>Table 5-5: Educational Attainment by Gender</i>	90
<i>Table 5-6: Conflict resolution patterns amongst the PAPs.....</i>	91
<i>Table 5-7: Type of land tenure by number of people affected.....</i>	91
<i>Table 5-8: Method how land was acquired.....</i>	92
<i>Table 5-9: Main source of income for household heads.....</i>	93
<i>Table 5-10: Other activities from which the household generates income.....</i>	94
<i>Table 5-11: Levels of incomes for the PAPs.....</i>	94
<i>Table 5-12: Production Levels per Sub-County July 2015 to June 2016</i>	98
<i>Table 5-13: Livestock Statistics</i>	100
<i>Table 5-14: Fish Production from Fish Ponds in comparison to the total fish production in the Project Area - Based On Farmers' Information - 2015.....</i>	101
<i>Table 5-15: The main marketing point for items.....</i>	102
<i>Table 5-16: Number and type of schools in Kabuyanda</i>	104
<i>Table 5-17: Non-Governmental Organizations Operating in the Area.....</i>	112
<i>Table 5-18: Existing Livelihood Programs in the Project Area.....</i>	112
<i>Table 6-1: Estimated Number of PAPs</i>	114

Table 6-2 Estimated Affected Structures by Type	115
Table 6-3 Number of PAPs and the intervention that is the source of the impact.....	116
Table 6-4: Institutions likely to be affected.....	117
Table 7-1: General Basis for Cash Compensation Calculations	125
Table 7-2: Basis for Land Values per Village	127
Table 7-3: Entitlement Matrix	132
Table 8-1 Timeframe for Implementing the Livelihood Restoration Measures	141
Table 11-1 Organisational Roles and Responsibilities of the Different Actors in Land Acquisition and Resettlement.....	153
Table 12-1: Livelihood Restoration Budget.....	161
Table 12-2: RAP Implementation Budget.....	162
Table 13-1: RAP Implementation Activities.....	164
Table 13-2 Potential Risks to RAP Implementation Activities.....	165
Table 14-1: Sample Monitoring and Evaluation Plan.....	170

LIST OF FIGURES

Figure 2-1: Layout of Project Components.....	35
Figure 2-2: Location map for the reservoir catchment and irrigation area.....	36
Figure 2-3: Distribution System Layout	Error! Bookmark not defined.
Figure 2-4: Alternative dam locations	42
Figure 4-1: Photographic Documentation of Stakeholder Consultations.....	73
Figure 5-1 Household Heads by Age Category.....	84
Figure 5-2: Sex of Household Heads.....	85
Figure 5-3: Marital Status of Household Heads.....	86
Figure 5-4: Religious Affiliation.....	87
Figure 5-5: Crop Farming in the Project Area.....	96
Figure 5-6: Livestock Rearing in the Project Area.....	100
Figure 5-7: Distance to Marketing Point.....	102
Figure 5-8: Assets Owned by Households in the Project Area.....	103
Figure 5-9: Reasons for not children not going to school.....	105
Figure 5-10: Fuel Used for Cooking.....	109
Figure 6-1: Photographs of Potential Affected Structures.....	117
Figure 6-2: Potential Affected Crops/Trees	118
Figure 6-3: Grazing land in the Project Area.....	119
Figure 7-1: Land Survey Methodology.....	122
Figure 7-2: Valuation Methodology.....	123
Figure 9-1: Grievance Resolution Stages	144
Figure 9-2: Grievance Resolution Process	149
Figure 11-1: showing the different relationships between the different agencies.....	157
Figure 13-1 : RAP Implementation Schedule.....	168

ABBREVIATIONS AND ACRONYMS

ACRONYM	DEFINITION
AIDS	Acquired Immune Deficiency Syndrome
ALCs	Area Land Committees
CAO	Chief Administrative Officer
CBO	Community Based Organizations
CDO	Community Development Officer
CGV	Chief Government Valuer
CIWA	World Bank Cooperation in International Waters
CSO	Civil Society Organisations
DFCU	Development Finance Company of Uganda
DIZ	Direct Impact Zone
DLB	District Land Boards
DLO	District Land Office
DSMP	Dam Safety Management Plan
DSTV	Digital Satellite Televisions
DWD	Directorate of Water Development
EFT	Electronic Funds Transfer
EIS	Environmental Impact Statements
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental Social Management Plan
GDP	Gross Domestic Product
GFS	Gravity Flow Schemes
GISO	Gombolola Internal Security Officer
GoU	Government of Uganda
GRCs	Grievance Resolution Committees
GRM	Grievance Resolution Mechanism
HC	Health Center
HIV	Human Immunodeficiency Virus

HMIS	Health Management Information Systems
IFC	International Finance Cooperation
IPMP	Integrated Pest Management Plan
IPPF	Indigenous Peoples Planning Framework
KM	Kilo Meter
LARF	Land Acquisition Resettlement Framework
LC	Local Council
LGDP	Local Government Development Plan
Ltd	Limited
MAAIF	Ministry of Agriculture and Animal Fisheries
MAVA	Market and Asset Valuation Assessment
MCM	Million Cubic Metres
MEMD	Ministry of Energy and Mineral Development
MGLSD	Ministry of Gender Labour and Social Development
MLHUD	Ministry of Lands, Housing and Urban Development
Mr.	Mister
MWE	Ministry of Water and Environment
MWE-WfP	Water for Production Department
NBI	Nile Basin Initiative
NCORE	Nile Cooperation for Results
NELSAP	Nile Equatorial Lakes Subsidiary Action Program
NEMA	National Environment Management Authority
NFA	National Forestry Authority
NGO	Non-Governmental Organizations
OC	Officer in Charge
OP	Operation Policy
OPD	Out Patient Department
PAP	Project Affected Persons
PFPs	Private for Profit
PHPs	Private Health Practitioners

PLC	Parish Land Committees
PMTCT	Prevention of Mother to Child Transmission
PNFPs	Private Not for Profit
Pty	Private registered company
PwD	Persons with Disabilities
RAP	Resettlement Action Plan
RDC	Resident District Commissioner
RPF	Resettlement Policy Framework
RTI	Respiratory Tract Infection
SACCO	Savings and Credit Cooperatives
SAGE	Social Assistance Grants for Empowerment
SC	Sub County
SDA	Seventh Day Adventists
SMC	Safe Male Circumcision
SPSS	Scientific Package for Social Scientists
TB	Tuberculosis
TC	Town Council
TCMPs	Traditional and Complementary Medicine Practitioners
TCP	Tropfenwasser Consulting Professionals
TV	Television
UBOS	Uganda Bureau of Statistics
UGX	Uganda Shillings
ULC	Uganda Land Commission
UNBS	Uganda National Bureau of Statistics
UNESCO	United Nations Educational Scientific and Cultural Organisations
UPE	Universal Primary Education
USD	United States Dollar
VHT	Village Health Teams
WB	World Bank

DEFINITIONS

CONCEPT	DEFINITION
Compensation	Refers to payment in cash or in kind for an asset to be acquired or affected by an infrastructure project at replacement cost including both full market value and transaction costs. Compensation also involves more than a one-time payment process. It involves improvement or restoration of incomes and livelihoods.
Directly Affected Persons	All those who reside or derive their living from areas where the project will have a direct impact, often referred to as the Direct Impact Zone (DIZ), consisting of all the project components including temporary land-take (camps, equipment lay-downs etc., auxiliary sites) and permanent land-take (for permanent Project components).
Involuntary Resettlement	Involuntary resettlement refers both to physical displacement (relocation or loss of shelter) and to economic displacement (loss of assets 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 natural resources. Resettlement is considered involuntary when affected individuals or communities do not have the option to refuse land acquisition that results in displacement. This occurs in cases of: (i) lawful expropriation or restrictions on land use based on eminent domain; and (ii) negotiated settlements in which the buyer can resort to expropriation or impose legal restrictions on land use if negotiations with the seller fail.
Livelihood	The term “livelihood” refers to the full range of means that individuals, families, and communities utilize to make a living, such as wage-based income, agriculture, petty trade, etc.
Project Affected Persons (PAPs)	Affected persons are defined as those who stand to lose, as a consequence of the project, all or part of their physical and non-physical assets, including homes, productive land, commercial properties, income earning opportunities, etc. including community or social structures (resulting in social disarticulation).
Replacement cost	The market value of the assets plus transaction costs. In applying this method of valuation, depreciation of structures and assets should not be taken into account. Market value is defined as the value required to allow Affected Communities and persons to replace lost assets with assets of similar value.

Resettlement Action Plan	The planning document that describes what will be done to address the direct social and economic impacts associated with involuntary taking of land.
Squatter	Any individual that settles on property without right or title or payment of rent: This category includes encroachers into forest reserve managed by the Government of Uganda for the purpose of this RAP.
Stakeholders	Any individuals, groups, organizations and institutions interested in and potentially affected by a project or having the ability to influence the project.
Vulnerable Groups	People who may, by virtue of gender, ethnicity, age, physical or mental disability, economic disadvantage or social status, be more adversely affected by resettlement than others; and who may have a limited ability to claim or take advantage of resettlement assistance and related development benefits.
Cut-off date	Date of commencement of the census of PAPs or DPs within the Project program area boundaries. This is the date on and beyond which any person whose land is occupied for the project will not be eligible for compensation.
Census	Field survey carried out to identify and determine the number of Project Affected Persons (PAPs) or Displaced Persons (DPs) because of land acquisition and related impacts. The census provides the basic information necessary for determining eligibility for compensation, resettlement and other measures emanating from consultations with affected communities and the local Government Institutions (LGIs).
Kibanja	This refers to persons who buy portions of land on Mailo land and are protected by Ugandan law to allow them to live on and use the land. They are however obligated to pay certain annual royalties to the Mailo owner
Gender Based Violence	This is a term used to denote harm inflicted upon individuals and groups that is connected to the normative understanding of the gender.
Grievance Redress Mechanism	Avenues through which disputes and grievances shall be resolved amicably before resorting to legal means.
Disturbance costs	These refers to costs that are incurred by the client in addition to compensation assessed for any assets. Disturbance allowance of 15 percent or, if less than six months' notice to give up vacant possession is given, 30 percent of any sum assessed for three months or less,
Income Restoration	Re-establishing income sources and livelihoods of affected people. Restoration of incomes of all APs is one of the key objectives of the RAP.

EXECUTIVE SUMMARY

A: Introduction

The Government of Uganda through the Ministry of Water and Environment (MWE) with support from the World Bank is preparing the Irrigation Development and Climate Resilience Project (IDCRP). The project objectives are to develop (i) irrigation, drainage infrastructure and services, and (ii) institutional capacity in irrigated agricultural production in the project areas. The project will contribute to improvement of farm incomes, rural livelihoods, food security, climate resilience, sustainable natural resources management in the proposed areas of Kabuyanda in Isingiro District.

The Project comprises three components here listed: Component 1 - Irrigation and Drainage Service Development; Component 2 - Support services for agricultural production and value-chain development; Component 3 - Institutional Strengthening and Implementation Support.

Component 1 - Irrigation and Drainage Service Development will be implemented by MWE with support from the Decentralised MWE Structures and Local Government, with the exception of a reforestation activity which will be implemented by the National Forestry Authority (NFA). The component will construct new large-scale irrigation schemes (Kabuyanda, Matanda/Enengo), carry out activities for the Operational and Maintenance (O&M) of new (Kabuyanda, Matanda/Enengo) and existing (Agoro) schemes, develop studies for future schemes (Amagoro, Nyimur), and implement integrated catchment management interventions.

Sub-component 1.1: Infrastructure Development. Activities will include: (i) dam construction and associated head works; (ii) construction of irrigation networks (pipes, canals, hydro-mechanical equipment); (iii) on-farm irrigation works and equipment; (iv) construction of drainage networks; (v) construction of access and scheme roads; (vi) construction of scheme offices, sanitation facilities, and weather stations; (vii) technical assistance for preparation of feasibility studies and detailed designs for irrigation schemes; (viii) technical assistance for monitoring and control of works; (ix) technical assistance for O&M of irrigation schemes (including WUAs); (x) technical assistance for environmental audits and implementation of the Environmental and Social Management Plan (ESMP).

Sub-component 1.2: Integrated Catchment Management. Activities will include: (i) technical assistance for the preparation of scheme-specific catchment management plans; and (ii) implementation of the interventions identified in the catchment management plans.

Kabuyanda Irrigation scheme is one of the projects that was designed under the previous NELSAP as Kabuyanda Water Resources Development project but was not funded.

Feasibility and detailed design, Environmental and Social Impact Assessment (ESIA) and Resettlement Action Plan (RAP) for Kabuyanda Irrigation scheme were undertaken under NELSAP

in 2017. The project design has been revised to reduce the project cost and this has necessitated the revision and update of the ESIA and RAP respectively, including all the additional required documents (Integrated Pest Management Plan (IPMP), and Dam Safety Management Plans (DSMP). Given the above aspects, it is therefore necessary to update the RAP for Kabuyanda Irrigation scheme to incorporate the new design review changes, before its implementation under IDCRP.

All infrastructural development projects that entail involuntary resettlements require a Resettlement Action Plan, as per World Bank policies and Ugandan laws. The general objective of the Resettlement Action Plan (RAP) is to lay down a framework for managing the loss of economic activities, livelihoods and assets of project affected people and/or their resettlement from the site, through monetary compensation or compensation in kind. This RAP has been prepared in accordance with standard RAP practice and in line with Ugandan Policies, as well as social safeguard policies of the World Bank Group largely drawing its propositions from the Operational Policy (OP) 4.12 on involuntary resettlement.

The preparation of the RAP document is based on review of relevant literature, consultations with affected communities, socio-economic baseline and asset surveys carried out at community level for the PAPs and their respective assets.

B: Project Description

The Kabuyanda Irrigation Development and Climate Resilience Project (IDCRP) is located in Isingiro and Ntungamo District in south-western Uganda, and falls within the broad zone known as Uganda's "cattle corridor", which stretches from the south-west to the north-east of the country. Characterized by fluctuating rainfall and with up to 4 months of little to no rainfall, it is dominated by pastoral rangelands and resource variability.

The proposed project consists of a dam and an irrigation scheme. The project will affect the three Sub-Counties of Kabuyanda, Kikagati, and Nyakitunda, as well as Kabuyanda Town Council. Within Ntungamo District, only Rukoni East Sub County will be affected. Kabuyanda Dam (25m high earth-fill dam with reservoir with a storage capacity of approximately 7.8 MCM) will be located approximately 5km north-west of Kabuyanda Town, and will submerge an area of 302 Ha within the Rwoho Forestry Reserve under the NFA, a degraded forest partially restored with non-indigenous species (pines and eucalyptus). The irrigation area served by the dam has an area of 3,663 Ha, and extends southwards from the dam bordering the banks of the Mishumba River. The area suffers from low access to water, with occasional border conflicts arising when pastoralists cross into Tanzania, and vice versa, in search of water and pasture during the dry seasons.

The design team considered 2 alternatives for the dam location as a way of minimizing project impact and optimizing. Alternative 1 is located about 2km upstream in forest reserve area while

alternative 2 location lies downstream of alternative 1 in an urbanized area with settlements and area heavily used for agriculture. In order to minimize the impact on displacement and resettlement, alternative 1 of the dam location was chosen.

C: Policy Legal and Institutional framework

The key policy and legislations governing compensation and resettlement in Uganda and that will guide the implementation of this RAP include: Uganda National Land Policy, 2013, Uganda Constitution, 1995, Land Act, Cap 227, The Land Acquisition Act, 1965, The Access Roads Act, 1964, the Local Government Act, 1997, the Survey Act, and the Water Act, 1997.

Reference will also be made to the Environmental and Social Management Framework (ESMF) for IDCRP developed by Ministry of Water and Environment.

International policies that have been reviewed include The Universal Declaration of Human Rights, The African Charter on Human and people's Rights, World Bank Operational Policies specifically Involuntary Policy on Resettlement – O.P 4.12 and OP 17.50 Public Disclosure.

There are however gaps that have been identified between the World Bank's Operational Policy 4.12 and Uganda's legislation. These include among others the following: Ugandan legislation does not provide for compensation of those without legal right or claim to land while World Bank guidelines provide for compensation even to those without legal claim to land. OP 4.12 emphasizes in-kind compensation and resettlement assistance whereas Ugandan legislation does not obligate the developer to pay in-kind or to provide resettlement assistance. A detailed analysis of the gaps and provisions made for the implementation of this RAP are presented in Table 3-1.

Ministry of Water and Environment will be the main implementing institution for this RAP. Other institutions that will be involved include Ministry of Lands and Urban Development, Ministry of Agriculture, Animal Industry and Fisheries, National Environment Management Authority (NEMA), Ministry of Gender, Labour and Social Development, District Land Boards (DLBs), District Land Offices (DLOs) and Private Sector entities among others.

D: Public Consultation and Participation

Public consultation aimed at sharing information about the project, obtaining information about the concerns, needs and priorities of the potential affected persons, managing expectations and misconceptions regarding the project, collecting information about the trends, practices, and norms in the project area and creating and enabling environment through which the project will smoothly operate. A total of 14 separate meetings were held with different stakeholders. These were carried out between 3rd and 16th November 2017.

The following stakeholders have to date been consulted.

- National level (Ministry of Water and Environment (MoWE), Ministry of Energy and Mineral Development (MoEMD), National Forestry Authority and Ministry of Agriculture, Animal Husbandry and Fisheries.

- Local government officials (Chief Administrative Officer (CAO), District Environmental Officer, Resident District Commissioner, District Forestry Officer, District Agricultural Officer, Operation Wealth Creation, Town Clerk, Councillors, Local Council II Chairpersons, Local Council I Chairpersons, Officer in Charge (OC), Local Council III Chairperson, Gombolola Internal Security Officer (GISO), District Speaker, Opinion Leaders, Elders, Sub County Chief, Community Development Officer.
- Others (Kaiho Farm School Leavers Cooperative Society, Kigarama Commodity Marketing Cooperative Society Limited, Kabuyanda Dairy Cooperative Society Limited, Tukundane Fish Farm Limited
- Local Community (Community members from various villages).

Views and concerns from stakeholders at all levels (national, local government and directly and indirectly project affected persons) were sought through interviews and public meetings. Issues/concerns were raised and suggestions provided by the different stakeholders.

E: Social Assessment and Socioeconomic Surveys

A socioeconomic survey was conducted assess the conditions of the people that will be directly affected and the control group (indirectly affected) by the project.

The estimated number of property owners that will be directly affected by the project through loss of property is 1,615 of which 15 are licensees on NFA land. Considering that the average household size in Isingiro District is 4.8 persons (5 persons), the estimated number of affected persons is 8,075. A breakdown of the population per component is presented in Table 6-1.

The baseline survey recorded the average age of household head as being 49.7 years with the youngest being 21 years and the eldest at 95 years and the median age was 36 with a mode of 30. Most of the household heads were in the age brackets of 26-35, 36-45 and 56-55 years. The elderly (65+) comprise of 13.1% and 7.4% of the directly and indirectly affected groups respectively implying that special attention needs to be given to these people during implementation of the Resettlement Action Plan and the project in general.

The majority of the Project Affected households are headed by males (at 62.6 % and 69.7% for the directly and indirectly affected) while the female-headed households constituted just under 40% for both categories of PAPs.

The majority of the directly affected household heads (68.8%) are married. The most predominant tribe is the Bakiga followed by Banyankore.

Majority of the household heads from both categories attained primary education and a sizeable number never attained any education. In terms of gender, the findings showed that more women did not attain any education as compared to the male household heads and fewer women attained higher levels of education compared to the male PAPs.

The baseline identified different categories of vulnerable of the PAPs as including; female heads of Households (37.4%), the disabled (including members of their households) – 2%, those with chronic illnesses (like, TB, HIV/AIDS, Heart Diseases and Diabetes)- 0.9%, the elderly 13.1%.

TB, HIV/AIDS, Heart Diseases and Diabetes) – 0.9%. The elderly 65+ were recorded at 13.1%. The Land tenure systems in the area include customary, leasehold, freehold, public land and communal land. There are several institutions owning land within the directly affected area. These include National Forestry Authority (NFA), educational institutions such as, Kabesekye Primary School, Bukurungu Primary, School Kitezo Primary School, Kigarama International School, Nyampichi Primary School, Kabuyanda Primary School, Kabugu Primary School, Kabugu Catholic Church, St. Mary's Primary School religious institutions such as St. Jude Catholic Centre and Ruyonza Church of Uganda.

Agriculture (mainly subsistence farming) is the main source of livelihood for majority of the households in both categories. These other activities through which the household generate income include Motorbike taxi services (locally known as “*bodaboda*”), casual labourer, brick laying, trading etc. Those who generate income from trading mostly sell crops like beans, maize, sorghum, bananas, and coffee.

Majority of the household heads in both categories earn less than UGX 100,000 per month.

The most common assets owned by households in the project area include land, a house, radio, domestic animals, cell phone and a bicycle. Other assets owned include solar panels, motorcycles and television sets. Very few households owned a car.

Land is the major natural resource accessed by households in the project area. The land is mainly used for crop farming, tree planting, animal rearing and fish farming. Other natural resources the people depend on are streams and river tributaries for water supply and fish farming. The communities also access firewood from Rwoho Forest Reserve. In addition, non-timber forest products such as medicinal plants, mushrooms, are accessed from Rwoho Forest Reserve.

F: Potential Project Impacts

The proposed Kabuyanda Irrigation Development and Climate Resilience Project will have impacts on people and institutions in Kabuyanda Town Council and Isingiro District as a whole. The impacts of the project on households will include both positive and negative impacts. Below is a summary of the impacts.

Impact on Land: Land that will be affected is mostly comprised of NFA land – 302.47 ha (details are contained in an independent report attached as Appendix E). The rest includes a combination of sections that will be impacted by i) the laying of sections of the main and secondary irrigation pipes mainly along the road reserve and individuals/institutions properties' edges so as to avoid land acquisition, ii) the laying of smaller tertiary pipes that will be laid along the boundaries of individual

plots in the command area for the same reason and, iii) the construction of the access road to the main camp, which will require compensation of 28 PAPs individually losing between 0.004 to 0.725 acres of land totalling about 2.2 acres.

Impact on Forests: Dam site, reservoir, camp sites, and access roads are located within the Rwoho Forestry Reserve under the NFA, a degraded forest partially restored with non-indigenous species (pines and eucalyptus). An independent assessment was conducted by MWE and NFA to carry out an inventory of all affected trees and licensees. The inventory recorded 15 licences comprising of 13 private trees farmers and 2 Collaborative Forest Management (CFM) groups. Details of the impact on NFA and proposed mode of compensation are contained in an Assessment Report attached as Appendix E.

In general principle, the licenced private tree farmers will be compensated for the trees cut, at rotation value of 8 years and shall be provided with land within the Rwoho forest reserve to plant more trees; whereas the unlicensed private farmers will be compensated for their trees and crops destroyed but shall not be allocated more land for tree planting.

As part of the catchment management, the project will mitigate the impact of the inundation of the degraded forest through the planting of a larger area within the Reserve, using indigenous species.

Impact on Structures: Table 0-1 shows the type of structures that will be affected and their numbers.

Table ES1: Estimated Affected Structures

Type of Structure	Estimated Number
Residential structures	93
Commercial buildings	02
Auxiliary structures (Kitchen, toilets, bathrooms)	67
Animal houses	13
Graves	4
Gate	02
Enclosed mud and Wattle structure with a Local Domestic Polythene Water reserve Pit	4
Hedge fence	117
Perimeter wall	03
Concrete Water Tanks	02
Green house	01
Valley dam	02

Beehive	01
Total	311

Impact on Public Infrastructure: Institutions whose property may be affected by the project is shown in Table 0-2

Table ES2: Institutions likely to be affected

	Name of Public Institution	Expected type of impact	Project Component
1.	Kabesekye Primary School	Land and crops	Main line
2.	Bukurungu Primary School	Land	Secondary line
3.	Kitezo Primary School	Land	Secondary line
4.	Kigarama International School	Crops and land	Main line
5.	Nyampichi Primary School	Land and trees	Main line
6.	Kabuyanda Primary School	Land	Main line
7.	Kabugu Primary School	Land and trees	Main line
8.	Kabugu Catholic Church	Land and trees	Main line
9.	St. Jude Catholic Centre	Land	Main line
10.	St. Mary's Primary School	Toilet, teachers' residences (2No), kitchen (2No), water tank	Main Line
11.	National Forestry Authority (NFA)	Land	Main line, camp, dam area, reservoir, office, workers' camp

Impact on Crops/Trees: Crops that will be affected by the project include bananas, coffee, seasonal crops such as maize, sweet potatoes, beans, vegetables, sorghum, millet, yams etc.

Fruit trees include mangoes, avocado, pawpaw and jackfruit. On the other hand, timber trees that will be affected include eucalyptus and pine trees as well as other trees like bush trees and *omukunyū*.

Impact on Cultural Sites and Assets: Around 4 graves and 3 religious institutions will be affected by the development of Kabuyanda IDCRP.

Loss of Access to Natural Resources: Natural resources that will be affected by the project include forest cover for NFA and grazing land. Land take for NFA land is estimated at around 302 Ha.

Positive Impacts from the Project

Despite having some of the negative impacts highlighted above, the proposed Kabuyanda IDCRP is expected to bring positive impacts. The following positive impacts are expected:

- Very high irrigation potential which will increase crop production and levels of income.

- Provision of employment opportunities for local people.
- Development of skills among the project workers
- Improvement of access roads
- Tourism potential will be enhanced

G: Valuation for Losses and Compensation Framework

To prepare for compensation and other resettlement benefits, it is imperative that a comprehensive asset and affected persons' inventory is prepared. The inventory specifies the type of buildings/structures, crops/trees, size of land and land tenure system affected.

At the affected land plots, the valuer took a careful assessment of the affected property. This was done through both measurement and enumeration of the affected property. Photographs of affected persons and property were taken during the assessment. Seasonal crops were not included in the assessment as these will be harvested by the owners before land take, however, in case the notice to vacate the land will be short, then all seasonal crops will be assessed and compensated.

Estimates for compensation payable for crops and trees were computed using Mitooma District Compensation Rates 2016/17. A 10% value adjustment was added to bring the applied rates to current value and also to cover up any inflation gap. Assessment for temporary and semi-permanent structures was computed using District Compensation Rates while permanent structures were assessed basing on replacement cost. Sizes of the different structures were measured in square meters. A disturbance allowance of 30% has been awarded on top of the assessed amount in compliance with the Land Act, Cap 227. The upper limit for the disturbance allowance was considered for purposes of calculating the RAP budget estimate. The update of the valuation report will revise the disturbance allowance basing on the period of notice to vacate the land that will be given to the PAPs.

H: Livelihood Restoration Measures

From the land and valuation surveys, the negative impact on livelihoods is expected to be minimal because of the nature of the project. Most of the affected persons will be losing strips of their land. Crops that will be affected mainly include bananas and coffee. Other crops are seasonal crops such as maize, sweet potatoes, beans, vegetables, sorghum, millet, yams etc. Fruit trees include; mangoes, avocado, pawpaw and jackfruit. Timber trees that will be affected include eucalyptus and pine trees. Proposed livelihood strategies are mainly land based and these include:

- Land / Agricultural based livelihoods and support
- Provision of training in proper usage of irrigation infrastructure.

- Collaboration with the districts to intensify the provision of agricultural extension services to the farmers.
- Promotion of horticultural agriculture among the farmers through training.
- Promotion of agroforestry among the affected households and farmers in the area in general through basic training.
- Training in good agricultural practices and improved technology including the use of modern technology to cultivate land more efficiently, organic pesticides and integrated pest management.
- Provision of replacement ‘economic’ trees plus technical support in maintaining them until reaching full productive potential.
 - Access to employment opportunities during project construction
 - Financial literacy and management training

I: Grievance Resolution Mechanism

Grievances on this project will be resolved through Grievance Resolution Committees (GRCs) and Courts of law, but the latter will be as a last resort if GRCs fail. The project implementers hand in hand with the appointed Grievance Resolution Committee members will endeavour that grievances are solved amicably, efficiently and in a quick manner.

The GRCs will be constituted at different levels i.e. village, sub county district levels. Composition of the GRCs at village level will include Chairperson Local Council one (LC1); an elder; two democratically elected PAPs, (one female and male) and MWE Representative. At sub county level, members will comprise of Chairperson Local Council III (LC3), Sub County Chief/ Town Clerk, Community Development Officer (CDO), Area Land Committee Representative and MWE Representative. At district level, the GRC members will comprise of Chief Administrative Officer (CAO), Chairperson Local Council V (LCV), Community Development Officers, District Land Officer and Environmental Officer.

The first point of grievance resolution will be at village level, if the grievance is not resolved at this level, it will be forwarded to the sub county for further management. If at the sub county level, the grievance is not resolved, it will be forwarded to the District Grievance Resolution Committee.

The guiding principle in addressing complaints is that the matters must be addressed as expeditiously as possible. The Legal Advisor on the implementing team will give guidance on cases that require legal input.

J: Budget and Funding Arrangements

Cash compensation for land developments is estimated at UGX 2,555,345,275 (USD 690,634) while the estimated RAP implementation budget is UGX 3,656,451,5834 (USD 988,230). Thus, the total is UGX 6,211,796,858 (USD 1,678,864).

Table ES 3: RAP Implementation Budget

Item	Estimated Budget (USD)	Assumptions
Cash compensation	690,634	Cash compensation for land and developments (excluding NFA assets)
Sub Total 1	690,634	
Livelihood Restoration	420,000	This will mainly include training in different aspects as shown in Chapter 8.
Assistance to vulnerable groups	10,000	Additional monetary support for vulnerable group if found necessary
Mobilization and sensitization by local government	35,000	Assumption of 5,000\$ for 7 sub counties
Grievance Resolution Engagements	70,000	Assumption of 10,000 per Grievance Committee (5 GRCs at SC level & 2 @ district level). The village level GRCs will utilize the same budget.
Relocation Assistance for 4 graves	800	Estimated at 200\$ per grave for 4 graves
Institutional capacity reinforcement	65,000	1 workshop for 5 sub counties @ USD5,000; 1 work for 2 districts @ USD5,000; 1 workshop for relevant ministries @ USD 20,000
Sub Total 2	600,800	
Sub Total 3 (1+2)	1,291,434	
Inflation allowance	129,143	10% inflation
Monitoring of resettlement activities (10% of the resettlement budget)	129,143	
Contingency (10% of resettlement budget)	129,143	This will take care of any unforeseen circumstances
Sub Total 4	387,430	
Total (3+4)	1,678,864	
Total (UGX)	6,211,796,858	

Exchange Rate: 3700

The Government of Uganda will be responsible for the funding of the Resettlement activities.

K: RAP Implementation Schedule

RAP implementation schedule is proposed over a period of 1 year followed by 2 years of monitoring. The RAP implementation unit and local committees would be informed shortly after

approval of RAP by CGV and funding entity. Compensation payments and resettlement assistance are expected to start at about the same time and extend over 12 months, after which construction would commence. At this stage the Cut-off date which was communicated as 15th October 2018 is well indicated to the PAPs to avoid any further development for their project affected area.

L: Monitoring and Evaluation

Monitoring and Evaluation includes the establishment of socio-economic background data of the affected persons prior to actual land acquisition or physical relocation and regular monitoring of their situation for a specified period of time after land acquisition and relocation. Both internal and external monitoring will be undertaken for this RAP. The main objective of monitoring is to provide the developer and funder with feedback on RAP implementation and to identify problems and successes as early as possible to allow timely adjustment of implementation arrangements. Both qualitative and quantitative evaluations will be made to ascertain whether the affected people have achieved at the minimum their pre-project standard of living.

1. INTRODUCTION

1.1. Background

The Government of Uganda through the Ministry of Water and Environment (MWE) with support from the World Bank is preparing the Irrigation Development and Climate Resilience Project (IDCRP). The project objectives are to develop irrigation, drainage infrastructure and services institutional capacity in irrigated agricultural production in the project areas. The project will contribute to improvement of farm incomes, rural livelihoods, food security, climate resilience, sustainable natural resources management in the proposed areas of Kabuyanda in Isingiro.

Kabuyanda Irrigation scheme is one of the projects that was designed under the previous NELSAP as Kabuyanda Water Resources Development project but was not funded.

Feasibility and detailed design, Environmental and Social Impact Assessment (ESIA) and Resettlement Action Plan (RAP) for Kabuyanda Irrigation scheme were undertaken under NELSAP in 2017. The project design has been revised to reduce the project cost and this has necessated the revision and update of the ESIA and RAP respectively, including all the additional required documents (Integrated Pest Management Plan (IPMP), and Dam Safety Management Plans (DSMP). Given the above aspects, it is therefore necessary to update the RAP for Kabuyanda Irrigation scheme to incorporate the new design review changes, before its implementation under IDCRP.

1.2. Overview and Scope of the Proposed Project

The Irrigation Development and Climate Resilience Project (IDCRP) is composed of 3 components;

- Irrigation and Drainage Service Development,
- Support Services for Agricultural Production and Value-Chain Development, and
- Institutional Strengthening and Implementation Support .

Component 1 - Irrigation and Drainage Service Development will be implemented by MWE with support from the Decentralised MWE Structures and Local Government, with the exception of a reforestation activity which will be implemented by the National Forestry Authority (NFA). The component will construct new large-scale irrigation schemes (Kabuyanda, Matanda/Enengo), carry out activities for the Operational and Maintenance (O&M) of new (Kabuyanda, Matanda/Enengo) and existing (Agoro, Olweny) schemes, develop studies for future schemes (Amagoro, Nyimur), and implement integrated catchment management interventions.

Sub-component 1.1: Infrastructure Development. Activities will include: (i) dam construction and associated head works; (ii) construction of irrigation networks (pipes, canals, hydro-mechanical equipment); (iii)

on- farm irrigation works and equipment; (iv) construction of drainage networks; (v) construction of access and scheme roads; (vi) construction of scheme offices, sanitation facilities, and weather stations; (vii) technical assistance for preparation of feasibility studies and detailed designs for irrigation schemes; (viii) technical assistance for monitoring and control of works; (ix) technical assistance for O&M of irrigation schemes (including WUAs); (x) technical assistance for environmental audits and implementation of the Environmental and Social Management Plan (ESMP).

Sub-component 1.2: Integrated Catchment Management. Activities will include: (i) technical assistance for the preparation of scheme-specific catchment management plans; and (ii) implementation of the interventions identified in the catchment management plans.

The RAP activities undertaken for the irrigation components of Kabuyanda are discussed in Chapter 2.

1.3. Purpose of the Task

The purpose of this task is to develop a Resettlement Action Plan consistent with the laws and policies of Uganda as well as the World Bank's policy on involuntary resettlement, and based on current, comprehensive and complete information as produced and provided by the project feasibility studies.

The content of this RAP is aimed at standardising the way in which land acquisition and resettlement planning will be conducted for all project components and to assure a consistent approach in line with both National Legislation and World Bank Safeguard Policies, specifically Operational Policy (OP) 4.12, and to establish estimates of the anticipated numbers of potential Project Affected Persons (PAPs)/households, assets and costs for compensation and resettlement.

Section V of World Bank's O.P 4.12 provides for three different kinds of planning instruments, including:

1. A Resettlement Plan or Abbreviated Plan required for all operations that entail involuntary resettlement. However, where impacts on the entire displaced population are minor, or fewer than 200 people are displaced, an abbreviated resettlement plan may be agreed with the borrower.
2. A Resettlement Policy Framework: (which is required for projects specified in paragraphs 26-30, or which have multiple subprojects and where, because of the nature and design of the project or of a specific subproject or subprojects (a) the zone of impact of subprojects cannot be determined, or (b) the zone of impact is known but precise sitting alignments cannot be determined. In such cases, the borrower submits a resettlement policy framework consistent with O.P. 4.12 prior to appraisal (see Annex, Part III). For other subprojects that

do not fall within the above criteria, a resettlement plan conforming to this policy is required prior to appraisal.

3. A Process Framework: (Paragraph 3b) is prepared for projects involving restriction of access to legally designated parks and protected areas resulting in adverse impacts on the livelihoods of the displaced persons.

This report therefore is in line with World Bank Policy, O.P 4.12 guidelines.

1.4. Objectives of the Resettlement Action Plan

All infrastructural development projects that entail involuntary resettlements require a Resettlement Action Plan, as per World Bank policies. The general objective of the Resettlement Action Plan (RAP) is to lay down a framework for managing the loss of economic activities, livelihoods and assets of project affected people and/or their resettlement from the site, through monetary compensation or compensation in kind.

Specific RAP objectives include:

1. To identify and assess the impacts of land acquisition that may remove or alter the land, structures, assets, livelihoods, and natural resources available, or affect individual or community access to any of these, as well alter or disrupt social practices and coherence of community structures.
2. To consult relevant stakeholders, including all potentially affected persons, and document their concerns regarding the proposed land acquisition in preparation for the Kabuyanda Irrigation Development and Climate Resilience Project.
3. Raise awareness of the project and its consequences among the general public and particularly among those people who will be directly affected by it.
4. Measure the current property and socio-economic status of the Project Affected Persons to assess compensation and mitigation measures required, and to prepare cost estimates for resettlement/compensation.
5. Prepare a RAP that sets out strategies and schedules to mitigate the adverse effects of mass displacement of people from their ancestral land.

1.5. Scope of the RAP

This RAP will cover interventions under Sub-component 1.1 (Infrastructure Development), which will be causing Involuntary resettlement. They include: (i) dam construction and associated head works; (ii) construction of irrigation networks (pipes, canals, hydro-mechanical equipment); (iii) on-farm irrigation works and equipment; (iv) construction of drainage networks; (v) construction of

access and scheme roads; (vi) construction of scheme offices, sanitation facilities, and weather stations. More specifically it will cover the following:

- An earth-fill dam with 33.4 maximum height and a crest length of approximately 280 m;
- A free-flow ogee crested spillway located on the left bank of the dam, designed to discharge a flood of 57 m³/s, with a return period of 10,000y;
- A Control Building;
- An irrigation network consisting of:
 - main and secondary distribution lines reaching the different zones in the command area,
 - tertiary lines distributing water directly to the irrigation units and relevant hydrants,
 - hydrants, each serving one irrigation unit;
- A drainage network composed of primary and secondary drainage canals designed in order to convey adequately drained water from each irrigation unit to the existing hydro graphic network. Tertiary drainage canals are included, too.

1.6. Approach and Methodology

The preparation of this RAP document was based on review of relevant literature, consultation with affected communities, socio-economic baselines and asset surveys carried out at community level for the PAPs from 1st November 2018- 15th January 2019. The property valuation and land survey assessment considered all assets affected by the main water lines, secondary water lines, worker's camp and management camp, access roads, intake area, dam and reservoir areas.

1.6.1. Document review

Documents that were reviewed and informed the contents of this report include:

- Final feasibility study report for Kabuyanda Irrigation Development and Climate Resilience Project (IDCRP);
- Final design study report for Kabuyanda Irrigation Development and Climate Resilience Project (IDCRP);
- Uganda National Population and Housing Census 2017;
- Isingiro District Five Year Development Plan II 2015/2016 – 2019/2020;
- Kabuyanda Town Council Five Year Development Plan 2015/2016 – 2019/2020;
- Health Management Information Systems (HMIS), Isingiro District, Annual Analysis Report (July 2016 – 2017); and
- Relevant laws and policies

1.6.2. Stakeholder Consultations

Different stakeholders were consulted during this study through: structures and unstructured interviews, focus group discussions and community meetings. Stakeholders included those at national, local government and community levels – directly and indirectly affected community members as described in Chapter 5. Other stakeholders consulted include large scale farmers and cooperative societies. Views and concerns of the different stakeholders on compensation and resettlement were collected, documented and included in the report.

1.6.3. Socio-economic baseline data collection

Quantitative and qualitative data collection was undertaken using a variety of methodologies, in order to capture up-to-date and comprehensive socio-economic information on potential directly affected households in the project area. The methods used included:

a) Stakeholder Consultation

As described above.

b) Socioeconomic Household Surveys

Quantitative data was collected using a structured baseline socio-economic household survey questionnaire, for which Research Assistants with a good command of both English and local languages were recruited and trained in survey techniques. The data collected was entered and computed using MS-Excel and Scientific Package for Social Scientists (SPSS), and the resulting analysis structured to provide an insightful and in depth study into the baseline socio-economic conditions of PAP households.

c) Observation

Whilst in the field, the Consultant undertook continuous non-participatory observation and qualitative ethnographic documentation of the potentially affected communities, households and living conditions, for purposes of gaining a greater understanding of responses provided during household and stakeholder interviews, and in order to substantiate the results of the socio-economic analysis and identification of trends within the affected communities. Qualitative data of this type provides much of the detail within the broader scope of the socio-economic household survey, and is invaluable in understanding ground realities for the project affected communities.

1.6.4. Asset Surveys and Estimation of Affected Persons

Assets including perennial crops, trees and structures, were documented, assessed and the value estimated using a combination of methods.

The number of Project Affected People was estimated by carrying out a census for each person with property in the direct area of impact. The census was carried out per each project component with eligible property for compensation. The laying of the tertiary pipelines will not require land acquisition. More so, they will be buried underground and will have no major impact on assets. As

much as possible, the excavation will be timed to match with the harvesting season to minimize impacts on crops.

- This being a project that will majorly benefit the communities, land in the irrigation command area was not valued. This is aimed at: Enhancing ownership of the development and responsibility from the communities in terms of operation and maintenance.
- Providing the local people with a meaningful stake in the project.
- Instilling a sense of pride and confidence in the project.
- Increasing participation among community members, volunteering, attendance at meetings etc.

Consultations with the communities on this aspect have been spearheaded by MWE through the local government leadership.

Crops and trees were enumerated and also measured in acreage.

Permanent and non-permanent structures were captured through taking measurements of the structures and enumeration of the auxiliary structures such as kitchens, animal houses, latrines, toilets etc.

1.7. Report Structure

The structure of this report is as follows:

	Executive Summary
Chapter 1:	Introduction
Chapter 2:	Project Description
Chapter 3:	Policy, Legal and Institutional Framework
Chapter 4:	Public Consultations and Participation
Chapter 5:	Social Assessment and Socioeconomic Surveys
Chapter 6:	Potential Project Impacts
Chapter 7:	Compensation Framework
Chapter 8:	Livelihood Restoration
Chapter 9:	Grievance Redress Mechanism
Chapter 10:	Organisational Arrangements
Chapter 11:	Budget and Funding Arrangements
Chapter 12:	Implementation Schedule
Chapter 13:	Monitoring and Evaluation Arrangements

2. PROJECT DESCRIPTION

2.1. Project Location

The Kabuyanda Irrigation Development and Climate Resilience Project is located in the Isingiro and Ntungamo Districts in south-western Uganda, and falls within the broad zone known as Uganda's "cattle corridor", which stretches from the south-west to the north-east of the country. Characterized by fluctuating rainfall and with up to 4 months of little to no rainfall, it is dominated by pastoral rangelands and resource variability.

The proposed access roads, workers' and management camps, dam and its associated infrastructure will be located in Kabuyanda Sub-county whereas the Irrigation network will be situated in both Kabuyanda and Kikagati sub-counties as well as Kabuyanda Town Council.

Administrative structure in Uganda is divided according to District – County – Sub-County – Parish – Village, and within Isingiro District. The project will affect the three Sub-Counties of Kabuyanda, Kikagati, and Nyakitunda, as well as Kabuyanda Town Council. Within Ntungamo District, only Rukoni East Sub County will be affected. Figure 2-1 shows the layout of project components, in conjunction with districts and sub counties.

Kabuyanda Dam will be located approximately 5km north-west of Kabuyanda Town. The irrigation area served by the dam has an area of 3,663 Ha, and extends southwards from the dam bordering the banks of the Mishumba River. The area suffers from low access to water, with occasional border conflicts arising when pastoralists cross into Tanzania, and vice versa, in search of water and pasture during the dry seasons.

The dam will be located on the Mishumba River, a tributary of the Kagera River. The catchment area of the Mishumba River drains part of the Rwoho Central Forest Reserve, and later joins the Kagera River along the Uganda-Tanzania border. The dam site is located on the edge of Rwoho Forest upstream of the Kikagati area. The dam drains an area of about 90 Km². Figure 2-2 shows the location map for the reservoir catchment and irrigation area.

Compensation for the developments in the forest reserve will be carried out under an implementation plan implemented by NFA and monitored by MWE. The implementation plan will entail revising the Management Plan for Rwoho CFR to provide for existence of the dam and also to allocate other areas for the private tree farmers and CDM project. The area covered by the dam shall still remain a forest reserve and new strategies will be developed for the management of the CFR with a dam therein. Compensation of the private tree farmers in the affected area of the forest will include possibility of accessing land in another area within the forest reserve but outside the project site.

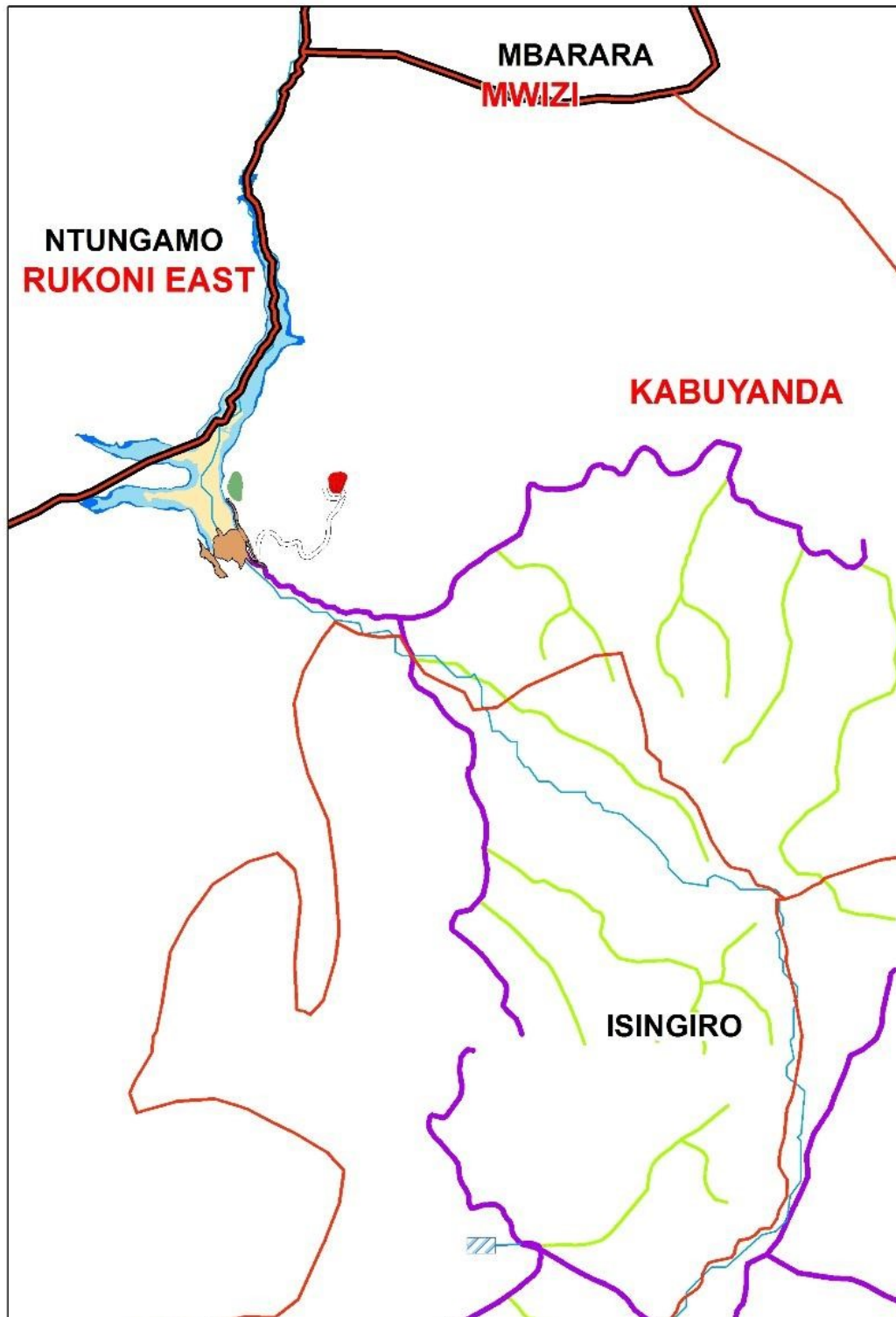


Figure 1-1: Layout of Project Components

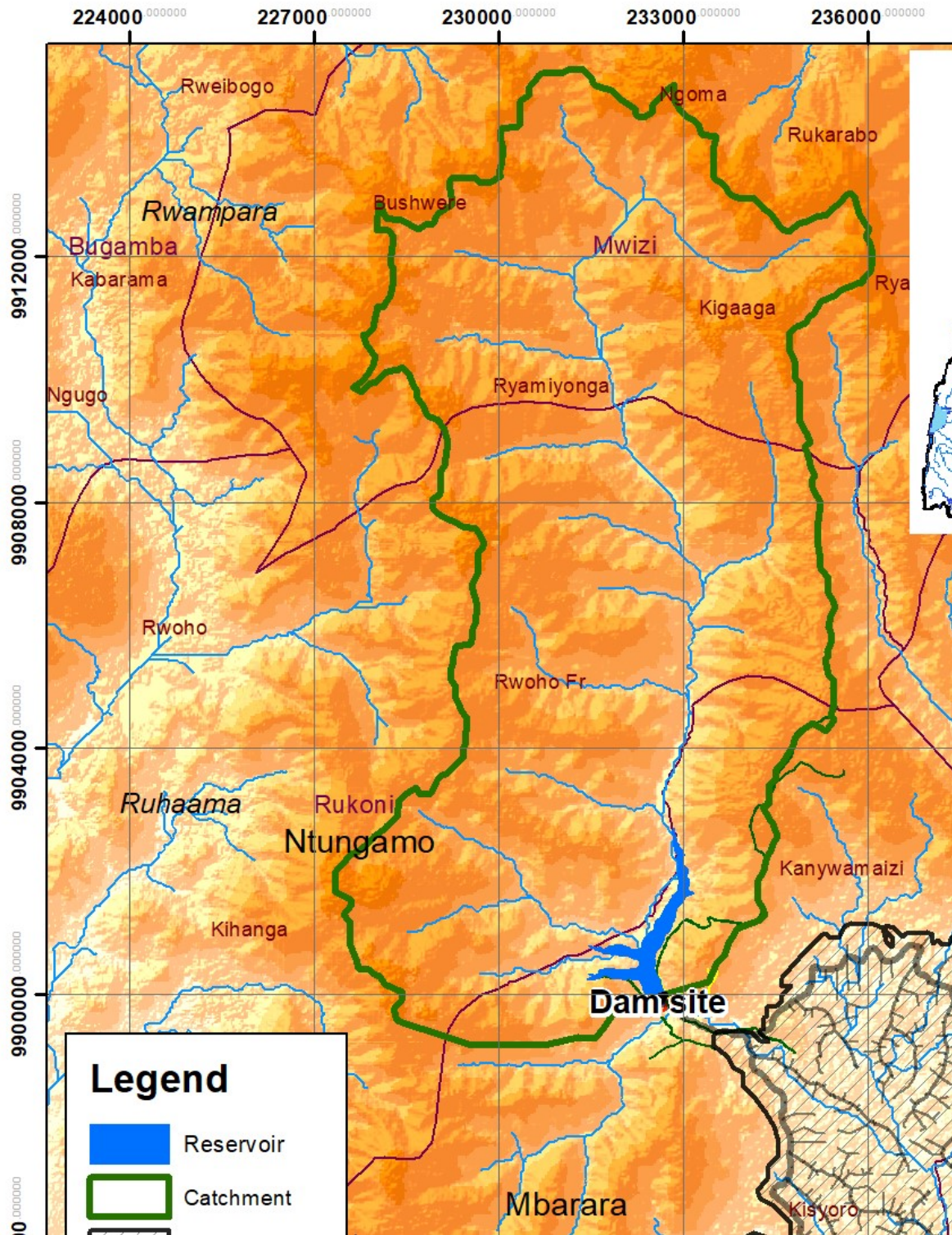


Figure 1-2: Location map for the reservoir catchment and irrigation area.

2.2. Project Components

The project is composed of the following main components:

- An earth-fill dam with 33.4 maximum height and a crest length of approximately 280 m;
- A free-flow ogee crested spillway located on the left bank of the dam, designed to discharge a flood of 57 m³/s, with a return period of 10,000y;
- A Control Building;
- An irrigation network consisting of:
 - main and secondary distribution lines reaching the different zones in the command area,
 - tertiary lines distributing water directly to the irrigation units and relevant hydrants,
 - hydrants, each serving one irrigation unit;
- A drainage network composed of primary and secondary drainage canals designed in order to convey adequately drained water from each irrigation unit to the existing hydro graphic network. Tertiary drainage canals are included, too.

2.2.1. Dam

The proposed dam will be located in the villages of Katooma I and Kagoto II in Kanyamizi Parish, Kabuyanda Sub-County in Isingiro District. The coordinates of the dam site area are (UTM, WGS84): E 233602 and N 9899313. The dam envisaged for the Kabuyanda Project is a homogeneous earth-fill dam type. All the materials foreseen for the construction of the dam body are available on site or in close proximity. Table 2-1 shows the main features of the proposed dam.

Table 1-1: Main Features of the Dam

Maximum dam height (H)	33.4 m
Maximum crest length (m)	280 m
Crest Elevation (Cel)	1374.5 m a.s.l
Maximum Base Width (upstream to downstream toe) (BW)	200 m
Upstream slope (S _{US})	3:1+4.5:1+6:1 h/v
Downstream slope (S _{DS})	3:1 h/v
Crest road width (CW)	7 m

A drainage pipe around 220 m long has been designed along the dam axis at a depth of about 10 meters from the original ground elevation. The drainage pipe is a corrugated steel pipe and is accessible from the intake gallery. The main function is to collect the water from the drainage system and to monitor the eventual presence of seepage problems.

2.2.1.1. *Spillway and Stilling Basin*

The spillway structure of Kabuyanda Dam will be located on the left side of the dam following the direction of flow of River Mishumba. A side channel spillway was selected, since it is particularly well-suited for embankment dams.

The spillway system will comprise the following hydraulic elements:

- an ogee crest with sill elevation at 1371 m a.s.l., 5.5 high;
- a side channel about 110 m long, characterized by a rectangular section 8.5 m wide and by a variable flow in the first stretch in correspondence of the spillway crest.
- a steep chute about 80 m long (calculated along the axis) characterized by a rectangular section of progressively narrowing width (from 8.5 m to 5 m);
- a 30 m long and 5 m wide stilling basin for energy dissipation, located at the end of the chute.

2.2.1.2. *Intake and Bottom Outlet*

The function of the intake pipe is to divert water from the reservoir for:

- the pressurized irrigation system;
- ecological release;
- draw-down the reservoir in an emergency or for exceptional maintenance (bottom outlet).

The intake pipe has been conceived as a braced vertical steel pipe having a diameter of 1,200 mm and a total length of about 260 m. It will enter into the valve chamber where a double T-junction will connect the vertical pipe with the horizontal pipe running into the intake gallery. The intake gallery is accessible and has the double function of protecting the pipe and allowing maintenance operations on the diversion pipes.

The main intake pipe was designed to divert the design flow Q_{\max} of 2.0 m³/s as a sum of the following:

- 1.2 m³/s (maximum flow to pressurized irrigation system)
- 0.1 m³/s (maximum ecological flow)
- 0.7 m³/s (maximum flow to be released into the natural river for irrigation purposes).

In emergency conditions, the intake pipe and the bypass is used to empty the reservoir. In the worst case, the reservoir will be emptied in about 3 months, differently in case of maintenance of either the irrigation system or the powerhouse system the reservoir will be emptied respectively in 1.5 months and 2 months. The bypass with all other diversion systems normally operating is able to empty the reservoir in about 40 days.

2.2.2. **Control Building**

The open-air control building has coordinates of 232662 E, 99003823 N (WGS 84) and is located within the dam area, approximately 110m from dam axis centre and 33.4m from the dam toe. With

dimensions of 21 m by 12 m, it will be situated on the left bank of the Mishumba River, in Kagoto II village, Kanyamizi Parish in Kabuyanda Sub-County.

The control building will serve as a control building for the management of irrigation water. From the control building it will be possible to divert the reservoir water into the:

- pressurized irrigation system;
- natural river for the ecological flow.

2.2.3. Reservoir

The reservoir starts from the dam area in Katooma I and Kagoto II villages in Kanyamizi Parish, Kabuyanda Sub-County in Isingiro District. It has a small section stretching into Mukazianyara Village, Kirungu Parish, and Rukoni East Sub County in Ntungamo District. The reservoir ends at coordinates 232805E, 9903108 N (WGS 84), where Isingiro District (Kabuyanda Sub County) borders both Mbarara District (Rwampara Sub County) and Ntungamo District (Rukoni East Sub County).

The need to fulfil the irrigation demand in the defined area of operation was a major determinant in the size of the reservoir.

2.2.4. Irrigation System

2.2.4.1. Distribution System and Irrigation Method

Distribution will consist of a piped network under pressure. In fact, an open-canal distribution system would prove much more difficult to conceive and expensive in terms of both construction and – most importantly – maintenance costs. The distribution network will provide water under pressure.

2.2.4.2. Irrigation Network

The irrigation system is composed of the following items:

- the main and sub-main or secondary distribution lines reaching the different zones in the command area,
- the tertiary lines distributing water directly to the irrigation units and relevant hydrants,
- the hydrants.

The irrigation network is not open canal. It will convey water through underground pipelines and delivered at the hydrant under pressure.

i) Main Distribution Line

The main distribution line is conveying the flow of the system under optimized hydraulic conditions of flow velocity and friction losses. It takes water from the source to distribute it to the sub main (secondary or tertiary) distribution lines.

ii) Secondary Distribution Lines

These are pipelines which, if necessary, extend from the main lines to reach significant irrigation areas lying far away from the main pipeline. Secondary lines branch into tertiary lines to serve the single irrigation unit. In some cases, tertiary lines can take straight from the main pipeline and in this case the secondary lines are not required.

The main and secondary distribution lines are the project components that will have an impact on structures and land which will lead to physical displacement of some households.

iii) Tertiary Distribution Lines

These are pipelines which extend from the main or sub main (secondary) lines and have hydrants mounted on them, each serving one irrigation unit.

iv) Hydrants

These are fitted on the tertiary lines and equipped with a shut-off valve. They deliver water to the irrigation unit. In the case of a pressurized irrigation system, they feed the manifolds (feeder lines).

2.2.4.3. *Drainage Network*

The drainage network will provide the necessary conditions to develop irrigated agriculture while keeping under control the water table that is a crucial condition for satisfactory production and environmental protection. In addition to that, the drainage network appears to be of significant importance because of the erosion risk the Kabuyanda soils are prone to, working as a flooding and water logging control system during rainfall events.

The drainage network is composed of primary and secondary drainage canals designed in order to adequately convey drainage water from each irrigation unit to the existing hydro graphic network. Tertiary drainage canals are included, too.

The primary drainage network is basically represented by existing water courses. In fact, morphological characteristics of the project area show several natural gullies carrying natural runoff towards the valley floor and the main rivers network. Thus, in order to minimize engineering works and the environmental impacts, it is assumed that secondary drains, which follow mainly the terrain contour lines, discharge drainage flow directly into the natural hydro graphic network.

2.2.5. **Access Roads**

The roads planned in this project provide access to:

- dam area;
- management's camp, workers' camp and offices;
- Irrigation area.

The access roads to be rehabilitated cover a 27 km total length, of which:

- Approximately 2 km are to be constructed, including access to the dam site, to the management's camp, to the pumping stations and including the roads running from the dam site to the north on the left bank of the river (about 190 m).
- The remaining 25 km stretches must be rehabilitated (from the branch out from the main road Mbarara-Kikagati about 65 km from Mbarara to the dam and irrigation appurtenances structures). The road will be enlarged and stabilized in order to transport heavy construction materials and machineries.

The new access road to be constructed around the dam area will connect to the existing non-asphalted roads upstream of the dam at the spillway (coordinates 232580E, 9900320N (WGS 84)) and this road will connect to the workers' camp. On the downstream side, the new access road connects to the existing access road at coordinates 232914E, 9899669N (WGS 84) and then connects to the management camp at coordinates 233543E, 9900380N (WGS 84).

2.3. Alternatives to Minimize Land Acquisition and Physical Displacement

The design team considered 2 alternatives for the dam location as a way of minimizing project impacts and optimizing project objectives (Figure 2-4).

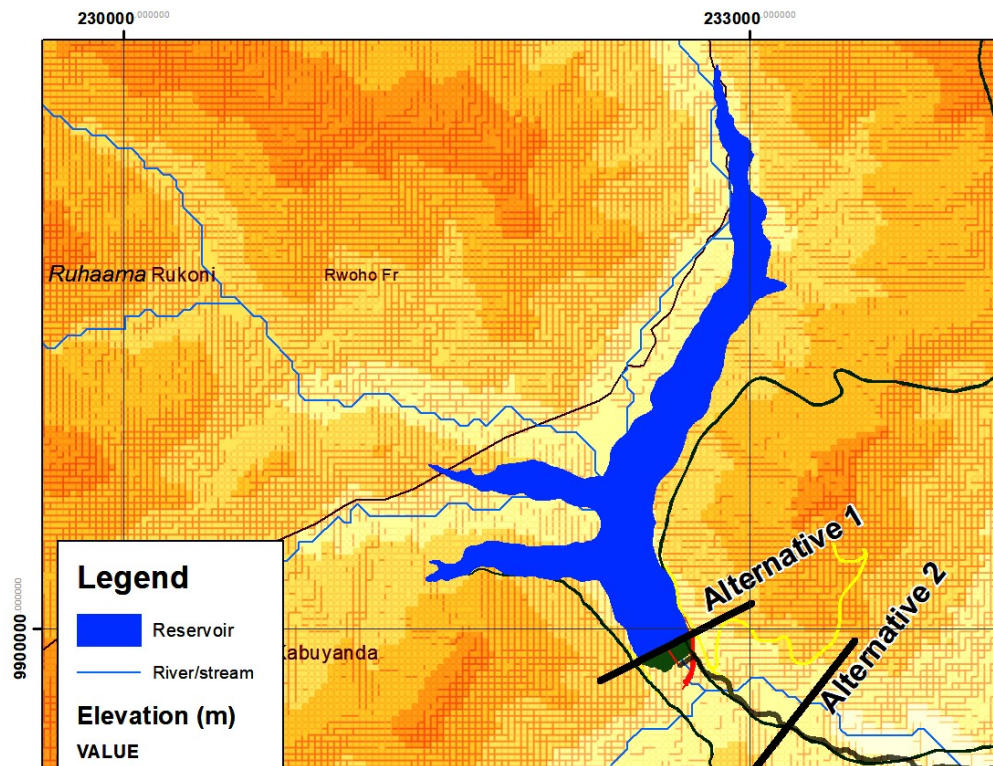


Figure 1-3: Alternative dam locations

Alternative 1 is located about 2km upstream in forest reserve area while alternative 2 location lies downstream of alternative 1 in an urbanized area with settlements and area heavily used for agriculture.

In order to minimize the impact on displacement and resettlement, alternative 1 of the dam location was chosen given that there are less significant impacts due to zero structures and less cultivation land (0.22 hectares) whereas alternative 2 has more significant impacts due to the presence of 180 structures to be affected and larger expanse of cultivation land (16.90 hectares).

3. POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK

3.1. Introduction

This chapter describes the Ugandan policies, laws and institutional framework relevant to the land acquisition and resettlement activities for the proposed Kabuyanda Irrigation Development and Climate Resilience Project under which the Resettlement Action Plan (RAP) is to be implemented. The chapter also describes the relevant sections of the World Bank Operating Policy 4.12 guideline on Involuntary Resettlement. A comparison and gap analysis of the Ugandan laws and World Bank's O.P 4.12 is also provided.

3.2. Standards for Land Acquisition and Resettlement

This Resettlement plan has been prepared in accordance with the requirements of the Government of Uganda and the World Bank for land acquisition and resettlement.

The Government of Uganda has set standards to follow when land is to be acquired for public interest. Under the Ugandan Constitution, the government is authorized to acquire land for a public purpose and compensate affected persons in accordance with the law. It specifically provides for the “prompt payment of fair and adequate compensation” prior to taking possession of the land.

Similarly, the World Bank has clear standards on the resettlement of displaced persons under the Operational Policy 4.12 – Involuntary Resettlement. The overall objectives for the OP 4.12 – Involuntary Resettlement are the following:

- a) Involuntary resettlement should be avoided where feasible or minimized by exploring all viable alternative project designs.
- b) Where it is not feasible to avoid resettlement, resettlement activities should be conceived and executed as sustainable development programs, providing sufficient investment resources to enable the persons displaced by the project to share in project benefits. Displaced persons should be meaningfully consulted and should have opportunities to participate in planning and implementing resettlement programs.
- c) Displaced persons should be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.

3.3. Uganda Policy Framework

3.3.1. Uganda National Land Policy, 2013

In regard to compulsory land acquisition, the policy states that, “the State as a trustee for the citizens of Uganda shall exercise the power of compulsory acquisition responsibly and in the public interest”.

This will be in accordance with the Land Act and Land Acquisition Act. In this way, the government has committed itself to creating an enabling environment to attract investments and establishment of social infrastructure in accordance with established laws and procedures. It is also emphasized that measures to mitigate the negative effects of such investments will be put in place. Regarding land rights of women and children, the policy states that *“the government shall by legislation, protect the right to inheritance and ownership of land for women and children;”* and *“the Government shall ensure that both men and women enjoy equal rights to land before marriage, in marriage, after marriage and at succession without discrimination.”*

During implementation of the RAP activities, the rights of women and children affected by the project shall be taken into consideration.

3.3.2. Uganda Gender Policy, 2007

The main goal of the policy is to achieve gender equality and women's empowerment as an integral part of Uganda's socio-economic development. One of the guiding principles of the policy is gender equality. The policy recognizes that gender equality is an integral part of national development processes and reinforces the overall development objectives in the country. The policy emphasizes government's commitment to elimination of gender inequalities and empowerment of women in the development process.

In relation to land acquisition the policy highlights that women's land rights are recognized in the Land Act Cap 227, Section 39 where spousal written consent is a requirement on all matters relating to land on which the person resides with his/her spouse and from which the family derives sustenance.

The framework has recommended the need for spousal consent for PAPs with affected residential structures.

3.3.3. National Policy for Older Persons, 2009

The policy recognizes that all older persons are equal before the law, and are entitled to equal treatment and benefits from the laws. Older persons should be provided with opportunities to take appropriate decisions on matters affecting their lives and families. Special attention will be provided by this project to older persons affected by the project.

3.4. Uganda Legal Framework

There are a number of national legal frameworks that regulate land relations in Uganda. These laws include the Constitution of the Republic of Uganda 1995, Land Act 1998, and The Land Acquisition Act 1965, The Physical Planning Act, 2010, The Public Procurement and Disposal of Public Assets Act, 2003, The Public Procurement and Disposal of Public Assets Regulations, 2003 amongst others. These frameworks define land rights, ownership, procedures and requirements of transfer and

acquisition of land between individuals and groups. They also provide procedures for the acquisition of land by the state or public body for public projects. For the purpose of this RAP, a legal review was conducted based on the following laws and regulations.

3.4.1. Uganda Constitution, 1995

The Constitution of the Republic of Uganda details land ownership in Uganda. Under A. 237(1) it provides that land belongs to the citizens of Uganda and shall vest in them in accordance with the land tenure systems provided for in the Constitution. It prescribes four tenure regimes in accordance with which rights and interests in land may be held, that is: customary tenure, freehold tenure, mailo tenure and lease hold. Land tenure is relevant in determining land rights since different tenures confer different rights.

Under Article 273(2) (a), the Constitution empowers the Government to compulsorily acquire land although this power is subjected to Article 26 of the Constitution. Article 26 provides that every person has a right to own property either individually or in association with others and no person shall be compulsorily deprived of property or any interest in or right over property of any description. The article makes two major exceptions: (a) the taking of possession or acquisition of property must be necessary for public use or in the interest of defence, public safety, public order, public morality and public health; (b) the compulsory taking or acquisition of property must be made under a law which makes provision for prompt payment of fair and adequate compensation, and any person who has interest or right over the property must not be denied the right of access to courts of law.

During the 1995 Constitution-making process, the Constitutional Commission found that many people felt that payment of compensation to persons deprived of their land and property was often inadequate and delayed. Article 26(2) in the 1995 constitution, therefore, was meant to ensure prompt and adequate compensation. The general principle of compensation outlined in the Constitution is that the owner who is compelled to sell or relinquish rights over land has the right to be put in the same position

i) Land tenure regimes and transfer of land

Article 237 of the Constitution, 1995, vests land ownership in citizens of Uganda and identifies four land tenure systems, namely: customary; freehold; mailo; and leasehold. However, another form of land ownership known as 'kibanja' is prevalent within the project area and along the buffer zone. A kibanja was a new type of land holding created as a result of the Busuulu and Envujju Law of 1928. Although the law was repealed, its provisions provide authority for customary land rights in the Buganda area. These systems are detailed under Section 4 of the Land Act (Cap 227) and outlined below:

a) Customary Tenure

- Land is owned in perpetuity;
- This tenure is governed by rules generally accepted as binding and authoritative by the class of persons to which it applies. In other words, customary regime is not governed by written law;
- Customary occupants are occupants of former public land and occupy land by virtue of their customary rights; they have proprietary interest in the land and are entitled to certificates of customary ownership which may be acquired through application to the Parish Land Committee and eventual issuance by the District Land Board.

b) Freehold Tenure

- This tenure derives its legality from the Constitution of Uganda and its incidents from the written law.
- It enables the holder to exercise, subject to the law, full powers of ownership.
- It involves the holding of land in perpetuity or for a period less than perpetuity fixed by a condition.

c) Leasehold Tenure

This tenure system is:

- Created either by contract or by operation of the law;
- Where the tenant has security of tenure and a proprietary interest in the land; and
- A form under which the landlord or lessor grants the tenant or lessee exclusive possession of the land, usually for a period defined and in return for a rent.

d) Mailo Tenure

The Mailo land tenure system is a feudal ownership introduced by the British in 1900 under the Buganda Agreement. "Mailo" is a Luganda word for "mile" as the original grants under the agreement were measured in square miles. Prior to the 1975 Land Reform Decree, Mailo land was owned in perpetuity by individuals and by the Kabaka (hereditary King of Buganda). All Mailo land parcels have title deeds.

Persons who buy portions (kibanja) on Mailo land are protected by Ugandan law to live on and use the land, but they are obliged to pay certain annual royalties to the Mailo owner (currently Ug. Shs 1000 about US 60 cents per household per year according to land law. Currently, titling of kibanja interests has been commissioned by the Buganda Land Board which offers leasehold interest to kibanja holders upon registration. No title deed was initially associated with kibanja purchase: the Mailo owner would simply write a sale (purchase) agreement witnessed by village local leaders (LCs),

giving the kibanja buyer full rights to own and use the purchased portion of Mailo land. Such a buyer can sell his/her kibanja to a new owner but notify Mailo owner and local leaders about the changed ownership.

In cases of compensation, an apportionment of land value of 30% and 70% share of the market value is given to the landlord and kibanja owners respectively, depending on developments invested on the affected land. For example, a kibanja owner who has permanent structures or perennial crops is entitled to a 70% share of the compensation value while one with only temporary structures or annual (seasonal) crops may be entitled to only 30%.

The Mailo tenure system:

- Derives its legality from the Constitution and its incidents from the written law;
- Involves holding of land in perpetuity;
- Permits separation of ownership of land from the ownership of development on land made by a lawful or bona fide occupant; and
- Enables the holder to exercise all the powers of ownership, subject to the rights of those persons occupying the land at the time of the creation of the mailo title and their successors.

Although only these latter forms of tenure are legally defined under the Land Act, the context of common law also recognizes “Licensee” or “Sharecroppers”, these terms having similar meanings in practice. Licensees are persons granted authority to use land for agricultural production. Traditionally, such production would be limited to annual crops and not perennial types. Licensees have no legal security of tenure or any property right in the land and their tenure is purely contractual. It will be noted, however, that JICA safeguard policies require compensation of PAPs irrespective of legality of their tenure on land.

ii) Rights of spouses and children

In compensation and resettlement, rights of spouses and children are protected under the Constitution of Uganda and the Land Act (Cap 227). The consent of spouse and children must be acquired prior to any transaction by head of households on land on which the family lives.

Section 40 of the Land Act, 1998 requires that no person shall:

- a) Sell, exchange, transfer, pledge, mortgage or lease any land; or enter into any contract for the sale, exchange, transfer, pledge, mortgage or lease of any land;
- b) Give away any land or enter into any transaction in respect of land:
 - In the case of land on which ordinarily reside orphans, whom are still minors, with interest in inheritance of the land, except with prior written consent of the Committee;
 - In the case of land on which the person ordinarily resides with his or her spouse, and from which they derive their sustenance, except with the prior written consent of the spouse;

- In the case of land on which the person ordinarily resides with his or her dependent children (minors) except with the prior written consent of the Committee; In the case of land on which the person ordinarily resides with his or her dependent children (minors) of majority age, except with the prior written consent of the dependent children (minors).

3.4.2. Land Act, Cap 227

Section 2 of the Act provides for land ownership as prescribed in Article 237 of the Constitution. Circumstances under which people claim an interest in land varies from case to case. With respect to acquisition and compensation of such land, it is essential to look at how the Land Act caters for such individuals and who is recognised as the lawful party to receive compensation.

The Land Act Section 29 recognises a number of people with respect to land occupancy, namely, lawful occupants, *bona fide* occupants, persons not qualified to be *bona fide* occupants and tenants by occupancy. All forms of land occupancy recognised by the law shall be taken into consideration in the preparation and implementation of the RAP for this project.

Section 39 gives restrictions on transfer of land by family members. Section 39 (1) requires a written consent from the (i) spouse(s), (ii) children of majority age, (iii) committee where children or orphans below majority age are involved before any person transfers, sells or enters into contract of land where the household derives its livelihood.

Section 39 (7) allows the spouse or children of majority age, not being the owners to lodge a caveat on the certificate of title or certificate of customary ownership of the person who is the owner of any land to which subsection (1) applies to indicate that the property is subject to the requirement of the consent under subsection (1). The consent of spouses and children will be required especially where the land is for residential purposes.

The Act lists a series of land administration institutions (Sections 46-76) consisting of the Uganda Land Commission (ULC), District Land Boards (DLB) and Parish Land Committees (PLC). The roles of the relevant institutions have been clearly defined in Section 3.8 of this report.

Section 77 (2) provides for disturbance allowance. It states that “*in addition to compensation assessed under this section, there shall be paid as a disturbance allowance of 15 percent or, if less than six months’ notice to give up vacant possession is given, 30 percent of any sum assessed under subsection (1)*”. An appropriate disturbance allowance shall be paid based on the duration of the time to be given to PAPs to vacate the land. For purposes of computing the budget estimates, a 30percent disturbance allowance has been computed in addition to the assessed compensation amount of the affected property.

3.4.3. Land Acquisition Act, 1965

The Land Acquisition Act provides for the procedure of compulsory land acquisition in Uganda. Compulsory acquisition is the power of government to acquire private rights in land without the

willing consent of the owner or occupant in order to benefit society. Compulsory acquisition requires finding a balance between the public need for land on one hand and the provision of land tenure security and protection of private property rights over land on the other hand. Because of its disruptive nature, compulsory land acquisition must be handled carefully, taking into consideration three basic principles: protection of due process and fair procedure; good governance-agencies that compulsorily acquire land should be accountable for the good faith implementation of the legislation; fair and timely compensation, and provision for fair hearing of the aggrieved people. Failure to comply with some of these principles inevitably results in delay of projects due to ongoing appeals against unfair procedures.

The Land Acquisition Act makes provision for the procedures and methods of compulsory acquisition of land for public purposes whether for temporary or permanent use. The Minister of Lands may authorize any person to enter the land, survey the land, dig or bore the subsoil or any other field study or investigation necessary for ascertaining whether the land is suitable for a public purpose. The Government or developer is to compensate any person who suffers damage as a result of the action. The Act requires that adequate, fair and prompt compensation is paid before taking possession of land and property. Disputes arising from the compensation to be paid should be referred to the court of law for decision.

3.4.4. Access Roads Act, Cap 350

The Act seeks to ensure that a private landowner/developer who has no reasonable means of access to public highway may apply for leave to construct a road of access to a public highway. The Act establishes a mechanism of applying for an access road to public highway and a legal regime to ensure the safety of the neighbouring environment. The Act permits the owner of any land over which an access road is to be constructed to be paid compensation in respect of the use of land, the destruction of crops or trees and other property on the land.

The Act also has provisions for grievance resolution between the developer and owner of land over which the access is to be constructed by applying to Magistrate's Court for leave to construct a road of access. Access roads to the dam site will be required and thus this Act will be applicable. Additionally, it will be necessary to improve on the existing access roads to the site and where necessary to also open up new access.

3.4.5. Survey Act, 1964

Prior to construction works in any part of the country, it is mandatory for a survey of the area to be carried out. Survey operations in Uganda are governed by The Survey Act of 1964.

Under this Act, the Commissioner of Surveys can authorize the carrying out of a survey of any land if it is deemed necessary. However, where a general survey is necessary, notice of such, specifying the local limits of the area affected has to be published in the gazette before the survey is undertaken. In case the survey is of a special nature, which could be outside the capacity and scope

of the Commissioner, then the Minister may order for such a survey. In that case, the Minister must specify the nature of the survey to be carried out and its purpose. The Minister is compelled to comply with the provisions of the Act when doing so.

Only government surveyors or duly authorized officers and workmen may enter upon any land, make all or any inquiries and do or cause to be done all things necessary for effecting such a survey.

Obstructing a surveyor when he is carrying out lawful activities is an offence under this Act (Section 31). However, in all cases, notice must always be given to the party to be affected by the survey.

With regard to compensation, Section 23 of the Act stipulates as follows:

“Where any demand for compensation is made as a result of the clearance of any boundary or other line, a Government surveyor shall, as soon as conveniently may be, inspect any trees, fences, or standing crops which are alleged to have been cut down or damaged, and, if he or she shall consider that any compensation should be paid, shall pay or tender to the owner of the trees, fences or standing crops the amount of compensation which in his or her opinion should be allowed for them”.

The proposed project will involve the acquisition of land that shall need surveying, demarcation and possible compensation, hence the relevance of the Act.

3.4.6. Local Government Act, 1997

This Act gives effect to the Government Policy on de-centralization and devolution of functions, powers, and services to Local Governments. Under this Act, District and lower Local Councils are given the responsibility of managing their natural resources. Some of the de-centralised services and activities for which District Councils are responsible are stipulated under Second Schedule Part 2, Section 5 and include land administration, physical planning, land surveying, conservation of forests and wetlands, social rehabilitation, labour matters, community development, vulnerable children, cultural affairs and others.

District and lower Local Councils of Isingiro and Kabuyanda will be involved in the process of preparation and implementation of the Resettlement Action Plan and also in the construction and operation of the project.

3.4.7. The Water Act 1997 (CAP 152)

Section 33 of this Act Subsection (1) stipulates that where damage is caused to land through the exercise of powers conferred upon the Minister, the director or an authorized officer by this Act, the Government shall compensate all parties having an interest in that land.

Subsection (2) states that damage to land includes (a) deprivation of possession of the surface land; damage to the surface of land and any improvements, trees or crops; damage to stock; and all consequential damage.

Subsection (3) stipulates that compensation may be in the form of money; provision of an alternative supply of water; exchange of land for another piece of public land if the land lost was

under the Land Reform Decree, 1975; or any other type of compensation which the Minister may consider appropriate.

Under Subsection (4) it is stated that in calculating monetary compensation for damage to land under this section; in respect of compulsory acquisition of any interest in land, no amount shall be paid in respect of the taking or use of water on, adjacent to or beneath that land, unless the effect of that taking or use is to deprive the owner or occupier of the right to use water conferred by section 8, or any water permit granted under this Part of the Act.

3.4.8. Remedies Available to Displaced Persons in the Judicial Process and the Normal Time Frame for such Procedures

People involved in a land disputes traditionally go before the clan elders, however the increasing number of disputes has challenged the capacity of customary resolution mechanisms to resolve conflicts, especially in countries where available land is scarce. It's important to note that increased disputes have also undermined the office and potency of traditional elders. In light of the above, apart from traditional institutions, various mechanisms are set up to resolve land disputes namely:

Local Council Courts: These courts are established under the Local Council Courts (LCC) Act 2006. Under s.3 of the LCC Act, they are meant to be courts of first instance at every village, parish, town, division and sub county level. Under s.10 of the Act, the LCCs have jurisdiction/power to try and determine matters relating to land held under customary tenure within the territorial area where the court is located. However, this means the LC Courts only have power to handle disputes over customary land as provided under s.13 of the Act. Local councils and courts exist at different tiers and they are the first instances where land disputes can BE heard. They work in parallel with customary institutions.

Local Council II Courts: Local councils at the parish level which are the first instances where land disputes can be heard; **Local Council III Courts:** local councils at the sub-county level which hear appeals against Local Council II rulings.

However, since Local council elections have not been conducted since 2006, Local counsel courts are not functional. In absence of the Local Council Courts, the first instance of reporting land disputes is the Chief Magistrates court.

The Chief Magistrates' Courts: These usually have to execute the rulings of LC 2 and LC 3 courts, which put an additional step for land dispute resolution. They also hear appeals from LC courts. Appeals form the magistrates' courts proceed to the High Court.

The High Court has a Land Division, which is charged with the responsibility of supervising the work of Land Tribunals and the adjudication of all land related dispute fall under this Division. The Division has jurisdiction to entertain all actions or cases arising out of or connected with any land transaction, including but not limited to, compensation paid for the compulsory acquisition of land, minerals and mineral rights and environmental disputes or causes, sale, purchase and transfer of real

property, leasing and rental of real property, hypothecation and securitization of land, other than as a mortgage involving a bank loan or credit facility, and destruction or degradation of land.

There is no fixed time frame for these procedures because a number of factors come into play, namely, the nature of the land dispute, availability of the judges, availability of evidence to support the case, witnesses etc.

3.4.9. Available Alternative Dispute Resolution Mechanisms that may be Relevant to the Project

3.4.9.1. Traditional or Customary Methods

The Land Act 1998 specifically recognized the role of customary law in dispute settlement and mediation in relation to land held under customary law. The Act states that at the beginning of a case, or at any time during a hearing, if the court is of the opinion that, because of the nature of the conflict, it ought to be dispensed with by traditional mediation, it may notify the parties to try to settle the dispute through this mechanism. The court may adjourn its proceedings for up to three months in such circumstances to make the parties' time to strain and arrive at agreement. Both parties are free to resume formal proceedings if either is not satisfied with the outcome of this process. Where a dispute is because of a customary system of owning land, the traditional or clan elders can hear the case or can be mediators and help the people who are disagreeing to reach an agreement. The traditional or clan elders use their customs to hear the case.

3.4.9.2. Mediation

Mediation is another alternative dispute resolution mechanism for resolving land disputes. It has been termed as "the interaction between two or more parties who may be disputants, negotiators, or interacting parties whose relationship could be amended by the mediator's intervention. The parties/disputants decide to seek the assistance of a third party, and this party decides whether to mediate. As the mediation gets underway, the third party selects from a number of available approaches and is influenced by various factors, such as environment, mediator's training, disputant's characteristics, and nature of their conflict. Once applied, these approaches yield outcomes for the disputants, the mediator, and third parties (other than the mediator)

Sections 88 and 89 of the Land Act provide for Customary Dispute Settlement and mediation as well as the functions of the mediator. Where a Land tribunal adjudicating over a land dispute in Uganda has reason to believe, on the basis of the nature of the case, that it would be more appropriate for the matter to be handled through a mediator, whether traditional authorities or not, may advise the disputant parties as such and adjourn the case accordingly

Section 89 of the Land Act provides guidance on the basis of which the selection and functions of a mediator follow. It provides that the mediator should be acceptable by all the parties; should be a person of high moral character and proven integrity; not subject to the control of any of the parties;

involve both parties in the mediation process, and; should be guided by the principles of natural justice, general principles of mediation and the desirability of assisting the parties to reconcile their differences

S.30 of the Land Act also makes provision for the appointment of mediators, on an adhoc basis, in an attempt to resolve land disputes. The Act specifies that the services of a mediator may be used in negotiations between landowners and tenants who are either seeking to gain occupancy rights or conduct a transaction relating to the land in question.

3.5. Environmental and Social Management Framework (ESMF) - Ministry of Water and Environment

Ministry of Water and Environment has developed an Environmental and Social Management Frame Work (ESMF) for IDCRP. The purpose of the framework is to ensure that interventions under the Irrigation Development and Climate Resilience Project are undertaken in a manner that avoids and minimizes environmental and social impacts as much as possible.

The framework presents the steps involved during environmental and social assessment and management process as per Ugandan regulations and in tandem with OP 4.01 be used to guide screening, assessment, review and approval of subprojects under the IDCRP.

The Framework emphasizes monitoring of project impacts and reporting to ensure that all the required environmental and social mitigation measures set out are implemented satisfactorily.

The Frame work emphasizes coordination with Government Agencies during implementation of the project. It also recommends capacity building for project implementers.

3.6. International Policy Instruments, Guiding Principles and Requirements

3.6.1. The Universal Declaration of Human Rights

The Universal Declaration of Human Rights and in particular Article 17 thereof, provides that everyone has a right to own property alone as well as in association with others and that no one shall be arbitrarily deprived of his property.

3.6.2. The African Charter on Human and people's Rights

The Charter provides that the right to property shall be guaranteed and can only be encroached upon in the interests of the public need or in the general interests of the community and in accordance with the provisions of appropriate laws. Under article 21, in case of dispossession, the affected people shall have the right to lawful recovery as well as to an adequate compensation.

3.7. World Bank Operational Policies

3.7.1. Involuntary Policy on Resettlement – O.P 4.12

The World Bank Resettlement Policy Framework (OP 4.12 and BP 4.12) is usually applied for projects that require international financing. The World Bank OP 4.12, Annex A (Paragraphs 17-31), describes the scope (level of detail) and the elements that a resettlement plan should include. These include objectives, potential impacts, socio economic studies, legal and institutional framework, eligibility, valuation and compensation of losses, resettlement measures, relocation planning, community participation, and grievance redress procedures, implementation schedule, costs and budgets, and monitoring and evaluation. In the following paragraphs the most relevant paragraphs from the policy are listed.

WB OP 4.12 (6a) demands that the resettlement plan includes measures to ensure that displaced persons are (i) informed about their options and rights, (ii) consulted on, offered choices among others and provided with technically and economically feasible resettlement alternatives, and (iii) provided prompt and effective compensation at full replacement costs.

WB OP 4.12 (8) requires that particular attention should be paid to the needs of vulnerable groups among those displaced such as those below the poverty line, landless, elderly, people with disabilities, women and children and indigenous people and ethnic minorities.

WB OP 4.12 (12a) states that payment of cash compensation for lost assets may be appropriate where livelihoods are land-based but the land taken for the project is a small fraction (less than 20%) of the affected asset and the residual is economically viable.

WB OP 4.12 Para (6b and c) state that in case of physical relocation, displaced persons should be (i) provided assistance (such as moving allowances) during relocation; and (ii) provided with residential housing, or housing sites, or, as required, agricultural sites for which a combination of productive potential, locational advantages, and other factors is at least equivalent to the advantages of the old site.

WB OP 4.12 (13a) stipulates that any displaced persons and their communities and any host communities receiving them should be provided with timely and relevant information, consulted on resettlement options and offered opportunities to participate in planning, implementing and monitoring resettlement.

In addition, displaced persons should be offered support after displacement, for a transition period, based on a reasonable estimate of the time likely to be needed to restore their livelihood and standards of living; and provided with development assistance in addition to compensation measures such as land preparation, credit facilities, training, or job opportunities.

WB OP 4.12 Para 13 (a) requires that appropriate and accessible grievance mechanisms are established to sort out any issues arising.

WB OP 4.12 para. 6(a), stipulates that to determine who will be eligible for assistance, and to discourage inflow of people ineligible for assistance. The borrower also develops a procedure, satisfactory to the Bank, for establishing the criteria by which displaced persons will be deemed eligible for compensation and other resettlement assistance. The procedure includes provisions for meaningful consultations with affected persons and communities, local authorities, and, as appropriate, nongovernmental organizations (NGOs), and it specifies grievance mechanisms.

3.7.2. OP 17.50 Public Disclosure

According to the WB's policy on disclosure of public information, whenever a Resettlement Plan (RAP) is required by the World Bank, a RAP must be prepared as a separate, free-standing document.

This document must also be available at a place accessible to, and in a form, manner and language understandable to the displaced or affected people and local NGOs.

MWE and World Bank will disclose the RAP on their websites.

3.8. Comparison between Ugandan Legislation & World Bank Policies on Resettlement and Compensation

There are some differences between the World Bank Policy and the Ugandan Laws on land acquisition and involuntary resettlement. While the Ugandan Laws restrict themselves to fair, adequate and prompt compensation, the World Bank policy extends it to providing alternative land and resettling the persons.

Furthermore, there is also no provision in the Ugandan legislation that the state should attempt to minimize involuntary resettlement whereas it is one of the key principles of WB OP 4.12.

A comparison between the Ugandan legislation and World Bank requirements regarding land acquisition and compensation is given in Table 3-1 with provisions or recommendations for bridging the gaps.

Table 3-1: Comparison between Uganda and World Bank Policies on Resettlement and Compensation

Resettlement Topic	World Bank OP 4.12	Ugandan Law	Gap Analysis	Proposed Mitigation Measure
Alternative project designs	Feasible alternative Project designs should be considered to avoid or at least limit physical or economic displacement.	Activities must be exercised in a manner that affects land owners as little as possible (Section 10.1 of EIA Guideline for the Energy Sector, 2004)	World Bank Standards explicitly require that resettlement be minimized by considering alternative project designs.	The project will consider alternative designs in order to minimize the impact of land acquisition.
Consultation and Information Disclosure	Provides for meaningful consultations with affected persons and communities, local authorities, and, as appropriate, non-governmental organizations (NGOs), including vulnerable groups and host communities.	For compulsory land acquisition, the Minister of Lands, Housing and Urban Development must declare the location, approximate area and plan of the land required. All land owners and occupiers must receive a copy of this declaration and must be informed on when and where they can inspect the plan of the land.	Both the WB O.P. 4.12 and national laws recognize the importance of sharing of information with stakeholders and project affected persons.	Timely disclosure of information to affected communities Continuous stakeholder engagement with the PAPs and other relevant stakeholders.
Eligibility	Eligibility criteria should recognize the rights of those affected people: <ul style="list-style-type: none"> ▪ Who have formal legal rights to the land or assets they occupy or use ▪ Who do not have formal legal rights to land or assets, 	Uganda laws recognise land occupancy under four regimes of land tenure, namely freehold, leasehold, <i>mailo</i> and customary. Under these different types of land ownership, occupants and land owners are eligible for compensation for land, improvements to land,	While Uganda laws recognize rights of different occupants and land owners under the different land tenure regimes, they do not cater for resettlement of illegal settlers, except for their developments.	All forms of tenancy based on formal or informal rights/ agreements between the land owner and tenants and squatters shall be recognised. The census to be undertaken prior to land acquisition and resettlement

	<p>but have a claim to land that is recognized or recognizable under national law</p> <ul style="list-style-type: none"> Who have no recognizable legal right or claim to the land or assets they occupy or use <p>The census will establish the status of the displaced persons.</p>	crops and structures.		activities will establish the status of the displaced persons
Cut-Off Date	World Bank O.P 4.12 Paragraph 15 provides for a cut-off date.	With regard to compulsory land acquisition the intention to acquire land must be published in several notices; exhibited at “convenient places on or near the land” and should state who should be compensated (Section 5 (1) Land Acquisition Act Cap. 226).	The Uganda regulations are unclear on how a cut-off date is to be enforced.	Cut off date, which was 15 th October 2018, is defined as the final date for enumeration and assessment of property and persons eligible for compensation will be well documented and disseminated throughout the project area, including local government authorities.
Census	Upon identification of the need for involuntary resettlement in a project, the borrower carries out a census to identify the persons who will be affected by the	Uganda laws do not require that a census be taken of the persons who will be displaced by the project. However, the other national guidelines for Infrastructure development, such EIA	Both the national guidelines for planning infrastructure Development and World Bank O.P 4.12 require that a census be conducted in the	The project will identify all persons who will be displaced as a result of the development activities. This will be done in the form of a census

	project, to determine who will be eligible for assistance and to discourage inflow of people ineligible for assistance	Guidelines, provide for a census as the means to identify all affected persons and their means of livelihood. It also refers to a baseline study to identify all interests in affected assets, including the rights of tenants (Section 10.4 of EIA Guidelines for the Energy Sector, 2004).	event of compensation and resettlement.	prior to displacement to determine who will be eligible for compensation and assistance.
Physical Displacement and Relocation	<p>If the impacts include physical relocation, the resettlement plan or resettlement policy framework includes measures to ensure that the displaced persons are:</p> <ul style="list-style-type: none"> ▪ Provided assistance (such as moving allowances) during relocation. ▪ Provided with residential housing, or housing sites, or, as required, agricultural sites for which a combination of productive potential, locational advantages and other factors is at least equivalent to the advantages of the old site; 	Uganda laws do not require that physically displaced persons be offered a choice of resettlement housing (out of the options available) and relocation assistance. However, the EIA Guidelines for the Energy Sector refers to the requirement to provide suitable materials for displaced persons to build their own housing.	There is no specific requirement for the resettlement of persons who are physically displaced by a development project in Uganda laws, other than making replacement building materials available.	The project will consider all available options to minimize physical displacement. However, if this is not possible, relocation assistance, support to livelihood restoration, transition allowance will be provided to the affected households and options to choose from will be provided.

	<ul style="list-style-type: none"> Provided with development assistance in addition to compensation measures 			
<ul style="list-style-type: none"> Vulnerable groups 	<ul style="list-style-type: none"> The 1995 Uganda Constitution stipulates that: “the State shall take affirmative action in favour of groups marginalised on the basis of gender, age, disability or any other reason [...] for the purpose of redressing imbalances which exist against them”. This regulation is not fully described in the context of resettlement and land acquisition. 	<ul style="list-style-type: none"> Particular attention should be paid to the needs of vulnerable groups among those displaced such as those below the poverty line, landless, elderly; women and children and indigenous peoples and ethnic minorities. 	<ul style="list-style-type: none"> Both the Ugandan Constitution and WB OP 4.12 favour vulnerable groups. However, the Ugandan law, vulnerable groups are not fully described in the context of resettlement and land acquisition. 	<ul style="list-style-type: none"> Special attention will be paid to vulnerable persons affected during RAP implementation
<ul style="list-style-type: none"> Grievances Redress 	<ul style="list-style-type: none"> Disputes regarding compensation will be determined by Government (in practice the Chief Government Valuer). In addition, any person who has an interest or right over property being acquired 	<ul style="list-style-type: none"> Affected persons will have access to an independent grievance mechanism to lodge concerns and complaints about compensation and relocation without impeding access to any judicial or administrative remedies 	<ul style="list-style-type: none"> Ugandan laws do not explicitly require that development project implementers develop independent grievance redress mechanisms that are 	<ul style="list-style-type: none"> A grievance redress mechanism accessible to project affected persons, including free access to judicial and administrative remedies will be set up.

	compulsorily has a right of access to a court of law.		accessible to affected communities and individuals.	
--	---	--	---	--

In case of conflict between O P 4.12 and national laws/policies of Uganda, the former will prevail.

3.9. Institutional Framework

The preparation and implementation of the resettlement strategies will require the participation of several institutions at different levels. Coordination of the participating institutions is a critical requirement to a successful resettlement program, and it is preferable to address this early into the project cycle, ensuring that all participating parties are made aware of each other's responsibilities, lines of reporting, communication channels, expectations and authority limits.

3.9.1. Ministry of Water and Environment, Water for Production Department (MWE-WfP)

The Ministry of Water and Environment (MWE) is responsible for ensuring sound environmental management that in turn ensures that there is sufficient water for domestic, agricultural and industrial uses. MWE has the responsibility for setting national policies and standards, managing and regulating water resources and determining priorities for water development and management.

Water for production refers to development of water resources for productive use (crop irrigation, livestock and aquaculture), rural industries, and other commercial uses. Water for Production is a critical area that contributes to the overall National Development Plan. The long-term objective of the Water for Production Department is "*to promote development of water supply for agricultural production in order to modernize agriculture and mitigate effects of climatic variations on rain-fed agriculture*" through:

- Bulk water transfer from areas of plenty to areas of scarcity.
- Promoting water resources assessment and planning for agricultural production - increasing the capacity of the farmers to access and use water for; crop, livestock and fisheries production.
- Promoting appropriate water harvesting technologies for irrigation and livestock development.
- Promoting the participation of the farmers and the private sector in financing and planning, development and management of irrigation and livestock water supply systems.
- Provision of technical support to line ministries and local Government.

3.9.2. Ministry of Agriculture Animal Industry and Fisheries (MAAIF)

The Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) is the lead agency for water use and management for agricultural development on-farm. The on-farm functions carried out by MAAIF include, among others, policy formulation for water use for irrigation, livestock, aquaculture and other agro-based activities; carrying out nationwide assessments on water for agricultural production needs; developing standards, guidelines and specifications for water use and management "on-farm" and schemes; planning/budgeting for water use and management of water use on public farms and schemes respectively; technical guidance to public sector developers on water use and management, quality assurance and livestock; on-farms promoting appropriate technologies on

efficient water use by all categories of farmers and monitoring and support supervision on water use for irrigation and agricultural production.

Irrigation being a major component of the project, and MAAIF will collaborate with the Ministry of Water and Environment during implementation of the project. It will provide policy guidance on water use for irrigation and any other related issue that may arise.

3.9.3. The Ministry of Lands, Housing and Urban Development (MoLHUD)

The Ministry of Lands, Housing and Urban Development will be responsible for providing policy direction, national standards and the coordination of all matters concerning lands, housing and urban development. Under this ministry, the Valuation Division (Office of the Chief Government Valuer - CGV) is instrumental. The CGV is responsible for guiding the valuation process, approving the compensation principles, approving compensation rates and valuation reports. The Chief Government Valuer's office will also be involved in resolving public complaints that will arise from valuation of land and compensation payments. The Department of Lands in liaison with the District Land Boards is responsible for implementing the registration and transfer of interests in land.

3.9.4. Ministry of Gender Labour and Social Development (MGLSD)

The MGLSD has, among its strategic objectives, emphasised the need for protection of vulnerable people from deprivation and livelihood risks, the creation of an enabling environment for increasing employment opportunities, and productivity for improved livelihoods and social security for all, especially the poor and vulnerable; and ensuring that issues of inequality and exclusion in accessing services across all sectors and levels are addressed.

The MGLSD will have a primary role of ensuring that the rights of minorities including women, orphans and other vulnerable groups are prioritized or protected.

3.9.5. National Environment Management Authority (NEMA)

The National Environmental Act provides for the establishment of NEMA as the principal agency responsible for coordination, monitoring and supervision of environmental conservation activities. NEMA is under the Ministry of Water and Environment (MWE) but has a cross-sectoral mandate to oversee the conduct of Environmental and Social Impact Assessments (ESIAs) through issuance of ESIA guidelines, regulations and registration of practitioners. It reviews and approves Environmental Impact Statements (EIS) in consultation with any relevant lead agencies.

NEMA works with District Environment Officers and local environment committees at local government levels who also undertake inspection, monitoring and enforce compliance on its behalf. In Government ministries, NEMA works with Environmental Liaison Units to ensure that they effectively incorporate environmental issues in their activities, policies and programs.

NEMA will have the responsibility to assess and monitor compliance of the Resettlement Action Plan with regard to Environmental and Social Safeguards. This shall be done either through Isingiro and Ntungamo District Councils or directly through NEMA's gazetted Environmental Inspectors.

3.9.6. Uganda Land Commission (ULC)

The Uganda Land Commission (ULC) holds and manages land in Uganda vested in or acquired by the Government of Uganda. Leases on public land are granted by the ULC. When the Project acquires land for the development of project infrastructure, the land will be transferred to the ULC.

3.9.7. Office of the Administrator General

The office of the Administrator General plays a key role in provision of Legal documentation such as Letters of Administration, Guardianship orders etc. all of which are necessary during RAP studies and their subsequent implementation.

3.9.8. Local Governments

The system of Local Government in Uganda is based on the District as a unit under which there are Lower Local Governments and Administrative Units. In each Local Government there is a Section of political (composed of elected leaders) and technical (composed of civil servants) leaders. Each Local Government is, by law, assigned powers of making local policy and regulating for the delivery of services; formulation of development plans based on locally determined priorities; receive, raise, manage and allocate revenue through approval and execution of own budgets; alter or create new boundaries; appoint statutory commissions, boards and committees for personnel, land, procurement and accountability; as well as establish or abolish offices in Public Service of a District or Urban Council.

In the context of land acquisition, the primary responsibility of the Local Government will be:

- To review the progress of the land acquisition and resettlement implementation and problems, if any, identified through monitoring;
- To make decisions regarding actions to solve the problems and designate officers to carry out these actions;
- To assist in the identification of property owners; and
- To resolve resettlement grievances.

The Districts' Land Boards will:

- Facilitate the registration and transfer of interests in land;
- Compile and maintain a list of compensation rates payable in respect of crops, buildings of a non-permanent nature and any other things that may be prescribed;
- Review every year the list of rates for compensation; and
- Deal with any matter which is incidental or connected with the above functions.

The office of the District Environmental Officer will:

- Review the Environmental Assessment report;
- Monitor environmental and
- Participate in the identification and selection of relocation sites.

District Community Development Officer

- Review the grievance management system
- Monitor social issues
- Participate in community engagements
- Participate in grievance resolution

The Local Councils will play the following roles:

- Mobilize the general community and Project Affected Persons;
- Witness the process of land survey, census of affected property and persons;
- Verify Project Affected Persons;
- Resolve Grievances; and
- Monitor RAP activities.

3.9.9. Non-Governmental Organizations and Civil Society Organizations

Independent NGOs and Civil Society Organizations will be involved in the implementation process of the Resettlement Action Plan. Activities they will be involved in may include witnessing the RAP process, overseeing of livelihood restoration programs, monitoring and evaluation of RAP activities etc.

3.9.10. Project Task Team

A project task team comprising government technical staff will be formed to provide guidance on different aspects of the project including land acquisition. Members of the team will meet as needed and will be responsible for monitoring project progress and resolving implementation constraints.

4. PUBLIC CONSULTATION AND PARTICIPATION

4.1. Introduction

The International Association for Public Participation defines ‘public participation’ as a means to involve those who are affected by a decision in the decision-making process. It promotes sustainable decisions by providing participants with the information they need to be involved in a meaningful way, and it communicates to participants how their input affects the decision.

Section 12 of the Environment Impact Assessment Regulation of 1998, requires the developer to seek views of the communities that are likely to be affected by the project and to publicize the intended project, its anticipated effects and benefits, in a language understood by those communities and for a period of not less than 14 days. The World Bank’s Operational Policy 4.01 likewise emphasizes consultation and public disclosure of the project.

4.2. Objective of Public Consultation and Participation

Information dissemination, consultation and participation of all stakeholders (including Project Affected People), reduces the potential for conflicts, minimizes the risk of project delays, and enables the project to design resettlement and rehabilitation as a comprehensive development program catered to suit the needs and priorities of the affected people. This in turn maximizes the economic and social benefits of the investment to the client and also the stakeholders involved.

The specific objectives of stakeholder consultation include the following:

- To provide information about the project and to tap stakeholder information on key environmental and social baseline information in the project areas;
- To provide opportunities to stakeholders to discuss their views, opinions, suggestions and concerns;
- To manage expectations and misconceptions regarding the project;
- To collect all relevant information about trends, practices and norms in the project area; and
- To inform the process of developing appropriate mitigation and management measures as well as institutional arrangements for effective implementation and;
- To create an enabling environment through which the project will smoothly operate.

4.3. Stakeholders Identification and Composition

During field activities carried out in the month of November 2017, several consultations were undertaken by the study team and multiple groups of stakeholders were consulted. The main groups of stakeholders consulted included the following:

4.3.1. Directly Affected People

Directly affected people are those who reside in or derive their living from areas where the project will have a direct impact, often referred to as the Direct Impact Zone (DIZ), consisting of all the project components. The directly affected people in the different villages, were identified, informed and consulted on major issues concerning relocation and compensation process.

Downstream communities are not directly affected by the land acquisition process and their livelihoods will not be affected.

4.3.2. Indirectly Affected Persons

This particular group of people includes all those who reside near project features or are reliant on resources within the project area and will have to relocate or adjust their livelihoods due to project activities. Consultations were held with communities residing near the proposed project sites.

4.3.3. National Stakeholders

National stakeholders are always an important part of any development because they provide policy guidelines and oversee the implementation of the project.

4.3.4. Local Government Stakeholders

Identified local government stakeholders include both the political and the technical leadership as shown in Table 4-1.

4.3.5. Other Stakeholders

Other stakeholders identified that are very important to the project include NGOs/CBOs, Cooperative Societies, large scale farmers etc. as shown in Table 4-1.

A list of the identified stakeholders is provided in Table 4-1.

Table 4-1 Identified Stakeholders

Stakeholder	Relevance
National Stakeholders	
<ul style="list-style-type: none"> ▪ Ministry of Water and Environment ▪ National Environmental Management Authority (NEMA). ▪ Ministry of Energy and Mineral Development (MoEMD) 	<ul style="list-style-type: none"> ▪ Provide information on National Policies and guiding principles in relation to their technical areas ▪ Are responsible for approval of reports ▪ Will monitor the project activities ▪ Provide policy guidelines in the agriculture, animal

<ul style="list-style-type: none"> ▪ Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) ▪ National Forestry Authority (NFA) ▪ Ministry of Gender, Labour and Social Development (MGLSD) ▪ Ministry of Lands, Housing and Urban Development (MLHUD), Chief Government Valuer's Office 	<p>industry and fisheries, the main activities envisaged for the proposed infrastructure in this RAP</p> <ul style="list-style-type: none"> ▪ Provide information on national laws and policies in the relevant area of forests in relation to the project ▪ Will provide information, policy guidelines and monitoring support for the social well-being and safeguards impacts/mitigation as a result of the project ▪ Will provide guidelines for the process of valuation, compensation and land acquisition for the project
Local Government Stakeholders	
<p><u>Political leadership</u> District Political Leaders (e.g. RDC, LC V Chairperson, District Councillor/Secretary for Education and Health, Councillor in charge of Technical services, LC III Chairperson etc.)</p>	<ul style="list-style-type: none"> ▪ Provide political support since these leaders represent the communities that are going to be affected by the project. ▪ They are responsible for security within the area of operation. ▪ They are the overall overseers of the planning for development in the districts and therefore require information for planning purposes.
<p><u>Technical Staff</u> District Chief Administrative Officer, District Technical Officers (Planner, Environment, Education, Water, Fisheries, Agriculture, Engineer, Health Inspector, Community Development, Production/Commercial Officers, Town Clerk, Sub County Chiefs, Community Development Officers)</p>	<ul style="list-style-type: none"> ▪ Are a vital source of information about the population, trends and other dynamics within the project area. ▪ Shall be utilised as the contact persons in the project area ▪ Their structures at the lower local government shall be utilised in the mobilisation of communities for the good of the project. ▪ Shall be used in the follow up and supervision of community and technical programs ▪ Could come up with proposals on how to mitigate the impacts of the project.
<p><u>Village leaders - LC I Chairpersons</u></p>	<ul style="list-style-type: none"> ▪ Could provide vital information at village level. ▪ They are good mobilisers of community members. ▪ Shall provide support to the project ▪ They have knowledge about land owners and potential PAPs.

	<ul style="list-style-type: none"> ▪ They are very instrumental in resolution of grievances. ▪ They witness all the processes of land acquisition and resettlement.
Communities in the project area / Directly affected Persons, including women and members of vulnerable groups.	<ul style="list-style-type: none"> ▪ They will be the beneficiaries of the proposed project. ▪ They will be directly and indirectly affected by the project ▪ Will provide casual labour during the construction phase. ▪ They have information on land owners and users. ▪ Communities are a good source of information on the trends and dynamics within the project area. ▪
Indirectly affected Persons	<ul style="list-style-type: none"> ▪ Could provide vital information at village level. ▪ Shall provide support to the project
Other stakeholders e.g. NGOs/CBOs, Cooperative Societies, large scale farmers etc.	<ul style="list-style-type: none"> ▪ Since they generally work very closely with communities, they can be a good source of information. ▪ Could be partnered with to minimise some of the negative social impacts.

4.4. Stakeholders Consulted

The Table 4-2 below shows the stakeholders that were consulted.

Table 4-2- Stakeholders Consulted

Level	Stakeholder category (position)
National Stakeholders (Government Institutions/ Departments) officials	<ul style="list-style-type: none"> ▪ Ministry of Water and Environment (MoWE); ▪ Ministry of Energy and Mineral Development (MoEMD) ▪ National Forestry Authority ▪ Ministry of Agriculture, Animal Husbandry and Fisheries
Local Government Institutions/officials	<ul style="list-style-type: none"> ▪ Chief Administrative Officer (CAO) ▪ District Environmental Officer ▪ Resident District Commissioner

	<ul style="list-style-type: none"> ▪ District Forestry Officer ▪ District Agricultural Officer ▪ Operation Wealth Creation ▪ Town Clerk ▪ Councillors ▪ Local Council II Chairpersons ▪ Local Council I Chairpersons ▪ Officer in Charge (OC) ▪ Local Council III Chairperson ▪ Gombolola Internal Security Officer (GISO) ▪ District Speaker ▪ Opinion Leaders ▪ Elders ▪ Sub County Chief ▪ Community Development Officer
Other stakeholders	<ul style="list-style-type: none"> ▪ Kaiho Farm School Leavers Cooperative Society ▪ Kigarama Commodity Marketing Cooperative Society Limited ▪ Kabuyanda Dairy Cooperative Society Limited ▪ Tukundane Fish Farm Limited
Local community	<ul style="list-style-type: none"> ▪ Directly and indirectly project affected community members from various villages as indicated on the attendance lists, including women and members of vulnerable groups.

4.5. Approach and Methods for Public Consultation and Participation

Public consultation and participation is a continuous process throughout the project cycle. The public consultation and participation process was commenced by other consultants in earlier phases of the project such as the feasibility and scoping phases. The process continued during this phase of finalisation of the ESIA process and preparation of the resettlement framework. Stakeholder consultations for this phase commenced on 04th November, 2017 and were concluded on 13th November, 2017.

Appointments with the stakeholders at national and local government were mainly made in writing. This process was all-inclusive, transparent and highly participatory, through the provision of sufficient information regarding the proposed project. Consulted stakeholders enthusiastically

participated during interactions. The project was briefly described, whilst issues arising, comments and/or areas of concern from the stakeholders were documented.

Meetings were organized and held with the directly and indirectly affected communities and also with women and other identified vulnerable groups. Mobilization of the participants and selection of meeting venues, dates, and times was achieved with the help of local authorities, who were met in person at their respective villages. The Local Council Chairpersons were also asked to inform the affected communities through public gatherings like community meetings, church services and other religious congregations and announcements using a public address system.

All the discussions were opened with a brief introduction of the project, its purpose and what it entails, followed by the aims of the preliminary Resettlement Action Plan, description of the activities involved and overview of the different teams involved. The team then guided the participants to express their views. Questions from the participants were answered and some misconceptions about the project clarified. A sample list of attendees is attached to this report as **Appendix A** while minutes of the meetings are attached as **Appendix B**. A summary of issues/concerns raised are presented in Section 4.7 and 4.8. Table 4-3 shows the schedule of

Table 4-3 Schedule of Meetings Held with Stakeholders

Stakeholders	Number of Males	Number of Females	Venue	Date/Time	Time
Ministry of Water and Environment	02	0	Ministry Head	16/11/2017	12:00hrs.
Ministry of Agriculture, Animal Husbandry and Fisheries	03	0	Ministry Head Quarters	30/11/2017	9:00am
Ministry of Energy and Mineral Development	02	0			
National Forestry Authority	04	01			
Isingiro District Local Government Officials	08	0	Isingiro District	03/11/2017	9:00 hrs.
Kabuyanda Town Council Officials	24	16	Kabuyanda Town Council	03/11 /2017	15:00hrs
Kabuyanda Sub County			Kigabagaba CoU	03/11/2017	17:00hrs
Kisyo Community (PAPs)	40	09	Kisyo Church	04/11/2017	13:00 hrs.
Iryango Community (PAPs)	48	33	Iryango Village	04/11/2017	16:45hrs.
Kagoto Community (PAPs)	05	14	Kagoto CoU	05/11/2017	13:00hrs.
Kigabagaba Community	51	33	Kigabagaba	05/11/2017	4:45 hrs.

(PAPs)			CoU		
Kabuyanda Community (PAPs)	163	21	Kabuyanda Trading Centre	06/11/2017	17:00hrs.
Women and other vulnerable groups (elderly, People with Disabilities) (PAPs)	10	16	Kabuyanda Town Council	07/11/2017	15:30hrs
Kabuyanda Dairy Cooperative Society Ltd	01	0	At their offices	07/11/2017	12:30hours
Kigalama Commodity Marketing Cooperative Society Limited	4	1	At their offices	07/11/2017	10:50hours
Kaiho Farm School Leavers Cooperative Society	2	0	At their offices	07/11/2017	09:50hours

4.6. Involvement of Women and Other Vulnerable Groups

A total of around 520 people attended the meetings. Out of these, approximately 38% were female and 62% were male. The low turn-out of women was attributed to the fact that it was a planting season and many women were spending most day-light hours working in their gardens. It was not possible to schedule the meetings during a different season given the assignment timelines. It is therefore recommended that the planning of meetings with communities in the subsequent consultations carefully takes into consideration factors such as the above that limit women participation so as to ensure their full participation throughout the process.

Nevertheless, consultations were held with women as well as vulnerable groups, large scale farmers in the area and cooperative societies. The cooperatives included Kaiho Farm School Leavers Cooperative Society, Kigarama Commodity Marketing Cooperative Society Limited, Kabuyanda Dairy Cooperative Society Limited and Tukundane Fish Farm Limited. These were consulted on aspects such as livelihood, health, gender specific concerns etc. Figure 4-1 shows some photographic documentation captured during stakeholder consultations.



Consultation with Ministry of Agriculture



Meeting with Isingiro District Commercial and Production Department



Meeting with Kabuyanda Town Council Leaders



Community Meeting at St. James Church of Uganda, Kigabagaba



Community Meeting at Iryango Village



Meeting with Women, the Elderly and People with Disabilities

Figure 4-1: Photographic Documentation of Stakeholder Consultations

4.7. Issues Raised by Stakeholders

As a result of engagement and consultations done with the different stakeholders a number of issues were raised. The issues raised, their responses and how they have been considered in this RAP are presented in Table 4-4.

Table 4-4: Summary of Key Issues and Responses

Stakeholder	Issues raised	Response
National level		
Ministry of Water and Environment	<ul style="list-style-type: none"> The district should not take full responsibility of the project because they lack human resource and experience. 	<ul style="list-style-type: none"> Recommendations for capacity building of the different stakeholders that will be involved in the implementation and management of the project and implementation of resettlement activities have been provided.
	<ul style="list-style-type: none"> Public awareness is very important. 	<ul style="list-style-type: none"> Stakeholder consultation is an on-going process in all phases of the project. Several stakeholders have been consulted to date. A Stakeholder Engagement Plan for this project has been prepared.

	<ul style="list-style-type: none"> The affected PAPs will need to be compensated for their property i.e. land, houses, trees, crops etc. affected. 	<ul style="list-style-type: none"> A Resettlement Action Plan has been prepared. This will be updated at the time of implementation of the project.
Ministry of Energy and Mineral Development	<p>How is the project going to benefit the community? Will they pay a fee or it will be for free?</p>	<ul style="list-style-type: none"> Communities will benefit through improvement of their livelihoods by accessing water irrigation of their crops.
	<ul style="list-style-type: none"> Public awareness is key. The community should be involved in meeting the objectives of the project. 	<ul style="list-style-type: none"> This is well noted. Public participation will be a continuous process in all project phases as emphasized in this report.
	<ul style="list-style-type: none"> Farmers should be assisted with agricultural inputs to boost agriculture 	<ul style="list-style-type: none"> This has been recommended as a way of improving production and livelihood.
National Forestry Authority	<ul style="list-style-type: none"> Land compensation should be to NFA and the PAPs should be compensated for their crops and properties since they are licenses and others who are squatters. 	<ul style="list-style-type: none"> The RAP has taken into consideration the different types of people eligible for compensation including land owners and licensees.
Local Government; District and Sub-County Stakeholders		
District officials	<ul style="list-style-type: none"> All district heads of department's including Environmental Officer, District Community Development Officer, Natural Resources Officer, Production and Marketing Officer, Water Officer, Agriculture Officer, Fisheries Officer, should be involved in all activities. He advised land issues to be addressed in the studies including compensation. The study should be holistic and involve all stakeholders. There is need for adequate planning and sensitization of communities. 	<ul style="list-style-type: none"> The roles of the relevant stakeholders to be involvement in land acquisition and resettlement activities have been defined in this report. Many of the stakeholders have been consulted and the consultation process will continue throughout the phases of the project. A Stakeholder Engagement Plan for the subsequent stages has prepared.
	<ul style="list-style-type: none"> The project should be implemented quickly to avoid speculators. 	<ul style="list-style-type: none"> Noted

	<ul style="list-style-type: none"> ▪ The consultant should develop an agroforestry plan for the project area. ▪ Viable alternatives programs for example in fruit tree agriculture should be explored. 	<ul style="list-style-type: none"> ▪ Agroforestry has been recommended as one of the ways of enhancing livelihoods.
Sub county and Town Council leaders	<ul style="list-style-type: none"> ▪ The people of Kabuyanda should benefit through provision of employment opportunities. 	<ul style="list-style-type: none"> ▪ Provision of employment opportunities to the local population has been recommended.
	<ul style="list-style-type: none"> ▪ The local leaders also informed the consultant that the people in the area were experiencing famine due to severe drought 	<p>One of the major aims of the project is to improve food production through increased potential for irrigation in the area and to contribute to the alleviation of the severe droughts.</p>
	<ul style="list-style-type: none"> ▪ Will the project compensate people for the crops that will be damaged during the construction? 	<ul style="list-style-type: none"> ▪ Crops that will be damaged during construction will be compensated.
	<ul style="list-style-type: none"> ▪ Will the youth benefit from the project? 	<ul style="list-style-type: none"> ▪ There is potential for employment opportunities on the project for the local people including the youth. They will also be able to improve crop production through the irrigation system
Community Members	<ul style="list-style-type: none"> ▪ Will the project compensate people for the affected land where the water pipes will be laid? 	<ul style="list-style-type: none"> ▪ All eligible property will be compensated. A Resettlement Action Plan has been prepared to guide land acquisition and resettlement.
	<ul style="list-style-type: none"> ▪ What are some of the items eligible for compensation? 	<ul style="list-style-type: none"> ▪ Land, trees, perennial crops, structures within the project footprint.
	<ul style="list-style-type: none"> ▪ What will happen to public utilities like electricity poles that will be affected by the access road? 	<ul style="list-style-type: none"> ▪ The design will try as much as possible to avoid them, if this is not possible, a Utilities Relocation Plan for these facilities will be prepared and implemented by the relevant authorities.

	<ul style="list-style-type: none"> What will happen to the boreholes that will be affected? 	<ul style="list-style-type: none"> They will be avoided and this is not possible, they will be replaced.
	<ul style="list-style-type: none"> Will project compensate us for the land on which grow crops and rear animals 	<ul style="list-style-type: none"> Affected land will be compensated.
Cooperative Societies and large scale farmers	<ul style="list-style-type: none"> Highly expect water for irrigation, safe and clean water for domestic use, water for fish farming. 	<ul style="list-style-type: none"> These will be supplied as it's the major objective of the project.
	<ul style="list-style-type: none"> Crops will be damaged during the laying of the water pipes at construction phase 	<ul style="list-style-type: none"> Destroyed crops will be compensated.
	<ul style="list-style-type: none"> Project will displace some households especially those households where the water pipes will pass. 	<ul style="list-style-type: none"> The design will try as much as possible to avoid settlements. A Resettlement Action Plan has been prepared to mitigate against these impacts.
	<ul style="list-style-type: none"> Cooperative societies will encourage farmers to adopt /take up the irrigation scheme 	<ul style="list-style-type: none"> This is well noted.
Women and other vulnerable groups (elderly, PwDs).	<ul style="list-style-type: none"> The women and other vulnerable groups should be given opportunities for employment. 	<ul style="list-style-type: none"> This has been recommended.
	<ul style="list-style-type: none"> They request the project to provide support to them e.g. extension of credit. 	<ul style="list-style-type: none"> This was noted
	<ul style="list-style-type: none"> They fear displacement and loss of property because of the project. Affected property should be compensated 	<ul style="list-style-type: none"> All affected property will be prepared. A RAP has been prepared to take this into consideration.
	<ul style="list-style-type: none"> Destruction of property in case of dam collapse 	<ul style="list-style-type: none"> The design has taken into consideration such eventualities. An Emergency Preparedness Plan has also been prepared in case of any accidents.

4.8. A Summary of the Salient Issues Raised

Public Consultation and awareness: Public consultation and awareness is crucial in all project phases. Stakeholders should be involved in the different RAP activities and processes.

Eligibility: All eligible PAPs and property should be compensated

Employment opportunities: PAPs should be considered and prioritised for employment opportunities during construction.

Alternative programs for livelihood: Alternative programs for livelihood including economic diversification should be considered, such as fruit growing.

4.9. Public Consultation & Disclosure Plan during RAP Implementation

The public consultation process was initiated at the beginning of project i.e. during the feasibility, ESIA and preparation of the RAP studies and will be on-going during the implementation of the RAP.

A Public Consultation and Disclosure Plan that outlines the consultations process to be followed during the implementation of the Resettlement Action Plan is shown in Table 4-5. The Public Consultation and Disclosure Plan highlight the kind of stakeholder, their relevance, mode of engagement, timing and responsible personnel.

The objectives of the plan are to:

- Provide sufficient, balanced, objective, accurate and consistent information to assist stakeholders to understand the project;
- Obtain feedback from stakeholders on project related issues;
- Work directly with stakeholders throughout the process to ensure that their concerns and needs are consistently understood and considered;
- Partner with the stakeholders in the implementation of resettlement activities; and
- Create an enabling environment through which the project will smoothly operate in friendly co-existence with other stakeholders.
- A timetable will be prepared at the start of implementation of the RAP and the dates for the engagements will be confirmed with the different stakeholders. Notices for the meetings need to be provided at least 1 week before the meeting to allow for mobilisation of the stakeholders.

Information will be disseminated to the relevant stakeholders through one-on-one meetings, workshops, village meetings, the media and project brochures, among others. A Stakeholder Engagement Plan for the project is attached to the ESIA report.

MWE and the local governments will engage community members regarding the nature of this project in order to achieve the following:

- Enhance ownership of the development and responsibility from the communities in terms of operation and maintenance;
- Provide the local people with a meaningful stake in the project;
- Instil a sense of pride and confidence in the project; and
- Increase participation among community members, volunteering, attendance at meetings etc.

The engagements with the communities on this matter by the MWE and the local governments will be well documented and will ensure that there is no coercion involved.

This RAP will be approved/cleared by the Government of Uganda and the World Bank and translated in a language that PAPs and stakeholders understand and disclosed locally in a culturally appropriate manner. It will also be disclosed in the World Bank external website. Any changes to the RAP will undergo the same clearance and disclosure protocols”.

Table 4-5 is a broad presentation of the stakeholder engagement plan for the different phases of the project.

Table 4-5: Stakeholder Engagement Plan

STAKEHOLDER	MODE OF ENGAGEMENT	TIMING			RESPONSIBLE PERSON	ISSUES TO BE COVERED
		Preparation Phase	Implementation / construction	Operation phase		
National stakeholders MEMD MoFPED ERA MWE (DWRM & WfP), MoAAIF) MGLSD MoLHUD NEMA	<ul style="list-style-type: none"> - Official correspondence - Meetings/Workshops - Project Progress Reports 	√	√	√	MWE, Consultant, Contractor	Project description Project duration and likely impacts Key concerns related to the project including resettlement Social risks
Project funders (World Bank)	Project Reports	√	√	√	MWE	Ensure the project preparation and implementation is in conformity with the WB guidelines.
Local Government stakeholders	<ul style="list-style-type: none"> - Official correspondence - Meetings/workshops - Project Progress Reports 	√	√	√	MWE, Consultant, Contractor	Project description Project duration and likely impacts Key concerns related to the project including resettlement
Grievance Resolution Committees	<ul style="list-style-type: none"> - Meetings 		√		MWE, Consultant, Contractor	What constitutes a GRC Procedures to lodge complaints
Communities	<ul style="list-style-type: none"> - Public meetings - Focus Group Discussions 	√	√	√	MWE, Consultant, Contractor	Issues regarding social risks such as HIV/AIDS Likely impacts associated with the project.
Project Affected Persons	<ul style="list-style-type: none"> - Public meetings - Focus Group Discussions - One-on-one meetings - Project brochures, 	√	√	√	MWE, Consultant, Contractor	Concerns regarding compensation Procedures for lodging grievances Social Risks, including GBV related issues

Non-Governmental Organizations	- Meetings - Local media	√	√		MWE, Consultant, Contractor	Welfare of the communities regarding the project.
Contractor	- Meetings - Construction Status Reports		√		MWE, Consultant,	Abiding by the ESMP recommendations Social and gender safeguards
The Media	- Press releases. - Press statements. - Interviews. - Talk shows - Newsletters - MWE website	√	√	√	MWE	Communication to the communities and other relevant stakeholders regarding the project

5. SOCIAL ASSESSMENT AND SOCIO-ECONOMIC SURVEYS

5.1. Introduction

This section describes the broad socio-economic characteristics of the project area, the immediate vicinity as well as a broad description of the area of influence. It further presents the findings on the socio economic conditions of the people that will be directly affected and the control group (indirectly affected) by the project. The level of details in the various sections depends on the interactions between the project activities and the particular socio-economic aspect. Information provided in this section will be superimposed on to the project concept and components for impact identification, evaluation and development of mitigation measures.

5.1.1. Approach and Methodology

As per the Terms of Reference, Section 5.2.2, “the Consultant shall conduct a socioeconomic survey using sample households. The sampling should include not less than 20% of potential affected persons (PAP) households and a control group of non-potential affected persons’ households (about 10%)”.

The estimated number of affected households is around 1,615 for all relevant project components including Irrigation and Drainage Service Development; Support services for agricultural production and value-chain development- Thirty percent (30%) of these households was sampled and an interviewer administered questionnaire was administered to 481 households. The same population size was used to estimate the sample size for the indirectly affected group (control group). Ten percent of the non-potential affected persons were sampled and 181 households were included in the survey.

Selection of the directly affected households mainly depended on availability of the respondents. Selection of the respondents for the control group was done randomly depending on the willingness of the people to be included in the survey.

Two separate questionnaires were developed with both open-ended and close-ended questions for gathering information on socio-economic baseline conditions of Project Affected Households. (*Appendix C*). The main respondent was the household head whose information was used to understand the status of the socioeconomic condition of the household. These questionnaires were aimed at capturing demographic data of affected households, livelihoods and incomes, assets owned options for relocation and access to social services etc.

Research Assistants with good command of both the English and local languages were recruited and trained for the exercise. The data collected was entered and analysed using Ms-Excel and the Scientific Package for Social Scientists (SPSS).

5.1.2. Administrative Framework

Isingiro District is a district in the Western Region of Uganda. The town of Isingiro is the District's main municipal, administrative, and commercial centre. Isingiro District is subdivided into Counties, Municipalities, Town Councils, Sub Counties, Parishes and Villages depending on the size and criteria set by the Ministry of Local Government (MoLG). Currently, Isingiro District is made of 2 Counties (Bukanga and Isingiro), 3 Town Councils (Kaberebere, Kabuyanda, and Isingiro), 14 Sub Counties (Rugaaga, Rushasha, Kashumba, Endiinzi, Ngarama, Mbaare, Birere, Nyamuyanja, Kabingo, Kikagate, Kabuyanda, Ruborogota and Masha), 90 Parishes /Wards and a total of 767 villages

Ntungamo District is a district in Uganda. It is bordered to the north by Mitooma District, Sheema District and Mbarara District, going from west to east. Isingiro District lies to the east, the Republic of Rwanda to the south, Kabale District to the southwest and Rukungiri District to the northwest. The district has 15 Sub counties, 92 parishes and 360 villages.

The project components are located in both Isingiro and Ntungamo districts with only a very small part in Ntungamo District as shown in Figure 2-1.

5.2. Population and Demographic Characteristics

5.2.1. Population

As per the population and housing census 2014, the total population of Isingiro District was 486,360 people, 250,739 females and 235,621 are males. The district has 101,623 households with an average size of 4.8 persons. Kikagate Sub County has the highest population followed by Nyakitunga and Mbaare Sub Counties.

Ntungamo District was 489,323 people, with 234,244 males and 255,079 females. The district has 103,232 households with an average size of 4.7 persons. Rukoni Sub County reported the highest number of households (6,029) followed by Rugarama (4,665).

The population of the affected Sub Counties is as shown in Table 5-1.

Table 5-1 Population Statistics for Affected Sub Counties

Administrative Unit	Male	Female	Total	Number of Households	Average Household Size
Isingiro District					

Kabuyanda Sub County	10,048	11,277	21,325	4,361	4.9
Kabuyanda Town Council	7,732	8,593	16,325	3,569	4.5
Kikagati	23,806	26,591	50,397	10,453	4.8
Nyakitundu Sub county	19,607	22,209	41,816	8,750	4.8
Ntungamo District					
Rukoni East sub county	11,323	12,391	23,714	5,181	4.5

Source: National Population and Housing Census 2014, Provisional Results

The National Population and Housing census results show that the population is predominantly young as the majority i.e. 55.9% and 54.7% of the people in Isingiro and Ntungamo districts respectively comprises of persons aged 0-17 years. The statistics indicate a high dependency burden on the older population. However, about 40% of the population is reported to be in the range of 18 to 59 years which can be a fairly productive age group. Table 5-2 shows a distribution of the population in the two districts by age group.

Table 5-2: Population by Age groups

Age Distribution of the Population	Isingiro District		Ntungamo District	
	Number	Percent	Number	Percent
Population aged 0-17 years	270,353	55.9	262,038	54.7
Population aged 18-30 years	95,965	19.9	97,394	20.3
Population aged 31-59 years	96,777	20.0	96,031	20.1
Population aged 60 years and over	20,267	4.2	23,263	4.9

Source: National Population and Housing Census 2014, Isingiro and Ntungamo Districts Profiles

5.2.2. Age of Household Heads

The baseline survey recorded the average age of household head as being 49.7 years with the youngest being 21 years and the eldest at 95 years and the median age was 36 with a mode of 30. Most of the household heads were in the age brackets of 26-35, 36-45 and 56-55 years as presented in Figure 5-1.

The elderly (65+) comprise of 13.1% and 7.4% of the directly and indirectly affected groups respectively implying that special attention needs to be given to these people during implementation of the Resettlement Action Plan and the project in general.

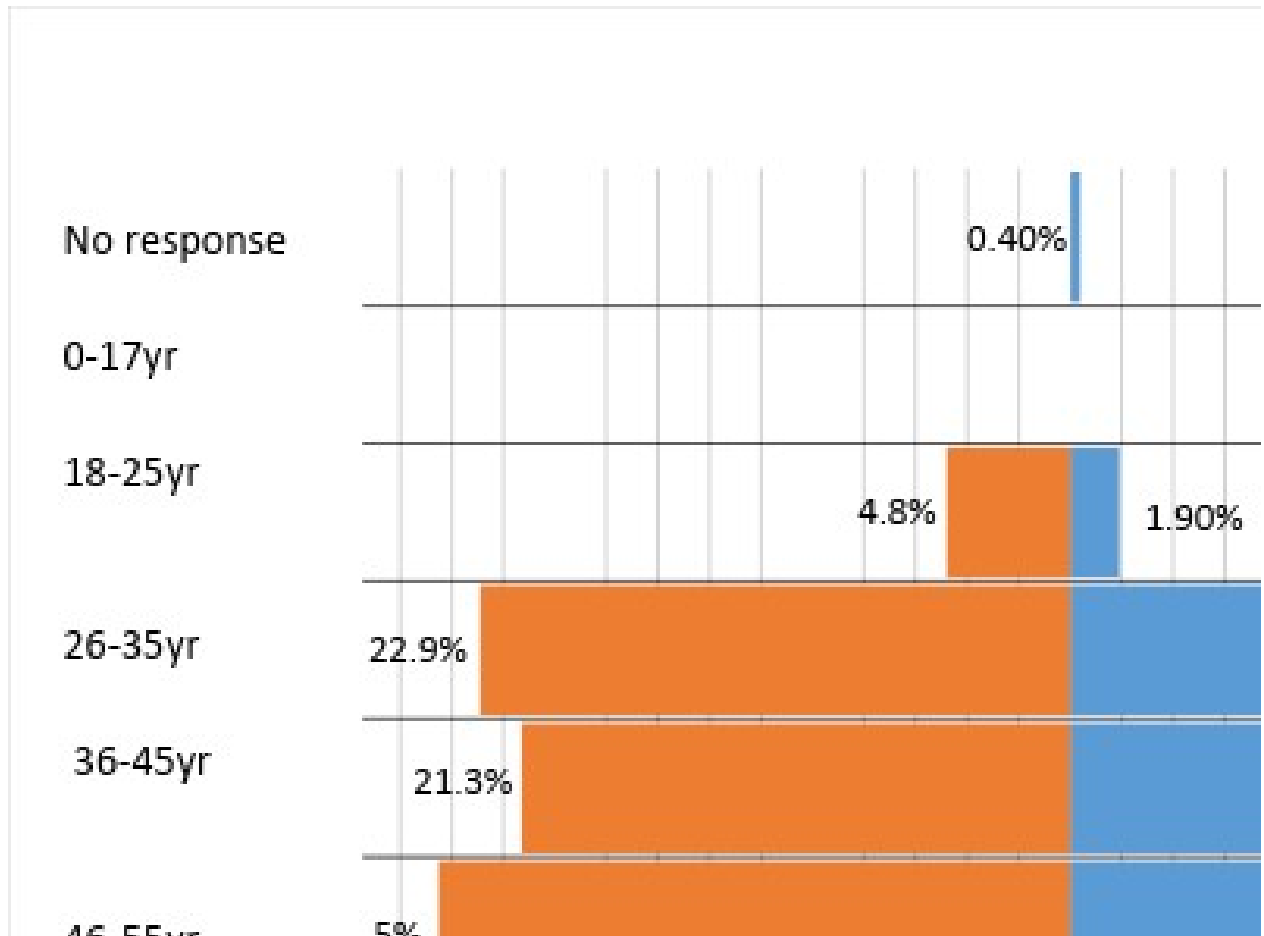


Figure 5-1: Household Heads by Age Category

5.2.3. Sex of Household Head

Findings from the baseline survey showed that the majority of the Project Affected households are headed by males (at 62.6 % and 69.7% for the directly and indirectly affected) while the female-headed households constituted just under 40% for both categories of PAPs (Figure 5-2).

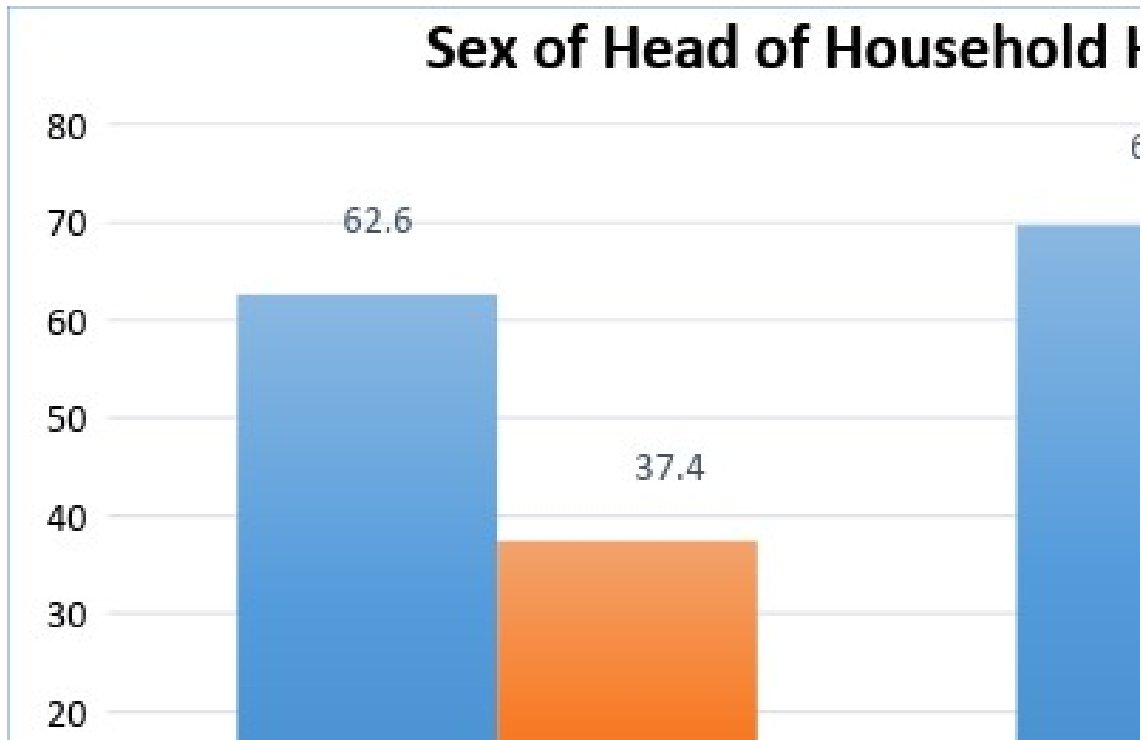


Figure 5-2: Sex of Household Heads

5.2.4. Marital Status

The findings from the baseline survey showed that the majority of the directly affected household heads (68.8%) are married while 17.7% are single, 12.5% are widowed and 1% is divorced / separated. In comparison, the indirectly affected persons (control group), the majority (49.2%) are single while 43.9% are married, 5.3% are widowed, 1.6% are divorced (*Figure 5-3*).

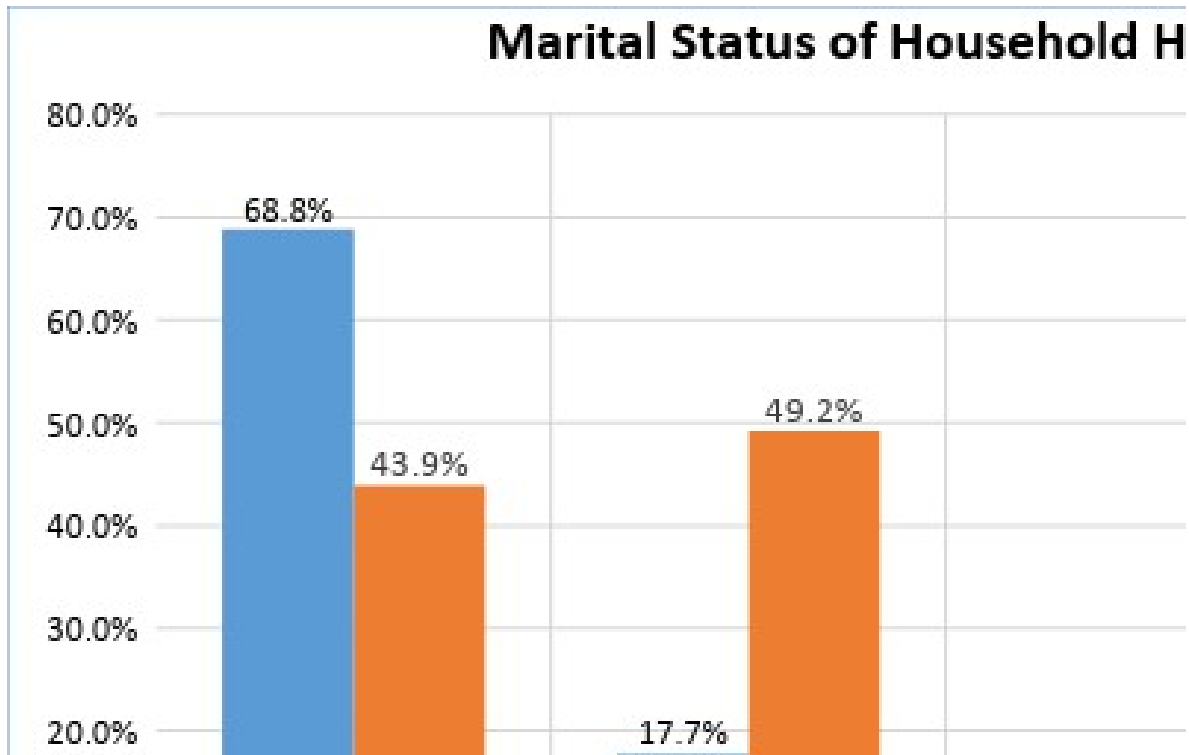


Figure 5-3: Marital Status of Household Heads

5.2.5. Religious Denominations

Among the population of the Persons Directly Affected by the Project, 59.3% of the household heads were Protestants, these were followed by Catholics at 34.7%, Pentecostals at 3.5%, Seventh Day Adventist (SDA) at 1%, and Muslims at 1%.

From the responses of the population of the Persons Indirectly Affected by the Project (Control Group), the figures recorded were slightly lower indicating 35.1% of the household heads being Protestants, followed by Catholics at 15.4%, the rest (Pentecostals, Seventh Day Adventist (SDA) and Muslims) together making up less than 3%. *Figure 5-4* shows the religious affiliations of household heads for both directly and indirectly (control group) groups.

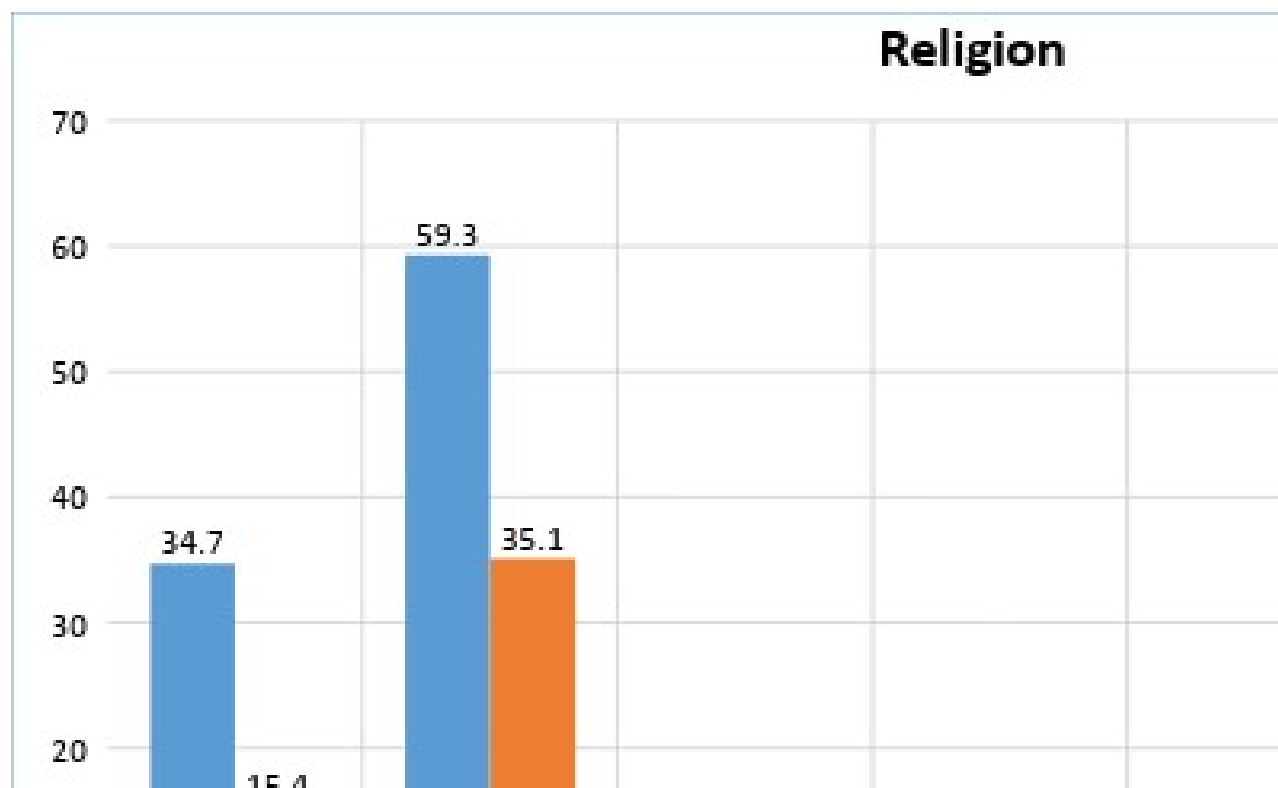


Figure 5-4: Religious Affiliation

5.2.6. Ethnic Composition

The survey findings showed that majority of the households amongst both categories of the directly and indirectly PAPs in the project area belong to the tribe Bakiga, recorded at 70.9% and 67.6% respectively. These are followed by the Banyankole (19.7%) amongst the indirectly affected and 16.8% amongst those directly affected, the Banyarwanda at just about 2% and other tribes combined including the Bafumbira, Madi, Omujire and Abashyaba together constituting about 4% amongst those directly affected and 11.1% from amongst those indirectly affected.

Table 5-3: Ethnic composition of the PAPs

Tribe	Directly affected		Indirectly affected	
	Frequency	Percent	Frequency	Percent
Bakiga	341	70.9%	127	67.6%
Banyankole	81	16.8%	37	19.7%
Batooro	2	0.4%	1	0.5%
Banyarwanda	7	1.5%	2	1.1%
Baganda	0	0	0	0

Others directly (Bafumbira, Madi, Omujire, Abashyaba)	50	10.4%	21	11.10%
Total	481	100%	188	100%

5.2.7. Level of Education and Literacy Levels

Literacy is the ability to identify, understand, interpret, create, communicate and compute using printed and written materials (UNESCO). Literacy is widely acknowledged as benefiting to both the individual and society and is associated with a number of positive outcomes for health, nutrition, status and civil participation in the society of both men and women. According to Kabuyanda Town Council Five Year Development Plan 2015/2016 – 2019/2020, in the Town Council, on average, 75% of persons aged 10 years and above are literate. Literacy rates are much lower among females contributing 70% than for males at 81%. Illiteracy levels are highest recorded at 65.4% among the persons above 60 years (*National Housing and Population Census 2014, Isingiro District Profile*).

The baseline survey findings showed that amongst the directly affected persons, 65.9% of those PAPs attained primary education, 7.9% attained secondary education, 6.9% attained tertiary, vocational or University education, while 19% of the PAPs have never attained any education. These figures are quite similar to those in the category of the indirectly affected, with 83% having attained primary school education and just about 6.4 % reported to have attained ordinary level education. As was the case with those directly affected, the percentage of those who attained an A level, Vocational and University education just under 3%.

Table 5-4: Educational Attainment amongst the PAPs

Level of Education	Directly affected		Indirectly affected	
	Frequency	Percent	Frequency	Percent
Primary school education	317	65.9	156	83
Ordinary level	38	7.9	12	6.4
A' Level	21	4.4	1	0.5
Vocational	4	0.8	1	0.5
University	8	1.7	2	1.1
None	92	19.1	12	6.4

No response	1	0.2	4	2.1
Total	352	100.0	188	100.0

In terms of gender, the findings showed that more women did not attain any education as compared to the male household heads and fewer women attained higher levels of education compared to the male PAPs. The figures recorded for the directly affected persons do not differ greatly from those that are indirectly affected.

Table 5-5 shows Education levels of households by sex in the project area.

Table 5-5: Educational Attainment by Gender

Education and Sex	Directly affected		Indirectly affected	
	Male (%)	Female (%)	Male (%)	Female (%)
Primary	69.1	60.9	88.3	76.8
Ordinary level	10.6	3.4	6.3	7.1
A level	5.3	2.8	0.8	-
Vocational	1	0.6	0.8	-
University	2.7	-	1.6	-
None	11.3	32.4	2.3	16.1
Total	100	100	100	100

5.2.8. Vulnerable Groups

The baseline identified the vulnerable categories of the PAPs as including; female heads of Households, the disabled (including members of their households), those with chronic illnesses (like, TB, HIV/AIDS, Heart Diseases and Diabetes) as shown in Table 5-5.

During a consultative meeting with the women, Persons with Disabilities and the elderly, it was revealed that these groups of people own property such as land and animals. However, the group argued that the land was inadequate to enable them compete favourably with their able bodied counterparts.

The group also revealed that some Persons with Disabilities from amongst the PAPs were receiving special grants from the government. Those eligible for the grants were expected to meet all the requirements as stipulated by the scheme; such as being disabled, being a member of an association, must be registered with Kabuyanda Town Council and were required to pay UGX 30,000 for registration. The elderly also revealed that they were not benefiting from the Social Assistance Grants for Empowerment (SAGE) programme, and felt that the government was being unfair to

them because their colleagues (elderly) from other parts of the country were benefiting from the programme.

Table 5-5: Educational Attainment by Gender

Type of Vulnerability	Gender		Total
	Male	Female	
Sick & Infirm (Chronic)	30	32	62
Disabled (dumb and deaf)	2	1	03
Mental instability	2	1	03
Physically disabled	05	08	13
Widowed	11	49	60
Others	08	06	14
Elderly above 68	29	35	64
Grand Total	87	132	219

5.3. Social Structure

In all rural communities in Uganda, patrilineal kinship i.e. descent through the male line usually limited to male children and male grandchildren. It is within and through these structures that marriage, property, inheritance, and community welfare of the social system are organized.

Like most rural societies, the project area is patrilineal in nature where men dominate the society. The men are major decision makers on several aspects including resources like land. Sons are mainly chosen as the heirs to their fathers. In some instances, however, widows who have children are given the opportunity to look after their deceased's property.

The household is the basic unit of social organisation. There are acceptable norms and values that the community members share. These have to be respected by the different team members of the project.

5.4. Social Capital and Mechanisms for Social Cohesion

The communities in the area mainly rely on their family members as most of them stay close to each other, religious institutions such as the churches, mosques, cooperative societies, farming groups and self-help groups also play a pivotal role in providing social capital. The communities live harmoniously with each other with minimum conflicts. However, respondents were asked the main sources of resolutions in the event of conflict and the findings are presented in Table 5-7.

Table 5-6: Conflict resolution patterns amongst the PAPs

Conflict Management	Frequency	Percent
Local Government	260	87.2
Police	10	3.4
Religious leader	1	0.3
No one	24	8.1
Others	3	1

The survey revealed that the PAPs mainly use government structures to resolve emerging conflicts. The local government structures, 87.2% constitute the main channel to resolve conflicts, followed by police 3.4%. Religious institutions are the non-government institutions mentioned to also play a role in conflict resolutions (0.3%). About 8% of the PAPs reported that they do not seek anybody for the conflict resolution.

5.5. Land Tenure System

The Land tenure systems in the area include customary, leasehold, freehold, public land and communal land. Table 5-7 indicates the land Tenure system by the number of people affected.

Table 5-7: Type of land tenure by number of people affected

Tenure	No of PAPs.
Freehold	05
Leasehold	-
Customary	1778
Kibanja	-

5.6. Land Ownership

There are several institutions owning land within the directly affected area. These include National Forestry Authority (NFA), educational institutions such as, Kabesekye Primary School, Bukurungu Primary, School Kitezo Primary School, Kigarama International School, Nyampichi Primary School,

Kabuyanda Primary School, Kabugu Primary School, Kabugu Catholic Church, St. Mary's Primary School religious institutions such as St. Jude Catholic Centre and Ruyonza Church of Uganda.

The socio-economic survey data showed that all PAPs interviewed own at least a piece of land in the project area and elsewhere besides the project area. The average size of land owned by the PAPs is 2.4 acres.

Amongst the directly affected PAPs, 61.4% of them reported to have bought the land which is not very different from amongst those that are indirectly affected as reported by 54.3% of the households. The second category of owners includes those that inherited the land from parents reported to be 37.6% amongst the directly affected PAPs and 41.5% amongst those that are indirectly affected. The survey indicated that there is a relatively smaller number of PAPs renting the land, with percentages under 1% amongst those directly affected and just over 4% for those indirectly affected, as indicated in *Table 5-8*.

Table 5-8: Method how land was acquired

How the land was acquired	Directly affected		Indirectly affected	
	Frequency	Percent	Frequency	Percent
Bought	296	61.5	102	54.3
Inherited from parents	181	37.6	78	41.5
Renting	4	0.8	8	4.3

Results further indicated that 31.6% of the directly affected households own land elsewhere while 68.4% do not. Among the male household heads directly affected, 30.9% reported to own land elsewhere and 32.8% of the women reported to own land elsewhere. In comparison with size of the affected land, 32.2% reported it to be bigger, 62.5% said it was smaller and 5.3% said it was equal in size with the affected land. Majority of the households (68.3%) said that the land is located in the same land. 26.1% reported the land to be located less than 20km, 2.1% said within 20-40kms and 3.5% said that it was located more than 40 km from affected land.

5.7. Settlement Pattern and Nature of Buildings

The downstream /irrigation command area has settlements with some sections concentrated while in others they are scattered. The areas that are heavily congested are the trading centres like Kabuyanda, Kisyoro, Kanywamaizi, and Kagoto among others.

In the upstream area i.e. dam access /reservoir area, there are no settlements apart from one household that has settled there. The land is primarily used for crop farming and tree planting.

The nature of the structures ranges from permanent, semi-permanent, and temporary with the majority being semi-permanent and temporary. The structures are in form of residential, commercial, auxiliary structures such as kitchens, animal pens, toilets, bathrooms etc.

5.8. Length of Stay in the Project Area

The baseline survey showed that majority of the PAPs (63%), migrated to the project area while (37%) of PAPs claimed to have been born in the project and they consider the project area as their ancestral home land. The average duration the households have lived on the project area is 19.8 years with the longest duration being 65 years and shortest being less than a year. This implies that the communities have strong social ties in the area. There are variations in the lengths of stay in the project area by the respective PAPs.

5.9. Livelihoods and Income Sources

Amongst the Directly affected PAPs, agriculture (mainly subsistence farming) is the main source of livelihood at 84% and this is undertaken on part of the land affected. The indirectly affected PAPs have land elsewhere for cultivation but this also contributes to the largest source of their livelihood estimated at 72.9%. Other sources of the livelihoods for PAPs include; business on land at 2.5%, salaried employment for household heads and dependant spouses at just about 2.5% and business located away from the location and away from the land (2.1). *Table 5-9* shows the major sources of income for households in the project area

Table 5-9: Main source of income for household heads

Activity	Directly affected		Indirectly affected	
	Frequency	Percent	Frequency	Percent
Salary	12	2.5	1	0.5
Husband's salary	2	0.4	-	-
Business on land	12	2.5	1	0.5
Business located elsewhere	10	2.1	1	0.5
Rent collected from affected land	9	1.9	4	2.1
Agricultural activity on affected land	407	84.6	44	23.4
Agricultural activity on land elsewhere	13	2.7	137	72.9
Fishing	-	-	-	-
Others	11	2.3	-	--
No response	3	0.6	-	
Total	481	100	188	100

These other activities through which the household generate income include Motorbike taxi services (locally known as “*bodaboda*”), casual labourer, brick laying, trading etc. Those who generate income from trading mostly sell crops like beans, maize, sorghum, bananas, and coffee.

Amongst the indirectly affected communities, poultry is another prominent activity estimated at 56% and 43% from amongst the directly affected. Retail shops are another income source for the communities in question accounting for 9% amongst the directly affected and 12% for those not directly affected (*Table 5-10*).

Table 5-10: Other activities from which the household generates income

Activity	Directly affected		Indirectly affected	
	Frequency	Percent	Frequency	Percent
Fishing	2	1	1	4
Poultry	87	42.9	14	56
Retail shop	19	9.4	3	12
Other (bodaboda, clinic etc.)	95	46.8	7	28

5.10. Levels of Income

The baseline survey assessed the levels of income for the project affected persons both directly and indirectly as indicated in *Table 5-11*.

Table 5-11: Levels of incomes for the PAPs

Total income from all sources of income per month (UGX)	Directly affected		Indirectly affected	
	Frequency	Percent	Frequency	Percent
Below 100,000	154	32	88	46.8
100-200,000	61	12.7	24	12.8
200-400,000	32	6.7	47	25
400-600,000	58	12.1	12	6.4
600-800,000	95	19.8	12	6.4
800-1 million	38	7.9	-	-

1-1.5 million	4	0.8	2	1.1
1.5-2 million	4	0.8	-	-
Above 2million	14	2.9	3	1.6
No response	21	4.4		
Total	481	100.0	188	100.0

Baseline survey results indicated a generally low income for the PAPs in the area, where more than 1/3 (32%) of directly affected persons and 46.8% of indirectly affected earn below UGX 100,000 per month. An equal proportion of just above 1 in 10 PAPs (12.7% directly affected and 12.8% indirectly affected) earn between UGX 100,000 and 200,000/- a month. Overall, less than less than 10% of PAPs both directly and indirectly affected earn one million shillings and above in a month. The low income for the PAPs indicates the relevance of an irrigation scheme, but also implies careful consideration of livelihood activities for the affected person to ensure that their already poor incomes are not worsened by the project.

5.11. Agriculture and Marketing

5.11.1. Crop Production

Isingiro District Five Year Local Government Development Plan II 2015/2016 – 2019/2020 stipulates that the District economy is largely informal, with more that 80% of the people employed in the agriculture subsistence sector. The majority of the people are engaged in production of crops and livestock products at a subsistence level.

The Project area economy is predominantly agricultural and more than 85% of the PAPs are engaged in Agricultural activity growing crops and rearing animals.

The above statistics are in line with earlier publications in the National Housing and Population Census 2014, which pointed out that Isingiro District has 87.6% of the district's population engaged in crop growing. This census further states that 78.2% of land use is mainly for crop farming and intercropping is majorly practiced in the area (*Figure 5-5*).



Bananas plantation in Luyonza village – Project Area



Maize in the foreground and NFA forest in the background

Figure 5-5: Crop Farming in the Project Area

The development objectives of the Agricultural Sector include increase the rural incomes and livelihoods, household food and improve nutrition security. The agricultural sector in the District faces a daunting set of output-level challenges. According to Isingiro District LGDPII 2015/2016-2019/2020, the challenges include:

- Low levels of productivity: These are attributed to:
 - declining soil fertility and land degradation;
 - low application rates of productivity-enhancing inputs;
 - degradation of the natural resource base by human activity in relation to poor crop and livestock farming practices;
 - inadequate public investment in the agriculture infrastructure namely; Irrigation, storage, processing plants, and refrigerated transport facilities;
 - low application of modern technology;
 - pests, vectors and diseases
- Climate change

Due to a number of factors including climate change, there is now so much volatility in precipitation that rain-fed agriculture may not be enough to guarantee production from one season to another. Whenever there is drought, which now comes with a higher frequency, production falls dramatically. The District does not have preparedness plans for adapting to these climatic changes and therefore remains exposed and vulnerable.

- Farm power

The hand hoe is still the predominant means for land tillage and it is used by virtually all small scale farmers. The lack of more efficient farm power at the household level has had a substantial negative impact on agricultural production and household food security. Many households respond to their shortage of farm power by scaling down their activities, by reducing the area under cultivation and by growing a limited range of crops. They struggle to keep pace with the seasonal calendar, which results in taking short cuts in one season, with adverse knock-on effects in the next. There is no doubt that the productivity of the labour-force is compromised by a lack of physical energy and poor quality tools.

- **Agricultural Finance**

Despite some development of financial services in the District, the majority of small scale farmers remain without access to the services they need to compete in the market and to improve their livelihoods. The existing Banks in the District, namely Centenary, DFCU and other for-profit Financial Intermediaries like Pride Micro Finance and SACCOs tend to limit their activities to urban areas compared to other areas of the rural economy. The root of the problem is that lenders tend to offer only a limited menu of products, mainly with heavy collateral requirements. Asset-poor households are limited to considerably smaller loans at much higher rates. Poor farmers may also turn down loans, even if they qualify, because they are unwilling to bear the risk of losing collateral.

- **Inadequate Agricultural Infrastructure**

Inadequate agricultural infrastructure includes processing infrastructure, water for production-related infrastructure (irrigation, livestock and aquaculture), disease control infrastructure, research infrastructure etc. The state of such infrastructure is generally inadequate. The existing water infrastructure for livestock production reservoirs are now in very poor condition due to lack of maintenance, vandalism and siltation.

- **Lack of Value Addition**

Despite evident potential for value-added products, the proportion of the District's agricultural commodities and products which are processed are believed to be less than 1 percent. This is a challenge because of:

- Poor links between different stakeholders, especially those providing facilitative services to producers and investors;
- Low capacity of farmers to participate in value chains;
- Inadequate market information to guide farmers in market oriented farming;
- Inadequate quantity and poor quality of goods produced;
- Limited availability of and access to production/ productivity enhancing inputs investment finance, equipment and machinery.

Table 5-12 shows crop production levels for some crops in Kabuyanda and Kikagate Sub counties and Kabuyanda Town Council in the year 2015-2016.

Table 5-12: Production Levels per Sub-County July 2015 to June 2016

Sub-county	Land area KM ²	Land Area (Ha)	Arable Land (Km ²)	Total Area (Est)	Annual Yield (Tons) per Ha	Gross Pdn (Tons)	Est. Annual Sales
Bananas							
Kabuyanda	137	13,700.0	96	1,161	77.7	90,200	27,063
Kikagate	416	41,600.0	291	2,737	111.0	303,829	91,142
Kabuyanda TC	93	9,300.0	88	561	77.7	27,239	13,077
Beans							
Kabuyanda	137	13,700.0	96	1,161.0	2.0	2,322	1,393.0
Kikagate	416	41,600.0	291	2,737.0	2.0	5,474	3,284.0
Masha	189	18,940.0	170	357.0	2.0	713	428.0
Kabuyanda TC	93	9,300.0	88	351.0	2.0	701	421.0
Maize							
Kabuyanda	137	13,700.0	96	103.0	3.0	310	216.0
Kikagate	416	41,600.0	291	312.0	3.0	938	657.0
Kabuyanda TC	93	9,300.0	88	175.0	3.0	526	368.0
Fresh Irish Potatoes							
Kabuyanda	137	13,700.0	96	51.0	5.0	258	232.0
Kikagate	416	41,600.0	291	312.0	5.0	1,564	1,407.0
Kabuyanda TC	93	9,300.0	88	35.0	5.0	175	158.0
Fresh Cassava							

Kabuyanda	137	13,700.0	96	51.0	12.0	619	247.0
Kikagate	416	41,600.0	291	195.0	12.0	2,346	938.0
Kabuyanda TC	93	9,300.0	88	35.0	12.0	421	168.0
Fresh Sweet Potatoes							
Kabuyanda	137	13,700.0	96	26.0	5.0	129	51.0
Kikagate	416	41,600.0	291	78.0	5.0	391	156.0
Kabuyanda TC	93	9,300.0	88	17.0	5.0	88	35.0
Wet Coffee							
Kabuyanda	137	13,700.0	96	5.2	16.7	86.0	86.0
Kikagate	416	41,600.0	291	78.2	16.7	1,306.0	1,306.0
Kabuyanda TC	93	9,300.0	88	3.5	16.7	59.0	58.0

Source: Isingiro District – Production Office

The survey indicated that the main problem faced by the farmers is drought especially during the dry season therefore the irrigation component of the project will be of more help when implemented.

During the survey it was also observed that the formation of cooperatives has boosted agriculture in the area. These have provided farmers with agricultural inputs like; better seeds and seedlings, Friesian cattle, market for farm produce, advisory services and loans at low interest rates.

5.11.2. Livestock Production

Table 5-13 shows livestock statistics in Kabuyanda and Kikagate Sub counties and Kabuyanda Town Council in July 2014 to June 2015

Table 5-13: Livestock Statistics

Sub-county	Land area (km ²)	Total number of cattle	Total Number of goats/sheep	Annual Cattle sales (No)	Annual Goat & Sheep sales	Annual cattle slaughter
Kabuyanda	137	572	845			
Kikagate	416	3,540	4,801	180	456	216
Kabuyanda TC	93	681	2,742		2,220	828

Source: Isingiro District – Production Office

The survey findings further revealed that there was no animal grazing in the dam access and water reservoir areas. However, animal rearing is mainly practiced in the irrigation command area. Here, farmers practice both zero grazing and free range. The animals kept under zero grazing mainly include; Friesian cattle and goats whereas animals kept under free range include; the local breed mainly the Ankole long horned cattle, goats, sheep and pigs. To boost milk production in the area, Kabuyanda Dairy Cooperative Society Limited was established and this has been very instrumental in boosting livestock farming and sale of its products in the project area. *Figure 5-6* shows some of the livestock reared in the project area.



Figure 5-6: Livestock Rearing in the Project Area

5.11.3. Fish Production

Isingiro District is also engaged in fishing activities carried out on Lakes Nakivale, Rwamurunga and Rivers Kagera and Rwizi. The major types of fish caught include; tilapia, *protopterus*, *Claris*, *miller caps*, lung fish and *haplochromis*. In the project area, commercial fish farming is practiced using fish ponds. Fish farming is mainly practiced in the downstream area (irrigation command area). The major fish farmer in the project area is Tukundane Fish Farm Limited. This fish farm has 37 fish ponds and the types fish reared include cat fish and tilapia. *Table 5-14* shows fish production from fish ponds in Kabuyanda Sub County and Kabuyanda Town Council.

Table 5-14: Fish Production from Fish Ponds in comparison to the total fish production in the Project Area - Based On Farmers' Information - 2015

Sub County	Number of farmers	No. of ponds	Pond area (Sq metres)	Total Annual Prodn.	Annual pond prod (Kg)
Kabuyanda TC	20	62	35,000	12,000	6,000
Kabuyanda S/C	2	4	200	16,000	8,000
TOTAL	22	66	35,200	28,000	14,000

Source: Isingiro District – Production Office

Fish ponds are another significant source of income and a number of the PAPs were reported to be engaged in the activity.

5.11.4. Marketing

In the project area, there are two gazetted markets, i.e. Kabuyanda and Kanywamaizi markets. The markets are open to the public every Tuesday and Friday respectively. Consultations revealed that the biggest market for agricultural produce from Kabuyanda Town Council, Kabuyanda Sub County and Isingiro District is Rwanda and Kenya. Some products are sold locally in the local markets in Kabuyanda and Kanywamaizi and the local trading centres on a daily basis, while others are sent to far towns such as Mbarara and Kampala. The major items sold in markets include bananas, ground nuts, cow peas, cassava, coffee, beans, cassava, maize, cattle, goats, milk products and poultry. In addition, the products from domestic animals (meat, skin, milk etc.) and poultry (eggs) are among the items sold.

It was also observed that some trading centres like Kabuyanda Trading Centre are open for business to the members of the public. The items sold range from foods, utensils, electrical items, solar panels, clothes, shoes, steel and metal works, and beef among others.

50% of the both directly and indirectly affected PAPs travel just about 500 metres to the nearest marketing points. 27% of the directly affected PAPS have to travel a distance of over 3 Kilometres

to the nearest marketing point as opposed to less than 3% for the indirectly affected PAPs. *Figure 5-7* shows the distance to the marketing points for persons in the project area.

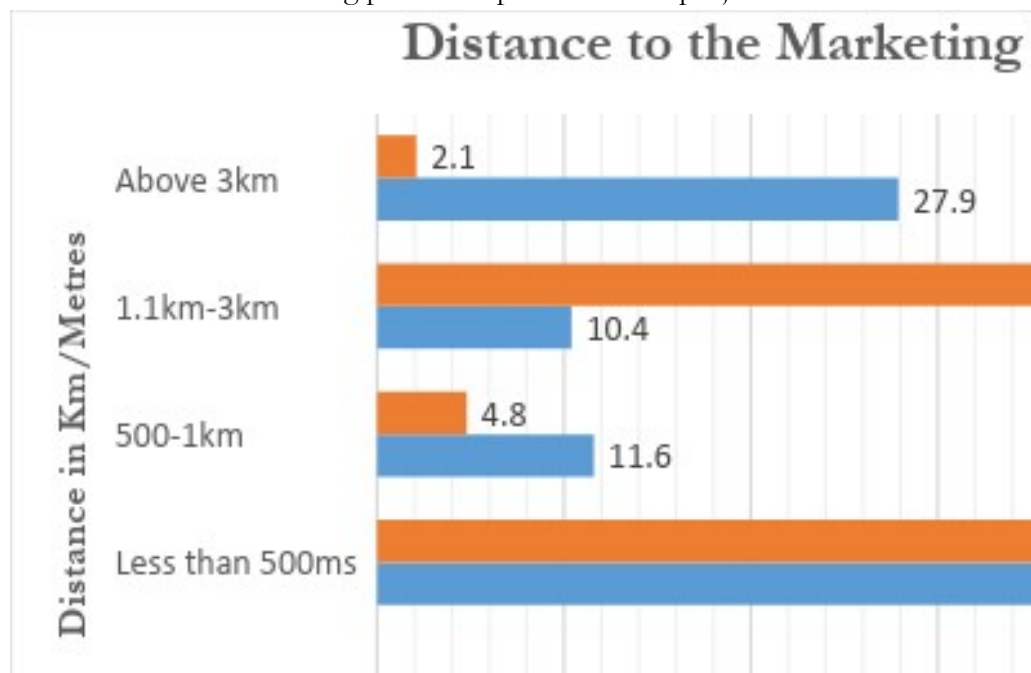


Figure 5-7: Distance to Marketing Point

The main marketing point for the items the PAPs sell include the local produce buyers who take about 37% of the produce from the directly affected PAPs and the bulk (59%) from the indirectly affected PAPs. This is followed by village markets that claim about 20-21% of the produce from both the directly and indirectly affected PAPs. The survey however notes that the cooperatives constitute a very small portion of the market (0.4% for the directly affected and 1.1% for the indirectly affected). The markets in the local trading centres account for about 12% amongst the directly affected and 16.5% amongst the indirectly affected PAPs, while border markets and far towns together constitute less than 10% of the market points for both categories of PAPs. *Table 5-15* shows the main marketing points for items.

Table 5-15: The main marketing point for items

Market	Directly affected		Indirectly affected	
	Frequency	Percent	Frequency	Percent
Local produce buyer	178	37	59	31.4
Village markets	105	21.8	38	20.2
Farm gate	98	20.4	53	28.2
Local trading centre	59	12.3	31	16.5
Boarder markets	12	2.5	2	1.1

Far towns	27	5.6	3	1.6
Co-operative store	2	0.4	2	1.1
Total	481	100	188	100

Households in the project area reported to encounter a number of problems when marketing their commodities including; poor quality products, low prices of the products, long distances travelled, few customers to buy the products, instability in prices, high transport costs, drought etc.

5.12. Assets Owned

Ownership of assets is a key indicator for a household's welfare. The most common assets owned by households in the project area include land, a house, radio, domestic animals, cell phone and a bicycle. Other assets owned include solar panels, motorcycles and television sets. Very few households owned a car. Figure 5-7 shows the assets owned by households in the project area.



Figure 5-8: Assets Owned by Households in the Project Area

5.13. Social Infrastructure

5.13.1. Education

Kabuyanda Sub County has limited education facilities. The Sub County has one secondary school, one Technical Institute and seven primary schools. The secondary school and the technical institute are both owned by the Anglican Church and the seven primary schools are all government owned. Similarly, Kabuyanda Town Council has two secondary schools and six primary schools, all of which are government owned. As a result, and following realisation of the limited educational facilities in the sub county, the government allowed the establishment of private schools to help to boost

education in the area. Six private schools have therefore been established in the sub-county. *Table 5-16* shows the number and type of schools within Kabuyanda.

Table 5-16: Number and type of schools in Kabuyanda

Government Owned Primary in Kabuyanda S/County	Government owned Schools in Kabuyanda Town Council	Private Schools in then Project Area
1. Kigabagaba Primary School	1. Kisyoro Secondary School	1. Kigabaga Primary School
2. Kabugu Primary School	2. St Thomas Aqinas Secondary School	2. Eden Primary School
3. Kagoto primary school	3. Kabuyanda Central Primary School	3. Beseri Primary School
4. St. Mary's Primary School	4. Kaiho Primary School	4. Bam Primary School
5. Kanywamaizi Primary School	5. Iryango Primary School	5. Future Holds Primary School
6. Rwabyemera Primary School	6. Kisyoro Primary School	6. Dubai Tech Kindergarten
7. Rwakakwenda Primary School	7. Nyampikye II Primary School	7. Kabuyanda Central Primary School
	8. Kaaro Karungi Primary School	

According to Isingiro District LGDPPII 2015/2016-2019/2020, the implementation of the Universal Primary Education Program by government has increased access to education in the district. However, despite registered successes of the UPE program, a number of challenges still exist. These include; low completion rates amongst the pupils; high drop out and repetitions rates; Head teacher/teacher and pupil absenteeism from the schools, weak capacity for school inspection which affects the quality of output; and inadequate resources for infrastructure and instructional materials, amongst others.

Government aided Primary Schools under the Universal Primary Education account for the greatest percentage (78%) of the total enrolment in the Project Area. It is also noted that the enrolment at Secondary school level is way below that at the Primary school which further confirms that limitations with completion rates.

Household heads were asked whether they had any children of school going age that were not in school, and 18.1% of them from the directly affected category and 2.7% from the indirectly affected group (control group) said that they did respectively. The major reason given was lack of school fees (*Figure 5-9*).

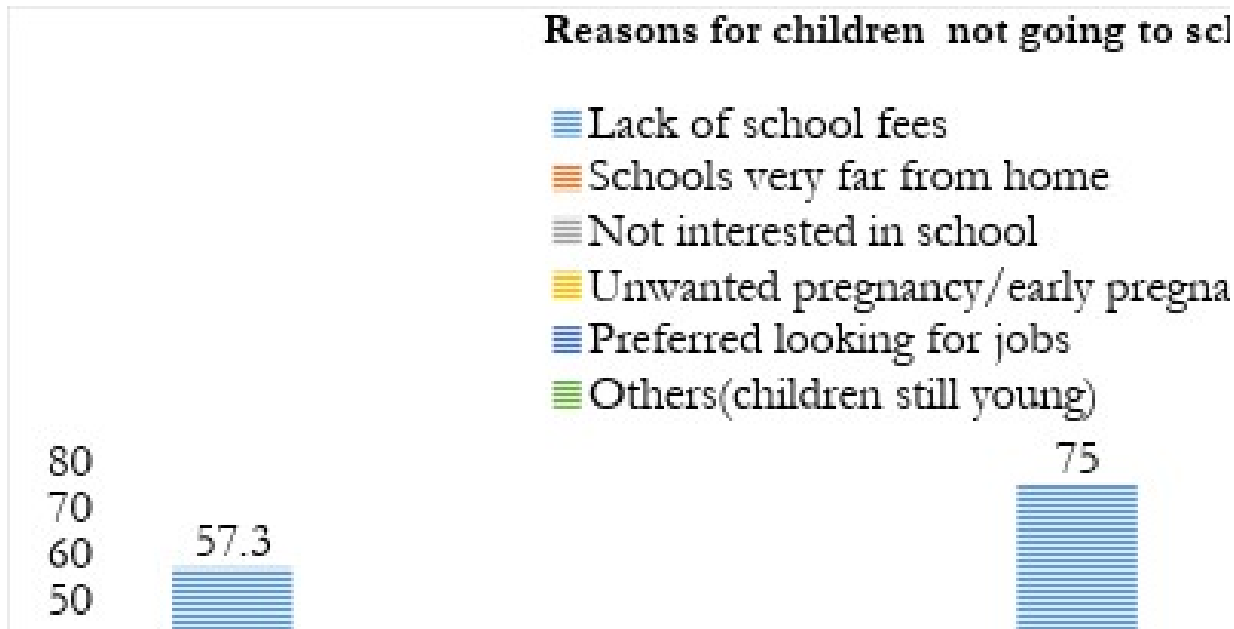


Figure 5-9: Reasons for not children not going to school

5.13.2. Health

5.13.2.1. Health Services and Infrastructure

In Uganda, public health services are delivered through Health Centre II, Health Centre III, Health Centre IV, General Hospitals, Regional Referral Hospitals and National Referral Hospital. There are also private non-profit health facilities and private profit making service centres throughout the country.

According to Isingiro District Health Management Information Systems (HMIS), Annual Analysis Report (July 2016 – June 2017), the District has 79 Health facilities, 4 Health Center (HC) IVs, 20 HC IIIs, and 55 HC IIs with 54 Government owned/public Health units, and 11 NGO owned Health Units Private Not for Profit Organizations (PNFPs) and 14 PFPs. The District has 32 PMTCT sites, 16 ART sites, 7 SMC sites and 30 TB sites.

Kabuyanda Town Council and Kabuyanda Sub County both have three health units. Kabuyanda Town Council has one Health Center IV and two HC IIs which include; Kabuyanda HC IV, Kisyoro HC II and Kyamosoni HC II while Kabuyanda Sub County has three HC IIs namely; Kabugu HC II, Kanywamaizi HC II and Rwakakwenda HC II. Health services in Kabuyanda Town Council and Kabuyanda Sub County are delivered through Village Health Teams (VHTs), HC IIs and HC IVs. The range of health services delivered vary with the level of the health facility. In all public health facilities, curative, preventive, rehabilitative and promotive health services are free.

HC IVs provide Out Patient Department (OPD) services, Laboratory services, Dental services, Immunization, Ultra Viral Therapy, Counselling services, Ultra Sound Scan services, Antenatal Care, Family Planning services, Nutritional Clinic, In-Patient Department, Deliveries, Operations, Safe Circumcision, Community Based services, Support and supervision of lower health facilities like HC IIs and IIs in their jurisdiction, Post Exposure Prophylaxis (PEP), and Emergency Systems.

HC IIIs on the other hand, provide basic preventative, promotive and curative care. They also provide support supervision of the community and HC IIs under their jurisdiction. There are provisions for laboratory services for diagnosis, maternity care and first referral. Kabuyanda Town Council and Kabuyanda Sub County lack HC III facilities to provide such services to the community thus leading to the congestion of the only HC IV in the area and the five HC IIs. They also provide out patient care, community outreach services and linkages with the Village Health Teams (VHTs)

The HC IIs in the Project Area, provide the first level of interaction between the formal health sector and the communities. HC IIs only provide out patient care, community outreach services and linkages with the Village Health Teams (VHTs). Kabuyanda Town Council has two HC IIs which include Kisyoro and Kyamosoni HC IIs while Kabuyanda Sub County has three HC IIs which include; Kabugu, Kanywamaizi and Rwakakwenda HC IIs.

Baseline survey results indicated that the majority (36.6%) of households amongst the directly affected people seek medical treatment and associated services from Health Centre IVs followed by 19.5% who seek services from Health Centre IIs, a relatively similar percentage (17.5%) obtain services Health Centre IIIs. Additionally, 17% go to private clinics and a small number estimated at about 9.1% seek services from drug shops. Very few of the PAPs (recorded to be 0.2%) seek services from other places like Mbarara Referral Hospital. Amongst the indirectly affected households, the majority (44.1%) seek medical treatment from the private clinics, followed by 21.8% who obtain services from health centres IIs. A relatively smaller percentage (18.1 %) was recorded as obtaining services from Health Centre IVs which is a contrast from the earlier category. An almost similar percentage (14.4%), obtains their services from Health Centre IIIs. Like was with the directly affected category, a small percentage of 1.1% treat themselves from drugs obtained from drug stores and an equally smaller percentage of 0.5% seek medication from other places or take referrals. The majority of the households reported to visit Health Centre IIs in case of an emergency.

The baseline recorded that the PAPs face a number of problems at the Health facilities ranging from; lack of enough drugs, poor service provision, inadequate staffing at the facilities, poor counselling services and in appropriate care by nurses and doctors towards patients.

The private sector plays an important role in the delivery of health services. The private health system comprises of the Private Not for Profit Organizations (PNFPs) and these are 11, Private

Health Practitioners (PHPs) and the Traditional and Complementary Medicine Practitioners (TCMPs).

5.13.2.2. Diseases Incidence

Just like it is in most parts of the country, malaria remains the most common disease affecting all age groups in Isingiro District and among the PAPs in the project area. The survey recorded the other diseases as including; respiratory infections, meningitis, urinary tract infections, candidiasis, eye infections, yellow fever, diarrhoea, rabies and HIV/AIDS etc. There was concern expressed by the PAPs that cases of malaria might increase due to construction activities that might lead to ponding of water. Results from the survey also indicate that children suffer from mostly cough and flu. It was therefore recommended that during the construction period, the contractor should endeavour to carry out watering of the area to reduce on the dust that may raise chances of other respiratory diseases.

Baseline results indicated that the directly affected PAPs, 19.1% of the household heads suffer from chronic diseases while 80.9% do not. Out of those suffering from chronic diseases, majority 42.1% suffer from other chronic disease like high blood pressure, ulcers, allergies, syphilis, 20% suffer from HIV/AIDS, and 14.7% suffer from Diabetes, 14.7% from Stroke, 4.2% from Heart disease, 3.2% TB, and 1.1% from cancer.

From the indirectly affected, results indicated that 6.4% of the households suffer from chronic diseases.

Amongst the directly affected group it is recorded that 9.6% of the households suffered death of a household member due to HIV/AIDSs, cancer, natural death, witchcraft, high blood pressure and malaria whereas in the Control group/indirectly affected, 13.3% suffered death of a household member due to cancer and malaria.

5.13.2.3. HIV/AIDS and STDs

Results indicated that 98.1% PAPs/directly affected have heard of HIV/AIDS, 99.6% know how it is contracted and 97.9% know how its avoided while from the control group/indirectly affected, all people surveyed had heard about HIV/AIDS, 99.5% know how its contracted and 99.5% know how to avoid it. These statistics imply that people are very much aware of the disease. This will help to reduce on the number of infections in the area during project implementation.

According to the directly affected people, 69.1% believe the cause of AIDS is irresponsible sexual behaviour followed by 27.4% through sharing of sharp instruments, 2.1% from mother to child transmission, 1.2% through blood transfusion and 0.2% don't really know what causes AIDS prevalence rate while according to the control group 100% of the people reported that the cause of AIDS is through irresponsible sexual behaviour.

Results of the directly affected group show that according to them the major STDs common in the project area include 50.9% HIV/AIDs, followed by 40.8% syphilis, 6.2% Gonorrhoea. However, according to the control group the majority reported that the major common STD is HIV/AIDS (67.6%), followed by 20.9% syphilis and 11.5% Gonorrhoea.

Among the referral health facilities utilized by the households are Mbarara Main Hospital and Kabuyanda HC IV. With regards to distance, according to the directly affected group, majority 49.7% travel 5-10km to the health centre from their home followed by 48.2% travel less than 5km and 2.1 % travel more than 10km from their homes to the health care clinics.

5.13.3. Energy

Kabuyanda Town Council and Kabuyanda Sub County are among the few remote areas in the country that are connected to the national grid. Several villages in Kabuyanda Town Council and Kabuyanda Sub County are connected to the 33kV lines and the power supplier is UMEME. During the project site inspection, it was observed that majority of the households connected to the national grid are mainly households in the trading centres like Kabuyanda trading centre, Kisyoro, Kanywamaizi among others while the households living on the hilltops are not connected. It was also observed that a few public facilities were connected to the grid like Kabuyanda HC IV, St. Paul Catholic Church among others. Electricity is mainly used for lighting.

Findings from the socio-economic survey showed that majority of the directly and indirectly affected households use firewood for cooking. A sizeable number in the indirectly affected group reported to use kerosene as shown in *Figure 5-10*.

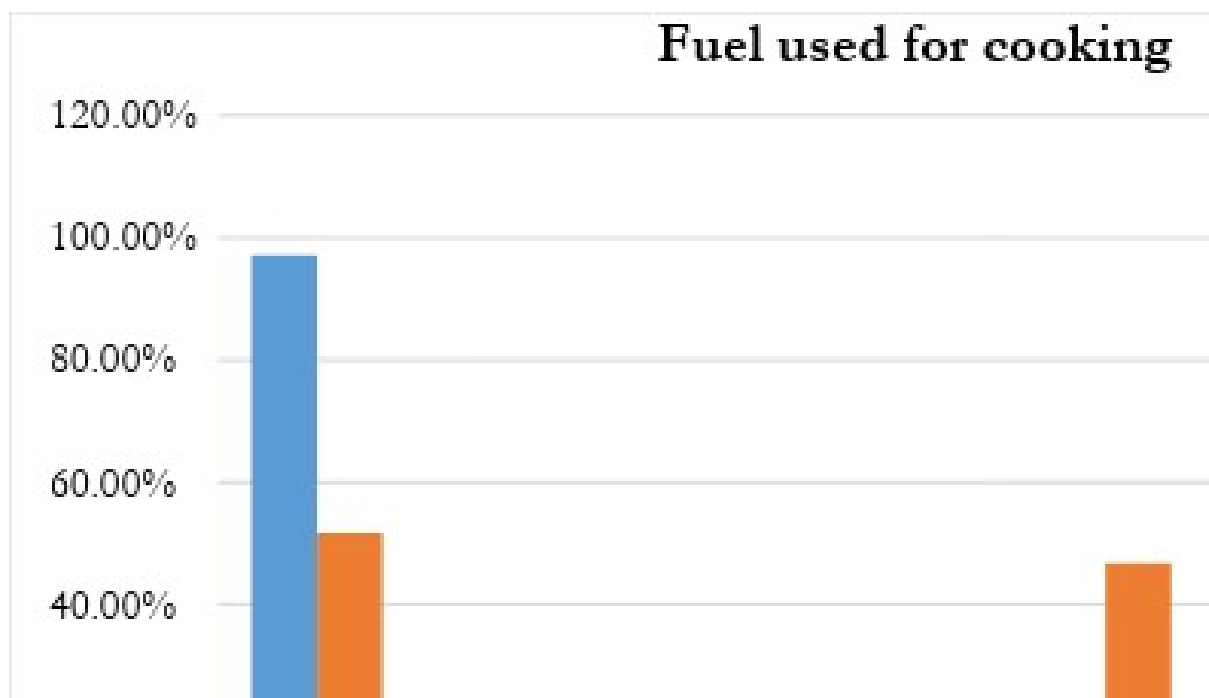


Figure 5-10: Fuel Used for Cooking

Also according to the directly affected people majority 79.2% use kerosene for lighting, 14.6% use solar, 5.5% use electricity and 0.6% use firewood while the Control group/indirectly affected group majority 66.7% use solar for lighting, followed by 22.2% who use kerosene and 11.1% use firewood.

5.13.4. Water Supply

Isingiro District is prone to drought and there is lack of adequate water for both human consumption and production. The average safe water coverage for the entire district is recorded at 35% which is far below the national standard of 66%.

According to the National Population and Housing Census 2014 – Isingiro District Profile, 12.3% of the households in the district have access to piped water while 6.1% access water through boreholes.

Kabuyanda Sub County depends mainly on water from Gravity Flow Schemes (GFS) and borehole water. The sub county has two Gravity Flow Schemes which include; Rwemango GFS, Rwabymera and four boreholes scattered all over the Sub County. Other sources of water for households in the sub county include springs and swampy water although the quality of the water from these two sources is poor in terms of taste, colour, smell and hardness.

Kabuyanda Town Council depends mainly on two streams flowing from Oruhenda from Kabuyanda Sub County and a Gravity Flow Scheme from Rutemba and Kisyoro supplying the town

council and other villages in the vicinity. These gravity flow schemes provide water to the communities at no cost. Initially, these gravity flow schemes were owned by associations, organized in small groups through which money was collected for maintenance purpose. These associations later collapsed due to poor management and death of strong leaders. During consultations with the local authorities, they requested the developer of Kabuyanda Water Resource Development Project to assist them in the maintenance of the gravity schemes and to build bigger water storage tanks.

The findings of the socio-economic survey show that the main sources of water for both directly and indirectly affected households are river/streams, unprotected springs, shallow wells, public boreholes, rain water harvesting, public stand posts and protected springs/wells.

In terms of distances travelled to the water source, the majority of the directly affected households (44.1%) travel up to 1.1km-5km to reach a water source while majority of the Control group 47.9% travel 501-1km to reach a water source. The majority of the households (75.3%) spend up to an hour to collect water from the water source.

5.13.5. Access to Credit Facilities

There are two major commercial banks and several Savings and Credit Cooperatives (SACCOs) operating in Isingiro District and these include DFCU Bank and Centenary Bank through which members of the public can keep their savings and access credit. The SACCOs provide savings and credit to the communities at slightly lower interest rates compared to commercial banks. These SACCOs include; OMIPA Cooperative Savings and Credit Society Limited, Ankole Diocese Millennium SACCO Limited, Kabuyanda Agricultural Savings and Credit Cooperative Society Limited and Girinka Mulenga Isingiro Savings and Credit Cooperative Society Limited.

Findings from the socio-economic survey revealed that 14.3% of the directed affected household heads have a bank account while only 4.3% from the control group/indirectly affected have a bank account. The results imply that during compensation, bank services will be needed near the PAPs so as to be able to get their compensation packages.

There are a number of cooperative societies that support members of the community especially the farmers. These include; Kabuyanda Dairy Cooperative Society Limited, Tukundane Fish Farm Limited, Kaiho Farm School Leavers Cooperative Society and Kigarama Commodity Marketing Cooperative Society Limited. These cooperative provide the farmers with advisory services, farm inputs like seeds and seedlings, chemicals, provision of high quality animals like Friesians, market for their products and loans at low interest rate and rent land to farmers like Tukundane Fish Farm Limited and Kaiho Farm School Leavers Cooperative Society.

5.14. Communication and Access to Information

Isingiro and Ntungamo Districts are connected to a number of telecommunication networks like MTN Uganda, Orange Uganda, and Airtel Uganda. Besides telecommunication, the district is also connected to satellite and free to air television and radio stations. Some of the satellite televisions that are accessible in the districts include; DSTV and Azam TV. Radio stations include; Radio West, Endigito radio and Ruhira Radio. Consultations with the communities revealed that majority of the people in the project area listen to Ruhira radio. In terms of telecommunication network, Airtel Uganda is the major network to which people in the project area are connected.

5.15. Access to and Dependence on Natural Resources

Land is the major natural resource accessed by households in the project area. The land is mainly used for crop farming, tree planting, animal rearing and fish farming. Other natural resources the people depend on are streams and river tributaries for water supply and fish farming. The communities also access firewood from Rwoho Forest Reserve. In addition, non-timber forest products such as medicinal plants, mushrooms, are accessed from Rwoho Forest Reserve.

5.16. Gender Relations

Consultations with the women groups revealed that women do not have much say as regards ownership of the property. The women further revealed that land and animals belong to the men while food crops belong to the women. A woman is entitled to land if it was given or inherited by her family or if she purchased it. The women emphasized that they should be involved and consulted throughout the project life cycles.

In terms of gender roles, women take up most of the workload compared to men. Women are responsible for tilling the gardens, collecting firewood, fetching water, cooking food, keeping the home clean, looking after children. Men are responsible for tilling the gardens, collecting firewood, grazing animals and earning income for the family. However, women are also major contributors to the family income. Girls are responsible for helping out their fathers with grazing animals, fetching water and any other chores assigned by the parents. Girls are responsible for helping their mothers with the household chores, fetching water and any other duties assigned by the parents.

Additionally, established forms of gender segregation and defined roles/responsibilities may affect women. They may also be inhibited or hindered from complaining about specific incidents (e.g., husbands abandoning affected family and eloping with different women after receiving compensation proceeds, gender based violence emanating from contested sharing of compensation proceeds, etc.). In some communities, women may have lower literacy rates and be less familiar with formal compensation processes.

Grievance redress committees will therefore include female staff and PAPs who are aware of and sensitive to the role of women in local communities and issues they face. The project will train personnel in the handling of gender-sensitive issues; The project's social development specialist (s) will receive training accordingly.

5.17. Non-Governmental Organisations / Community Based Organisation

Table 5-17 shows the NGOs that operate within the project area.

Table 5-17: Non-Governmental Organizations Operating in the Area

NGO/CBO	Activities	Target group	Area of operation
Compassion International	Support children from humble families through payment of school fees and scholastic materials	Vulnerable children /poor children	Kabuyanda
Kagera Integrated Rural Program	- Build water tanks	Families	Kikagati Sub County
Control groups	- Evaluations of the impact of the project	Host communities	Project host communities

5.18. Existing Government Programs for Livelihood

There has been some effort by government provide programs to improve livelihoods for the communities in the project areas. Table 5-18 shows the existing livelihood programs for communities in the project area.

Table 5-18: Existing Livelihood Programs in the Project Area

Livelihood Program	Activities	Target group
Youth Livelihood Program	<ul style="list-style-type: none"> - Government supports various youth projects - Youth are encouraged to form groups of 10-15 members - Government extends loans to youth and it is a revolving fund where youth have to pay back the loan in a period of 2 years. 	Youth
Uganda Women	- Government supports women through women's' groups by giving them loans.	Women

Entrepreneurship Program		
Special Grant for Person with Disabilities	<ul style="list-style-type: none">- Persons with Disability are encouraged to form groups through which the government can extend credit facilities to them.- The government gives the PwDs less than 3,000,000 UGX and the loan is not payable back to the government.	Persons With Disabilities

6. POTENTIAL PROJECT IMPACTS

6.1. Introduction

The proposed Kabuyanda IDCRP Project will have impacts on people and institutions in the project area. The impacts of the project on households will include both positive and negative impacts. This section of the report summarises the anticipated impacts from the project.

6.1.1. Estimated Potential Affected Population

The estimated number of asset owners that will be directly affected by the project through loss of property is 1,615 of which 15 are licensees on NFA land. Considering that the average household size in Isingiro district is 4.8 persons (5 persons), the estimated number of affected persons is 8,075. A breakdown of the population per component is presented below:

Table 6-1: Estimated Number of PAPs

Project Component	Number of Asset Owners	Number of Persons in a household
Main lines	884	4,420
Secondary lines	667	3,335
Access road	28	140
Management camp	21	105
Sub Total	1,600	8,000
NFA licensees	15	75
Total	1,615	8,075

6.2. Negative Impacts

The proposed construction of the water resources project will affect households and institutions by one or a combination of the identified categories of losses as below:

- Loss of residential houses and auxiliaries;
- Loss of land;
- Loss of crops;
- Loss of public property e.g. National Forestry Authority land and tree cover and educational facilities.

6.2.1. Impact on Land

Land that will be affected comprise of majorly NFA land (details are contained in an independent report attached as Appendix E). The impact on land for individual households will be through the laying of sections of the main and secondary irrigation pipes mainly along individuals/institutions

properties' edges. The smaller tertiary pipes will be laid along the boundaries of individual plots boundaries in the command area and will not require land acquisition. The breakdown is detailed in the table below:

Project Component	Location	Amount of Land
Dam construction, associated head works part of irrigation network (<i>Sections of Main Pipeline</i>)	Rwoho Forestry Reserve and along road reserve and edge of individual/institution properties	303 Ha
construction of irrigation networks (<i>Sections of Main Pipeline and secondary pipelines</i>), scheme offices, sanitation facilities, and weather stations	Along road reserve and edge of individual/institution properties	6 Ha

6.2.2. Impact on Structures

Different categories of structures will be affected by the main water lines such as residential (categorised as semi-permanent and permanent structures) pit latrines, bathrooms, fences/hedges, kitchens etc. Table 6-1 shows the type of structures that will be affected and their numbers. Sample pictures of the potential affected structures are provided in Figure 6-1.

Table 6-2: Estimated Affected Structures by Type

Type of Structure	Estimated Number
Residential structures	93
Commercial buildings	02
Auxiliary structures (Kitchen, toilets, bathrooms)	67
Animal houses	13
Graves	4
Gate	02
Enclosed mud and Wattle structure with a Local Domestic Polythene Water reserve Pit	4
Hedge fence	117
Perimeter wall	03
Concrete Water Tanks	02
Green house	01

Valley dam	02
Beehive	01
Total	311

Table 6-3: Number of PAPs and the intervention that is the source of the impact.

Type of Structure	Estimated Number of structures	No. of PAPs	Component
Residential structures	93	93	Main 1,2,3,4,5 & 6
Commercial buildings	2	2	Main 1
Auxiliary structures (Kitchen, toilets, bathrooms)	67	67	Main 1,2,3,4,5 & 6
Animal houses	13	11	Main 1,2 & 6
Graves	4	4	Main 4, Main 2
Gate	02	2	Main Line 2, Sec 2
Hedge fence	117	65	
Concrete Water Tanks	2	2	Main 2 Sec 1, Main 4
Enclosed mad and Wattle structure with a Local Domestic Polythene Water reserve Pit	4	2	Main Line1, Main line 2
Perimeter wall	03	03	Main 6
Green house	01	1	Main 5
Valley dam	02	2	Main 4,Sec 1
Beehive	01	1	Main 6
Total	311	255	



Semi-permanent affected structure

Permanent affected structure

Figure 6-1: Photographs of Potential Affected Structures

6.2.3. Impact on Public Infrastructure and Utilities

Institutions with property affected by the project are shown in Table 6-4.

Table 6-4: Institutions likely to be affected

	Name of Public Institution	Expected type of impact	Project Component
1.	Kabesekye Primary School	Land and crops	Main line
2.	Bukurungu Primary School	Land	Secondary line
3.	Kitezo Primary School	Land	Secondary line
4.	Kigarama International School	Crops and land	Main line
5.	Nyampichi Primary School	Land and trees	Main line
6.	Kabuyanda Primary School	Land	Main line
7.	Kabugu Primary School	Land and trees	Main line
8.	Kabugu Catholic Church	Land and trees	Main line
9.	St. Jude Catholic Centre	Land	Main line
10.	St. Mary's Primary School	Toilet, teachers' residences (2No), kitchen (2No), water tank	Main Line
11.	National Forestry Authority (NFA)	Land	Main line, camp, dam area, reservoir, office, workers' camp

6.2.4. Impact on Crops/Trees

Crops that will be affected by the project include bananas, coffee, seasonal crops such as maize, sweet potatoes, beans, vegetables, sorghum, millet, yams etc.

Fruit trees include mangoes, avocado, pawpaw and jackfruit. On the other hand, timber trees that will be affected include eucalyptus and pine trees as well as other trees like bush trees and *omukunyu*.

Figure 6-2 shows some of the potential affected crops/trees.

<p><i>Overview of a potential affected banana plantation in the proposed area for storage tanks</i></p>	<p><i>Maize plantation in the directly affected area for the storage tanks</i></p>
<p>Banana plantation affected in Luyonza village</p>	<p>Affected Eucalyptus trees at Ndani village</p>

6.3. Figure 6-2: Potential Affected Crops/Trees Impact on Cultural Sites and Assets

Around 4 graves and 3 religious institutions will be affected by the development of Kabuyanda Water Resources Project. Consultations with a few individuals indicated that they would prefer not to have their loved ones exhumed from the graves. Nonetheless, a budget for relocation of graves has been provided.

6.4. Loss of Access to Natural Resources

Natural resources that will be affected by the project include forest cover for NFA and grazing land such as shown in Figure 6-3 below. Land take for NFA land is estimated at around 130.354 acres (52.75 hectares).



Figure 6-3: Grazing land in the Project Area

6.5. Impact on National Forestry Authority (NFA)

Most of the project component such as dam site, reservoir, camp sites, access roads are located within NFA land, the Rwoho Forestry Reserve, a degraded forest partially restored with non-indigenous species (pines and eucalyptus). An independent assessment was conducted by MWE and NFA to carry out an inventory of all affected trees and licensees. The inventory recorded 15 licences comprising of 13 private trees farmers and 2 (Collaborative Forest Management CFM) groups. Details of the impact on NFA and proposed mode of compensation are contained in an Assessment Report attached as Appendix E. A summary of the impact on NFA is as shown below.

- Area affected: 302.47 ha
- Number of licensees: 15 (i.e. 13 private farmers and 2 CFM groups)
- Number of stems/trees: 133,131

6.6. Impact of the construction of the dam for the downstream water users

The construction of the dam is expected to affect water quality and quantity for the downstream users by trapping river-borne nutrients, dams might lead the growth of toxic algae which is harmful for the water users. These issues are addressed in the project's ESIA.

6.7. Positive Impacts from the Project

Despite having some of the negative impacts highlighted above, the proposed Kabuyanda Water Resources project is expected to bring positive impacts. If resettlement measures are properly implemented, the following positive impacts are expected:

- Very high irrigation potential which will increase crop production and levels of income.
- Provision of employment opportunities for local people.
- Development of skills among the project workers
- Improvement of access roads
- Tourism potential will be enhanced

7. MITIGATION MEASURES, VALUATION AND COMPENSATION FRAMEWORK

This section presents the valuation approach for asset and land improvement losses that was considered for compensation as well as the basis of valuation and rates used. It in addition discusses the eligibility criteria, entitlement matrix detailing what each category of eligible owner, user or business will receive in compensation.

7.1. Valuation Methodology in Uganda

The Uganda legislation provides specific guidelines in terms of valuation. Compensation following the acquisition of land in Uganda is based on the principle of equivalence, which is broadly assumed to be the financial equivalent of the asset taken. The asset is valued on the basis of market value.

In addition to the compensation derived from market value, the PAP is entitled to a statutory payment referred to as disturbance allowance of 15 or 30 percent depending on the duration given to the affected household to vacate the land. Valuation of semi-permanent structures and crops/trees is based on approved annually updated district compensation rates.

Compensation may also arise where land or improvements are affected but not necessarily acquired in the interest of the execution of works. This type of compensation is payable when the loss occurs i.e. when some right in property other than its acquisition are temporarily affected due to interference with the activities being conducted on it.

In Uganda valuation for compensation of land and improvements that are affected by Government projects was originally undertaken by the office of the Chief Government Valuer (CGV). This practice has changed in recent times and private valuers are now used to compile valuation assessment reports on behalf of Government. However, the CGV's office retained its oversight role in ensuring that standards are maintained, and government interests are duly protected. The valuation is carried out in consideration of established practices, policies, regulations and Ugandan laws.

The valuation of affected property for Kabuyanda Water Resources followed the following procedures:

7.1.1. Land Surveys

7.1.1.1. Collection of Initial Cadastral Data from Land Offices

A request for cadastral data from Department of Survey and Mapping in Entebbe was made to enable the Consultant acquire information about all the surveyed or titled pieces of land within the

proposed directly affected area however, by the time of reporting this information had not yet been received.

7.1.1.2. Land Boundary Surveys

Land boundary surveys were carried out to demarcate and determine the actual size of land to be acquired by the project. The survey was conducted by professional land surveyors.

Surveying and opening land boundaries helps to show ownership of property and to calculate the extent of the impact of land acquisition. Property owners and the LC I Chairpersons worked closely with the land survey team for purposes of transparency, confirming land boundaries and ownership of the affected property. Based on the survey data, a Strip Map of the properties and the land to be taken by the proposed project has been produced (*Annex 3.1*). Figure 7-1 shows the land survey steps /methodology during detailed RAP preparations.

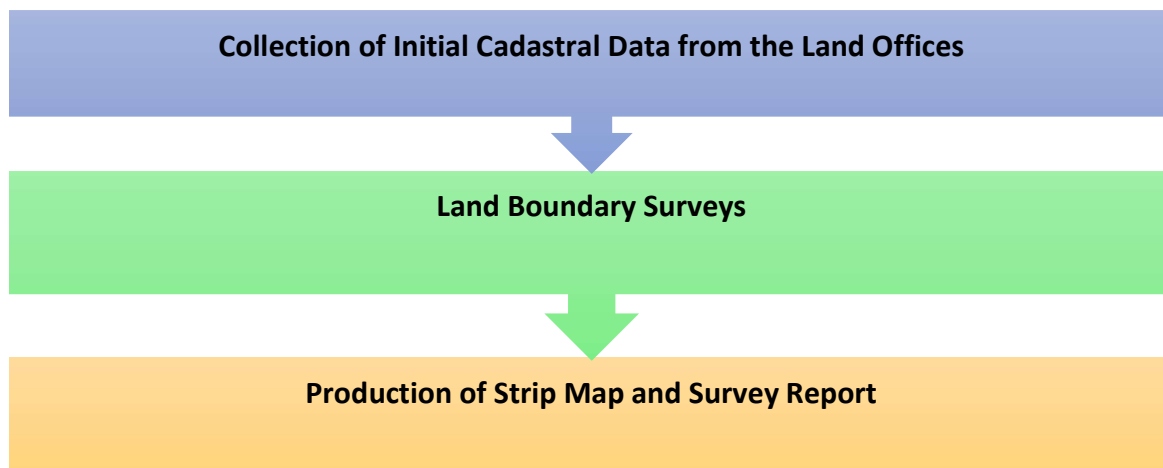


Figure 7-1: Land Survey Methodology

7.1.2. Preparation of a Valuation Methodology

For each valuation that is to be undertaken, a valuation methodology is prepared by a Valuer and submitted to the Chief Government's Office for approval. A valuation methodology for this project was prepared and submitted to the CGV. This methodology is as described below and was followed when assessing the affected property and persons.

7.1.2.1. Inventory and Registration of Affected Properties and Persons

In order to prepare for compensation and other resettlement benefits, it is imperative that a comprehensive asset and affected persons' inventory is prepared. The inventory specifies the type of buildings/structures, crops/trees, size of land and land tenure system affected.

At the affected land plots, the valuer took a careful assessment of the affected property. This was done through both measurement and enumeration of the affected property. Photographs of affected persons and property were taken during the assessment. Seasonal crops were not included in the assessment as these will be harvested by the owners before land take. The valuer worked closely with the affected persons and the local authorities. A Valuation Report has been prepared (*Annex 3.2*). Figure 7-2 shows the valuation methodology /steps during preparation of this RAP.

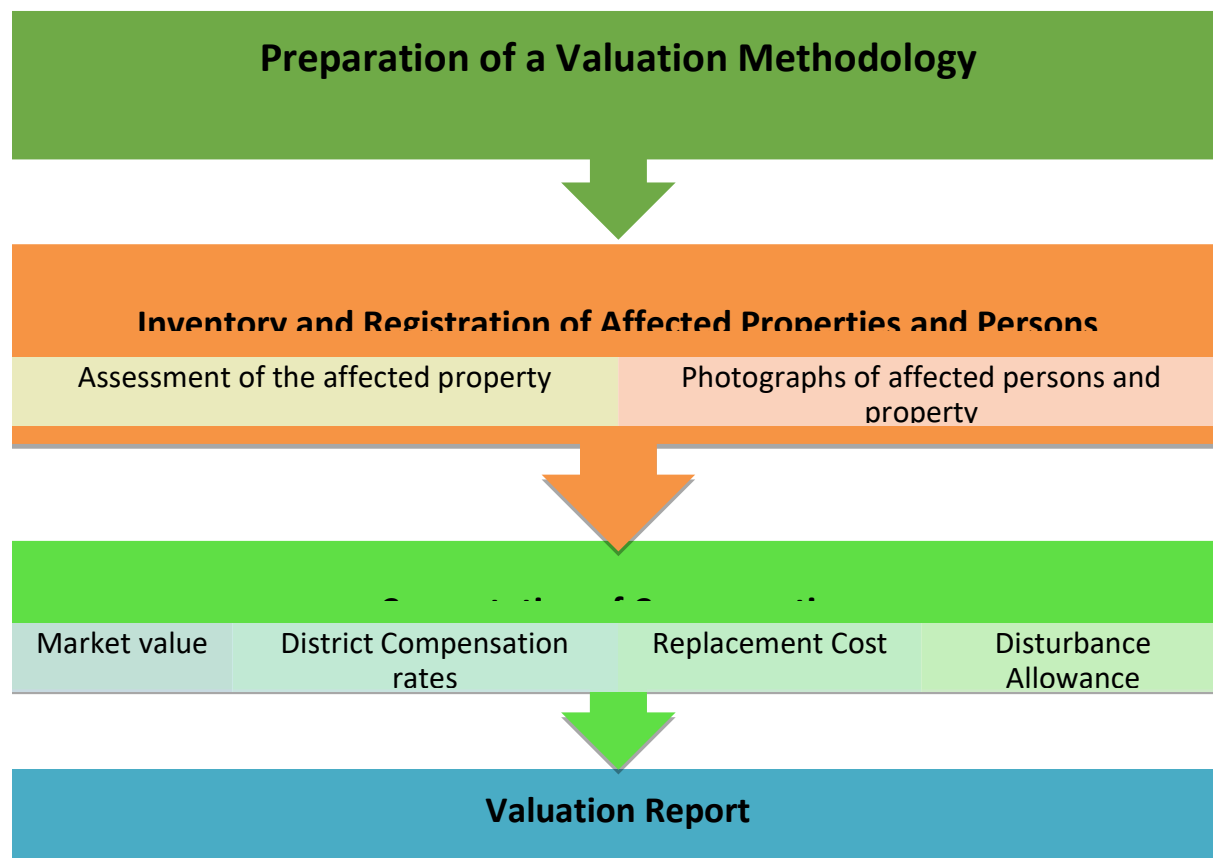


Figure 7-2: Valuation Methodology

7.2. Computation of Compensation

7.2.1. General Overview of Computation of Compensation

Compensation and its computation have continuously been hindering factors in the successful and timely implementation of Resettlement Action Plans in Uganda. More often, the majority of the grievances raised by affected persons are related to compensation packages. It is thus important to provide appropriate compensation approaches that meet both the Ugandan and World Bank requirements.

The valuation assessment is reached through a direct application of the applicable rates that are provided by the District Land Board for the Project Affected area and is submitted in draft to the CGV together with the strip map for review and comments. Following on from this, the final report is submitted to the Client through the office of the CGV for technical approval. The approved report becomes an official document for implementation of compensation payment.

Two categories of rates used in the valuation of assets for compensation are:

- 1) **Statutory rates** as provided for in the Constitution and the Land Act. These include rates for crops, economic trees, temporary structures and graves, and are determined by District Land Boards (DLBs) with input from the relevant technical professionals.

The District Land Board (DLB) develops the District Compensation Rates supported by the District Land Office (DLO) and other relevant District Technical Team. The developed rates are then submitted to the Chief Government Valuer's (CGV) office for review and approval. The CGV reviews and makes changes to the rates and sends them to the DLB. The rates are then adopted for implementation within the jurisdiction of the district. The District Compensation Rates can be accessed at the Districts or at the CGV's office. It is a statutory requirement that the rates are updated annually.

- 2) **Market related rates** derived from market analyses conducted by the office of the CGV or a delegated appointee who is a registered Valuer. These rates are specifically applied to land interests and permanent buildings. Factors considered during the assessment of these assets include market conditions, tenure systems, covenants, securities, and physical conditions of the asset.

Amounts calculated for compensation for this project were in respect of official district approved compensation rates for crops, trees, semi-permanent and temporary structures. Cost estimates for land were calculated at market value including transaction costs, permanent structures at replacement cost including transaction costs. The disturbance allowance depends on the duration to be given to the PAPs to vacate the land. For this project, a disturbance allowance of 30% has been considered. The upper limit for the disturbance allowance was considered for purposes of

calculating the budget estimates. The update of the valuation report will revise the disturbance allowance basing on the period of notice to vacate the land that will be given to the PAPs.

Table 7-1 provides a summary of valuation guidelines under national legislation and World Bank's O

Table 7-1: General Basis for Cash Compensation Calculations

Assets	Compensation under Ugandan Law	World Bank O.P. 4.12
Land	Valuation based upon market value of land plus a 15% or 30 % disturbance allowance including transaction costs.	Value is computed at full replacement cost
Permanent structure	Valuation on case-by-case basing on materials, and the replacement cost plus a 15% or 30% disturbance allowance.	Structural values are computed at full replacement cost. For cases of salvage value, there will also be no deduction for depreciation of assets in calculating the compensation rates.
Non-permanent House	Valuation based upon the official district approved compensation rates with type of materials and condition taken into account as well as replacement value plus a 15% or 30 % disturbance allowance.	Structural values are computed at full replacement cost. For cases of salvage value, there will also be no deduction for depreciation of assets in calculating the compensation rates.
Other Structures (graves, toilets, plate rakes etc.)	Valuation based upon the official district approved compensation rates with type of materials, condition and age taken into account plus a 15% or 30% disturbance allowance.	Replacement cost with additional facilitation for cultural rituals and relocation assistance.
Crops/Trees	Valuation based upon the official district approved compensation rates and count of trees and crops on the affected land/plot plus a 15% or 30% disturbance allowance.	Compensation at full replacement cost.

It should be noted that interests in assets may be vested in more than one person or entity. The valuation procedure must, therefore, be able to recognize each interest and allocate the appropriate value to these interests so that fair and adequate compensation can be demonstrated in terms of individual interest, and not merely the combined interests in an asset. The following general guiding principles are followed when valuing assets.

- a) Valuation of assets must separate the different interests in the asset under review. Each interest must be valued in terms of fairness and adequacy;
- b) Land must be valued separately from any improvements to facilitate the valuation of separate interests and allow for the establishment of consistent land rates across the project;
- c) Annual crops are not valued if sufficient notice is given to harvest the crops. In the event that crops cannot be harvested, or incidental damage is caused, standard rates for annual crops will apply for the assessment of damaged crops.
- d) The value of salvaged materials at the time of resettlement will not be deducted from compensation.

This RAP and the valuation of assets took into consideration the different principles. These were described in simple and understandable terms during the consultation meetings.

7.2.2. Valuation Basis Considered in this RAP

7.2.2.1. Land

1. Land acquisition for this project is categorised into the following: **Permanent land acquisition for long term occupation.** This covers land for the reservoir, water tanks, dam site, power house, camp sites, 5m for the main lines, 5m for the secondary lines and access roads.
2. **Easements for the way leaves** – This mainly covers 4m considered as buffer zones for the main lines.
3. **Temporary land acquisition for short term occupation during the construction phase.** Temporary land acquisition has not been considered in this RAP as the land for this purpose had not yet been earmarked. It is however recommended that for any future land temporary land acquisition, market rental values of the area be considered.
- 4 Along with salvage value, there will also be no deduction for depreciation of assets in calculating the compensation rates.

The assessment for land for this project was based on market value and in accordance with Section 77(1) (a) of the Land Act.

During the exercise, market surveys were carried out in consultation with the local people, LC I leaders, and District Land Board committee representatives to obtain information on land transactions in the project area. Where no market information was available in a particular village but available in the next village the latter information was used. Table 7-2 shows the basis for the land values per village.

Market survey data collected within the project area indicated an acre of land was purchased at 1 million to 40 million as shown in the table below. The land in Kabuyanda had the highest value due to its urban nature. The size of land taken has been multiplied by the market value of land to compute compensation for permanent land take. Land take for easements was assessed at 40% of the market value of an acre of land.

Table 7-2: Basis for Land Values per Village

Village	Land rate (UGX) per acre (Permanent acquisition)
Kamwosya, Rwamwijuka, Kigabagaba 2, Rwendongo	10,000,000
Kaburara, Kabeshekyere, Ruuyonza, Nyamiyaga, Muhanga, Rwabyemera, Bugarama 2, Kigarama, Iryango, Kashaka, Nyampikye 1, Ndani, Kisinga, Bwebwera 2	8,000,000
Kabugu I And Kabugu 2, Rwendongo I, Paragon, Rwemizo	4,000,000
Kagoto 2, Kagoto 1, Kagoto 3, Kanywamaizi 2, Kanywamaizi 4, Kaaro 1, Kaaro 2, Kaaro 3, Kinyara 1	7,000,000
Kabuyanda	40,000,000
Rutooma	15,000,000
Bugarama 1	12,000,000
Ruyonza	1,500,000
Bubare	5,000,000
Kabugu 2	6,000,000
Rukoni East	1,000,000

Cases of the registered land (in which case a land title should be available) could not be conclusively identified for purposes of this Valuation, but the owner would be well known and identified by the lawful tenants neighbours and local council authorities. The land is in that case assessed as customary, pending conclusive identification of the land (registered title) at a later date (possibly during project implementation). If the land is found to be registered, the extra cost for registration

shall be awarded to the subject registered owner as the title is made available or confirmed. Evidence of the registered land by the time of reporting had not yet been obtained from the Ministry of Lands, Housing & Urban Development, Department of Survey and Mapping, Entebbe.

The land in this case has been assessed as customary, pending conclusive identification of the land (registered title) at a later date, possibly during census update. If the land is found to be registered, the extra cost for registration shall be awarded to the registered owner when the title is made available or confirmed.

7.2.2.2. Crops and Trees

Estimates for compensation payable for crops and trees were computed using Mitooma District Compensation Rates 2016/17. Mitooma District compensation rates were used because Isingiro District had no current approved district rates. Section 59 of the Land Act provides for District Land Boards to compile or review District Compensation rates for their respective Districts.

A 10% value adjustment was added to bring the applied rates to current value and also to cover up any inflation gap.

Enumeration of crops was done mainly by head count. However, enumeration by area coverage was also used where appropriate. In both cases, the Valuation team was as much as possible cognizant of the normal agricultural standards.

Seasonal crops were not assessed with assumption that by the time the project construction starts, these crops will have been harvested.

7.2.2.3. Buildings & Structures

Assessment for temporary and semi-permanent structures was computed using District Compensation Rates while permanent structures were assessed basing on replacement cost. Sizes of the different structures were measured in square meters. A 10% value adjustment was added to cover up for escalating building material costs.

Replacement cost is defined as the present day cost of acquiring a substantially similar present day asset that could provide a similar level of service to the asset in question. Replacement cost is based on current market values and technology of the day.

Replacement cost values of permanent buildings and structures are derived from the project area in accordance with prevailing construction costs as governed by the following factors:

- Location in relation to urban centres
- Type and quality of materials used
- Workmanship and design of buildings

- Location of building in relation to sources of materials and labour
- Terrain of the building site and the possible amount of leveling involved
- Age of structure and condition of buildings

7.2.2.4. Disturbance Allowance

As guided by S.77 (2) of The Land Act, Cap 227 (Computation of Compensation), a disturbance allowance of 30% has been awarded on top of the assessed amount. This is on the assumption that the project affected persons will be given a notice of less than 6 months to give up vacant possession of the property. The disturbance allowance will be revised to 15% when updating the census in case the period to be given to PAPs to vacate the land will be more than 6 months.

7.3. Entitlement Framework and Eligibility Criteria

The involuntary taking of land, results in relocation or loss of shelter and loss of assets or access to assets or loss of income sources or means of livelihood, whether or not the PAPs must move to another location. The WB OP 4.12 Para 15 (a, b, & c) guidelines categorize those eligible for compensation and resettlement in three groups as shown below.

- (a) Those who have formal legal rights to land (including customary and traditional rights recognized under the laws of the country);
- (b) Those who do not have formal legal rights to land at the time the census begins but have a claim to such land or assets-provided that such claims are recognized under the laws of the country or become recognized through a process identified in the resettlement action plan (itinerant farmers or sharecroppers) and;
- (c) Those who have no recognizable legal right or claim to the land they are occupying.

WB OP 4.12 Para 16 states that persons who encroach on the area after the cut-off date are not entitled to compensation or any other form of resettlement assistance.

To achieve the objectives of WB OP 4.12 principles; PAPs covered under (a) and (b) above are to be provided compensation for land they lose, and other assistance; persons covered under (c) above are to be provided with resettlement assistance in lieu of compensation for the land they occupy or use, and other assistance, as necessary. All persons included in (a), (b) or (c) above are to be provided with compensation for loss of assets other than land if they occupied the land before the entitlement cut-off date.

7.3.1. Eligibility Criteria for Land and Developments

PAPs may be classified in one of the three groups listed above. The process involves review of tenure documents owned by occupants, interviews with households and groups in the affected area.

PAPs covered in (a) and (b) will be compensated for the land they lose, and other assistance ensuring that they are (i) informed about their options and rights pertaining to resettlement, (ii) consulted and provided with technically and economically feasible resettlement options and (iii) provided prompt and effective compensation at full replacement cost for loss of assets attributable directly to the project. Persons covered under (c) are to be provided with resettlement assistance in lieu of compensation for the land they occupy or use, and other assistance, as necessary, to achieve the objectives set out in this RAP, if they occupy or use the project area prior to the cut-off date.

PAPs were also considered eligible for compensation if;

- They have land within the directly affected area.
- They have developments/structures on the land within the directly affected area.
- They have crops or trees that will be affected by the project.
- Their crops are accidentally damaged during the valuation and survey exercises.
- They are affected during the fine tuning of the design and construction
- They are affected by opening up of access roads.

7.3.2. Eligibility for Community/Public Property

Eligibility may also be claimed collectively, e.g. as a community, farmer's group, religious group etc., when the assets lost are of communal property or use.

7.3.3. Vulnerable Groups

WB OP 4.12 (8) requires that particular attention be paid to the needs of vulnerable groups among those displaced such as those below the poverty line, landless, elderly; women and children, indigenous peoples and ethnic minorities.

All vulnerable households (See table 5-5) that are affected by the project will be eligible for additional/special assistance. Special/additional assistance will include assistance throughout the compensation and claim process. The assistance provided will seek to ensure that they rightfully get their compensation, they receive continuous explanations about the process and they will in addition get assistance with opening up bank accounts etc.

7.3.4. Eligibility for relocation

Eligibility for resettlement will consider the following categories of PAPs:

- All those affected households whose family house (principle place of residence) is located within the reservoir and any other sub-projects.

- Households whose land will be acquired by the project and the remaining piece is considered no longer economically viable.

7.3.5. Loss of Income

PAPs losing income will be considered for compensation for economic loss and livelihood restoration assistance.

7.3.6. Proof of Eligibility

During the valuation process, a great deal of care was taken to ensure that the rightful owners are recorded. Photocopies of certificates of titles, land sale agreements, confirmation from family members, neighbours and local leaders were also be considered for PAPs who had them. In addition, photographs of PAPs recorded were taken and shall be attached to each file during the implementation of the RAP. In the case of absentee PAPs during the assessment period, their documentation and photographs will be taken prior to payment of their compensation packages.

The RAP implementing team shall also consider several aspects for proof of eligibility and these will include the following; written evidence indicating that the person purchased the land (e.g. certificate of title, land sale agreements), received it as a donation or as a legacy or a successor. Additionally, documents proving succession grants, Letters of Administration in case of death of the owner, and Guardianship Orders in case of minors shall be accepted.

7.3.7. Salvage of Materials

PAPs shall be given a chance to salvage materials or other items from their land before construction activities commence. They will be given at least a 3-6 months' notice to move as provided by law.

7.3.8. Moving Arrangements

PAPs shall receive notice that they must relocate at least 3-6 months prior to the date they must move. Along with details of their entitlements, the process for receiving compensation and assistance will be explained by the RAP implementation team. They may be assisted with moving expenses and transitional assistance where necessary.

7.3.9. Cut-off Date

The entitlement cut-off date refers to the time when the valuation assessments of the land and assets/developments on the land and a census of all the affected people are complete. The general meaning of the cut-off date and its implication was disseminated to the communities during the public meetings held at the local government and village levels. Those were held with the relevant stakeholders and communities in 2017 but the cut-off date was disclosed as 15th October 2018.

7.3.10. Entitlement Matrix

Entitlement matrix proposes eligibility and payments for the losses triggered by the project (e.g. land, structures, trees, crops, etc.). Hence, based on analysis of the impact of the project and the criteria for eligibility, the following entitlement matrix is developed on categories of PAPs according to losses and their entitlement benefits. Table 7-3 shows the entitlement for the different assets.

Table 7-3: Entitlement Matrix

Land and Assets	Types of Impact	Person(s) Affected	Compensation/Entitlement/Benefits
Residential Land	Land used for residence partially affected, limited loss Remaining land viable for present use.	Title holder/ Owner	Cash compensation for affected land at replacement value 15% or 30% disturbance allowance Transfer of the land to PAP shall be free of taxes, registration, and other costs.
	Land and assets used for residence severely affected	Title holder	Land for land replacement or compensation in cash according to PAP's choice. 15% or 30% disturbance allowance. Relocation assistance (costs of shifting + allowance)
Buildings and structures	Partially or fully affected	Owner	Cash or in-kind compensation for affected building and other fixed assets at replacement cost 15% or 30% disturbance allowance. No deduction of depreciation value Right to salvage materials without deduction from compensation
		Rental/lease holder/squatters	Cash compensation for affected assets (verifiable improvements to the property by the tenant). Disturbance compensation equivalent to 2-3 months rental costs
	Entire structures are affected or partially affected	Owner	Cash or in-kind compensation 15% or 30% disturbance allowance. Right to salvage materials without deduction from compensation Relocation assistance (costs of shifting + transition

	Remaining structures not suitable for continued use		allowance)
		Rental/lease holder/squatter	Cash compensation for affected assets (verifiable improvements to the property by the tenant) 15% or 30% disturbance allowance. Relocation assistance (costs of shifting + allowance equivalent to four months rental costs) Assistance to help find alternative rental arrangements Rehabilitation assistance if required (assistance with job placement, skills training)
Schools, health facilities and other public assets (e.g. water provision facilities)	Loss structures, loss of land	Public institutions	Compensation to owners or operators as agreed by the management of the institutions.
Crops	Crops affected by land acquisition or temporary acquisition or easement	PAP (whether owner, tenant, or squatter)	Cash compensation. 15% or 30% disturbance allowance. Livelihood restoration assistance
Temporary Acquisition	Temporary acquisition	PAP (whether owner, tenant, or squatter)	Cash compensation for any assets affected (e. g. boundary wall demolished, trees removed, food and other crops) Ample notice for harvest of mature crops
Cultural assets (e.g. graves, shrines etc.)	Loss of cultural property	Community / owner	Cash compensation at replacement value Relocation assistance for moving of asset to a secure site.
Trees	Loss of trees	Private farmers / CFM groups on NFA land/squatters	Replacement of trees in another area within the forest reserve outside the project site.
Developments on	Loss of crops/trees	Licensees/squatters	Cash compensation for developments on the land.

land	and other eligible developments		
------	---------------------------------	--	--

7.4. Verification and Disclosure of Entitlements

7.4.1. Validation of Census Data

Before disclosure of the entitlements, the census data will need to be approved by the Chief Government Valuer's Office.

7.4.2. Verification, Disclosure of Compensation Principles and Unit Rates

Disclosure will be carried out by the RAP team responsible for implementing this RAP to enable the dissemination of the results of the land and property compensation assessment process. The LC I representatives, elected PAPs' representatives and representatives from the local government at both Sub County and district levels will be part of the verification and disclosure team.

Prior to the individual disclosures, the RAP team will hold meetings with the local government authorities with particular reference to the District Land Board, Community Development Officer, District Surveyor, Sub county/Town Council representatives and Area Land Committee representatives. The objective of the meetings will be to update them about the project, introduce the implementing team, introduce the project procedures and principles to be followed during compensation, elaborate their expected roles and responsibilities and to avail information about all the other stakeholders involved and their roles. In this meeting, the project schedule will also be discussed.

After the above meetings, the following disclosure meetings will then be carried out.

- The first stage disclosure meeting for the Grievance Resolution Committee team will be organized at a convenient place that will be decided upon after consultations with the local leadership and Grievance Resolution Committee members. This meeting will be a training session for the GRC members to understand the principles of compensation for the different types of loss and the processes of compensation, their roles and responsibilities in the resettlement process, etc.
- The second stage disclosure meetings will be at village level with individual households during which the results of the land and property assessment will be disclosed to them. The list of each affected individual will be made available at designated village notice boards; however, no amounts shall be indicated against each name. PAPs will be expected to point out any discrepancies in the property owners, neighbours, misspelt names etc.
- The third stage disclosure is individual meetings with each affected household/institution at an appropriate gazetted place. The proposed compensation for land and other affected

properties will be disclosed. Family members have to express their consent at this level as required by Section 40 of the Land Act especially with regard to family property such as family houses.

At this stage the following forms will be filled.

1. Verification form: This will be signed by the affected person, the LC I Chairperson, Community Development Officer and Town Clerk or representative.
2. Disclosure form: This will be signed by a number of people such as the claimant, the next of kin, LC I Chairperson, the Social Development Specialist, The Town Clerk or his/her representative among others.

Normally, there are high expectations in regard to the compensation packages. Based on the expectations of the PAPs, some may reject the compensation packages. Discussions with and explanations to the affected parties will be held by the implementing team.

The affected households/institutions will be free to ask any questions before signing the compensation agreements. The RAP implementers will make sure that the affected households have understood all the steps and requirements before signing the agreements. Openness and mutual respect will be key in this process. Affected parties will be provided with a choice of either cash or in-kind compensation to the extent practically possible.

7.4.3. Conclusion of Agreements or Attempt at Mediation

After verification that the affected property is properly captured / enumerated and after the affected persons/households / institutions confirm that the compensation and resettlement packages adequately reflect their lost assets and are acceptable to them, they will sign disclosure agreement forms. In case of family property or married persons, consent will be given by the spouse and the adult children (18 years and above) as required by the Land Act Sections 39 and 40.

However, if the affected persons do not agree with the disclosure outcomes, they will be requested to put it in writing or fill a grievance form so that their issues can be dealt with and matter closed later on. All relevant documentation such as land agreements, land titles, Letters of Administration in case of death of a property owner, valid identification etc. will be scrutinized and relevant land searches carried out with the relevant bodies.

If all the relevant documentation is found to be in order and the affected person is in agreement with the compensation amount, he/she will sign the consent forms. In the event, that the person is not in agreement with any aspect of the compensation, the PAP will lodge a grievance by filling a Grievance Resolution Form or by formally writing to the project team.

7.5. Procedures for Delivering Compensation Entitlements

The implementation team or compensation committee will draw up a payment plan to ensure that payments are not delayed.

The compensation packages and all relevant information will be verified by the RAP implementation team. The team will make sure that all relevant documents have been signed by the relevant parties i.e. PAP, spouses or children, LC I Chairperson, Area/Parish Committee representative etc. The team will also ensure that all relevant ownership documents are attached on individual payment forms. The team shall work hand in hand with the local authorities at village, sub-county and district levels.

In addition, all tenants/*kibanja* owners shall seek consent from the registered land owner to pass interest in land to MoWE as required by Section 34 of the Land Act. A consent form in regard to this shall be signed by the registered land owner and the tenants/*kibanja* owners. This form shall be witnessed by the Area Land Parish-/-Sub- County Committee member, and a Legal Officer.

The criteria of payment will be a lump sum paid to an individual PAP as a sum of the affected property owned on the affected land. Payment of compensation for all amounts more than Uganda Shillings Five Hundred Thousand (UGX 500,000/=) will be made through the bank. Money will be transferred directly from the developer's account to the affected persons account through Electronic Funds Transfer system (EFT). Bank cheques will also be another form of payment. However, for purposes of security, PAPs will be encouraged to use the option of Electronic Funds Transfer. Payments less than Uganda Shillings Five Hundred Thousand (UGX 500,000/=) will be paid directly in cash to the affected people. PAPs with compensation packages of more than UGX 500,000/= will be encouraged to open bank accounts in banks of their own choice.

Each person who will receive compensation will sign an acknowledgement receipt form for the payment. This form summarizes the compensation amount per item affected (land, crops, structures) plus disturbance allowance. The following parties shall sign the Compensation Payment Certificate: compensation recipient/claimant, Legal Officer, PAP's witness, MWE Representative and Area / Parish Land Committee representative.

The World Bank resettlement guidelines recommend provision of in-kind compensation or cash compensation where appropriate. Affected households were asked their preferred mode of compensation and the majority (88.4%) preferred cash compensation for their property. However, despite this preference, analysis will be made during implementation so that the most vulnerable households receive the most appropriate option for compensation. In addition, all those who will prefer in-kind compensation for their structures will have a chance to receive in-kind compensation.

7.6. Land Acquisition Process

7.6.1. Signing of Land Transfer and Land Mutation Forms

Registered landowners (leasehold/private land) sign land transfer and mutation forms and submit the original certificate of title of the affected land to MWE for subdivision and transfer of ownership of the acquired land.

Customary and *bibanja* land owners will sign land transfer consent forms to enable their land to be subdivided and transferred in the name of the government by issuance of a certificate of title.

7.6.2. Application for Land Title

The process of land titling starts immediately after compensation payment, signing of land transfer forms and mutation forms by the PAPs and surrendering of original certificate of title to the implementing agency (MWE). The individual subdivision survey files for each plot will be prepared and submitted to the district and national land and survey offices for processing deed prints. Thereafter, the applications for consent transfer and deed prints are taken to the Chief Government Valuer's office for stamp duty assessment which is then paid to Uganda Revenue Authority (URA). Thereafter, the deed prints, proof of payment of the stamp duty and endorsed transfer forms are taken to the respective district land registry offices to obtain the mutated and residual titles. At this stage, registration and title charges are paid to the land registry.

MWE is obliged to pay all transaction fees for processing of the subdivision and residual titles and to return all the residual titles to the land owners.

8. LIVELIHOOD RESTORATION MEASURES

8.1. Introduction

Land acquisition and resettlement can result in a temporary or permanent loss of income or livelihood (or reduction in livelihood status) by preventing an individual's access to his/her productive assets or place of employment. Cash or even 'in-kind' compensation for lost assets are often not sufficient to ensure that adverse livelihood impacts do not occur.

Thus, additional measures are often implemented to ensure that livelihoods do not decline, and to the extent feasible, are improved following completion of a land acquisition and resettlement process. These measures vary in type, scale, and time-scales and any programme of co-ordinated measures needs to be designed to fit the specific circumstances created by a land acquisition and resettlement process.

WB OP 4.12 Para (6c) states that displaced persons should be offered support after displacement, for a transition period. This is based on a reasonable estimate of the time likely to be needed to restore their livelihood and standards of living. It recommends the provision of development assistance in addition to compensation measures such as land preparation, credit facilities, training, or job opportunities.

In addition, WB OP 4.12 Para (2c) requires that displaced persons should be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.

This section provides for applicable income restoration measures for PAPs whose income will be affected or disrupted during the construction of the Kabuyanda Water Resources Project. The proposed income restoration measures will minimise the impact of income loss and will provide PAPs with quick means of re-establishing their livelihoods.

8.2. Eligibility

All PAPs will be eligible for livelihood restoration measures. However, the measures need to be targeted so that those who need most support can access it. The identification of the households mostly in need of the support is based on the criteria of:

- Areas which are the most impacted by the land take – water lines and reservoir tanks.
- Households losing structures
- Households losing crops/trees
- Vulnerable PAPs.
-

8.3. Proposed Livelihood Restoration Programs

The proposed livelihood restoration programs have been mainly based on the current livelihood activities, the imminent receipt of compensation packages, government plans and views elicited from stakeholders. Quite many stakeholders including PAPs proposed provision of employment opportunities, promotion of agroforestry and use of irrigation infrastructure among others.

Some of the existing government programs for improving livelihood were not considered since they were more aligned to provision of loans to youth, women and PwDs groups. This is mainly because previous experience indicates that many of the affected households most times fail to repay the loans and end up in a worse situation than before the project.

8.3.1. Land / Agricultural based livelihoods and support

This will be the major form of livelihood restoration. The rationale for the proposed measure is based on the current existing livelihood sources which are largely land based. All affected households will be eligible for this program.

One of the major aims of the project is to provide water for irrigation which is already a measure to improve livelihoods. Farmers' improved capacities to enhance productivity of their remaining lands will contribute greatly to the restoration and improvement of their livelihoods. Agricultural productivity can be enhanced through the following:

- **Provision of training in proper usage of irrigation infrastructure.** This will be continuous throughout the lifespan of the project.
- **Collaboration with the districts to intensify the provision of agricultural extension services to the farmers.** This will be a part of the district and sub county agricultural plans and should be continuous throughout the lifetime of the project.
- **Promotion of horticultural agriculture among the farmers through training.** This should be a part of the district and sub county agricultural plans and will be continuous throughout the lifetime of the project.
- **Promotion of agroforestry among the affected households and farmers in the area in general through basic training.** This will be a part of the district and sub county agricultural plans and should be continuous throughout the lifetime of the project.
- **Training in good agricultural practices and improved technology** including the use of modern technology to cultivate land more efficiently, organic pesticides and integrated pest management.

- **Provision of replacement ‘economic’ trees plus technical support** in maintaining them until reaching full productive potential.
- Note: All the Project Affected People are eligible to livelihood restoration Programme.

8.3.2. Access to employment opportunities during project construction

This program aims to provide access to employment opportunities to Project Affected Persons for the construction period. The affected families will not only get income but will acquire skills that can provide them with other opportunities in the future.

Able-bodied members of the affected households will be given first priority for recruitment during the construction phase. Given, the nature of the project, available jobs for the local people will mainly be in form of casual labour. It is expected that by employing them, they will be able to improve their income and this will facilitate their survival during the transition stage. Gender equity during recruitment of the PAPs shall be emphasized.

A list of project-affected persons especially those losing their will be availed to the contractor before construction commences. Interested households shall nominate at least 1 person from their households to be included in the job interviews and successful candidates will be employed by the Contractor or his Sub Contractors. The number of households provided with job opportunities will largely depend on the number of available opportunities. All affected households are eligible for this program.

8.3.3. Financial literacy and management training

Financial literacy refers to the set of skills and knowledge that allows individuals to make informed and effective decisions regarding money matters. It is important for affected families to make good decisions on money matters to avoid the misuse of the compensation money. Poor decisions regarding money can harm families and their livelihoods.

Financial literacy and management training will commence prior to the disclosure of entitlements and cash compensation. All PAHs will be eligible for financial management training. Training topics will include but not limited to the following:

- Basic numeracy skills
- Money management and basic household budgeting
- Savings and strategic cash management
- Investment analysis
- Access to low interest loans

The RAP implementing consultant will liaise with one of the rural banks i.e. DFCU and Centenary Bank to offer the financial management training. All affected households will be eligible for this program.

8.4. PAP Consultations and Disclosure

The proposed livelihood measures were disclosed to the PAPs during the community meetings and information disseminated about livelihood restoration programs. The methods of implementation of the programs were disclosed to the PAPs.

Delivery Mechanism

There are a range of options for delivery of transitional support and livelihood restoration measures; for example:

- MWE establishes a ‘Resettlement Unit’ and funds, manages and implement measures until the completion audit confirms that livelihoods have been restored;
- MWE establishes a ‘resettlement function’ with a manager and appropriate support staff to manage the work. Implementation would be by external partners (such as specialized consultancies and/or NGOs) contracted against specific scopes of work); and
- MWE enters into partnerships with organizations that are undertaking successful agricultural and business-based assistance programmes in the targeted areas, to expand their programmes and eligibility criteria to accommodate livelihood restoration measures.

8.5. Schedule of Implementing Livelihood Restoration Measures

Table 8-1 shows the timeframe and timing of implementation of the proposed livelihood restoration strategies.

Table 8-1 Timeframe for Implementing the Livelihood Restoration Measures

	Livelihood Restoration Program	Timeframe	Start date	Responsibility
1.	Land / Agricultural based livelihoods and support			
	Provision of training in proper usage of irrigation infrastructure	Continuous	After construction	MWE, District, Sub county, Town council
	Collaboration with the districts to intensify the provision of agricultural extension services to the farmers.	Continuous	Before start of implementation livelihood programs	MWE, District
	Promotion of horticultural agriculture	Continuous	At start of	MWE, District,

	among the farmers through training.		implementation livelihood programs	
	Promotion of agroforestry among the affected households and farmers in the area in general through basic training.	Continuous	At start of implementation livelihood programs	MWE, District, Sub County, Town Council
	Training in good agricultural practices and improved technology including the use of modern technology to cultivate land more efficiently, organic pesticides and integrated pest management.	Continuous	At start of implementation livelihood programs	MWE, District, Sub County, Town Council
	Provision of replacement 'economic' trees (saplings) plus technical support and training in maintaining them until reaching full productive potential.	1 month	At start of implementation livelihood programs	MWE, District, Sub County, Town Council
2.	Access to employment opportunities during project construction	Throughout the duration of construction	At start of construction	Contractor, District, Sub County, Town Council,
3.	Financial literacy and management training	1 month	Before commencement of compensation	MWE in collaboration with reputable banks.
4.	Transition Allowance	3 months	After displacement	MWE

9. GRIEVANCE REDRESS MECHANISM

9.1. Introduction

Taking into account the complexity of resolving disputes and grievances, PAPs have to be informed about various grievance redress procedures and of their right to appeal if not satisfied. This section therefore describes avenues through which PAPs can lodge complaints/grievances related to land acquisition and compensation. It describes stages and procedures to be followed during grievance management

A Grievance Resolution Mechanism (GRM) is a system by which queries or clarifications about the project are responded to, problems with implementation are resolved, and complaints and grievances are addressed efficiently and effectively.

It is best practice for the grievance mechanism to clarify at the outset who is expected to use the procedure, and to assure stakeholders that there will be neither costs nor retribution associated with lodging a grievance. The entire process (i.e. how a complaint is received and reviewed, how decisions are made and what possibilities may exist for appeal) will be made as transparent as possible by putting it into writing, publicizing it and explaining it to relevant stakeholders.

Different categories of grievances are expected during the different stages of the RAP. These are categorised into social, survey, valuation and legal grievances as shown below.

- Social: Family disputes, land disputes, deceased PAPs, minors, mentally ill, the vulnerable.
- Survey: Objection to computed land size of the affected land, omission of PAPs land, missing PAPs, and land tenure system complaints. These may require re-surveys.
- Valuation: Rejection of compensation package considered low value, PAPs missing in approved Valuation Report, property not captured during the initial assessment, discrepancy of information appearing on Strip map and Valuation report. These may require re-valuations or explanation to clarify issues.
- Legal: PAPs requiring legal assistance and advice in acquiring of legal documents.

This grievance procedure will not replace existing legal processes in Uganda but rather will seek to resolve issues quickly so as to expedite receipt of entitlements and smooth resettlement without resorting to expensive and time-consuming legal processes.

The general objective of the proposed grievance mechanism is to provide a mechanism/process to receive and respond timely to any complaints made about the Project from different stakeholders (including those from members of the communities, local businesses and other stakeholders) and to be the basis for developing appropriate mitigation strategies.

Specific objectives include:

- Establish a mechanism for responding to complaints in an understanding, transparent and culturally appropriate way (including language);
- Develop an accessible, transparent and efficient complaint procedure for people involved in and/or impacted by the Kabuyanda Water Resources Project;
- Facilitate effective dialogue and open lines of communication with the public;
- Manage expectations and/or negative perceptions towards Kabuyanda Water Resources Project;
- Establish a system of investigation, response and prompt complaint resolution;
- Minimize grievances regarding Kabuyanda Water Resources Project;
- Improve the Project social performance by evaluating complaints as a basis for taking remedial or preventive actions or developing responsive initiatives.

The grievance mechanism will ensure that all Project Affected Persons including vulnerable groups e.g. the elderly, women and the disabled can easily access help at no cost.

9.2. Grievance Resolution Mechanism

A simple Grievance Redress Mechanism (GRM) has been proposed to enable timely settlement of grievances to the PAPs. The grievance procedures will be anchored and administered at the local level to facilitate access, flexibility and openness to all PAPs. The grievance redress procedure ensures involvement with the respective districts and sub counties and Town Council officials and other key stakeholders and provides for record keeping to determine the validity of claims, and to ensure that solutions are taken in the most transparent and cost effective ways for all PAPs.

The grievance resolution mechanism will involve four stages as illustrated in Figure 9-1.

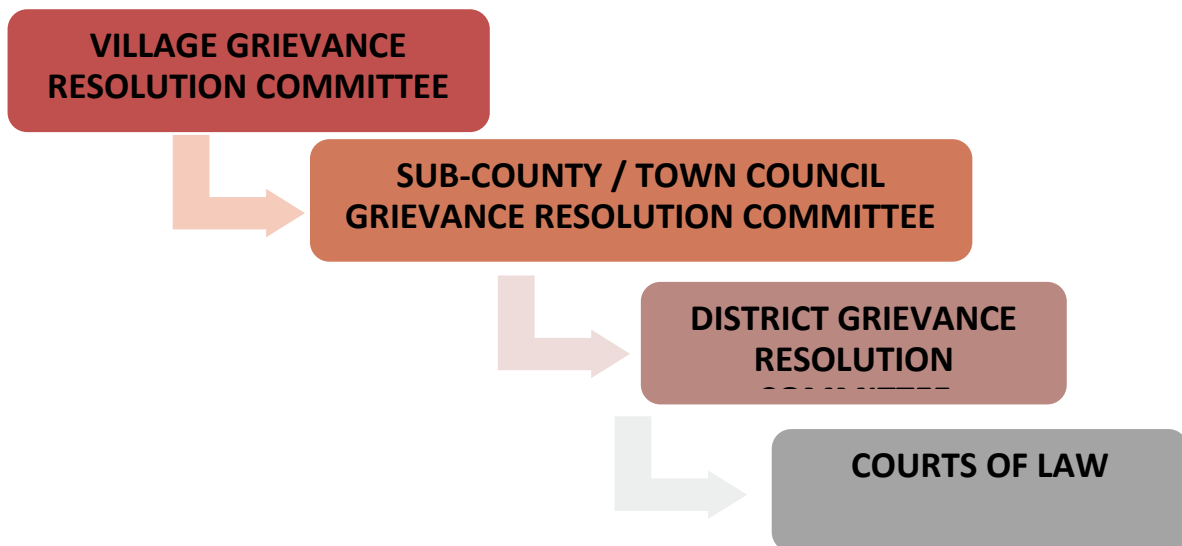


Figure 9-1: Grievance Resolution Stages

Stage I: Village Grievance Resolution Committees

Grievance Redress Committees will be constituted at local council one level (LC1) so as to ease accessibility for the PAPs. This committee will comprise of the following members:

1. Chairperson Local Council one (LC1);
2. An Elder;
3. Two democratically elected PAPs, (one female and male)
4. MWE Representative

The grievance resolution committees for each of the affected villages will be established. The respective committees will handle grievances from their villages. Complaints that cannot be handled at village level will be forwarded to the Sub Country GRC for further management.

Representative of community members on the GRC committees will be chosen by their respective communities during village meetings/community gatherings. The selection criteria will be jointly developed with the affected communities. The following could be used as a guide when selecting community members on the GRCs:

- The GRC member shall be one of the affected persons;
- The GRC member must be of good standing in the community, possess local knowledge and be willing to represent the interests of the PAPs; and
- The GRC member must be trustworthy and available to attend meetings whenever called upon.

The communities will evaluate these selection criteria to identify the person(s) best suited to represent them on the GRCs. Each Grievance Resolution Committee is expected to select a Chairperson and a Secretary.

Stage II: Sub County / Town Council Grievance Resolution Committees

Grievance resolution committees will be constituted at Sub County level (LC3). Kabuyanda Water Resources project falls in Kabuyanda, Nyakitunda, Kikagati Sub Counties, Kabuyanda Town Council and Rukoni East Sub County in Ntungamo District, thus, five resettlement committees at this level will be set up. The grievance resolution committees will comprise of the following members:

1. Chairperson Local Council III (LC3)
2. Sub County Chief/ Town Clerk;

3. Community Development Officer (CDO)
4. Area Land Committee Representative.
5. MWE Representative

Each Grievance Resolution Committee is expected to select a Chairperson and a Secretary.

Each Committee will be responsible for grievances in their Sub County or Town Council. The Sub County GRCs will work with the respective village leaders to solve a grievance. If the grievance is solved at this level, it will then be closed. However, if the grievance is not resolved, it will be forwarded to the District GRC for further management.

Stage III: District Grievance Resolution Committees

District authorities will participate in grievance redress thus the need to establish a grievance resolution committee at the District level. The grievance redress committees at the district level (Isingiro District) will comprise of the following members:

1. Chief Administrative Officer (CAO);
2. Chairperson Local Council V (LCV);
3. Community Development Officers;
4. District Land Officer;
5. Environmental Officer.

The District GRC will get background information as much as possible about the case from the Sub county/Town Council GRCs. If the District GRC solves the grievance, it will then be closed. However, if the parties fail to agree, the affected person can utilize the Courts of Law as a last resort to solve the grievance.

The Grievance Resolution Committees will utilize all avenues to solve grievances before the affected parties can go to the courts of law.

Stage IV: Courts of Law

The Government of Uganda (GoU) legislation allows a right of access to the courts of law by any person who has an interest or right over property. If the grievance procedure fails to provide a settlement, complainants can still seek legal redress in courts of law as a last resort.

9.3. Grievance Resolution Process

Through sensitization meetings, the PAPs, other community members and other stakeholders will be informed of the grievance management mechanisms in place for them to lodge their complaints and dissatisfactions. The procedure of resolving grievances is provided in Figure 9-2.

To lodge grievances, PAPs will fill a Grievance Resolution Form or write formally to the implementing agency. (*Sample of Grievance Form – in English is attached as **Appendix D***). The form will

also be translated into the local language i.e. Runyankore-Rukiga. Stakeholders who are illiterate will be assisted by members of the GRC to lodge complaints. The forms will be made available at the different levels of local government. The grievances will be received by the respective village leaders that is the LC1 for the respective project affected villages by the 5 Project Liaison Officer at sub-county offices who will register the grievances in a Grievance Log, give them reference numbers and categorize them. The Officer will evaluate the application and determine whether the issue can be handled administratively by the project technical team or whether the respective GRC has to meet over the matter.

For matters that require technical input/verification, the grievance will be forwarded to the respective officers for handling. All grievances will be verified in the presence of at least two members of the respective committees at the level the grievance is being resolved.

Communication of the outcome of the resolution will be provided in writing to the concerned parties or in a meeting and recordings of the proceedings taken and signed. Feedback of the outcome of the meetings or grievance resolution will be communicated verbally immediately after the resolution and, formally (in writing) within a week of the grievance resolution.

If the grievance requires the sitting of the GRC, this will be communicated by the Project Officer to the Chairperson of the GRC committee. The Chairperson will then mobilize the committee members and the concerned parties. The concerned parties will be mobilized within a week of determining the course of action for the grievance. The date and venue of the deliberations will be communicated to the relevant parties through the Chairperson of the Grievance Committee.

The frequency of GRC meetings will be determined by the number of grievances received.

It is however proposed, that initially, the GRCs sit at least once a month as a minimum in each Sub County to clear off any pending issues and to provide feedback to the project implementers.

It is foreseen that the frequency of these meetings will diminish as the issues to be addressed decrease and the meetings can then be scheduled on quarterly basis.

The guiding principle in addressing complaints is that the matters must be addressed as expeditiously as possible. The Legal Advisor on the implementing team will give guidance to cases that require legal input.

Where found practical, civil society organizations operating in the project area can be involved in the grievance resolution process. These will be involved in i) sensitizing PAPs about their rights to compensation, ii) reaching out to the communities, and iii) providing support to the disadvantaged youth through income generating opportunities. Selection of these NGOs will be based on their presence in project affected Districts and type of services they provide.

9.4. Inclusion of Women and other Vulnerable Groups

The GRCs will be sensitive to the needs of women and other vulnerable groups. For instance, meeting venues and times will take into consideration the limitations of such groups.

All aggrieved parties will have access to the grievance resolution team at no cost.

Women may also be inhibited or hindered from complaining about specific incidents (e.g., husbands abandoning affected family and eloping with different women after receiving compensation proceeds and gender-based violence emanating from contested sharing of compensation proceeds). In some communities, women may have lower literacy rates than men and be less familiar with formal processes.

Therefore, grievance mechanism committee to be established will include female staff who are aware of and sensitive to the role of women in local communities and the issues they face. The project will train personnel in the handling of gender-sensitive issues; preferably the social development specialist for MWE should have training in Gender-based violence.

9.5. Training

Members of the Grievance Resolution Committees at the different levels of local government will be trained in grievance management. The main topics of discussion will include GRC roles, managing gender based violence related cases ,channels of communication, guiding principles etc. The training will be conducted by the RAP implementing team.

9.6. The Grievance Database Management

- A database will be established and will be updated weekly by the Project Liaison Officer. The database will be designed to make it easy to track individual grievances, giving each grievance a reference number and will show deadlines for progress on grievance communications and resolution. The grievance database will specify the actions for each grievance and the status of the grievances. Where it has not been possible to resolve grievances to the satisfaction of both parties, this will be specified in the database and unresolved grievances assessed during third party monitoring. However, it should be noted that it is important that grievances are resolved at the earliest and be monitored regularly through internal project monitoring mechanism.

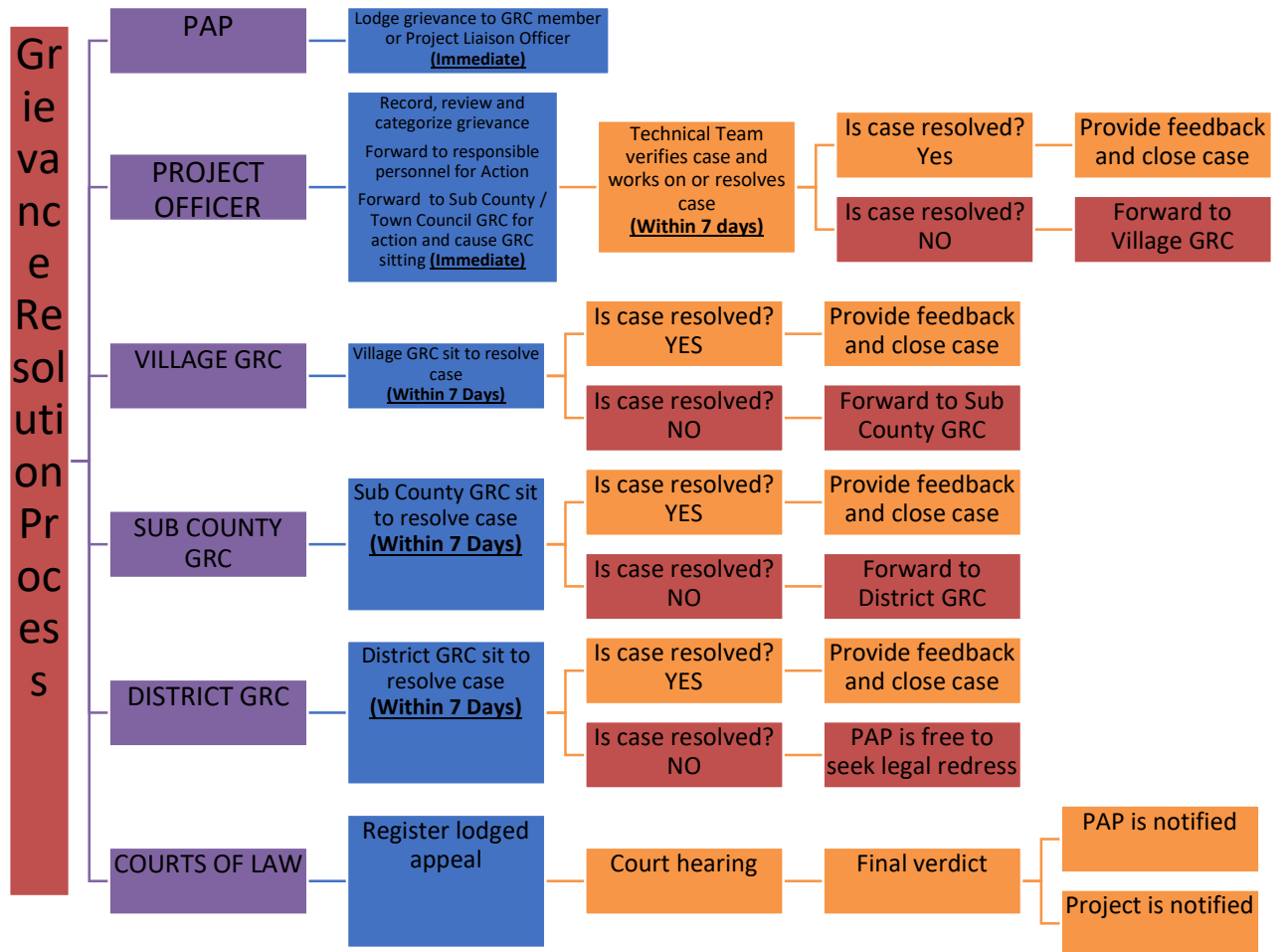


Figure 9-2: Grievance Resolution Process

10. RELOCATION / RESETTLEMENT

10.1. Introduction

This section describes aspects related to resettlement for physically displaced persons. World Bank Policy requires that wherever possible, the project should avoid or minimize the displacement of people by exploring alternative project designs. A total of 105 buildings used for residential purposes will be affected by the construction of Kabuyanda Irrigation Development and Climate Resilience Project.

The design team considered 2 alternatives for the dam location as a way of minimizing project impact and optimizing project objectives and design alternative 1 which has fewer impacts on settlements was chosen. It is however, recommended further that the design team explores other alternatives for the main and secondary camps to further reduce on the impact of physical displacement.

10.2. Resettlement Options

The residential buildings affected are majorly found along the main water pipes. Land acquisition took into consideration a 5m width for the main lines for permanent land take and 4 meters for the buffer zones. This is small strip of land and all affected households will be able to relocate their structures on the same piece of land by shifting it backwards (backward resettlement). The implication is that affected households will still maintain their social networks, there will not be social disarticulation and will still have access to other aspects that are currently a part of their life.

10.3. Relocation Schedule and Assistance

Relocation will be implemented after compensation of the affected assets. A notice to vacate the premises shall be officially written to the respective PAPs clearly providing ample time i.e. 3-6 months to relocate as provided for in the national laws. Construction works shall commence after PAPs have been fully compensated and rebuilt their structures. PAPs interested to salvage their materials shall be given a chance to do so.

The project will provide support to the households that will move their structures by constant monitoring of the construction activities of the activities to ensure that there do not meet any snags.

10.4. Integration with Host Communities

It is expected that all households with affected residential structures will remain on the same piece of land they are currently residing on and thus are not expected to have relocation and integration issues.

10.5. Moving Arrangements

The PAPs shall be given enough time to vacate the land after receiving compensation. The Government of Uganda laws provide for 3-6 months depending on the disturbance allowance given.

11. ORGANIZATIONAL ARRANGEMENTS

11.1. Introduction

This chapter highlights the different actors that will be involved in land acquisition and resettlement activities, their roles and responsibilities, capacities and gaps and proposals to reinforce institution capacities.

11.2. Organizational Arrangements and Procedures for Delivery of Entitlements

The RAP shall describe the process for organizational arrangements, responsibilities and roles. The RAP shall describe the approval processes for the various stages of the compensation work including the various actors and their roles and responsibilities.

This section will also spell out the actual process for delivering the entitlement including the roles for the different agencies and reporting formats (assets inventories management, providing compensation, undertaking relocation work, responsibility for income restoration, supervision, management and monitoring the implementation of land acquisition and resettlement etc.). The consultant will analyze the institutional capacities, identify gaps and recommend an institutional strengthening strategy and/or formulation and training of resettlement units in the executing agencies.

11.3. Actors Involved

A number of actors will be involved in the overall implementation of the resettlement and compensation aspects for this project, either by way of their mandate or because of the direct impact of the project on their areas of jurisdiction. These include:

- Ministry of Water and Environment, Water for Production Department (MWE-WFP);
- Ministry of Agriculture Animal Industry and Fisheries (MAAIF);
- The Ministry of Lands, Housing and Urban Development;
- Ministry of Gender Labour and Social Development (MGLSD);
- National Environment Management Authority (NEMA);
- Local Governments;
- Non-Governmental Organizations and Civil Society Organizations;
- Project Task Team;
- Grievance Resolution Committees;

- Private Sector;
- Project Affected Persons (PAPs).

11.4. Procedures and Responsibilities

MWE will be the overall implementing agency for this RAP. It will be responsible for the coordination of the different institutions and actors involved in the implementation activities. MWE may delegate the day to day running of the RAP activities and their implementation by procuring a Consultant firm. The Consultant firm will have the required skills, experience, adequate and relevant personnel to successfully support the implementation the RAP activities. In co-ordination with the MWE, the Consultant will directly work with the Local Government authorities, the Grievance Committees and the Project Affected Persons (PAPs) under the support of MWE. The Office of the Chief Government Valuer in the Ministry of Lands, Housing and Urban Development will be responsible for approving the valuation reports. Table 11-1 shows the different roles and responsibilities of the different actors in the planning and implementation of the RAP while figure 11.1 shows organisational organogram between the different entities.

Table 11-1: Organisational Roles and Responsibilities of the Different Actors in Land Acquisition and Resettlement

Ministry / Authority	Roles & Responsibilities
Ministry of Water and Environment, Water for Production Department (MWE-WFP)	<p>MWE will be the implementing agency of resettlement and compensation aspects of Kabuyanda Water Resources Project. It will implement the RAP through contracting the private sector and its personnel. Below are the roles and responsibilities of MWE:</p> <ul style="list-style-type: none"> ● Overall implementation of the RAP; ● Coordination of all RAP related activities among the different stakeholders; ● Ensure that compensation and resettlement activities are consistent with Ugandan legislation and World Bank Social Safeguard policies; ● Review all project documentation and ensure they meet all legislative requirements and ensure safe custody of all information and documentation relevant to the RAP; ● Provision of necessary assistance to affected persons during the land acquisition and resettlement process and ensuring that vulnerable people are appropriately compensated; ● Appoint an agency for external monitoring of activities; ● Appoint a Consultant for preparing and implementing the RAP; ● Publish and disseminate information on the cut-off date; ● Participate in grievance resolution of raised complaints from the PAPs and other stakeholders;

	<ul style="list-style-type: none"> ● Provide internal monitoring of the land acquisition and resettlement activities' ● Review whether all categories of impacts are being adequately compensated for and all categories of affected persons can at least restore their standards of living after resettlement; ● Budget, allocate and disburse funds for land acquisition and resettlement; ● Provide regular updates to project stakeholders;
	<ul style="list-style-type: none"> ●
Ministry of Agriculture Animal Industry and Fisheries (MAAIF)	<ul style="list-style-type: none"> ● Provision of advisory services to the livelihood enhancement programs and the irrigation component of the project. ● Monitoring of livelihood restoration programs.
The Ministry of Lands, Housing and Urban Development	<ul style="list-style-type: none"> ● The Ministry through the Chief Government Valuer (CGV) in liaison with Isingiro District Land Board is responsible for providing approved updated compensation rates for use in the computation of compensation packages. ● The Office of the CGV has a responsibility to approve all valuations. ● Furthermore, the CGV's office is also involved in resolving public complaints and disputes that arise from valuation for land acquisition and compensation payments. ● The Department of Lands in liaison with the District Land Board as well as the Surveys and Mapping Departments implements the registration and transfer of interests in land.
Ministry of Gender Labour and Social Development (MGLSD)	<ul style="list-style-type: none"> ● Monitor to ensure that the rights of minorities including women, orphans and other vulnerable groups are prioritized or protected and also monitor issues related to livelihood.
National Environment Management Authority (NEMA)	<ul style="list-style-type: none"> ● Monitoring of compliance of all environmental issues including social impacts on people that result from land acquisition. This will mainly be done through Isingiro District Environment Officers.
Uganda Land Commission (ULC)	<ul style="list-style-type: none"> ● The Uganda Land Commission (ULC) holds and manages land in Uganda vested in or acquired by the Government of Uganda. Leases on public land are granted by the ULC. When the Project has acquired the land for the development of project infrastructure, the land will be transferred to the ULC.

Office of the Administrator General	<ul style="list-style-type: none"> • The Office of the Auditor General is vital in issuing legal documents such as Letters of Administration, Guardianship Orders etc. which are sometimes necessary during Resettlement.
The Local Government Authorities	<ul style="list-style-type: none"> • The primary responsibility of the Local Government (District and Sub County) will be to review the progress of the land acquisition and resettlement implementation and make decisions regarding actions to solve the problems and designate officers to carry out these actions. • All districts have five levels of local councils (LCs) however, only 3 levels are active i.e. LC V, LC III and LC I. Local Councils are responsible for local policy matters, economic development, resolving local conflicts and providing orderly leadership. • LC Is and LC IIIs interact directly with the affected population. These councils will thus be able to assist during the identification of rightful property owners, and resolving compensation grievances during the resettlement and compensation process. <p>District Land Board (DLB) will:</p> <ul style="list-style-type: none"> • Facilitate the registration and transfer of land ownership; • Compile and maintain a list of compensation rates payable in respect of crops, buildings of a non-permanent nature and any other thing that may be prescribed. <p>District Land Office (DLO) will:</p> <ul style="list-style-type: none"> • Provide technical services to the DLB through its own staff to facilitate the Board in the performance of its functions. • Will be key in processing residual titles for the affected persons. <p>Area Land Committees (ALCs) will:</p> <ul style="list-style-type: none"> • Determine, verify and mark the boundaries of all interests in land that is subject to an application for certificate of customary ownership or in grant of freehold title. • Assist the DLB in an advisory capacity on matters relating to land including ascertaining rights in land boundaries and disputes.
Private Sector entities	<ul style="list-style-type: none"> • RAP preparation and implementation will entail involvement of private sector consultants for various planning and implementation activities, including the assessment and verification of assets, monitoring and evaluation of compensation and resettlement activities.

Grievance Resolution Committees (GRCs)	<ul style="list-style-type: none"> ● Participate in resolution of grievances related to land acquisition, compensation and resettlement. ● Mediation between implementation agency and affected communities. ● Monitoring of land acquisition, compensation and resettlement activities. ● Mobilization of projected affected persons with grievances. ● Participation during the verification of PAPs and disclosure of entitlements.
Project Affected Persons (PAPs)	<ul style="list-style-type: none"> ● Cooperation with and support to the project team. ● Availability for the activities. ● Engage in project consultation forums. ● Participation in measurement and sign-off of assets. ● Participation in monitoring & evaluation of land acquisition and resettlement activities.
Non-Governmental Organizations and Civil Society Organizations	<ul style="list-style-type: none"> ● Monitoring of land acquisition and resettlement activities. ● Participation in the implementation of livelihood programs. ● Witnessing the land acquisition process.
Project Task Team	<ul style="list-style-type: none"> ● Monitoring of land acquisition and resettlement activities.

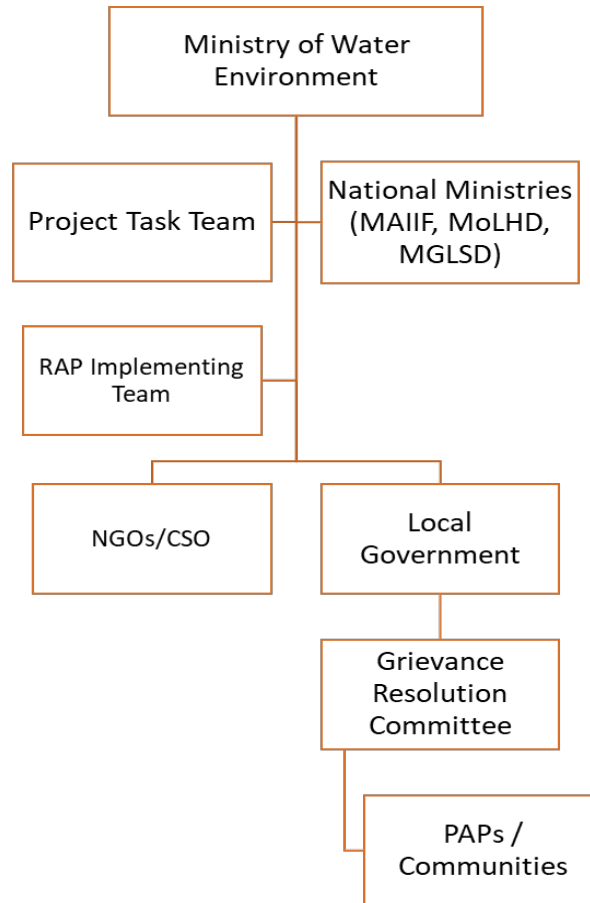


Figure 11-1: showing the different relationships between the different agencies.

11.5. Institutional Capacities

11.5.1. Ministry of Water and Environment, Water for Production Department (MWE-WFP)

The Water for Production department of the Ministry of Water and Environment directly oversees projects that are geared towards agriculture enhancement. It is therefore instrumental in guiding in relation to policy for operation and maintenance for sustainability.

There exists a Safeguard Team at the Ministry of Water and Environment with 15 persons from the Department of Water for Production. These individuals are made up of Environmentalists, Sociologists, Surveyors, Agriculturists and Land use experts.

Furthermore, the agency has substantial experience in undertaking RAP implementation activities gained through a number of water for production projects implemented in the past years. The WFP has decentralized its operations to regions, thus enhancing its capacity to handle activities in a more efficient and effective manner. It is in position to oversee the overall implementation of the RAP.

11.5.2. The Ministry of Lands, Housing and Urban Development

The Chief Government Valuer (CGV) is central in the RAP implementation process at the Central Government level and is mandated to approve all valuations in the country for public interest. In addition, there are more than 100 districts in the country that need the services of the CGV's office in relation to the approval of the compensation rates annually. The office of the CGV has the technical competency to participate, guide and regulate the valuation process. However, it is often constrained by the limited human and other resources such as office space and vehicles to facilitate inspection and verification of the valuation process before approval.

This often affects timely approvals of the Valuation reports and any re-assessments that may be required during the implementation of the RAP. These delays tend to trigger rejections of the compensation packages by the affected people that generally result from economic inflations and or increase in the value of the initially assessed properties. In addition, other transactions such as new bank mortgages, change in ownership etc., which require additional administrative procedures often take place and lengthen the compensation process.

There are also human resource capacity challenges within the Ministry of Lands, Housing and Urban Development (MLHUD), where search statements must be obtained prior to compensation of affected registered land, to prove ownership. Although the ministry has recently computerized land registration, the limited staffing and other resources such as office space, often delays the response to the requests to search statements. This leads to further delays in the land acquisition process.

11.5.3. Office of the Administrator General

The office of the Administrator General is also at the core in the compensation process. It is a common phenomenon that original owners of the properties are deceased and their estates are managed by other administrators. However, obtaining official letters of administration is a lengthy process, which is further delayed by limited personnel capacity in the office of the Administrator General and the court processes. The delays in processing and obtaining these documents before compensation often affect timelines in the land acquisition Process.

11.5.4. Other Ministries involved in the Execution of RAP Activities

The situation of low capacities is experienced by several other ministries. There are normally no specific offices assigned the role of land acquisition and resettlement. The ministries therefore sometimes rely on the private sector for these services. As result, monitoring of the different aspects of the RAP becomes very minimal or almost non-existent from the relevant ministries.

11.5.5. The Local Government Authorities

One of the main tasks of local governments is to provide annual compensation rates. However, due to factors such as lack of budgets, the compensation rates are normally not updated. This therefore delays the process of finalising the valuations.

Like many other local government institutions, Isingiro District has limited capacity to update compensation rates annually. In such cases the use of rates for the neighbouring district as recommended by the CGVs Office is acceptable.

In addition, there have not been many land acquisition projects to provide the relevant experience at both the district and sub county levels.

11.6. Institutional Capacity Reinforcement

11.6.1. National Ministries – Project Task Team

A project task team of selected technical staff at national level from the relevant Ministries will be instituted to participate in the provision of the required services to Kabuyanda Water Resources Project. The chosen technical personnel will have knowledge in land management, economic development, land use planning, agricultural development, environmental protection etc. Capacity building and training of appointed staff will be necessary. The training will include but shall not be limited to the following:

- Clarity on roles and responsibilities;
- National legislation on land acquisition and resettlement;
- International Policies on land acquisition and resettlement;
- Monitoring and evaluation indicators;

- Etc.

The training will be in form of a workshop. In addition, there will be continuous knowledge transfer from the more experienced personnel to the less experienced personnel.

11.6.2. Local Governments

Local governments will be more involved in the planning and implementation of land acquisition activities and will require more support in terms of training and physical facilitation. The contents of the training will be similar to the one suggested for the national task force. The RAP budget will include the training and support in terms of logistics to the local governments. Members of the Grievance Resolution Committee will also be included in the training.

12. BUDGET AND FUNDING ARRANGEMENTS

12.1. Introduction

This section presents an estimate of the costs for the compensation of the potential affected property. An update of the costs will be provided after the census update basing on the revised designs that will take into consideration avoidance or minimisation of the impact on structures.

12.2. ESTIMATED TOTAL COMPENSATION BUDGET

Cash compensation for land developments is estimated at UGX **1,453,511,217** (USD 392,841) while the estimated RAP implementation budget is UGX 3,656,451,5834 (USD 988,230). Thus, the total is UGX 4,779,413,210 (USD 1,291,733).

Table 12-1 shows a breakdown of the livelihood restoration budget.

Table 12-1: Livelihood Restoration Budget

Livelihood strategy	Estimated cost (USD)	Assumptions
Land / Agricultural based livelihoods and support		
Provision of training in proper usage of irrigation infrastructure.	25,000	1 training per sub county @ 5000USD (4 sub counties & 1 Town Council)
Collaboration with the districts to intensify the provision of agricultural extension services to the farmers.		To be part of the local government planning and relevant ministry
Promotion of horticultural agriculture among the farmers through training.		Part of the local government planning and part of the other trainings
Promotion of agroforestry among the affected households and farmers in the area in general through basic training.	80,000	8 trainings in a period of 1 year @ a cost of USD 10,000 per training. Continuous sensitization by local government
Training in good agricultural practices and improved technology including the use of modern technology to cultivate land more efficiently, organic pesticides and integrated pest management.	120,000	Procure a consultant to do the training over a period of 1 years
Provision of replacement 'economic' trees plus technical support in maintaining them until reaching full productive potential	50,000	50 economic trees/crops for about 1800 families @ a cost of 2000 UGX per seedling
Access to employment opportunities during project construction		Part of contractor's budget

Financial literacy and management training	25,000	1 training per sub county @ 5000USD
Sub Total	300,000	
Mobilization costs	15,000	
Administrative costs (5%)	15,000	To cater for items such as printing of training materials
Monitoring costs (10%)	30,000	
Contingency budget (20%)	60,000	
Total	420,000	

Table 12-2: RAP Implementation Budget

Item	Estimated Budget (USD)	Assumptions
Cash compensation	690,634	Cash compensation for land and developments (excluding NFA assets)
Sub Total 1	690,634	
Livelihood Restoration	420,000	This will mainly include training in different aspects as shown in Chapter 8.
Assistance to vulnerable groups such as opening for them bank accounts, transition allowance and financial literacy	10,000	Additional monetary support for vulnerable group if found necessary
Mobilization and sensitization by local government	35,000	Assumption of 5,000\$ for 7 sub counties
Grievance Resolution Engagements (GBV, compensation issues, child-labour, Sexual harassment at the work place among others.	70,000	Assumption of 10,000 per Grievance Committee (5 GRCs at SC level & 2 @ district level). The village level GRCs will utilize the same budget.
Relocation Assistance for 4 graves	800	Estimated at 200\$ per grave for 4 graves
Institutional capacity reinforcement	65,000	1 workshop for 5 sub counties @ USD5,000; 1 work for 2 districts @ USD5,000; 1 workshop for relevant ministries @ USD 20,000
Sub Total 2	600,800	
Sub Total 3 (1+2)	1,291,434	
Inflation allowance	129,143	10% inflation
Monitoring of resettlement activities (10% of the resettlement budget)	129,143	
Contingency (10% of resettlement budget)	129,143	This will take care of any unforeseen circumstances
Sub Total 4	387,430	
Total (3+4)	1,678,864	

Total (UGX)	6,211,796,858
--------------------	----------------------

Exchange Rate: 3700

12.3. SOURCES OF FUNDING

The Government of Uganda under Ministry of Water and Environment will be responsible for the funding of the Resettlement activities. The government should ensure prompt and adequate provision plus efficient flow of funds for resettlement. It should further ensure that land acquisition and compensation are adequately funded and carried out in accordance with applicable laws, rules and guidelines.

13. IMPLEMENTING SCHEDULE

13.1. Introduction

This section presents the schedule for implementation of the RAP activities.

13.2. Time Schedule for RAP Implementation

Table 13-1 shows the different compensation and resettlement activities, the timeframes in which they will be implemented and the responsible bodies and persons. The proposed duration of the RAP update is 8 calendar months including CGV's approval. The RAP implementation is estimated at 16 calendar months. The Land Surveyor, Property Surveyor/Valuer, Social Development Officer/RAP Specialist and a Legal Officer will be key in the implementation of the RAP activities. At least one of the staff should be female for purposes of gender sensitivity during this exercise.

Table 13-1: RAP Implementation Activities

Activity	Responsibility
RAP approval by Chief Government Valuer and funder	CGV and MWE
▪ RAP disclosure & display of valuation lists	MWE
▪ Verification of vulnerable PAPs by MWE	MWE/ Consultant
▪ Procurement of RAP implementation consultant	MWE
▪ Formation and mobilization of RAP unit & committees	MWE/ Consultant
Compensation payment & grievance management	MWE/ consultant
End of compensation payment period	MWE/ Consultant
Approval from funding agency to commence project	Funder
Notice to vacate compensated assets	MWE/ consultant
3-month period allowed to vacate	MWE/ consultant Implementing Agency
Commencement of irrigation construction	MWE
Monitoring & evaluation	MWE/ Consultant

13.3. Time Schedule, Linking Resettlement Implementation to Civil Works

The resettlement schedules will be coordinated with construction schedules. Before any project civil works activity is implemented, PAPs will have to be compensated in accordance with the Ugandan laws and regulations and World Bank resettlement guidelines. No individual or affected household will be displaced due to civil works activity before he/she has been compensated for his/her losses. In other words, the implementation of the RAP will have to be aligned with construction activities.

The land acquisition and demolition of houses should be completed within the preparatory stage of the engineering construction and before the beginning of relevant engineering works.

Projects Affected Households that will physically be displaced shall be given ample time to relocate to new areas. The Ugandan law provides for 3-6 months' notice to PAPs after compensation to vacate the acquired land.

The proposed schedule is thus expected to ensure that all PAPs, prior to their physical relocation, have;

- Been adequately consulted about the project, its impacts and compensation entitlements;
- Received compensation entitlements in a timely manner; and
- Been provided adequate time to relocate their property.

Figure 13-1 below shows the layout of the RAP Implementation schedule. It also presents the linkage to the civil works/construction schedule.

13.4. Potential Risks to the Schedule and Proposed Mitigation Measures

Table 13-2 shows some of the potential risks to the implementation schedule and proposed mitigation measures while Figure 13-1 shows the RAP implementation schedule which is proposed over a period of 1 year followed by 2 years of monitoring. The RAP implementation unit and local committees would be informed shortly after approval of RAP by CGV and funding entity. Compensation payments and resettlement assistance are expected to start at about the same time and extend over 12 months after which construction would commence. At this stage the Cut-off date which was communicated as 15th October 2018 is well indicated to the PAPs to avoid any further development for their project affected area.

Table 13-2: Potential Risks to RAP Implementation Activities

Potential risk	Proposed mitigation measure
Approval delays from approving bodies e.g. office of the CGV.	Implementing agency to be involved in the follow up of the approvals together with the Consultant.
Constant changes in design.	Finalise changes in design communicate them as early as possible to the RAP consultant.
Family wrangles in relation to asset ownership	Urge affected persons to resolve family issues amicably before commencement of payments. MoUs will be signed with the families to allow access to land and their

	compensation money deposited on an escrow account.
Refusal of compensation packages by PAPs	Provide adequate and fair values for affected property.
Delays from the District Land offices and the Ministry of Lands, Department of Surveys, Entebbe.	MWE work with the implementing team and the district authorities and the Survey Department to minimize the delays in the lands offices when processing the project title.

Activity	Month	1	2	3	4	5	6	7	8	9	10	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30			
RAP approval																																	
RAP approval by Chief Government Valuer and funder		◆																															
RAP disclosure & display of valuation lists			■	■																													
Verification of vulnerable PAPs by MWE				■	■	■																											
RAP implementation																																	
Procurement of RAP implementation consultant			◆																														
Formation and mobilization of RAP unit & committees				◆																													
Compensation payment & grievance management				■	■	■	■	■	■	■																							
End of compensation payment period										◆																							
Approval from funding agency to commence project											◆																						
Notice to vacate compensated assets												◆																					
3-month period allowed to vacate												■	■	■																			
Commencement of irrigation construction																																	
Monitoring & evaluation																																	
				—		—		—		—		—		—		—		—		—		—		—		—		—		—		—	→

Figure 13-1 : RAP Implementation Schedule

14. MONITORING AND EVALUATION ARRANGEMENTS

14.1. Introduction

This Chapter sets out requirements for the monitoring and evaluation of the implementation of the RAP in order to successfully complete the resettlement management as its implementation schedule and compliance with the resettlement regulations, policies and guidelines.

The WB's safeguard policy (OP 4.12) states that the project sponsor is responsible for adequate Monitoring and Evaluation of the activities set forth in the resettlement instrument. Monitoring will provide both a warning system for the project sponsor and a channel for the affected persons to make known their needs and their reactions to resettlement execution. Monitoring activities include a review of the grievance and redress mechanism and of the physical progress and impact of the Resettlement Action Plan.

14.2. Objectives for Monitoring and Evaluation

The main objective of monitoring is to provide the developer and funder with feedback on RAP implementation and to identify problems and successes as early as possible to allow timely adjustment of implementation arrangements. Both qualitative and quantitative evaluations are made to ascertain whether the affected people have achieved at the minimum their pre-project standard of living.

The Project Implementing Agency will establish a reporting system for the RAP that will:

- (i) Provide timely information to the project about all resettlement and compensation issues arising as a result of RAP related activities;
- (ii) Identify any grievances, especially those that have not yet been resolved at the local level and which may require resolution at a higher level;
- (iii) Document project resettlement and compensation activities that are still pending, including for all permanent and temporary losses;
- (iv) Evaluate whether all PAPs have been compensated in accordance with the requirements of this RAP; and
- (v) Identify mitigation measures, as necessary, when there are significant changes in the indicators that may require strategic interventions (e.g. vulnerable groups are not receiving sufficient support from the project, etc.).

14.3. Monitoring and Evaluation Plan

The RAP implementing team will develop and implement a Monitoring and Evaluation Plan (MEP). The main indicators that the MEP will measure include impacts on affected individuals, households, and communities to be maintained at their pre-project standard of living, and better; improvement of communities affected by the project; management of disputes or conflicts etc. Table 14-1 shows a sample of the Monitoring and Evaluation Plan.

Table 14-1: Sample Monitoring and Evaluation Plan

Activity	Indicator	Data Source	Responsibility	Timeframe / frequency of reporting	Outcome / Output	Evaluation of Impacts Indicators	Responsibility
Sensitization of PAPs including the vulnerable groups, women and Mobilization for Disclosure of entitlements	-Number of meetings held with the PAPs -Number of PAPs who turned up for the meeting	Minutes of the meetings	Implementing agency or representative	Monthly	Sensitized PAPs with a proper understanding of the principles used to calculate the entitlements.		
Set up of the Grievance Resolution Committees	-Number. of Grievance Resolution Committees set up -Trained Grievance Resolution Committee	-Grievance set up report -Training reports	Implementing agency or representative	1 month after start of implementing activities	Instituted Grievance Resolution Committee with knowledge of their roles & responsibilities		
Agreement of entitlements	-Number. of PAPs who have agreed to	-Number. of Compensation	Implementing agency or representative	Monthly	PAPs consented to the entitlements	-Changes (+/-) in affected households income levels	Independent party

	entitlements.	agreement / consent forms -Progress reports	tive		nts	-Improved standards of living -Equal or improved production per affected household/homestead	
Compensation Payments	Number. of PAPs who received cash compensation -No. of PAPs who received in-kind compensation -No. of PAPs who have not received compensation -No. PAPs who received relocation assistance	Compensation payment reports	Implementing agency or representative	Monthly	Compensated PAPs	-Changes (+/-) in affected households income levels -Improved standards of living -Equal or improved production per affected household	Independent party
Grievance Resolution	Number of grievances received Number. of	Grievance Resolution Report / Grievance Log	Implementing agency or representative	Monthly, Quarterly	Resolved grievances		

	grievances resolved						
Livelihood restoration	-Number of livelihood programs implemented -Number of livelihood restoration programs completed -Number of PAPs receiving livelihood restoration programs					-Changes (+/-) in affected households' income levels -Improved standards of living -Equal or improved production per affected household/homestead	Independent party

14.4. Internal Monitoring

Internal monitoring of RAP implementation will be undertaken by the implementing team with the implementing agency as the overall overseer. This will be done hand in hand with some of the District, Sub County and Town Council staff, the village leaders and the PAPs representatives as far as possible. The role of the implementing agency is mainly to carry out the following:

- Verify the re-inventory of baseline information of all PAPs (whether it has been carried out and that the valuation of assets lost or damaged), ii)
- Provision of compensation and other entitlements, and relocation have been carried out in accordance with the WB Guidelines and other applicable Ugandan laws,
- Ensure that the RAP is implemented as designed and planned,
- Record all grievances, especially their nature, and corresponding resolution, and ensure that complaints are handled in a prompt manner.

Internal monitoring will be carried at regular intervals i.e. monthly, quarterly, etc. Monthly progress reports will be prepared by the RAP implementing team and submitted to MWE's Project Implementing /Management Unit, relevant stakeholders and project funders. The internal monitoring will look at inputs, processes, and outcomes of compensation/resettlement/other impact mitigation measures.

Internal Monitoring indicators will include but not be limited to the following:

- a) Personnel, Equipment and Supplies
 - Number of personnel to carry out the different resettlement activities and their qualifications;
 - Type of equipment and quantities for the resettlement activities.
- b) Methods and Strategies to carry out the RAP Implementation Activities
 - Methodology and strategies for implementing RAP activities;
 - Documented lessons learnt and recommendations to strengthen the design and implementation of the RAP.
- c) Fund Disbursement
 - Number of PAPs affected by the project;
 - Compensation paid and timelines;
 - Number of PAPs who have not received compensation;
 - Timing of compensation in relation to commencement of physical works.
- d) Grievance Resolution

- Grievance redress mechanisms in place and functioning;
- Number of people raising grievances in relation to the project;
- Number of unresolved/resolved grievances;
- Number of PAPs who have resorted to courts of law.

e) Public Participation

- Participation of local government staff and community in the resettlement process; and
- Number of public meetings held.

The implementing team will review these statistics to determine whether the RAP implementation arrangements, as defined in the RAP, are effective in addressing RAP related issues. Financial records will be maintained by the implementing agency to determine the final cost of RAP implementation.

14.5. External Monitoring and Evaluation

External monitoring will be undertaken by an independent agency or Consultant appointed by the implementing agency and the funders. These will have extensive experience in social surveys and resettlement monitoring. The external monitoring will also verify the reports from the internal monitoring. External monitoring activities will entail the following:

- Periodic evaluation of implementation progress; and
- Completion audit.

The team will at a minimum annually conduct independent monitoring to assess the Project outcomes as envisaged in the RAP and engage with PAPs in this regard to verify that the Project is implemented in accordance with the measures outlined in the RAP. The independent monitoring will be done for the duration of the RAP implementation.

14.6. RAP Completion Audit

The completion audit of the RAP implementation shall include:

- (i) Summary of RAP performance;
- (ii) Compliance review of RAP implementation process; and
- (iii) Report on the quality of RAP implementation in terms of application of guidelines as provided in the RAP.

The audit will verify results of monitoring of RAP implementation indicators, and assess whether the project achieved the resettlement objectives. The audit will also assess the efficiency, effectiveness, impact, and sustainability of RAP activities. The aim is to learn lessons for application on future projects or other projects in the sector and in the country. Finally, the audit will ascertain whether the resettlement entitlements were appropriate. A completion audit report will be submitted to the funding agency and other relevant stakeholders.

To be effective, the completion audit will take place after all RAP activities have been completed but before the completion of financial commitments to the Programme. This will allow for flexibility to undertake any corrective action that the auditors may recommend before the project is completed. An independent party shall be procured by the project sponsors to undertake the completion audit.

14.7. Reporting

Performance monitoring reports shall be prepared by the implementing team at regular intervals (monthly, quarterly, semi-annually and annually) beginning with the commencement of any activities related to resettlement. These will be submitted to the Project Implementing Unit and shared with relevant stakeholders and the funders.

APPENDICES

A. ATTENDANCE LISTS

KABUYANDA WATER RESOURCES DEVELOPMENT PR

District *Singiro*
 Sub County *Kabuyanda Town Council*
 Village *Kabuyanda Central*
 Venue *Kabuyanda I/c*
 Date/Time *6/11/2017 (17:00 hrs)*

KABUYANDA WATER RESOURCES DEVELOPMENT PR

District *Singiro*
 Sub County *Kabuyanda Town Council*
 Village *Kabuyanda Central*
 Venue *Kabuyanda I/c*
 Date/Time *6/11/2017 (17:00 hrs)*

No.	Name	Designation	C
	<i>Twinomusuni</i>	<i>Kabuyanda</i>	<i>075</i>
	<i>Akompurira Emmy</i>		<i>070</i>
	<i>mpyzi Dent</i>		<i>075</i>

KABUYANDA WATER RESOURCES DEVELOPMENT PI

District Singiro
 Sub County Kabuyanda Town Council
 Village Kabuyanda Central
 Venue Kabuyanda T/C
 Date/Time 6/11/2017 (17:00hrs)

No.	Name	Designation	C
1	Bizimane Kristof	CPerson L/C	Co
2	Ndungutse Abel		
3	Tsheff Bikeri		Apk

KABUYANDA WATER RESOURCES DEVELOPMENT PR

District ... Isingiro
 Sub County ... Kabuyanda Town Council
 Village ... Kabuyanda Central
 Venue ... Kabuyanda II
 Date/Time ... 6/11/2017 (17:00hrs)

No.	Name	Designation	Co
01	TUSIMUNIRE ROBERT	T/Agent	07521
02	TWINEEMUCUN GUZI MOSES TINKA	'Seko'	0754E
03	Ngonzi Eldard	Councillor for Elderly	0750
04	Karorini Rwabujese	Councillor	0755
05	Bizimaana Benson	V/Chairman Kabuyanda Dairy	075
06	Bahati Juliet	CM/D.	0705
07	Gabasi Kwapaka	Ch.	Kab.

KABUYANDA WATER RESOURCES DEVELOPMENT PI

District ISINGIRO
 Sub County KABUYANDA TOWN council
 Village Kabuyanda Central
 Venue Kabuyanda T/C
 Date/Time 6/11/2017 (17:00 hrs)

No.	Name	Designation	C
1.	MUGABE ROBERT	COUNCILLOR LCM CENTRAL	070
2.	S-Karugaba	CM	07
3	Sempongu	P.	
4	Migazero M	M	071
5	Mgabirano ASAPH	TAILORS	070
6	Mwagaba SAM	ENG	075
7	Nabasa Silius	Technician	075
8	Akansara TORANI		07
9	Seme zedi	-	

KABUYANDA WATER RESOURCES DEVELOPMENT PROJECT

KY 15000 of No 2

District Singano
 Sub County Kabuyanda Town Council
 Village Kabuyanda Central
 Venue Kabuyanda TC
 Date/Time 6/11/2017 (17:00 hrs)

No.	Name	Designation	Co
1-	Atthuri Subwe Kuber	COMMANDER	07536 0788
2-	Turnomuni Mure	RELATIVE	0788 0753
3	Oyesigye Naboth	NORTHER	075
4	Kanyesigye Jesta	Area LC	07789 075
5-	Kasabanga John	ward chair	075
6	Sandey Elikadi	Omuhiingi	0754
7	Musingwi Stephen	Omuhiingi	075
8	Sunday Asaph	omuhingi	075
9	thiiza doniel	omuhingi	075

KABUYANDA WATER RESOURCES DEVELOPMENT PROJ

District Singu
 Sub County Kabuyanda Town Council
 Village Kyamba Kabuyanda Area
 Venue Kabuyanda T/C
 Date/Time 6/11/2017 (17:00 hrs)

No.	Name	Designation	Contact
1	Misher Koyedamu	Elder	07888
2	Nyiranshe Satu	Elder	
3	Akanwatsy Chast		
4	Asimwe Joy Shilling	Elder	07857
5	Ngabwano Asaph		07560
6	Tukahirwa Jovita	Woman	0752
7	Muhairwe Nauce	II	
8	Nyamukobwa Langoda	Elder Woman	
9	Iwimufun Jenmal	Elder	-

KABUYANDA WATER RESOURCES DEVELOPMENT PROJ.

District .. *Isingiro* ..
 Sub County .. *Kabuyanda Town Council* ..
 Village .. *Kabuyanda Central* ..
 Venue .. *Kabuyanda TIC* ..
 Date/Time .. *6/11/2017* ..

No.	Name	Designation	Cont
<i>20</i>	<i>Baswana</i>	<i>APOLIS</i>	<i>07030</i>

KABUYANDA WATER RESOURCES DEVELOPMENT PROJ.

District .. Singiro
 Sub County .. Kabuyanda Town Council
 Village .. Kabuyanda Central
 Venue .. Kabuyanda II
 Date/Time .. 6/14/2017 (17:00hrs)

No.	Name	Designation	Cont
1	Kanyaga Sphurak	C/comm LC II Northern	0756
2	Kabagire Kwabijere	Chairman of Elders	075533
03	BYARUKANDA GEDWA	LC II Flag bearer Northern ward	075416
04	Mbabazi Fred	Kisyo I	0756418
5	Muhoozi Nasani	Rwembwera	0770
6	ELCAYINDA MUYINGI	Kisyo	0756
7	MUSINGIZI ALEX	Rwembwera	07577
8	MBABAZI ENIAS	Rwembwera	075312
9	TUMYOMWENGE GEDWA ERODE	Kisyo I	07577
10	TUMUKIBI BILAL VALENTIN	Kisyo III	075579
11	RWAKATWE ECHALIC	Rwembwera	075-

KABUYANDA WATER RESOURCES DEVELOPMENT PROJECT

District ISINGIRO
 Sub County KABUYANDA T/CONCIL
 Village KABUYANDA TOWN CELL
 Venue Kabuyanda T/c
 Date/Time 06/11/2017 (17.00 hrs)

No.	Name	Designation	Co
1-	NSIMIRE GEORGE	Chief of Central Ward	075
2-	ALIZABATH KIZIYA BEMBE	Chief of Kabuyanda Ward	0757
3	Muhwezit	Kisyoro II	070
4	DERINA KIBUTSANA	KABUYANDA	0782
5	Petero R. BUHACHA	Kabuyanda	075
6	Ngunize Mulondo	Kisyoro II	0758
7	Uwesiyarive	Rwehweho II	075
8	Sebale	Kabuyanda	07
9	Katarinye Nais	Kabuyanda	0754
10	Amumpaye Nicodemus	Kabuyanda	070
11	Tuwangirwe Ericka	Kabuyanda	0700

KABUYANDA WATER RESOURCES DEVELOPMENT PRO

District Singu
 Sub County Kabuyanda Town Council
 Village Kabuyanda Central
 Venue Kabuyanda TIC
 Date/Time 6/11/2017 (17:00 hrs)

No.	Name	Designation	Co
1	DUMMANWA JOSEPH	SPEAKER	07501
2	Mabunga Peter	B.M	0773
3	Birusha Juma B.	Law B. Member	C
4	ASUMA MEROZA	U/C/person III	
5	Akamungwa John	Business	07556
6	Byaruhanga Henry	Peasant	07000
7	AMOS ARIWE	Parish Chief	07570
8	Diina Kabunga	PEASANT	079
9	Ndumu Josie T.	C/Peasant	0750
10	Mefenzi Cudion	Peasant	
11	Mugasha Thomas		07505

KABUYANDA WATER RESOURCES DEVELOPMENT PROJECT

District ISINGIRO
 Sub County KABUYANDA TOWN COUNCIL
 Village KABUYANDA CENTRAL VILLAGE
 Venue KABUYANDA T/C
 Date/Time 6/11/2017 5 PM

No.	Name	Designation	Co
1.	TUSINGIWE PARIKA	GTSO	075
2	BAR-TAMUSUKA CHARLES	OMUTUZE	075
3	MUJ-MUSERE	KAMUKONZA	075
4	HABIMAANA CHARLES	VHT MEMBER	0751
5	BYARUTANGA GODFREY	TAX DRIVER	075
6	ARINATIWE ALDWE	OMUTUZE	075
7	KYOMUGISHA LDY		
8	BINGAMUGISHA	PA TRACK	0775
9	WACURATE	MANAGEMENT	en
10	SSENDAGO APPOLO	Bodaboda	0756
11

District .. Singu
 Sub County .. Kabunganda Town Council
 Village .. Kabunganda Central
 Venue .. Kabunganda T.C.
 Date/Time .. 8/11/2017 (17:00 hrs)

No.	Name	Designation	C
29	ORISHABA ADSON.K	Student	
30	Mukasa Wilson	emuly,	07
31	ATW JUDYEE JACK	ball	070
32	OWOKUBURIBO JOHABO		0703
33	ARIHO WAN	Builder	0701
34	ANUYUWIRI NUBIRI	student	0754
35	AROKKIKE BIRIAT	Student	075
36	Ulwesibwe William	Teacher	0780
37	Nakaseta meloo		075
38	Soc Lovro	JOSEPH	070
39	Tumwine Innocent	Student	0750
40	Akanyagire Sonan	Electrical Eng	0701

KABUYANDA WATER RESOURCES DEVELOPMENT PROJECT

District Singiro
 Sub County Kabuyanda Town Council
 Village Kabuyanda Central
 Venue Kabuyanda U/C
 Date/Time 6/11/2017 (17:00 hrs)

No.	Name	Designation	C
20	NIWABIINZE F CHAMPION		0754
21	Kansiime W Ellen		07
22	MURUSA-ELIASAPH	See List	0700
23	Mwebembezi Albert	Businessman	0750
24	Sande Joseph	PERCORR -	
25	Ndyamuhaki Jonathan		075
26	Kiviri rwaga	Boda	075
27	ACIABA RONALD	D.J	070
28	MUGISHA SAMUEL	KTC	0782
29	MUSIKA GUSI BERTS	U/C	078
30	Kiviri Jonathan	Alunan	075

KABUYANDA WATER RESOURCES DEVELOPMENT PROJ

District Singiro
 Sub County Kabuyanda SC
 Village Kyamuziga, Kagara, Ruyabar
 Venue Kugabagaba COU
 Date/Time 5/11/2017

No.	Name	Designation	Contact
1	Mushabe George	Farmer	075419
2	Pr Kahimbise Jack	W/Man	075008
3	AKANKWASA MEDARD	Uman	075968
4	Ntegyereize James	Afande	078534
5	Mabasa Unity		07502
6	Tomwubaze Tereza	Farmer	
7	Kyokwirwe Lydia	Farmer	07520
8	Twizukye Evas		07512
9	Odinyo Tukahirwa	Farmer	
10	Tukamushaba Christine	Farmer	075695
11	T...		

KABUYANDA WATER RESOURCES DEVELOPMENT PRO

District .. *Singiro* ..
 Sub County .. *Kabuyanda S/C* ..
 Village .. *Kyamazingi, Kagera, Rutabara* ..
 Venue .. *Kigabwaga* ..
 Date/Time .. *5/11/2017* ..

No.	Name	Designation	Cor
1	KEORESS ATEGYEREIZE	Vice chair Person LC.III	07544
2	NIGHTI MURANGIRA	Famer Member	0708
3	RESTER KYOMUHANGI	Famer	
4	SLIVIA NIWAGABA	Famer	
5	Peace Katurwebe	omuhingi	0751
6	tumuhise Didaxo	omuhigi	075
7	kitarinyaba banaba	omuhigi	075
8	banwezaki banaba	omuhigi 0757073032	07
9	mbabazi Fausta	omuhingi	
10	Ainembabazi	omuhingi	07522 0752
11	T. indubwa catherine	member	0706

KABUYANDA WATER RESOURCES DEVELOPMENT PRO

District ISINGIRO
 Sub County KABUYANDA S/C
 Village Khamazinga, Kagura, Ruyab
 Venue KIGABAGABA COU
 Date/Time 5/11/2017

No.	Name	Designation	Con
1-	Nkwase LOYSE	Obubulizi	075071
2-	ACAHO BOREEN	sielvice chair Person	0755
3-	TUSUME EUNTY	Farmer	07084
4-	AKANKWASA HOPE	Farmer	07578
5-	TUMASIME ANNET	Farmer	
6	Nkwase Francis	Lay leader	07539
7	Kyinhiremu	Farmer	
8	Tugumisirize Solinda	Farmer	070
9	RUAMARA puruda	Farmer	070
10	charity Byekwaso	farmer	0706
11	K...	...	0754

KABUYANDA WATER RESOURCES DEVELOPMENT PROJE

District ISINGIRO
 Sub County Kabuyanda s/c
 Village Nyamazungu, Kagana, Rugabwari
 Venue Rugabwari COM
 Date/Time 5/11/2017

No.	Name	Designation	Contact
01	AKANKWASA G.W	EV. Foced. Point. Rep s/c/ chief	075833
02	MUTAREMWA FUSINA	ole CID	075133
03	Bwiziriz E	C/MAN KBI	075
04	Tungasingura Todoram	VHT	075340
05	Kazehi Bernard	Omushubazi	0758234
06	AHIMBISI BWE OBADIAH	PLUMBER	0757053
07	ORIKAZA BENON	C/MAN	0757902
08	DAMARI KEDRES	Peasant	0756569
09	MOLLY NZAARO	Peasant	0758695
10	AKAMPURIRA ZIDALYNE	Peasant	0757145
11	KAREYESA GRACE	Peasant	
12	NABAHIMBA AGNES	Peasant	
13	KATARAZI TEREZA	Peasant	
14	NABAHIMBA	Peasant	

KABUYANDA WATER RESOURCES DEVELOPMENT PROJE

District Isingiro
 Sub County KABUYANDA
 Village Kagoto II, Kagoto I & III
 Venue KAGOTO COU
 Date/Time 5/11/2017 (13:00 hrs)

No.	Name	Designation	Contact
1	ABAHU JONAS		07809
2	AMUTUHAIRE EMILT		
3	OWATTANI CAROLINE		
4	ANTITUKIRE CRISPIN		
5	AINEBYONA OSBART		
6	ATUHAIRE PRUISE		
7	BRENDAN AMPEIRE		0701926
8	ORSHABA JOAN		
9	MADEEBA BRENDAN		

KABUYANDA WATER RESOURCES DEVELOPMENT PROJECT

District ... ISINGIRO
 Sub County KABUYANNA
 Village KAGOTO II, Kagoto I & Kato
 Venue KAGOTO C.O.U.
 Date/Time ... 5/11/2017 (13:00 hrs)

No.	Name	Designation	Contact
1.	MUGISHA WILSON	TEACHER	077281
2	Minsiima Adella		078066
3	Elias Kato	lay reader	075701
4.	TWEBAZE ROBERT	TEACHER	0782895
5	Basyenda Festo	peasant	
6	NIWAGABA AMOS	STUDENT	
7	TURAMUKURATIRA	peasant	075749
8	THYEBWA ISRAEL	STUDENT	~
9	KEMBABAZI Edith		~
10	KEBIRUNGI GIFT	YOUTH	0705584

KABUYANDA WATER RESOURCES DEVELOPMENT PROJE

District / Singiro
 Sub County Kabuyanda Subcounty
 Village Kagato I, Kagato II & Katoma
 Venue Kagato Church of Uganda
 Date/Time 5/4/2017 (13:00 hrs).....

No.	Name	Designation	Contact
1	Tumuhumbise R.		0757
2	MBA BAZI		
3	Kyompire		
4.	AHM BISI BWE FERESTA		070589
	MUWA GABA ANGEL		0757HH
5	ya muremya		
6	Ainembabazi Judith		
7	NSengeri Miriam		
8	Rwabuwama. Agurey Kabuyanda		07826
9	KYAKUNZIRE DITAVECE		
10	K...	Herp...	

KABUYANDA WATER RESOURCES DEVELOPMENT PROJ

District Singano
 Sub County Kabuyanda
 Village Kaguto I, Kaguto II & Katoma
 Venue Kaguto church of Uganda
 Date/Time 5/11/2017 (13:00 hrs)

No.	Name	Designation	Cont
1	Dwomukisha Ruth	farmer	
2	Pemnan Tindizirare	farmer	
3	Mdinah Kendefit	farmer	
4	Kesime Jackine	✓	
5	Fouli Banzi	Farmer	
6	Toventa Kasigire	former	0778
7	Aimi Mbaasa	Farmer	
8	Muri Ntugohwe	Farmer	
9	Ayebare puronye	former	
10	Norah Bwuwanga	Farmer	
11			

KABUYANDA WATER RESOURCES DEVELOPMENT PROJ.

District Singiro
 Sub County Kabunguda ~~Kampungu~~ Sub County
 Village Kagoto
 Venue Kagoto church of Uganda
 Date/Time 5/11/2017 (13:00 hrs)

No.	Name	Designation	Contact
1	Loy Kambari		
2	Kedress Sabena		
3	Patience Nsenge		
4	Fausta Bulcabebe		
5	Tumuhimbaze M		
6	Apophica Nyakato		
7	Peace Kahawa		
8	Tukorezi Vetur		
9	Nimusima Charity		
10	ASIMWE SCOVIA		
11	VANISI RUKWAGAZA		

KABUYANDA WATER RESOURCES DEVELOPMENT PRC

District Isingiro
 Sub County Kabuyanda Town Council
 Village Kagata, Katuma, Iryaga & Iryaga 6 Village
 Venue Iryaga 6 Village
 Date/Time 11/11/2017 (11:45 pm)

No.	Name	Designation	Contact No.
1.	Mugabe Isaac	Farmer	
2.	Tushabe Benson	Farmer	
3	Mujuni Thomas	FARMER	0752 0782
A.	Kulson Gwukwe	Farmer	07846 07522
5	Turyakya George	Farmer	0750
6	Akumbisibwa Yoram	---	0757
7	Mbasimwe Erika	---	
8	Mujuni Geoffrey	Chairman	0757
9	ABAIHE ASAPH	PI Chief	078296
10	KARONIRI	Farmer	0757
11	MUCHUSUZU G.	FARMER	0757

KABUYANDA WATER RESOURCES DEVELOPMENT PROJ.

District *(Singu)*
 Sub County *Kabuyanda Town Council*
 Village *Kagoto, Kaboma, Iyanga & K...*
 Venue *Iyanga Village*
 Date/Time *4/11/2017 (4:45pm)*

No.	Name	Designation	Cont
20	<i>nyaburona Jor. omuhingi</i>		-
21	<i>Kyariimba. meron</i>	- - -	0750
22	<i>Mugume Kellen</i>	<i>Peasant</i>	07575
23	<i>Joventa Kastigeiryo</i>	<i>Omuhingi</i>	
24	<i>ANNE Komugisha</i>	<i>omuhingi</i>	07568
25	<i>Komugisha monika</i>		
26	<i>mellon kirabo</i>	<i>omuhingi</i>	0758648
27	<i>NAMBUZA ZVALWE</i>	<i>TERRACING</i>	0701
28	<i>KATUSIMEEVALYNE</i>	<i>Peasant</i>	07596
29	<i>minanda</i>	<i>omuhingi</i>	

KABUYANDA WATER RESOURCES DEVELOPMENT PROJ

District .. Singiro
 Sub County .. Kabuyanda Town Council
 Village .. Katoto, Katoma, Iryango & K...
 Venue .. Iryango Village
 Date/Time .. 11/11/2017 (H: 4:5pm)

No.	Name	Designation	Com
39	Ashairi Rommawel	Councilor	0754
40	Muhengazi Simon	Omukungu	0750
41	NANWANDA ELY	IT consultant	0752

KABUYANDA WATER RESOURCES DEVELOPMENT PROJ

District ... Singima
 Sub County ... Kabuyanda Town Council
 Village ... Kagato II, Kagato II & Katoma
 Venue ... Iryanga Village
 Date/Time ... 4/4/2017 (4:45pm)

No.	Name	Designation	Contact
1	Agnes Mujuni	omuhingi	07822
2	Kyoshabire Betty	omuhingi	07783
3	Noreda Nyanwegenda	,, ,,	
4	Kyampire Keti	,, ,,	
5	EVELINE KAMUGISHA	,,	0755136
6	Jolly Kyashimire	"	07798
7	Kyampire Jane	" "	07780
8	JAVANICE MANKUNDA	omuhingi	075196
9	ISUENTA KATSURUGO	"	077720
10	Birah Turyakira	" "	
11	Nwabutaro Tanese	"	07508

KABUYANDA WATER RESOURCES DEVELOPMENT PROJ

District Singida
 Sub County Kabuyanda Town Council
 Village Kigata, Katooma, Iryango & K...
 Venue Iryango Village
 Date/Time 4/11/2017 (4:45 pm)

No.	Name	Designation	Conta
20	Kuryaho Milton	Farmer	0758233 Chuan. 2
21	FRED NYERURUKI		078593
22	Bryan Jisho T.	Farmer	—
23	BWengye	Farmer	
24	Jibrilwedrogyero	21 17	0771695
25	Tushabe Francis	P/Farmer	0752241
26	KADAMA SETHACK	farmer	075379
27	Ngonzi Eldard	Councillor	07501
28	Namanyo Henry	Farmer	077511
29.	Murebomwe Wan	Farmer	0757
30	Rev Tushemezi bwe	Parish Priest	0774211

KABUYANDA WATER RESOURCES DEVELOPMENT PROJDistrict .. SiggiroSub County .. Kabuyanda Town CouncilVillage .. Kishoro, Begerama, NyampityeVenue .. Kishoro ChurchDate/Time .. 4/11/2017 (2:00 pm)

No.	Name	Designation	Cont
1.	LIMANKIKA JOSEPH	SPEAKER	0750171
2	HOPE BULOGE	COUNSELLOR	0759
3	Byamukama Yoramu	Defence	07572
4	Ndyababwira Gadi		
5	Kamuzi G.		075184
6	ASIMWE Yosamu		
7	DEDNT H		
8	Busingye NORDA		07724
9	ANUGI T		075430
10.	Joyi Mujenje		
11	Nassanga Joy	VHT. co-ord	07513

KABUYANDA WATER RESOURCES DEVELOPMENT PRO

District Isingiro KABUYANDA
 Sub County Kabuyanda town council
 Village Kisyoro, Bugarama, Nyampitaye
 Venue Kisyoro church
 Date/Time 4/11/2017 (3:00 pm).....

No.	Name	Designation	Con
1-	Alubwizwe w	chunwa	0753 the
2	BIRIHA WILSON	Def Lett Kisyoro	07
3	DIABU Bmja	Kisyoro	
4	MUKABIBWE ADIZI	KISYORO	0755
5	Eric Kamukunda	KISYORO	0759
6	Tuhisemwe magret	KISYORO	—
7	KAFUSITABE MONIC	KISYORO	0753E
8	RUGYENDO: gere	KISYORO	075L
9	Semugere Pascal	KISYORO	07528
10.	Emmy munumaza	KISYORO	07548
11.	MUGARURA PAUSAL	KISYORO	075215

There were also some vulnerable groups that

B. MINUTES OF STAKEHOLDER ENGAGEMENTS

MINUTES OF STAKEHOLDER ENGAGEMENTS

District	Isingiro District Local Government
Venue	Chief Administrative Officer's office
Date	3rd November 2017
Time	10:00:00hrs

ATTENDANCE

NAME	DESIGNATION
Donata Eswilu	Chief Administrative Officer (CAO)
Francis Rwezahara	Water Officer
Patrick Tumwesigye	District Agricultural Officer
Benson Rweogosha Bashaga	APO, Kagera
Francois Xavier Ndekezi	Project Manager, Kagera
Boaz Niwamanya	EIA /DFPP
Prof. John Okedi	Team Leader
Moses Dakasi	Sociologist
Jerome K. Mugondi	Flora Ecologist
Emmanuel Bwenge	District Natural Resource Officer

Min No 1 Mr. Eswilu Donata, ushered in the Consultants and Kagera River Basin Management officials to his office.

Min No 2 Mr. Niwamanya Boaz, the District Focal Point Person informed the Chief Administrative Officer and colleagues that team before them were officials from Kagera River Basin Management Project (Nile Basin Initiative /NELSAP) and the Consultants from NEWPLAN Limited. He informed them that their purpose of visit was to consult the local leaders and members of the community and to familiarize themselves with the project. Thereafter, the Consultants and Kagera River Basin Management officials introduced themselves.

Min No 3 Ndekezi Francois Xavier, informed the meeting that the purpose of the visit was to introduce the consultants. He informed the officials that Kagera River Basin contracted NEWPLAN Limited to finalize the Environmental Social Impact Assessment (ESIA) and Resettlement Action Plan (RAP) studies for the proposed Kabuyanda Water Resources Development Project. He described the different project components. He informed the officials that the consultants has five months to undertake and complete the assignment. He also informed the officials of the plan workshop in November 2017.

Min No 4 Presentation of the project by Prof. Okedi John

He described the purpose for the visit of Kabuyanda. He said there was a team of consultants which include the experts on social issues, plants and vegetation, wild animals, soils, hydrology, animals, fish and water quality, birds, insects, socioeconomic, pests and aquatic animals.

The consultant team will stay on the site to carry out baseline studies.

He emphasized that the project would benefit the local communities and therefore there was need for the communities to be properly informed and to get involved in all activities of the project from inception to the implementation. During the baseline studies the consultant would be working 24 hrs a day.

There would therefore need security and guides to help them more particularly at night, the consultants would need local coordinator to assist in setting up community consultation in the project area.

He informed the CAO that they would be stakeholder workshop to discuss the interim in planned for the first of December 2017

Min No 5 Issues raised by the Chief Administrative Officer (CAO)

The CAO wanted all the district heads of department's including environmental officer, District Community Development Officer, natural resources officer, production and marketing officer, water officer, agriculture officer, fisheries officer, to be involved in all activities. He advised land issues to be addressed in the studies including compensation.

He also said the study should be holistic and involve all stakeholders.

The project should be implemented quickly to avoid speculators.

He recommended the need for adequate planning and sensitization of communities.

MINUTES OF STAKEHOLDER ENGAGEMENTS

District	Isingiro District Local Government
Venue	Natural Resource office
Date	3 rd November 2017
Time	11:00hrs

ATTENDANCE

NAME	DESIGNATION
Abdu Kamoga	Environmental Officer
Ayorekire Fredere	District Forest Officer
Patrick Tumwesigye	District Agricultural Officer
Benson Rweogosha Bashaga	APO, Kagera
Francois Xavier Ndekezi	Project Manager, Kagera
Maj. Topher Agaba	Operation Wealth Creation
Prof. John Okedi	Team Leader
Moses Dakasi	Sociologist
Jerome K. Mugondi	Flora Ecologist
Herbert Muhangi	Residential District Commissioner

Min No 1 Mr. Niwamanya Boaz, the District Focal Point Person informed his colleagues that team before them were officials from Kagera River Basin Management Project (Nile Basin Initiative /NELSAP) and the Consultants from NEWPLAN Limited. He informed them that their purpose of visit was to consult the local leaders and members of the community and to familiarize themselves with the project.

Min No 2 Ndekezi Francois Xavier, informed the meeting that the purpose of the visit was to introduce the consultants. He informed the officials that Kagera River Basin contracted NEWPLAN Limited to finalize the Environmental Social Impact Assessment (ESIA) and Resettlement Action Plan (RAP) studies for the proposed Kabuyanda Water Resources Development Project. He described the different project components. He informed the officials that the consultants have five months to undertake and complete the assignment. He also informed the officials of the plan workshop in November 2017.

Min No 3 Prof. Okedi John informed the officials that we were an advanced team. He informed the officials that the team will be looking at the baselines conditions of the project area. He also informed the meeting that the consultant will produce an ESIA and RAP report including an Environmental Social Management Plan and it will be the responsibility of the District to implement the ESMP to protect the environment and ecosystem and to ensure the dam does not burst. He also informed the meeting that the consultant has six months to produce the final ESIA and RAP report. He informed the meeting that the beneficiary of this project is the Government of Uganda (GoU) and is funded by the World Bank. He informed the meeting that the project area is composed of two sections, upstream area (dam) and the downstream area which is a command area for irrigation. Furthermore, he informed the officials that the consultants will traverse the entire project area such as the valley area, hills of Kabuyanda, and the forest area. He also informed the meeting that studies will be conducted during the day and night. He informed the meeting that it is a requirement by World Bank to conduct an ESIA study for the projects of this nature.

The officials were informed that the project will provide electricity, water for domestic use and water for irrigation mainly to the residents Kabuyanda. The officials were informed that when the dam is constructed, it will help in controlling floods. The officials were informed that NELSAP will organize a workshop in December 2017 whereby the consultant will present the key findings on the social and environmental aspects.

Min No 4 Issues raised by District Natural Resource Officer and District Environment Officer

Mr. Ayorekire requested the NEWPLAN Limited and Kagera River Basin to share with them the Interim report with different heads of departments in the District to enable them study the document in preparation for the planned workshop in December 2017.

There was degradation in the project area

The project should ensure issues of conservation of the ecosystem of the project area

He decried heavy loss of soil fertility and therefore the need to have a good conservation plan

He requested the consultant to develop an agroforestry plan for the project area.

He advised to have green belt in the project area

He recommended zoning of the area to have green belts where agriculture activities would be restricted.

He requested viable alternatives programs for example in fruit tree agriculture.

MINUTES OF STAKEHOLDER ENGAGEMENTS

District	Isingiro District Local Government
Venue	Residential District Commissioner's office
Date	3 rd November 2017
Time	13:00hrs

ATTENDANCE

NAME	DESIGNATION
Muhangi Herbert	Residential District Commissioner (RDC)
Benson Rweogosha Bashaga	APO, Kagera
Francois Xavier Ndekezi	Project Manager, Kagera
Maj. Topher Agaba	Operation Wealth Creation
Prof. John Okedi	Team Leader
Moses Dakasi	Sociologist
Jerome K. Mugondi	Flora Ecologist

Min No 1 Mr. Niwamanya Boaz, the District Focal Point Person informed his colleagues that team before them were officials from Kagera River Basin Management Project (Nile Basin Initiative /NELSAP) and the Consultants from NEWPLAN Limited. He informed them that their purpose of visit was to consult the local leaders and members of the community and to familiarize themselves with the project.

Min No 2 Ndekezi Francois Xavier, informed the meeting that the purpose of the visit was to introduce the consultants. He informed the officials that Kagera River Basin contracted NEWPLAN Limited to finalize the Environmental Social Impact Assessment (ESIA) and Resettlement Action Plan (RAP) studies for the proposed Kabuyanda Water Resources Development Project. He described the different project components. He informed the officials that the consultants has five months to undertake and complete the assignment. He also informed the officials of the plan workshop in November 2017.

Min No 3 Prof. Okedi John informed the officials that we were an advanced team. He informed the officials that the team will be looking at the baselines conditions of the project area. He also informed the meeting that the consultant will produce an ESIA and RAP report including an Environmental Social Management Plan and it will be the responsibility of the District to implement the ESMP to protect the environment and ecosystem and to ensure the dam does not burst. He also informed the meeting that the consultant has six months to produce the final ESIA and RAP report. He informed the meeting that the beneficiary of this project is the Government of Uganda (GoU) and is funded by the World Bank. He informed the meeting that the project area is composed of two sections, upstream area (dam) and the downstream area which is a command area for irrigation. Furthermore, he informed the officials that the consultants will traverse the entire project area such as the valley area, hills of Kabuyanda, and the forest area. He also informed the meeting that studies will be conducted during the day and night. He informed the meeting that it is a requirement by World Bank to conduct an ESIA study for the projects of this nature.

The officials were informed that the project will provide electricity, water for domestic use and water for irrigation mainly to the residents Kabuyanda. The officials were informed that when the dam is constructed, it will help in controlling floods. The officials were informed that NELSAP will organize a workshop in December 2017 whereby the consultant will present the key findings on the social and environmental aspects.

Min No 4 Mr. Muhangi Herbert pledged full support to the project. He pledged to provide security to the teams and personnel likely to work at night.

Min No 5 The RDC asked the consultants to fully involve the local leaders and the community of Kabuyanda Town Council and Kabuyanda Sub County in all project activities.

Min No 6 The RDC also assured the consultant that the people of Kabuyanda are friendly and they won't reject the project.

MINUTES OF STAKEHOLDER ENGAGEMENTS

District	Isingiro District Local Government
Sub County /Town Council	Kabuyanda Town Council
Venue	Kabuyanda Town Council Headquarters
Date	3 rd November 2017
Time	15:00hrs

ATTENDANCE

NAME	DESIGNATION
Francois Xavier Ndekezi	Project Manager, Kagera
Benson Rweogosha Bashaga	APO, Kagera
Prof. John Okedi	Team Leader
Moses Dakasi	Sociologist
Jerome K. Mugondi	Flora Ecologist
Hope Bwogi	Lady Councilor LC III
Gedion Byaruhanga	LC II Chairman
Naboth Oyesigye	
Abert Mugisha	LC I Chairman
George Niwamanya	
Vicent Masiko	For Town Clerk
God Habaasa	
Mutesigesi F	
Ainamani Banabasi	
Arinaitwe Geofrey	
Muhanguzi N. Gerald	
ASP Bakundine Ronald	Officer in Charge, Kabuyanda
Nzabakwikiza B	LC I Chairman, Kabuyanda
Anyijukire Onesmas	LC III Chairperson
Julius Rwabujere	Gombolola Internal Security Officer (GISO)
Rumanyika Joseph	Speaker
Asiima Meron	Vice Chairperson LC III
Byasigara John	Person With Disability

Atuhaire Emmanuel	Councilor
Mbabazi Emmy	Chairperson LC II
Ndumu Yosia Tibimpama	Chairman LC I
Tushabe Gauda	District Councilor
Nkurungiza Benon	Opinion Leader

Min No 1 Mr. Niwamanya Boaz, the District Focal Point Person informed his colleagues that team before them were officials from Kagera River Basin Management Project (Nile Basin Initiative /NELSAP) and the Consultants from NEWPLAN Limited. He informed them that their purpose of visit was to consult the local leaders and members of the community and to familiarize themselves with the project.

Min No 2 Ndekezi Francois Xavier, informed the meeting that the purpose of the visit was to introduce the consultants. He informed the officials that Kagera River Basin contracted NEWPLAN Limited to finalize the Environmental Social Impact Assessment (ESIA) and Resettlement Action Plan (RAP) studies for the proposed Kabuyanda Water Resources Development Project. He described the different project components. He informed the officials that the consultants has five months to undertake and complete the assignment. He also informed the officials of the plan workshop in November 2017.

Min No 3 Prof. Okedi John informed the officials that we were an advanced team. He informed the officials that the team will be looking at the baselines conditions of the project area. He also informed the meeting that the consultant will produce an ESIA and RAP report including an Environmental Social Management Plan and it will be the responsibility of the District to implement the ESMP to protect the environment and ecosystem and to ensure the dam does not burst. He also informed the meeting that the consultant has six months to produce the final ESIA and RAP report. He informed the meeting that the beneficiary of this project is the Government of Uganda (GoU) and is funded by the World Bank. He informed the meeting that the project area is composed of two sections, upstream area (dam) and the downstream area which is a command area for irrigation. Furthermore, he informed the officials that the consultants will traverse the entire project area such as the valley area, hills of Kabuyanda, and the forest area. He also informed the meeting that studies will be conducted during the day and night. He informed the meeting that it is a requirement by World Bank to conduct an ESIA study for the projects of this nature.

The officials were informed that the project will provide electricity, water for domestic use and water for irrigation mainly to the residents Kabuyanda. The officials were informed that when the dam is constructed, it will help in controlling floods. The officials were informed that NELSAP will organize a workshop in December 2017 whereby the consultant will present the key findings on the social and environmental aspects.

Issues Raised /Concerns	
Issues Raised /Concerns	Responses
The leaders pledged full support to the project. They promised the consultant to assist in the mobilization of the likely project beneficiaries. The leaders also pledged to provide security to the team that was working at night.	

<p>The leaders were concerned that the project should benefit the people of Kabuyanda through provision of employment opportunities.</p>	<p>The project will consider the local people for the available employment opportunities</p>
<p>The local authorities informed the consultant that there is misconception of the project by the local population that gold was being mined in the project area. The leaders advised the consultant to adequately sensitize the population.</p>	

MINUTES OF STAKEHOLDER ENGAGEMENTS

District	Isingiro District Local Government
Sub County /Town Council	Kabuyanda Sub County
Venue	St. James Kigabagaba Church of Uganda
Date	3 rd November 2017
Time	17:00hrs

ATTENDANCE

NAME	DESIGNATION
Prof. John Okedi	Team Leader
Moses Dakasi	Sociologist
Jerome K. Mugondi	Flora Ecologist
Arinaitwe Silver	Community Development Officer
Mutaremusha Justus	OC CID, Kabuyanda
Gunobire Tadeo	
Kahimbise Jack	
Ndyomugyennyi John	Councilor
Kyomukama Sam	Councilor
Murangira	
Nkwase Francis	Lay Leader
Annet Nkwase	
Tibwabwine B	Councilor LC III
More Zoro	Publicity
Nkwase Loice	Lay Leader
Kakwenza J	Elder
Julius Rwabujere	Gombolola Internal Security Officer
Akankwasa G.W	Sub County Chief
Kedress Ategyereize	Vice Chairperson LC III
Akankwasa Hope	C.M
Odeta Siyajavi	Councilor

Min No 1 Mr. Niwamanya Boaz, the District Focal Point Person informed his colleagues that team before them were officials from Kagera River Basin Management Project (Nile Basin Initiative/ NELSAP) and the Consultants from NEWPLAN Limited. He informed them that their purpose of visit was to consult the local leaders and members of the community and to familiarize themselves with the project.

Min No 2 Prof. Okedi John informed the officials that we were an advanced team. He informed the officials that the team will be looking at the baselines conditions of the project area. He also informed the meeting that the consultant will produce an ESIA and RAP report including an Environmental Social Management Plan and it will be the responsibility of the District to implement the ESMP to protect the environment and ecosystem and to ensure the dam does not burst. He also informed the meeting that the consultant has six months to produce the final ESIA and RAP report. He informed the meeting that the beneficiary of this project is the Government of Uganda (GoU) and is funded by the World Bank. He informed the meeting that the project area is composed of two sections, upstream area (dam) and the downstream area which is a command area

for irrigation. Furthermore, he informed the officials that the consultants will traverse the entire project area such as the valley area, hills of Kabuyanda, and the forest area. He also informed the meeting that studies will be conducted during the day and night. He informed the meeting that it is a requirement by World Bank to conduct an ESIA study for the projects of this nature.

The officials were informed that the project will provide electricity, water for domestic use and water for irrigation mainly to the residents Kabuyanda. The officials were informed that when the dam is constructed, it will help in controlling floods. The officials were informed that NELSAP will organize a workshop in December 2017 whereby the consultant will present the key findings on the social and environmental aspects.

ISSUE/CONCERN RAISED	RESPONSE
The local leaders informed the consultant that project area floods and about three people were killed by the floods.	The local authorities were informed that the dam will help will controlling floods.
The local leaders were afraid that the water will be diverted to peoples' gardens and as a result the people will deny the developer access to the project site.	
The local authorities informed the consultant that sometimes the water from the river and streams turns yellow in color which makes it difficult for the farmers to irrigate their crops.	
The local leaders also informed the consultant that the people in the area are experiencing famine due to severe drought.	
The consultant was informed that there is forest reserve in the project area.	

MINUTES OF STAKEHOLDER ENGAGEMENTS

District	Isingiro District Local Government
Sub County /Town Council	Kabuyanda Sub County
Village	Kisyoro
Venue	Kisyoro Church of Uganda
Date	4 th November 2017
Time	15:00hrs
Attendance list attached	

Min No 1 The meeting commenced with a prayer and thereafter self-introductions of all the members present.

Min No 2 The chairman local council one welcomed the consultant and the people present for the meeting. The chairman asked the people to embrace the project since the project is meant benefit the people of Kabuyanda.

Min No 3 The speaker pledged full support to the project. He also asked the people to support the project since they are the direct beneficiaries. The speaker informed the consultants that the community has been expecting the project to commence some time ago.

Min No 4 The GISO pledged to provide security to the consultants while conducting various activities in the project area.

Min No 5 Prof. Okedi John informed the officials that we were an advanced team. He informed the officials that the team will be looking at the baselines conditions of the project area. He also informed the meeting that the consultant will produce an ESIA and RAP report including

an Environmental Social Management Plan and it will be the responsibility of the District to implement the ESMP to protect the environment and ecosystem and to ensure the dam does not burst. He also informed the meeting that the consultant has six months to produce the final ESIA and RAP report. He informed the meeting that the beneficiary of this project is the Government of Uganda (GoU) and is funded by the World Bank. He informed the meeting that the project area is composed of two sections, upstream area (dam) and the downstream area which is a command area for irrigation. Furthermore, he informed the officials that the consultants will traverse the entire project area such as the valley area, hills of Kabuyanda, and the forest area. He also informed the meeting that studies will be conducted during the day and night. He informed the meeting that it is a requirement by World Bank to conduct an ESIA study for the projects of this nature.

The officials were informed that the project will provide electricity, water for domestic use and water for irrigation mainly to the residents Kabuyanda. The officials were informed that when the dam is constructed, it will help in controlling floods. The officials were informed that NELSAP will organize a workshop in December 2017 whereby the consultant will present the key findings on the social and environmental aspects.

ISSUES RAISED /CONCERNS	RESPONSES
Will the project compensate people for the crops that will be damaged during the construction?	Properties that will be damaged during project construction will be valued and paid
Will the people pay for the water?	The people intending to use the water for different purposes will pay for it.
Will the youth benefit from the project?	The youth will benefit from the project by using water for irrigation, use water for domestic use, and directly be employed in the project.

There being no any other business to discuss the meeting was closed by prayer.

MINUTES OF STAKEHOLDER ENGAGEMENTS

District	Isingiro District Local Government
Sub County /Town Council	Kabuyanda Town Council
Village	Iryango
Venue	Local Council one residence
Date	4 th November 2017
Time	17:00hrs
Attendance list attached	

Min No 1 The meeting was opened with a prayer led by the area reverend.

Min No 2 The chairman local council one welcomed the consultant and the people present for the meeting. The chairman asked people to pay attention and ask questions thereafter.

Min No 3 The area councilor welcomed the consultants and the people. He informed the community that the project will benefit the people of Kabuyanda mainly through the use of water for irrigation. The councilor also asked the people to support the project.

Min No 4 Prof. Okedi John informed the officials that we were an advanced team. He informed the officials that the team will be looking at the baselines conditions of the project area. He also informed the meeting that the consultant will produce an ESIA and RAP report including an Environmental Social Management Plan and it will be the responsibility of the District to implement the ESMP to protect the environment and ecosystem and to ensure the dam does not burst. He also informed the meeting that the consultant has six months to produce the final ESIA and RAP report. He informed the meeting that the beneficiary of this project is the Government of Uganda (GoU) and is funded by the World Bank. He informed the meeting that the project area is composed of two sections, upstream area (dam) and the downstream area which is a command area for irrigation. Furthermore, he informed the officials that the consultants will traverse the entire

project area such as the valley area, hills of Kabuyanda, and the forest area. He also informed the meeting that studies will be conducted during the day and night. He informed the meeting that it is a requirement by World Bank to conduct an ESIA study for the projects of this nature.

The officials were informed that the project will provide electricity, water for domestic use and water for irrigation mainly to the residents Kabuyanda. The officials were informed that when the dam is constructed, it will help in controlling floods. The officials were informed that NELSAP will organize a workshop in December 2017 whereby the consultant will present the key findings on the social and environmental aspects.

ISSUES RAISED /CONCERNS	RESPONSE
Supposing the farm is about 400m away from the main pipe that supplies water to the area. Who will meet the cost of extending water to the farm?	Water points will be provided by the project to enable the farmers' access water to their gardens thus the farmers will pay for the cost of extending water to their gardens and households.
The community asked the developer to inform the community when they should apply for the jobs.	
He is grateful for this project. How will all the people benefit from this project?	The community will benefit from the project through using water for irrigation and employment opportunities.
Will the community pay for the water?	The community will be pay for the cost of the water.
Will the project compensate people for the affected land where the water pipes will be laid?	
Is the World Bank funding for the construction of the project?	The World Bank is funding for the construction of the project.

Professor Okedi closed the meeting by thanking people for coming to the meeting, listening and waiting patiently.

MINUTES OF STAKEHOLDER ENGAGEMENTS

District	Isingiro District Local Government
Sub County /Town Council	Kabuyanda Sub County
Village	Kagoto
Venue	Kagoto Church of Uganda
Date	5 th November 2017
Time	13:00 hrs
Attendance list attached	

Min No 1 The meeting was opened with a prayer led by the area reverend.

Min No 2 The chairman local council one welcomed the consultant and the people present for the meeting. The chairman asked people to pay attention and ask questions thereafter.

Min No 3 The area councilor welcomed the consultants and the people. He informed the community that the project will benefit the people of Kabuyanda mainly through the use of water for irrigation. The councilor also asked the people to support the project.

Min No 4 Prof. Okedi John informed the officials that we were an advanced team. He informed the officials that the team will be looking at the baselines conditions of the project area. He also informed the meeting that the consultant will produce an ESIA and RAP report including an Environmental Social Management Plan and it will be the responsibility of the District to implement the ESMP to protect the environment and ecosystem and to ensure the dam does not burst. He also informed the meeting that the consultant has six months to produce the final ESIA and RAP report. He informed the meeting that the beneficiary of this project is the Government of Uganda (GoU) and is funded by the World Bank. He informed the meeting that the project area is composed of two sections, upstream area (dam) and the downstream area which is a command area for irrigation. Furthermore, he informed the officials that the consultants will traverse the entire

project area such as the valley area, hills of Kabuyanda, and the forest area. He also informed the meeting that studies will be conducted during the day and night. He informed the meeting that it is a requirement by World Bank to conduct an ESIA study for the projects of this nature.

The officials were informed that the project will provide electricity, water for domestic use and water for irrigation mainly to the residents Kabuyanda. The officials were informed that when the dam is constructed, it will help in controlling floods. The officials were informed that NELSAP will organize a workshop in December 2017 whereby the consultant will present the key findings on the social and environmental aspects.

ISSUES RAISED	RESPONSES
What are some of the items the project will be compensating?	Items to be compensated include; land, structures both temporary and permanent, perennial crops and trees, graves, and shrines.
Do you assess gardens that will be affected?	Gardens will be assessed if affected by the project.
What will happen to structures that will be damaged as a result vibration from the machinery?	We shall request the owners of such properties to report such cases and thereafter such properties shall be inspected to establish the magnitude of the damage.
Will the project compensate PAPs who are in possession of land titles for their deceases relatively?	The relatives of the deceased will be compensated if provide proof such as death certificate and Letters of Administration.
Will the new road have a road reserve?	This road will have a carriage way and a road reserve.
What will happen to public utilities like electricity poles that will be affected by the road?	Public utilities that will be affected by the road will be transferred to the road reserve.
What will happen to the boreholes that will be affected?	Water sources that will be affected by the road project will be replaced.

MINUTES OF STAKEHOLDER ENGAGEMENTS

District	Isingiro District Local Government
Sub County /Town Council	Kabuyanda Sub County
Village	Kagoto
Venue	Kagoto Church of Uganda
Date	5 th November 2017
Time	13:00 hrs
Attendance list attached	

Min No 1 The meeting was opened with a prayer led by the area reverend.

Min No 2 The chairman local council one welcomed the consultant and the people present for the meeting. The chairman asked people to pay attention and ask questions thereafter.

Min No 3 The area councilor welcomed the consultants and the people. He informed the community that the project will benefit the people of Kabuyanda mainly through the use of water for irrigation. The councilor also asked the people to support the project.

Min No 4 Prof. Okedi John informed the officials that we were an advanced team. He informed the officials that the team will be looking at the baselines conditions of the project area. He also informed the meeting that the consultant will produce an ESIA and RAP report including an Environmental Social Management Plan and it will be the responsibility of the District to implement the ESMP to protect the environment and ecosystem and to ensure the dam does not burst. He also informed the meeting that the consultant has six months to produce the final ESIA and RAP report. He informed the meeting that the beneficiary of this project is the Government of Uganda (GoU) and is funded by the World Bank. He informed the meeting that the project area is composed of two sections, upstream area (dam) and the downstream area which is a command area for irrigation. Furthermore, he informed the officials that the consultants will traverse the entire project area such as the valley area, hills of Kabuyanda, and the forest area. He also informed the meeting that studies will be conducted during the day and night. He informed the meeting that it is a requirement by World Bank to conduct an ESIA study for the projects of this nature.

The officials were informed that the project will provide electricity, water for domestic use and water for irrigation mainly to the residents Kabuyanda. The officials were informed that when the dam is constructed, it will help in controlling floods. The officials were informed that NELSAP will organize a workshop in December 2017 whereby the consultant will present the key findings on the social and environmental aspects.

ISSUES RAISED	RESPONSES
Will the project compensate people without land titles?	People with or without land titles will be compensated by the project.
How much time will the project give people affected to relocate from the affected areas?	The developer will communicate but usually the period timeframe is between 3-6 months.
When shall we be compensated, before or after construction?	PAPs are usually compensated before construction activities commence.
Will project compensate us for the land on which grow crops and rear animals	The project will compensate for the land but the bricks will not be compensated as the bricks can be shifted away from the affected place.
How will the project compensate people without bank accounts?	PAPs without bank accounts will be encouraged to open with the banks of their choice.
Will the project compensate me for the bare land?	PAPs with bare land will be paid for the land.
What will happen to PAPs who are living outside the country and will not be present during compensation exercise?	We expect such PAPs to come and receive his or her compensation in person or unless they grant powers of attorney to their trusted relatives.
Will the project compensate affected institutions?	Institutions that will be affected by the project will be compensated.

MINUTES OF STAKEHOLDER ENGAGEMENTS

District	Isingiro District Local Government
Sub County /Town Council	Kabuyanda Sub County
Village	Kabuyanda Town Council Community
Venue	Kabuyanda Trading Centre
Date	5 th November 2017
Time	13:00 hrs
Attendance list attached	

Min No 1 The meeting was opened with a prayer led by the area reverend.

Min No 2 The chairman local council one welcomed the consultant and the people present for the meeting. The chairman asked people to pay attention and ask questions thereafter.

Min No 3 The area councilor welcomed the consultants and the people. He informed the community that the project will benefit the people of Kabuyanda mainly through the use of water for irrigation. The councilor also asked the people to support the project.

Min No 4 Prof. Okedi John informed the officials that we were an advanced team. He informed the officials that the team will be looking at the baselines conditions of the project area. He also informed the meeting that the consultant will produce an ESIA and RAP report including an Environmental Social Management Plan and it will be the responsibility of the District to implement the ESMP to protect the environment and ecosystem and to ensure the dam does not burst. He also informed the meeting that the consultant has six months to produce the final ESIA and RAP report. He informed the meeting that the beneficiary of this project is the Government of Uganda (GoU) and is funded by the World Bank. He informed the meeting that the project area is composed of two sections, upstream area (dam) and the downstream area which is a command area for irrigation. Furthermore, he informed the officials that the consultants will traverse the entire

project area such as the valley area, hills of Kabuyanda, and the forest area. He also informed the meeting that studies will be conducted during the day and night. He informed the meeting that it is a requirement by World Bank to conduct an ESIA study for the projects of this nature.


The officials were informed that the project will provide electricity, water for domestic use and water for irrigation mainly to the residents Kabuyanda. The officials were informed that when the dam is constructed, it will help in controlling floods. The officials were informed that NELSAP will organize a workshop in December 2017 whereby the consultant will present the key findings on the social and environmental aspects.

ISSUES RAISED	RESPONSES
Will the project compensate people without land titles?	People with or without land titles will be compensated by the project.
When shall we be compensated, before or after construction?	PAPs are usually compensated before construction activities commence.
Will project compensate us for the land on which we make bricks?	The project will compensate for the land but the bricks will not be compensated as the bricks can be shifted away from the affected place.
How will the project compensate people without bank accounts?	PAPs without bank accounts will be encouraged to open with the banks of their choice.
Will the project compensate me for the bare land?	PAPs with bare land will be paid for the land.
What will happen to PAPs who are living outside the country and will not be present during compensation exercise?	We expect such PAPs to come and receive his or her compensation in person or unless they grant powers of attorney to their trusted relatives.
Will the project compensate affected institutions?	Institutions affected by the project will be compensated.

Interview with the Farm Manager Kaiho Farm School Leavers Cooperative Society	
What is the name of this cooperative society?	Kaiho Farm School Leavers Cooperative Society
Date consulted	7 th November 2017
Farm Manager	Turyahebwa Sylviano
Number of member	The cooperative society had 30 members but currently there are 26 active members.
When was the cooperative society established?	The cooperative society was established by father Ampey from Britain in 1968. Fr. Ampey was a priest at Kaiho Catholic Church. The cooperative society was established to support students who completed primary and secondary education and the needy.
What activities is this cooperative society involved in?	Kaiho Farm School Leavers Cooperative Society are farmers and they group crops such as maize, beans, ground nuts, sorghum, Irish potatoes, cow peas, cassava, bananas and fruits such as passion fruits and vegetables such as cabbages and onions. The cooperative also practiced dairy farming at the early of the cooperative.
Size of land owned by the cooperative society	The cooperative owns 75 hectares of land. The 26 hectares of land is utilized by the 26 active members while 40 hectares of land is hired / rented out to the member of the public and the remaining 9 hectares is comprised of swamp/wetland.
Achievement / benefits	The cooperative society collects money from the tenants of which the money is used to run activities of the organization such pay the employees of the organization. The cooperative society members earn dividends from the proceeds collected. The cooperative society members have benefited through utilization of the cooperative land (26 hectares) for crop farming.
How many tones do you harvest per season	The cooperative society does not have such data.
Do you have market for food crops that cooperative society produces?	Initially the harvests used to be sold to the cooperative society. Currently, harvests are sold to the local business men and some is used for home consumption.
What are challenges faced by the cooperative society?	The Tanzanian invasion of Uganda crippled the cooperative society thus cooperative society lost property such as the machinery like tractors. The cooperative society machinery like tractors, watering cans, wheel barrows, spray equipment and chemicals. The cooperative lack water for irrigation. Severe drought has affected in the last 2 years has affected their

	<p>output.</p> <p>Thieves who steal mainly bananas while in the gardens</p> <p>The cooperative society lacks access roads in the various parts of the farms thus farmers find it difficult to transport their produce from the farm to their homes and the market.</p>
<p>What are your expectations from the Kabuyanda Water Resources Project?</p>	<p>The cooperative society is highly expectatant of the water for irrigation.</p> <p>The cooperative society expects safe and clean water for domestic use.</p> <p>The cooperative society expect water to start a fish farm in the 9 hectare swamp / wetland.</p>
<p>What are your fears from the Kabuyanda Water Resources Project?</p>	<p>Crops will be damaged during the laying of the water pipes at construction phase</p> <p>Project will displace some households especially those households where the water pipes will pass through.</p>

Interview with the Manager Kigarama Commodity Marketing Cooperative Society Limited	
What is the name of this cooperative society?	Kigarama Commodity Marketing Cooperative Society Limited
Date consulted	7 th November 2017
Manager	Arinaitwe Innocent
Number of member	The cooperative society has 140 members organized under 18 groups. The cooperative society works with about 1500 farmers in 4 sub counties of Kabuyanda Town Council, Kabuyanda, Ruborogota and Kikagati sub counties.
When was the cooperative society established?	
What activities is this cooperative society involved in?	Extends credit in form of loan to the farmers Provides improve seeds to the farmers Advisory and education to the farmers Stocks farmers harvests bulk mainly beans and maize Looks for market for the farmers produce They also deal in other items like bananas, potatoes etc.
Achievement / benefits	
How many tones of produce do you stock?	
Do you have market for food crops that cooperative society produces?	The cooperative has 3 types of markets i.e. international market with Rwanda and Kenya, Local market supply schools and farmers and Non-Governmental Organizations looking nutritional component like World Vision and Harvest Plus.
What are challenges faced by the cooperative society?	Poor weather that contributed to drought thus affecting their output for the last 2 years.
What solutions have you provided to the farmers?	Farmers have been encouraged to plan trees especially on the bare hills. Farmers have been encouraged to plan drought resistant crops
What are your expectations from the Kabuyanda Water Resources Project?	Irrigation. Cooperative society will encourage the farmers to adopt /take up the scheme
What are your fears from the Kabuyanda Water Resources Project?	Floods as a result of the breakdown of the dam Emergency of new pests and diseases as a result of the dam.

Interview with the Manager Kabuyanda Dairy Cooperative Society Limited	
What is the name of this cooperative society?	Kabuyanda Dairy Cooperative Society Limited
Date consulted	7 th November 2017
Manager	Biryomumaisho Elias
Number of member	Cooperative society has 123 registered members but have 90 active members
What was the purpose of establishing this cooperative society?	The cooperative society was established to increase milk production so that the people in the area can benefit. Cooperative society was established with the aim of changing and keeping animals that are productive. Cooperative society provides the members with improved animals. Provide market for the milk produced by the members
Where do you sell the milk that you stock?	The main market for the milk is for the residents of Kabuyanda Town Council and the neighboring communities.
How many liters of milk does the cooperative stock on daily /monthly basis?	The cooperative society stocks about 350 and 10,500 liters of milk on daily and monthly basis respectively.
What are challenges faced by the cooperative society?	Lack adequate water to enable the cooperative clean their tanks / machines Lack electricity to enable the machines to run. The cooperative currently uses solar. The cooperative has not yet paid back the loan that was used to purchase the coolant The members of the society face shortage of water for the animals.
What are your fears from the Kabuyanda Water Resources Project?	Floods in case the dam collapses
	

A group photo with the staff of Kabuyanda Dairy Cooperative Society Limited																	
Interview with Assistant in Charge of Kabuyanda Health Center IV																	
Name of Personnel	Mr. Alex Katagira, Assistant in Charge, Kabuyanda Health Center IV																
Date consulted	7 th November 2017																
How many health worker does Kabuyanda Health Center IV have?	<p>Health center has 49 health workers and these include:</p> <table border="1"> <tr> <td>3 medical Doctors</td> <td>2 Counselors</td> </tr> <tr> <td>8 Nurses</td> <td>2 data Clerks</td> </tr> <tr> <td>8 Midwives</td> <td>2 Nursing Assistants</td> </tr> <tr> <td>4 Clinical Officer</td> <td>1 Theatre Assistants</td> </tr> <tr> <td>1 Dentist</td> <td>1 Public Health Nurse</td> </tr> <tr> <td>4 Laboratory Technicians</td> <td>1 Records Assistant</td> </tr> <tr> <td>3 Nursing Officers</td> <td>1 Accountant and</td> </tr> <tr> <td>1 Anesthetist</td> <td>7 Porters</td> </tr> </table>	3 medical Doctors	2 Counselors	8 Nurses	2 data Clerks	8 Midwives	2 Nursing Assistants	4 Clinical Officer	1 Theatre Assistants	1 Dentist	1 Public Health Nurse	4 Laboratory Technicians	1 Records Assistant	3 Nursing Officers	1 Accountant and	1 Anesthetist	7 Porters
3 medical Doctors	2 Counselors																
8 Nurses	2 data Clerks																
8 Midwives	2 Nursing Assistants																
4 Clinical Officer	1 Theatre Assistants																
1 Dentist	1 Public Health Nurse																
4 Laboratory Technicians	1 Records Assistant																
3 Nursing Officers	1 Accountant and																
1 Anesthetist	7 Porters																
What are the services offered by the health facility?	<p>Outpatient Department. Facility receives patients get treated and return back home</p> <p>Laboratory services. Tests are done on HIV, Malaria, Syphilis, Urine, Stool, Sputum, CD4, Viral load and MTB</p> <p>Dental Services. Extract teeth and cementing</p> <p>Immunization</p> <p>Ultra Viral Therapy</p> <p>Counselling</p> <p>Ultra Sound Scan services</p> <p>Antenatal care</p> <p>Family Planning</p> <p>Nutritional Clinic</p> <p>Inpatient Department. Patients are admitted in wards</p> <p>Deliveries</p> <p>Postnatal care</p> <p>Operations</p> <p>Safe circumcisions</p> <p>Community Based (Direct Observed Therapy)</p> <p>Out Reaches. Services are offered out sides like immunization</p> <p>Support plus supervision of lower facilities e.g. Health Center IIIs and IIs.</p> <p>Post Exposure Prophylaxis (PEP). Services are offered to people raped or bitten by HIV patients and</p> <p>Emergency systems</p>																
What are the major diseases affecting patients who visit	The illness include; malaria, Respiratory Tract Infections, Diarrhea, Ear infections and HIV/AIDS																

this health facility?	
How many patients does the facility receive on daily basis?	Facility receives approximately 120 patients
How many beddings does the facility has as per ward?	Maternity ward has 24 beds General ward has 16 beds and Children's ward has 8 beds
What some of the challenges faced by the facility?	Staffing is still inadequate Water crisis especially during dry spell.
What is the HIV/AIDS prevalence in the area?	HIV/AIDS stands at 4.6%
What are your expectations from this project?	The health facility will expect support from the project because the facility will be overstretched by the increase in the number patients, project workers and the surrounding Districts like Ntungamo, Rwanda and Tanzania.
Do you have anything important that project would want to know?	Health facility is focused on preventing diseases. The health facility works with private partners such as Maririe Stops, Egg Puff, Mayanja Memorial Foundation, AIDS Information Center, Mellennium Village Project (closing December 2017).

C. QUESTIONNAIRES

Directly Affected Households

Resettlement Action Plan (RAP) for Kabuyanda Water Resources Development Project

SOCIO ECONOMIC SURVEY TOOL – DIRECTLY AFFECTED

INTRODUCTION

My name is _____

I am here on behalf of the **Nile Basin Initiative/Nile Equatorial Lakes (NBI/NELSAP)**. This is an organization formed to develop the River Nile in a equitable and sustainable way for the benefit of the people living within the Nile Basin at promoting regional peace and security. We would therefore like to ask you for your responses will help in the planning, construction and operation phases of the Project. The information you will give will be treated with utmost confidentiality.

Serial number _____

LOCATIONAL DETAILS

District----- Sub County-----

Parish----- Village -----

Date of interview-----

PROJECT INFRASTRUCTURE

Access roads	1
Water Reservoir	2
Dam Area	3
Main Water Pipes	4
Other Infrastructure (specify)	5

FAMILY INFORMATION

1. Name of Household Head (Surname, First Name) -----

2. Sex: 1 Male 2 Female

3. Age of respondent _____ (in completed years)

1 (00 – 17)

2 (18 – 25)

Resettlement Action Plan (RAP) for Kabuyanda Water Resources Development Project

6. a) . What was your reason for moving here?

- | | | |
|------------------|--------------------------|--------------------------|
| 1. Marriage | <input type="checkbox"/> | 5. For education |
| 2. Grazing land | <input type="checkbox"/> | 6. Internal displacement |
| 3. Farming | <input type="checkbox"/> | 7. Trade |
| 4. To find a job | <input type="checkbox"/> | 8. Other (specify) |

b). Where did you move from? (District/ Country) -----

7. Marital status

- | | |
|-------------|--------------------------|
| 1. Single | <input type="checkbox"/> |
| 2. Married | <input type="checkbox"/> |
| 3. Divorced | <input type="checkbox"/> |
| 4. Widowed | <input type="checkbox"/> |

7b). If married, how many spouses? _____

8. How big is your current family? _____

Female _____ Male _____

(Include only those members who permanently stay in the household including boarding who got married or those who started their own families and stay in the neighborhood,

Age bracket	Male	Female	Total
0-17yrs			
18-39yrs			
40-64yrs			
Above 65			

9. Of what religious affiliation is your household?

- | | |
|---------------------|--------------------------|
| 1. Catholic | <input type="checkbox"/> |
| 2. Protestant | <input type="checkbox"/> |
| 3. Islam | <input type="checkbox"/> |
| 4. Pentecostal | <input type="checkbox"/> |
| 5. SDA | <input type="checkbox"/> |
| 6. Others (specify) | |

10. What is the highest level of education you have attended / are currently i

Resettlement Action Plan (RAP) for Kabuyanda Water Resources Development Project

13. Are there other members of the household that are working?

1. Yes
2. No

14. Are there members of the household who are disabled?

1. Yes
2. No

If yes, how many? _____

15. Does the head of household have any chronic disease? 1 Yes

16. If yes, type of chronic disease

1. HIV / AIDS
2. Heart Disease
3. Cancer
4. TB
5. Stroke
6. Diabetes
7. Other (specify)

17. a) What is the main occupation of the household head?

1. Formal employment
2. Farmer
3. Trader
4. Casual laborer
5. Service provision (e.g. salon, hotel, transport etc.)
6. Others (specify)

18. b). How far is your workplace from here?

1. Less than 100m
2. 100 – 500 meters
3. 501 – 1 Km
4. 1.1km – 2km
5. 2.1km -5km
6. Over 5 km

19. How do you get to work?

1. Work at home
2. By public means

Resettlement Action Plan (RAP) for Kabuyanda Water Resources Development Project

22. In what capacity do you utilize this land?

1. Landowner
2. Tenant (kibanja holder)
3. Co-owner
4. Squatter
5. Licensee

23. How did you acquire this land?

1. Bought
2. Inherited from parents
3. Renting

24. Describe the tenure ship of this land

1. Public land
2. Private Mailo land
3. Freehold
4. Leasehold
5. Customary
6. Communal land

25. After acquisition of a portion of your land, will the remaining land be sufficient for:

1. Farming and household food security? Yes
2. Trading/Business activities? Yes
3. Residential dwelling? Yes

26. If the land is not sufficient, do you own land elsewhere?

1. Yes
2. No

27. If yes how, how does it compare with the affected land?

1. Bigger
2. Smaller
3. Equal

28. If you have land elsewhere, is it located in the same village or far from your village?

1. Same village
2. Less than 20 km
3. 20 – 40 km
4. More than 40 km

Resettlement Action Plan (RAP) for Kabuyanda Water Resources Development Project

31. Do you have a bank account? Yes No

32. If yes, what is the name of the bank _____

33. Distance to the bank

- 1. Less than 1Kms
- 2. 2-5km
- 3. 1-3kms
- 4. 3-5kms
- 5. 6km+

34. What is the household's main source of income?

- 1. Salary
- 2. Husband's salary
- 3. Business on land
- 4. Business located elsewhere
- 5. Rent collected from affected land
- 6. Rent collected elsewhere
- 7. Agricultural activity on affected land
- 8. Agricultural activity on land elsewhere
- 9. Fishing
- 10. Other, specify _____

35. From what other activities does the household generate income?

- 1. Fishing
- 2. Poultry
- 3. Retail shop
- 4. Other, specify _____

36. Please give suggestions of how the livelihood / income of the household

37. What items do you sell? _____

38. What is the main marketing point for the items you sell?

Resettlement Action Plan (RAP) for Kabuyanda Water Resources Development Project

40. What problems do you encounter when marketing your commodities?

41. In the last 12 months, are there days when your household did not have
 eat to satisfaction because of lack of enough food? Yes 1

42. If yes, what were the reasons for the food not being enough? (Multiple a

43. Rank the following items according to what you spend the most money
 spent on and 8= least spent on)

Item	Rank
School fess	
Healthcare/ medical expenses	
Food	
Clothing	
Transport	
Dependents	
Rent	
Airtime	

NATURE OF IMPACT ON HOUSEHOLD

44. Are there structures on the affected land? Yes 1

45. How is your household going to be impacted? (Tick appropriate response)

Description of impact	Yes	No	
Structure on land?			
Loss of land			
Loss of perennial crops			
Seasonal crops			Will not be compensated since ca

Resettlement Action Plan (RAP) for Kabuyanda Water Resources Development Proc

50. If children are not going to school, give reasons why

1. Lack of school fees
2. Schools very far from home
3. Not interested in school
4. Unwanted pregnancy/Early pregnancy
5. Preferred looking for jobs
6. Others (Please specify)

51. What is the distance to the nearest primary school?

1. Less than 100m
2. 101 – 500 meters
3. 501 – 1 Km
4. 1.1km – 2km
5. 2.1km -5km
6. Over 5 km

52. What is the distance to the nearest secondary school?

1. Less than 100m
2. 101 – 500 meters
3. 501 – 1 Km
4. 1.1km – 2km
5. 2.1km -5km
6. Over 5 km

53. By what means do the children go to school?

1. By public means
2. By personal vehicle
3. By bicycle/motorcycle
4. On foot
5. Others (specify)

HEALTH, INFANT MORTALITY AND VULNERABILITY

54. Are there members of the household who suffer chronic illnesses?

55. If yes, type of chronic disease (multiple answers acceptable)

Resettlement Action Plan (RAP) for Kabuyanda Water Resources Development Project

60. If yes, how many? -----

61. Has the household lost a child under the age of 5 years in the last three years?

62. What are the 3 most common diseases that affect the family?

1. _____
2. _____
3. _____

63. What are the 3 most common diseases suffered by children in the household?

64. What is the household's monthly expenditure on treatment for above mentioned diseases?

65. When was a member of the household last hospitalized?

1. In the last week
2. In the last month
3. In the last 6 months
4. Never

66. Where does the household usually seek medical attention from?

- | | |
|---|---|
| 1. Home treatment <input type="checkbox"/> | 6. Health Center 1 <input type="checkbox"/> |
| 2. Pharmacy/ Drug shop <input type="checkbox"/> | 7. Health Centre 4 <input type="checkbox"/> |
| 3. Private Clinic <input type="checkbox"/> | 8. Other specify <input type="checkbox"/> |
| 4. Health Center3 <input type="checkbox"/> | |
| 5. Health Center 2 <input type="checkbox"/> | |

67. Is there a health center in the sub county? Yes

68. What type of health facility exists in this area?

- | | |
|---|---|
| 1. District Hospital <input type="checkbox"/> | 4. Health Center 2 <input type="checkbox"/> |
| 2. Health Center 4 <input type="checkbox"/> | 5. Private Clinic <input type="checkbox"/> |
| 3. Health Center 3 <input type="checkbox"/> | |

69. How far is it from your home?

1. Less than 5km

Resettlement Action Plan (RAP) for Kabuyanda Water Resources Development Pro

74. If yes, how many? _____

75. Do you practice family planning? 1. Yes 2. No

76. Have you heard of HIV/AIDS 1. Yes 2. No

77. Do you know how HIV is contracted? 1. Yes 2. No
(Verify knowledge if yes response is given)

78. Do you know how HIV is avoided? 1. Yes 2. No
(Verify knowledge if yes response is given)

79. According to you what are some of the major STDS common in your area

1. HIV/AIDS
2. Gonorrhoea
3. Syphilis
4. Others

80. According to you, what are the major causes of AIDS prevalence in your area

1. Irresponsible sexual behavior
2. Blood transfusion
3. Sharing of sharp instruments such as razorblades
4. Mother to child transmission
5. Don't know

81. Is any member of your household infected with HIV/AIDS? 1 Yes

SOURCES OF WATER

82. What are the sources of water for your domestic use?

- | | |
|--|---|
| 1. Private boreholes <input type="checkbox"/> | 6. Shallow wells <input type="checkbox"/> |
| 2. Public boreholes <input type="checkbox"/> | 7. Piped Water <input type="checkbox"/> |
| 3. Protected spring <input type="checkbox"/> | 8. Rainwater <input type="checkbox"/> |
| 4. Unprotected spring <input type="checkbox"/> | 9. Other Specify _____ |
| 5. River <input type="checkbox"/> | |

Resettlement Action Plan (RAP) for Kabuyanda Water Resources Development Project

ENERGY

85. What fuel does your household use for cooking?

- | | | | |
|-------------|--------------------------|----------------|--------------------------|
| 1. Firewood | <input type="checkbox"/> | 5. Kerosene | <input type="checkbox"/> |
| 2. Gas | <input type="checkbox"/> | 6. Biogas | <input type="checkbox"/> |
| 3. Charcoal | <input type="checkbox"/> | 7. Electricity | <input type="checkbox"/> |
| 4. Solar | <input type="checkbox"/> | 8. Other _____ | |

86. What fuel does your household use for lighting?

- | | | | |
|-------------|--------------------------|-------------------------|--------------------------|
| 1. Firewood | <input type="checkbox"/> | 5. Kerosene | <input type="checkbox"/> |
| 2. Gas | <input type="checkbox"/> | 6. Biogas | <input type="checkbox"/> |
| 3. Charcoal | <input type="checkbox"/> | 7. Electricity | <input type="checkbox"/> |
| 4. Solar | <input type="checkbox"/> | 8. Other, specify _____ | |

WASTE MANAGEMENT

87. How does your household dispose of domestic refuse?

- | | |
|-----------------------------|--------------------------|
| 1. In a landfill | <input type="checkbox"/> |
| 2. In a dumpster | <input type="checkbox"/> |
| 3. Burning | <input type="checkbox"/> |
| 4. Burying in a compost pit | <input type="checkbox"/> |

88. What type of facility is by your household for disposal of human waste?

- | | |
|---------------------------|--------------------------|
| 1. Flush toilet | <input type="checkbox"/> |
| 2. Pit latrine | <input type="checkbox"/> |
| 3. Community pit latrines | <input type="checkbox"/> |
| 4. Bush | <input type="checkbox"/> |
| 5. Other, specify _____ | <input type="checkbox"/> |

SECTION 5: SOCIAL NETWORK

89. Do you belong to any of the following groups? (*Multiple responses accepted*)

- | | |
|---|--------------------------|
| 1. Agricultural / fishing/ group or association | <input type="checkbox"/> |
| 2. Support group for vulnerable groups | <input type="checkbox"/> |
| 3. Loan financial association's | <input type="checkbox"/> |
| 4. Other (specify) _____ | <input type="checkbox"/> |

Resettlement Action Plan (RAP) for Kabuyanda Water Resources Development Project

92. What is your role in the group/Association? _____

COMMUNITY TIES, CULTURAL, RELIGIOUS RESOURCES

93. Are there graves on the affected land? 1. Yes

94. If yes, how do you wish to handle them

1. Relocate them
2. Leave them
3. Other(Specify) _____

95. Are there areas of cultural significance on your affected property?

96. If yes, please specify them _____

CONFLICT MANAGEMENT

97. Who do you turn to in a position of authority when there is a conflict in the community?

1. Religious leader
2. Police
3. Local government
4. No one
5. Other (specify) _____

THANK YOU

Indirectly Affected Households

Resettlement Action Plan (RAP) for Kabuyanda Water Resources Development Project

**SOCIO ECONOMIC SURVEY TOOL – INDIRECTLY AFFECTED
(CONTROL GROUP)**

INTRODUCTION

My name is _____

I am here on behalf of the **Nile Basin Initiative/Nile Equatorial Lakes (NBI/NELSAP)**. This is an organization formed to develop the River Nile in a equitable and sustainable way for the benefit of the people living within the Nile Basin at promoting regional peace and security. We would therefore like to ask you for your responses will help in the planning, construction and operation phases of the Project. The information you will give will be treated with utmost confidentiality.

Serial number _____

LOCATIONAL DETAILS

District----- Sub County-----

Parish----- Village -----

Date of interview-----

PROJECT INFRASTRUCTURE

Access roads	1
Water Reservoir	2
Dam Area	3
Main Water Pipes	4
Other Infrastructure (specify)	5

FAMILY INFORMATION

1. Name of Household Head (Surname, First Name) -----

2. Sex: 1 Male 2 Female

3. Age of respondent _____ (in completed years)

1 (00 – 17)

2 (18 – 25)

Resettlement Action Plan (RAP) for Kabuyanda Water Resources Development Project

6. a) . What was your reason for moving here?

- | | | |
|------------------|--------------------------|--------------------------|
| 1. Marriage | <input type="checkbox"/> | 5. For education |
| 2. Grazing land | <input type="checkbox"/> | 6. Internal displacement |
| 3. Farming | <input type="checkbox"/> | 7. Trade |
| 4. To find a job | <input type="checkbox"/> | 8. Other (specify) |

b). Where did you move from? (District/ Country) -----

7. Marital status

- | | |
|-------------|--------------------------|
| 1. Single | <input type="checkbox"/> |
| 2. Married | <input type="checkbox"/> |
| 3. Divorced | <input type="checkbox"/> |
| 4. Widowed | <input type="checkbox"/> |

7b). If married, how many spouses? _____

8. How big is your current family? _____

Female _____ Male _____

(Include only those members who permanently stay in the household including boarders who got married or those who started their own families and stay in the neighborhood,

Age bracket	Male	Female	Total
0-17yrs			
18-39yrs			
40-64yrs			
Above 65			

9. Of what religious affiliation is your household?

- | | |
|---------------------|--------------------------|
| 1. Catholic | <input type="checkbox"/> |
| 2. Protestant | <input type="checkbox"/> |
| 3. Islam | <input type="checkbox"/> |
| 4. Pentecostal | <input type="checkbox"/> |
| 5. SDA | <input type="checkbox"/> |
| 6. Others (specify) | |

10. What is the highest level of education you have attended/ are currently i

- | | |
|-----------------------------|--------------------------|
| 1. Primary school education | <input type="checkbox"/> |
|-----------------------------|--------------------------|

Resettlement Action Plan (RAP) for Kabuyanda Water Resources Development Project

14. Are there members of the household who are disabled?

1. Yes
2. No

If yes, how many? _____

15. Does the head of household have any chronic disease? 1 Yes

16. If yes, type of chronic disease

1. HIV / AIDS
2. Heart Disease
3. Cancer
4. TB
5. Stroke
6. Diabetes
7. Other (specify)

17. a) What is the main occupation of the household head?

1. Formal employment
2. Farmer
3. Trader
4. Casual laborer
5. Service provision (e.g. salon, hotel, transport etc.)
6. Others (specify)

18. b). How far is your workplace from here?

1. Less than 100m
2. 100 – 500 meters
3. 501 – 1 Km
4. 1.1km – 2km
5. 2.1km -5km
6. Over 5 km

19. How do you get to work?

1. Work at home
2. By public means
3. By personal vehicle
4. By bicycle/motorcycle
5. On foot
6. Others (specify)

Resettlement Action Plan (RAP) for Kabuyanda Water Resources Development Project

22. How did you acquire this land?

1. Bought
2. Inherited from parents
3. Renting

23. Describe the tenure ship of this land

1. Public land
2. Private Mailo land
3. Freehold
4. Leasehold
5. Customary
6. Communal land

24. If your land was to be taken/acquired from you, what mode of compensation?

1. Cash
2. Another similar property

LIVELIHOOD, INCOME SOURCES AND EXPENDITURE PATTERNS OF HOUSEHOLDS

25. Total income from **all** your sources of income

Monthly	below 100 000	1	100 - 200 000	2
	400 – 600 000	4	600 – 800 000	5
	>1 – 1.5 million	7	>1.5 – 2 million	8

26. Do you have a bank account? 1. Yes 2. No

27. If yes, what is the name of the bank _____

28. Distance to the bank

1. Less than 1Kms
2. 2-5km
3. 1-3kms
4. 3-5kms

Resettlement Action Plan (RAP) for Kabuyanda Water Resources Development Project

30. From what other activities does the household generate income?

- | | |
|-------------------------|--------------------------|
| 1. Fishing | <input type="checkbox"/> |
| 2. Poultry | <input type="checkbox"/> |
| 3. Retail shop | <input type="checkbox"/> |
| 4. Other, specify ----- | <input type="checkbox"/> |

31. Please give suggestions of how the livelihood / income of the household

32. What items do you sell? _____

33. What is the main marketing point for the items you sell?

- | | |
|----------------------|---|
| Farm gate | 1 |
| Co-operative store | 2 |
| Local produce buyer | 3 |
| Village markets | 4 |
| Local trading Centre | 5 |
| Boarder markets | 6 |
| Far towns | 7 |
| Others specify | 8 |

34. What is the distance to the main marketing point for your items?

- | | |
|-----------------|---|
| Less than 500ms | 1 |
| 500-1km | 2 |
| 1.1k - 3km | 3 |
| Above 3 km | 4 |

35. What problems do you encounter when marketing your commodities?

36. In the last 12 months, are there days when your household did not have eat to satisfaction because of lack of enough food? Yes 1

37. If yes, what were the reasons for the food not being enough? (Multiple a

Resettlement Action Plan (RAP) for Kabuyanda Water Resources Development Project

EDUCATION

39. Do you have any school age children not going to school?

40. If yes, how many are they? Boys----- Girls -----

41. If children are not going to school, give reasons why

1. Lack of school fees
2. Schools very far from home
3. Not interested in school
4. Unwanted pregnancy/Early pregnancy
5. Preferred looking for jobs
6. Others (Please specify)

42. What is the distance to the nearest primary school?

1. Less than 100m
2. 101 – 500 meters
3. 501 – 1 Km
4. 1.1km – 2km
5. 2.1km -5km
6. Over 5 km

43. What is the distance to the nearest secondary school?

1. Less than 100m
2. 101 – 500 meters
3. 501 – 1 Km
4. 1.1km – 2km
5. 2.1km -5km
6. Over 5 km

44. By what means do the children go to school?

1. By public means
2. By personal vehicle
3. By bicycle/motorcycle
4. On foot

Resettlement Action Plan (RAP) for Kabuyanda Water Resources Development Project

47. Has the household suffered death of members in the last 12 months?
48. If yes, how many? -----
49. What was/were the cause(s) of death? _____
50. Have children been born to the household in the last 12 months?
51. If yes, how many? -----
52. Has the household lost a child under the age of 5 years in the last three years?
53. What are the 3 most common diseases that affect the family?
1. _____
 2. _____
 3. _____
54. What are the 3 most common diseases suffered by children in the household?

55. What is the household's monthly expenditure on treatment for above mentioned diseases?

56. When was a member of the household last hospitalized?
1. In the last week
 2. In the last month
 3. In the last 6 months
 4. Never
57. Where does the household usually seek medical attention from?
- | | | | |
|------------------------|--------------------------|--------------------|--------------------------|
| 1. Home treatment | <input type="checkbox"/> | 6. Health Center 1 | <input type="checkbox"/> |
| 2. Pharmacy/ Drug shop | <input type="checkbox"/> | 7. Health Centre 4 | <input type="checkbox"/> |
| 3. Private Clinic | <input type="checkbox"/> | 8. Other specify | <input type="checkbox"/> |
| 4. Health Center3 | <input type="checkbox"/> | | |
| 5. Health Center 2 | <input type="checkbox"/> | | |
58. Is there a health center in the sub county? Yes

Resettlement Action Plan (RAP) for Kabuyanda Water Resources Development Pro

63. What problems or difficulties do you face when you go for health care?
(E.g. Lack of drugs, doctors, nurses etc.)

64. Do you have members of your household who are orphans? 1 Yes

65. If yes, how many? _____

66. Do you practice family planning? 1 Yes

67. Have you heard of HIV/AIDS 1 Yes

68. Do you know how HIV is contracted? 1 Yes
(Verify knowledge if yes response is given)

69. Do you know how HIV is avoided? 1 Yes
(Verify knowledge if yes response is given)

70. According to you what are some of the major STDS common in your ar

1. HIV/AIDS
2. Gonorrhoea
3. Syphilis
4. Others

71. According to you, what are the major causes of AIDS prevalence in you

1. Irresponsible sexual behavior
2. Blood transfusion
3. Sharing of sharp instruments such as razorblades
4. Mother to child transmission
5. Don't know

72. Is any member of your household infected with HIV/AIDS? 1 Yes

SOURCES OF WATER

Resettlement Action Plan (RAP) for Kabuyanda Water Resources Development Project

75. How sufficient is this water?

1. Throughout the year
2. Insufficient during dry season
3. Insufficient throughout the year
4. Other (specify) _____

ENERGY

76. What fuel does your household use for cooking?

- | | | | |
|-------------|--------------------------|----------------|--------------------------|
| 1. Firewood | <input type="checkbox"/> | 5. Kerosene | <input type="checkbox"/> |
| 2. Gas | <input type="checkbox"/> | 6. Biogas | <input type="checkbox"/> |
| 3. Charcoal | <input type="checkbox"/> | 7. Electricity | <input type="checkbox"/> |
| 4. Solar | <input type="checkbox"/> | 8. Other | _____ |

77. What fuel does your household use for lighting?

- | | | | |
|-------------|--------------------------|-------------------|--------------------------|
| 1. Firewood | <input type="checkbox"/> | 5. Kerosene | <input type="checkbox"/> |
| 2. Gas | <input type="checkbox"/> | 6. Biogas | <input type="checkbox"/> |
| 3. Charcoal | <input type="checkbox"/> | 7. Electricity | <input type="checkbox"/> |
| 4. Solar | <input type="checkbox"/> | 8. Other, specify | _____ |

WASTE MANAGEMENT

78. How does your household dispose of domestic refuse?

1. In a landfill
2. In a dumpster
3. Burning
4. Burying in a compost pit

79. What type of facility is by your household for disposal of human waste?

1. Flush toilet
2. Pit latrine
3. Community pit latrines
4. Bush
5. Other, specify -----

Resettlement Action Plan (RAP) for Kabuyanda Water Resources Development Project

5. Payment of Schools fees and scholastic materials
6. Provision of household items to families e.g. foodstuffs, clothes, blankets
7. Trainings to members?
8. Distribution of mosquito nets
9. HIV/AIDS counselling services
10. Others (Specify) _____

83. What is your role in the group/Association? _____

COMMUNITY TIES, CULTURAL, RELIGIOUS RESOURCES

84. Are there graves on your land? 1 Yes

85. If yes, how many? _____

86. Are there areas of cultural significance on your affected property?

87. If yes, please specify them _____

CONFLICT MANAGEMENT

34. Who do you turn to in a position of authority when there is a conflict in your community?

1. Religious leader
2. Police
3. Local government
4. No one
5. Other (specify) _____

THANK YOU

D. GRIEVANCE FORM SAMPLE

Serial No:

Query/Grievance Form

Name of Complainant	Sex
Telephone Contact	Village
Sub-County	District
Plot Ref	Categories of grievance a. Survey b. Valuation c. Social Economic d. Legal e. Compensation f. Resettlement g. Identification/Ownership h. Land Wrangle/Family Dispute

Describe the complaint

Any Supporting document? Yes/No indicate all parties involved in case

Action

Taken

Grievance Taken by

Designation

Name & Signature of Complainant

Date

Dispute Resolution Sheet:

Basic Facts;

Resolution/Responses;

Signed _____ Name _____

**E. INVENTORY, AND ECONOMIC ASSESSMENT OF ON RWOHO
CFR BY THE IRRIGATION AND CLIMATE RESILIENCE
PROJECT**

List of Acronyms

CDM:	Clean Development Mechanism
CFR:	Central Forest Reserve
CFM:	Collaborative Forest Management
Cm ³ :	Cubic meters
DBH:	Diameter at Breast Height
EA	Environmental Assessment
EIA:	Environmental Impact Assessment
ESIA	Environmental and Social Impact Assessment
ESG	Environmental Safeguards Unit GEF
GEF	Global Environment Facility
Ha:	Hectares
Ht:	Height
IDB	Inter-American Development Bank
MWE	Ministry of Water and Environment
NFA:	National Forestry Authority
NPV	Net Present Value
PV	Present Value
PWS	Potable Water Supply
TEV	Total Economic Value
TC	Travel Cost
TORs	Terms of Reference
WB	World Bank

1.0: Background

Under the Irrigation Development and Climate Resilience Projects, the Kabuyanda dam will inundate (submerge) part of the Rwoho CFR. The activities relating to construction of the dam is estimated to cover an estimated area of 302.47 ha of the Central Forest Reserve. In part of this area (51.5 ha), the National Forestry Authority (22.77ha), as well as the forest adjacent community under Collaborative Forest Management (CFM) (28.28ha), have established plantations under Climate Development Mechanism (CDM), as a strategy to mitigate against extremes of weather and climate but also to benefit from the CDM financing mechanisms aimed at sustaining the developments and for resilience to climate. Other members from adjacent communities have also established commercial plantations of trees under licence from NFA. Details of the breakdown of individual/group plantations are indicated in table 4.1.

It was against this background that the Ministry of Water and Environment requested NFA to undertake an inventory of the trees within the dam embankment site and reservoir located within the Central Forest Reserve as per the detailed designs.

2.0: Objective

Objective was to assess the impact of the irrigation scheme on the part of Rwoho CFR to be inundated by the proposed dam and generate economic value for this impact.

The specific tasks were;

1. To delineate and demarcate the area of CFR to be affected by the dam (302.468 ha.)
2. To establish sample plots equal to 1% of the impact area (200 plots of area 0.02 ha)
3. To enumerate and quantify all the trees in the 200 plots.
4. To quantify natural trees, poles/saplings in the wetland that will be submerged by dam water.
5. To determine the standing volume of trees and take census of seedling, saplings and poles.
6. Take stock of the forest resources including volume of trees and number poles/sapling.
7. To determine the ecological and economic values of the impact of the development.

3.0: Materials and Methods

3.1: DEMARCATION OF DAM AREA

The map of area was produced using GIS software, exported as a PDF format, and uploaded into Avenza map installed in the tablets. The outline of the dam area was traced using the Avenza map and was marked by red paint.

3.2: SAMPLING, DEMARCATION AND ENUMERATION OF SAMPLE PLOTS

Systematic sampling was done along transects on either sides of the wetland. Sample plots were established and demarcated along transects at an interval of 100m. The area of sample plot was 200m², with radius of 8m. All the trees in the plots were enumerated and the data booked using field forms.

3.3: Assessment of the amount of carbon sequestered by CDM Project

Generic equation with in-built formulae have been used to assess the amount of carbon sequestered. The equations described shall only serve to compute from the derivatives provided in the report and shall ignore the derivation of the said formulae. The derivation used can however be viewed by highlighting the table in its top –left (of the soft or digital copy as one is directly facing the compute!), and placing the cursor on the individual valued in table 3.1.

Table 1: Generic values used to Compute Carbon Stock in Forest Plantations (IPCC GPG, 2006)

Tree Species	BEF	WD	RSR	dm-C	tCO2e
Eucalyptus	3.4	0.75	0.2	0.5	3.67
Pines	1.32	0.51	0.23	0.5	3.67
Broadleaved Species (Musizi)	3.4	0.41	0.27	0.5	3.67

Table 3.2: Biomass Conversion Generic Values by Land Use/Cover (IPCC GPG, 2006)

Land Use/Cover	Shoot-Root Ratio	Dry matter to Carbon	Carbon to tCO2e
Cropland/woody perennials	0.42	0.5	3.67

Equation: Estimation of Above Ground Biomass (Baseline).....1

$$B_{A(t)} - M_{(t)} * 0.5$$

Where:

$B_{A(t)i}$ = Carbon Stocks in above ground biomass at time t in the absence of the project activity (t C/ha)

$M_{(t)}$ = above ground biomass at time t that would have occurred in the absence of the project activity (t dm/ha)¹

0.5 = carbon fraction of dry matter (t C/t dm)

Equation: Estimation of Below Ground Biomass (Baseline).....2

$$B_{B(t)} = 0.5 * (M_{(grass)} * R_{grass} + M_{woody} + R_{woody})$$

Where:

$B_{B(t)}$ = Carbon Stocks in below ground biomass at time t that would have occurred in the absence of the project activity (t dm/ha)

M_{grass} = Above ground biomass in grass on grassland at time t that would have occurred in the absence of the project activity (t dm/ha)

$M_{woody}(t)$ = Above ground biomass at time t that would have occurred in the absence of the project activity (t dm/ha)

R_{woody} = Root to shoot ration of woody perennials (t dm/t dm)

R_{grass} = Root to shoot ration of grassland (t dm/t dm)

Equation: Estimation of above and below ground Biomass in Forest Plantations.....3

$$C_{AB,ijt} = A_{ijt} * V_{ijt} * D_j * BEF_{2,j}$$

Where:

$$C_{BB,ijt} = C_{AB,ijt} * R_j$$

$C_{AB,ijt}$	= Carbon Stocks in above ground biomass for stratum i , species j at time t ; tC
$C_{BB,ijt}$	= Carbon Stocks in below ground biomass for stratum i , species j at time t ; tC
A_{ijt}	= Area of stratum i , species j at time t ; hectares
V_{ijt}	= Average merchantable volume of stratum i , species j at time t ; m
D_j	= Basic wood density of species j ; t d.m. m ⁻³
BEF_{2j}	= Biomass expansion factor for conversion of merchantable volume to above ground tree biomass for species j ; dimensionless
R_j	= Root-shoot ration for species j ; dimensionless

3.4: Assessment of the environmental impacts of economic development

Economic valuation of environmental impacts be based on a careful identification and measurement of the biological and physical changes by a project to guide conformation or development of alternative project designs.

Natural systems like the “green belts” of Rwoho CFR are holistic and interconnected forming a nexus of relationships of dependency and interdependency in the environment. It is thus essential that from the very beginning of the planning process to be able to determine which one and how much of each of the natural systems is to be impacted by the project .

4.0: Field Findings

Systematic quantification of the issues in the impact area and the ecological and financial analyses of the environmental impacts including the landscape analysis, measurements of trees seedlings, saplings and pole and other benefit streams form the CFR are as illustrated in this chapter.

4.1: GENERAL

The portion of the Rwoho CFR affected includes; the portions of NFA CDM blocks 3 and 4, two CFM groups (KADA and BEKA) under CDM, the private tree farmers and the natural forest belts along the rivers and unplanted areas. Details of the affected planted portions are in Table 2 below. Specifically;

- Assessed plantations were owned by NFA, CFM groups and private tree farmers
- Natural belts still exist especially the areas along the stream banks
- Indigenous trees such *Parinari species*, *Erythrina abyssinica*, *Prunus Africana* among others were seen in both natural bets and area under plantations
- Taugya practice (unsystematic planting of food plants with trees with tree crop) was also visible in both mature and young plantations within the project affected area.
- Approximately 60.52ha categorized as natural belt comprises the natural belts, nursery site, unplanted areas and areas of crop failures.

TABLE 2: ORGANIZATIONS/INDIVIDUAL THAT WILL BE AFFECTED BY THE PROPOSED PROJECT AND AREA PLANTED IN HECTARES

Licensee	Area (ha)	Remarks
Ankole Wood and Timber Works Ltd	1.61	
CFM-CDM	28.28	
Hon. Alex Byarugaba Bakunda	0.01	
Hon. Ngabirano Charles	7.14	
Kaddugala	54.16	
Kyalimpa Lilian/Hon. Ngabirano Charles	38.07	
Mutahunga Livingstone	4.30	
Nabimanya Robert	17.09	
Ndyanabo Cipiriano	5.68	
NFA Unplanted (Natural Belt & Nursery)	60.52	
NFA-CDM	22.77	
Rutasikwa Gordon	0.60	
Takwesire	0.25	
Twinomugish Benon	5.85	Has patchy <i>Maesopsis</i> and Pines for NFA
Twinomugisha Benon	55.71	Has patchy <i>Maesopsis</i> and Pines for NFA
Twinomugisha Benon/Noida	0.45	
Total	302.47	

6.0: Conclusion

Table 10 gives the summary of the assessed compensable items.

Fig 1: Proposed Location and expanse of the (RWOHO CFR) irrigation and climate Resilient Project for the adjacent forest community

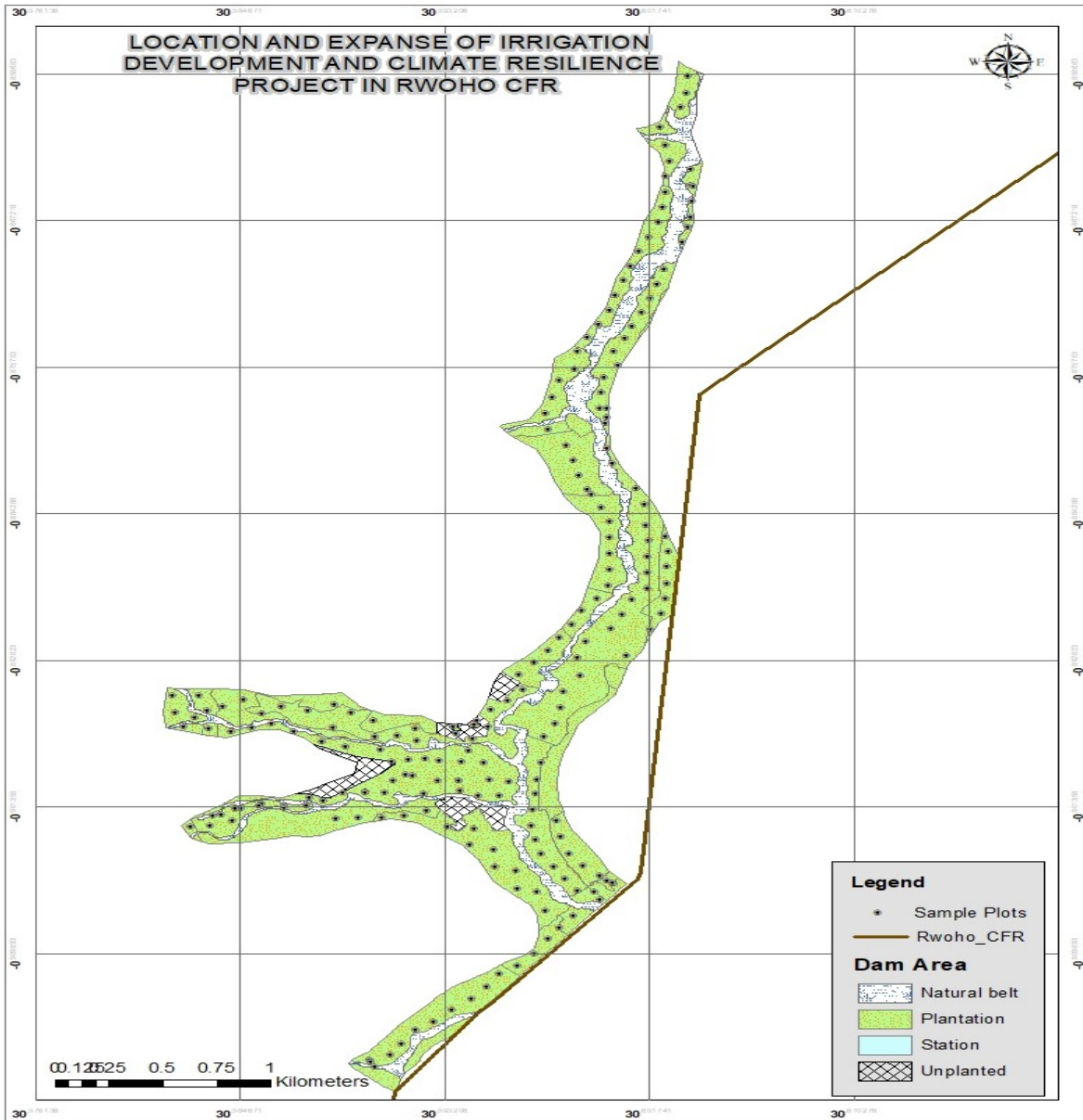


Table 3: Current standing volume of the plantations within the affected portion of Rwoho Central Forest Reserve

Tree Farmer	Tree Species	Age	No Plots	Area (ha)	Stems /	Total Stem	Mean D (cm)	Mean (m)	Vol/ha (m3)	Total Vol (m3)
Ankole Woods	<i>Eucalyptus grandis</i>	3	4	1.61	575	926	13.3	12.5	67.86	109.25
BEKA - CDM	<i>Pinus caribaea</i>	5	7	4.32	629	2,715	13.7	10.0	43.19	186.58
Hon Ngabirano Charles	<i>Eucalyptus grandis</i>	3	5	4.59	480	2,203	14.4	15.7	57.98	266.12
Hon Ngabirano Charles	<i>Eucalyptus grandis</i>	4	3	2.55	650	1,658	16.7	19.7	124.79	318.22
KADA-CDM	<i>Eucalyptus grandis</i>	3	1	3.82	700	2,674	9.6	14.6	33.81	129.16
KADA-CDM	<i>Pinus caribaea</i>	3	11	14.53	541	5,916	9.8	5.6	16.29	61.97
KADA-CDM	<i>Pinus caribaea</i>	6	5	4.99	763	3,783	10.5	7.0	22.80	90.63
KADA-CDM	<i>Pinus caribaea</i>	11	1	0.59	550	325	21.5	15.5	132.74	78.32
Kaddugala	<i>Eucalyptus grandis</i>	2	4	11.59	538	6,230	11.3	13.2	35.85	415.52
Kaddugala	<i>Eucalyptus grandis</i>	3	33	42.31	629	25,675	12.3	16.5	59.75	2,440.08
Kaddugala	<i>Pinus oocarpa</i>	8	2	0.27	975	262	13.4	11.7	71.98	18.40
Kyalimpa Lilian/ Ngabirano Charles	<i>Eucalyptus grandis</i>	1	3	2.58	200	516	0.0	0.0	0.0	-
Kyalimpa Lilian/ Ngabirano Charles	<i>Eucalyptus grandis</i>	2	6	4.44	567	1,864	8.4	9.8	15.82	52.03
Kyalimpa Lilian/ Ngabirano Charles	<i>Eucalyptus grandis</i>	3	16	20.85	615	13,927	14.3	15.5	66.57	1,300.50
Kyalimpa Lilian/ Ngabirano Charles	<i>Eucalyptus grandis</i>	4	4	10.2	588	5,993	16.8	19.5	108.03	1,101.94
Mutahunga Livingstone	<i>Eucalyptus grandis</i>	3	4	4.3	438	1,881	15.8	18.1	67.60	290.67
Nabimanya Robert	<i>Eucalyptus grandis</i>	2	7	17.07	386	6,584	2.9	3.0	2.70	46.07
Ndyanabo Cipiriano	<i>Eucalyptus grandis</i>	1	1	0.54	500	270	0.0	0.0	0.0	-
Ndyanabo Cipiriano	<i>Eucalyptus grandis</i>	3	6	5.14	767	3,941	13.2	15.7	74.69	383.91
NFA-CDM/Twinomugisha	<i>Pcaribaea/Eucalypt</i>	5	3	5.85	400	2,340	17.2	10.6	42.82	250.50

Benon											
NFA-CDM	<i>Pinus caribaea</i>	12	5	5.59	510	2,851	21.5	17.9	142.37	795.85	
NFA-CDM	<i>Pinus caribaea/oocarpa</i>	11	17	18.22	426	6,853	20.3	16.1	111.05	1,784.61	
Twinomugisha Benon	<i>Eucalyptus grandis</i>	3	34	44.7	688	29,158	12.0	13.2	48.86	2,148.48	
Twinomugisha Benon	<i>Pinus caribaea</i>	5	10	10.44	240	2,506	13.3	9.5	24.45	255.30	
Hon. Alex Byarugaba Baku	<i>Eucalyptus grandis</i>	1	1	0.01	500	5	0.0	0.0	0.0	-	
Rutasikwa Gordon	<i>Eucalyptus grandis</i>	2	1	0.5977	550	329	8.4	9.8	15.82	9.45	
Takwesire	<i>Eucalyptus grandis</i>	2	1	0.2454	620	152	8.4	9.8	15.82	3.88	
NFA Natural Belt	<i>Natural trees</i>	0	0	60.52	-	1,595	24	6	0.00	338.09	
Grand Total			195	302.46		133,131	12.3	11.3	54.78	12,876	

Table 4: Projected stand Volume and Value of the individual plantations within the affected portion

Tree Farmer	Tree species	Age	Area (ha)	Stems /ha	Survival %	Mean DBH	Mean (m)	Site Index	First Vol	Second Thin	Final harvest	Vol/ha (m3)	Total (m3)	Econ value Average
Ankole Woods	<i>Eucalyptus grandis</i>	3	1.61	57	52	13.3	12.5	26.0	0.00	30.11	220.42	250.53	403.35	48,402,000
BEKA - CDM	<i>Pinus caribaea</i>	5	4.32	62	57	13.7	10.0	16.0	0.00	47.55	414.12	461.67	1,994.4	239,329,200
Hon Ngabirano Charles	<i>Eucalyptus grandis</i>	3	4.59	48	43	14.4	15.7	28.0	0.00	0.00	289.22	289.22	1,327.5	159,301,200
Hon Ngabirano Charles	<i>Eucalyptus grandis</i>	4	2.55	65	59	16.7	19.7	30.0	0.00	46.85	314.51	361.36	921.47	110,576,400
KADA-CDM	<i>Eucalyptus grandis</i>	3	3.82	70	63	9.6	14.6	28.0	0.00	47.63	271.40	319.03	1,218.6	146,242,800
KADA-CDM	<i>Pinus caribaea</i>	3	14.53	54	49	9.8	5.6	16.0	0.00	42.46	368.42	410.88	5,970.0	716,407,200
KADA-CDM	<i>Pinus caribaea</i>	6	4.99	76	69	10.5	7.0	14.0	0.00	48.43	356.66	405.09	2,021.3	242,564,400
KADA-CDM	<i>Pinus caribaea</i>	11	0.59	55	50	21.5	15.5	14.0	0.00	32.27	296.03	328.31	193.70	23,244,000
Kaddugala	<i>Eucalyptus grandis</i>	2	11.59	53	48	11.3	13.2	32.0	0.00	50.20	323.32	373.52	4,329.1	519,492,000
Kaddugala	<i>Eucalyptus grandis</i>	3	42.31	62	57	12.3	16.5	30.0	0.00	46.06	309.20	355.27	15,031.3	1,803,754,800
Kaddugala	<i>Pinus oocarpa</i>	8	0.27	97	88	13.4	11.7	18.0	22.13	47.67	415.24	485.04	130.96	15,715,200
Kyalimpa Lilian/I Ngabirano Charles	<i>Eucalyptus grandis</i>	1	2.58	20	18	0.0	0.0	30.0	0.00	0.00	216.56	216.56	558.73	67,047,600
Kyalimpa Lilian/I	<i>Eucalyptus grandis</i>	2	4.44	56	51	8.4	9.8	28.0	0.00	42.91	244.54	287.45	1,276.2	153,152,400

Ngabirano Charles															
Kyalimpa Lilian/H Ngabirano Charles	<i>Eucalyptus grandis</i>	3	20.85	61	55	14.3	15.5	30.0	0.00	45.26	45.26	90.52	1,887.2	226,473,600	
Kyalimpa Lilian/H Ngabirano Charles	<i>Eucalyptus grandis</i>	4	10.2	58	53	16.8	19.5	30.0	0.00	44.44	298.30	342.74	3,495.9	419,514,000	
Mutahunga Livingstone	<i>Eucalyptus grandis</i>	3	4.3	43	39	15.8	18.1	30.0	0.00	0.00	317.13	317.13	1,363.6	163,636,800	
Nabimanya Robert	<i>Eucalyptus grandis</i>	2	17.07	38	35	2.9	9.8	28.0	0.00	0.00	261.29	261.29	4,460.2	535,228,800	
Ndyanabo Cipiriano	<i>Eucalyptus grandis</i>	1	0.54	50	45	0.0	0.0	30.0	0.00	33.81	285.41	319.22	172.38	20,685,600	
Ndyanabo Cipiriano	<i>Eucalyptus grandis</i>	3	5.14	76	69	13.2	15.7	28.0	0.00	49.81	283.86	333.67	1,715.0	205,808,400	
NFA-CDM/ Twinomugisha Benon	<i>Pinus caribaea/Eucaly</i>	5	5.85	40	36	17.2	10.6	14.0	0.00	0.00	320.40	320.40	1,874.3	224,920,800	
NFA-CDM	<i>Pinus caribaea</i>	12	5.59	51	46	21.5	17.9	14.0	0.00	24.99	293.91	318.90	1,782.6	213,919,200	
NFA-CDM	<i>Pinus caribaea/oocarpa</i>	11	18.22	42	38	20.3	16.1	14.0	0.00	0.00	334.01	334.01	6,085.6	730,278,000	
Twinomugisha Benon	<i>Eucalyptus grandis</i>	3	44.7	68	62	12.0	13.2	28.0	0.00	47.25	269.27	316.52	14,148.4	1,697,817,600	
Twinomugisha Benon	<i>Pinus caribaea</i>	5	10.44	24	22	13.3	9.5	14.0	0.00	0.00	217.90	217.90	2,274.8	272,986,800	
Hon. Alex Byaru Bakunda	<i>Eucalyptus grandis</i>	1	0.01	50	45	0.0	0.0	30.0	0.00	28.15	248.05	276.22	2.76	331,200	
Rutasikwa Gordon	<i>Eucalyptus grandis</i>	2	0.5977	55	50	0.0	0.0	30.0	0.00	29.6	261.2	290.95	173.90	20,868,000	
Takwesire	<i>Eucalyptus grandis</i>	2	0.2454	62	56	0.0	0.0	30.0	0.00	44.9	256.08	301.02	73.87	8,864,400	
NFA Natural Belt	Natural trees		60.52	-	-	-	-	-	-	-	-	-	-	osee table 5 page	
Grand Total			302.46	536		12.6	12.2					317.94	74,888.	8 986 562 400	

Table 5: Standing table of Natural trees within the affected portion

S/N	Tree species	No stems	Mean DBH (cm)	Mean Height (m)	Volume (m ³)	Reserve price Unit / vol (UGX)	Value (UGX)
1	<i>Acacia sieberiana</i>	11	31	5	3.07	107,965	331,453
2	<i>Acacia spp</i>	17	17	5	1.78	107,965	192,178
3	<i>Alangium chinensis</i>	1	16	5	0.06	215,929	12,956
4	<i>Albizia spp</i>	20	30	6	6.92	215,929	1,494,229
5	<i>Allophyllas dumeri</i>	1	18	2	0.05	107,965	5,398
6	<i>Blighia unijugata</i>	1	16	2	0.04	107,965	4,319
7	<i>Bridelia micrantha</i>	37	24	6	10.17	107,965	1,098,004
8	<i>Canthium vulgaea</i>	3	36	7	1.34	215,929	289,345
9	<i>Celtis africana</i>	1	60	8	1.36	215,929	293,663
10	<i>Combretum molle</i>	6	23	5	1.19	107,965	128,478
11	<i>Cordia africana</i>	126	29	5	32.22	215,929	6,957,232
12	<i>Croton macrophylla</i>	9	26	5	2.01	107,965	217,010
13	<i>Ebretia cymosa</i>	4	29	5	0.84	107,965	90,691
14	<i>Erythrina abyssinica</i>	237	32	4	72.84	53,982	3,932,049
15	<i>Euclea divinorum</i>	3	22	3	0.34	53,982	18,354
16	<i>Ficus spp</i>	12	32	7	4.87	53,982	262,892
17	<i>Flocoutia indica</i>	1	55	8	1.14	107,965	123,080
18	<i>Halea stipulosa</i>	3	35	7	1.23	53,982	66,398
19	<i>Kigelia africana</i>	3	14	2	0.09	107,965	9,717
20	<i>Macaranga schweinfurthii</i>	7	14	6	0.38	53,982	20,513
21	<i>Maesa lanceolata</i>	20	16	5	1.82	107,965	196,496
22	<i>Maesopsis emini</i>	764	20	6	108.34	158,836	17,208,292
23	<i>Markhamia lutea</i>	20	23	4	2.51	188,938	474,234
24	<i>Newboultonia macrocalyx</i>	1	23	5	0.12	215,929	25,911
25	<i>Parinari sp.</i>	28	33	5	8.17	107,965	882,074
26	<i>Phoenix reclinata</i>	10	19	5	1.01	53,982	54,522
27	<i>Phyllanthus discoides</i>	1	33	6	0.31	107,965	33,469
28	<i>Premna angolense</i>	3	28	4	0.73	107,965	78,814
29	<i>Prunus africana</i>	24	41	7	16.01	215,929	3,457,023
30	<i>Pseudospondias macrocarpa</i>	1	16	7	0.08	100,000	8,000
31	<i>Rhus natalensis</i>	5	10	4	0.31	107,965	33,469
32	<i>Sapium ellipticum</i>	55	39	5	26.38	53,982	1,424,045
34	<i>Un identified species</i>	95	17	5	10.46	53,982	564,652
35	<i>Vangueria apiculata</i>	1	30	2	0.14	53,982	7,557
36	<i>Vernonia amagyadalina</i>	18	24	4	2.96	53,982	159,787
Total		1595	24	6	338.09		41,061,583

Table 6: Current economic value of the carbon dioxide sequestered by the Rwoho plantation climate change resilient project under CDM

Tree Farmer	Tree Species	Age	Area (ha)	Mean DB	Mean Ht (m)	Vol/ha (m3)	Total Vol (m3)	Biomass	Carbon	tCO2e	Value (US\$) (@US\$3/t CO2e)	Value (UGX)	Base line Value of carbon
Ankole Woods	<i>Eucalyptus grandis</i>	3	1.61	13.3	12.5	67.86	109.25	334.3	167.2	613.4	1,840.3	6,809,291	
BEKA - CDM	<i>Pinus caribaea</i>	5	4.32	13.7	10	43.19	186.58	585.20817	292.60409	1073.857	3,221.6	11,919,813	11,919,813
Hon Ngabirano Charles	<i>Eucalyptus grandis</i>	3	4.59	14.4	15.7	57.98	266.12	814.3	407.2	1494.3	4,482.9	16,586,624	
Hon Ngabirano Charles	<i>Eucalyptus grandis</i>	4	2.55	16.7	19.7	124.79	318.22	973.8	486.9	1786.8	5,360.5	19,833,892	
KADA-CDM	<i>Eucalyptus grandis</i>	3	3.82	9.6	14.6	33.81	129.16	395.2	197.6	725.2	2,175.7	8,050,234	8,050,234
KADA-CDM	<i>Pinus caribaea</i>	3	14.53	9.8	5.6	16.29	61.97	20.859102	4.7975935	76.552904	229.7	849,737	849,737
KADA-CDM	<i>Pinus caribaea</i>	6	4.99	10.5	7	22.8	90.63	30.506058	7.0163933	111.95723	335.9	1,242,725	1,242,725
KADA-CDM	<i>Pinus caribaea</i>	11	0.59	21.5	15.5	132.74	78.32	26.362512	6.0633778	96.750419	290.3	1,073,930	1,073,930
Kaddugala	<i>Eucalyptus grandis</i>	2	11.59	11.3	13.2	35.85	415.52	1271.5	635.7	2333.2	6,999.6	25,898,369	
Kaddugala	<i>Eucalyptus grandis</i>	3	42.31	12.3	16.5	59.75	2,440.08	7466.6	3733.3	13701.3	41,103.9	152,084,355	
Kaddugala	<i>Pinus oocarpa</i>	8	0.27	13.4	11.7	71.98	18.4	6.19344	1.4244912	22.729925	68.2	252,302	
Kyalimpa	<i>Eucalyptus</i>	1	2.58	0	0	0	-	0.0	0.0	0.0	-	0	

Lilian/Hon. Ngabirano Charles	<i>grandis</i>												
Kyalimpa Lilian/Hon. Ngabirano Charles	<i>Eucalyptus grandis</i>	2	4.44	8.4	9.8	15.82	52.03	159.2	79.6	292.2	876.5	3,242,906	
Kyalimpa Lilian/Hon. Ngabirano Charles	<i>Eucalyptus grandis</i>	3	20.8 5	14.3	15.5	66.57	1,300. 50	3979.5	1989.8	7302.4	21,907.3	81,057,057	
Kyalimpa Lilian/Hon. Ngabirano Charles	<i>Eucalyptus grandis</i>	4	10.2	16.8	19.5	108.0 3	1,101. 94	3371.9	1686.0	6187.5	18,562.5	68,681,287	
Mutahunga Livingstone	<i>Eucalyptus grandis</i>	3	4.3	15.8	18.1	67.6	290.6 7	889.5	444.7	1632.1	4,896.4	18,116,766	
Nabimanya Robert	<i>Eucalyptus grandis</i>	2	17.07	2.9	3	2.7	46.07	141.0	70.5	258.7	776.1	2,871,433	
Ndyanabo Cipiriano	<i>Eucalyptus grandis</i>	1	0.54	0	0	0	-	0.0	0.0	0.0	-	0	
Ndyanabo Cipiriano	<i>Eucalyptus grandis</i>	3	5.14	13.2	15.7	74.69	383.9 1	1174.8	587.4	2155.7	6,467.1	23,928,193	
NFA- CDM/Twinomu gisha Benon	<i>Pinus caribaea/Eucaly ptus</i>	5	5.85	17.2	10.6	42.82	250.5	84.3183	19.3932 09	309.448 16	928.3	3,434,875	3,434,875
NFA-CDM	<i>Pinus caribaea</i>	12	5.59	21.5	17.9	142.3 7	795.8 5	267.88311	61.6131 15	983.131 01	2,949.4	10,912,754	10,912,754

NFA-CDM	<i>Pinus caribaea/ oocarpa</i>	11	18.22	20.3	16.1	111.05	1,784.61	600.69973	138.16094	2204.568	6,613.7	24,470,705	24,470,705
Twinomugisha Benon	<i>Eucalyptus grandis</i>	3	44.7	12	13.2	48.86	2,148.48	6574.3	3287.2	12063.9	36,191.8	133,909,624	
Twinomugisha Benon	<i>Pinus caribaea</i>	5	10.44	13.3	9.5	24.45	255.3	85.93398	19.764815	315.37771	946.1	3,500,693	
Hon. Alex Byarugaba Bakunda	<i>Eucalyptus grandis</i>	1	0.01	0	0	0	-	0.0	0.0	0.0	-	0	
Rutasikwa Gordon	<i>Eucalyptus grandis</i>	2	0.5977	8.4	9.8	15.82	9.45	28.9	14.5	53.1	159.2	588,996	
Takwesire	<i>Eucalyptus grandis</i>	2	0.2454	8.4	9.8	15.82	3.88	11.9	5.9	21.8	65.4	241,831	
NFA Natural Belt	<i>Natural trees</i>	0	60.52	24	6	0	338.09	480.0878	240.0439	880.96111	2,642.9	9,778,668	9,778,668
Grand Total			302.46	12.3	11.3	54.78	12,876	29774.809	14584.26	56697.032	170,091.1	629,337,057	71,733,441

Table 7: Economic Value of the Carbon dioxide Sequestered by the Rwoho Plantation Climate Change Resilient Project under the CDM at full maturity (25 years)

Tree Farmer	Tree species	Age	Area (ha)	Mean DBH	Mean	Site Ind	First thin	Second thin	Final	Vol/ha (m ³)	Total Vol.	Biomass	Carbon	tCO ₂ e	Value (US\$)	Value (UGX)	carbon Value of CDM
Ankole Woods	Eucalyptus	3.0	1.6	13.3	12.0	26.0	0.0	30.1	220.0	250.5	403.4	1,234.3	617.1	2,264.9	6,794.3	25,139,841	
BEKA - CDM	Pinus	5.0	4.3	13.7	10.0	16.0	0.0	47.6	414.0	461.7	1,994.0	6,255.5	3,127.7	11,478.0	34,436.0	127,414,479	127,414,479
Hon Ngabirano Charles	Eucalyptus grandis	3.0	4.6	14.4	15.7	28.0	0.0	0.0	289.2	289.2	1,327.5	4,062.2	2,031.1	7,454.1	22,362.3	82,740,526	
Hon Ngabirano Charles	Eucalyptus grandis	4.0	2.6	16.7	19.7	30.0	0.0	46.9	314.5	361.4	921.5	2,819.7	1,409.8	5,174.1	15,522.4	57,433,023	

KADA-CDM	Eucalyptus	3.0	3.8	9.6	14.	28.0	0.0	47.6	271.	319.0	1,218.	3,729.2	1,864.6	6,843.1	20,529	75,958,035	75,958,035
KADA-CDM	Pinus	3.0	14.5	9.8	5.6	16.0	0.0	42.5	368	410.9	5,970	18,725	9,362.5	34,360	103,08	381,402,06	381,402,061
KADA-CDM	Pinus	6.0	5.0	10.5	7.0	14.0	0.0	48.4	356.	405.1	2,021.	6,340.0	3,170.0	11,633.	34,901	129,136,84	
KADA-CDM	Pinus	11.	0.6	21.5	15.	14.0	0.0	32.3	296.	328.3	193.7	607.5	303.8	1,114.8	3,344.	12,374,680	12,374,680
Kaddugala	Eucalyptus	2.0	11.6	11.3	13.	32.0	0.0	50.2	323.	373.5	4,329.	13,247.	6,623.5	24,308.	72,925	269,822,45	
Kaddugala	Eucalyptus grandis	3.0	42.3	12.3	16.5	30.0	0.0	46.1	309.2	355.3	15,031.3	45,995.7	22,997.9	84,402.2	253,206.6	936,864,381	
Kaddugala	Pinus oocarpa	8.0	0.3	13.4	11.7	18.0	22.1	47.7	415.2	485.0	131.0	410.8	205.4	753.7	2,261.2	8,366,484	
Kyalimpa	Eucalyptus	1.0	2.6	0.0	0.0	30.0	0.0	0.0	216.	216.6	558.7	1,709.7	854.9	3,137.3	9,412	34,824,306	
Kyalimpa Lilian/Hon. Ngabirano Charles	Eucalyptus grandis	2.0	4.4	8.4	9.8	28.0	0.0	42.9	244.5	287.5	1,276.3	3,905.4	1,952.7	7,166.4	21,499.2	79,546,859	
Kyalimpa Lilian/Hon. Ngabirano Charles	Eucalyptus grandis	3.0	20.9	14.3	15.5	30.0	0.0	45.3	45.3	90.5	1,887.3	5,775.1	2,887.5	10,597.3	31,791.8	117,629,652	
Kyalimpa	Eucalyptus	4.0	10.2	16.8	19.	30.0	0.0	44.4	298.	342.7	3,496.	10,697.	5,348.8	19,630.	58,890	217,894,20	
Mutahunza	Eucalyptus	3.0	4.3	15.8	18.	30.0	0.0	0.0	317	317.1	1,363	4,172.7	2,086.4	7,657.0	22,970	84,992,422	
Nabimanva	Eucalyptus	2.0	17.1	2.9	9.8	28.0	0.0	0.0	261.	261.3	4,460.	13,648.	6,824.2	25,044.	75,134	277,996,09	
Ndyanabo	Eucalyptus	1.0	0.5	0.0	0.0	30.0	0.0	33.8	285.	319.2	172.4	527.5	263.7	967.9	2,903	10,744,033	
Ndyanabo Cipiriano	Eucalyptus grandis	3.0	5.1	13.2	15.7	28.0	0.0	49.8	283.9	333.7	1,715.1	5,248.1	2,624.1	9,630.3	28,890.9	106,896,214	
NFA-	Pinus	5.0	5.9	17.2	10.	14.0	0.0	0.0	320.	320.4	1,874.	5,878.9	2,939.4	10,787.	32,363	119,743,71	119,743,711
NFA-CDM	Pinus	12.	5.6	21.5	17.	14.0	0.0	25.0	293.	318.9	1,782.	5,591.3	2,795.7	10,260.	30,780	113,886,66	113,886,661
NFA-CDM	Pinus	11	18.2	20.3	16.	14.0	0.0	0.0	334	334.0	6,085	19,087	9,543.8	35,025	105,07	388,786,62	388,786,620
Twinomugisha Benon	Eucalyptus grandis	3.0	44.7	12.0	13.2	28.0	0.0	47.3	269.3	316.5	14,148.5	43,294.3	21,647.2	79,445.1	238,335.4	881,840,944	
Twinomugisha Benon	Pinus caribaea	5.0	10.4	13.3	9.5	14.0	0.0	0.0	217.9	217.9	2,274.9	7,135.2	3,567.6	13,093.1	39,279.2	145,333,168	

Hon. Alex Byarugaba Bakunda	Eucalyptus grandis	1.0	0.0	0.0	0.0	30.0	0.0	28.2	248.1	276.2	2.8	8.4	4.2	15.5	46.5	172,024	
Rutasikwa Gordon	Eucalyptus grandis	2.0	0.6	0.0	0.0	30.0	0.0	29.6	261.2	291.0	173.9	532.1	266.1	976.5	2,929.4	10,838,771	
Takwesire	Eucalyptus grandis	2.0	0.2	0.0	0.0	30.0	0.0	44.9	256.1	301.0	73.9	226.0	113.0	414.8	1,244.4	4,604,141	
NFA Natural Belt	Natural trees	0.0	60.5	-	-	-	-	-	-	-	-	0.0	0.0	0.0	0.0	0	
Grand Total			302.5	12.6	12.2					317.9	74,888.1	230,865.4	115,432.7	423,638.1	1,270,914.2	4,702,382,638	1,219,566,247

Table 8: Seedlings/Saplings derived from belts of natural belts

Ser. No.	Species	Number	Price (UGX)	Value4
1	<i>Albizia spp</i>	21,267	3,000	63,801,000
2	<i>Celtis africana</i>	2,836	2,000	5,672,000
3	<i>Clausena anistata</i>	35,444	3,000	106,332,000
4	<i>Combretum molle</i>	4,253	2,000	8,506,000
4	<i>Doryalis abyssinica</i>	21,267	1,000	21,267,000
4	<i>Erythrina abyssinica</i>	5,671	3,000	17,013,000
5	<i>Erythrina abyssinica</i>	4,253	3,000	12,759,000
5	<i>Eucles divinorum</i>	9,924	2,000	19,848,000
6	<i>Maesa lanccalata</i>	5,671	2,000	11,342,000
7	<i>Markhamia lutea</i>	46,787	2,000	93,574,000
8	<i>Parinari sp.</i>	17,013	2,000	34,026,000
9	<i>Prunus africana</i>	2,836	3,000	8,508,000
10	<i>Rhus vulgaris</i>	2,836	3,000	8,508,000
11	<i>Sapium ellipticum</i>	2,836	3,000	8,508,000
12	<i>Vernonia amagyadalea</i>	17,013	2,000	34,026,000
13	<i>Alangium chinensis</i>	7,089	2,000	14,178,000
14	<i>Bridelia micrantha</i>	21,267	2,000	42,534,000
15	<i>Blighia unijugata</i>	8,507	3,000	25,521,000
16	<i>Cordia africana</i>	8,507	2,000	17,014,000
17	<i>Croton macrostachys</i>	12,760	2,000	25,520,000
18	<i>Halea stipulosa</i>	55,293	3,000	165,879,000
19	<i>Macaranga schweinfurthii</i>	283,556	500	141,778,000
20	<i>Phoenix reclinata</i>	42,533	1,000	42,533,000
21	<i>Un Identified species</i>	266,542	500	133,271,000
Summary		905,960		1,061,918,000

Table 9: Expected biomass from trees tops and branches of Natural trees

References

- 1) *Forestry and Tree Planting Act, 2003*
- 2) *NFA Approved Price list 2018*

