

GOVERNMENT OF KENYA



**FLOOD MITIGATION STRUCTURES ALONG LOWER
BANKS OF RIVER NZOIA (DYKES CONSTRUCTION
PROJECT)**

DRAFT RESETTLEMENT ACTION PLAN (RAP)

APRIL 2015

**WATER SECURITY AND CLIMATE RESILIENCE PROJECT-ADDITIONAL
FINANCING**

**Ministry of Environment, Water and Natural
Resources**

**Tech Training and Research Consultants
Nairobi, Kenya**



Tech Training & Research Ltd

TABLE OF CONTENTS

LIST OF TABLES	6
LIST OF FIGURES.....	8
LIST OF BOXES.....	9

EXECUTIVE SUMMARY	11
--------------------------------	-----------

1 Introduction.....	31
----------------------------	-----------

1.1 Background.....	31
1.2 The Flooding Problem.....	31
1.3 Western Kenya Flood Mitigation Project/Dykes	33
1.4 Flood Management Program (FMP)	33
1.5 Project Benefits and Rationale.....	34
1.6 Project Design and Benefits	34
1.7 Projects Activities.....	35
1.7.1 Dyke Improvements.....	35
1.7.2 River Channel Improvements	36
1.8 Project Design Criteria	37
1.8.1 Construction Material And Equipment	38
1.8.2 Seepage Control.....	38
1.8.3 Dyke Maintenance	39
1.8.4 Culverts & Drainage Structures Construction.....	40
1.8.5 Construction Methods and Equipment	40
1.8.6 Contractor's Camp.....	40
1.8.7 Planning/Phasing of Construction Activities	40
1.8.8 Construction Period	41
1.8.9 Project Operation and Decommissioning	41

2 The Project	43
----------------------------	-----------

2.1 Project Location.....	43
2.1.1 Project Investment and Benefits	43
2.1.2 Resettlement Action Plan	43
2.1.3 Resettlement Objectives.....	44
2.1.4 Project-Affected People	44
2.1.5 Summary Description of Resettlement Action Plan Program	44
2.1.6 Other Relevant Studies and Reports	45
2.1.7 Conclusion.....	45

3 Policy Framework For Land Acquisition and Resettlement.....	47
--	-----------

3.1 Introduction.....	47
3.2 The Basic Concepts of Resettlement.....	47
3.2.1 Involuntary Resettlement.....	47
3.2.2 Project-Affected People.....	47
3.2.3 Physical and Economic Displacement	48
3.2.4 Restricted Access	48
3.2.5 Expropriation.....	48
3.2.6 Entitlement.....	48
3.2.7 Resettlement	48
3.2.8 Resettlement with Development.....	48
3.2.9 Rehabilitation and Reconstruction	49
3.2.10 Resettlement Action Plan (RAP)	49
3.3 World Bank Policy and Guidelines on Involuntary Resettlement.....	49
3.4 Conclusion.....	50

4	The Project Policy and Legal Framework for Project-Affected People	51
4.1	Introduction.....	51
4.2	Entitlement Matrix.....	51
4.3	Legislative Framework.....	55
4.3.1	<i>Discussion of Relevant Legislation.....</i>	55
4.3.2	<i>Land Tenure System In Kenya.....</i>	59
4.3.3	<i>Land Act, 2012.....</i>	61
4.3.4	<i>Children And Orphans Provision Of Land Possession.....</i>	66
4.3.5	<i>The Valuers Act.....</i>	66
4.3.6	<i>Involuntary Resettlement.....</i>	67
4.3.7	<i>Institutional Context.....</i>	68
5	The Resettlement-Affected Communities: Environment, Demography, Productive Activities and Sources and Levels of Income	74
5.1	Introduction.....	74
5.2	Physical Environment.....	75
5.2.1	<i>Location.....</i>	75
5.2.2	<i>Existing Infrastructure.....</i>	78
5.3	Socio-Economic Environment.....	78
5.3.1	<i>Population and Demography.....</i>	78
5.3.2	<i>Settlement Patterns.....</i>	79
5.3.3	<i>Land Tenure and Use.....</i>	80
5.3.4	<i>Land Tenure System.....</i>	82
5.3.5	<i>Livelihoods.....</i>	84
5.3.6	<i>Agriculture.....</i>	85
5.3.7	<i>Livestock Keeping.....</i>	87
5.3.8	<i>Fishing.....</i>	88
5.3.9	<i>Sand Harvesting.....</i>	89
5.3.10	<i>Brick Making.....</i>	89
5.3.11	<i>Employment.....</i>	89
5.3.12	<i>Health.....</i>	90
5.3.13	<i>Transportation and Communication.....</i>	92
5.3.14	<i>Energy.....</i>	92
5.3.15	<i>Water Access and Sanitation.....</i>	94
5.3.16	<i>Education and Literacy levels.....</i>	95
5.3.17	<i>Gender and Inequality.....</i>	97
5.3.18	<i>Poverty.....</i>	97
5.3.19	<i>Income.....</i>	98
5.4	Challenges and needs in the project area.....	99
5.5	Village Housing, Facilities and Services.....	100
6	PROJECT IMPACTS.....	101
6.1	Efforts to Minimize Resettlement.....	101
6.2	Households.....	101
6.2.1	<i>RESIDENT HOUSEHOLDS.....</i>	101
6.2.2	<i>Non-Resident Households.....</i>	102
6.2.3	<i>SUMMARY OF IMPACTS TO HOUSEHOLDS.....</i>	103
7	COMPENSATION STRATEGY.....	107
7.1	Summary of Main Issues and Principles.....	107
7.1.1	<i>Project Objectives.....</i>	107
7.2	Eligibility.....	107

7.2.1	ELIGIBILITY POLICY	107
7.3	IMPLEMENTATION.....	108
7.3.1	Entitlements	109
7.3.2	LOSS OF CROPS	109
7.3.3	LOSS OF LAND	111
7.3.4	LOSS OF STRUCTURES	112
7.3.5	Graves.....	114
7.3.6	Loss Of Access/Social Networks.....	114
8	LIVELIHOODS AND COMMUNITY DEVELOPMENT	115
8.1	Employment	115
8.1.1	Unskilled Labor.....	115
8.2	Money Management.....	115
8.2.1	Livelihood Enhancement and Community Empowerment Program.....	116
9	VULNERABLE PERSONS	119
9.1	Vulnerability in Resettlement.....	119
9.2	Vulnerability in the Area	120
9.3	Assistance Measures.....	121
10	Public Consultation and Disclosure.....	122
10.1	Introduction.....	122
10.2	Public Consultation and Disclosure	122
10.3	Community Consultations	124
10.3.1	Initial Consultations and Socialization	124
10.3.2	Project Consultations	124
10.3.3	Resettlement Stakeholders	126
10.3.4	Formal Meetings.....	126
10.3.5	Informal Dialogue.....	127
10.3.6	Resettlement Negotiations.....	127
10.4	Background.....	127
10.5	Key Issues	128
10.5.1	Definition of an Entitlement Cut-Off Date	128
10.5.2	Livelihood Enhancement and Community Development	128
10.5.3	Disclosure of the Resettlement Action Plan	129
10.5.4	Resettlement Implementation	129
10.5.5	Negotiation Committee meetings	129
10.6	Conclusions	130
11	GRIEVANCES AND DISPUTES	131
11.1	Likely Types of Grievances and Disputes	131
11.2	Management Mechanism.....	131
11.2.1	National Land Commission Grievance Mechanism	131
11.3	Structures for Grievance Management	132
11.3.1	Process Procedures of Lodging Complaints.....	132
11.3.2	Grievance Registration and Monitoring	133
12	IMPLEMENTATION OF THE RAP	137
12.1	Implementation Arrangements.....	137
12.1.1	Ministry of Environment, Water and Natural Resources.....	137
12.1.2	Project Management Unit –WSCRIP	137
12.1.3	Liaison with the Government of Kenya	138
12.2	Roles Related to Implementation Arrangements	139

<i>Resettlement Committees</i>	140
12.3 IMPLEMENTATION SCHEDULE	141
12.3.1 <i>Institutional Roles in Compensation</i>	141
Implementation Schedule	145
13 Budget	147
13.1 Introduction	147
13.2 Budget	147
14 Monitoring and Evaluation	149
14.1 Introduction	149
14.2 Monitoring Purpose	149
14.2.1 FRAMEWORK	150
14.2.2 <i>Use of Monitoring and Evaluation</i>	152
14.2.3 <i>Use of Indicators in Monitoring and Evaluation</i>	153
14.2.4 <i>Internal Monitoring and Evaluation</i>	154
14.2.5 <i>External Monitoring and Evaluation</i>	154
15 APPENDIX	157
15.1 Minutes of Meetings and Consultations	
15.2 RAP Field Survey Tool	
15.3 Detailed Maps of Project	
15.4 Selected Photographs	
15.5 List of Consulted Stakeholders	

LIST OF TABLES

Table 1 Summary of Category of PAP.....	11
Table 3 Locations Proposed for New Alignments	35
Table 4 Fill Material Specifications.....	38
Table 5 Project Affected Counties and Sub Counties	43
Table 6 Entitlement Matrix.....	52
Table 7 Summary of relevant resettlement legal statutes applicable to Project.....	55
Table 8 Comparative Analysis of World Bank OP 4.12 and Government of Kenya requirements including measures to address gaps.....	69
Table 9 Comparative Analysis of World Bank OP 4.12 and Kenya's requirements Relevant to the Process.....	73
Table 10 Administrative Units within Bunyala Sub County and their Location Relative to River Nzoia	75
Table 11 Gender of the head of the household.....	78
Table 12 Reasons for living in this village.....	79
Table 13 Housing building materials in the project districts.....	79
Table 14 Current use of the land.....	81
Table 15 Land Tenure Regime	83
Table 16 Plots of land affected by the project	83
Table 17 Awareness that land occupied could be affected by this project	83
Table 18 Primary, Secondary & Tertiary Occupation.....	84
Table 19 Sectoral contribution to Household incomes	86
Table 20 Cropping Calendar	87
Table 21 Domestic Livestock in the Area by PAPs	87
Table 22 Average Domestic Livestock in the area.....	88
Table 23 Household members who contracted malaria during the past year (Average).....	91
Table 24 Number of hospitalizations and deaths attributable to malaria.....	91
Table 25 Household members who suffered from chronic illnesses during the past year	91
Table 26 Number of hospitalizations and deaths attributable to malaria.....	91
Table 27 Length of roads in Siaya and Bunyala	92
Table 28 Sources of energy for lighting from household survey	93
Table 29 Sources of energy for cooking from household survey	93
Table 30 Access to drinking water	94
Table 31 Sanitary Facilities	95
Table 32 Education institutions and literacy levels in project districts	95
Table 33 Education level of household.....	96
Table 34 Can read or write	96
Table 35 Language spoken at home	97
Table 36 Source of income/Sector	98
Table 37 Average expenses of the household	98
Table 38 Household Equipment.....	99
Table 39 Household Equipment: responses.....	99
Table 40 Type of Structures Affected.....	101
Table 41 Graves in Project Area.....	102
Table 42 Summary of Project Impacts.....	104
Table 43 Aware of the Flood Mitigation/Dyke project.....	104
Table 44 Main source of information about project	104
Table 45 Awareness that land occupied could be affected by this project	105
Table 46 Preferred Compensation-Structures and Land Loss.....	105
Table 47 Preferred Compensation-Agricultural Fields	106

Table 48 Resettlement Assistance.....	106
Table 50 Vulnerable individuals living in the household.....	120
Table 51 Vulnerable individuals living in the household.....	120
Table 52 Consultations with Project Affected PAPs.....	124
Table 53 Summary of Consultation Issues.....	125
Table 54 Breakdown of the Value Estimates.....	145
Table 55 RAP Implementation Schedule- 2nd Part - RAP Implementation.....	146
Table 56 Summary of Budget for RAP.....	147

LIST OF FIGURES

Figure 1 Bunyala Administrative	76
Figure 2 Bunyala Sub-County Boundaries.....	77
Figure 3 Gender of the head of the household	79
Figure 4 Current use of the land.....	82
Figure 5 Land Cover of Nzoia Catchment	82
Figure 6 Plots of land affected by the project.....	83
Figure 7 Awareness that land occupied could be affected by this project.....	84
Figure 8 Crops grown in the area.....	85
Figure 9 Average monthly income per Household by economic activity	86
Figure 10 Percentage of households planting the crop	87
Figure 11 Domestic Livestock in the Area by PAPs.....	88
Figure 12 Reasons for unemployment by gender	90
Figure 13 Disease prevalence in the area.....	91
Figure 14 Number of hospitalizations and deaths attributable to malaria.....	92
Figure 15 Sources of energy for lighting from household survey	93
Figure 16 Sources of energy for cooking from household survey	93
Figure 17 Sanitary Facilities	95
Figure 18 Education level of household	96
Figure 19 Can read or write	96
Figure 20 Source of income/Sector	98
Figure 21 Average monthly income per Household by economic activity	99
Figure 22 Prioritization of needs in the project area	100
Figure 23 Type of Structures Affected	102
Figure 24 Graves in Project Area.....	103
Figure 25 Main source of information about project	105
Figure 26 Awareness that land occupied could be affected by this project.....	105
Figure 27 Vulnerable Individuals in Project Area.....	120

LIST OF BOXES

Box 1 Civil / Infrastructure designs shall be carried out on the basis of the following design Codes and Standards:	37
Box 2 Materials for culvert and drainage structures construction will include:	40
Box 3 Erosion Control Materials.....	40

ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
AP	Affected People
ARVs	Anti-retrovirals
CBO	Community Based Organization
CEC	County Executive Committee
CoK	Constitution of Kenya
DDP	District Development Plan
FMP	Flood Mitigation Programme
GOK	Government of Kenya
GPS	Global Positioning System
GRM	Grievance Redress Mechanism
HIV	Human Immunodeficiency Virus
KFSSG	Kenya Food Security Steering Group
KIHBS	Kenya Integrated Household Budget Survey
KWSCRIP	Kenya Water Security and Climate Resilience Project
LA	Land Act
LEEP	Livelihood Enhancement and Community Empowerment
LNIP	Lower Nzoia Irrigation Project
LRCC	Location Resettlement and Compensation Committee
LVA	Land Valuation Act
M&E	Monitoring and Evaluation
MEWNR	Ministry of Environment, Water and Natural Resources
NCPB	National Cereals and Produce Board
NGOs	Non-Governmental Organizations
NHIF	National Hospital Insurance Fund
NLC	National Land Commission
NLP	National Land Policy
NT	National Treasury
PAH	Project Affected Household
PAPs	Project Affected Persons
PIU	Project Implementation Unit
PLO	Project Liaison Officer
PMU	Project Management Unit
RAP	Resettlement Action Plan
SCRCC	Sub County Resettlement and Compensation Committee
TB	Tuberculosis
VCT	Voluntary Counseling and Testing
VRCC	Village Resettlement and Compensation Committee
WB	World Bank
WKCCDD	Western Kenya Community Driven Development

EXECUTIVE SUMMARY

Resettlement Action Plan For Nzoia Dykes Project, Budalangi, Busia and Siaya Counties, Kenya

A. Scope of Land Acquisition and Resettlement

1. The flood mitigation structures along the lower banks of River Nzoia (known as Nzoia Dykes Project) are being developed and being implemented in Busia and Siaya Counties, Kenya. The Project will entail construction and rehabilitation of the existing dykes in the project area as part of flood mitigation that has historically affected the local communities.
2. Prior to the involvement of the Ministry of Environment, Water and Natural Resources (MEWNR), State Department of Water involvement in the Project under the Water Security and Climate Resilience Project (WSCRCP) through Additional Financing by the Bank, another Ministry in the Government of Kenya (GOK)-the Ministry of Special Programs was engaged in the conceptualization including supporting the feasibility and design studies for the project under the Western Kenya Community Driven Development (WKCDD) and Flood Mitigation Program (FMP).
3. The construction and rehabilitation of the dykes will lead to acquisition of land for the proposed infrastructures on both sides of River Nzoia hence triggering the Bank's OP. 4.12 on Involuntary Resettlement. Land acquisition for the project will lead to physical and economic displacement.

Table 1. Project Affected Counties and Sub Counties

County	Sub-County
Busia	Bunyala
Siaya	Alego
	Rwambwa
	Sumba
	Uranga
	Usonga
Total	6

4. Table 2 presents a summary of involuntary resettlement impacts.

Table 2. Summary of Project Impacts

Impact	Impact by Project
Loss of Land	
Dyke Footprint	102 Hectares or 250 Acres
Loss of Crops	Cultivated land included variety of crops grown in the area, including: Banana, Citrus, Maize, Rice, Beans etc.
Loss of Structures	

Residential Household Structures	225 Residential Structures and 121 non residential including latrines, fences, animal sheds etc.
Loss of Access	Restricted, Denied or Loss of (3) traditional canoe crossing points
Loss of Graves	505 Graves
Loss of Business	Loss of brick making and sand harvesting ventures; loss of canoe transport businesses

Table 3. Type of Residential and Non Residential Structures Affected

	#	%
Latrines	56	4.8
Well	5	0.4
Shower room	20	1.7
Fence	9	0.8
Residential	255	21.9
Grain store	10	0.9
Animal shed	18	1.5
Temporal business shed	2	0.2
Septic Tank	1	0.1
No Structures Affected (residential and non residential)	787	67.7
Total	1163	100.0

Table 3. Number of PAH Losing Land Totally or Partially

	# of Affected Land Owners	% Affected Land Owners
Total Loss of Land	397	34.1
No Loss of Land¹	2	0.2
Partial Loss of Land	764	65.7
Total	1163	100

A total of **1,163 Project Affected Households (PAHs)** which translates to **4,482** household members according to the census survey, will be affected via loss of land, crops as well as **505 graves** and **225 residential and 121 non-residential structures** by the proposed dyke construction and rehabilitation project. Of this number **397 PAHs** will need to be permanently relocated due to total land loss while **764 PAPHs** will suffer partial loss of land. Those partially losing land will not relocate instead will shift structures away from the dyke area to the remaining parcel of land after compensation in cash. The PAHs consist of formal and customary landowners and tenants. There are no squatters or encroachers at the project site.

The **397 PAHs** suffering from total land loss as well as the **764 PAHs** suffering partial land loss were given a choice to make in regard to cash for land or land for land as a form of compensation. The preference was cash by majority of the PAHs as shown in Table **50 and 51** where **60.2%** of the PAHs affected preferred cash compensation for loss of land and structures and **77.5%** of the PAHs preferred cash compensation for loss of agricultural fields.

¹ 2 Project Affected Persons (PAPHs) who will not lose land

During the census survey, it was found out that the PAHs have other several parcels of land unaffected by the project and preferred to relocate and build new structures on these parcels once compensated hence the overwhelming preference for cash compensation. **86%** of the PAHs (1,000 PAHs) during the census survey indicated that they had other parcels of land other than the one affected by the project with 14% not having alternative land. This fact is what informed the decision by RAP consulting team to recommend cash for land compensation. The remaining **14%** of the PAHs (163PAHs) who do not have other parcels of land will be able to purchase land from the same area and more importantly from their relatives who indicated willingness to sell land for their kinsmen. The option of identifying a relocation land for the **14%** of the PAHs without alternative available land was considered but rejected because within the locality, there is no available government land within the vicinity that could be acquired, and the PAHs indicated that they would acquire land from their kinsmen and hence keep their familial ties and linkages intact.

It is for this reason (availability of alternate land by PAHs within the project area) that this RAP recommended land for cash compensation. The Bank resettlement principles in almost all cases recommend land for land compensation unless it can be proven that PAHs have alternate parcels of land and hence would not be adversely affected by cash for land compensation.

The table below shows the number of PAHs by sub County and it shows that Bunyala Sub County in Busia County has the highest number of PAHs.

Table 4. Number PAHs affected by County and Sub Counties

County	Sub-County	No. Affected PAHs
Busia	Bunyala	1105
Siaya	Alego	27
	Rwambwa	3
	Sumba	5
	Uranga	12
	Usonga	11
Total		1163

- The Project has developed a **Draft Resettlement Action Plan (RAP)** to address its involuntary resettlement impacts. The objectives of the RAP are to achieve ‘resettlement with development’ and thereby ensure that resettled households achieve better livelihoods than they would have if resettlement had not taken place.
- This RAP is currently in draft form. Designs for the dykes construction project have not yet been finalized. The designs for the Dykes will be enhanced, and additional work will be completed to minimize any backflow effect caused by the heightening of the dykes. In addition, the designs will be harmonized with the designs for the Lower Nzoia Irrigation Scheme, which overlaps with the project area for the Dykes Construction Project. Once the designs for these projects have been finalized, the RAPs for both projects will be updated to respond to any changes in project designs,

as well as to reflect the coordination needed in resettlement between the two projects, as there are expected to be a small portion of PAHs who are affected by both projects.

B. Legal and Policy Framework

1. The Project has designed its RAP with the aim of complying with both Kenya's and World Bank's Involuntary Resettlement Policy. The three key elements of the Bank's policy on involuntary resettlement are: (i) compensation to replace lost assets, livelihood and income; (ii) assistance for relocation, including the provision of relocation sites with appropriate facilities and services and (iii) assistance for rehabilitation to achieve at least the same level of well-being with the project as without it.
2. The RAP has been prepared in compliance with the requirements of the relevant national legislation of the Republic of Kenya. The process and procedures of land acquisition for the Project will be principally governed by Kenya land laws including; Land Act 2012, Land Registration Act 2012, National Land Commission Act 2012 as well as the World Bank Involuntary Resettlement Policy (OP 4.12).
3. Articles 40 of the 2010 Constitution of the Republic of Kenya establish the fundamental principles of right to and protection of private property. In addition to the overarching principles stated in the Constitution, key legislation applicable to land management and expropriation in Kenya includes:
 - Land Act 2012
 - Land Registration Act 2012
 - National Land Commission Act
 - The Constitution of Kenya
 - Valuation Act
4. The World Bank Group is the potential lender for the project. This document has therefore been prepared in accordance with World Bank requirements as stated in OP 4.12 "Involuntary Resettlement".
5. In Kenya, the Land Act stipulates that compensation value must be 'just'. This can be interpreted to mean that the value paid must include all the other miscellaneous expenses as well as disturbance to them. Specific guidelines for assessing or determining "just" compensation have not yet been developed. In this RAP, compensation will be based on replacement cost explained later in the document. Valuation for assets as outlined in this RAP involved field survey to collect data on the PAHs, land to be acquired, structures lost, trees, community assets and crops affected.
6. Valuation of structures: The replacement value of structures has been investigated during the Socio-Economic Baseline Survey. Structures in the project corridor were inventoried (see table 3 above) and were valued on case-by-case basis. Replacement costs was calculated based on actual cost of construction/re-establishment of a structure of at least equal quality as the affected structure. For houses and other structures, [replacement cost] is the market cost of the materials to build a replacement structure with an area and quality similar or better than those of the affected structure, or to repair a partially affected structure, plus the cost of

- transporting building materials to the construction site, plus the cost of any labor and contractors' fees, plus the cost of any registration and transfer taxes”
7. Valuation for trees and crops: Was undertaken on the basis of the requirements of Kenyan laws, which require that crops be valued based on the values provided by Ministry of Agriculture for crops and Kenya Forest Service for trees. However, because the value for crops by GoK is undervalued, the value of the harvest is determined by the average market value of crops for the previous three years.
 8. Valuation of land: The prevailing market rates for land was used in determining the compensation for loss of land. Replacement values includes market rates and additional funds to meet costs for getting same quality of land elsewhere, registering it, tilling and sowing the same land, etc. OP 4.12 specifies either direct replacement of land or provision of full replacement cost, along with rehabilitation measures, in order to restore livelihoods. Because the land will not be directly replaced, compensation has been based on market value, productive potential, or equivalent residential quality. In principle, the replacement cost of agricultural land used in this RAP “is the pre-project or pre-displacement, whichever is higher, market value of land of equal productive potential or use located in the vicinity of the affected land, plus the cost of preparing the land to levels similar to those of the affected land, plus the cost of any registration and transfer taxes”. The project area has active market for land and hence replacement cost of affected land was based on fair market value (plus transaction costs and, in rural areas, any preparation costs). The RAP consultants engaged private and independent real estate agencies and banks to determine market prices and to evaluate the adequacy of administratively set compensation. Cash compensation was considered appropriate for the land because of the marginal land takings that was experienced during the census survey. The census found that for over 70% of the PAHs, small portions of land parcels were expropriated hence the impact was likely to be marginal and replacement of small parcels is likely to result in fragmented holdings, cash compensation at prorated replacement cost is enough.

C. Entitlement

1. Using Bank policies referred to above, the Project has identified the following Project-Affected groups: Category of Impact/Losses
 - Loss of land only (land owners customary or formal owners)
 - Loss of land and trees/crops
 - Loss of income (those businesses including brick making, sand harvesting and canoe services)
 - Loss of access of canoe crossing points at river banks
 - Loss of graves
2. **Table 5** below provides an entitlement matrix for people affected by land acquisition and the resettlement affected communities. Eligibility was defined by reference to socio-economic census undertaken in the resettlement-affected

villages during the RAP study.

Table 5. Entitlement Matrix

Affected Asset	Affected Right or Interest	Eligible Entity (Individual or Household)	Eligibility Conditions	Entitlements
AGRICULTURAL LAND OWNERS	TITLED LAND: Land held under a registered title deed	Registered land (usually a physical person – one case in the Project-Affected Area) – INDIVIDUAL	Hold a registered land that was registered with relevant Authorities prior to the Cut-Off Date	Replacement of lost land by agricultural land of similar potential under similar tenure arrangements with formal registration in replacement land with the relevant land authorities; or, – Cash compensation for land or non-cash compensation of land (land for land), taking into account market values for land Cash compensation of all immovable developments on the affected land, such as structures, etc.... - See below “Structures” , taking into account market values for structures and materials Cash compensation of standing crops – See below “Crops”
	UNTITLED LAND: Land held under customary ownership, and not registered. Customary land owners are those that own land from ancestral inheritance	Customary land owner (legally an unregistered), whether resident or non-resident– INDIVIDUAL	Hold, prior to the Cut-Off Date, an unregistered, customary land and be recognized as such	Replacement of lost land by agricultural land of similar potential under similar customary tenure arrangements; or Cash compensation for land or non-cash compensation of land (land for land), taking into account market values for land Cash compensation of all immovable developments on the affected land, etc.... - See below “Structures”, taking into account market values for materials Cash compensation of standing crops – See below “Crops”
	RENTED LAND: Land rights obtained temporarily as per a customary rental agreement	Tenant as recognized by the customary landowner and customary authorities whether resident or non-	Occupy land prior to the Cut-Off date as per a rental agreement recognized by the land owner and customary authorities	No compensation for the land itself Cash compensation to the owner of immovable developments established by the owner and to the tenant of immovable developments that were established by the

Affected Asset	Affected Right or Interest	Eligible Entity (Individual or Household)	Eligibility Conditions	Entitlements
		resident– INDIVIDUAL		tenant, such as structures, canals, soil improvement, etc.... - See below “Structures”, taking into account market values for materials Cash compensation of standing crops – See below “Crops”
Category A: Permanent residents, also customary holders of agricultural land		Be recognized by local traditional authorities and the relevant resettlement committee as a permanent resident and a customary holders of agricultural land located in the Project-Affected Area at the cut-off date		<ul style="list-style-type: none"> - Resettlement house of similar or better quality on a resettlement plot (best practice) or cash compensation of the lost house at full replacement value, taking into account market values for housing - Replacement of lost land by agricultural land of similar potential under similar tenure arrangements near the resettlement site – No cash compensation of land if the household does not choose resettlement - Cash compensation of all immovable developments on the affected agricultural land, such as structures, canals, soil improvement, etc...., taking into account market values for materials - Cash compensation of standing perennial crops at replacement value and of non-perennial crops at market value - Moving allowance if the household vacates the Project-Affected Area at a given date - Livelihood restoration package
B: Permanent residents and tenants or sharecroppers of agricultural land		Be recognized by local traditional authorities as a non-permanent resident in the Project-Affected Area and as a customary land holder of agricultural land located in the Project-Affected Area		<ul style="list-style-type: none"> - Cash compensation of the lost non-permanent house at full replacement value, taking into account market values for housing - Replacement of lost land by agricultural land of similar potential under similar customary tenure arrangements anywhere in the Area - Cash compensation of all immovable developments on the affected agricultural land, such as structures,

Affected Asset	Affected Right or Interest	Eligible Entity (Individual or Household)	Eligibility Conditions	Entitlements
		for more than one year		canals, soil improvement, etc...., taking into account market values for materials - Cash compensation of standing perennial crops at replacement value and of non-perennial crops at market value - Moving allowance if the household vacates the Project-Affected Area at a given date - Livelihood restoration package
RESIDENTIAL LAND	UNTITLED LAND: Land held under customary ownership and not registered	Customary land owner (legally an unregistered owner) – INDIVIDUAL	Hold, prior to the Cut-Off Date, an unregistered, customary land and be recognized as such by local customary authorities	Replacement of lost residential land by resettlement residential land of similar size with formal recognition of ownership of the resettlement plot by the relevant administrative authorities; or, Cash compensation for land or non-cash compensation of land (land for land), taking into account market values for land Cash compensation of all immovable developments on the affected land, such as structures, wells, etc.... - See below “Structures”, taking into account market values for materials
STRUCTURES and GRAVES	RESIDENTIAL HOUSES: Inhabitable houses used as a permanent residence	Owner – HOUSEHOLD	Be the locally recognized owner of an inhabitable house permanently used as a residence	Resettlement house of similar or better quality on a resettlement plot and or Cash compensation of the lost house per Kenyan law at full replacement value, taking into account market values for housing
	NON RESIDENTIAL STRUCTURES: Non inhabitable house or other structure of any design	Owner – INDIVIDUAL	Be the locally recognized owner of a non residential structure	Cash compensation at full replacement value, taking into account market values for structure and materials
BUSINESS OWNERS e.g. Sand harvesters, brick makers and canoe transporters	PAPs who harvest sand, make bricks along the river banks and offer canoe transport services across both banks of the river	Compensation for the entire structure at replacement cost as determined by the concerned appraisal committee		Restorative compensation in accordance with the land Act. No compensation for land Restorative compensation includes disturbance allowance, severance and injurious affection

Affected Asset	Affected Right or Interest	Eligible Entity (Individual or Household)	Eligibility Conditions	Entitlements
		without deduction for salvaged building materials.		Disturbance allowance is 15% of the market value of the cost of construction of affected structures Compensation for lost income for up to a period of 12 months
CROPS	STANDING NON PERENNIAL CROPS	Owner of the crop – INDIVIDUAL	Be the recognized owner of a standing crop and be unable to harvest it prior to land occupation by project	Cash compensation at full replacement value
	STANDING PERENNIAL CROPS	Owner of the crop – INDIVIDUAL	Be the recognized owner of a standing perennial crop	Cash compensation at full replacement value

D. Resettlement And Compensation

1. The RAP aims to ensure that all affected parties are compensated and assisted in restoring their livelihoods.
2. Overall objectives of the RAP are:
 - Avoid or at least minimize involuntary resettlement
 - Mitigate adverse social and economic impacts from land acquisition by:
 - Providing compensation for loss of assets at replacement cost; and
 - Ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected, and
 - Improve or at least restore the livelihoods and standards of living of affected people.
 - Provide additional targeted assistance and opportunities to improve or at least restore their income- earning capacity, production levels, and standards of living to economically displaced persons whose livelihoods or income levels are adversely affected;
 - Provide transitional support to affected people, as necessary, based on a reasonable estimate of the time required to restore their income earning capacity, production levels, and standards of living.

Principles For Compensation And Resettlement

The key principles of this RAP are the following:

- All physically and economically displaced people will be offered an option between either a full resettlement package, including the compensation for land at full market cost and replacement value for structures, or land-for-land replacement, with compensation for lost structures and assets; -Majority of the PAHs when asked

their preferred mode of compensation (land for land or cash for land) opted for receiving cash for their land, structures and other assets as described above and highlighted in table 51 and 52.

- Compensation and resettlement of project-affected people will be carried out in compliance with Kenyan legislation and WB OP 4.12;
 - PAPs were, are and will be informed, consulted and involved in decisions making during the course of RAP development, implementation and evaluation;
 - The Project will assist PAPs in restoring their affected livelihoods and will provide transitional assistance in order to restore livelihoods to at least their previous level;

The Project will provide for measures to inform beneficiaries of the pros and cons of cash versus land for land compensation so that PAPs make an informed choice. The project will also provide money management trainings and will monitor livelihood restoration implementation following compensation.

- The RAP implementation and–outcomes will be monitored and evaluated as part of a transparent process;
- Where Kenyan legislation is less favorable to PAPs than WB OP 4.12 requirements or does not apply at all, the latter shall apply.

E. Socio-economic Survey and Census Background

1. Socio-economic surveys of the resettlement village and host villages were conducted in March 2015. The survey involved full enumeration of all households resident in the villages. The surveys: (a) provided socio-economic information that has been included in the RAP; (ii) established a baseline against which the success of the RAP can be measured and (iii) formed the basis of defining eligibility to receive compensation and/or benefits. This was a full census where the consultant and a team of research assistants traversed the project corridor.
2. A cut-off date was set (**30 March 2015**) and established during the process of undertaking the RAP and was communicated to the PAPs. The RAP process including census methodology used in the preparation of the original RAP is highlighted with a summary of the census approach that was used in collecting information from the PAPs. They included:
 - Conducting public consultations/awareness creation;
 - Registering the affected persons by name and other family details;
 - Gathering demographic information on social-economic activities of the affected families;
 - Recognizing any susceptible Project Affected Persons (PAPs) including women-headed household, physically and mentally challenged and the aged.

- Conducting inventory of all assets to be affected or damaged by the project, including details on land ownership and extent of land loss due to the land acquisition, actual land ownership, and not only in terms of land records.
- Valuation of the affected assets at full replacement value and determining any supplementary payments such as the unit price lists and itemized breakdowns of compensation offers and participation;
- Instituting valuation negotiations and devising grievance referral and redress procedures and mechanisms;
- Incorporation of external policies, procedures and institutional arrangements not covered by the Kenyan law;
- Developing a framework for monitoring and evaluation of the PAPs after resettlement;
- Developing a timeline and Budget for all RAP related activities.
- The identification and inventory of all the **structures/residential and business**, including **institutions** whether government or private e.g. schools churches etc. in the affected communities
- The identification and inventory of all **land** that will be acquired as a result of the project
- The inventory of all **trees and crops** in the project corridor,
- The census of Project-Affected People, including their personal details like identification numbers; age; area of domicile; type of loss (land, business or residential), occupation among others using a socio-economic questionnaire,

The census survey of the PAPs was done using a semi-structured household questionnaire. The questionnaire covered the households' baseline information on incomes and expenditures, identification details, age, occupational and livelihood pattern, use of resources, place of residence (County, Sub County and Village), and contact address, arrangements for use of common property, social organization, leadership patterns, community organizations, and cultural parameters. Photographs of the structures owned by PAPs were taken including the GPS coordinates as part of the census.

F. Consultation, Participation and Disclosure

1. The key objective of the public consultation and disclosure process is to ensure awareness, support and participation of the Project-Affected People in planning and implementing activities associated with Project development and resettlement. The Project engages in continuous consultation with the resettlement-affected communities. This occurs through the establishment of formal mechanisms such as village committees, with interest groups established around sectoral program implementation, and on an informal basis through continuous interaction with the affected communities, the latter being facilitated by the establishment and residence of a Resettlement Unit in the midst of the resettlement-affected communities.

2. Consultations were also held with the County Government with the view of obtaining their views, advice and participation in defining the socio-economic impacts of the project and the most adequate mitigation measures to apply. This was also a particularly important step in terms of gaining a better understanding of resettlement impacts and planning possible synergies with rural development projects to find available land and propose restoration strategies.
3. In March 2015, a total of **5** consultative meetings were held with **411** stakeholders at different locations within the project Area to first of all sensitize them about the project, inform them of the reason for update and reviewing of the RAP, agree on the dates for census survey and enumeration and seek their views and perception on the project. **Table 6** below outlines the locations and dates where the consultations were held.

Table 6. Consultations with Project Affected Stakeholders

Location	Venue	Date	# of Participants
Nanjomi Village, Bunyala Central Location	Chief's Office	21 st March 2015 at 2pm	72
Nalera Village, Sisinga Sub Location, Bunyala West Location	Chief's Office	20 th March 2015 at 4pm	64
Makhoma Village for Lugale sub location in Khajula Location	Chief's Office	21 st March 2015 at 4pm	94
Bunyinyi Grounds, Mabinju Sub Location, Khajula Location	Chief's Office	23 rd March 2015 at 4pm	120
Igigo Village Bunyala East Location	Chief's Office	20 th March 2015 at 2pm	61
Total			411

4. In summary, there were no major issues and concerns raised by the PAPs who were generally supportive in a broad way of the project and appreciated the benefits the road would bring with it. **Table 7** below shows the thematic issues raised consistently in all the 5 meetings and the responses.

Table 7. Summary of outcome of the stakeholder consultations

	Key Issues Raised	Discussion
1	Land ownership – PAPs do not have titles to the parcels they are occupying (land not yet adjudicated) PAPs worried they might not be eligible for compensation	RAP team clarified to the community that according to the Land Act 2012 and WB OP 4.12, every PAP will be eligible for compensation
2	Extent of Acquisition – The project is only acquiring section of the PAPs land which makes it Partial acquisition, this also applies for the structures as majority will rebuild the houses within the same land parcels	RAP team explained that the extend of acquisition is 17m from the centre of the dyke and 10m for right of way for maintenance,
3	Double acquisition – Section of PAPs who will be affected by irrigation canal project and dyke project worried about double acquisition	RAP team clarified that all acquisitions that will be required for the projects will be adequately compensated as required.

4	Canoe crossings – PAPs were worried that once the dyke is constructed it is likely to block the crossings that they currently use to cross from one bank of the river to the other	This has been provided in the ESIA prepared for the project, the design will be required to make provisions for people using canoe crossings along the dyke
5	Backflow – River Nzoia backflows at the delta and floods homestead not protected by the dyke on both banks of the river	The issue will be considered further during the Dykes design review. Hydraulic modelling will be undertaken on the backflow concerns to determine the best available options of solving the challenge that is economical and one that does not significantly increase the overall costs of the project. Depending on the best available option chosen, safeguards issues will then be comprehensively addressed after the Dykes design review during the final RAP preparation.
6	Borrow pit sites – community raised concern on where the contractor will get soil for the works and that previous contractors have been getting soil from farms without reinstatement causing health hazards	Concern was noted in the ESIA prepared for the project, borrow pit sites will be properly identified and rehabilitated after borrowing.
7	Seepage from the dyke- the community complained of seepage from the dyke at various sections	The current design will resolve the seepage problem as it has proposed measures such as increasing the dyke base and use of concrete base in some sections.
8	Compensation mode and value of compensation –PAPs raised fears of possibility of not being compensated appropriately for the land parcels to be acquired	The project clarified that compensation will be made in a transparent manner
9	Relocation timings – PAPs expressed fear of timings of civil works and their actual relocation	Project clarified that PAPs will be given 3 months’ notice to vacate land before civil works commence

- As per Bank requirements, the summary and full RAP will be disclosed in the Infoshop and locally in the website for the Ministry of Water, Environment and Natural Resources. In addition, copies of the RAP will be distributed to resettled-affected households through placement at the County offices as well as the project office. The summary will provide information on resettlement impacts, entitlements, compensation, livelihood restoration programs and schedules.

G. Grievance Procedures

- The project provides a simple and accessible, extra-judicial mechanism for managing grievances and disputes based on explanation and mediation by third parties. Each of the affected persons will be able to trigger this mechanism, while still being able to resort to the judicial system. Grievance management

- will provide three tiers of amicable review and settlement, with the first one at the village level using customary rules.
2. The second level will be RAP implementation committees and Sub County representatives in case the grievance cannot be solved on the first level. The third level will be the involvement of the National Land Commission (NLC), which is entitled by the constitution of Kenya to oversee all land acquisitions for public interest projects including grievance redress. The NLC is the legal agency under the new constitutional dispensation responsible for compulsory acquisition of private land for public development by national government and county governments. NLC is governed by National Land Commission Act 2012, which stipulates one of its roles as that of compulsory acquiring land for national government and county governments' development projects among other roles. Key roles of NLC in the implementation of this RAP will include: receive compensation money from the Ministry of Environment, Water and Natural Resources; notifies landholders in writing of the intention to acquire land; assist in resolving disputes related to compensation; undertake public consultation on intended acquisition with the help of SCRCC; receive money from MEWNR for actual payment of entitlement awards to PAPs.
 3. Finally, there will be the option for each complainant to resort to court (third level), in case there is no solution within the Project's grievance mechanism.
 4. An in situ residence of the Resettlement Unit was established during the preparation of the RAP for continuous access and consultation and provides a vehicle for on-the-spot resolution of grievances. As described in the Resettlement Action Plan, the Project will implement a formal grievance tracking and resolution procedure.

H. Livelihood Restoration

1. As described above, the general objective of the Resettlement Action Plan is to achieve 'resettlement with development' ensuring that affected households achieve better livelihoods than they would have if resettlement had not taken place. To achieve this objective the resettlement plan describes restoration and development programs for the main components of local livelihood strategies, namely agriculture, fisheries and micro-enterprise. The primary target group of these programs is the resettled households.
2. Agriculture: Resettled households retain traditional mechanisms to utilize lands distant from new settlements. The agriculture program initially focuses on restoration activities including land division and allocation and the establishment of vegetable and field crop and agroforestry gardens in the vicinity of the resettlement villages. Benefit packages including agricultural tools, seed and fruit tree seedlings will be provided to every household. Further development of agriculture systems will consider market gardening, livestock, and estate cropping based on interest from households.

3. Fisheries: The harvest and sale of fish represents the main source of cash income for households. The program will help the PAP to continue undertaking fisheries as an economic activity by ensuring that access to the river is provided as well as linking the PAPs to markets including support in establishing cold storage facilities
4. Micro-enterprise: The program will support savings and micro-enterprise development as a means of: (i) ensuring that the short-term benefits brought by the Project (i.e., wage labour) serve as a catalyst for sustainable livelihood development, and (ii) supporting diversification of livelihood strategies
5. Employment: Employment of resettlement-affected villagers will be prioritized during construction of the dykes. Opportunities for construction phase employment will be provided to at least one member of every household of the resettlement-affected villages.

I. Vulnerable People

1. Vulnerable groups/people are defined as individuals, groups, households, or communities who by virtue of gender, locality, age, physical or mental disability, economic disadvantage, or social and cultural status may require additional support or assistance and will need help adjusting to changes introduced by the project.
 - Assistance will take the following forms, depending on vulnerable people's requests and needs;
 - Assistance in the compensation payment procedure;
 - Assistance in the post payment period to secure the compensation money;
 - Assistance in moving: providing vehicle, driver and facilitation at the moving stage, providing services for disabled or inform persons during moving, and;
 - Health care if required at critical periods;
 - Moving and transition period.
2. In the context of the Project, vulnerable people include:
 - Disabled persons, whether mentally or physically;
 - Elderly people, particularly when they live alone;
 - Households whose heads are children;
 - Households whose heads are female, particularly widowed or repudiated and divorced women having to take care of their children, and who live with limited resources;
 - People with serious medical conditions, particularly people living with HIV and AIDS and other chronic illnesses;
 - Under the provisions of the RAP, vulnerable households will be provided with targeted assistance.

J. Implementation Framework

1. Ministry of Environment, Water and Natural Resources

The Ministry of Environment, Water and Natural Resources (MEWNR) is the implementing agency for this project under the Project Management Unit of the KWSCRIP. MEWNR will mobilize funds from Government of Kenya (GoK) i.e. National Treasury for resettlement and compensation purposes of this RAP.

2. MEWNR/PMU

The implementing entity for the KWSCRIP/PMU will establish a Project Implementation Unit (PIU) at the project site level and will assign staff for the RAP implementation. The Environment and Social specialists within the KWSCRIP/PMU will be responsible for the management of the RAP implementation including;

Management of RAP Implementation

- Compensation process
- Ensure and monitor overall social and environmental due diligence within RAP implementation (national requirements, lenders requirements)
- Ensure the grievance committees are established and working;
- Establishing Resettlement and Compensation Committees;
- Monitoring

Communication and Coordination

- Overall coordination with County Government and local administration and MEWNR with regard to the Project's social and environmental issues

County Governments of Busia and Siaya

- The County Executive Committee/staff shall contribute with their expertise, their capacity and competence to the implementation of the RAP, corresponding to the different technical areas they represent (i.e. water, environment, social assistance, youth and women).

K. Grievance Redress and Resettlement Committees

The resettlement committees are partners on the local level for RAP implementation, especially for:

- Compensation process
- Identification of vulnerable people on the household level, information of special concerns of vulnerable people in their community, organize meetings and with and visits of vulnerable people
- Involvement in monitoring procedures, especially in monitoring of land dynamics, of progress of livelihood restoration measures and of compensation disbursement
- Involvement into the grievance mechanism on the village level

Sub County Resettlement and Compensation Committees (SCRCCs), Location Resettlement and Compensation Committees (LRCCs) and Village Resettlement and Compensation Committees (VRCCs) will be established in every sub county, location and village affected by the project.

This RAP recommends the first level of grievance or conflict redress on land related issues as a result of this project to be handled by the Village Resettlement and Compensation Committees.

In every affected village there will be a Village Resettlement and Compensation Committees and the membership will include:

- The sub locational chief,
- Assistant chiefs,
- One project affected youth,
- One project affected woman,
- One project affected male
- A representative of vulnerable groups,
- A CBO in the location.
- Business representative.

There will be a Mediation Committee at the Sub County level to handle grievances that cannot be resolved by the village committee and membership will include:

- One representative of the National Administration; - National Government
- One representative of County Administration; - County Government
- Land Officer
- Representatives of Resettlement and Compensation Committees at location level.
- One representative from MEWNR/PMU acting as an observer;
- One representative of the construction contractor, acting as an observer
- Three representatives of the affected people, amongst them at least one woman, chosen i.e. from community based organizations, elders, customary authorities.

In case this mechanism will not allow an amicable agreement to be reached, the complainant or the defendant can resort to Justice (and could at any time).

L. Budget

1. The total budget allocated to implementation of the Resettlement Action Plan in the resettlement-affected villages is **Kenya Shillings 230,767,463.3. (US\$ 2,508,342)**. The Government of Kenya will finance the full budget.
2. However, for this RAP, a 15% disturbance and relocation assistance was included to the budget. The relocation assistance will cater for economic, social and physical disturbance caused to PAHs. The estimated cost and budget for the RAP is Kenya Shillings **230,767,463.3**. The Government will finance the RAP through the Ministry of Environment, Water and Natural Resources.

Table 8. Summary of Budget for RAP

Item	Approx. Value (Kshs)	Addition (20%)	Estimated Total Value (Kshs)	15% Statutory allowance	Total Value (Kshs)
Structures Values	5,322,416	1,064,483	6,386,899	958,034	7,344,933
Land Values (Land Rates is 350,000 Kenya Shillings per Acre. Total land loss is 250 Acres)	87,500,000	17,500,00	105,000,000	15,750,000	120,750,000
Tree and Crop Values	3,101,500	620,300	3,721,800	558,270	4,280,070
Loss of graves	250,000	50,000	300,000		300,000
One year loss in livelihood (businesses)	1,592,800 per month for 12 months				19,113,600
Livelihood Restoration					50,000,000
Sub-Total					201,788,603
Estimated expenses of KWSCR					5,000,000
Financial Management Training & Counseling for PAPs					3,000,000
Sub-Total					209,788,603
Miscellaneous Expenses (10%)					20,978,860
GRAND TOTAL					<u>230,767,463.3</u>

M. Implementation Schedule

1. This is a Draft RAP. Optimization of the project design for the Dykes Construction Project and harmonization of designs with the Lower Nzoia Irrigation Scheme which is co-located with the Dykes Construction Project are expected to occur in 2015. As needed based on design changes, this RAP will be updated accordingly. As there is expected to be a small subset of PAPs for the Dykes Construction Project who are also PAPs for the Lower Nzoia Irrigation Scheme, once the joint designs for the two projects are complete, revisions to the RAPs for both projects will be made to plan for these PAPs.
2. The Resettlement Action Plan will be implemented from 2016. A detailed implementation schedule for the resettlement-affected villages is incorporated into the resettlement plan. The activities related to the Project are expected to commence in 2016 by which time the PAHs are expected to have moved from the site. It is expected that before September 2016, all the PAHs will have been fully compensated in line with the findings of the RAP study and that all the grievances arising will have been resolved in order to pave way for the project execution.

N. Monitoring and Evaluation

1. The Resettlement Unit will be responsible for internal monitoring of resettlement plan implementation. An external monitoring and evaluation team will review implementation on an annual basis. Such reviews will be supported by socio-economic surveys. A baseline survey was conducted in March 2015. Further surveys will be implemented every two years following physical relocation (i.e.). An external M&E team will implement a Completion Audit.

O. Structure of RAP

The RAP focuses on addressing permanent involuntary resettlement impacts. The RAP is presented in three blocks as follows:

Block 1

Describes (a) the project history, context and content; (b) the policy framework and objectives that guide the Project Resettlement Program; (c) the legal basis for land acquisition and compensation and resettlement; (d) a socio-economic description of the resettlement and host communities, and (e) an analysis of the impacts of resettlement on the resettlement.

Block 2

Describes (a) the community consultation processes undertaken by the Project; (b) the physical construction activities undertaken in resettlement-affected villages, and (c) the planned income and social reconstruction strategies for resettlement-affected villages.

Block 3

Describes (a) the implementation plan; (b) the budget, and (c) the monitoring and evaluation framework to be used by the Project. Together the chapters present an integrated and comprehensive description of the Project's commitment to implementing a successful resettlement plan.

1 INTRODUCTION

This chapter describes the technical aspect of the project as well as project layout and activities to be undertaken during the preparation and operation of the project. The chapter also describes the inputs and outputs of the project during the project life cycle.

1.1 BACKGROUND

The Ministry of Environment, Water and Natural Resource/State Department of Water (the Proponent), through Kenya Water Security and Climate Resilience Project (KWSCRIP) seeks to promote economic empowerment of local communities and their organizations in flood prone regions of western Kenya, through support to local initiatives and efforts that understand and mitigate the adverse effects of poverty.

A consultancy contract was originally awarded to WS Atkins International in association with Howard Humphreys (East Africa) Limited for the Assessment of Levee Integrity and Floodplain Condition and Final Design of Improvement of Flood Water Structures along the Lower Reaches of River Nzoia-Budalangi. This was one of the packages within the World Bank funded Western Kenya Community-Driven Development and Flood Mitigation Project then implemented by Ministry of Special Programs. The project, which envisages developing flood management in the Nzoia River basin, has now been taken up by Kenya Water Security and Climate Resilience Project.

The solution currently under consideration entails development of a system of multi-purpose flood control, potentially consisting of one or more flood control structures. The current study considers works to be implemented in the short to medium term in the lower reaches of the River Nzoia, that is, between Rwambwa Bridge and Lake Victoria in Budalang'i, where the majority of the flooding problems occur. The intention is that these works will be augmented by the provision of multi-purpose flood storage reservoirs, also being investigated in the middle and upper catchment in the medium to long term.

1.2 THE FLOODING PROBLEM

Prior to the construction of the existing dykes River Nzoia flowed through the Budalangi area within a natural levee system raised above the surrounding floodplain. The first recorded incidence of flooding was in 1937, although it is probable that this had been happening regularly prior to this point. Records indicate that there was frequent flooding, on average every 2 years through the late 1950's and 1960's, which may have been exacerbated by the significant increase in Lake Victoria levels that occurred in 1961. Flooding in the project area occurred with or without dykes. Different reports show flooding occurred in the years 1947, 1951, 1957/58, 1961/62, 1963 and 1975. This was before the construction of dykes was finalized.

The existing dykes were constructed on top of the natural levees between 1965 and early 1986, initially to protect the Bunyala Pilot Irrigation Scheme, and subsequently the remainder of the north and south bank.

The dykes were successful in prevention of flooding from the time of construction up to 1997. Since then, despite Government of Kenya (GoK) efforts to effect repairs there have been many failures. The most recent occurrences were in November 2008 and December 2011. The increased frequency of levee failure and breaching has resulted in communities within the floodplain increasingly suffering the effects of flooding, resulting in damage to dwellings, livestock and crops, and risk to human life. People, their villages, crops and livestock are affected by these incidences and threats. It has been estimated that the average annual cost of the damage is in the order of US\$800,000 plus a further US\$1,000,000 (both at 2004 prices) to provide emergency relief and rehabilitation for around 12,000 people.

The dykes and natural levees impede the natural drainage of the floodplain. This prevents runoff from draining to the river, creating localised flooding and extensive areas of marshland next to the dyke. Soils of the alluvial plain are typically of low permeability. They therefore do not allow floodwaters to seep away naturally and areas of standing water can remain for up to 6 months after flooding occurred. This causes public health problems including malaria and cholera and prevents people from returning to their homes.

The Government of Kenya (GoK) has planned a large-scale water investment program to address the challenges in water sector and to close the massive infrastructure gap that has been estimated at US\$ 5 – 7 billion in various existing and on going studies. The Water Sector Strategic Plan (2010) and the draft Water Harvesting and Storage Management Policy (2010) focus on reducing the water infrastructure gap through single and multipurpose storage. This approach is in line with a recent World Bank report that found substantial opportunities for multi-purpose storage to secure reliable water supply, manage floods, provide irrigation, and generate hydropower.² Further, a Climate Change Response Strategy was developed in 2010 that identified soil and water conservation, construction of dams, and expanded irrigation as key actions to increase climate resilience.

The National Policy for Disaster Management and the National Disaster Response Plan (both issued in 2009) highlight the need for mainstreaming disaster risk reduction and establish additional roles and responsibilities for mitigating residual risks in the water sector. To address some of challenges and to fill some of the gaps, the Government of Kenya has prepared Kenya Water Security and Climate Resilience Project (KWSCR), to be implemented in phases. This program is focused on achieving water security and resilience to climate variability and change.

To this end, the KWSCR I will support the higher level objectives of inclusive green growth as a pathway to sustainable development. In particular, the KWSCR I and II will foster growth that is efficient in its use of natural resources, clean in that it minimizes environmental impacts, and resilient in that it reduces social vulnerabilities and accounts for natural hazards and the role of environmental management and natural capital in preventing physical disasters.

²World Bank, 2012, Towards a Strategic Analysis of Water Resources Investments in Kenya

1.3 WESTERN KENYA FLOOD MITIGATION PROJECT/DYKES

Western Kenya Community Driven Development and Flood Mitigation Project (WKCDD FMP) became effective on August 7, 2007. The project has three Components: (i) Community Driven Development (US\$37.1million); Flood Mitigation Component (US\$32.9million) and; Implementation Support (US\$15.7million). Soon after the Board approval, the project was affected by the post election violence of December 2007 through March 2008. This caused implementation delays during and after this period but some project intervention areas, such as Mt. Elgon, remained volatile and was not accessible due to internal ethnic conflicts for prolonged periods before and after the post-election period. This and the Kenya post election violence that followed, affected many parts of Western Kenya and complicated project supervision in the months of early 2008 through June 2008. In addition, project gains were undermined as community associations particularly under the Water Resources Management Authority were dismantled.

1.4 FLOOD MANAGEMENT PROGRAM (FMP)

The Flood Mitigation Component envisages developing Flood Management structures within the Nzoia River Basin. It is estimated to cost USD\$54m. The lower flood plain areas within Nzoia Basin, experiences flooding and destruction each year due to degraded upper catchment, high levels of sedimentation leading to reduced river carrying capacity, land use and lack of control structures to manage the damaging effects of the Nzoia River waters. The project has completed the final design for improvement of the flood control structures in the lower Nzoia and intends to undertake construction of these works immediately. However, the design depicts some possible displacement of some people living extremely to the dykes where some realignment may take place.

This sub component was designed to support flood plain management in Budalang'i in Western Kenya through rehabilitation and strengthening of the existing dykes. Studies were initiated with the objective of assessing the integrity of the existing dykes and these are now completed and the cost elements determined. This component has the highest potential to enhancing achievement of the objective of reduction of vulnerability of communities caused by floods.

The FMP works will be located at the Lower reaches of Nzoia River downstream of Rwambwa Bridge (about 24km South West of Bumala). From Rwambwa Bridge to the mouth of the river is approximately 17.5km, but the river meanders and distance along the channel is approximately 40km. The study area lies in Bunyala Sub-county of Busia County. The sub-county covers an area of 306.5km², out of which 120km² is under permanent water surface of Lake Victoria. The proposed construction works will take place within the flood plain in the Lower Nzoia River at Budalang'i, Bunyala sub-county. The works will entail improvement and realignment of the existing flood protection structures, which comprises of two dykes - southern and northern – each approximately 17km along the Flood Plain as the river discharges to Lake Victoria. The existing dykes were constructed in 1980s.

1.5 PROJECT BENEFITS AND RATIONALE

The proposed Project is positive in the overall, being in line with the locals' aspirations and national objectives for enhancement of social and economic development. The existing dykes along the downstream (of Rwambwa Bridge) River Nzoia are now beyond their design lifespan. Despite on-going efforts to effect repairs on the dykes, they have increasingly been breached with increasing frequency of flood incidences. This has led to increased socioeconomic losses in the project area and exposes it not only to losses of life and livelihoods but also the government in terms of emergency response expenditure.

Despite the fact that the proposed combination of interventions was the best in meeting the project objectives, the construction, operation and decommissioning phases are likely to have certain adverse impacts on the local community and the immediate surrounding environment given the nature of the project environment. The major activity in the project will be earthworks. Each of the anticipated impacts has been assessed and where feasible, appropriate mitigation measures proposed and the following can be concluded:

During design and planning phase the significant impacts identified were positive and included job creation and an opportunity for the community/stakeholders' engagement and inputs in formulation of flood management interventions.

The project area's natural environment is a mix of natural aquatic, riparian and wetland habitats. Review of documented flora and fauna species did not reveal any species of special conservation concerns. Even though it has no gazetted wetland, consultations revealed that plans are underway by both NEMA and Nile Basin Initiative to have the wetland areas gazetted thereby calling for more precaution while undertaking any activities. It is however, notable that interventions which would have posed greatest negative construction environmental impacts on the habitats were eliminated during the optimal appraisal stage.

Numerous positive impacts other than the key project objective put forward by the proponent are anticipated during operation. Some of these include: facilitation of reliable agriculture; attraction of more development investment into the floodplain; ensuring educational calendars are not interrupted by floods; promotion of transport linkages between communities to the south and to the north of the Nzoia River; and other numerous benefits were identified by the beneficiary community.

1.6 PROJECT DESIGN AND BENEFITS

The project earthworks during construction will require an estimated fill material of 586,000 cubic metres for the northern dyke and 637,000 cubic metres for the southern dyke. Construction of the broader and higher dykes will also necessitate additional strip of land adjoining the existing dykes. Even though the design has been optimised to minimize the associated impact, some properties located and even families whose structures are built right at the foot of the existing dykes will have to be relocated.

1.7 PROJECTS ACTIVITIES

The proposed new flood management interventions will be implemented along both sides of the Nzoia River, downstream of Rwambwa Bridge (located about 24 km south west of Bumala) to its confluence with Lake Victoria. The area is commonly known as Budalangi and has old flood protection dykes on both north and south of the river referred to as northern dyke and southern dyke respectively. Rwambwa Bridge to the mouth of the river is approximately 17.5km, but given the river meanders, the distance along the channel is approximately 40km.

Following evaluation and appraisal of various alternatives, a preferred combination was selected for implementation. The adoption of the proposed activities to the management of flood in the study area was endorsed by the Western Kenya Community Driven Development and Flood Mitigation Project (WKCDD&FMP) and stakeholders at the workshop held in Nairobi on 13 September 2012. The structural works proposed to WKCDD&FMP are to:

- Improve the dykes to provide a greater level of flood protection;
- Improve conveyance of flood flow by realigning some sections of the dykes;
- Provide larger culverts through the road crossing dyke at Sigiri/Rugunga; and
- To improve floodplain drainage by providing two drainage structures that will allow flow drainage for the northern dyke (east of Sigiri).

Further details of the proposed arrangement are as follows:

1.7.1 Dyke Improvements

Proposed dykes improvements will involve a combination of new higher and stronger dykes and raising and strengthening existing dykes. These will mainly involve earthworks comprising compacted fill of sandy clay with a 300mm thick sand filter to the landward side.

On the northern dyke, a greater section (90%) of the existing dyke will be retained and improved (through raising and strengthening) while localised areas at Sibanze and Sigiri will be replaced with new higher and stronger dyke on new alignments.

On the southern dyke, about 80% of the existing structure would be retained and improved (intervention B2) while the remainder will be replaced with a new dyke. Higher and stronger dykes on new alignments will be constructed as detailed in Table below.

Table 9. Locations Proposed for New Alignments

South Dyke (total 4.020km)	North Dyke (total 1.300km)
Burungasi Ch 7+980 to 8+475 (0.495km)	Sibanze Ch 10+900 to 11+400 (0.500km)
Makhoma Ch 10+550 to 10+900 (0.350km)	Sigingi Ch 16+100 to 16+600 (0.500km)
Makhoma Ch 10+945 to 11+385 (0.440km)	New Extension dyke at: Ch 0-300 to 0+000 (Total 0.300km)
Makhoma Ch 11+625 to 11+750 (0.125km)	
Galalani Ch 12+250 to 12+580 (0.330km)	
Khayinga Ch 12+665 to 13+490 (0.825km)	

Khayinga to Rugunga Ch 13+965 to 14+265 (0.750km)	
Khayinga to Rugunga Ch 14+865 to 15+265 (0.400km)	
Rugunga Ch 15+365 to 15+670 (0.305km)	

New drainage outlet as a means of conveying drainage and flood flows across the line of the dyke from the north floodplain will also be provided at chainage 11300 and 12400 - Intervention D15. The flow will be controlled by use of a flap valve/spindle.

In order to maintain the durability of the dykes, the following will be implemented:

- Provision of special crossing points with hard surfaces to stop erosion of crest.
- Cattle crossing ramps will be provided near homesteads or at intervals of approximately 1km to enable cattle crossing to watering points. The ramp will be 250mm thick concrete and 6m wide with a finish of rough concrete laid on a fabric mesh (A393);
- Protection of dykes from erosion by the use of gabion mattresses where the river meanders have shifted closer to the dykes.
- Provision of roads along dyke crests (surfacing only, not a public road). The roads will consist of 300mm thick compacted gravel course with kerbs and toe drains; and
- Keeping dykes free of trees to avoid long-term problems and protect against excess grazing by livestock

Detailed design drawings of the proposed works are included in appendix section. However, it is important to note that further work will be done to optimize these designs, as well as to integrate them with the designs for the First Phase of the Lower Nzoia Irrigation Project, which is scheduled to be implemented through the KWSCR-1, in the Southern Bank of the Nzoia River.

1.7.2 River Channel Improvements

The proposed river channel improvement activities include:

- Realignment of the southern dyke at Rugunga (chainage 15.0 Km) to remove the constriction between the dykes;
- Replacement of 13nr. DN900 culverts along Sigiri crossing (Chainage 13.6km) with triple 5m x 1.2m high box culverts 7 nr. Sets;

In addition, the following activities will be included as part of the project management:

- Coordination with NIB on drainage issues, particularly on the northern flood plain, in light of the proposed Lower Nzoia Irrigation Development Project planned for implementation in 2014/2015. The informal discussion with NIB agreed in principal that the 4km long irrigation canal will be shifted away from the rehabilitated Northern dyke while the two new drainage outlet structures on the Northern dyke would serve only as outlets for natural drainage, with the effluent from the proposed irrigation works on the Northern floodplain being handled separately by NIB;

- Coordination with NIB on social and environmental issues arising from the co-location of projects, including but not limited to coordination over resettlement for PAP's affected by both projects, potential competition for borrow sites and materials;
- Consultation with the relevant roads authority has been undertaken concerning any future plans to undertake bridge crossing at Sigiri including improvement of the road. The current status is that design studies are being procured for the Lake Victoria Ring Roads (our project falls within this proposed study area). Since there are no immediate government works at this area in the near future, our work is moving independently - replacing existing culverts and rehabilitating the crossing to 7m width.

Figure 1: Proposed Works' Locations within the Study Area-separate attachment

1.8 PROJECT DESIGN CRITERIA

The project was appraised and costs for dyke construction estimated using design flows of 500 cumec, 750 cumec and 1000 cumec. However, following hydraulic modelling, which showed that the 500-cumec flow provides little more benefit in terms of in-dyke capacity than the existing dykes, this was dropped and the current design for Phase III is 750 cumec.

Box 1 Civil/ Infrastructure designs shall be carried out on the basis of the following design Codes and Standards:

BS 8005: Part 1:1987 Guide to New Sewer Construction;
 Ministry of Water Development – Design Manual for Water Supply in Kenya, 1986;
 BS 5911: Part 100:1988 – Specification for Unreinforced and Reinforced Pipes and Fittings with Flexible Joints;
 KS 06-149 – Specification for uPVC Pipes for Cold Water Services;
 KS 06-217 – Specification for uPVC Pipes for Buried Drains and Sewer Pipes;
 BS 3505 – Specification for uPVC Pressure Pipes for Cold Potable Water;
 Rainfall Frequency Atlas of Kenya, Ministry of Water Development, 1978;
 WHO Report No. 9 – Selection and Design Criteria for Sewerage Projects;
 WHO Report No. 4 – Design and Selection Criteria for Community Water Supplies
 The Traffic Act, Chapter 403, Laws of Kenya;
 Road Design Manual, Parts I & III, Ministry of Public Works & Housing (MOPW&H), Kenya, Jan. 1979 and May 1987 respectively;
 Surface Water Drainage – Design Manual by John Keenan, Oct. 1975;
 Nairobi City Council Adoptive Standards for Infrastructure Works;
 ECA TRRL – Report on Flood Hydrology Symposium, Nairobi 21-24 October 1975;
 BS 1387/67 & KS 06:259 Steel tubes and tubular; and
 MOPW&H Manual for Civil Works Details – 1983.

The above references shall be used in a complementary manner. Where requirements of two or more codes or standards are found to conflict, the more stringent of them is adopted for the purpose of this project.

It is acknowledged that the project area is subject to the deposition of sediment from the Nzoia River, causing an increase in flood levels over time. The design of the dykes includes an allowance for sedimentation of 25mm per year for 10 years.

1.8.1 Construction Material And Equipment

Construction materials will include;

- Fill material for dykes – this will comprise cohesive material for dykes. This will be obtained from existing sections of dyke being realigned and borrow pits within and close to the project area;
- Aggregate, cement and steel-for construction of culverts and drainage structures will be purchased from quarries and hardware/supplies; and Bentonite- for the seepage cut-off walls will be sourced from suppliers.
- A lot of fill materials will be required in the dykes construction. It is estimated fill material of 586,000 cubic metres for the northern dyke and 637,000 cubic metres for the southern dyke will be used. The materials will be of the following preliminary specifications.

Table 10. Fill Material Specifications

Preliminary Fill Specification	Max	Min
Liquid Limit %	60	35
Plasticity index %	30	15
% Passing 0.075mm sieve		50
% Lab maximum dry density (2.5kg Hammer)		98
Moisture content relative to OMC (%)	Plus 3%	0%

It is envisaged that a crest width of 5m will be suitable to sustain the current level of usage, that is, occasional vehicles (mainly for routine maintenance and sand harvesting), livestock, motorcycles and pedestrians. Additionally, 5m is considered a minimum working width to safely accommodate plant and labour for construction of the dykes. The location and frequency of vehicle access points has been carefully considered in consultation with the community-through use of traffic barriers to ensure only maintenance vehicles use the dykes. Limiting vehicular traffic will help to maintain the integrity of the dykes for the primary role of flood defense.

1.8.2 Seepage Control

Seepage is known to be a problem in a number of areas along both north and south dykes, which are founded on a broad alluvial plain comprising a shallow layer of soft to firm clay overlying permeable sands and gravels. The highly permeable layer extends at least 5m below the foundation level of the dykes, proven by the geotechnical investigations.

Seepage gives rise to standing water or waterlogged ground on the landward side of the dykes, which can be a nuisance to local communities, as the land cannot be used. More critically in relation to flood risk, seepage under the dyke can lead to:

- Instability due to increased pore water pressures in the foundation; and
- Erosion of the dyke toe.

Natural streams draining to and from the River Nzoia (north and south sides respectively) were severed by the original dyke construction and it appears that no cut off was

provided. There is evidence that there is still hydraulic connectivity between these streams and the main channel, resulting in 'weak points' along the dyke during flood conditions.

To minimize the risk of dyke failure, seepage control for the full length of the dyke will be instituted. The reduction of the hydraulic gradient through the foundation of the dyke will be achieved either by seepage control through the filter drain within the dyke and provision of a seepage berm on the landside. Other areas will involve construction of bentonite cut-off walls below the dyke on the riverside to control the hydraulic flow. These methods are aimed at increasing the seepage path length under the dyke thereby dissipating the driving head over a longer distance. The bentonite cut off wall at the riverside toe will be 10m deep.

A seepage berm is the alternative option to a cut off and, by comparison, simpler to construct, requiring the same materials and plant as for the main dyke construction. The seepage berm would comprise a layer of compacted fill material, typically 1m deep and extending variably from one section to another between 5m and 15m from the landward toe. However, the seepage berm considerably extends the overall footprint required for the dyke construction (approximately doubling to (up to 48 metres), and from site inspections there are some settlements in close proximity to the existing dyke which would be affected. To further reduce the risk of piping through the dyke the design includes a sand filter and toe drain on the landward slope.

For stability under hydraulic loading (in flood conditions) the dyke slope gradient will range between 1:2.25 for heights less/or equal to 3.5m and 1 in 2.5 for height greater/or equal to 3.5m. The foundation width of the new dyke (excluding seepage berm) is likely to be up to 10m greater than the existing foundation (up to 33 metres).

Slope stability is dependent on the type of soils available and at it is assumed a material will be available similar to the existing silty clay which was locally sourced at the time of construction and for recent repair work.

In some locations, the course of the river channel has migrated close to the existing dyke, leading to erosion of the toe, or risk of erosion if left unchecked. In these locations it is proposed to realign the dyke to the landward side. Erosion control measures will be incorporated into the design, although in flood conditions velocities are high and on-going maintenance and/or repair is likely to be required, to ensure these measures remain effective.

Once the structural form of the dyke is complete, the slopes will need to be trimmed and prepared for protection against erosion by planting suitable grass/vegetation and the crest of the dyke will be filled with 300mm of murrum to allow a vehicle surface ride.

1.8.3 Dyke Maintenance

It will be important to regularly maintain both the slope and the crest surfaces to ensure that the durability of the dyke is maintained. This will be achieved by:

- Planting and maintaining suitable grass cover on the dyke slopes. No trees/bushes will be planted on the dykes and the Community shall ensure the cattle crossing ramps are used;
- Ensure controlled traffic via barriers to avoid unauthorized traffic; and
- Regular inspection and timely patch repairs before minor damage develops into significant impact.

1.8.4 Culverts & Drainage Structures Construction

Box 2 Materials for culvert and drainage structures construction will include:

Gravel; Crashed stone for scour control; Blinding materials (class 15); Flap gates; and Penstocks Steel reinforced concrete;

Box 3 Erosion Control Materials

Suitable grassing of dyke slopes; Stone pitching at cattle crossings and for scour control; Gabion boxes and mattresses; and Rock armour.
--

1.8.5 Construction Methods and Equipment

Dyke construction will require plant typically deployed for road construction work. Compaction will be closely supervised, as it is critical to the long-term performance of the flood defense and requires materials to be placed at optimum moisture content for compaction. Some of the equipment to be deployed will include:

- Earth movers including; excavators, dump trucks, road roller; backhoe excavators and loaders;
- Concrete mixers;
- Bentonite slurry wall equipment; and
- Staff vehicles.

1.8.6 Contractor's Camp

To facilitate the dyke construction activities, it is envisaged that the selected contractor(s) will need to set up a residential camp within the project area for easier mobilization of both equipment/materials and human resources. The camp will host staff, machinery/equipment and be used for minor equipment servicing/workshop. It will have its waste handling system including use of septic tanks for domestic wastes.

1.8.7 Planning/Phasing of Construction Activities

The sequencing of construction will need careful consideration as flood defenses will need to be maintained to at least the current standard of defense during periods of high flows. The contractor will need to sequence works accordingly. It is preferable that in locations where new dykes (Type A) are proposed, the new structure should be built landward of the

existing (that is, where there is sufficient space avoiding settlements). This approach would allow work to progress for an extended period of time throughout the year, other than during particularly wet conditions, which would prevent compaction of materials to the required specification. The existing dyke could either be left in place (providing some secondary/temporary protection against erosion) or later excavated and compacted on the landward side to form a seepage berm (or the material reused elsewhere).

If there is not sufficient area to build the new dyke behind the existing (and resettlement is to be avoided) then the dyke will need to be constructed on the same line during periods of low flow or with a temporary flood defense in place on the river side. The seasonal timing of floods appears to have become less predictable, as witness by the devastating December 2011 floods. Therefore this approach will need to be planned with a good degree of caution, with necessary trigger levels and contingency plans put in place to restore flood defenses promptly.

In locations where Type B Dykes (raise and strengthen existing dykes) are proposed, construction methods will need to ensure that the new material placed bonds well with the existing material to form a homogeneous structure. Except in areas where erosion is a problem, the dyke will remain on the same line, limiting the additional land take required, although additional land (nominally 10-20m) will be needed for the seepage berm. Where dense settlements are located near to the existing dykes, the use of a bentonite wall cut off will be considered as an alternative to the seepage berm, to minimize the requirement for resettlement. Construction of the dyke on line should eliminate the need to construct a temporary defense or the need to restrict construction to periods when low flows would normally be expected.

1.8.8 Construction Period

The construction period has been estimated to be approximately twenty-four months.

1.8.9 Project Operation and Decommissioning

The main operational activity on the dykes and associated works will be to allow drainage from the culverts. Other activities during operation will be maintenance tasks. These will be community driven as the project will be implemented with their ownership in mind. Activities will include; trimming and cutting of grass on dykes, removal of bushes, saplings or any woody vegetation that start to grow anywhere on the dykes, repair of erosion damage or damage from grazing animals among others. Some of these activities may be too large for the community to complete unaided, in which case external assistance, e.g. using a contractor, will need to be provided.

Decommissioning of the proposed works is considered unlikely. Should the need arise following realization of new flood control/management measures upstream, the dykes or their sections could be decommissioned following technical appraisals. Decommissioning activities will be guided by management plans provided in the report.

It is expected that machinery will be used in the construction of the main and secondary canals together with the main drains. This will be due to expected earth volume to be moved. Choice will therefore be made for the proper equipment required for the execution of the relevant work. Among the works is the excavation, loading, hauling, spreading and compacting.

2 THE PROJECT

2.1 PROJECT LOCATION

The Project is located in two counties in Western Kenya, namely Siaya and Busia Counties. Administratively the project area falls in eastern parts of Bunyala Sub County in Busia County and western parts of Siaya County. Busia County borders Lake Victoria to the South West, the Republic of Uganda to the West, North and North East. The county constitutes seven (7) constituencies namely; Teso North, Teso South, Nambale, Matayos, Butula, Funyula and Budalangi. In relation to neighbouring counties, Busia borders Bungoma and Kakamega to the East, and Siaya to the South East and South. Busia County covers an area of 1,695km and has a population of 488,075. The proposed project is sited in Bunyala District, Budalangi constituency. Bunyala District covers an area of 306.5km², out of which 120km² is under permanent water surface of Lake Victoria. The District has lies between Latitude 0° 1' 36" South and 0° 33' North and Longitude 33° 54' 32"East and 34° 25' 24" East.

Bunyala district has a total area of 306.5 Km² including water surface of Lake Victoria of 120 Km². The district has one division with 6 locations and 18 sub-locations. Siaya district has a total area of 1520 Km² and is divided into 7 divisions with 30 locations and 130 sub-locations. In total, 16 Sub-locations within 6 Locations in 3 Districts would benefit from the project.

Table 11. Project Affected Counties and Sub Counties

County	Sub-County
Busia	Bunyala
Siaya	Alego
	Rwambwa
	Sumba
	Uranga
	Usonga
Total	6

2.1.1 Project Investment and Benefits

- A Resettlement Program focused on the resettlement of 1,163 PAHs;
- Project-implemented sectoral program assistance for communities (water and sanitation, health, education, micro-finance, small- and medium-scale enterprise development);
- Workforce management and vocational training;
- Capacity-building with government and civil society (as implemented through the Diversified Growth Strategy and including good governance training with local government, planning and fiscal impact management, etc.).

2.1.2 Resettlement Action Plan

The Project recognizes that the project activities may result in the loss of land, resources

and means of livelihood. Accordingly the Project has utilized the World Bank (WB) involuntary resettlement policies and guidelines for identifying Project-Affected People and addressing Project impacts. This document specifically addresses the involuntary resettlement impacts of the Project. Both Kenyan law and international “best-practice” regarding involuntary resettlement require projects involving land acquisition and population displacement to develop a Resettlement Action Plan (RAP).

In addition, the Implementation RAP also incorporates:

- Additional information regarding the resettlement process (e.g., land acquisition, relocation, income restitution and development);
- Additional consultations with the resettlement-affected communities;

2.1.3 Resettlement Objectives

The objectives of the Project’s Resettlement Action Plan are to achieve ‘resettlement with development’ and thereby ensure that resettled households achieve better livelihoods than they would have if resettlement had not taken place.

2.1.4 Project-Affected People

Using WB policies referred to above, the Project has identified the following ‘Project-Affected People’:

- Those affected by the project as a result of loss of crops and trees;
- Those communities that have lost land (i.e. those physically relocated);
- Those that have lost structures
- Those that have lost businesses-brick making, sand harvesting, canoe transporting
- Those that have lost graves
- Those that have lost access to the traditional canoe crossing points

In accordance with Bank policy, the Project is committed to on-going monitoring of activities and the development of further plans with appropriate mitigation measures if necessary.

2.1.5 Summary Description of Resettlement Action Plan Program

The RAP focuses on addressing the permanent involuntary resettlement impacts described above. As outlined the Resettlement Program involves the physical relocation of the community (comprising 1,163 PAH).

The Resettlement Program aims to ensure ‘resettlement with development’ with households achieving better livelihoods than they would have if the resettlement had not occurred. The program addresses the development of new settlements (including houses, public infrastructure and services) and a livelihood reconstruction program that considers the re-establishment and development of agriculture, fisheries, and micro-enterprise. In addition, education, vocational training, Project-related employment, and health are being addressed.

The Project through the Government of Kenya will bear all the costs of the Resettlement

Program and the MEWNR assumes primary responsibility for its implementation.

This RAP is currently in draft form. Designs for the dykes' construction project have not yet been finalized. The designs for the Dykes will be enhanced, and additional work will be completed to minimize any backflow effect caused by the heightening of the dykes. In addition, the designs will be harmonized with the designs for the Lower Nzoia Irrigation Scheme, which overlaps with the project area for the Dykes Construction Project. Once the designs for these projects have been finalized, the RAPs for both projects will be updated to respond to any changes in project designs, as well as to reflect the coordination needed in resettlement between the two projects, as there are expected to be a small portion of PAHs who are affected by both projects.

2.1.6 Other Relevant Studies and Reports

The following studies and investigations were undertaken as part of the RAP preparation:

- Social Impact Assessment
- Environmental and Social Impact Assessment
- Economic Assessment

2.1.7 Conclusion

In conclusion, this RAP represents the Project's commitment to addressing involuntary resettlement impacts. The implementation plan is intended to be flexible and responsive, with adaptation and improvement occurring in response to further studies, community consultations, monitoring, verification and evaluation throughout the Project's duration. An adaptive approach ensures that the Resettlement Plan described in this RAP meets the developmental needs and best interests of the affected communities.

The Project is a major resource development project that will yield substantial benefits to the local communities. However as with most large-scale projects there are unavoidable adverse impacts. The most significant impact derives from land acquisition and population resettlement activities associated with the construction of the dyke.

The Project is committed to developing and implementing a Resettlement Program that will facilitate the physical relocation of the community and ensure the economic and social reconstruction of all three resettlement-affected communities. To ensure that the Project achieves both Kenyan and international standards in resettlement, the Project has developed this document (the RAP). The plans outlined in this document include a combination of mitigation measures and development initiatives that together aim to balance the adverse impacts of resettlement, to ensure the reconstruction of livelihoods in the three resettlement-affected communities and to secure standards of living higher than those attained prior to Project entry (i.e., to achieve resettlement with development).

The resettlement is an unavoidable step in implementing the Project. The Project is aware of the physical and socio-economic impacts of displacement and is committed to adhering to standards in resettlement, starting with the adoption of clear policy principles and standards for guiding the resettlement process and progressing through operational measures and financial provisions for implementing and translating the resettlement

policy into a substantial action program. The following chapter describes the conceptual and policy framework upon which the Project has developed the RAP.

3 POLICY FRAMEWORK FOR LAND ACQUISITION AND RESETTLEMENT

3.1 INTRODUCTION

The Project is currently negotiating financing with the World Bank, which requires compliance with specific environmental and social policies during the term of any financing provided by them. With respect to involuntary resettlement, World Bank Group's OP. 4.12-Involuntary Resettlement will be applied. Accordingly, the Project has designed its RAP with the aim of complying with both WB's Involuntary Resettlement Policy.

This chapter first discusses the key components of population displacement and resettlement. It then describes Bank policies, guidelines and standards for resettlement and specifies the policy framework and operational guidelines that the Project has adopted for its Resettlement Program. It highlights the key aspects of these policies that have been incorporated into the planning and implementation of the resettlement activities.

3.2 THE BASIC CONCEPTS OF RESETTLEMENT

The WB guidelines and standards for resettlement have been developed in order to deal with the negative impacts that are associated with involuntary resettlement and to ensure the protection of affected communities. Generally the analysis of resettlement requires consideration of the concepts set out below.

3.2.1 Involuntary Resettlement

Under WB's policy framework, involuntary resettlement describes situations whereby the development of a project leads to temporary or permanent social and economic impacts through: (a) the acquisition of land and other fixed assets; (b) changes in use of land, and/or (c) restrictions imposed on land as a result of a project.

3.2.2 Project-Affected People

OP. 4.12 defines the term 'project affected person' (PAP) to include any person, household, firm or private institution who, on account of changes that result from a project, will have their:

- (a) Standard of living adversely affected;
- (b) Right, title, or interest in any house, land (including residential, commercial, agricultural, forest, and/or grazing land), water resources, or any other moveable or fixed assets acquired, possessed, restricted, or otherwise adversely affected, in full or in part, permanently or temporarily, and/or
- (c) Business, occupation, place of work or residence, or habitat adversely affected, with or without displacement.

3.2.3 Physical and Economic Displacement

Displacement can be either physical, economic or both. Physical displacement occurs when people lose their dwellings and have to move from the site where their community is located. In such circumstances, where they maintain their cultivated lands and access to other resources they may not be economically displaced. When a project's needs restricts people's access to their productive resources (cultivated land, forest areas, fishing areas, etc.) they incur economic displacement. Often both types of displacements (i.e., physical and economic) take place simultaneously.

3.2.4 Restricted Access

Project needs may not only require the acquisition of land but also impose various demands and/or restrictions upon the local population and the use of, or access to, some natural resources. Such restrictions represent an opportunity cost for the local population. The restriction of access and activity is considered as another form of economic displacement.

3.2.5 Expropriation

Expropriation takes place when the power of eminent domain is used to compulsorily purchase land and houses and thus remove, under legal authority, the residing people who otherwise would not relocate. The eminent domain principle is inscribed in the legal systems and land acquisition laws of virtually all countries including Kenya, and is intended for application by governments when expected benefits are in the general public interest and no other solution can be found.

3.2.6 Entitlement

A range of measures comprising compensation, transfer assistance, income substitution, income restoration and relocation which are due to affected people, depending on the nature of their losses, to restore their economic and social base.

3.2.7 Resettlement

Resettlement occurs when people are required to relocate their place of habitat and/or their productive activities to different sites. Resettlement may be voluntary or involuntary.

Resettlement has three distinct phases or social processes:

- Displacement of people from the site of their residence or productive activities;
- Transfer of the people to a different site, and
- Reconstruction of livelihoods and communities.

3.2.8 Resettlement with Development

Resettlement with development occurs when the economically and physically displaced population sees significant improvement over previous standards of living. This includes restoration of previous levels of living, but goes further by deliberately using the opportunities of change and development created through resettlement to enhance the conditions of resettlers.

Resettlement with development takes time and does not occur suddenly and simultaneously with the act of physical relocation to the new location. However, to ensure success, the basic premises for resettlement with development must be established and planned for before the displacement process.

3.2.9 Rehabilitation and Reconstruction

After relocation, rehabilitation or reconstruction refers to activities intended to restore the resources and capacities lost by displaced people to enable them to resume their productive activities, income streams and patterns of life at a level at least equal to that before the project.

Rehabilitation measures include restoration of access to public facilities, infrastructure and services, and to cultural property and common property resources. Measures to mitigate loss of access to cultural sites, public services, water resources, grazing or forest resources include establishment of access to equivalent and culturally acceptable resources and income earning opportunities. Such measures must be determined in consultation with the affected communities, whose rights may not be formally recognized in national legislation. Where people are seriously affected by the loss of assets, incomes and employment, compensation solely for lost assets may not be adequate to restore their economic and social base. Such people will be entitled to rehabilitation measures for restoring incomes and living standards.

3.2.10 Resettlement Action Plan (RAP)

A Resettlement Action Plan defines a project's involuntary resettlement objectives and strategy. It also represents the project's commitment to the project-affected people and financing institutions. The content of a resettlement plan varies depending on the nature of the project, its impacts and the size of the affected populations.

3.3 WORLD BANK POLICY AND GUIDELINES ON INVOLUNTARY RESETTLEMENT

The Policy on Involuntary Resettlement aims to ensure that the population displaced by a project receives benefits from it. The policy emphasizes that resettled people are to achieve livelihood standards at levels above the pre-project situation. The key elements of the policy are:

- (a) Involuntary resettlement should be avoided, or minimized, where feasible, exploring all viable project alternative designs.
- (b) Where displacement is unavoidable, resettlement activities should be conceived and executed as sustainable development programs, providing sufficient investment resources to enable the persons displaced to share in project benefits. Displaced persons should: (i) receive compensation for their losses at full replacement cost; (ii) be assisted with the move and supported during the transition period, and (iii) be assisted in their efforts to improve (or at least restore) their former living standards, income earning capacity and production levels. Special attention needs to be paid to the needs of the poorest groups to be resettled.

(c) Community participation in planning and implementing resettlement should be encouraged. Existing social and cultural institutions of resettlers and their hosts should be supported and used to the greatest extent possible.

(d) Resettlers should be integrated socially and economically into host communities so that adverse impacts on host communities are minimized.

(e) Land, housing, infrastructure, and other compensation should be provided to the adversely affected population, indigenous groups, ethnic minorities, and pastoralists, who may have usufruct or customary rights to land or other resources taken for the project. The absence of legal title to land should not be a bar to compensation.

3.4 CONCLUSION

The Project is committed to adhering to World Bank policy and guidelines on involuntary resettlement. This chapter has provided an overview of World Bank policy guidelines in the planning and implementation of its Resettlement Program. The overall objective in this resettlement is that resettled communities are assisted to sustainably improve and surpass their income, standards of living, and livelihoods (in real terms) over and above pre-Project (displacement) levels or expected levels without the Project.

In accordance with these policies the Project has developed a RAP as outlined in this document. In implementing the plan, the Project is committed to improve the livelihood standards of the community. Although replacing and improving assets and services is important for community re-establishment, the core resettlement efforts will be medium- to long-term programs designed to ensure that the affected communities can increase the sustainable productivity of their natural resource-based activities (i.e., agriculture and fishing), and offering expanded and diversified income-generation opportunities (i.e., employment, small business development) to its residents.

4 THE PROJECT POLICY AND LEGAL FRAMEWORK FOR PROJECT-AFFECTED PEOPLE

4.1 INTRODUCTION

This section of the report outlines and reviews the existing legislations, policies and institutions and identifies requirements as well as gaps and conflicts of the relevant legal and institutional arrangements that would hinder or guide the development of the project in line with the national and international laws applicable to construction of dykes. Kenya being a signatory to various international conventions and laws, it's important that national projects are in line with these laws and as such the Bank policies in this chapter.

This chapter describes the policy and legal framework within which the Project has carried out land acquisition and resettlement, and established compensation for Project-Affected People (PAPs). It then describes in detail the way in which this has been implemented. The chapter is set out as follows:

The first section identifies the Project-Affected People and sets out an entitlement matrix. The second section describes the policy and legal basis for provision of compensation to Project-Affected People. Based on the identification of Project impacts, this section focuses on the basis for: (a) land acquisition; (b) resettlement, and (c) resource compensation including trees, cultivated crops and marine resource rights.

This section also includes a comparison of the Bank's policy on involuntary resettlement and Kenyan legislation, and provides a summary of the way in which the Project has fulfilled WB requirements.

The third section deals with the implementation of the policy and legal framework for the three groups of identified PAPs. Implementation includes the process of establishing appropriate compensation, consultation, and agreements with PAPs. The section illustrates how the framework adopted by the Project reflects current Kenya best practices and international guidelines issued by the World Bank.

4.2 ENTITLEMENT MATRIX

As discussed in Chapter 1, the Project has identified the following Project-Affected groups:

1. Those groups losing land
2. Those groups losing land and structures
3. Those groups losing agricultural land (crops and trees)
4. Those groups losing businesses (brick making, sand harvesting, canoe transport)
5. Those groups losing graves
6. Those groups losing access to traditional river crossing points

Compensation for each of these groups has been dealt with in different ways in light of the timing of the losses incurred by each of the groups. The PAHs consist of formal and

customary landowners and tenants. There are no squatters or encroachers at the project site.

The main groups of PAPs are the villagers resettled from the dyke area and will be compensated as set out in the compensation strategy section. In addition, as described in the Project commits to on-going monitoring and assessing occurrence of resettlement-related impacts. **Table 12** presents an entitlement matrix that identifies the losses incurred by each group, and the way in which the Project has provided compensation.

Table 12. Entitlement Matrix

Affected Asset	Affected Right or Interest	Eligible Entity (Individual or Household)	Eligibility Conditions	Entitlements
AGRICULTURAL LAND OWNERS	TITLED LAND: Land held under a registered title deed	Registered land (usually a physical person – one case in the Project-Affected Area) – INDIVIDUAL	Hold a registered land that was registered with relevant Authorities prior to the Cut-Off Date	<p>Replacement of lost land by agricultural land of similar potential under similar tenure arrangements with formal registration in replacement land with the relevant land authorities; or, – Cash compensation for land or non-cash compensation of land (land for land), taking into account market values for land</p> <p>Cash compensation of all immovable developments on the affected land, such as structures, etc.... - See below “Structures” , taking into account market values for structures and materials</p> <p>Cash compensation of standing crops – See below “Crops”</p>
	UNTITLED LAND: Land held under customary ownership, and not registered. Customary land owners are those that own land from ancestral inheritance	Customary land owner (legally an unregistered), whether resident or non-resident – INDIVIDUAL	Hold, prior to the Cut-Off Date, an unregistered, customary land and be recognized as such	<p>Replacement of lost land by agricultural land of similar potential under similar customary tenure arrangements; or Cash compensation for land or non-cash compensation of land (land for land), taking into account market values for land</p> <p>Cash compensation of all immovable developments on the affected land, etc.... - See below “Structures”, taking into account market values for materials</p> <p>Cash compensation of standing crops – See below “Crops”</p>

Affected Asset	Affected Right or Interest	Eligible Entity (Individual or Household)	Eligibility Conditions	Entitlements
	RENTED LAND: Land rights obtained temporarily as per a customary rental agreement	Tenant as recognized by the customary landowner and customary authorities whether resident or non-resident– INDIVIDUAL	Occupy land prior to the Cut-Off date as per a rental agreement recognized by the land owner and customary authorities	No compensation for the land itself Cash compensation to the owner of immoveable developments established by the owner and to the tenant of immoveable developments that were established by the tenant, such as structures, canals, soil improvement, etc.... - See below “Structures”, taking into account market values for materials Cash compensation of standing crops – See below “Crops”
Category A: Permanent residents, also customary holders of agricultural land		Be recognized by local traditional authorities and the relevant resettlement committee as a permanent resident and a customary holders of agricultural land located in the Project-Affected Area at the cut-off date		- Resettlement house of similar or better quality on a resettlement plot (best practice) or cash compensation of the lost house at full replacement value, taking into account market values for housing - Replacement of lost land by agricultural land of similar potential under similar tenure arrangements near the resettlement site – No cash compensation of land if the household does not choose resettlement - Cash compensation of all immoveable developments on the affected agricultural land, such as structures, canals, soil improvement, etc...., taking into account market values for materials - Cash compensation of standing perennial crops at replacement value and of non-perennial crops at market value - Moving allowance if the household vacates the Project-Affected Area at a given date - Livelihood restoration package
B: Permanent residents and tenants or sharecroppers of agricultural land		Be recognized by local traditional authorities as a non-permanent resident in the		- Cash compensation of the lost non-permanent house at full replacement value, taking into account market values for housing

Affected Asset	Affected Right or Interest	Eligible Entity (Individual or Household)	Eligibility Conditions	Entitlements
		Project-Affected Area and as a customary land holder of agricultural land located in the Project-Affected Area for more than one year		<ul style="list-style-type: none"> - Replacement of lost land by agricultural land of similar potential under similar customary tenure arrangements anywhere in the Area - Cash compensation of all immovable developments on the affected agricultural land, such as structures, canals, soil improvement, etc...., taking into account market values for materials - Cash compensation of standing perennial crops at replacement value and of non-perennial crops at market value - Moving allowance if the household vacates the Project-Affected Area at a given date - Livelihood restoration package
RESIDENTIAL LAND	UNTITLED LAND: Land held under customary ownership and not registered	Customary land owner (legally an unregistered owner) – INDIVIDUAL	Hold, prior to the Cut-Off Date, an unregistered, customary land and be recognized as such by local customary authorities	<p>Replacement of lost residential land by resettlement residential land of similar size with formal recognition of ownership of the resettlement plot by the relevant administrative authorities; or, Cash compensation for land or non-cash compensation of land (land for land), taking into account market values for land</p> <p>Cash compensation of all immovable developments on the affected land, such as structures, wells, etc.... - See below “Structures”, taking into account market values for materials</p>
STRUCTURES and GRAVES	RESIDENTIAL HOUSES: Inhabitable houses used as a permanent residence	Owner – HOUSEHOLD	Be the locally recognized owner of an inhabitable house permanently used as a residence	Resettlement house of similar or better quality on a resettlement plot and or Cash compensation of the lost house per Kenyan law at full replacement value, taking into account market values for housing
	NON RESIDENTIAL STRUCTURES: Non inhabitable house or other	Owner - INDIVIDUAL	Be the locally recognized owner of a non residential structure	Cash compensation at full replacement value, taking into account market values for structure and materials

Affected Asset	Affected Right or Interest	Eligible Entity (Individual or Household)	Eligibility Conditions	Entitlements
	structure of any design			
BUSINESS OWNERS e.g. Sand harvesters, brick makers and canoe transporters	PAPs who harvest sand, make bricks along the river banks and offer canoe transport services across both banks of the river	Compensation for the entire structure at replacement cost as determined by the concerned appraisal committee without deduction for salvaged building materials.		Restorative compensation in accordance with the land Act. No compensation for land Restorative compensation includes disturbance allowance, severance and injurious affection Disturbance allowance is 15% of the market value of the cost of construction of affected structures Compensation for lost income for up to a period of 12 months
CROPS	STANDING NON PERENNIAL CROPS	Owner of the crop – INDIVIDUAL	Be the recognized owner of a standing crop and be unable to harvest it prior to land occupation by project	Cash compensation at full replacement value
	STANDING PERENNIAL CROPS	Owner of the crop – INDIVIDUAL	Be the recognized owner of a standing perennial crop	Cash compensation at full replacement value

4.3 LEGISLATIVE FRAMEWORK

4.3.1 Discussion of Relevant Legislation

A list of the key Kenyan laws and regulations considered in connection with the Project is set out in the table below. In carrying out land acquisition and resettlement, the Project carefully adhered to applicable Kenyan law and best practices. Consequently, the framework for land acquisition and compensation has taken into account both the formal system of Kenyan law and the customary rights of the affected communities.

Table 13 below summarizes the relevant legal framework in Kenya applicable to this project in regard to resettlement.

Table 13. Summary of relevant resettlement legal statutes applicable to Project

Legal Framework	Functional Relationship to Resettlement
-----------------	---

Constitution of Kenya 2010	Constitution of Kenya 2010 recognizes individuals' right to acquire and own property provided they are citizens of the country in article 40. However, Article 66 of the same Constitution provides for the State to regulate the manner in which these rights may be curtailed for the benefit of the general public. Article 47 of the Constitution provides for administrative action to override the individual rights but the victim has to be given written reason for the action taken that undermines the right.
The Land Act 2012 Laws of Kenya	It is the substantive law governing land in Kenya and provides legal regime over administration of public and private lands. It also provides for the acquisition of land for public benefit. The government has the powers under this Act to acquire land for projects, which are intended to benefit the general public. The projects requiring resettlement are under the provision of this Act.
Land Registration Act, 2012	The law provides for the registration of absolute proprietorship interests over land (exclusive rights) that has been adjudicated or any other leasehold ownership interest on the land. Such land can be acquired by the state under the Land Act 2012 in the project area.
National Land Commission Act 2012	The act establishes the National Land Commission with the purpose of managing public land and carrying out compulsory acquisition of land for specified public purposes.
The Land Adjudication Act Chapter 95 Laws of Kenya	Provides for ascertainment of interests prior to land registrations under the Land Registration Act 2012 through an adjudication committee that works in liaison with adjudication officers.
The Valuers Act 532	The act establishes a valuers registration board, which has the responsibility of regulating the activities and conduct of registered valuers in accordance with the provision of the act.

4.3.1.1 The National Land Policy

The National Land Policy (“NLP” or “Policy”)³ was adopted in August 2009 with the aim of providing an overall framework for new legislation and defining key measures required to address critical issues such as land administration, access to land, land use, and restitution related to historical injustices and an outdated legal framework. The NLP addresses constitutional issues such as compulsory acquisition and development control.⁴ Section 45 of the NLP defines compulsory acquisition as “the power of the State to extinguish or acquire any title or other interest in land for a public purpose, subject to prompt payment of compensation.”⁵ Under the current Constitution,⁶ the Land Act 2012 empowers the National Land Commission (under the guidance of Minister for Lands) to

³ Sessional Paper No. 3 of 2009 on National Land Policy (referred to as the “National Land Policy” in this report) was adopted in August 2009 by the Ministry of Lands. Available at http://www.lands.go.ke/index.php?option=com_content&task=view&id=238&Itemid=48, accessed May 25, 2011.

⁴ Development control is the power of the State to regulate the property rights in urban and rural areas and is derived from the State’s responsibility to ensure that the use of land promotes the public interest.

⁵ Sessional Paper No. 3 of 2009 on National Land Policy, § 45.

⁶ The Constitution of Kenya, 1963, was replaced in 2010.

exercise the power of compulsory acquisition on behalf of the State.⁷ Similarly, the NLP empowers the National Land Commission to compulsorily acquire land.⁸

According to the NLP, the exercise of compulsory acquisition in the past has been conducted with abuses and irregularities.⁹ The NLP therefore calls for a revision of such power and requires the GoK:

- To review the law on compulsory acquisition to align it with the new categories of land ownership (public, private and community land);¹⁰
- To harmonize the framework for compulsory acquisition to avoid overlapping mandates;¹¹
- To establish compulsory acquisition criteria, processes and procedures that are efficient, transparent and accountable;¹²
- To institute legal and administrative mechanisms for the exercise of the power of compulsory acquisition by the State through the National Land Commission;¹³ and
- To confer pre-emptive rights on the original owners or their successor in title where the public purpose or interest justifying the compulsory acquisition fails or ceases.¹⁴

4.3.1.2 The Constitution of Kenya

The Constitution of Kenya, 2010,¹⁵ protects the sanctity of private property rights and states that no property can be compulsorily acquired by the Government except in accordance with law.¹⁶ Article 40(3) states:

“The State shall not deprive a person of property of any description, or of any interest in, or right over, property of any description, unless the deprivation—results from an acquisition of land or an interest in land or a conversion of an interest in land, or title to land, in accordance with Chapter Five; or is for a public purpose or in the public interest and is carried out in accordance with this Constitution and any Act of Parliament that –

(i) Requires prompt payment in full, of just compensation to the person; and

⁷ Land Act, § 6, 2012.

⁸ Sessional Paper No. 3 of 2009 on National Land Policy. §233(d).

⁹ *Id.* at Chapter 3.2.1.1, article. 46.

¹⁰ *Id.* at Chapter 3.2.1.1, article. 47(a).

¹¹ *Id.* at Chapter 3.2.1.1, article. 46 and 47(b). Under the previous Constitution, Chapter IX (Trust Land), Art. 18, the President and local authorities had the power to set apart Trust Land for the purposes of the Government of Kenya or any corporate body established by an Act of Parliament, or companies which shares are held on behalf of the GoK and for extraction of minerals and oils. This power does not exist under the new Constitution. Under the Government Lands Act, the President has special powers with regards to government land, and he may exercise these powers through the Commissioner of Lands. (Government Lands Act, Chapter 280, §3.)

¹² Sessional Paper No. 3 of 2009 on National Land Policy, Chapter 3.2.1.1, § 47(c).

¹³ *Id.* at Chapter 3.2.1.1, p. 47(d).

¹⁴ *Id.* at Chapter 3.2.1.1, §47(e).

¹⁵ The Constitution of Kenya, 2010, was adopted by the Government of Kenya on 27 August 2010. The full text is available at http://www.kenyalaw.org/klr/fileadmin/pdfdownloads/Constitution/Constitution_of_Kenya2010.pdf, accessed May 25, 2011.

¹⁶ Constitution of Kenya, art. 40.

(ii) Allows any person who has an interest in or right over, that property a right of access to a court of law.¹⁷

The Constitution empowers the state to exercise the authority of compulsory acquisition. Land Act 2012 (LA) designates the National Land Commission (NLC) as the agency empowered to compulsorily acquire land.¹⁸ Article 40 of the Constitution provides that the state may deprive owners of property only if the deprivation is "for a public purpose or in the public interest," which includes public buildings, roads, way leaves, drainage, irrigation canals among others. The state's exercise of this power is left at the discretion of NLC, and requires the state to make full and prompt payment of "just compensation" and an opportunity for appeal to court.

Article 40(3) (a) refers to acquisition and conversion of all kinds of land in Kenya (private, public, community land and foreign interests in land). The Constitution further provides that payment of compensation shall be made to "occupants in good faith" of land acquired by the state who do not hold title for such land.¹⁹ An occupant in good faith is a "bona fide" occupant. On the other hand, under the Constitution, those who have acquired land illegally are not regarded as deserving any compensation.²⁰

In addition to Article 40, Chapter Five of the Constitution is relevant to compulsory acquisition. This chapter, entitled "Land and Environment," is divided into two parts. Part 1 deals with land, and Part 2 deals with environment and natural resources. Part 1 of Chapter 5, articles 60 – 68, describes the principles of land policy. Land should be held, used and managed in a manner that is equitable, efficient, productive and sustainable and in accordance with security of land rights, sound conservation and protection of ecologically sensitive areas.²¹ These principles must be implemented through a national land policy reviewed regularly by the national government and through legislation.²²

4.3.1.3 Land Act 2012

The Land Act is Kenya's framework legislation regulating compulsory acquisition of real property (i.e. land, houses, easements etc.).

Actions preliminary to the Acquisition

Under the LA, the Government can carry out land taking for reasons of "defense, public safety, public order, public morality, public health, town and country planning or the development or utilization of any property in such manner as to promote the public benefit," and when such necessity justifies the hardship that the intended acquisition may cause to any person having interest in the land. The LA requires the Minister to be satisfied that such necessity exists before setting in motion the process and directing in writing to the National Land Commission to acquire the land compulsorily. Under the LA, public participation in eminent domain decisions is limited to the public hearing

¹⁷ Id.

¹⁸ The Land Act, 2012 The Government of Kenya, Section 8.

¹⁹ Constitution of Kenya. Id. at art. 40(5).

²⁰ Constitution of Kenya. Id. at art. 40(3).

²¹ Id. at art. 60.

²² Id. at art. 60(2).

scheduled to determine legitimate claims, and the value of land and compensation. The opinion of the landowner on whether or not the government should acquire the land is not considered. Such objections by the owner are deemed irrelevant and it is an offense to willfully oppose or impede the State's taking of the land.

4.3.2 Land Tenure System In Kenya

Land tenure in Kenya is classified as public, community or private.²³ Public land consists of government forests (other than those “lawfully held, managed or used by specific communities as community forest, grazing areas or shrines”²⁴), government game reserves, water catchment areas, national parks, government animal sanctuaries and specially protected areas.²⁵ The National Land Commission will manage public land.²⁶ Community land includes land that is “lawfully held, managed or used by specific communities as community forest, grazing areas or shrines,” and “ancestral lands and lands traditionally occupied by hunter-gatherer communities.”²⁷ Rights are also held through traditional African systems, and rights that derive from the English system introduced and maintained through laws enacted by colonial and then the national parliament. The former is loosely known as customary tenure bound through traditional rules (customary law). The latter body of law is referred to as statutory tenure, secured and expressed through national law, in various Act of parliament e.g. Land Act 2012, Land Registration Act, 2012, Trust Land Act (cap 288) of the Laws of Kenya).

4.3.2.1 Customary Land Tenure

This refers to unwritten land ownership practices by certain communities under customary law. Kenya being a diverse country in terms of its ethnic composition has multiple customary tenure systems, which vary mainly due to different agricultural practices, climatic conditions and cultural practices. However most customary tenure systems exhibit number of similar characteristics as follows: individuals or groups by virtue of their membership in some social unit of production or political community have guaranteed rights of access to land and other natural resources. Individuals or families thus claim property rights by virtue of their affiliation to the group.

4.3.2.2 Freehold Tenure

This tenure confers the greatest interest in land called absolute right of ownership or possession of land for an indefinite period of time, or in perpetuity. The Land Registration Act, 2012, governs freehold land. The Act provides that the registration of a person as the proprietor of the land vests in that person the absolute ownership of that land together with all rights, privileges relating thereto. A freehold title generally has no restriction as to the use and occupation but in practice there are conditional freeholds, which restrict the use for say agricultural or ranching purposes only. Land individualization was demanded by the colonial settlers who required legal guarantee for the private ownership of land without which they were reluctant to invest.

²³ *Id.* at art. 61.

²⁴ *Id.* at art. 63(d)(i).

²⁵ *Id.* at art. 62(g).

²⁶ *Id.* at arts. 62(3), 67(2)s (a).

²⁷ *Id.* at art. 63(d)(i) and (ii).

4.3.2.3 Leasehold Tenure

Leasehold is an interest in land for a definite term of years and may be granted by a freeholder usually subject to the payment of a fee or rent and is subject also to certain conditions which must be observed e.g. relating to developments and usage. Leases are also granted by the government for government land, the local authorities for trust land and by individuals or organizations owning freehold land. The maximum term of government leases granted in Kenya is 99 years for agricultural land and urban plots. There are few cases of 33 years leases granted by government in respect of urban trust lands. The local authorities have granted leases for 50 and 30 years as appropriate.

4.3.2.4 Public Tenure

This is where land owned by the Government for her own purpose and which includes unutilized or un-alienated government land reserved for future use by the Government itself or may be available to the general public for various uses. The land is administered under the Land Act 2012 (LA). These lands were vested in the president and who has, normally exercised this power through the Commissioner of Lands, to allocate or make grants of any estates, interests or rights in or over un-alienated government land. However the new constitution grants those rights to the National Land Commission (NLC) which is governed by the National Land Commission Act, 2012 that specifies the role of NLC as:

- *To identify public land, prepare and keep a database of all public land, which shall be geo-referenced and authenticated by the statutory body responsible for survey;*
- *Evaluate all parcels of public land based on land capability classification, land resources mapping consideration, overall potential for use, and resource evaluation data for land use planning; and*
- *Acquire land for public purposes*
- *Solve land disputes and deal with historical land injustices*
- *Share data with the public and relevant institutions in order to discharge their respective functions and powers under this Act; or*
- *May require the land to be used for specified purposes and subject to such conditions, covenants, encumbrances or reservations as are specified in the relevant order or other instrument²⁸.*

Categories of government land include forest reserves, other government reserves, alienated and un-alienated government land, national parks, townships and other urban centers and open water bodies.’ The Lands Act does not contain any notion of trusteeship by government of the land to her people.

4.3.2.5 Public Resources on Public Land

Notwithstanding the fore going, it is a common law doctrine to the effect that common property resources such as rivers, forests and parks are held by the state in trust for the general public. Consequently, the state cannot alienate these resources or use them in a way detrimental to public interest. This is the doctrine that would ensure that public land

²⁸ National Land Commission Act, 2012, Section II, article 5(1)

cannot be alienated or committed to waste to the detriment of public interest. It is the case that the statutory frameworks for land ownership in Kenya is heavily influenced by common law jurisprudence on land ownership-the owner's rights includes the rights of use and abuse. In Kenya however, the development of physical planning legislation has vested in the state the cumulative rights of other landowners. The regulatory power is referred to as police power.

4.3.3 Land Act, 2012

The land act ²⁹("LA") is the Kenya's framework legislation regulating compulsory acquisition of land (i.e. land, houses, easements etc.). The LA was adopted on 2nd may 2012 and provides for sustainable administration and management of land and land-based resources including compulsory acquisition.

4.3.3.1 Land Acquisition Process

4.3.3.1.1 Proof that compulsory possession is for public good

It is very explicit in the Land Act, 2012, Section 107, that whenever the national or county government is satisfied that it may be necessary to acquire some particular land under section 110 of Land Act 2012, the possession of the land must be necessary for public purpose or public interest, such as, in the interests of public defense, public safety, public order, public morality, public health, urban and planning, or the development or utilization of any property in such manner as to promote the public benefit. Irrigation and drainage are explicitly identified as qualifying for land acquisition as public utility and the necessity therefore is such as to afford reasonable justification for the causing of any hardship that may result to any person having right over the property, and so certifies in writing, possession of such land may be taken.

The respective Cabinet Secretary or Government agency or the County Executive Committee Member must submit a request for acquisition of private land to the NLC to acquire the land on its behalf. The Commission will prescribe a criteria and guidelines to be adhered to by the acquiring authorities in the acquisition of land. Similar, the Commission has powers to reject a request of an acquiring authority, to undertake an acquisition if it establishes that the request does not meet the requirements prescribed.

4.3.3.1.2 Inspection of Land to be acquired

NLC may physically ascertain or satisfy itself whether the intended land is suitable for the public purpose, which the applying authority intends to use as specified. If it certifies that indeed the land is required for public purpose, it shall express the satisfaction in writing and serve necessary notices to land owners and or approve the request made by acquiring authority intending to acquire land.

4.3.3.1.3 Publication of notice of intention to acquire

Upon approval, NLC shall publish a notice of intention to acquire the land in the *Kenya Gazette and County Gazette*.³⁰ It will then serve a copy of the notice to every person

²⁹ Land Act, 2012.

³⁰ The Kenya Gazette is the official government journal in Kenya published by the Government Printing Press.

interested in the land and deposit the same copy to the Registrar³¹ The courts have strictly interpreted this provision, requiring that the notice include the description of the land, indicate the public purpose for which the land is being acquired and state the name of the acquiring public body.³² NLC shall ensure that the provisions are included in her notice.

The Land Registrar shall then make entry in the master register on the intention to acquire as the office responsible for survey, at both national and county level, geo-references the land intended for acquisition.

4.3.3.1.4 *Serve the notice of inquiry*

Thirty days after the publication of the Notice of Intention to Acquire, NLC will schedule a hearing for public inquiry. NLC must publish notice of this meeting in the *Kenya Gazette and County gazette 15 days before the inquiry meeting* and serve the notice on every person interested in the land to be acquired. Such notice must instruct owner of land to deliver to the NLC, no later than the date of the inquiry, a written claim for compensation.³³

4.3.3.1.5 *Holding of a public hearing*

NLC then convenes a public hearing not earlier than 30 days after publication of the Notice of Intention to Acquire. On the date of the hearing, NLC must conduct a full inquiry to determine the number of individuals who have legitimate claims on the land, the land value and the amount of compensation payable to each legitimate claimant.³⁴ Besides, at the hearing, the Commission shall— make full inquiry into and determine who are the persons interested in the land; and receive written claims of compensation from those interested in the land. For the purposes of an inquiry, the Commission shall have all the powers of the Court to summon and examine witnesses, including the persons interested in the land, to administer oaths and affirmations and to compel the production and delivery to the Commission (NLC) of documents of title to the land.

The public body for whose purposes the land is being acquired, and every person interested in the land, is entitled to be heard, to produce evidence and to call and to question witnesses at an inquiry. It will also provide opportunity to land owners to hear the justification of the public authority in laying claims to acquire the land.

4.3.3.1.6 *Valuation of the land*

Part III of the Land Act 2012, section 113 (2a) states that “the Commission shall determine the value of land with conclusive evidence of (i) the size of land to be acquired; (ii) the value, in the opinion of the Commission, of the land; (iii) the amount of

³¹ Land Act, 2012, 107

³² Government of Kenya 1994. Coastal Aquaculture Limited v. The Commissioner of Lands and Settlement and the Minister of Lands and Settlements. Mombasa H.C. Misc. Appl., No. 55 of 1994, http://www.kenyalaw.org/CaseSearch/case_download.php?go=97115264151454584840489&link=, accessed May 25, 2011.

This ruling was upheld by the Court of Appeal. Coastal Aquaculture Limited v. the Commissioner of Lands and Settlement and the Minister of Lands and Settlements. Nairobi. No. 252 of 1996, http://www.kenyalaw.org/CaseSearch/view_preview1.php?link=49186237036025529910634, accessed May 25, 2011.

³³ Land Act, 2012 (112).

³⁴ Id. at article 112.

compensation payable, whether the owners of land have or have not appeared at the inquiry.” This can be interpreted that NLC must determine the value of the land accordingly and pay appropriate just compensation in accordance with the principles and formulae that it will develop. Nonetheless, just compensation³⁵ could also be interpreted as market rate. The final award on the value of the land shall be determined by NLC and shall not be invalidated by reason of discrepancy, which may be found to exist in the area.

4.3.3.1.7 Matters to be considered in determining compensation:

The market value of the property, which is determined at the date of the publication of the acquisition notice, must be considered.³⁶ Determination of the value has to take into consideration the conditions of the title and the regulations that classify the land use e.g. agricultural, residential, commercial or industrial.

Increased market value is disregarded when:

- It is accrued by improvements made within two years before the date of the publication of the acquisition notice, unless it is proved that such improvement was made in good faith and not in contemplation of the proceedings for compulsory acquisition.
- It is accrued by land use contrary to the law or detrimental to the health of the occupiers of the premises or public health.
- Any damages sustained or likely to be sustained by reason of severing such land from other land owned by the claimant.
- Any damage sustained or likely to be sustained if the acquisition of the land had negative effects on other property owned by the claimant.
- Reasonable expenses, if as a consequence of the acquisition, the claimant was compelled to change his residence or place of business (i.e., compensation for disruption to the claimant’s life).
- Any damage from loss of profits over the land occurring between the date of the publication of the acquisition notice and the date the NLC takes possession of the land.³⁷

4.3.3.1.8 Matters not to be considered in determining compensation:

- The degree of urgency, which has led to the acquisition.
- Any disinclination of the person’s interest to part with the land.
- Damages sustained by the claimant, which will not represent a good cause of action.
- Damages, which are likely to be caused to the land after the publication of the acquisition notice or as a consequence of the future, land use.
- Increased land value accrued by its future use.

³⁵ Schedule explaining ‘just compensation’ has not been assessed and released by NLC. The Land Act 2012 say NLC should develop the schedule.

³⁶ *Id.* at article 112 and article 111.

³⁷ Schedule 2 governing compensation 2000

- Any development at the time of acquisition notice, unless these improvements were necessary for maintaining the land.³⁸

4.3.3.1.9 *Award of compensation*

The Land Act does not stipulate that compensation must be in the form of money only. Under the Land Act 2012 section 117, the State can award a grant of land in lieu of money compensation (“land for land”), provided the value of the land awarded does not exceed the value of the money compensation that would have been allowable.³⁹ The law could be interpreted that any dispossessed person shall be awarded the market value of the land.⁴⁰ The new law is silent on relocation support or disturbance allowance support.

Upon the conclusion of the inquiry, and once the NLC has determined the amount of compensation, NLC will prepare and serves a written award of compensation to each legitimate claimant.⁴¹ NLC will publish these awards, which will be considered “final and conclusive evidence” of the area of the land to be acquired, the value of the land and the amount payable as compensation.⁴² Land Act, Section 115 further stipulates that an award shall not be invalidated by reason only of a discrepancy between the area specified in the award and the actual area of the land. Compensation cannot include attorney’s fees, costs of obtaining advice, and costs incurred in preparing and submitting written claims.

4.3.3.1.10 *Payment of Compensation*

A notice of award and offer of compensation shall be served to each person by the Commission. Section 120 provides that “first offer compensation shall be paid promptly” to all persons interested in land.⁴³ Section 119 provides a different condition and states that the NLC “as soon as practicable” will pay such compensation.⁴⁴ Where such amount is not paid on or before the taking of the land, the NLC must pay interest on the awarded amount at the market rate yearly, calculated from the date the State takes possession until the date of the payment.⁴⁵

In cases of dispute, the Commission may at any time pay the amount of the compensation into a special compensation account held by the Commission, notifying owner of land accordingly. If the amount of any compensation awarded is not paid, the Commission shall on or before the taking of possession of the land, open a special account into which the Commission shall pay interest on the amount awarded at the rate prevailing bank rates from the time of taking possession until the time of payment.

³⁸ Schedule 3 governing compensation for compulsory acquisition

³⁹ Land Act, 117.

⁴⁰ Land Act, Schedule

⁴¹ Land Act, 115

⁴² Land Act, 115

⁴³ Land Act, This language reflects the language of the Kenya Constitution, 1963.

⁴⁴ Land Act, 119

⁴⁵ Constitution of Kenya, article 162

4.3.3.1.11 Transfer of Possession and Ownership to the State

Once first offer payment has been awarded, the NLC will serve notice to landowners in the property indicating the date the Government will take possession. Upon taking possession of land, the commission shall ensure payment of just compensation in full. When this has been done, NLC removes the ownership of private land from the register of private ownership and the land is vested in the national or county Government as public land free from any encumbrances.⁴⁶

On the other side also, the Commission has also the power to obtain temporary occupation of land. However, the commission shall as soon as is practicable, before taking possession, pay full and just compensation to all persons interested in the land.

In cases of where there is an urgent necessity for the acquisition of land, and it would be contrary to the public interest for the acquisition to be delayed by following the normal procedures of compulsory acquisition under this Act, the Commission may take possession of uncultivated or pasture or arable land upon the expiration of fifteen days from the date of publication of the notice of intention to acquire.

On the expiration of that time NLC shall, notwithstanding that no award has been made, take possession of that land. If the documents evidencing title to the land acquired have not been previously delivered, the Commission shall, in writing, require the person having possession of the documents of title to deliver them to the Registrar, and thereupon that person shall forthwith deliver the documents to the Registrar.

On receipt of the documents of title, the Registrar shall— cancel the title documents if the whole of the land comprised in the documents has been acquired; if only part of the land comprised in the documents has been acquired, the Registrar shall register the resultant parcels and cause to be issued, to the parties, title documents in respect of the resultant parcels. If the documents are not forthcoming, the Registrar will cause an entry to be made in the register recording the acquisition of the land under this Act.

4.3.3.1.12 Opportunity for Appeal

The Kenya Constitution establishes Environment and Land Court⁴⁷. Article 162 of the constitution provides for the creation of specialized courts to handle all matters on land and the environment. Such a court will have the status and powers of a High Court in every respect. Article 159 on the principles of judicial authority, indicates that courts will endeavor to encourage application of alternative dispute resolution mechanisms, including traditional ones, so long as they are consistent with the constitution. Section 20, of the Environment and Land Court Act, 2011 empowers the Environment and Land Court, on its own motion, or on application of the parties to a dispute, to direct the application of including traditional dispute resolution mechanisms.

Any person whose land has been compulsorily acquired may petition the Environment and Land Court for redress with respect to:

⁴⁶ Land Act, 115 and 116

⁴⁷ Land Act 2012, Section 128

- *The determination of such person's right over the land;*
- *The amount offered in compensation; and*
- *The amount offered in compensation for damages for temporary dispossession in the case of the Government's withdrawal of its acquisition of the land.*⁴⁸

Parties will pay fees as determined by Environment and Land Court or the court may choose to waive them completely or in part on grounds of financial hardship.⁴⁹

4.3.4 Children And Orphans Provision Of Land Possession

The Land Act 2012, Part III, section 27⁵⁰ recognizes the capacity of a child as being capable of holding title to land. However this can only happen through a trustee and such a child shall be in the same position as an adult with regard to child's liability and obligation to the land.

4.3.5 The Valuers Act

Valuation of land is a critical aspect of compulsory acquisition practice and compensation. The National Land Commission based on land valuation determined by registered valuers will make compensation awards. Besides, the Valuers Act⁵¹ establishes the Valuers Registration Board, which regulates the activities and practice of registered valuers. All valuers must be registered with the Board to practice in Kenya. The Board shall keep and maintain the names of registered valuers, which shall include the date of entry in the register; the address of the person registered the qualification of the person and any other relevant particular that the Board may find necessary.

As of March 2011, there were 285 registered valuers in Kenya.⁵² The Valuers Act does not provide for a description of the valuation procedures and methods. The RAP team has made use of the services of registered valuers who are approved by Valuers Registration Board.

Under the Valuers Act, professional misconduct of registered valuer will include:

- False or incorrect entry in the register;
- False or misleading statement caused by omission or suppression of a material fact,⁵³ and
- The acceptance of "any professional valuation work which involves the giving or receiving of discounts or commissions."⁵⁴

In case of professional misconduct, the registered valuer is guilty of an offense punishable with a fine (not exceeding Ksh.10, 000) and/or imprisonment for three years.

⁴⁸ Land Acquisition Act. at article 29(7).

⁴⁹ Land Acquisition Act at article 43.

⁵⁰ "A child shall be capable of holding title to land through a trustee and such child be in the same position as an adult with regard to the child's liability and obligations to the land".

⁵¹ The Valuers Act, Chapter 532, http://www.kenyalaw.org/kenyalaw/klr_app/frames.php, accessed May 25, 2011.

⁵² Government of Kenya, Kenya Gazette notice no. 2892, March 18, 2011. Registered and Practicing Valuers.

⁵³ The Valuers Act, § 24 and Legal Notice no. 32.

⁵⁴ Land Act 2012, article 128.

Fees for land valuation in case of compulsory acquisition are established based on the value of the property as “the first Kshs 400,000 at 1 per cent. Residue at 0.5 per cent”⁵⁵ and are paid by those who requested the valuation.

4.3.6 Involuntary Resettlement

This document has been prepared in accordance with WB requirements as stated in OP 4.12 “Involuntary Resettlement”. The overall policy approach and concept is guided by the following basic principles for social development:

- People who are physically or economically displaced by the Project should not be worse off after the Project than before the Project, and
- The number of people whose livelihoods are improved as a result of the Project should be maximised.

The World Bank recognizes that involuntary resettlement may cause severe long-term economic, social and environmental damage unless appropriate measures are carefully planned and implemented. The main objective of OP 4.12 is therefore to avoid involuntary resettlement when possible, by exploring all viable options before any action is taken to resettle people. In cases where involuntary resettlement cannot be avoided, the policy aims to minimize and mitigate its adverse social and economic impacts by providing sufficient investment resources to enable affected parties to share in project benefits. The policy promotes the participation of displaced people in resettlement planning and implementation. The policy requires that displaced persons be assisted in their efforts to improve or at least restore their incomes and standards of living to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher. More specifically, OP 4.12 requires that the following measures be taken in the event of involuntary resettlement:

- A Resettlement Action Plan (RAP) should be prepared;
- Prompt and effective compensation at full replacement cost should be provided for losses of assets attributable directly to the project;
- Affected people (including residents of “host communities”) should be consulted and fully informed of their rights under the resettlement process;
- Affected people (including residents of “host communities”) should be allowed to express their preferences regarding housing, infrastructure and services and agricultural land provided as compensation;
- Physically displaced people should be provided with assistance such as a moving allowance during the relocation process;
- Economically displaced people (including residents of “host communities”) should be provided with development assistance in addition to compensation measures, such as credit facilities, training and job opportunities;
- Vulnerable persons among the displaced people (such as the handicapped, the elderly, women, widows, children, members of disadvantaged minority groups, etc.) should be provided with specific social assistance;

⁵⁵ Legal Notice 32.

- Ensuring that the relocation of affected people (and subsequent start-up of project construction) does not occur until all necessary measures for compensation and resettlement are fully in place.
- In terms of eligibility to resettlement benefits, OP 4.12 makes a distinction between three categories of Project Affected People (PAP):
- Those who have formal legal rights to land (including customary and traditional rights recognized under the laws of the country);
- 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 plan (see Annex A, para. 7(f)); and
- Those who have no recognizable legal right or claim to the land they are occupying.

According to OP 4.12, persons covered under para. (a) and (b) are provided compensation for the land they lose, and other assistance. Persons covered under para. (c) are provided resettlement assistance in lieu of compensation for the land they occupy, and other assistance, as necessary, to achieve the objectives set out in the policy, if they occupy the project area prior to the cut-off date. OP 4.12 also mentions that where affected peoples' livelihoods are land based, land for land solutions should always be preferred to cash compensation.

4.3.7 Institutional Context

Responsibility for ensuring that all aspects of resettlement and compensation planning and implementation are taken into consideration falls to project proponents or project implementation bodies. The main institutions involved in land management, compensation and resettlement are briefly described below:

1. The Ministry of Lands:
2. National Land Commission (NLC):
3. County Government of Busia

The Project has also referred to World Bank's Operational Policy on Involuntary Resettlement with regard to the nature of involuntary resettlement.

Table 13 outlines World Bank OP. 4.12 policy on involuntary resettlement and compares them to the Kenyan legislation on the same. Recommendations are made on the existing gaps of the Kenyan laws. In general, where there is a difference between Kenyan law and OP 4.12, the latter shall prevail.

Comparative Analysis of World Bank OP 4.12 & Kenyan Resettlement Laws

Table 14. Comparative Analysis of World Bank OP 4.12 and Government of Kenya requirements including measures to address gaps

OP 4.12	Kenyan Legislation	Comparison	Recommendation to Address Gap
GENERAL REQUIREMENTS			
<p>World Bank OP4.12 has overall policy objectives, requiring that:</p> <ol style="list-style-type: none"> 1. Involuntary resettlement should be avoided wherever possible, or minimized, exploring all alternatives. 2. Resettlement programs should be sustainable, include meaningful consultation with affected parties, and provide benefits to the affected parties. 3. Displaced persons should be assisted in improving livelihoods etc., or at least restoring them to previous levels. 	<ol style="list-style-type: none"> 1. According to Kenyan Legislation, involuntary resettlement may occur as a result of projects implemented in public interest. 2. The Land Act, 2012 Act outlines procedures for sensitizing the affected population to the project and for consultation on implications and grievance procedures. 3. The Land Act 2012 guarantees the right to fair and just compensation in case of relocation. 	<ol style="list-style-type: none"> 1. The Land Act does not stipulate that resettlement should be avoided wherever possible; on the contrary, as long as a project is for public interest, involuntary resettlement is considered to be inevitable. 2. Same as the World Bank 3. Just and fair compensation as outlined in the Land Act 2012 is not clear and can only be determined by NLC, which can be subjective. It is does not talk about improving livelihood or restoring them to pre-project status. 	<ol style="list-style-type: none"> 1. For RAP, ensure that resettlement issues are considered at the design stage of the project in order to avoid/ minimize resettlement. <p>Implement World Bank OP 4.12 policy - displaced should be assisted in improving their livelihood to pre-project status.</p>
OP 4.12	Kenyan Legislation	Comparison	Recommendation to Address Gap
PROCESS REQUIREMENTS			

OP 4.12	Kenyan Legislation	Comparison	Recommendation to Address Gap
<p>Consultation: Displaced persons should be meaningfully consulted and should have opportunities to participate in planning and implementing resettlement programs</p>	<p>The Land Act outlines procedures for consultation with affected population by the NLC and grievance management procedures.</p>	<p>Same as World Bank</p>	<p>Implement consultation procedures as outlined in both Kenyan legislation and World Bank.</p>
<p>Grievance: For physical resettlement, appropriate and accessible grievance mechanism will be established.</p>	<p>Land Act 2012 clearly outline the steps and process for grievance redress that includes alternative dispute resolution, re-negotiation with NLC and is backed by the judicial system through Environmental and Land Court</p>	<p>Kenyan legislation meets OP4.12 requirements.</p>	<p>N/A</p>
<p>Eligibility Criteria <i>Defined as:</i> (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 plan (see Annex 10 A, para. 7(f)); and (c) those who have no recognizable legal right or claim to the land they are occupying <i>To determine eligibility:</i> Carry out resettlement census. Cut off date for eligibility is the day when the census begins.</p>	<p>The Land Act 2012 provides that written and unwritten official or customary land rights are recognized as valid land right. The Law provides that people eligible for compensation are those holding land tenure rights Land Act also recognizes those who have interest or some claim in the land such as pastoralist or who use the land for their livelihood. The constitution recognizes ‘occupants of land even if they do not have titles’ and payment made in good faith to those occupants of land. However, this does not include those who illegally acquired land</p> <p>Land Act 2012 provides for census through NLC inspection and valuation process</p>	<p>Kenya’s Land Law defines eligibility as both formal (legal) and informal (customary) owners of expropriated land. However, it does not specifically recognize all users of the land to be compensated. The constitution of Kenya on the other hand recognizes ‘occupants of land’ who do not have title and who the state has an obligation to pay in good faith when compulsory acquisition is made.</p> <p>Same as World Bank</p>	<p>Ensure ALL users (including illegal squatters, laborers, rights of access) of affected lands are included in the census survey or are paid</p> <p>Implement cut-off procedures as outlined in the RPF and Kenyan Law</p>

OP 4.12	Kenyan Legislation	Comparison	Recommendation to Address Gap
<p>Measures: Preference should be given to land based resettlement strategies for displaced persons whose livelihoods are land-based. Cash based compensation should only be made where (a) land taken for the project is a small fraction of the affected asset and the residual is economically viable; (b) active markets for lost assets exist and there is sufficient supply of land and housing; or (c) livelihoods are not land-based.</p> <p>World Bank OP4.12 Article 6(a) requires that displaced persons are provided with prompt and effective compensation at full replacement cost for losses of assets attributable directly to the project. If physical relocation is an impact, displaced persons must be provided with assistance during relocation and residential housing, housing sites and/or agricultural sites to at least equivalent standards as the previous site. Replacement cost does not take depreciation into account. In terms of valuing assets, if the residual of the asset being taken is not economically viable, compensation and assistance must be provided as if the entire asset had been taken.</p> <p>Compensation and other assistance required for relocation should be determined prior to displacement, and preparation and provision of resettlement sites with adequate facilities, where required</p>	<p>Legislation provides for land for land compensation but the Land Act 2012 does not state whether preference should be granted to land to land compensation. Land Act 2012 appears to prefer mode of compensation by the Government to the affected population.</p> <p>Land Act talks of prompt, just compensation before the acquisition of land. However, interpretation of just compensation is yet to be clearly outlined through a specific schedule defining just compensation have not been put in place.</p> <p>Attorney’s fees, cost of obtaining advice or cost incurred in preparing and making written claim not in the Land Act other than ‘just compensation’</p> <p>The Act is does not out rightly stipulate assistance for relocation but we can interpret that relocation cost will be included in just compensation.</p>	<p>Land for Land provided for in the Land Act based on agreement by the PAP.</p> <p>Cash based compensation seems to be the preferred mode of awarding compensation to the affected population by Government of Kenya</p> <p>‘Just compensation’ as stipulated in the Land Act not yet specifically defined.</p> <p>OP 4.12 provides related land transaction fees. Land Act not clear on this.</p> <p>OP4.12 requires that displacement must not occur before all necessary measures for resettlement are in place, i.e., measures over and above simple compensation</p>	<p>Ensure that all alternative options are considered before providing cash compensation Use World Bank OP4.12 procedures in determining form of compensation</p> <p>Implement prompt and effective compensation at full replacement cost for the losses of the assets.</p> <p>Implement World Bank policy.</p> <p>Ensure that ALL resettlement options are agreed on with PAPs and put in place BEFORE displacement of affected persons.</p>

OP 4.12	Kenyan Legislation	Comparison	Recommendation to Address Gap
<p>Valuation: With regard to land and structures, “replacement cost” is defined as follows:</p> <p>For agricultural land, it is the pre-project or pre-displacement, whichever is higher, market value of land of equal productive potential or use located in the vicinity of the affected land, plus the cost of preparing the land to levels similar to those of the affected land, plus the cost of any registration and transfer taxes.</p> <p>For houses and other structures, it is the market cost of the materials to build a replacement structure with an area and quality similar to or better than those of the affected structure, or to repair a partially affected structure, plus the cost of transporting building materials to the construction site, plus the cost of any labor and contractors’ fees, plus the cost of any registration and transfer taxes.</p>	<p>Valuation is covered by the Land Act 2012 and stipulates, as already mentioned, that the affected person receive just compensation from NLC, as determined by National Land Commission. Valuers Act stipulates that a residual amount of 0.5% of the total valuation of an asset is expected to pay the valuer.</p> <p>Land Act 2012 talks of just compensation for the lost assets but it is not specific of the exact amount or procedures on the same.</p> <p>The Land Act 2012 stipulates just compensation.</p>	<p>Though one could argue that there is some form of consistency between the Kenyan Law and World Bank OP.4.12, interpretation of ‘just compensation’ has not been defined.</p> <p>Interpretation of just compensation not clear</p> <p>Interpretation of just compensation not clear.</p>	<p>Apply the World Bank OP4.12 valuation measures, as outlined in Section 6, in order to fully value all affected assets in a consistent manner.</p> <p>Apply World Bank OP4.12 on valuation and compensation measures.</p> <p>Apply World Bank OP4.12 on valuation and compensation procedures.</p>
<p>Monitor Adequate monitoring and evaluation of activities to be undertaken.</p>	<p>According to Land Act can be undertaken County Land Boards.</p>	<p>Both Kenyan Law and World Bank policy advocates for Monitoring and Evaluation</p>	<p>Implement as prescribed in the World Bank OP4.12 and Kenyan Law.</p>

Comparative Analysis of World Bank OP 4.12 & Kenya's Requirements Relevant to the Process

Table 15. Comparative Analysis of World Bank OP 4.12 and Kenya's requirements Relevant to the Process

Category of PAPs and Type of Lost Assets	Kenyan Law	World Bank OP4.12
Land Owners	Fair and just compensation which could be in form of cash compensation or Land for Land	Recommends land-for-land compensation. Other compensation is at replacement cost
Land Tenants	Constitution says that 'occupants of land' entitled to some level of pay in good faith. Land Act stipulates that they are entitled to some compensation based on the amount of rights they hold upon land under relevant laws. However, those who acquired land illegally not entitled to any.	PAPs are entitled to some form of compensation whatever the legal/illegal recognition of their occupancy.
Land Users	Land Act not clear on Land Users although in some cases they can receive some form of compensation depending on the determination by NLC	Entitled to compensation for crops and investments made on the land; livelihood must be restored to at least pre-project levels.
Owners conducting businesses along the project area river banks e.g. sand harvesters, brick makers, canoe transporters		Entitled to in-kind compensation or cash compensation for loss of business
Owners of Permanent buildings	The constitution of Kenyan respects the right to private property and in case of compulsory acquisition, just compensation must be granted to the owner for the permanent building	Entitled to in-kind compensation or cash compensation at full replacement cost including labor and relocation expenses, prior to displacement.
Perennial Crops	Compensation for the loss of crops	Full replacement cost for the loss of crops valued at market price Relocation assistance and livelihood restoration program.

5 THE RESETTLEMENT-AFFECTED COMMUNITIES: ENVIRONMENT, DEMOGRAPHY, PRODUCTIVE ACTIVITIES AND SOURCES AND LEVELS OF INCOME

5.1 INTRODUCTION

The goal of the Project Resettlement Program is to restore and improve the livelihoods of the resettlement-affected communities. In order to achieve this goal, a baseline socio-economic survey of the communities provided Project management with key baseline data necessary for designing, planning, monitoring and evaluating resettlement programs. Specifically the information collected by these surveys has assisted the development of the Resettlement Program by:

- Defining eligibility to receive resettlement-related benefits;
- Identifying private and communal assets that will be forgone due to the resettlement in order to plan their replacement;
- Describing the demographic structure of the communities, thereby providing the Project with a basis for planning resettlement and protecting the social fabric of the resettled and host communities;
- Describing the communities' livelihood systems, thereby providing the Project with a basis for planning income restoration programs;
- Providing a socio-economic baseline against which Project impacts can be measured after resettlement has taken place.

A team from **Tech Training and Research Limited** (consultant) team undertook the census/socio-economic survey. Structured interviews of all families living in the resettlement-affected communities were conducted during the month of March 2015. The formal survey was supplemented by numerous household case studies to verify the data. In addition, photographs of the families enumerated in the survey, taken in front of their homes, were added to the final survey report.

The survey was conducted in collaboration with the Water Security and Climate Resilience Project Management Unit (PMU), as well as the local administration, which participated in regular reviews of the work and provided local partners who accompanied the enumerators in data collection. The team worked with and was accompanied by village leaders and residents from the project area. The survey questionnaire used is presented in Appendix 2.

5.2 PHYSICAL ENVIRONMENT

5.2.1 Location

The project is located in Busia County and partly in Siaya County, in western Kenya. Busia County borders Lake Victoria to the South West, the Republic of Uganda to the West, North and North East. The county constitutes seven (7) constituencies namely; Teso North, Teso South, Nambale, Matayos, Butula, Funyula and Budalang'i. In relation to neighbouring counties, Busia borders Bungoma and Kakamega to the East, and Siaya to the South East and South. Busia County covers an area of 1,695km and has a population of 488,075. The proposed project is sited in Bunyala District, Budalangi constituency. Bunyala District covers an area of 306.5km², out of which 120km² is under permanent water surface of Lake Victoria. The District has lies between Latitude 0° 1' 36" South and 0° 33' North and Longitude 33° 54' 32" East and 34° 25' 24" East.

Table 16 below shows the names of the six administrative locations and administrative sub- locations of Bunyala Sub County. **Figures 2 and 3** overleaf show maps of the six administrative locations and a map for Bunyala Sub-locations boundaries respectively.

Table 16. Administrative Units within Bunyala Sub County and their Location Relative to River Nzoia

Name of Administrative Sub-location	Administrative Location	Location with Respect to River Nzoia
Siginga	Bunyala West	Northern side of River Nzoia
Bukani		
Bukoma		
Bulemia	Bunyala North	
Sisenye		
Mundere		
Budalangi	Bunyala East	
Mudembi		
Rwambwa		
Mabinju	Khajula	Southern side of River Nzoia
Lugare		
Rugunga		
Mabinju	Bunyala Central	
Magombe East		
Magombe Central		
Magombe West	Bunyala South	
Rukala		
Ebulwani		
Obaro		

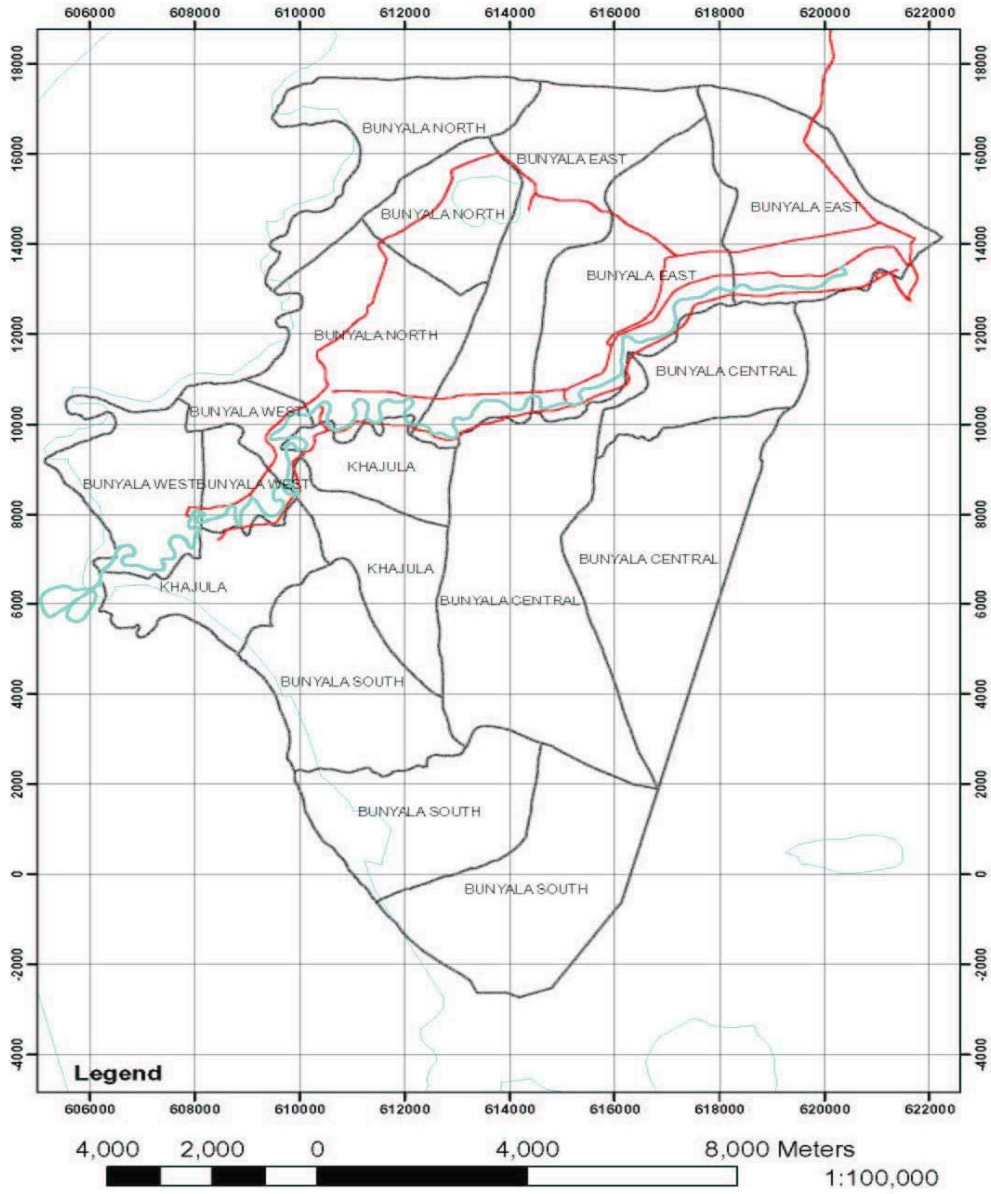


Figure 1 Bunyala Administrative

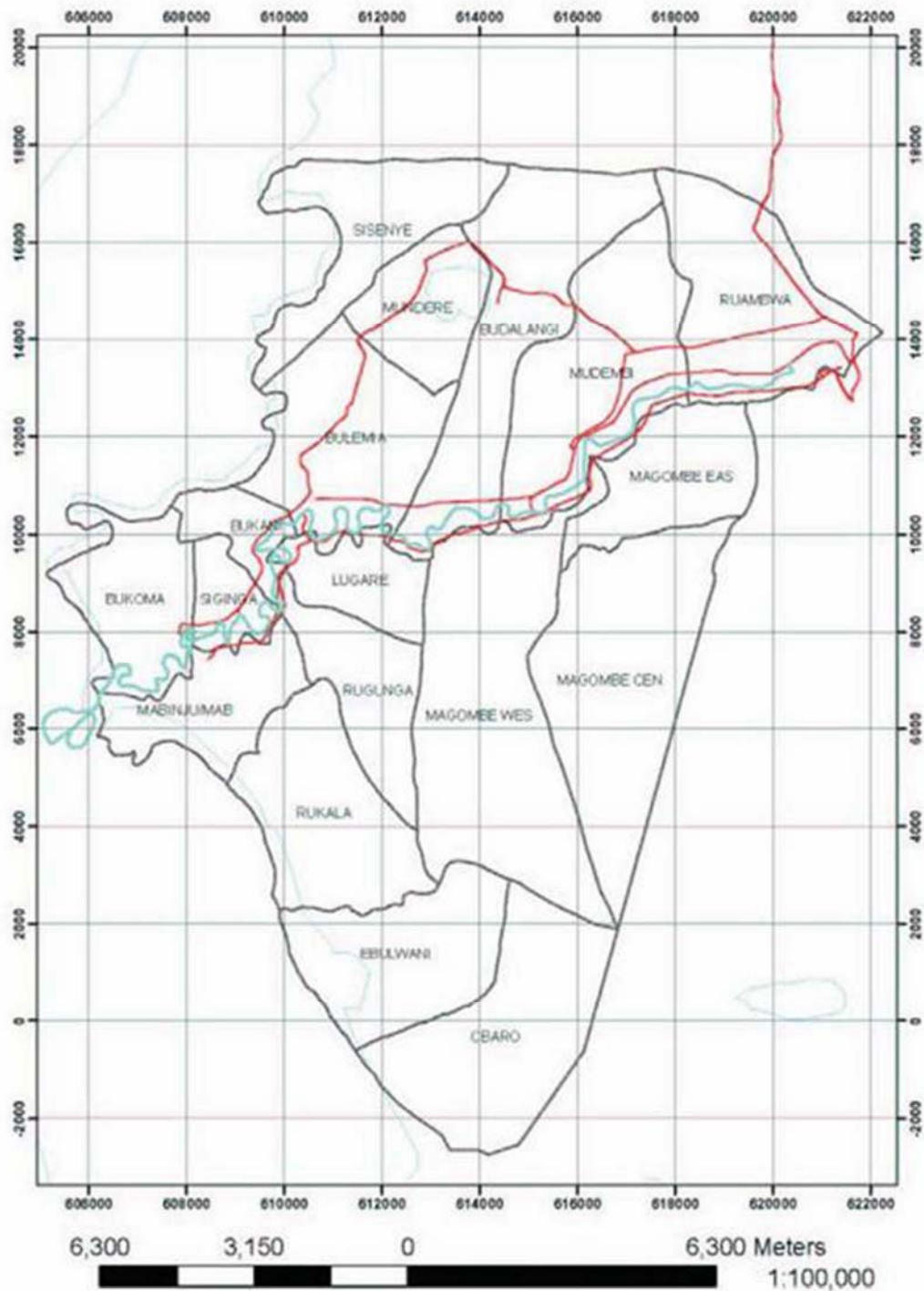


Figure 2 Bunyala Sub-County Boundaries

The proposed project is part of the Nzoia catchment but limited to the Nzoia River downstream of Rwambwa Bridge and the areas, which may be affected by flooding from that section of the river. The area of the Nzoia catchment upstream of Rwambwa Bridge is about 12,500km² with a distance of about 300km to the upstream end of the system.

5.2.2 Existing Infrastructure

Current infrastructure affected by the project comprises of;

- *Dykes* - running along both banks of river from Rwambwa to Namabusi. The dykes have a total length of 34.09km comprising of 17.0km on the southern and 17.09km on the northern side. Visual inspection revealed dykes are almost entirely bare of grass or other low level vegetative cover, degradation as a result of erosion of crest and banks, crest settlement in some places on the Budalangi dykes;
- *Access Roads* – There are two dykes on which lies the access roads across the levee section, providing access to boats across river during periods of flooding. The farthest downstream, connecting the village of Mau Mau to the boat crossing point at Siginga, runs along the side bank of river inside of floodplain. The other connects the road running west from the Bunyala irrigation scheme to the derelict vehicle ferry on the western side of Munsojo Hill;
- *Culverts* – dyke across levee section is equipped with culverts to allow flood flows to pass through the dyke; and water pumping station-for the rice plantation scheme.

5.3 SOCIO-ECONOMIC ENVIRONMENT

5.3.1 Population and Demography

According to the 2009 Kenya population census, these sub-locations had a total population of 54,201. 46.1% of the populations are male while 53.9% are females. The ratio of male to female is 1.133:1. There are a total of 13,273 households and the average population density is 299 persons per km².

On average a household head has 10 dependents, made up of one wife and 6 children. The composition of the population shows that young people below 19 years make over 50% of the total population. The District Development Plans (DDPs) in Siaya and Bunyala indicate that 40% and 66% respectively are classified to be experiencing absolute poverty in rural areas.

In the project affected area, 70.5% of the household head are male with 29.5% of the households being female headed as shown in the table below generated from the census survey.

Table 17. Gender of the head of the household

	Frequency	%
Male	820	70.5
Female	343	29.5
Total	1163	100

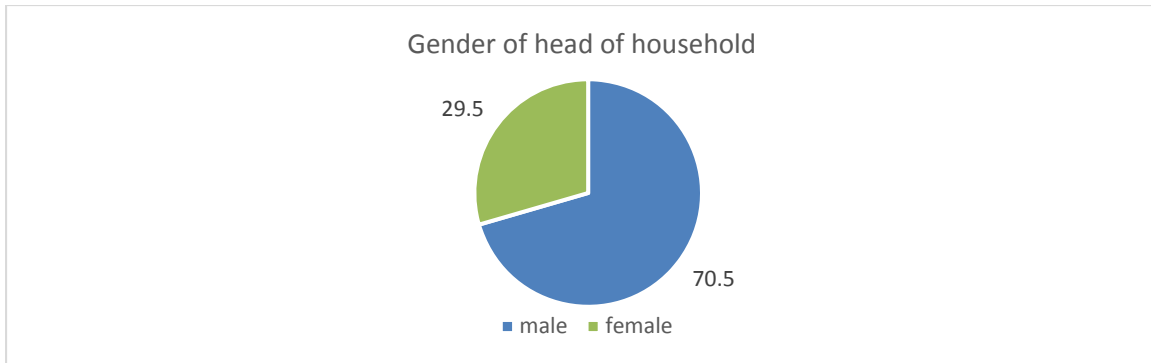


Figure 3 Gender of the head of the household

Majority of the PAPs reside in the affected villages as a result of being born there with the second reason for residence in the villages being marriage. Other reasons for residing in the project affected area is shown in the table below.

Table 18. Reasons for living in this village

	Frequency	%
Marriage	268	23.0
Born in village	672	57.8
Look for employment	2	0.2
Exploit the wetlands	36	3.1
To look for land	50	4.3
Fishing	1	0.1
Trade activities	9	0.8
Retirement	6	0.5

5.3.2 Settlement Patterns

Siaya district has a total land area of 1,520 km² while Bunyala has 306.5 km². Of this total land area, the arable area in Siaya district is 80.1% but reduces to 60.7% in Bunyala district. Despite high percentages of arable land areas, land use in the districts is below optimal as the practices disregard the need to conserve the soils and renew the soil fertility. Land is publicly and privately owned in the project districts. In Siaya district, 90 per cent of the land has been adjudicated and 197,325 title deeds issued.

The area is densely populated along the lake region due to pronounced fishing activities in the district. The plains of Bunyala are characterized by scarce population because it is prone to periodical flooding. Most of the population is concentrated in the urban areas of Port Victoria due to increased number of immigrants from the neighbouring districts to carry out lucrative fishing. **Table 19** below summarizes housing building materials in the project districts:

Table 19. Housing building materials in the project districts

District	HH distribution by main wall materials					HH distribution by main Roofing materials			
	Stone	Brick/Block	Mud/Wood	Mud/Cement	Other	Corrugated Sheet	Iron	Grass	Other
Bunyala	0.7	7.2	85.4	6.0	0.7	59.0		40.8	0.2
Siaya	2.7	9.5	73.1	14.3	0.5	63.7		34.5	1.7

Source: Kenya Integrated Household Budget Survey, 2005/06 and District Plans

Houses are constructed with the exterior ground raised above adjacent ground level to prevent shallow floodwater from entering. The raised part is usually well compacted against the wall and the ground level. Also houses in the flood prone areas are made of thicker walls than those in higher parts of this area. During walling, properly mixed mud is placed from exterior side of the wall, so that when damaged, mud that came from the wall piles at the outside part of the house. There are two construction techniques practiced in this area; houses constructed to resist damage by floodwater and those constructed temporarily.

5.3.3 Land Tenure and Use

There are three categories of land ownership in the project area, i.e. government land, trust land and community and private land. According to Land Adjudication Office Siaya and Survey of Kenya Nairobi, most of the land in the project area is categorized as community or private free hold. 67% of the farmers' possessed documents to prove land ownership. Even for those who did not have documents, it was because succession may not have been done and such ownership was not in dispute.

Despite being a floodplain area for Nzoia River, the area has various types of vegetation are recognized in the area. Evergreen or semi evergreen tree bushes and grasses generally cover the hilly lands. The lowland is mostly grassland with shrubs and is often seasonally swampy.

Traditionally, the economy of the people is dependent on agriculture and on animal husbandry mainly at the subsistence level. The main crops are maize and sorghum, which are extensively cultivated. Other common crops are peas, beans, groundnuts, sweet potatoes, cassava and bananas.

The original landscape can be described as an area divided by slightly higher, better drained ridges, covered by bush land, swamps and marshes, covered by papyrus, reeds and sedges. The upper part of the study area has higher ground altitude with better rainfall and therefore able to support natural bush land vegetation. The lower area being an estuary of the Nzoia and the Yala rivers is lower and prone to flooding, forming wetland before the Lake Victoria shores. Three major landscape types are distinguished:

1. The "settlement area", slightly higher, better-drained land. The village or homestead areas have farmhouses encircled by hedges, woodlots and roads are found in these areas.
2. The "cropping area", this area is the transition zone from the higher ridges to the depressions. The area has better drainage than the depressions and therefore allows the growing of "dry feet" crops, mainly food crops. The food crops in these areas are normally intercropped as follows:
 - Maize/sorghum; Maize/sorghum/cowpeas; Maize/sorghum/beans
 - Maize/sorghum/green grams; Maize/cotton; Maize/cassava
 - Sugar Cane/Maize

The dominant land use in the region is agriculture and the main food crops include maize. This cropping area runs into the wetter area bordering the depressions ensuring that the risk of crop failure due to drought during a dry year and towards the end of the rainy period. In an extremely wet year, the dry areas perform better.

The “swamp area”, the very wet areas are covered by permanent or seasonal swamps. This land use is found on the shores of Lake Victoria, the banks of Nzoia River and on the southern part of the project area, which is Yala swamp. These bottomlands and swamps occur at altitudes ranging from 1140-1260 m with relief intensity of less than 5 m and slopes of less than 2%. The main swamp is found in the southwest of the survey area (Yala Swamp). River Nzoia also has swamps along part of their courses. The bottomland occurs in the north-eastern corner of the survey area and on the eastern side of the Yala swamp.

Less than 10% of the project area is cultivated with maize and sorghum. The interviewed survey raised reasons for the low cultivation intensity in the area, which evolved around inadequate rainfall and floods. The project areas experiences severe flooding and as a result flood control measures are constantly being implemented in the area. Once these efforts are controlled, the project area may be able to increase in expand irrigated rice production and irrigated sugar cane farming. Presently, the major undertakings of the people of the area are rice farming (on tenant basis) in the Bunyala Irrigation Scheme, part-time fishing and temporary keeping of cattle, goats, poultry and sheep.

Land use in the project-affected area is mainly agricultural at 60.8% followed by 16.2% of land being used as residential. Other uses of land include pasture, business, burial sites among others as shown in table below.

Table 20. Current use of the land

	Frequency	%
Household residence	188	16.2
Business	11	0.9
Agriculture	707	60.8
Pasture	18	1.5
Burial site	5	0.4
Traditional places of worship	1	0.1
Fallow/Abandoned	40	3.4

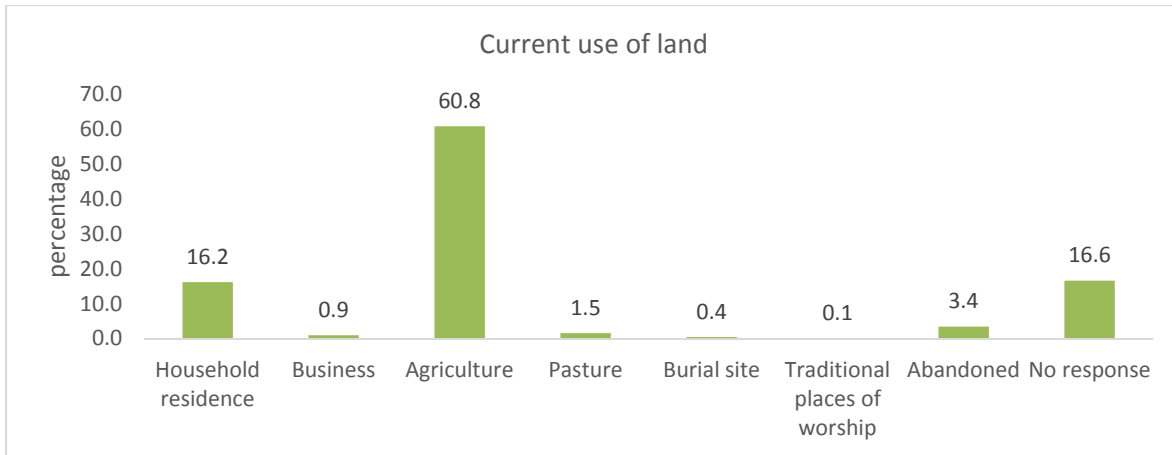


Figure 4 Current use of the land

The other 90% of the area has been left fallow due to floodwater. Within the project area there are no natural habitats. The lack of natural vegetation is due to floods and cultivation of the area when the floodwater recedes. As shown on the **figure 4** below, the project area is shown as shrub land.

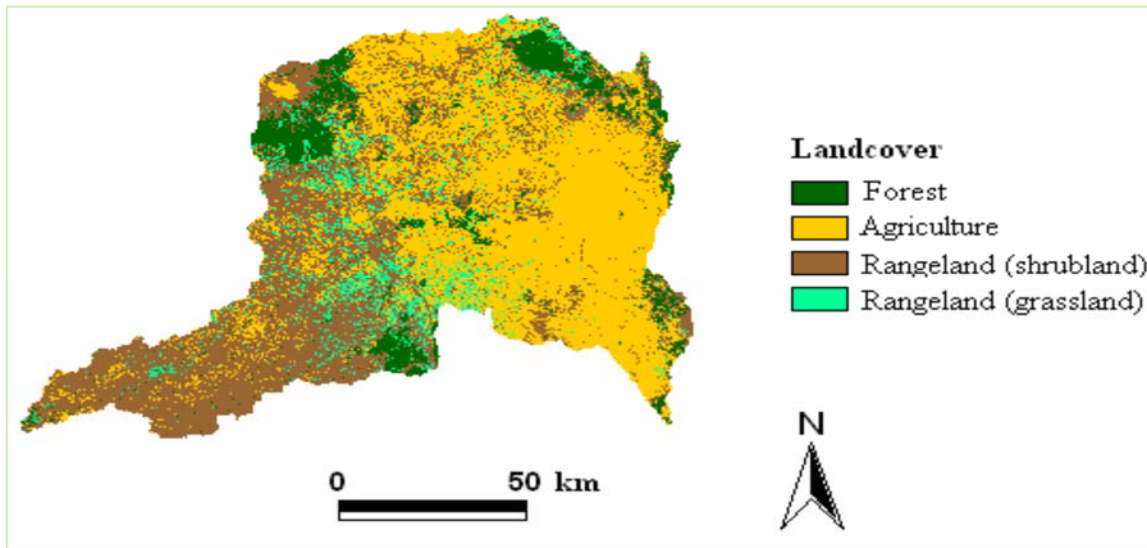


Figure 4 Land Cover of Nzoia Catchment

5.3.4 Land Tenure System

There are three categories of land ownership in the project area, i.e. government land, trust land and community and private land. According to Land Adjudication Office Siaya and Survey of Kenya Nairobi, most of the land in the project area is categorized as community or private free hold. 67% of the farmers' possessed documents to prove land ownership. Even for those who did not have documents, it was because succession may not have been done and such ownership was not in dispute.

Land in the project area is either private owned land with free hold title or registered landowners with Ministry of Lands while waiting provisions of the title deeds. Over 69% of the PAPs have no legal title for land as shown in table below.

Table 21. Land Tenure Regime

	# of PAHHs	% of PAHHs
Titled Property	119	10.2
Non Titled Property	807	69.4
Rental/Other Occupancy Regime Than Ownership	12	1.0
None	225	19.3
Total	1163	100

34.1% of land owned by the PAPs will be affected totally as a result of the project with 65.7% partially affected.

Table 22. Plots of land affected by the project

	# of PAHHs	% of PAHHs
Yes	397	34.1
None	2	0.2
Partial	764	65.7
Total	1163	100

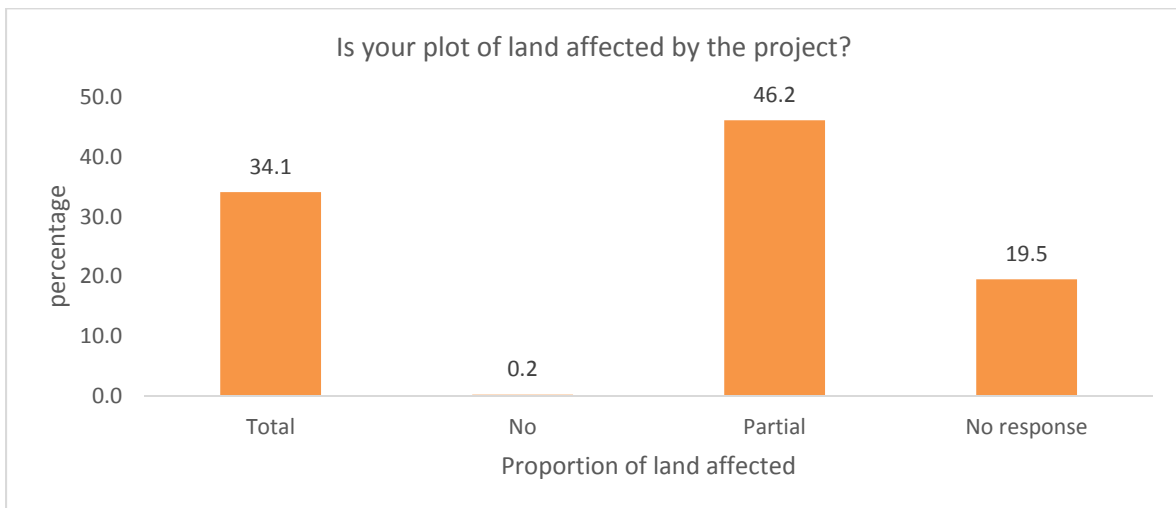


Figure 5 Plots of land affected by the project

Majority of the PAPs were aware that the land they occupied (76.8%) could be affected as a result of the project as shown in the table below.

Table 23. Awareness that land occupied could be affected by this project

	# of PAHHs	% of PAHHs
Yes	893	76.8
No	130	11.2
Did Not Know	140	12.0
Total	1163	100

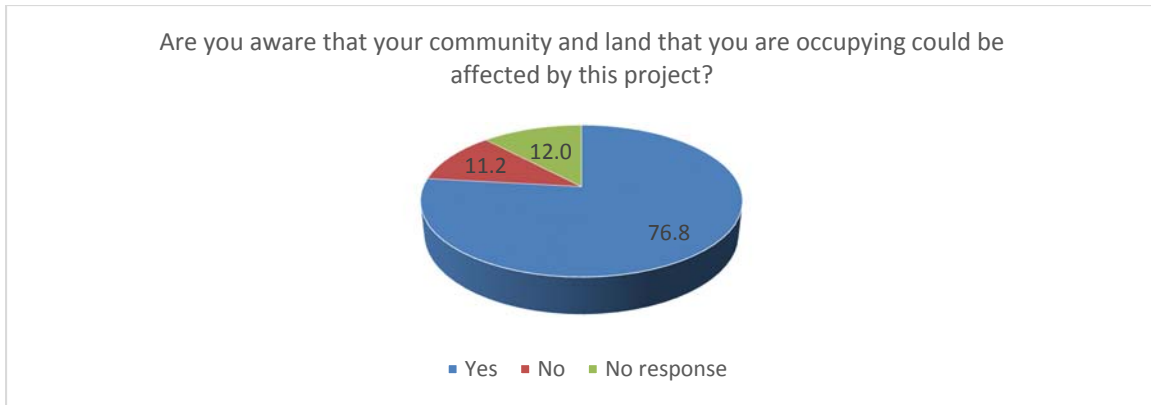


Figure 6 Awareness that land occupied could be affected by this project

5.3.5 Livelihoods

There are various livelihoods means in the area. The household survey revealed that most of people in the project area are farmers, followed by fishermen and traders 15, with a small fraction employed either as teachers or civil servants as illustrated in the table below.

The three most important livelihood strategies in the study area are crop farming, livestock rearing and casual labor in the rice fields or in other people’s farms. Other livelihood strategies in Bunyala that were found to be important are business, craftsmanship and formal employment to a lesser extent.

Rice farming is ranked as the most important economic activity in the area, which is sustained by a wide market in their local communities as this is their staple food, as well as in the adjacent regions and in neighboring towns both near and far. Rice from Bunyala is sold to communities and centers as Kampala and Bungoma.

Table 24. Primary, Secondary & Tertiary Occupation

	Primary		Secondary		Tertiary	
		%		%		%
Farming	715	61.5	80	6.9	40	3.4
Fisherman/fish farmer	89	7.7	75	6.4	11	0.9
Builder	17	1.5	7	0.6	1	0.1
Agricultural Worker	7	0.6	92	7.9	1	0.1
Self Employed Craftsman	63	5.4	40	3.4	32	2.8
Employed Craftsman	12	1.0	6	0.5	9	0.8
Non employed Home Helper	10	0.9	2	0.2	4	0.3
Trader	36	3.1	47	4.0	11	0.9
Civil servant	21	1.8	6	0.5	6	0.5
Student	6	0.5		0.0		0.0
Housewife	9	0.8	7	0.6	11	0.9
Mining		0.0	1	0.1	1	0.1
Without Occupation	41	3.5	10	0.9	28	2.4

5.3.6 Agriculture

Both drainage and irrigation agriculture is practiced in the area where small-scale farming dominates with average farm sizes varying from 1.02 Ha in Siaya to 2.5 in Bunyala. Interviews in the project area revealed that only 10% of the population used irrigation in crop growing and the rest (90%) relied on rain fed agriculture.

Bunyala district has a total approximate area of 300ha under irrigation benefiting approximately 2000 people against a potential of 40,000 people. Siaya district has approximately 1000 ha under irrigation against 3,000 ha, of potential area. Anyiko (Siaya district), is the only irrigation scheme within the proposed project area rice irrigation scheme to increase irrigable area from 50 ha to 80 ha.

The main food crops produced in the districts are maize, sorghum, finger millet, beans and cassava. Traditionally, cotton, bananas, sugarcane and tobacco have been the main cash crops. However, Irrigated rice, palm oil, chilli and grain amaranth have emerged as major alternative cash crops and are increasingly gaining prominence. According to the survey, maize is the most cultivated crop in the area followed by beans shown on the **Figure 7 below.**

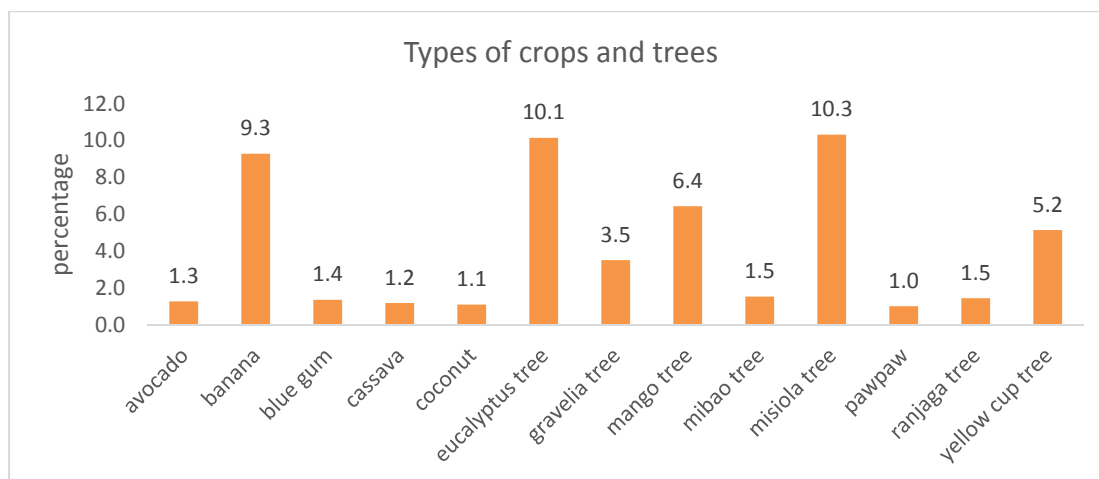


Figure 7 Crops grown in the area

Other crops grown in small scale include sugarcane, sweet potatoes; Green vegetables (kale and indigenous greens) grow with partial irrigation. Farmers use kitchen water, spring water and intricate systems of trenches for catching rainwater to irrigate, mostly by hand.

Pests and disease control is becoming increasingly an important aspect of production in the study area. Some of the pests and diseases facing production of crop in the study area

- Hailstones: They were reported in pockets of the District during the long rains season.
- Quelea Quelea birds: These are serious pests in the rice fields and also on the sorghum fields.
- Cassava Mosaic Disease
- Wilt of Tomatoes

- Maize Streak diseases
- Panama disease of Bananas
- Armyworms
- Greater Grain Borer

Agricultural sector is the highest overall contributor to household incomes in the project districts as presented on **Table 25** below.

Table 25. Sectoral contribution to Household incomes

Sector	Sectoral contributions to household income (%)	
	Siaya	Bunyala
Agriculture	65.6	38.2
Urban self-employment	15.3	3.8
Rural Self-employment	8.8	39.1
Wage employment	9.2	10.2
Other	1.1	5.7

Source: District Development Plans (2008-2012), Siaya and Bunyala

In the project area, residents earn their livelihoods from diverse economic activities including farming, employment (civil servant, teacher), trading, fishing and doing other jobs including electrical, motorcycles (Bodaboda) and security. The commonest source of livelihood is farming (70%), followed by fishing and trade (11% each) and employment (4%) as presented on **Figure 8** below.

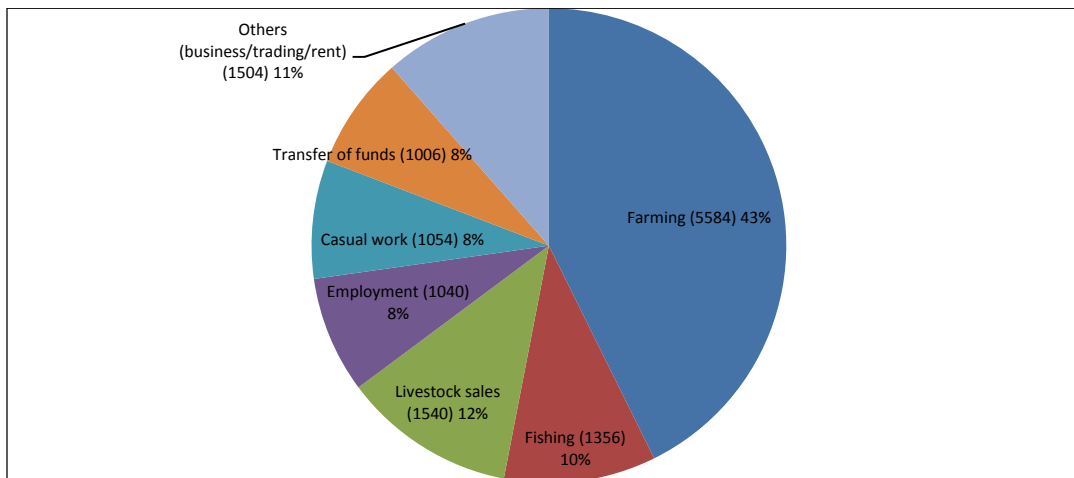


Figure 8 Average monthly income per Household by economic activity

Source: Field assessment

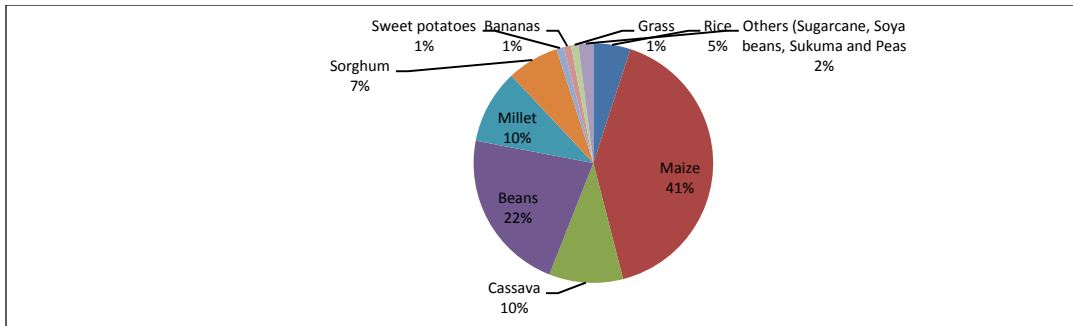


Figure 9 Percentage of households planting the crop
Source: Field Assessment

Food in the area is mainly stored on-farm in traditional granaries and/or off-farm in National Cereals and Produce Board (NCPB). The total population working in the agriculture sector is over 80%. Crop farming is faced with few challenges like flooding that destroy crops.

In the project area, household interviews revealed that a large proportion of people (69%) do not use any fertilizer. Further most households use manures (22%) than those who use chemical fertilizers (9%).

Table 26. Cropping Calendar

Crops	Jan	Feb	Mar	April	May	June	Jul	Aug	Sept	Oct	Nov	Dec
Maize												
Cotton												
Finger Millet												
Sorghum												
Paddy												
Horticulture												
Fruit tress												
Napier grass												
Cassava												
Sweet potatoes												
Pulses												

Source: Feasibility Study Report.

5.3.7 Livestock Keeping

Local breeds make up most of the livestock with the main animals kept in the project districts being Zebu, dairy cattle, goats and local poultry. Other livestock are also reared in the districts including sheep, pigs and rabbits. Livestock products in the project districts include milk, beef, mutton, poultry meat, egg, honey and pork. In the past, land was plenty and animals were left to graze freely. However, with reduced land availability, animals are tied up to graze in small grassy areas or kept at home for zero-grazing.

In the project area, domestic animals found to be most common are chickens followed by cattle, goats, ducks and sheep as presented in the **table 27** below.

Table 27. Domestic Livestock in the Area owned by PAHs

	Frequency	%
Goats	305	26.2
Sheep	97	8.3
Cows	438	37.7

Fowl	634	54.5
Cats/Dogs	77	6.6
Pigs	17	1.5
Total	1568	134.8

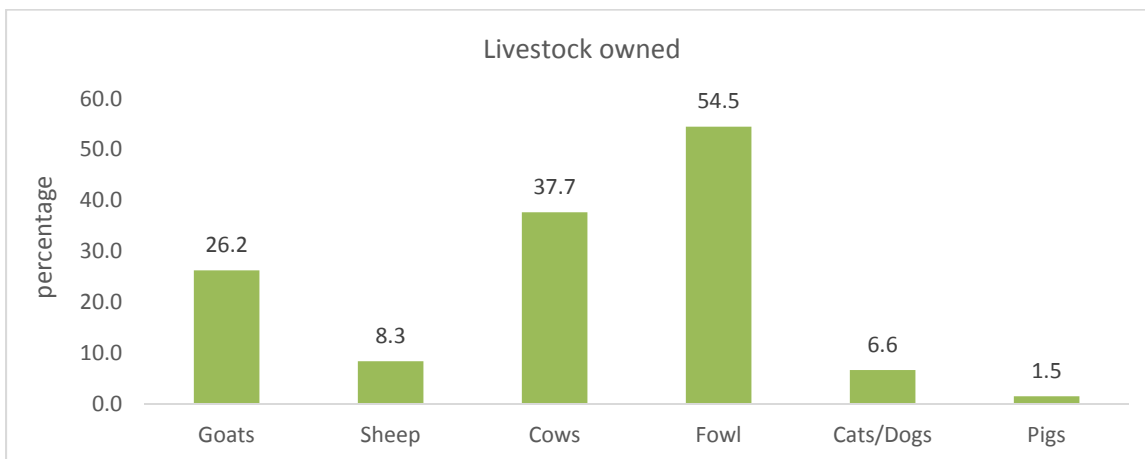


Figure 10 Domestic Livestock in the Area by PAHs

Table 28. Average Domestic Livestock in the area

	Average
Goats	5.9
Sheep	5.5
Cows	6.0
Fowl	15.4
Cats/Dogs	4.8
Pigs	2.6

Source: Field Assessment

Culturally, livestock plays a very important role in the study area including production of milk, dowry, meat, gifts for funerals, and these acts as a savings. Livestock is mostly grazed on the natural grassland or fallow field after harvest and managed using traditional techniques. The livestock is also grazed in the wetland areas especially as the floodwaters recede or during exceptionally dry years when the swamp areas shrink i.e. during the period when the Lake Victoria level fell substantially leaving the fringes dry.

5.3.8 Fishing

Fishing is traditionally practiced among the lakeshore communities (Luos) and could be found along the Lake Victoria, Lake Kanyaboli, and River Nzoia and within the wetlands. It is an activity that provides an exit option for local communities when the local farming activities are depressed. Within the project area fishing is mainly done in the lake but also along the Nzoia River and the wetlands such as Sifuyo and Mahawa swamps on the right/left bank of River Nzoia. These are second to agriculture apart from petty trade and remittance from those working outside the area.

The Luos and the Abanyala; who in many cases share traditional practices pertaining to fishing which include, men's dominance in the physical removal of the fish in the said water bodies and women basically does the sales. There are no organized organizations that facilitate the sale of the fish; hence the middlemen expose fishermen to exploitation.

The major nearby fish collection and sales points include Sio Port and Port Victoria. The project area is characterized by a number of water ponds of different sizes and which as suggested could be transformed into fishponds. The project could also encourage this attribute by increasing the number of ponds. This will contribute in meeting ever-increasing demand for fish.

The common fish species catch being *Oreochromus Osculentus* (*Ngege*), Catfish (*mumi*), Nile perch, Omena, and *Protopterus acthiopus* (*kamongo*). In 2008, there were 3364 fishermen who mostly composed of strong energetic men leaving agriculture for the old men, women and children hence creating food insecurity. Landing beaches are 18 and total production from capture fishery was 62,469 metric tonnes, which fetched Kshs. 59,325,642.

5.3.9 Sand Harvesting

Brick making/granite mining and sand harvesting is observable along the road reserves, wetlands and on arable cropland normally carried out by men. The sand harvesting is mainly carried out in specific pockets of the river which include; Wadh Mbare and Ajuke in Simur Kondiek sub-location, Adeda, Nyadenda and Lwanga in Siranga sub-location, Central Ugenya has 6, 3 places in West Ugenya location while Bunyala North and Khajula locations have 4 each. It is an activity mainly for the youth though it is hampered by poor state of roads.

5.3.10 Brick Making

The study area is endowed with black soils that enhance brick making, though the product is minimally utilized exclusively within neighbouring towns such as Kisumu, Siaya, Mumias and Busia. Houses, institutions and offices built out of bricks are less than 20% where as a greater percentage are semi permanent. This occupation though helps the community members. However, when put together with the need for firewood for basic cooking, brick making activity causes a concern of deforestation that should be addressed within the context of the project development. Energy saver 'Jikos' are not in use except in West Ugenya location where it is being introduced.

5.3.11 Employment

The labour force (15-64) in the two districts in 1999 was 280,298 (Bunyala 25,182 and Siaya 255,116) and is expected to continue increasing. Over 70 percent of labour force is engaged on family farms. The remaining over 25 per cent is distributed over other economic activities such as fishing, trading and employment in the formal and informal sectors. The rate of unemployment in the districts is 73 percent. The household survey revealed that 52% of the males and 48% of the females in the project area were unemployed. Majority of those employed worked in Nairobi (23%) followed by Mombasa (15%) and Kisumu (14%) while the rest worked in various other towns. The reasons advanced for unemployment included: cannot find work (39%), Sickness (2%), still in school (26%), too old to work (11%) and prefers not to work (3%) while the rest did not give reasons for not being in a gainful employment. **Figure 11** below presents an overview of reasons for unemployment in the project area.

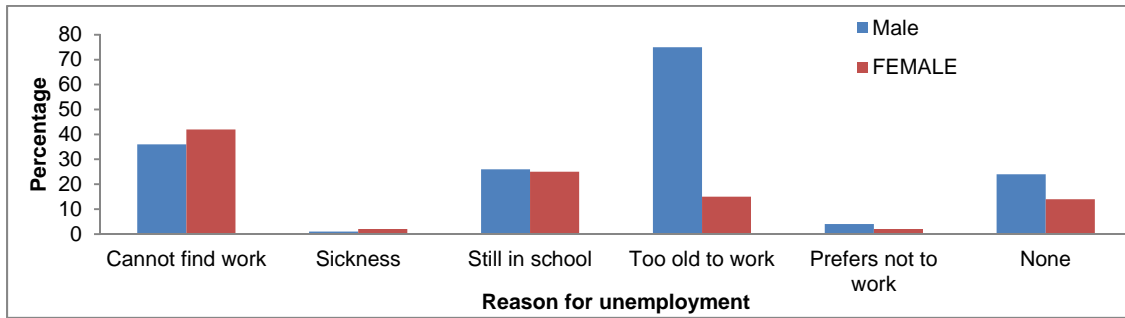


Figure 11 Reasons for unemployment by gender

Source: Field Assessment

5.3.12 Health

5.3.12.1 Diseases

The commonest diseases in the project area was malaria accounting for 58% of the morbidity rates, followed by Diarrhoea (23%), Cholera (7%) and others (TB – 5%, Typhoid – 4% and HIV/AIDS – 3%) order of prevalence as shown in the figure 16 below. Many of these diseases are water related. The project area lies between Siaya and Bunyala districts each having specific backgrounds to disease outbreaks and prevalence. The life expectancy in Siaya is 36.9 and 43 years for male and females respectively while it is higher in Bunyala standing at 40 for males and 46 years for females. In Bunyala District, according to the Regional Assessment Team from Kenya Food Security Steering Group (KFSSG), in 2007 the district immunization coverage was 70.1%. Floods along the Nzoia river basin increase the cases of water-borne diseases such as cholera and increase the breeding grounds for mosquitoes leading increased cases of malaria. Flooding also leads to outbreaks of livestock diseases. The district also has latrine coverage of 46% according to KFSSG (2007), which poses a serious health hazard due to contamination of underground and open water sources from solid and waste disposal. HIV/AIDS prevalence rates in the districts are 19.2% (15.4% in Bunyala and 24% in Siaya district). Thus implies that HIV/AIDS is a major health concern in the project area. The project area experiences annual flooding which brings many water borne diseases that attacks the already weakened immune system. Flooding means the loss of crops, creating hunger. Other factors contributing to rapid spread of HIV/AIDS are:

- Engaging in unprotected sex
- Ignorance on safe sex practices
- Unwillingness to use condoms
- Ignorance on HIV status
- Commercial sex workers
- Extensive traditional use of herbal medicine.
- Negative cultural beliefs and unhygienic practices that facilitate the spread of HIV/AIDS including deliveries routinely performed by Tradition Birth Attendants and wife inheritance and/or sharing amongst age mates

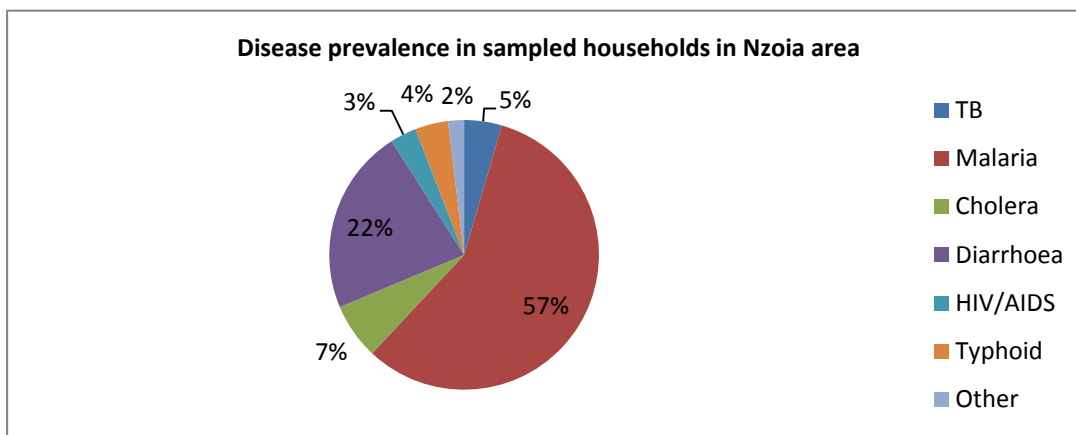


Figure 12 Disease prevalence in the area
Source: Field Assessment

Table 29. Household members who contracted malaria during the past year (Average)

	Male	Female
Persons aged 0-5 yrs	1.24	1.39
Persons aged 6-15 yrs	1.47	1.50
Persons aged 16-60 yrs	1.42	1.54
Persons aged >60 yrs	1.04	1.20

Table 30. Number of hospitalizations and deaths attributable to malaria

	Observation	Mean	Standard Dev	Min	Max
Hospitalization	447	2.6	2.6	0	20
Death	124	1.9	2.2	0	15

Table 31. Household members who suffered from chronic illnesses during the past year (Average)

	Male	Female
Persons aged 0-5 yrs	1	1
Persons aged 6-15 yrs	1.12	1.5
Persons aged 16-60 yrs	1.11	1.29
Persons aged >60 yrs	1.0	1.06

Vulnerable individuals living in the household

Table 32. Number of hospitalizations and deaths attributable to malaria

	Observation	Mean	Standard Dev	Min	Max
Disabled/chronically ill persons	255	1.21	0.56	0	4
Young children <2yrs	130	1.65	2.01	0	20
Individuals >65yrs	184	1.47	1.92	0	22

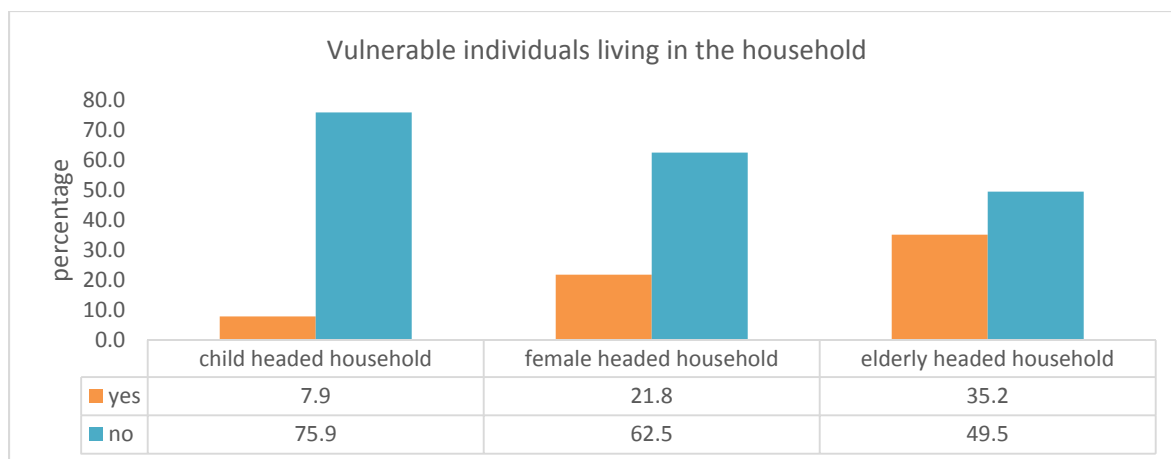


Figure 13 Number of hospitalizations and deaths attributable to malaria

5.3.12.2 Health Facilities

The project districts have 78 health facilities (Bunyala 7 and Siaya 71) including hospitals, health centres, nursing homes, dispensaries and clinics. These are either public or private. The districts have 19 Voluntary Counseling and Testing (VCT) centres and 20 facilities offering Anti-retrovirals (ARVs).

5.3.13 Transportation and Communication

The area is served with all-weather road are impassable during rainy season. Matters become worse when Nzoia River breaks its banks causing severe flooding that render the roads unusable and delinking areas like Mau Mau from the rest of other areas. The length of roads (earth, murrum, bitumen etc.) in both districts is tabulated below.

Table 33. Length of roads in Siaya and Bunyala

District	Nature of road (Kms)			Total
	Bitumen	Murrum/ Earth	Gravelled	
Bunyala	0	92	-	92
Siaya	97.9	667.2	400	1165.1
Total	97.9	759.2	400	1257.1

Source: Siaya and Bunyala District Development Plans, 2008-2012

Other transport infrastructure includes airstrips, waterways (only in Bunyala) and railway (only in Siaya district). The main communication facilities in the districts include mobile phone, post /sub post offices, telephone booth, private courier services, radios and cyber cafes.

5.3.14 Energy

The major energy sources within Siaya and Busia Districts with respect to quantity are fuel wood, paraffin, petroleum gas and electricity (**Figure 14**). In the project area, kerosene is the most common source of energy for lighting.

Table 34. Sources of energy for lighting from household survey

	FREQUENCY	%
Electricity (Public Utility)	56	4.8
Electricity (Power Generator)	18	1.5
Kerosene Lamp/Lantern	996	85.6
Wood	75	6.4
Candle	15	1.3
None	105	9.0
Total	1265	108.8

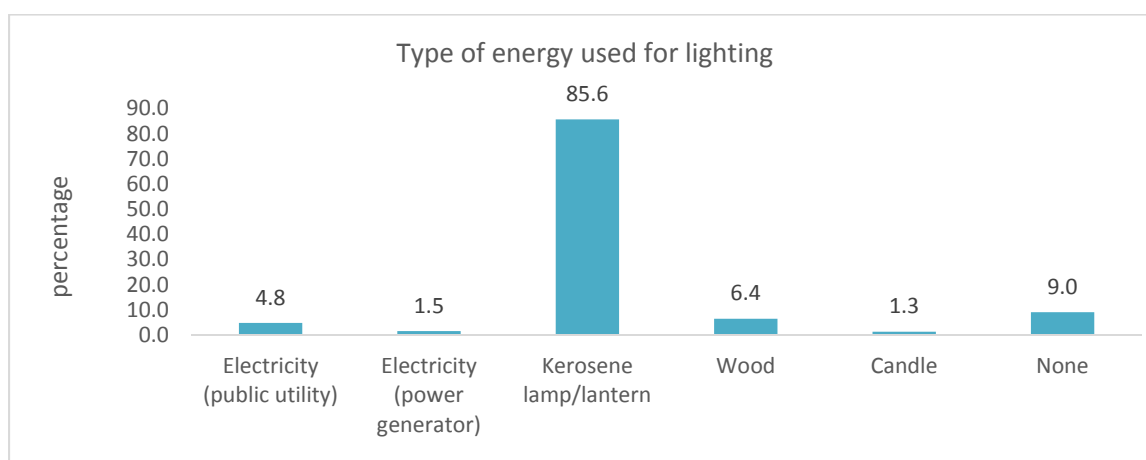


Figure 14 Sources of energy for lighting from household survey

Table 35. Sources of energy for cooking from household survey

	Frequency	%
Electricity	8	
Kerosene	69	
Charcoal	366	
Gas	22	
Firewood	981	
Other	2	
Total		

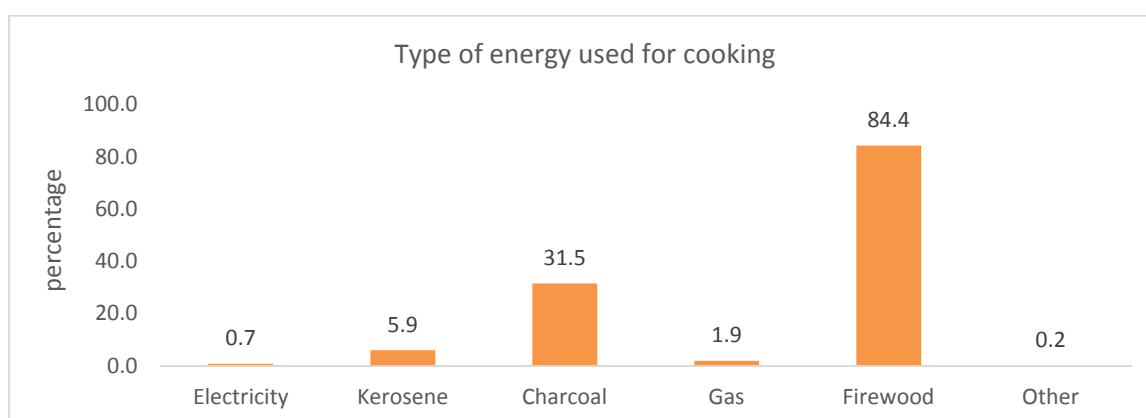


Figure 15 Sources of energy for cooking from household survey

The principle sources of domestic water for drinking and cooking are wells and bore holes. Lake water is primarily used for recreation and fishing while Nzoia river water is used for washing and irrigation. The river and its tributaries provide permanent water but with varying flows through the seasons of the year. Major water reticulation systems in this region are found in urban centres abstracting water from the river and its tributaries. This shows that the Nzoia flood plain has good water resources that can be used in a sustainable way.

The major water reticulation systems are only available in the urban centres abstracting water from the river and its tributaries. Otherwise water reticulation schemes for the rural masses are few. The bigger hindrance to this development is the high cost of operation and maintenance. The organizational capacity of the rural masses in this respect is also in doubt. It was however observed that shallow wells exist within the study area. For the potential selected irrigation area, therefore water for human consumption should be an important consideration with respect to quality and quantity. Information from the household survey was used to plot the pie chart in **Figure 16** below.

5.3.15 Water Access and Sanitation

The study area is relatively well endowed with water resources. The water sources in the study area include River Nzoia and its tributaries, swamps, few earthen dams on the tributaries and potential for ground water, Nzoia being the largest. The average distance to the nearest potable water point for many is within 2 km. Investigations revealed that the water is basically used for domestic use, drinking for both humans and livestock and about 3% of the population use it for irrigation of crops especially horticultural crops.

Piped water is available only within the urban centres and effort should be made to extend this benefit to the rural areas. This would bring direct benefit to the women who otherwise must make a choice between the effort and time involved in fetching and boiling water or facing the risk associated with consuming untreated and boiled water.

It was established that all locations have an average of 10 shallow wells because the Government and NGOs are promoting safe water supply in the area. There are few piped water systems in the area i.e. townships and only in West Ugenya location and Bunyala North location. Other sources include ponds, springs and rain water. It should be noted that relatively good impression was obtained on the enthusiasm of the inhabitants of the project area on utilization of river Nzoia water for irrigation.

A number of households still lack sanitation facilities (latrines, toilets) due to poverty and presence of alternative defecating areas (bushes). This constitute one of the principal pathways for infection which can kill people once the human wastes are swept by running water into the water bodies. This is coupled to the notable long distance to health centres.

Table 36. Access to drinking water

	Frequency	%
Traditional well at home	39	3.4
Borehole at home	247	21.2
House with water tap	74	6.4

Access to public water taps outside the house	249	21.4
Access to water sources/boreholes outside the house	350	30.1
Access to surface water	522	44.9
Rainwater	80	6.9
Total	1561	134.2

Table 37. Sanitary Facilities

	Frequency	%
Flush toilet in the house	9	0.8
Latrine with septic tank	70	6.0
Latrine without septic tank	825	70.9
Public toilets outside the house	150	12.9
None	109	7.3
Total	1163	100.0

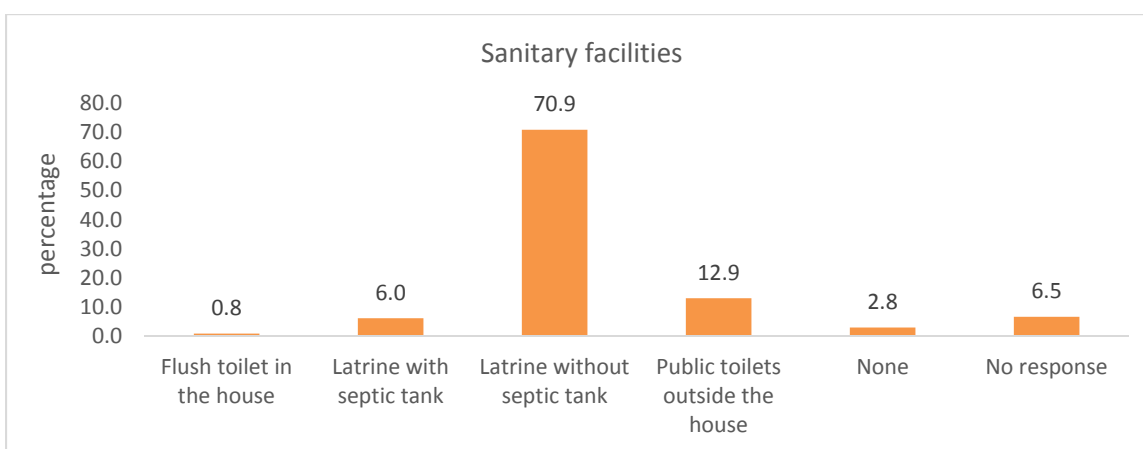


Figure 5 Sanitary Facilities

5.3.16 Education and Literacy levels

The project districts have a total of 1072 education institutions (pre-primary schools – 455, primary schools – 425, secondary schools – 118, other training institutions – 8 and adult classes 66). Majority of these are located in Siaya district. Literacy levels are higher in Siaya (78.2%) than in Bunyala (62.5%) district. In both districts, literacy levels for males (81.6%) are higher than for females (59.9%) as presented in the **table 38** below.

Table 38. Education institutions and literacy levels in project districts

Type of institution		Number of institutions per district		Total
		Bunyala	Siaya	
Number of educational facilities	Number of pre-primary schools	28	427	455
	Number of primary schools	34	391	425
	Number of secondary schools	7	111	118
	Number of other training institutions:	4	4	8
	Number of adult classes	18	48	66
Literacy levels (%) by sex	Male	73.9	89.2	81.6
	Female	51.1	68.7	59.9
	Total	62.5	78.2	70.4

Source: Siaya and Bunyala District Development Plans, 2008-2012

The household assessment results showed that in regard to the education of household heads, 21.5% had no formal education, 28.3% did not complete primary education, 17.9% completed primary education and 6.8% did not complete secondary education. However, there were a small percentage of these proceeding to secondary (12.6%) and even fewer reaching tertiary institutions (3.5%).

Table 39. Education level of household

	Frequency	%
Without education	250	21.5
Didn't complete primary education	329	28.3
Completed primary education	208	17.9
Didn't complete secondary education	79	6.8
Completed secondary school	146	12.6
Completed technical training	17	1.5
Completed vocational training	23	2.0

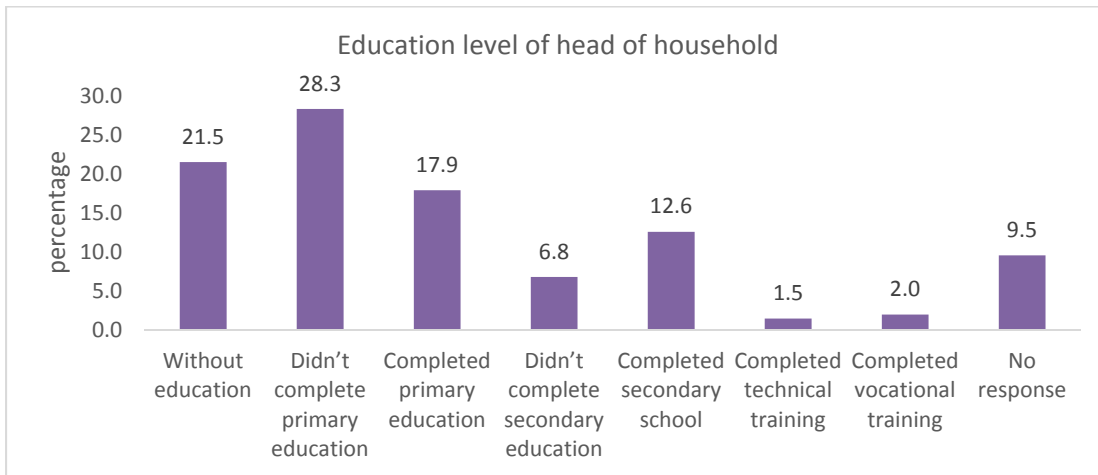


Figure 6 Education level of household

Over 58% of the PAPs can read and write with mother tongue being the most spoken language by the PAPs as shown in the **tables 40 and 41** below.

Table 40. Household Heads who can read or write

	Frequency	%
Yes	683	58.7
No	337	29.0

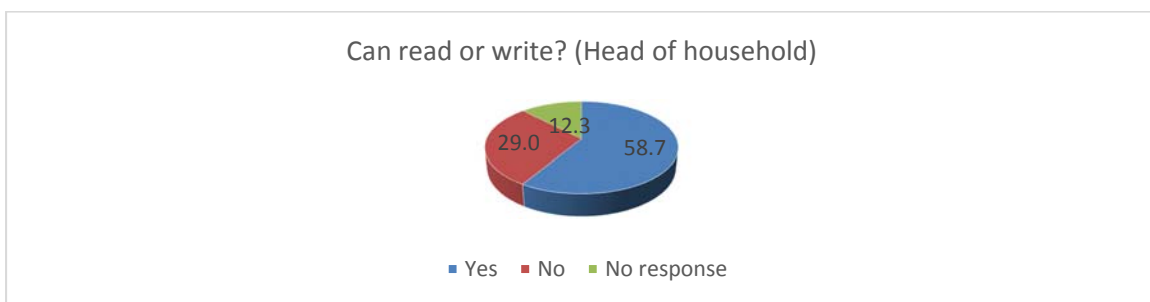


Figure 7 Can read or write

Table 41. Language spoken at home

	Frequency	%
Kiswahili	497	42.7
English	18	1.5
Mother tongue	541	46.5

5.3.17 Gender and Inequality

50.4% of all households in Siaya are female headed households while children headed households are 4.4%. Bunyala district has 13,749 households of whose average size is 4.5%. The high number of female-headed households may be explained by single parenthood and high male mortality rates.

Gender roles related to livelihood activities were also very clear. For instance, land preparation, maintenance of water levels and cutting of rice stalks is done by men, while both genders could do land-levelling and bird scaring. Women exclusively do transplanting, weeding, and threshing. In all other farming activities, a similar trend is duplicated, with men doing the harder manual work such as clearing and ox-ploughing, while women did hand digging, planting, weeding and harvesting. Men are also employed in construction sites and digging of water channels. Weaving and livestock rearing is done by both gender, even though men also do undertaken spraying of cattle or take to the dip. Very few of both genders from the same household are involved in formal employment.

5.3.18 Poverty

The project area lying between Siaya and Bunyala districts faces deprivation associated with poverty that is characteristic throughout the two districts. The Lower Nzoia basin straddles the Siaya and Busia districts both of which have 60-70% of their population living below the poverty line.

The KIHBS 2005/06 revealed that the absolute poverty in Siaya district was 39.3% (Rural 40% and Urban 38.6%) with Food Poverty being 34% and the district contributed 0.013% to National poverty. The absolute poverty in Bunyala district was 68% while food poverty was 62% and the district's contribution to national poverty was 2.43%. Bunyala district has 50.5% male and 49.5% of females who are poor while similar figures for Siaya district are 46.9% male and 50.7% of females (CBS, Well Being in Kenya – A socio- Economic Profile, 2008).

There are many factors that have caused poverty to spread including population growth, shifting land use systems and ownership from common to individual, pressure on natural resources such as trees (for firewood and building), deforestation leading to soil erosion and desertification and a decrease in soil fertility. Other causes include increasing expenditures on education and healthcare. Though there are many development initiatives in the project area, poverty is still a major challenge. Most families live on less than a dollar a day. Poverty hits hardest in areas facing low rainfall levels and poor soil fertility, such as the lower Ukwala, Uranga and Karemo divisions. According to the household survey the main challenges that the residents around the project area face are food

shortages, education and fees, money and income, clothing, diseases and healthcare facilities shortages, shelter and employment, in respective order of magnitude.

5.3.19 Income

Agriculture is the most adopted means of livelihood and as such it's the highest source of income in the area at 53.7% followed by livestock keeping and fishing 10.1% as shown on table 42 below.

Table 42. Source of Income/Sector

	Frequency	%
Agriculture	625	53.7
Animal husbandry	14	1.2
Fishing/Fish farming	118	10.1
Handicraft	25	2.1
Construction	14	1.2
Property rental	5	0.4
Trade	73	6.3
Civil service	25	2.1
Pension	2	0.2
Economic support: family friends	36	3.1
Economic support: Govt/NGO	6	0.5
Mining	8	0.7
No response	212	18.2
Total	1163	100.0

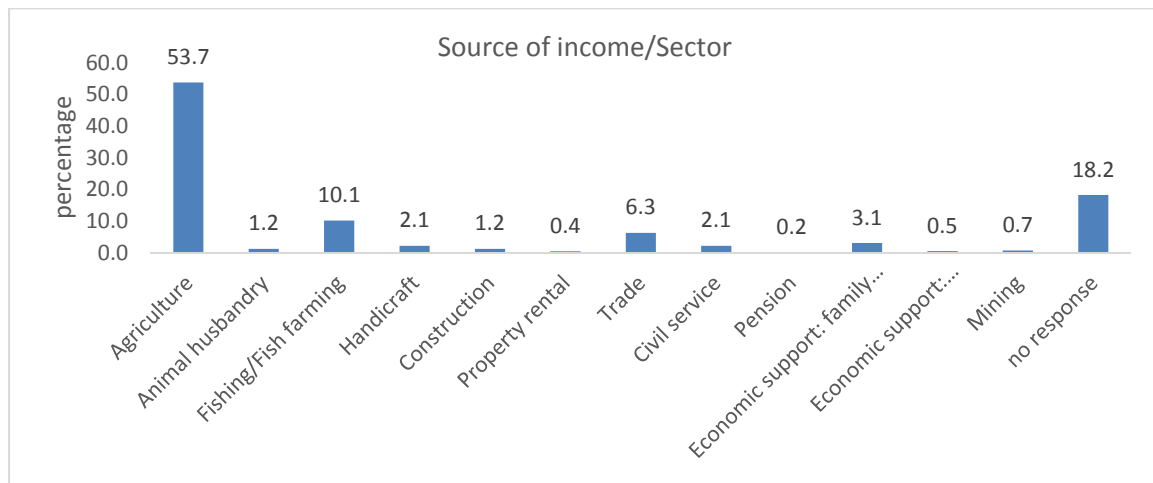


Figure 8 Source of income/Sector

Table 43. Average expenses of the household

Main Expenses	Week	Month	Year
House rental	2025	2440	17000
Rental of agricultural land	4000	2623	12208
Agricultural input	2108	5132	8960
Food	2899	8589.4	69997
Drinking water	423.4	367.4	6735
Health	1541.0	3314.3	17452
Transport	1130	3980.3	12206

Education	11107	18053.2	62014
Clothes		2250	16214

The average monthly income for the household head is Kshs. 5,200. The survey that was conducted during design indicated that farm incomes from crops the previous year was Kshs. 16,108 that translated to approximately Kshs.1, 300 per month. The average annual income from livestock and agricultural wages was Kshs. 13, 571(Kshs.1, 100) per month. This depicts that for the bigger populace crop production generate more income compared to livestock. However, it was noted overall annual income was generally low. Only a small percentage 4% indicated have permanent jobs with an average income of Kshs. 61,019, while over a quarter 28% had small-scale business with average annual income of Kshs. 15,566. By and large, farming and other agricultural related activities are more important as a source of income for the local community and should be given more emphasis for the development of the area. Most expenses go to education, which has a mean of Kshs. 8,538 per month.

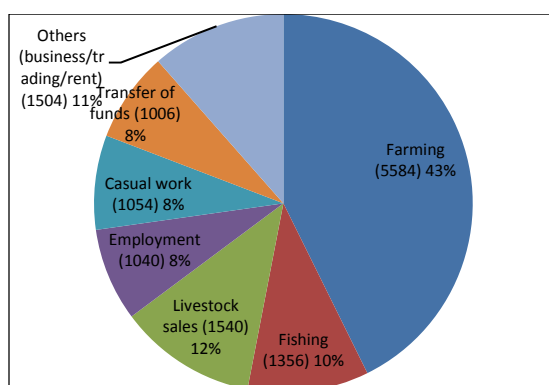


Figure 9. Average monthly income per Household by economic activity
Source. Field Assessment

Table 44. Household Equipment: responses

	Frequency	%
Bicycle	724	62.3
Mobile phone	797	68.5
Motorcycle	53	4.6
Tractor	6	0.5
Truck	6	0.5
Motor Pump	7	0.6
Car	15	1.3
Radio	662	56.9
Total	2270	195.2

5.4 CHALLENGES AND NEEDS IN THE PROJECT AREA

Prioritization of needs and assessment of coping mechanisms was conducted to assess the values locals attached to various issues, specifically agriculture. From the interviews conducted, food is the major challenge/need accounting for 30% of all the needs. This is closely followed with education, incomes and health respectively.

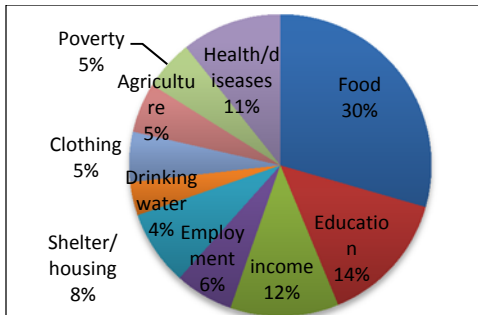


Figure 22. Prioritization of needs in the project area
Source: Field Assessment

Residents in the project area have adopted various strategies to cope with each of the above needs as follows:

- Health- visiting the local clinic, taking medicine or going to a doctor, using Herbal medicine, using NHIF funds, maintaining healthy standards and doing without medicine when on falls sick
- Education - Seeking assistance from schools, letting children dropout of school, borrowing from friends/relatives, getting Bursaries/community raise fees/harambee, assistance from charitable institutions and paying fees in bits
- Employment - doing casual work
- Food - engaging in farming, Buying food, relying on relatives, diversifying crops grown, growing resistant crops and depending on food aid form GOK and NGOs
- Poverty, Income and employment- engage in business activities or casual labour to generate income, Pray to God, foregoing non-basic necessities and borrowing from neighbours
- Other strategies are getting loans from society, engaging in income generating activities and relying on children and hand-outs from relatives
- Water - boil water, using untreated/unsafe water and searching long distances for water
- Shelter and housing - constructing more houses as a preferred strategy and living/sharing their houses with their livestock.
- Agriculture (labour, ploughing and inputs shortages in farms) - use hand digging, local seeds and relying on family labour.
- Clothing - buy second hand clothes.

5.5 VILLAGE HOUSING, FACILITIES AND SERVICES

The quality of housing, village facilities and services are poor. The typical house is raised off the ground, has flooring and walls constructed of rough-hewn wooden planks, and thatch or zinc roofing. The house comprises a living room (often used for sleeping quarters at night), one to two bedrooms and an open or detached kitchen often serving also as a dining room. Average house area is 56.8m², 58.2m² and 47.4m². Households do not have reticulated water systems.

6 PROJECT IMPACTS

The project area in terms of the area needed for the construction and rehabilitation of dykes is **102 Hectares (250 Acres)** in size. This chapter details the impacts of this land take. It describes the project's efforts to minimize resettlement, and then provides an overview of impacts on households, public facilities, public access, and host communities.

6.1 EFFORTS TO MINIMIZE RESETTLEMENT

The project has minimized the scope of physical and economic displacement associated with the Project through the following actions:

- Aligning the dykes within the existing corridor

6.2 HOUSEHOLDS

Impacted households comprise “resident” households and “non-resident” households, each of which are described below.

6.2.1 RESIDENT HOUSEHOLDS

Resident households are those owning houses in the proposed dyke area. These households are physically displaced and are eligible for resettlement or relocation. The Project has identified **1,163 Household Heads**, with a total population of **4,482 Persons**. These households live primarily in rural homesteads scattered throughout the Footprint. This section describes the structures, farm fields and businesses of resident households, and defines the difference between resettling and relocating households.

6.2.1.1 Structures

Each resident household possesses a set of completed structures, including residential and non-residential buildings. A total of **225** residential structures will be affected as a result of the project and **121** non-residential structures.

Table 45. Type of Structures Affected

	#	%
Latrines	56	4.8
Well	5	0.4
Shower room	20	1.7
Fence	9	0.8
Residential	255	21.9
Grain store	10	0.9
Animal shed	18	1.5
Temporal business shed	2	0.2
Septic Tank	1	0.1
No Structures Affected	787	67.7
Total	1163	100.0

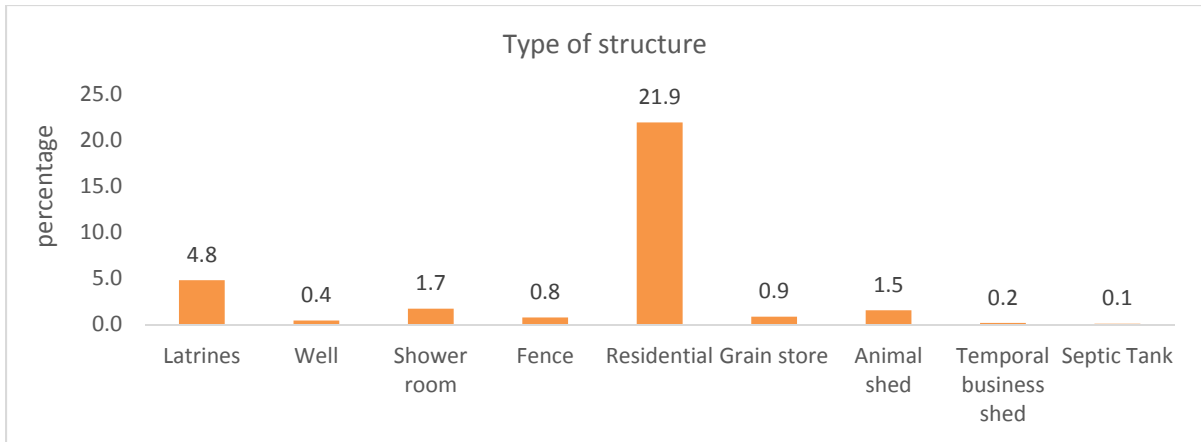


Figure 23 Type of Structures Affected

6.2.1.2 Cropped Fields

Resident households cultivate an average of 3 fields. They also possess fallowed landholdings, which are in most cases not cultivated due to the perennial flooding in these parcels of land.

6.2.1.3 Resettling Households and Relocating Households

These households are eligible for relocation compensation, if they so choose, subject to verification of their alternative residence by the Resettlement Committee.

6.2.2 Non-Resident Households

Non-resident households are those households residing outside the dyke area but that possess land, usage rights or businesses within the area. These households are economically displaced by the Project. This section describes the structures, farms held by non-resident households.

6.2.2.1 Structures

As a general rule, non-resident households do not possess any completed structures in the Area (i.e., lean-to, farm sheds, grains stores, latrines, wells etc).

6.2.2.2 Graves

There are a number of graves within the proposed project Area that will be affected as a result of the project. A total of **505 gravesites** were found to be within the project area during the census survey as shown in the **table 46** below.

Table 46. Graves in Project Area

Gravesites	#	%
1	159	13.7
2	248	21.3
3	26	2.2
4	17	1.5
5	16	1.4
6	12	1.0
7	7	0.6

8	7	0.6
9	1	0.1
10	7	0.6
12	2	0.2
14	1	0.1
15	1	0.1
20	1	0.1
Total	505	43.4

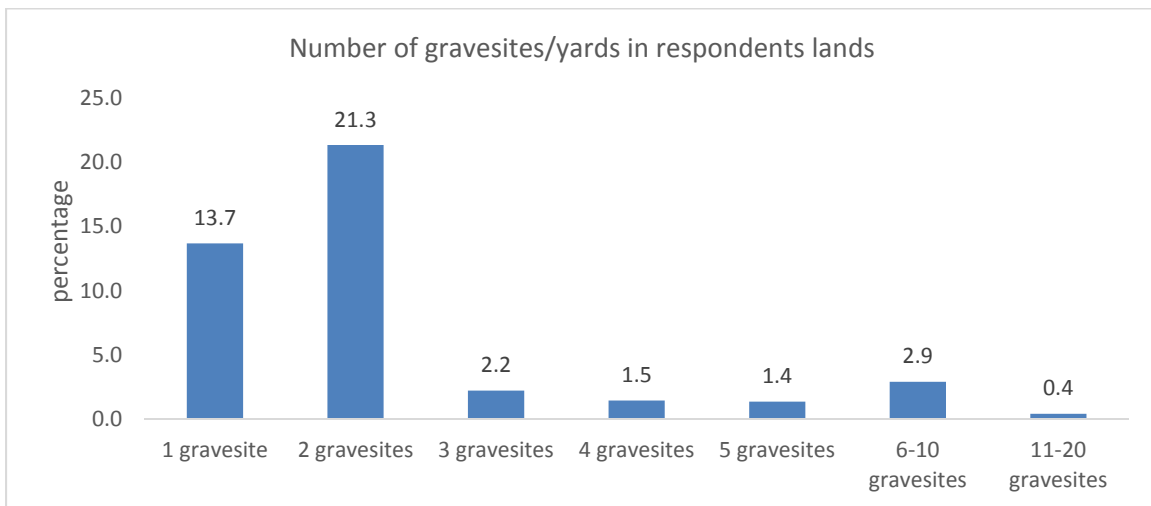


Figure 24 Graves in Project Area

6.2.3 SUMMARY OF IMPACTS TO HOUSEHOLDS

The Project identified 1,163 Project Affected Households, with a total population of 4,482 impacted persons. These PAHs:

- Own a total of **225** structures (residential structures), as well as **121** non-residential structures in the Dyke Area. The average household size is 6 based on the census survey hence 1,350 persons are affected in relation to loss of residence,
- Own businesses, comprising sand harvesting, brick making and canoe transport in the Dyke Area,
- Own cultivated fields (crops and trees),
- Own graves within the project site

6.2.3.1 Public Access

There are 3 traditional crossing points on both sides of the River that the local communities use to cross from the northern to the southern banks using canoes. These crossing points are likely to be affected by the dyke which may restrict access to these crossing points and hence affect the social networks in respect to communication.

The Project is aware of the traditional crossing points and network across the two sides of the River Nzoia. Restricted access of these crossing points by the dykes roads and footpaths may disrupt household access to productive assets and / or usage rights and / or livelihood capacities.

6.2.3.2 Summary of Impacts

Table 47 below outlines the impacts of the Project on land, crops, structures, access and businesses:

Table 47. Summary of Project Impacts

Impact	Impact by Project
Loss of Land	102 Hectares or 250 Acres
Dyke Footprint	102 Hectares or 250 Acres;- which is the total land that will be acquired for the dyke and affects agricultural land as well as residential land.
Loss of Crops	Cultivated land included variety of crops grown in the area, including: Banana, Citrus, Maize, Rice, Beans,
Loss of Structures	
Residential Household Structures	225 Residential Structures and 121 non residential
Loss of Access	Restricted, Denied or Loss of (3) traditional canoe crossing points
Loss of Graves	505 Graves
Loss of Business	Loss of brick making and sand harvesting ventures; loss of canoe transport businesses

6.2.3.3 Household Perceptions in relation to project and to available compensation and resettlement options

Majority of the PAHs are fully aware of the project (79.2%) and cited the local administration as the highest source of information regarding the proposed project as shown in tables below.

Table 48. Aware of the Flood Mitigation/Dyke project

	# of PAHs	% of PAHs
Yes	921	79.2
No	123	10.6
Did Not Know	119	10.2
Total	1163	100

Table 49. Main source of information about project

	# of PAHH	% of PAHH
Family Members	148	12.7
Neighbors	161	13.8
National or County Government	160	13.8
Local Authorities	517	44.5
Public Baraza	29	2.5
Did Not Know	148	12.7
Total	1163	100.0

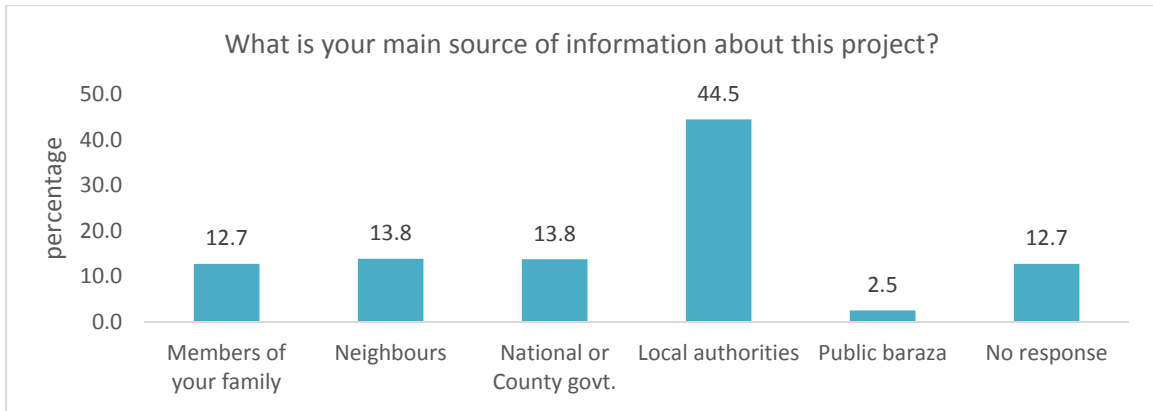


Figure 25 Main source of information about project

Majority of the PAHs (76.8%) are aware that they would have their land occupied (land loss) as a result of the project.

Table 50. Awareness that land occupied could be affected by this project

	# of PAHHs	%
Yes	893	76.8
No	130	11.2
Did Not Know	140	12.0
Total	1163	100

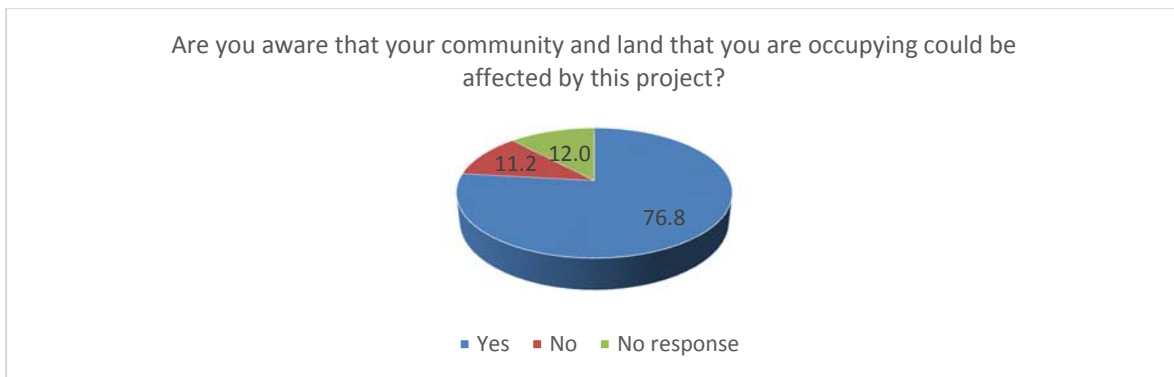


Figure 26 Awareness that land occupied could be affected by this project

There is a high preference by the Project Affected Heads of Households for cash compensation for loss of land as opposed to land for land as shown in the table below. PAPs also prefer to be compensated in cash for crops and structures lost as a result of the project.

Table 51. Preferred Compensation-Structures and Land Loss

	# of PAHHs	% of PAHHs
Resettlement by the project in a new place of residence in the same location/village	22	1.9
Resettlement by the project in a new place of residence in a different location/village	12	1.0
Cash compensation for loss of residence	700	60.2
Did Not Know	429	36.9

Total	1163	100.0
--------------	------	-------

Table 52. Preferred Compensation-Agricultural Fields

	# of PAHHs	% of PAHHs
Replacement fields on new agricultural land	74	6.4
Monetary compensation for the value of part of your agricultural plots it has lost to the project	901	77.5
Did Not Know	188	16.2
Total	1163	100.0

Table 53 below shows that 86% of the PAHHs have other parcels of land other than the one affected by the project with 14% not having alternative land. This fact is what informed the decision by RAP consulting team to recommend and consider cash for land compensation. The remaining 14% of the PAHs who do not have other parcels of land will be able to purchase land from the same area and more importantly from their relatives who indicated willingness to sell land for their kinsmen.

Table 53. Households with other parcels of land

	# of PAHHs	% of PAHHs
Number of Households affected households with other parcels of land	1000	86%
Number of Households affected households without other parcels of land	163	14%

Most of the PAHHs did not require any resettlement assistance during the resettlement and relocation process even though 26.7% requested for transport during relocation as shown below.

Table 54. Resettlement Assistance

	# of PAHHs	% of PAHHs
Assistance for the transportation of the household's goods to the resettlement site	310	26.7
Personalized assistance for specific transportation of one or several members of the household due to their health conditions	98	8.4
No assistance	523	45.0
Did Not Know	232	19.9
Total	1163	100.0

7 COMPENSATION STRATEGY

This Chapter outlines the compensation strategy defined in the negotiations. It consists of the following sections:

- Project goals and objectives with respect to the Project and resettlement compensation
- Compensation eligibility – i.e., the types of impacts that are eligible for compensation
- Compensation entitlements – i.e., the compensation available for eligible impacts.

7.1 SUMMARY OF MAIN ISSUES AND PRINCIPLES

Several legal, socio-economic and administrative procedures are fundamental to this RAP:

- The constitutional requirement to resettle displaced people
- All persons with property affected by the Project before an agreed entitlement cut off date are compensated
- Facilitating replacement arable land through the traditional system
- Monitoring both agricultural livelihood restoration and any emergent hardship
- Training and community development to restore agricultural income and create alternative sources of income
- Applying a gender strategy that ensures accessibility and representation of women in all aspects of the resettlement
- Monitoring and assisting vulnerable persons during life of project.

7.1.1 Project Objectives

7.2 ELIGIBILITY

This section summarizes the eligibility policy defined by the Project, outlines the legal basis of that policy, and provides an overview of activities undertaken to implement it.

7.2.1 ELIGIBILITY POLICY

Impacted persons / households / communities are eligible for resettlement compensation if they have a “legitimate interest”⁵⁶ in immovable assets in the Area that were in place (i.e., planted or constructed) as of the entitlement cut-off date established by the Resettlement Negotiation Committee.

Immovable assets comprise:

- Crops – food, cash and tree crops

⁵⁶ “Legitimate interest” is not synonymous with ownership. Even those Project-affected persons / households / communities with no recognizable legal right or claim to the assets they are occupying or using are considered eligible for resettlement assistance.

- Land – cultivated land, homestead land,
- Structures – household residential structures (for living, sleeping, cooking, storing) and nonresidential structures
-

Immoveable assets that were in place as of the entitlement cut-off date comprise:

- Completed immoveable assets – assets that were fully planted or constructed as of the entitlement cut-off date
- Incomplete immoveable assets – assets that were only partially planted or constructed as of the entitlement cut-off date.
- Immoveable assets that were constructed or planted after the entitlement cut-off date are not included in compensation calculations.

The types of impacts identified as eligible for compensation are:

- Loss of crops and trees
- Loss of land
- Loss of structures
- Loss of graves
- Loss of access
- Loss of business especially brick making and canoe transport activities at river crossing points.

Within a household, the “legitimate interest” in immoveable assets is usually held by a single member: the household head. Through tradition and family court practice, the household head is typically the most senior male member of the household. In some instances, the “legitimate interest” may be held jointly e.g. by the household head and his/her spouse) or by other members of the extended family. When the household head dies, the Project insists that other household members get a court order that identifies the inheritor.

7.3 IMPLEMENTATION

The Project has inventoried all immoveable assets located in the Project Area as of the entitlement cutoff date, namely: crops, land, structures and access.

Each entry in the Project’s inventory was verified by the responsible owner, specifically:

- Every crop survey was verified by the responsible farmer and witnessed by a chief farmer or his/her designate
- Every cadastral survey was accompanied by the responsible landlord or his / her designate
- Every structure survey was verified by the responsible owner and a representative of the Resettlement Committee

The inventory of immoveable assets forms the basis for compensation of Project-affected persons / households. In conjunction with compensation rates (below), the inventory determines the compensation entitlement for each impacted person / household.

7.3.1 Entitlements

The RAP provides a broad range of appropriate and fair compensation and assistance for eligible impacts. All of the provisions were negotiated and agreed to by the Resettlement Committee.

This section outlines the compensation entitlements available for loss of crops, loss of land, loss of structures, loss of access, and loss of business. These entitlements are summarized in **Table 12**.

With respect to compensation in cash, all compensation rates, compensation calculations, and compensation payments are in the legal currency of Kenya: the Kenya Shillings.

7.3.2 LOSS OF CROPS

The RAP compensates for all crops located in the Project Area that were planted as of the entitlement cut-off date. Specifically, the RAP pays compensation to those who have the right to consume, give away, or sell produce of the land.

Crop compensation rates calculation and payment of crop compensation. The agreed rates for 2015 have been used in the calculation of compensation for all crop losses. The agreed rates reflect market prices, costs of production and other factors.

Compensation for crops will be done on the basis of the requirements of Kenyan laws, which require that crops be valued based on the values provided by Ministry of Agriculture. However, there are no crops affected by the project along the project corridor with only trees affected and the valuation exercise is illustrated below.

7.3.2.1 Non-Perennial Crops

In situations where the farmer cannot be given sufficient notice to harvest his/her crop, compensation will be paid based on the market value of the non-perennial crop. These rates are based on the following data collected during the 2015 socio-economic baseline study when preparing this RAP:

- Average yields and prices for typical crops grown in the project area:
 - The individual crop yields used in this calculation represent “good harvests” as reported to the socioeconomic team in meetings in the villages,
 - Crop prices used in calculations were taken from results of the visits to the central market in along the project town

7.3.2.2 Perennial Crops

The calculation of the value of perennial crops for compensation is also based on the market rates and includes the type of crops, the age and size or area under which the crops are grown. These factors have been used as the basis for the calculation of perennial crop loss.

Compensation rates are factored for the following stages of tree development:

- Seedling,

- Young, not productive,
- Young productive,
- Mature.

The calculation of the full replacement value considers not only of the product of the crop over one year, but also the cost of re-establishing the crop (seedlings, soil preparation, fertilizers, others), as well as the lost income during the period needed to re-establish the crop. Compensation rates will be calculated in compliance with the full replacement value principle, based on the following: If:

- **V:** Average market value of the produce of one tree for one year
- **D:** Average period of time required to re-establish the tree to an adult production level, in years
- **CP:** Cost of planting (seedling, soil preparation, initial fertilization)
- **CL:** Cost of the labor required to maintain the crop during the period of time needed to re-establish it to its previous production level.

The compensation amount C for one tree is determined by application of the following formula:

$$C = V \times D + CP + CL$$

7.3.2.3 Calculation of Crop Compensation

With the results of the crop survey, compensation for a given field can be calculated using either unit rates or area rates. The area rates reflect crop density recommendations from the Ministry of Agriculture, Livestock and Fisheries. The decision of whether to use unit rates or acre rates was made by the crop surveyor in the field, in consultation with the impacted person and chief farmer of the area.

7.3.2.4 Payment of Crop Compensation

The RAP pays crop compensation to impacted persons in a one-time, lump-sum payment, for each field measured and assessed prior to crop destruction.

The RAP pays crop compensation to the most directly impacted person, namely the planter / owner of the crop itself, whether they be a landlord, sharecropper or caretaker. Payees are then responsible for sharing the compensation with all others with a legitimate interest in the crop, namely any interested landlords, sharecroppers and caretakers. In fact, payment is contingent on the sharing of compensation among those with a legitimate interest, according to the terms of any caretaking and sharecropping contract. A grievance mechanism is in place to resolve disputes is part of the RAP report.

This RAP spends much effort, on a case by case basis, to ensure that caretaking and sharecropping contracts are respected when crop compensation is issued. Thus far, the RAP has assisted contending parties to resolve all substantial complaints regarding the division of crop compensation.

The RAP has limited impersonation by requiring each compensatee to be photographed prior to receiving his / her compensation at the bank, and has recommended that the project hires locally knowledgeable persons to attest each applicant for payment is indeed the entitled person.

After payment of crop compensation, and prior to destruction as much as is practicable, the RAP allows crop owners to salvage (harvest or transplant) their crops.

The RAP provides for a money management course for all those receiving cash compensation for structures or crops. To facilitate attendance, the RAP also provides a training allowance to each compensatee: i.e. payment for attendance of this course. The course will teach micro-enterprise organization, SWOT analysis, resource mobilization, money management, sourcing and managing credit, costing / pricing and marketing.

7.3.2.5 Ineligible Crops

Crops planted within the Area after the entitlement cut-off date of 30 March 2015 are not eligible for compensation. Non-eligibility is a constant source of friction, as many farmers aggressively demand that crops planted after the entitlement cut-off date are included in compensation calculations. The determination of whether crops are ineligible is made in the field by the crop survey teams, in consultation with the farmer and Chief Farmer.

7.3.2.6 Rate Update and Market Value Monitoring

Compensation rates for crops will be updated on a yearly basis based on a fresh market survey at “lean” season (January) and after harvest (May). The market survey will include price monitoring in the project area, confirmed by interviews with potential farmers.

7.3.3 LOSS OF LAND

This RAP recognizes that loss of land is of critical importance for impacted persons / households, particularly those with land-based livelihoods, and has devised a strategy to ensure the provision of replacement land in kind. OP 4.12 specifies either direct replacement of land or provision of full replacement cost, along with rehabilitation measures, in order to restore livelihoods. Because the land will not be directly replaced, compensation has been based on market value, productive potential, or equivalent residential quality.

In principle, the replacement cost of agricultural land used in this RAP “is the pre-project or pre-displacement, whichever is higher, market value of land of equal productive potential or use located in the vicinity of the affected land, plus the cost of preparing the land to levels similar to those of the affected land, plus the cost of any registration and transfer taxes”

The project area has active market for land and hence replacement cost of affected land, in either was based on fair market value (plus transaction costs and, in rural areas, any preparation costs). The RAP consultants engaged private and independent real estate

agencies, banks to determine market prices and to evaluate the adequacy of administratively set compensation.

Cash compensation was considered appropriate for the land because of the marginal land takings that was experienced during the census survey. The census found that small portions of land parcels were expropriated hence the impact was likely to be marginal and replacement of small parcels is likely to result in fragmented holdings, cash compensation at prorated replacement cost is enough.

7.3.3.1 Replacement of Homestead Residential Plots

For resettling persons / households who are losing their residential land (i.e., homestead plots) within the Area, the RAP provides for a full replacement of lost plot via cash compensation.

7.3.4 LOSS OF STRUCTURES

The RAP compensates for all structures (residential or non-residential) located in the Project Area that were fully or partially constructed as of the entitlement cut-off date.

This section describes the following:

- Structure compensation rates
- Calculation and payment of structure compensation (i.e., either in cash or in kind)
- Specific provisions for the potentially vulnerable and for ineligible structure
- Replacement strategy for institutional structures

7.3.4.1 Structure Compensation Rates

The RAP consulting firm retained a registered professional valuer to define replacement rates for all types of structures found within the Dyke Area, in accordance with Land Valuation Act.

Replacement rates represent the replacement value of the structure plus transaction costs, with no consideration of depreciation or the value of salvaged materials.

The compensation rates meet the definition of full replacement value as specified by the LVA. The LVA defines replacement rate as the total current market cost of materials to build its replacement to the original area and with equal or better quality than the affected structure, or to repair a partially affected structure, plus associated site acquisition and preparation costs. Costs of transporting materials to the construction site, labor, construction fees, registration costs, and transfer taxes are included in the rates. The calculation of compensation rates does not consider depreciation of the asset and value of the salvage material.

7.3.4.2 Calculation of Structure Compensation

With the area measurements of the structure survey, the replacement value for any given structure that existed in the Dyke Area as of the entitlement cut-off date can be calculated using the unit rates listed above. Where a range of values is provided, the professional valuer determines what the rate will be for any specific structure.

As a policy, all completed residential structures would be compensated at the highest possible rate listed above: that of sandcrete block, rendered and plastered. Given the vast majority of residential structures in the Dyke Area are made of “lesser” building materials, this decision has meant a significant boost in the amount of compensation for residential structure owners.

For all non-residential structures and for all incomplete (i.e., partially constructed) structures that existed in the Dyke Area, as of the entitlement cut-off date, owners receive cash compensation calculated at the structure’s true replacement value.

Cash compensation of residential houses will apply to the following situations:

- PAPs in Categories (residents of the Project-Affected Area and structure owners-landlords) who will be physically displaced

The replacement value of structures has been investigated during the Socio-Economic Baseline Survey. Structures in the project corridor are not numerous and were valued on case-by-case basis. Replacement costs was calculated based on actual cost of construction/re-establishment of a structure of at least equal quality as the affected structure.

7.3.4.3 Non-Residential Structures

Non-residential structures include latrines, sheds and verandas of various kinds, dish racks, kitchens, etc. Except for pit latrines, these structures are usually almost entirely moveable, and as long as the owner will be able to salvage the materials, the loss will be very limited. The compensation at full replacement value is therefore mainly intended to cover the labor needed to dismantle and re-establish the structure elsewhere. Non-residential structures that would not fall in one of the above categories will be valued and compensated on a case by- case basis.

7.3.4.4 Payment of Structure Compensation

For completed residential structures that existed in the Dyke Area as of the entitlement cut-off date, owners have the option to choose either resettlement or relocation, as defined below:

Resettlement – compensation in which owners receive a replacement residential structure built in sandcrete block within a resettlement village located within the jurisdictional area of their village

Relocation – compensation in which owners receive a lump-sum cash payment for their existing residential structures based on the replacement rate for sandcrete block multiplied by the area measurement of their structure. This rate takes into account market values for structures and materials. The RAP provides an opportunity for all persons / households to salvage their structures prior to destruction, and works closely with those resettling owners and their spouses to select a resettlement house and plot and to assist with moving.

7.3.4.5 Ineligible Structures

Structures constructed within the Dyke Area after the entitlement cut-off date of 30th March 2015 are not eligible for compensation. The determination of structure age was made in the field, during the structure survey, by the registered professional valuer, after consultation with the owner / owner's household and the two representatives of the Resettlement Committee who accompany the building valuation team full-time.

For each ineligible structure (or set of structures), the RAP provides for hand-delivery by the Project a letter to the owner informing that their structures are not eligible for compensation and must be removed from the area, and if not removed may be torn down after a designated date.

7.3.5 Graves

There are **505** graves in the project area that was observed and that would warrant compensation. The graves will be relocated using the traditional and customary methods for appeasing the dead. Compensation of the relocation of graves will include cash mainly to support the traditional relocation methods including slaughtering of livestock and transport of the remains of the dead exhumed. The local communities have accepted to relocate the graves for as long as cost associated with the relocation are paid for by the Project.

7.3.6 Loss Of Access/Social Networks

The proposed dykes are likely to block and restrict access to the traditional crossing points by canoes from the left side of the banks of the river to the right side. With respect to the displacement of traditional access crossing points by canoes, the project has recommended that during the dyke construction, these crossing points must remain intact in order to have the interactions and networks on both sides of the dykes continued.

8 LIVELIHOODS AND COMMUNITY DEVELOPMENT

This Resettlement Action Plan (RAP) has defined a number of livelihood enhancement initiatives to help Project-affected persons / households re-establish their livelihoods or create new ones, and long-term community development initiatives to assist communities, local and County government in the Project Area establish social programs and infrastructure.

8.1 EMPLOYMENT

The RAP following consultation with PAPs and other stakeholders has publicly committed to employing as many local people as possible at all stages of the Project in order to ensure maximum local capture of the economic benefits of the Project. To this end, it has introduced a proactive local recruitment policy, with a complementary skills training program.

This section describes the local employment program, focusing in turn on unskilled labor, semi skilled labor and craft, apprentice or artisan labor.

8.1.1 Unskilled Labor

Prior to the commencement of construction, the Project will establish an unskilled labor pool of local people to meet unskilled labor requirements.

The Project will work with community leaders to establish a population-based quota system consisting of an agreed percentage of unskilled jobs to be allocated through the labor pool to every local community in and around the Dyke Area. Then, the Project will communicate its plan to employ as many local people as possible throughout the “local” area and solicited applications from interested locals.

All interested local applicants will obtain verification from their respective community leaders that they were legitimately “local”. The Project will then screened verified applications and identified a short-list of applicants consistent with the quota system. These verified, short-listed local applicants will be asked to undertake a very basic skills test and a “fit for work” medical examination, and were enrolled in a three-week work-orientation training program.

Successful graduates of this program from the unskilled labor pool, will be offered employment by the Project and contractors on an as-needed basis. The Project will maintain a comprehensive data on each and every member of the unskilled labor pool, including training and work performance results.

8.2 MONEY MANAGEMENT

A series of money management and micro-enterprise development training courses for Project-impacted persons / households will be delivered as part of RAP implementation. The course is designed to help impacted persons / households apply compensation payments appropriately in support of sustainable livelihoods.

The course will consist of modules, delivered over a period. The modules are:

- Group formation
- Team building and leadership
- Roles and responsibilities of members of a group
- Introduction to micro-enterprise development
- Identifying the strengths, weaknesses, opportunities and threats of a micro-enterprise
- Mobilizing resources for micro-enterprise development
- How to start a micro-enterprise
- Sourcing credit
- Credit management
- Costing and pricing
- Marketing

All impacted persons / households are eligible to participate, and the Project will provide assistance, in the form of a small training allowance, to facilitate their participation.

8.2.1 Livelihood Enhancement and Community Empowerment Program

The census and socio-economic survey served as the basis for design of a Livelihood Enhancement and Community Empowerment Program (LEEP). The vision of LEEP is that of a high-impact, results-focused, sustainable livelihood enhancement and community development program, which focuses on economic growth, wealth creation, quality of life, and empowerment. The Program involves -targeted assistance in the near-term for impacted households to ensure the establishment of sustainable livelihoods and in the long-term for households, communities, and traditional council in the Project Area establish social programs and infrastructure to improve quality of life and promote community empowerment.

This section describes LEEP and is divided into the following sections:

- LEEP goals and objectives
- Targeting and beneficiary selection

8.2.1.1 Goals And Objectives LEEP

The goal of LEEP is to improve livelihood security and the quality of life of poor, vulnerable, men, women and children who are directly impacted by the Project as well as ensure households and communities in the Project Area have improved quality of life and enhanced opportunity.

Target groups comprise the following:

1. Households that are economically displaced by the Project
2. Households that are physically displaced and being resettled and / or relocated by the Project.

Implementation of LEEP will help ensure that, in the near future, the quality of life of

impacted peoples / households will be equal to or better than their current situation. Program objectives include the following, and are described further below:

- To enhance livelihood capacities of households
- To enhance human capabilities of households in health, nutrition, and education to improve the quality of life of men, women and children
- To enhance community resiliency and participation of resettled households.

Objective 1: To Enhance Livelihood Capacities

This objective seeks to enhance livelihood capacities of target groups through small and medium enterprise development, increased agriculture production, agri-business development, and vocational and technical skills training for employment for adults and youth.

The diversification of non-farm income generating activities as well as agriculture growth in the area are necessary to ensure food security, especially of the vulnerable relocated or resettled populations, and is critical to the enhancement of rural livelihoods and community resiliency. Food security defined as the availability (production / supply), access to (income) and utilization (adequate nutrition) of food. Unless there are rapid improvements in agricultural productivity as well as alternative livelihood creation and efficiencies, those displaced by the Project will remain vulnerable and impoverished.

To diversify and increase income, LEEP will promote income-generating activities and provide vocational and technical skills training in, for example, food processing and value added technologies, and training in small- and medium-sized enterprise creation and expansion to encourage development of viable businesses. LEEP will provide business development services to the existing groups identified in the livelihood survey as well as facilitate the creation of new small- and medium-sized enterprises.

Accelerated growth in agriculture will involve a transition to more intensive farming, applying increased inputs to farms, promoting crop integration, increasing crop diversification, and improving access to technical expertise, inputs, agricultural technology and credit. This will be undertaken through linking with the Lower Nzoia Irrigation Project (LNIP), which is another KWSCRIP implemented in the same project area. LEEP in collaboration with the LNIP will address food security and vulnerability factors, and provide training in areas such as improved farming techniques, soil fertility, natural resource management, participatory farm management, marketing, seed production and integrated pest management in order to increase food production and productivity for farmers. In order to save more food, LEEP will train farmers on post-harvest loss reduction techniques and on construction of household and community storage structures.

Targeting And Beneficiary Selection

LEEP will target the following groups:

- Households that are economically displaced by the Project
- Households that are physically displaced and relocated and / or resettled by the Project.

Participants will be selected based on a vulnerability assessment and also on willingness to participate in the program.

As discussed above, vulnerability of all target households will be assessed using a set of criteria that evaluate the likelihood of livelihood loss and economic need in areas of agricultural production, postharvest loss prevalence, income generation capacities, and quality of life.

Application of these criteria will enable the Project to rank households in target groups and communities according to their level of vulnerability and to identify their priority needs. Consequently, the households that rank as the most vulnerable will be selected to participate in the development assistance programs immediately followed by households that are the most willing to participate. The LEEP programs are available to all affected households.

9 VULNERABLE PERSONS

Communities who by virtue of gender, locality, age, physical or mental disability, economic disadvantage, or social and cultural status may require additional support or assistance and will need help adjusting to changes introduced by the project.

Assistance will take the following forms, depending on vulnerable people's requests and needs:

- Assistance in the compensation payment procedure;
- Assistance in the post payment period to secure the compensation money;
- Assistance in moving: providing vehicle, driver and facilitation at the moving stage, providing services for disabled or inform persons during moving, and;
- Health care if required at critical periods;
- Moving and transition period.

In the context of the Project, vulnerable people include:

- Rural agricultural producers, especial migrant workers and sharecroppers
- Children in difficult circumstances
- Persons living with HIV/AIDS
- Displaced communities, including communities affected by mining
- Disadvantaged women, particularly single mothers
- The elderly
- Physically challenged persons
- Persons suffering from chronic debilitating disease
- Victims of abuse and harmful traditional practices
- Unemployed, especially unskilled retrenched workers and the unemployed youth

9.1 VULNERABILITY IN RESETTLEMENT

The dominant risks of involuntary resettlement are:

- Landlessness
- Joblessness
- Homelessness
- Economic setback
- Increased morbidity and mortality
- Food insecurity/malnutrition
- Social disorganization
- Loss of common property

International experience is that vulnerable households are especially disadvantaged by resettlement, with increased rates of impoverishment, sickness and death. Resettlement especially stresses persons and households that are:

- Without adequate income or assets
- Without sufficient family support, e.g. children, without adults for support, elderly persons, without working adults for support, single parents, especially single mothers;

- Stigmatized due to gender, ethnicity, occupation, illness
- Highly dependent due to age (the elderly and children), mental or physical disability.

A reality of resettlement is that several risks are often realized simultaneously e.g. loss of land, employment, home, in a deteriorating social structure. This cascade tends to drive those already living close to the edge, over the edge.

9.2 VULNERABILITY IN THE AREA

By most measures of poverty in Kenya, Budalangi and the Project Area are poor. On the positive side, the extended family remains the foundation of family life. Individuals and households are tightly held in an extended family support network, unless they have behaved in an exceptionally anti-social fashion. Modally, the elderly and insane, single mothers, children who have lost their biologic parents remain integrated in their extended family. Nevertheless, there are vulnerable persons and households in the Dyke Area.

The most prominent categories are:

- Caretakers / sharecroppers with no buildings or fields of their own, or who are losing all the land they work.
- Poor female-headed-households without extended family support
- Elderly poor, especially those without extended family support

Table 55. Vulnerable individuals living in the household

	Male	Female
Persons aged 0-5 yrs	1	1
Persons aged 6-15 yrs	1.12	1.5
Persons aged 16-60 yrs	1.11	1.29
Persons aged >60 yrs	1.0	1.06

Table 56. Vulnerable individuals living in the household

	Observation	Mean	Standard Dev	Min	Max
Disabled/chronically ill persons	255	1.21	0.56	0	4
Young children <2yrs	130	1.65	2.01	0	20
Individuals >65yrs	184	1.47	1.92	0	22

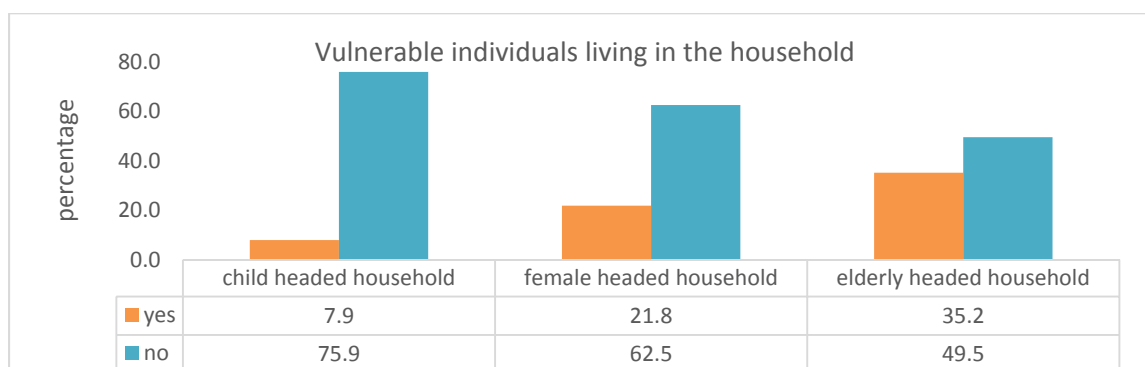


Figure 27 Vulnerable Individuals in Project Area

The tables above and figures show that in the project area, there are 7.9% headed households, 21.8% female headed households and 35.2% elderly headed households who all qualify to be categorized as vulnerable and thus needing special attention in this RAP.

9.3 ASSISTANCE MEASURES

The RAP has specifically identified and will register, and track the vulnerable by means of:

- Socio-economic survey and case work on household composition, assets, source of income, and food security

During RAP implementation, the Project will commence a household vulnerability tracking and monitoring project that: (a) assesses the socio-economic condition of compensated, resettled and relocated households; (b) identifies impacts of resettlement, relocation, compensation and mining activities; (c) identifies vulnerable households and those at risk of food insecurity and impoverishment.

10 PUBLIC CONSULTATION AND DISCLOSURE

10.1 INTRODUCTION

Public disclosure is the process, by which the Project sponsors formally provide an opportunity for the wide range of stakeholders, both within the country and internationally, to analyze and provide inputs on the Project. Public consultations and disclosure allow two-way communication between the Project sponsor and the public.

They are essential to gaining a comprehensive, mutual awareness and understanding, and in encouraging mutual responsibility, ownership and trust among all the stakeholders affected by the Project and other interested parties. Finally, public consultations also allow early exposure of potential problems and efforts to address them.

This Chapter describes public and stakeholder participation in the resettlement planning process, and has been divided into the following sections:

- Description of the main resettlement stakeholders
- Summary of resettlement-related consultation and disclosure activities, including a review of formal meetings and community outreach activities
- Overview of the resettlement negotiations process, including activities of the Resettlement

The Plan also includes a summary of public and stakeholder participation in the resettlement planning and implementation process, as detailed in subsequent sections of this Chapter, as well as the following:

- Records of public consultation and disclosure activities undertaken
- Description of public consultation, disclosure, and engagement activities undertaken by the RAP consultants, on diverse topics, including training, employment and procurement
- Records demonstrating that all Project stakeholders have been actively engaged in the consultation process.

This chapter further describes the consultation and public disclosure plans for the Project Resettlement Action Plan. The key objective of the public consultation and disclosure process for the RAP is to ensure the participation of the Project-affected people in planning and implementing activities associated with resettlement.

Accordingly, this chapter seeks to describe the public consultations undertaken and in so doing demonstrate that the Project has followed the public consultation and disclosure requirements for projects involving resettlement.

10.2 PUBLIC CONSULTATION AND DISCLOSURE

The World Bank provides guidelines on the public consultation and disclosure requirements for projects involving physical or economic displacement. These guidelines

provide a framework for public consultation and disclosure that involves (a) public consultation; (b) participation, and (c) the establishment of a process to address grievances of affected people. The World Bank require open, direct and culturally appropriate communications with the key Project stakeholders (including the directly affected population), local government officials, civil society and other representatives of the affected population. Project sponsors are required to ensure the following outcomes:

- Open, direct and timely consultations with the Project-affected population and other stakeholders throughout the entire Project cycle;
- Full disclosure to stakeholders regarding their options and rights pertaining to resettlement, loss of assets or access to assets, and compensation;
- Stakeholders full consultation on technology and economy feasible alternatives for the establishment of sustainable livelihoods;
- Documentation and consideration throughout RAP preparations of views and feedback from Project-affected people on land acquisition, valuation method, and compensation;
- Establishment of institutional arrangements that allow the affected population to communicate concerns to Project personnel throughout implementation, and that ensure that sectors of the population are fairly represented;
- Provision of a summary of the RAP (along with other Project documents related to land acquisition and compensation) in local languages and in all areas of the Project.
- According to international guidelines, the RAP Public Consultation and Disclosure Strategy must include the following specific steps:
 - Identify all stakeholders and Project impacts, including: (a) a census of the affected population, (b) inventory of the affected land and assets, (c) socioeconomic surveys and studies, and (d) analysis of those surveys and studies;
 - Inform representatives of affected people (i.e., local government, village leaders and local community organizations) of the Project plan and ask that they inform their constituents;
 - Brief all Project line managers and staff who will interact with affected people on the anticipated effects of the Project and measures to mitigate their impact;
 - After completion of the census and public notice of the eligibility cut-off date, arrange for the government to issue formal notice banning construction of new buildings or capital improvements in areas to be affected by the Project;
 - Prepare an information booklet with details on eligibility, principles of compensation and other entitlements, a timetable for implementation and all applicable grievance procedure;
 - Prepare and issue regular RAP information updates.

The following sections describe how the Project has adhered to these guidelines and provides descriptive accounts of public consultations with the affected population. A summary of public consultations with the affected communities appears in **Table 57**.

Table 57. Consultations with Project Affected PAPs

Location	Venue	Date	# of Participants
Nanjomi Village, Bunyala Central Location	Chief's Office	21 st March 2015 at 2pm	72
Nalera Village, Sisinga Sub Location, Bunyala West Location	Chief's Office	20 th March 2015 at 4pm	64
Makhoma Village for Lugale sub location in Khajula Location	Chief's Office	21 st March 2015 at 4pm	94
Bunyinyi Grounds, Mabinju Sub Location, Khajula Location	Chief's Office	23 rd March 2015 at 4pm	120
Igigo Village Bunyala East Location	Chief's Office	20 th March 2015 at 2pm	61

10.3 COMMUNITY CONSULTATIONS

Formal meetings with the affected villages were held with the Project RAP Team.

10.3.1 Initial Consultations and Socialization

Socialization meetings with the local communities included landowners, villagers and owners of cultivated plants. The intention of these meetings was to ensure that the communities understood the nature of the Project, the extent of land acquisition required, the need to relocate and the implications of this for the area. Simultaneously, consultations allowed the Project to understand the concerns of the communities, to identify their livelihood strategies, and the land related rights recognized by the communities.

10.3.2 Project Consultations

During Project implementation, the Project is committed to on-going consultation with a broad range of stakeholders. The objectives of such consultations are to: (i) seek partnership with stakeholders; (ii) engage stakeholders in selection of program priorities and program design (i.e., goals, objectives, activities, methodology, etc), and; (ii) provide stakeholders with opportunities to assess the Project.

Key issues that have emerged through consultation and disclosure process include:

- Employment – community desire and demand for a high level of employment, coupled with fear that the limited local skill base would result in exclusion
- Resettlement – impacts and compensation measures for economic and physical displacement
- Worker and job seeker inflows – negative consequences on social infrastructure (potable water, toilets, schools, health service, rents / housing) and social problems (crime, prostitution, disrespect of established authority)
- Environmental impacts – water, air and noise pollution
- Health and safety – proliferation of HIV/AIDS, over-burdened health facilities and traffic accidents.
- Restricted access to fisheries resources, water, canoe crossing points
- Back flow impacts
- Cultural impacts-relocation of graves

Table 58. Summary of Consultation Issues

	Key Issues Raised	Discussion
1	Land ownership - PAPs do not have titles to the parcels they are occupying (land not yet adjudicated) PAPs worried they might not be eligible for compensation	RAP team clarified to the community that according to the Land Act 2012 and WB OP 4.12, every PAP will be eligible for compensation
2	Extent of Acquisition - The project is only acquiring section of the PAPs land which makes it Partial acquisition, this also applies for the structures as majority will rebuild the houses within the same land parcels	RAP team explained that the extend of acquisition is 17m from the centre of the dyke and 10m for right of way for maintenance,
3	Double acquisition – Section of PAPs who will be affected by irrigation canal project and dyke project worried about double acquisition	RAP team clarified that all acquisitions that will be required for the projects will be adequately compensated as required.
4	Canoe crossings – PAPs were worried that once the dyke is constructed it is likely to block the crossings that they currently use to cross from one bank of the river to the other	This has been provided in the ESIA prepared for the project, the design will be required to make provisions for people using canoe crossings along the dyke
5	Backflow - River Nzoia backflows at the delta and floods homestead not protected by the dyke on both banks of the river	The issue will be considered further during the Dykes design review. Hydraulic modelling will be undertaken on the backflow concerns to determine the best available options of solving the challenge that is economical and one that does not significantly increase the overall costs of the project. Depending on the best available option chosen, safeguards issues will then be comprehensively addressed after the Dykes design review during the final RAP preparation.
6	Borrow pit sites – community raised concern on where the contractor will get soil for the works and that previous contractors have been getting soil from farms without reinstatement causing health hazards	Concern was noted in the ESIA prepared for the project, borrow pit sites will be properly identified and rehabilitated after borrowing.
7	Seepage from the dyke - the community complained of seepage from the dyke at various sections	The current design will resolve the seepage problem as it has proposed measures such as increasing the dyke base and use of concrete base in some sections.
8	Compensation mode and value of compensation –PAPs raised fears of possibility of not being compensated appropriately for the land parcels to be acquired	The project clarified that compensation will be made in a transparent manner
9	Relocation timings – PAPs expressed fear of timings of civil works and their actual relocation	Project clarified that PAPs will be given 3 months’ notice to

		vacate land before civil works commence
--	--	---

These concerns have helped inform Project development, project design generally and resettlement planning specifically.

10.3.3 Resettlement Stakeholders

Resettlement stakeholders are individuals, groups and organizations with a legitimate interest in the resettlement process, including – in particular – affected peoples, households, and communities, relevant traditional and political authorities, responsible government agencies, and interested civil society organizations.

For resettlement planning, the most important stakeholders are those persons and households directly impacted by the Project, viz:

- Persons and households with residential and non-residential structures in the Area (i.e., those physically displaced by the Project)
- Persons and households with productive assets, usage rights or livelihood capacities in the Area (i.e., those economically displaced by the Project)

These two groups are not mutually exclusive. For example, all physically displaced persons and households are also economically displaced because they all engage in cropping in the Area.

Disadvantaged groups within the above categories, including the destitute, infirm and women-headed households, receive specific attention to ensure care and obviate neglect.

10.3.3.1 Resettlement Consultation and Disclosure Activities

The Project has undertaken a comprehensive and formal negotiations process with representatives of Project-affected people / households and other stakeholders to arrive at mutually agreed compensation policies, procedures and rates.

This negotiations process – described in detail below - has been complemented by a series of consultation and disclosure activities, which both preceded and have paralleled negotiations. These activities have comprised both a series of formal meetings with community leaders and representatives, and an informal dialogue with stakeholders during the RAP preparation process.

Through such meetings and dialogue, the Project has ensured that the stakeholders have been engaged in the resettlement planning and implementation process, above and beyond their participation in the formal negotiations process.

This section provides a description of the formal meetings and informal dialogue undertaken by the Project.

10.3.4 Formal Meetings

Beginning March 2015, the Project held 4 formal consultation meetings regarding the

resettlement (Table 57). These meetings served to:

- Provide information about the Project to stakeholders
- Respond to questions and record concerns
- Notify stakeholders that a collaborative negotiation process would be undertaken to develop compensation policies, procedures and rates and that they should elect representatives to participate on their behalf (before April 2015)
- Build understanding and consensus around agreements reached by the Resettlement Committee (after April 2015).

10.3.5 Informal Dialogue

During the RAP preparation, the Consulting Team undertook an extensive informal dialogue with stakeholders throughout the resettlement planning process. In so doing, it built trust and facilitated open information exchange among stakeholders. The Team engaged with the community on a broad range of issues with local traditional and political leadership, impacted people / households, youth, and the general public.

In March 2015, the RAP consultants initiated a series of consultations on resettlement. The meetings were either community education meetings or focus group meetings. Community education meetings were held in a town or village and open to the public. The meetings provided residents with information ranging from resettlement negotiations to community development.

10.3.6 Resettlement Negotiations

The negotiations process lies at the heart of public participation in the resettlement planning and implementation process, and has:

- Entailed intensive, ongoing collaboration between the above stakeholder groups at the Resettlement Committee, through which it has successfully secured the participation of all people affected by the Project in their own resettlement planning and implementation
- Resulted in the agreement of the compensation principles, policies, procedures and rates described in the remainder of this document
- Served to alleviate pressures, fears and anxieties for both impacted persons / households and the Company
- Contributed to broad community support for the Project.

This section summarizes the resettlement negotiations process, and comprises the following:

- Description of the background to the process
- Summary of procedures guiding negotiations
- Detailed log of Resettlement Committee meetings

10.4 BACKGROUND

To lay the foundation for negotiations, the Consultants, in consultation with stakeholders, undertook the following:

- Discussed the Project, including anticipated impacts, with a broad cross-section of stakeholder groups
- Mobilized Project-affected people / households and traditional authorities to elect representatives to serve on the Resettlement Committee
- Invited political leaders, government agencies and non-governmental organizations with a potential interest in the Project to participate as observers at Resettlement Committee meetings.

10.5 KEY ISSUES

Key issues related to the negotiations process have included:

- Nomination of individuals to serve on the Resettlement Negotiation Committee
- Definition of a entitlement cut-off date
- Identification of crop compensation rates
- Rental payment on crop compensation
- Livelihood enhancement and community development
- Disclosure of the Resettlement Action Plan
- Resettlement implementation.

10.5.1 Definition of an Entitlement Cut-Off Date

The entitlement cut-off is a specific date (30th April 2015) agreed by Resettlement Committee. The date establishes a deadline for entitlement to compensation in the Area. Up to and including that date, structures and crops in the Area are eligible for resettlement assistance and compensation. Structures and crops established in the Project Area after the entitlement cut-off date are not eligible for resettlement assistance and compensation.

10.5.2 Livelihood Enhancement and Community Development

The Project has adopted a three-prong approach to livelihood enhancement and community development: aggressive local recruitment targets for both the project and its contractors, a money management course for all people receiving cash compensation from the Project, and a comprehensive Livelihood Enhancement and Community Empowerment Program.

1. **Local recruitment:** The project has introduced a proactive local recruitment policy, with a complementary skills training program, to ensure maximum local capture of the economic benefits of the Project. Specifically, the Project seeks to meet 100% of its unskilled labor needs with local recruitment. This target applies equally to all contractors. While specific targets have not been set for skilled recruitment, procedures are in place to support and encourage local capture of these positions.
2. **Money management course:** The Project will recruit a consulting firm to deliver a series of money management and micro-enterprise development training courses for Project-affected households. The course is designed to help impacted households apply compensation payments appropriately in support of sustainable livelihood enhancement. All impacted persons / households will be eligible to

participate, and the Project will provide assistance, in the form of a small training allowance, to facilitate their participation.

3. **Livelihood Enhancement and Community Empowerment Program:** The resulting program will focus on economic growth, wealth creation, quality of life, and empowerment. The first phase of the program involves targeted assistance for Project-affected households to ensure livelihood enhancement during resettlement and relocation.

10.5.3 Disclosure of the Resettlement Action Plan

As a next step in the public participation process, this Resettlement Action Plan will be released to the public in the Counties affected, Sub Counties and district and elsewhere in Kenya. Specifically, the Project plans to disclose this document in the following ways:

- Hosting public information sessions in local communities,
- Translating RAP summary into Kiswahili
- Distributing the summary to all Resettlement Committee representatives, along with a letter explaining where the Resettlement Action Plan is available for review
- Depositing the summary, as well as the complete document, with the national, County and district offices in Project Area,
- Publicizing the existence of this Resettlement Action Plan in the national and County media, the means to access it, and the establishment of a 60-day period for registration of comment
- Placing the summary and document on the MEWNR's website.

The Project will record and tabulate all comments received. The Project will report on and respond to the comments received in a timely manner.

As part of these disclosure activities, this Resettlement Action Plan will be presented formally to the National Land Commission (NLC) for review and approval. The NLC is national government's designated arbitrator for land development-related compensation.

10.5.4 Resettlement Implementation

Working with the Project Management Unit and Project-affected persons / households, the Resettlement Committee oversees implementation of resettlement, to ensure that the agreed policies, procedures and rates are applied fairly.

It is important to note that Project impacts (e.g., loss of crops) have been in all instances preceded by an agreement with the Resettlement Negotiation Committee regarding appropriate compensation, as documented in the minutes kept of all Resettlement

10.5.5 Negotiation Committee meetings

Upon conclusion of resettlement, the Resettlement Negotiation Committee will conclude its work. A consultative liaison committee will then be formed with broader stakeholder representation to provide a structured and sustainable consultation mechanism for the life

of the Project. The committee will cover all communities within the operational area of the Company and will be responsible for addressing all issues that arise. In addition, the committee will, as one of its principle purposes, be significantly involved in the ongoing evolution and implementation of the Livelihood Enhancement and Community Empowerment Program.

10.6 CONCLUSIONS

This chapter has described the Project Resettlement Program's substantial commitment to community consultations in a wide range of areas, including land acquisition and resettlement, village layout, house design and allocation as well as various issues associated with the resettlement process.

The Project commitment to working with the resettlement-affected communities, whether through village government, the resettlement and development committees, or directly with the communities, has seen progressive development of the capacity of the communities and relationships with the Project. The outcome—more capable, demanding partners—has in many instances involved more community demands and increased Project commitments (human resources, budget).

Going forward, the Resettlement Program will maintain its commitments to consultation with the resettlement-affected communities. The Resettlement Team will work with different partners as the resettled communities strengthen village governance and establish new bodies to manage the new villages. As the Project moves forward and the resettlement-affected communities become re-established, there will be a greater focus on ownership and responsibility.

11 GRIEVANCES AND DISPUTES

11.1 LIKELY TYPES OF GRIEVANCES AND DISPUTES

In practice, grievances and disputes that are most likely during the implementation of a resettlement program are the following:

- Misidentification of assets or mistakes in valuing them;
- Disputes over plot limits, either between the affected person and the Project, or between two neighbors;
- Dispute over the ownership of a given asset (two individuals claim to be the owner of this asset);
- Disagreement over the valuation of a plot or other asset;
- Successions, divorces, and other family issues, resulting in disputes between heirs and other family members, over ownership or ownership shares for a given asset;
- Disagreement over resettlement measures, for instance on the location of the resettlement site, on the type or standing of the proposed housing, or over the characteristics of the resettlement plot; and
- Disputed ownership of a business (for instance where the owner and the operator are different persons), which gives rise to conflicts over the compensation sharing arrangements.

11.2 MANAGEMENT MECHANISM

It often appears that many grievances derive from misunderstandings of the Project policy, or result from neighbor conflicts, which can usually be solved through adequate mediation using customary rules. Most grievances can be settled with additional explanation efforts and some mediation using customary disputes settlement mechanisms:

- Through explanations (for instance explain in detail how the Project calculated the complainant's compensation and that the same rules apply to all); or

- Through arbitration, resorting to elders or individuals well regarded by the community and external to it.

In contrast, resorting to the judicial system often results in long delays before a case is processed, may result in significant expenses to the complainant, and requires a complex mechanism, involving experts and lawyers, which can fall well beyond the complainant's control, and be counter productive to him/her.

11.2.1 National Land Commission Grievance Mechanism

The Land Act 2012 and National Land Commission Act 2012 obligate the NLC to manage grievances and disputes related to resettlement or land amicably. NLC will be expected to arbitrate or negotiate with PAPs or landowners that have any grievances concerning their compensation. The cascading structures they put in place are also expected to take up this responsibility.

11.3 STRUCTURES FOR GRIEVANCE MANAGEMENT

This RAP proposes that the SCRCC, LRCCs and VRCC provide this function on a transitional basis until NLC is fully operational and clear structures defined.

SCRCC/LRCCs/VRCC structures will act as mechanism of grievance management. SCRCC will be based at the sub County level while LRCCs will be based in each location. The VRCC and LRCCs will be the first points of contact in grievance management system.

These committees will seek to resolve PAPs issues quickly in order to expedite the receipt of entitlements, without resorting to expensive and time-consuming legal process in the Environment and Land Court⁵⁷ or high court that may delay the implementation of the project. Appeals to the court will only be occasioned if the grievance procedure fails to provide a result.

11.3.1 Process Procedures of Lodging Complaints

- SCRCC /LRCCs/VRCCs will inform PAPs of their losses and entitlement.
- If satisfied, the PAP claims resettlement payment directly from NLC⁵⁸. If dissatisfied or the PAP does not clearly understand the entitlement/any aspect of the resettlement plan, s/he approaches the LRCC for clarification.
- The LRCC makes a note and explains the unclear issues to the PAP in accordance with the RAP. If the issue(s) are resolved, the PAP collects the payment from the paying authority, NLC⁵⁹. If not resolved, PAP moves to the next step.
- PAP will fill a specifically pre-designed complaint form and append his or her signature and formally submit it to LRCC office; or LRCC documents the complaint on behalf of the PAP. The LRCC members will assist those who cannot fill up the forms.
- A copy is maintained by LRCC and another copy passed to SCRCC.
- LRCC attempts to find a solution through arbitration, explaining, settling, or facilitating consensus dialogue.
- If not successful LRCC assists PAP to fill a complaints form appended with his/her signature and formally submits to the SCRCC.
- The DRCC holds a session with the aggrieved PAP and minutes recorded.
- SCRCC attempts to find a solution through arbitration, explaining, settling, or facilitating consensus dialogue. If resolved, SCRCC approves and the PAP collects his/her entitlements from NLC.
- If deemed necessary by the SCRCC, the case will be re-investigated and necessary corrective measure undertaken. **Figure 28** below show schematically how the grievances will be addressed.

⁵⁷ This is court that is proposed by the Constitution of Kenya 2010 to deal with resettlement and land disputes

⁵⁸ NLC is official mandated organization that makes compensation award under the Kenyan laws

⁵⁹ Same comment as footnote 71

- If not resolved, the complainant can seek redress with the National Land Commission or the register his/her case in any Court in Kenya. The legal option will only act as avenue of last resort and will be sought after all other redress mediums have been exploited and exhausted.

The Project thus will put in place an extra-judicial mechanism for managing grievances and disputes arising from the resettlement process based on explanation and mediation by third parties. Each of the affected persons will be able to trigger this mechanism, while still being able to resort to the judicial system. Procedures relevant to this amicable mechanism are detailed below. It will include three different levels.

- Registration by KWSCR/PMU/PIU of the complaint, grievance or dispute;
- Processing by KWSCR/PMU/PIU of the grievance or dispute until closure is established based on evidence that acceptable action was taken; and
- In the event where the complainant is not satisfied with action taken by KWSCR/PMU/PIU as a result of the complaint KWSCR/PMU/PIU, an amicable mediation can be triggered involving a mediation committee independent from the Project.

11.3.2 Grievance Registration and Monitoring

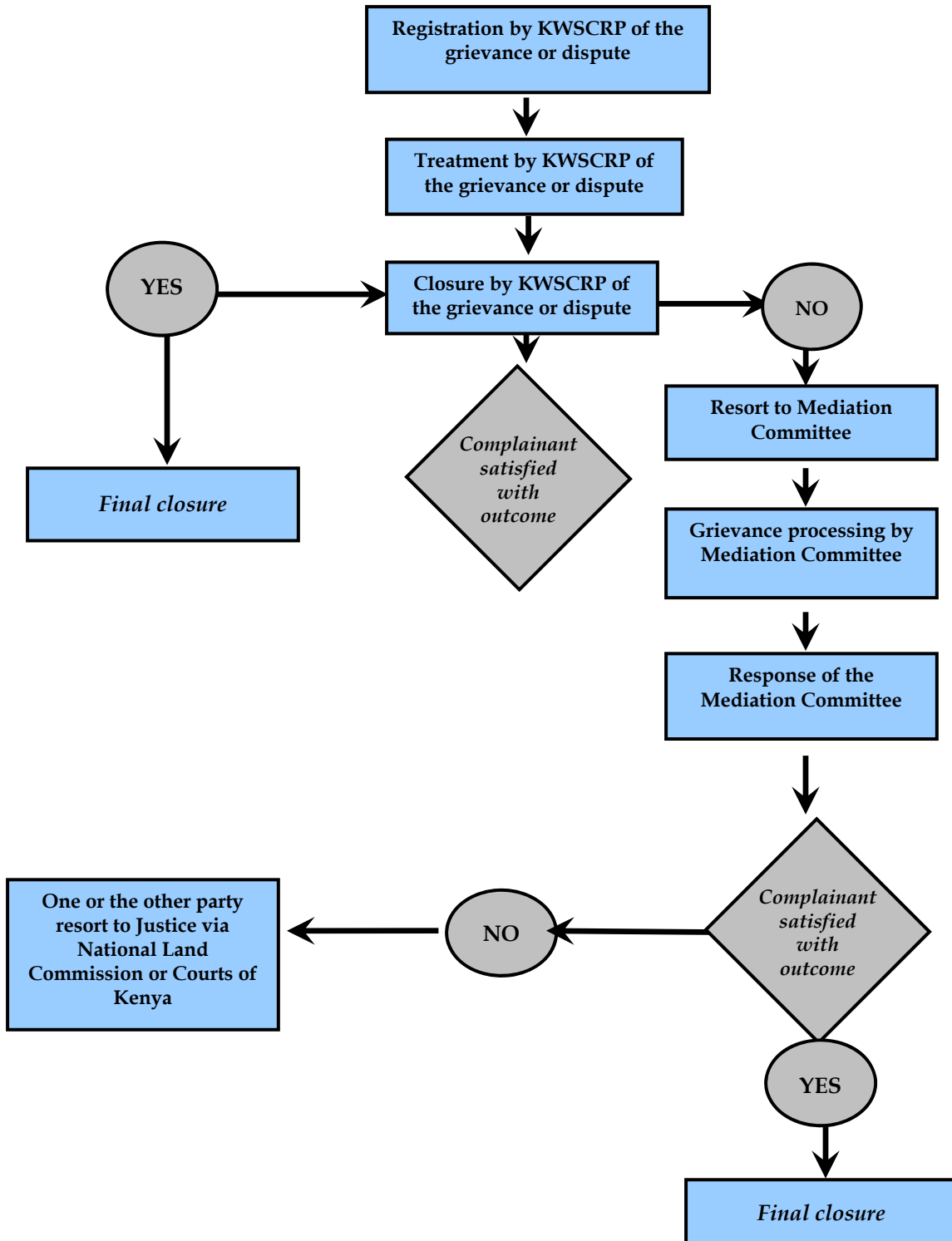
KWSCR/PMU/PIU will establish a register of grievances, which will be available at the following locations:

- Community Liaison Officer in Project Office,
- Construction Site.

Within 48 hours of registration, complainants should be informed that their complaint has been received and their case registered. Acknowledgement is done by the CLO, SCRCC /LRCCs/VRCCs, and should be communicated via text or phone call, followed up with a hard copy of the grievance form. In the case of anonymous complaints, acknowledgement will be posted in a designated community notice board location(s).

Grievances will be registered within 2 days of receipt (as indicated above) and a response will be provided to the aggrieved party in 15 days or less which includes resolution and closure of the grievance or elevating the grievance to the next dispute resolution level.

Figure 28. Grievance / Dispute Management Mechanism



The existence of this register, as well as procedures to lodge a complaint (where, when, etc.), will also be broadly advertised by KWSCR/PMU/PIU. The register will be established as of the commencement of resettlement and compensation activities. For each grievance, a grievance file will be opened, including the following elements:

- Initial grievance sheet (including the description of the grievance), with an acknowledgement of receipt handed back to the complainant when the complaint is registered;
- Grievance monitoring sheet, mentioning actions taken (investigation, corrective measures); and
- Closure sheet, one copy of which will be handed to the complainant after he/she has agreed to the resolution and signed-off.

Complaint closure does not necessarily mean that the complainant is happy with action taken (KWSCR/PMU/PIU may decide that the complaint is not founded, and that the RAP principles have been complied with). Closure means that the complainant agrees that action has been taken without necessarily being happy with the outcome.

11.3.2.1 Mediation Committee – Amicable Resolution Mechanism

Mediation Committee

Complaints that cannot be closed to the complainant's satisfaction will be handed over to a mediation committee that will include the following individuals:

- One representative of the local Administration;
- One KWSCR/PMU/PIU representative acting as an observer;
- Three representatives of the affected people, including at least one woman, chosen from the Resettlement Committees and/or amongst community based organizations, elders, customary authorities,
- One representative of an NGO or of a religious organization present in the field in the concerned area and well regarded by the population.

The mediation committee will meet as needed, depending on registered complaints and disputes.

11.3.2.2 Processing

After a complaint or dispute has been registered, KWSCR/PMU and the Project Implementation Unit (PIU) on site will prepare the technical background to the complaint (for instance, the proposed compensation amount, the list of meetings and interviews with the complainant, a description of the exact reason of the dispute, etc.) for consideration by the mediation committee.

The complainant(s) will be invited before the mediation committee, which will mediate and attempt to propose a solution acceptable to both parties (KWSCR/PMU/PIU and complainant). If need be, other meetings will be held and the committee may resort to one of its members to arbitrate in a less formal framework than meetings, if appropriate.

If reached, the agreement will be sanctioned by a settlement agreement signed by the parties, and the chair of the mediation committee will be responsible for monitoring the implementation of this agreement, which will include all references to the applicable local law provisions.

Role of National Land Commission

The NLC is the legal agency under the new constitutional dispensation responsible for compulsory acquisition of private land for public development by national government and county governments. NLC is governed by National Land Commission Act 2012, which stipulates one of its roles as that of compulsory acquiring land for national government and county governments' development projects among other roles. Key roles of NLC in the implementation of this RAP will include: receive compensation money from the Ministry of Environment, Water and Natural Resources; notifies landholders in writing of the intention to acquire land; assist in resolving disputes related to compensation; undertake public consultation on intended acquisition with the help of SCRCC; receive money from MEWNR for actual payment of entitlement awards to PAPs.

Grievances resolutions are encouraged to be resolved at the village level and via the Grievance Redress Committees at different levels and KWSCR/PMU and NLC as they are aware of and involved in the whole process. If not resolved the courts in Kenya remain an avenue for resolving these complaints.

12 IMPLEMENTATION OF THE RAP

The KWSCR/PMU is responsible for the implementation of the Resettlement Action Plan, in consultation with the Resettlement Committee, and with the cooperation of government agencies at the sub county, county and national level.

12.1 IMPLEMENTATION ARRANGEMENTS

Compliance with social commitments contained in this document will be under the responsibility of the KWSCR/PMU that will report to the Project Coordinator. The KWSCR/PMU environment and social specialists will be responsible for securing and maintaining the project's social license to operate, which during the project's construction phase will entail the following areas of oversight and responsibility:

Oversee and provide quality assurance on the following

- Resettlement action planning and execution
- Community relations
- Socio-economic impact assessment
- Implementation of social aspects of recruitment and procurement policies
- Development and execution of additional needed policies for all operational areas of responsibility

A supervising consultant (firm) will be recruited to supervise the construction activities and the supervising consultant will also recruit an environmental and social specialist including engineers to oversee the construction activities.

12.1.1 Ministry of Environment, Water and Natural Resources

The Project is owned by the Government of Kenya through the Ministry of Environment, Water and Natural Resources and shall be responsible for mobilization of financing from The National Treasury (NT) for this RAP. MEWNR will request The National Treasury to allocate funds for this RAP and will thereafter give the funds to NLC to compensate all the identified PAPs.

12.1.2 Project Management Unit -WSCR

KWSCR has established a project-implementing unit (PMU) for the RAP, with a team dedicated to carrying out the respective activities, and coordinating with the County and National Government. This team has wide experience in RAP implementation. With regard to the implementation of the RAP, KWSCR/PMU has the following responsibilities.

12.1.2.1 Communication and Coordination

- Communication and cooperation with County administrations as key actors with implementation of livelihood restoration programs
- Communication and cooperation with local resettlement committees as key actors with implementation processes (i.e. compensation process, monitoring, identification of vulnerable people)

- Communication and cooperation with the institutions involved in the compensation process and into training measures for affected people:
- Overall coordination with national and county government and with local authorities and funding agency with regard to the Project's social and environmental issues

12.1.2.2 Management of RAP Implementation

- Ensure and monitor overall social and environmental due diligence within RAP implementation (national requirements, lenders requirements)
- RAP Key Implementation Processes
 - Oversee and coordinate compensation process
 - Operate Grievance Mechanism
 - Operate Monitoring
- Design of overall training plan for RAP implementation staff, oversee and coordinate implementation of plan
- Manage staff recruitment processes and contracting processes of external service providers

12.1.2.3 Change Management

Communicate necessary changes of approach, particularly where substantial and material changes to the RAP might be envisioned or necessary (i.e. as consequence of monitoring results) to KWSCR/PMU (see below) for final decision-making.

12.1.2.4 Capacity Building

Facilitate and guide capacity building for authorities on different levels with regard to due diligence of Project management and due consideration of environmental and social safeguards

The KWSCR/PMU Environmental and Social specialists will serve as the primary point of contact between communities of the project affected area and the project, and will have the following primary areas of responsibility inter alia:

- Liaise with County and Sub County government with regard to local community liaison and issues and in consultation with appropriate KWSCR/PMU personnel
- Log and respond to grievances lodged by members of the community
- Organize and facilitate compensation payment actions
- Obtain prior written permission from community leaders/affected members for any intended damage to any infrastructure, crops or land as a result of construction and compensation to be paid.

12.1.3 Liaison with the Government of Kenya

The Government of Kenya through the Ministry Environment, Water and Natural Resources, State Department of Water owns the project. MEWNR shall be responsible for mobilization of financing from The National Treasury for this RAP. MEWNR will request The National Treasury to allocate funds for this RAP and will thereafter give the funds to NLC to compensate all the identified PAPs.

12.2 ROLES RELATED TO IMPLEMENTATION ARRANGEMENTS

The overall coordination of the implementation of the RAP will be provided jointly by KWSCR/PMU, which will oversee all resettlement planning and coordinate all issues relating to the compensation. Given the importance of the activities under the various sub-components, KWSCR/PMU will collaborate with the County and Government falling within the project area in coordination and implementation.

KWSCR/PMU will be also responsible for implementation of the RAP. Other roles will include;

- Constitute the SCRCC and LRCCs and provide their operational budget;
- Collect all the needed documentation for compensation;
- Make funding request from MEWNR to undertake compensation of the PAPs;
- Compile all the grievances and document for future reference
- Send copies of all the documents to the MEWNR;

Besides this, KWSCR/PMU will have overall responsibility of monitoring and evaluation of the resettlement process. Specialist consultants will support the KWSCR/PMU, including: an M&E consultant to collect data to transfer to KWSCR/PMU, which will be responsible for overall project M&E; and a social/environmental safeguards specialist for implementation of the RAP and Environmental and Social Management Plan (ESMP), working under the supervision of KWSCR/PMU.

(a) Public Participation with the PAPs

This will initiate the compensation process as part of an ongoing process that would have started at the planning stages when the technical designs are being developed and at the land selection/screening stage. The process therefore seeks the involvement of PAPs in a participatory approach from the beginning.

(b) Notification of land resource holders

In cases where there is clearly no identified owner or user, the respective local authorities and leaders will notify the community leaders and representatives who will help to identify and locate the land users. These leaders and representatives will also be charged with the responsibility of notifying their members about the established cut-off date and its significance. The users will be informed through formal notification in writing and by verbal notification delivered in the presence of the all the relevant stakeholders.

(c) Agreement on Compensation and Preparation of Contracts

All types of compensation will be clearly explained to the individual and households involved. NLC jointly with the client will draw contracts listing all property and land being surrendered, and the types of compensation selected. The compensation contract and the grievance redress mechanisms will be read aloud in the presence of the affected party and the Local Community Elder prior to signing.

(e) Compensation Payments

All handing over of property such as land and buildings and compensation payments will be made in the presence of the affected party, MEWNR/KWSCRП staff, County Government representatives and local administration, representative of the PAPs and the community local leaders.

Resettlement Committees

The resettlement committees are partners on the village level for RAP implementation, especially for:

- Compensation process: witness of exit survey with technical asset valuation by official valuers and final compensation agreements with households;
- Involvement into the grievance mechanism on the village level
- Involvement into monitoring procedures, especially in monitoring of land dynamics, of progress of livelihood restoration measures and of compensation disbursement
- Identification of vulnerable people on the household level, information of PMU on special concerns of vulnerable people in their community, organize meetings and with and visits of vulnerable people

The KWSCRП/PMU's Environment and Social Specialists along with the Projects PIU shall regularly meet and consult with local resettlement committees on site in the affected villages.

12.2.1.1 Composition Of Resettlement Committees

- Village Leader
- Project Affected Persons
- Assistant Chiefs, who support the locational Chief and Government in managing local community disputes in village units, will form membership of the team.
- Female PAP, elected by women PAPs, will represent women and children related issues as regards resettlement and compensations
- Youth representative, elected by youths, will represent youth related concerns
- Vulnerable persons representative, will deal and represent vulnerable persons issues
- Business representative, will represent business people concerns
- County Ward Administrator
- Land officer
- MEWNR/KWSCRП/PMU/PIU

Membership to committees will be elected by each category of PAPs except the locational Chief and assistant chiefs who will automatic members of the team by virtue of their positions. Each village committee will elect their chairperson and a secretary. The roles of will include among others the following:

- Assist the effective working of RAP consultants in validation and updating of the RAP after the detailed design study is completed

- Conducting extensive public awareness and consultations with the affected people.
- Coordinate activities between the various organizations involved in relocation;
- Ensure that all the PAPs in their locality are informed about the content of the RAP.
- Ensure that the concerns of vulnerable persons such as the disabled, widowed women, orphaned children affected by the sub project are addressed.
- Facilitate conflict resolution and addressing grievances; and
- Guide and monitor the implementation of relocation;
- Help ensure that local concerns raised by PAPs as regards resettlement and compensation are promptly addressed.
- Help the vulnerable during the compensation and restoration for their livelihoods
- Monitor the disbursement of funds;

Provide support and assistance to vulnerable groups.

- Resolve manageable disputes that may arise relating to resettlement and compensation process. If it is unable to resolve, help refer such grievances to the next level as described in the grievance redress mechanism.
- Validate inventories of PAPs and affected assets;

This committee meets on a regular basis (as determined by the needs of the project) to ensure that resettlement activities are appropriately designed and executed. A representative elected to act as the Project Liaison Officer acts as the key contact with PAPs and therefore facilitate implementation of consultation, public participation and grievance mechanisms.

12.3 IMPLEMENTATION SCHEDULE

The project is divided into three phases.

- **Phase 1**-Preconstruction period (Y0): Start of RAP implementation (i.e. compensation for assets affected by construction, start of livelihood restoration measures for affected people);
- **Phase 2**-Construction period (Y1– Y2): continuation of RAP implementation (i.e. compensation for loss of land resulting from project operation, start of livelihood restoration measures for affected land users);
- **Phase 3** –Commissioning and start of Project operation (Y3): continuation of RAP implementation;
- **After Phase 3** – Y3–: completion of RAP implementation.

12.3.1 Institutional Roles in Compensation

12.3.1.1 National Level Implementing Agencies

National Land Commission

The National Land Commission (NLC) is an independent constitutional agency that has statutory powers to undertake compulsory acquisition of private or community land for public purposes or public interest. It performs these functions on behalf of the national

government and county governments. The specific powers and functions of the NLC are set out in the National Land Commission Act 2012, and the Land Act 2012.

Key roles of NLC in the implementation of this RAP will include:

- *Provide approval to request made by MEWNR to acquire land for the project;*
- *Notify landholders in writing of the intention to acquire land;*
- *Assist in resolving disputes related to compensation;*
- *Acquire land on behalf of MEWNR;*
- *Undertake public consultation on intended acquisition;*
- *Undertake actual payment of entitlement awards to PAPs*

12.3.1.2 Sub County Level Implementing Agencies

Sub County Resettlement Compensation Committee

In accordance with the RPF and to assist the smooth implementation of the RAP, Sub County Resettlement Compensation Committee (SCRCC) will be established at the sub County level to ensure participatory and transparent implementation of the RAP.

The SCRCC will not engage in land acquisition or compensation, as this remains the prerogative of the NLC. KWSCR/PMU/PIU will help constitute the SCRCC with the help of the NLC and Land Offices at the level and the District Commissioner. SCRCC will help Resettlement Compensation Committee carry out their mandates efficiently; particularly, ensuring effective communication between NLC with the affected communities. Members to SCRCC will include representation from the following agencies;

- *The District Administration representative, who in this case will be the District Commissioner and will provide the much needed community mobilization, and support the project in the process of resettlement. The District Commissioner will chair the DRCC that will be established.*
- *A representative of KWSCR/PMU/PIU as the implementing agency implementing the Project.*
- *District Land Survey Officer to help with survey works and demarcation of land to be acquired.*
- *The District Gender and Social Development Officer who will be responsible for livelihood restoration programs.*
- *The District Lands Registrar Office will help with validation and verification of the documentation provided by the affected persons.*
- *LRCCs PAPs representative introduced by the Location Resettlement and Compensation Committee – act as voice for the PAPs.*
- *NGOs and CBOs locally active in relevant fields to ensure PAPs are assisted throughout the RAP implementation and help with the livelihood restoration, information dissemination, among other things.*

PAPs will elect their representative to SCRCC while the Social and Gender Officer will identify an active NGO/CBO in the project area.

The SCRCC will have the following specific responsibilities as regard implementation of the RAP:

- *Ensuring effective flow of information between KWSCRCP/PMU/PIU and PAPs*
- *Coordinate Locational Resettlement and Compensation Committees (LRCCs), validate inventories of PAPs and affected assets;*
- *Guide and monitor the implementation of relocation*
- *Coordinate activities between the various organizations involved in relocation*
- *Facilitate grievance and conflict resolution*
- *Assist with the livelihood restoration activities.*

12.3.1.3 Local Implementing Agencies

Resettlement and Compensation Committees

Since a Sub County is fairly large, further decentralized resettlement units will be formed in each location of the project affected area. Locational Resettlement and Compensation Committees (LRCCs), based in each administrative location affected by the project will be established. KWSCRCP/PMU/PIU will constitute the LRCCs with the assistance of local administration. The LRCCs will work under guidance and coordination of SCRCC. LRCCs will be formed two to three weeks after the formation of the SCRCC. Their membership will comprise of the following:

- *The locational Chief, who is the Government administrative representative at the locational unit and who deals with community disputes will represent the Government in LRCC*
- *Assistant Chiefs, who support the locational Chief and Government in managing local community disputes in village units, will form membership of the team.*
- *Female PAP, elected by women PAPs, will represent women and children related issues as regards resettlement and compensations*
- *Youth representative, elected by youths, will represent youth related concerns in the LRCCs*
- *Vulnerable persons representative, will deal and represent vulnerable persons issues in the LRCC.*
- *Business representative, will represent business people concerns*

Membership to LRCCs will be elected by each category of PAPs except the locational Chief and assistant chiefs who will automatic members of the team by virtue of their positions. Each LRCC will elect their chairperson and a secretary. The roles of LRCCs will include among others the following:

- *Conducting extensive public awareness and consultations with the affected people.*
- *Help ensure that local concerns raised by PAPs as regards resettlement and compensation among others are promptly addressed by relevant authorities.*
- *Assist the effective working of RAP consultants in validation and updating of the RAP after the detailed design study is completed*

- *Resolve manageable disputes that may arise relating to resettlement and compensation process. If it is unable to resolve, help refer such grievances to the SCRCC.*
- *Ensure that the concerns of vulnerable persons such as the disabled, widowed women, orphaned children affected by the sub project are addressed.*
- *Help the vulnerable during the compensation and restoration for their livelihoods*
- *Ensure that all the PAPs in their locality are informed about the content of the RAP.*
- *Validate inventories of PAPs and affected assets;*
- *Monitor the disbursement of funds;*
- *Guide and monitor the implementation of relocation;*
- *Coordinate activities between the various organizations involved in relocation;*
- *Facilitate conflict resolution and addressing grievances; and*
- *Provide support and assistance to vulnerable groups.*

This committee meets on a regular basis (as determined by the needs of the project) to ensure that resettlement activities are appropriately designed and executed. A representative elected to act as the Project Liaison Officer acts as the key contact with PAPs and therefore facilitate implementation of consultation, public participation and grievance mechanisms.

IMPLEMENTATION SCHEDULE

Tables 59 and 60 present the RAP implementation schedule from the 1st stage of planning (currently on-going) to the 2nd stage of implementation.

In its current form, this is a Draft RAP. It should be noted that finalization of the project design for the Dykes Construction Project and harmonization of designs with the Lower Nzoia Irrigation Scheme which is co-located with the Dykes Construction Project is expected to occur in 2015 (as noted in line 13, below). As needed based on design changes, this RAP will be updated accordingly. As there is expected to be a small subset of PAPs for the Dykes Construction Project who are also PAPs for the Lower Nzoia Irrigation Scheme, once the joint designs for the two projects are complete, revisions to the RAPs for both projects will be made to plan for these PAPs.

The RAP implementation schedule with respect to relocation will be timed to ensure that it does not coincide with months and seasons when the PAPs are planting instead it will be made to coincide with the harvest period to allow for PAPs to harvest before moving.

Table 59. Breakdown of the Value Estimates

No.	TASK NAME	MONTH 1				MONTH 2				MONTH 3				MONTH 4			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1.	RAP FINALIZATION																
2.	Census Finalization																
3.	Census Residences																
4.	Census Fields																
5.	Checks on Census																
6.	Release of Census results to communities																
7.	Information Management System																
8.	Consultant Mission																
9.	In-puting data into new data management system																
10.	RESETTLEMENT DOCUMENTATION																
11.	Submission of RAP to World Bank																
12.	Review by World Bank																
13.	Update of RAP to include consultation progress, update of project designs, provisions for PAPs also affected by the Lower Nzoia Irrigation Project and submission of update RAP																

Table 60. RAP Implementation Schedule- 2nd Part - RAP Implementation

No.	TASK NAME	DURATION IN WEEKS																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
14.	RAP IMPLEMENTATION																		
15.	Cash Compensation																		
16.	Payment of compensation for crops and Easement																		
17.	Payment of compensation for structures																		

13 BUDGET

13.1 INTRODUCTION

This chapter presents the budget for the Resettlement Action Plan. The resettlement plan is budgeted as an activity commencing with land acquisition.

13.2 BUDGET

1. The total budget allocated to implementation of the Resettlement Action Plan in the resettlement-affected villages is **Kenya Shillings 230,767,463.3. (US\$ 2,508,342)**. The Government of Kenya will finance the full budget.
2. However, for this RAP, a 15% disturbance and relocation assistance was included to the budget. The relocation assistance will cater for economic, social and physical disturbance caused to PAHs. The estimated cost and budget for the RAP is Kenya Shillings **230,767,463.3**. The Government will finance the RAP through the Ministry of Environment, Water and Natural Resources.

Table 61. Summary of Budget for RAP

Item	Approx. Value (Kshs)	Addition (20%)	Estimated Total Value (Kshs)	15% Statutory allowance	Total Value (Kshs)
Structures Values	5,322,416	1,064,483	6,386,899	958,034	7,344,933
Land Values (Land Rates is 350,000 Kenya Shillings per Acre. Total land loss is 250 Acres)	87,500,000	17,500,00	105,000,000	15,750,000	120,750,000
Tree and Crop Values	3,101,500	620,300	3,721,800	558,270	4,280,070
Loss of graves	250,000	50,000	300,000		300,000
One year loss in livelihood (businesses)	1,592,800 per month for 12 months				19,113,600
Livelihood Restoration					50,000,000
Sub-Total					201,788,603
Estimated expenses of KWSCR					5,000,000
Financial Management Training & Counseling for PAPs					3,000,000
Sub-Total					209,788,603
Miscellaneous Expenses (10%)					20,978,860
GRAND TOTAL					230,767,463.3

A post-relocation monitoring program has been designed and will be implemented to ensure that the resettlement with development program achieves its goals and objectives.

14 MONITORING AND EVALUATION

14.1 INTRODUCTION

The WB policy on resettlement tasks the implementer with adequate monitoring and evaluation of the activities set forth in the resettlement instrument. Similarly, the guidelines for resettlement state that the Project engaged in resettlement must sponsor monitoring and reporting on the effectiveness of their Resettlement Action Plan (RAP) implementation, including the physical progress of resettlement and rehabilitation activities, the disbursement of compensation, the effectiveness of public consultation and participation activities and the sustainability of income restoration and development efforts among affected communities.

This Chapter describes a monitoring and evaluating program during and following implementation. Monitoring and evaluating are key components of the Resettlement Action Plan, and as such are part of the Project's commitments.

Monitoring and evaluating have the following general objectives:

- Monitoring specific situations or difficulties arising from the implementation, and of the compliance of the implementation with objectives and methods set out in the Resettlement Action Plan,
- Evaluating emergent, mid- and long-term impacts of the Project on the welfare of impacted households, communities, and local government.

Monitoring and evaluating reference documents include:

- Resettlement Action Plan,
- Kenyan laws and regulations
- Applicable World Bank Safeguard Policies.

14.2 MONITORING PURPOSE

The purpose of monitoring is to provide Project management, and directly affected persons, households and communities, with timely, concise, indicative information on whether compensation, resettlement and development investments are on track to achieve sustainable restoration and improvement in the welfare of the affected people, or that course adjustments are needed.

Monitoring verifies that:

- Actions and commitments for compensation, resettlement, land access, and development in the RAP are implemented fully and on time;
- Entitled persons receive their compensation and replacement housing on time;
- Compensation and LEEP investments are achieving sustainable restoration and improvement in the welfare of Project affected persons, households and communities;
- Complaints and grievances are followed up with appropriate corrective action;
- Vulnerable persons are tracked and assisted as necessary.
- Brief, monitoring answers the question: Are Project compensation, resettlement

- and development
- Investments on time and having the intended effects?

14.2.1 FRAMEWORK

Monitoring consists of (a) internal monitoring by the Project as an integral part of management, and (b) external monitoring by Project appointed consultants, working with impacted communities

Monitoring will be done by:

- Audit,
- Conventional sample surveys, and
- Community participation.

A substantial proportion of monitoring will be participatory. Affected communities will cooperate in determining: (a) what is important to monitor, (b) the various methods and indices chosen for monitoring and (c) answers to the basic question: How are things? Consultants will use workshops, site visits, training, and concept instruments that require little literacy or math skill to elicit the participation and views of affected people.

Monitoring will be based on indicators of change in:

- Delivery of compensation,
- Resolution of grievances,
- Land access,
- Increase or decrease in household assets,
- Social stability, and Health.

Indicators will be in the form of:

- Done/not done, present/not present, achieved/not achieved etc,
- Easily measured, relevant quantities suitable for trend analysis; or
- Judgments of the affected people and their traditional authorities, as revealed by participative socioeconomic survey and interviews.

Monitoring will be linked to past surveys (baseline information) but will not use control areas. Where important baseline information is not available, but the subject requires monitoring, the preferred objective will be to identify any trends, year on year.

Monitoring is of necessity a long-term and potentially open-ended activity. The Project and the community will define end-points and goals, which achieved, will allow monitoring to drop to a low level in trouble-free domains, while maintaining focus on problematic areas.

Figure 30: Monitoring Indicators Matrix

Broadly speaking, the Project itself will monitor inputs, outputs and impacts. Input monitoring establishes if staff, organization, finance, equipment, supplies and other inputs are on schedule, in the requisite quantity and quality.

Output monitoring establishes if agreed outputs are being realized timely for

- Communication with the affected communities
- Agreed resettlement and compensation policy, procedures, and rates
- Compensation for crops, buildings, and lost business
- Construction and occupation of infrastructure and housing,
- LEEP delivery and uptake.
- Grievance resolution,
- Attention to vulnerables.

Impact monitoring is to determine that:

- Resettlement objectives and goals are being met
- Resettlement villages are functioning as intended
- Resettlers and relocatees have an equal or better quality of life as a result of the Project
- Unintended impacts are identified and addressed

Impact monitoring covers:

- Social structures- traditional authorities, formal social groups e.g. churches, neighborhood networks for reciprocal help, family,
- Economic status of resettlers and relocates, including employment, arable land and livestock holdings, employment, non-agricultural enterprise, household assets,
- Land use- cropland availability, opening of new cropland, fallow use,
- Availability of natural resources- e.g. wood, bush foods and medicines,
- Cost of a market basket of essentials, including rental accommodation,
- Access and use of public facilities- water supply, sanitation, health and education services,
- Employment- on the Project and in the impact area,
- Health of Project-affected persons and host communities- mortality, morbidity of prominent
- Diseases, status of vulnerables, and nutrition of children specifically,
- Crime,
- Public perception of the Project- judgments on Project, prospects for place and community

External monitoring consultants will also undertake input, output, and impact monitoring. External input and output monitoring is intended to provide an additional level of oversight and will cover:

- Internal monitoring procedures, reports and records, to identify recurring problems or areas of non-compliance with the RAP;
- Progress against program for compensation, resettlement, income restoration and community development.
- Grievance records, to identify implementation problems and status of grievance resolution; compliance with OP 4.12.

External impact monitoring will focus on the degree to which affected peoples' livelihoods, standard of living and general welfare are being restored or bettered as a result of the Project. Monitoring will be accomplished by surveys of households, enterprises, and community institutions, especially traditional authorities, the local government, education and health services.

The external monitor will survey and report annually. However, the monitor will bring emergent problems (e.g. substantial task short-falls, unintended negative consequences or trends) to the attention of Project management as they become apparent.

The annual monitoring report summarizing the external monitoring findings will be released to the public annually. The Monitoring and Evaluations (M&E) framework defines the means of assessing the overall success of the RAP and the success of individual programs outlined therein. To do so requires:

(a) the identification of suitable indicators; (b) their measurement at appropriate intervals; (c) the creation of mechanisms to analyze M&E data against a baseline, and (d) the setting of a system to regularly respond to M&E results by adapting program design and/or modifying implementation arrangements.

The M&E framework outlined in this document (the implementation RAP) integrates the Project commitments and the M&E guidelines contained in the RAP as well as additional commitments described in this document.

14.2.2 Use of Monitoring and Evaluation

The M&E process has three major functions.

First, monitoring the delivery of Project activities provides information about progress and serves to verify that the Project is implementing the LARAP in accordance with stated commitments (entitlements, activities, budget) and implementation schedule.

Second, they will allow the Project to assess whether the RAP and its specific program initiatives are achieving their stated goals and objectives and identify the outstanding problems/ issues in implementation thereby allowing the Resettlement Team to adapt program design and implementation. For instance, often those who manage the labour departments of large-scale projects do not work closely with the staff who manage the implementation of RAP. Many households may fall through the cracks in the system. Accordingly it is crucial to monitor whether or not the project actually recruits from resettlement-affected households, as the RAP requires.

Third, the monitoring process will be used to assess whether livelihoods, living standards and incomes of resettlement-affected communities are improved to a level over and above pre-displacement and land acquisition conditions. The Project will track RAP outcomes and impacts against the baseline conditions of the affected population prior to economic and physical displacement. The socio-economic censuses will serve as the primary baselines against which the success of the RAP will be measured.

14.2.3 Use of Indicators in Monitoring and Evaluation

The M&E framework encompasses: (a) input and process indicators that reflect Project resource commitments toward resettlement and the implementation plans for specific sector programs and activities, and (b) performance indicators that allow the Project to assess the delivery and success of the aforementioned programs. The indicators are as follows:

- Input indicators measure resources in terms of people, equipment and materials that go into the community development plans described in the RAP. Examples of input indicators in the RAP include: (a) funding of various RAP activities, (b) the establishment of a Community Development/ Resettlement Team in the Project and staff work inputs, and (c) training programs offered,
- Process indicators measure the change in the quality and quantity of access and coverage of the activities and services. Examples of process indicators in the RAP include: (a) increased capacity of government and NGOs to provide services; (b) the establishment of channels for stakeholder participation in RAP implementation, and (c) setting up of regular savings accounts,
- Output indicators measure the results of activities and services produced with the inputs. Examples of output indicators include: (a) creating and maintaining a database for tracking employment; (b) creating new economic opportunities providing alternatives for loss of income, and (c) numbers of people trained, a. o.
- Outcome indicators measure the changes in behavior, skills, incomes and capacity resulting from resettlement activities and outputs. Examples of outcome indicators include: (a) family and individual income levels; (b) individual and overall employment rates, and (c) upward changes in the types of professional work performed by men and women resettlers employed by the Project.
- Impact indicators measure medium- to long-term changes in the living standards, behavior and attitudes of the target group resulting from resettlement activities.
- In the near term, measurements of input, process and output indicators are feasible and important since these define whether the planned level of effort is being achieved and whether early implementation experience is in line with anticipated results. The success of the RAP, however, is measured by outcome and impact indicators. These indicators establish: (a) whether the developmental resettlement programs are having the intended results (outcomes/impacts) on social and economic conditions, social groups such as women and the elderly, and social institutions such as the family and communities; (b) whether individuals, families and social groups included in the resettlement are able to restore and maintain their livelihoods, and (c) whether positive results can be maintained over the medium and long term.

Clearly, the results measured by outcome/impact indicators are the ultimate measures of the RAP's success in restoring and improving livelihoods. If affected families live in better homes, enjoy access to a range of productive infrastructure, diversify their economic activities and exceed their pre-Project level of incomes and thus reduce their livelihood risks, learn to prevent exposure to pandemics and improve their health, and

attain better education, RAP will have not only achieved desired outcomes (increased incomes), but will have also made sustainable improvements in people's lives.

WB guidelines specify M&E parameters including delivery of entitlements; restoration of living standards; livelihood restoration; effectiveness of consultation and grievance management, and levels of Affected Households (AH) satisfaction.

14.2.4 Internal Monitoring and Evaluation

Internal monitoring and evaluation has the following objectives:

- To measure and report progress against RAP schedule;
- To verify that agreed entitlements are delivered in full to affected people;
- To identify any problems, issues or cases of hardship resulting from the resettlement process, and to develop corrective actions or, where problems are systemic, refer them to management;
- To monitor effectiveness of the grievance system;
- To periodically measure satisfaction of Project-Affected People.

Implementation of internal monitoring and evaluation involves the following activities:

- Liaison with stakeholders and Project-affected communities to review and report progress against the RAP;
- Verify delivery of entitlements in accordance with RAP;
- Verify that agreed measures to restore or enhance living standards are being implemented;
- Verify that agreed measures to restore or enhance livelihoods are being implemented;
- Identify any problems, issues, or cases of hardship resulting from resettlement process;
- Assessment of project affected peoples' satisfaction with resettlement outcomes;
- Collation of records of grievances (type, number), follow-up that appropriate corrective actions have been undertaken and those outcomes are satisfactory.

The results of these internal RAP M&E activities will be reported in accordance with general Project norms for line reporting i.e., monthly reports from the Resettlement Unit to management. The format and content of the monthly report will be discussed with management.

Monthly reports should include qualitative assessment and quantified information with emphasis on progress towards achieving various sectoral program objectives including agriculture, fisheries, micro-finance and small business development. The final reports for each year will also summarize progress in the context of the overall Resettlement Plan, including all inputs provided for agriculture, fisheries, micro-finance and small business development and the outputs attained during the year. The report will also present an annual implementation plan for the following year.

14.2.5 External Monitoring and Evaluation

14.2.5.1 Socio-economic Surveys of Resettlement-Affected Communities

It is clear that the internal and external monitoring and evaluation process require

collection of outcome indicators from a sample of the population (20 per cent of households and/or beneficiaries) at regular intervals.

Survey results will be used to measure progress, identify weaknesses and new issues, and help adapt program design and/or redirect implementation work where necessary. The survey design should replicate questions and data collected in the baseline survey carried out in 2015 and include additional aspects, which became relevant during RAP preparation and implementation. The biannual survey should be implemented by an Indonesian monitoring group independent of the Project. This group should propose a methodology and interview schedule in line with RAP objectives and submit it to the Project Resettlement Unit for review. The Resettlement Unit and the Advisory Panel will review the survey findings and develop a summary and action report for submission to management.

14.2.5.2 External Monitoring and Evaluation Team

- A team comprising international resettlement and social development experts will be recruited to:
- Verify internal M&E findings and provide an objective external assessment;
- Assess overall compliance;
- Provide objective and periodic assessments of resettlement implementation plans and their impacts.

Activities of the external team will include:

- Review internal monitoring procedures and reporting to ascertain they are being undertaken in compliance with RAP;
- Review internal monitoring records as a basis for identifying any areas of non-compliance, recurrent problems, or potentially disadvantaged groups or households;
- Review grievance records for evidence of significant non-compliance or recurrent poor performance in resettlement implementation;
- Discuss with Resettlement staff;
- Interview a cross section of affected households to gauge extent to which
- Project-Affected People's living standards and livelihoods have been restored or enhanced as result of the Project;
- Interview a cross section of affected community people and key informants to ascertain effectiveness of non-RAP related social measures;
- Assess overall compliance with international standards.
- The external team will implement M&E activities on a six-monthly basis, with each member contributing 20 days time to each visit. The team's M&E reports (and the completion audit described in the following section) will be disclosed in line with Bank policies.

14.2.5.3 Completion Audit

The completion audit will verify: (a) that all physical inputs committed to have been delivered and all services provided, and (b) whether efforts to restore the livelihoods of the affected population have been properly conceived and executed and have had the

desired effect. A successful completion audit brings to a close the Project liabilities vis a vis resettlement.

If the completion audit demonstrates that resettlement objectives have not yet been achieved, further action will be planned and implemented as appropriate.

The schedule for independent evaluation of RAP implementation is:

- After completion of RAP final draft –April 2015
- Six months following completion of RAP implementation – this evaluation will verify that (a) compensation payments have been made as promised, (b) have been properly processed, and (c) recommendations of previous assessments are being implemented
- One year after physical resettlement is complete
- Subsequent review schedule will be determined during prior evaluation.

15 APPENDIX

15.1 MINUTES OF MEETINGS AND CONSULTATIONS

**RESETTLEMENT ACTION PLAN FOR LOWER NZOIA IRRIGATION
PROJECT: REHABILITATION OF FLOOD PROTECTION STRUCTURES
Minutes of Public Participation Meeting Held at Igigo Village Bunyala East
Location held on 20th March 2015 at 2pm**

MEMBERS PRESENT

NO	NAME	DESIGNATION
	Thomas Mudonga	Chief Bunyala East
		Chief Ruambwa
	As per Attached Attendance list	Project Affected Persons
	Pitalyse Sande Musiola	Community Liaison Person
	Liya Mango	RAP team – consultant
	Godwin Sakwa	RAP team – consultant

AGENDA OF THE MEETING

- Share Project information with PAPs in regards to resettlement
- To discuss the issues the PAPS had regarding the resettlement
- Deliberate on best way forward of handling issues likely to result from Resettlement

PROCEEDINGS OF MEETINGS

The meeting started at 14:30 hours with introductions of the parties' present and opening remarks from the chief who welcomed all members present to the meeting and requested for a word of prayer.

REPORT FROM THE POTENTIAL AFFECTED PERSONS

The following are the issues that were presented by the community of Bunyala East location:

- **Minute 01/03/2015 - Land ownership**
 - PAPs do not have titles to the parcels they are occupying (land not yet adjudicated)
 - PAPs worried they might not be eligible for compensation

During this meeting the PAPs requested the RAP team to help them resolve the land ownership issues through relevant offices, however the RAP team responded that the issues was outside the scope of RAP but will be forwarded to the respective land offices in the county.

RAP team clarified to the community that according to the Land Act 2012 and WB OP 4.12, every PAP will be eligible for compensation

Minute 02/03/2015 - Extent of Acquisition

The project is only acquiring section of the PAPs land, which makes it Partial acquisition; this also applies for the structures as majority will rebuild the houses within the same land parcels

The community members appreciated that the extent of acquisition is not much as many of them will still have much of their land remaining where they can re-construct their structures. However they complained on the delays that are normally experienced during compensation as requested the consultants and relevant ministry to ensure that they are promptly compensated prior to commencement of civil works.

RAP team explained that the extent of acquisition is 17m from the centre of the dyke and 10m for right of way for maintenance

The community representative present reported to the meeting that the dyke RAP team should liaise with the irrigation canal RAP team as it looks like the dyke realignment is proposed to pass through the same route where RAP for the canal has been done, he expressed fears of double acquisition and cited that the community may end up being short changed.

RAP team clarified to the community that in the event that a PAP is affected twice by both the project, adequate measures will be taken to ensure appropriate compensation to the PAP

Minute 04/03/2015 – Canoe crossings

PAPs were worried that once the dyke is constructed it is likely to block the crossings that they currently use to cross from one bank of the river to the other, the major crossing cited was the one at Nalera village.

RAP team clarified that this has been provided in the ESIA prepared for the project, the design will be required to make provisions for people using canoe crossings along the dyke

Minute 05/03/2015 – Backflow menace

River Nzoia backflows at the delta and floods homestead not protected by the dyke on both banks of the river, the community complained of the menace on both the south bank and North bank, however the problem was more pronounced on the south bank where the settlements are many.

Ministry of Environment Water and Natural Resources will initiate a modelling study during the design review of the feasibility study report with the objective of proposing solution to the problem.

Minute 05/03/2015 – Borrow Pits sites

Community raised concern on where the contractor will get soil for the works and that previous contractors have been getting soil from farms without reinstatement causing health hazards

Discussions on the Concern was noted in the ESIA prepared for the project, borrow pit sites will be properly identified and rehabilitated after borrowing

Minute 06/03/2015 – Seepage from the dyke

The community complained of seepage from the dyke at various sections

The current design will resolve the seepage problem as it has proposed measures such as increasing the dyke base and use of concrete base in all sections where seepage is noted.

Minute 07/03/2015 – Compensation Mode and value of compensation

PAPs raised fears of possibility of not being compensated appropriately for the land parcels to be acquired

RAP team clarified that compensation to the PAPs will be at full replacement cost as guided by the

WAY FORWARD

- PAPS appreciated the objectives of the project considering that the area is a flood prone area.
- PAPs requested for prompt compensation and adequate time to demolish and reconstruct their houses.
- PAPs requested for more consultative meetings as the project progresses.
- The meeting ended after 16:00 hours with a closing prayer.

**RESETTLEMENT ACTION PLAN FOR LOWER NZOIA IRRIGATION
PROJECT: REHABILITATION OF FLOOD PROTECTION STRUCTURES
Minutes of Public Participation Meeting Held at Bunyinyi Grounds, Mabinju Sub
Location, Khajula Location on 23rd March 2015 at 4pm**

MEMBERS PRESENT

NO	NAME	DESIGNATION
	John Kudombi	Chief Khajula Location
	Daniel Ingekhi	Assistant Chief Khajula Location
	As per attached attendance list	Project Affected Persons
	Liya Mango	RAP team – consultant
	Godwin Sakwa	RAP team – consultant

AGENDA OF THE MEETING

- Share Project information with PAPs in regards to resettlement
- To discuss the issues the PAPS had regarding the resettlement
- Deliberate on best way forward of handling issues likely to result from Resettlement

PROCEEDINGS OF MEETINGS

The meeting started at 16:30 hours with introductions of the parties' present and opening remarks from the local area chief who welcomed all members present to the meeting and requested for a word of prayer.

REPORT FROM THE POTENTIAL AFFECTED PERSONS

The following are the issues that were presented by the residents of Khajula Location:

Minute 01/03/2015 – Borrow Pits sites

Community raised concern on where the contractor will get soil for the works and that previous contractors have been getting soil from farms without reinstatement causing health hazards. The PAPs suggested that the contractors should pay for the soil wherever they extract it.

Discussions on the concern was noted in the ESIA prepared for the project, borrow pit sites will be properly identified and rehabilitated after borrowing

Minute 02/03/2015 – Realignment and widening of the dykes

PAPs suggested that the realignment takes place by widening the dykes inwardly within the flood plain and not outwardly where they have their residences and farms to spare their land.

The RAP team assured them that the engineers had considered all the options and where the new alignment fell was best to control the floods. However, their opinions and suggestions would be taken into consideration.

Minute 03/03/2015 - Land ownership

- PAPs do not have titles to the parcels they are occupying (land not yet adjudicated) PAPs worried they might not be eligible for compensation. During this meeting the PAPs requested the RAP team to help them resolve the land ownership issues through relevant offices, however the RAP team responded that the issues was outside the scope of RAP but will be forwarded to the respective land offices in the county.

RAP team clarified to the community that according to the Land Act 2012 and WB OP 4.12, every PAP will be eligible for compensation

Minute 04/03/2015 – Land Compensation

- The PAPs welcome the fact that they will be compensated for their assets but also wanted to know whether compensation will be done on both sides of the dyke (the outside and within the riparian area) as this land is very important to them as a source of livelihood.
- The PAPs wanted compensation for the land that they lost during the first resettlement when the dykes were first built in 1963

The RAP team explained that the scope of the current project was to improve the flood protection structures and would deal with what was in its scope in this case it is the area that will be affected by the improvement and realignment of the dykes in this case which is 27.5 metres on the outside, the 17.5 metres on the inside would involve compensation for structures and crops but not for land.

Historical injustices committed previously can be addressed by the Kenya Government specifically the National Land Commission if properly petitioned by the residents or affected persons that lost their land previously.

Minute 05/03/2015 – Use of indigenous knowledge

The PAPs expressed concern that the project experts do not make use of indigenous knowledge that the local people possess and feel that it is because of this that the dykes are not as successful as they can be. They want locals to be more involved in the project.

The RAP team acknowledged the importance of their knowledge and encouraged them to give their opinion and use the proper channels to air their views. If they organized themselves they could even write some notes that could be part of the report as an addendum.

Minute 06/03/2015 – Provision of Auxiliary Structures

The PAPs expressed a need for auxiliary structures that would make their everyday lives easier such as ramps for them and their livestock to climb and descend the dyke. With regards to erosion when it rains-the PAPs suggested a trench at the bottom of the dyke to slow down the rainwater runoff and reduce erosion and flooding.

The RAP team responded that stairs are part of the design and the issue of erosion would also be addressed accordingly.

Minute 07/03/2015 – Backflow menace and the Auxiliary Dyke

River Nzoia backflows at the delta and floods homestead not protected by the dyke on both banks of the river, the auxiliary dyke was built but was not well received as it has rendered the residents land parcels enclosed by this dyke as riparian land which flood often and now considering their location, they cannot be compensated for.

Ministry of Environment Water and Natural Resources has initiated relevant studies with the objective of obtaining a solution to the problem. A Reconnaissance of the PAPs affected by the backflow will be done by Technical Training and Research Institute team during this current RAP survey and the Report forwarded to the Ministry.

WAY FORWARD

- PAPS appreciated the objectives of the project considering that the area is a flood prone area.
- PAPs requested for prompt compensation and adequate time to demolish and reconstruct their houses.
- PAPs requested for more consultative meetings as the project progresses.
- The PAPs decided to put a team together that would petition the National Land Commission to seek compensation for the farms/land they lost in 1963
- The meeting ended after 18:30 hours with a closing prayer.

Minutes Signed

.....
SECRETARY

**RESETTLEMENT ACTION PLAN FOR LOWER NZOIA IRRIGATION
PROJECT: REHABILITATION OF FLOOD PROTECTION STRUCTURES
Minutes of Public Participation Meeting Held at Makhoma Village for Lugale sub
location in Khajula Location on 21st March 2015 at 4pm**

MEMBERS PRESENT

NO	NAME	DESIGNATION
	Daniel Ingekhi	Assistant Chief Khajula Location in charge of Lugale Sub Location
	As per attached attendance list	Project Affected Persons
	Liya Mango	RAP team – consultant
	Godwin Sakwa	RAP team – consultant

AGENDA OF THE MEETING

- Share Project information with PAPs in regards to resettlement
- To discuss the issues the PAPS had regarding the resettlement
- Deliberate on best way forward of handling issues likely to result from Resettlement

PROCEEDINGS OF MEETINGS

The meeting started at 14:30 hours with introductions of the parties' present and opening remarks from the chief who welcomed all members present to the meeting and requested for a word of prayer.

REPORT FROM THE POTENTIAL AFFECTED PERSONS

The following are the issues that were presented by the community of Makhoma Village:

Minute 01/03/2015 - Land ownership

- PAPs do not have titles to the parcels they are occupying (land not yet adjudicated) PAPs worried they might not be eligible for compensation.
- PAPs are concerned that they may not be compensated because they live in areas that are not affected but have land parcels along the dyke that will be affected

During this meeting the PAPs requested the RAP team to help them resolve the land ownership issues through relevant offices, however the RAP team responded that the issues was outside the scope of RAP but will be forwarded to the respective land offices in the county.

RAP team clarified to the community that according to the Land Act 2012 and WB OP 4.12, every PAP will be eligible for compensation

Minute 02/03/2015 - Extent of Acquisition

The project is only acquiring section of the PAPs land which makes it Partial acquisition; this also applies for the structures as majority will rebuild the houses within the same land parcels

The community members appreciated that the extent of acquisition is not much as many of them will still have much of their land remaining where they can re

construct their structures. However they complained on the delays that are normally experienced during compensation as requested the consultants and relevant ministry to ensure that they are promptly compensated prior to commencement of civil works. They also expressed concern that they did not know who was going to be affected as they did not know the affected area.

RAP team explained that the extent of acquisition is 17.5 m from the centre of the dyke and 10m for right of way for maintenance, totaling 27.5 metres which would be indicated/demarcated by the RAP team when they start their work.

RAP team clarified to the community that in the event that a PAP is affected twice by both the project, adequate measures will be taken to ensure appropriate compensation to the PAP

Minute 04/03/2015 – Canoe crossings

PAPs were worried that once the dyke is constructed it is likely to block the crossings that they currently use to cross from one bank of the river to the other, the major crossing cited was the one at Nalera village.

RAP team clarified that this has been provided in the ESIA prepared for the project, the design will be required to make provisions for people using canoe crossings along the dyke

Minute 05/03/2015 – Backflow menace

River Nzoia backflows at the delta and floods homestead not protected by the dyke on both banks of the river, the community complained of the menace on both the south bank and North bank, however the problem was more pronounced on the south bank where the settlements are many.

Ministry of Environment Water and Natural Resources will initiate studies to find a solution to this project during the design review stage of the feasibility study report.

Minute 05/03/2015 – Borrow Pits sites

Community raised concern on where the contractor will get soil for the works and that previous contractors have been getting soil from farms without reinstatement causing health hazards

Discussions on the concern was noted in the ESIA prepared for the project, borrow pit sites will be properly identified and rehabilitated after borrowing

Minute 06/03/2015 – Seepage from the dyke

The community complained of seepage from the dyke at various sections

The current design will resolve the seepage problem as it has proposed measures such as increasing the dyke base and use of concrete base in some sections.

Minute 07/03/2015 – Compensation Mode and value of compensation

PAPs raised fears of possibility of not being compensated appropriately for the land parcels to be acquired

RAP team clarified that compensation to the PAPs will be at full replacement cost as guided by the World Bank Operational Procedures.

WAY FORWARD

- PAPs appreciated the objectives of the project considering that the area is a flood prone area.
- PAPs requested for prompt compensation and adequate time to demolish and reconstruct their houses.
- PAPs requested for more consultative meetings as the project progresses.
- The meeting ended after 16:00 hours with a closing prayer.

Minutes Signed

.....
SECRETARY

**RESETTLEMENT ACTION PLAN FOR LOWER NZOIA IRRIGATION
PROJECT: REHABILITATION OF FLOOD PROTECTION STRUCTURES
Minutes of Public Participation Meeting Held at Nalera Village, Siginga Sub
Location, Bunyala West Location on 20th March 2015 at 4pm**

MEMBERS PRESENT

NO	NAME	DESIGNATION
	Alfred Namwakira	Chief Bunyala West Location
		Assistant Chief Siginga Sub location
	As per Attached Attendance list	Project Affected Persons
	Liya Mango	RAP team – consultant
	Godwin Sakwa	RAP team – consultant

AGENDA OF THE MEETING

- Share Project information with PAPs in regards to resettlement
- To discuss the issues the PAPS had regarding the resettlement
- Deliberate on best way forward of handling issues likely to result from Resettlement

PROCEEDINGS OF MEETINGS

The meeting started at 14:30 hours with introductions of the parties' present and opening remarks from the chief who welcomed all members present to the meeting and requested for a word of prayer.

REPORT FROM THE POTENTIAL AFFECTED PERSONS

The following are the issues that were presented by the community of Narera location:

Minute 01/03/2015 - Land ownership

- PAPs do not have titles to the parcels they are occupying (land not yet adjudicated) PAPs worried they might not be eligible for compensation

During this meeting the PAPs requested the RAP team to help them resolve the land ownership issues through relevant offices, however the RAP team responded that the issues was outside the scope of RAP but will be forwarded to the respective land offices in the county.

RAP team clarified to the community that according to the Land Act 2012 and WB OP 4.12, every PAP will be eligible for compensation.

Minute 02/03/2015 - Extend of Acquisition

The project is only acquiring section of the PAPs land, which makes it Partial acquisition; this also applies for the structures as majority will rebuild the houses within the same land parcels

The community members appreciated that the extend of acquisition is not much as many of them will still have much of their land remaining where they can re construct their structures. However they complained on the delays that are normally experienced during compensation as requested the consultants and

relevant ministry to ensure that they are promptly compensated prior to commencement of civil works.

RAP team explained that the extent of acquisition is 17m from the centre of the dyke and 10m for right of way for maintenance, compensation

Minute 03/03/2015 – Canoe crossings

PAPs were worried that once the dyke is constructed it is likely to block the crossings that they currently use to cross from one bank of the river to the other, the major crossing cited was the one at Narera village.

RAP team clarified that this has been provided in the ESIA prepared for the project, the design will be required to make provisions for people using canoe crossings along the dyke

Minute 04/03/2015 – Backflow menace

River Nzoia backflows at the delta and floods homestead not protected by the dyke on both banks of the river, the community complained of the menace on both the south bank and North bank, however the problem was more pronounced on the south bank where the settlements are many.

Ministry of Environment Water and Natural Resources will initiate studies to find a solution to this project during the design review stage of the feasibility study report.

Minute 05/03/2015 – Borrow Pits sites

Community raised concern on where the contractor will get soil for the works and that previous contractors have been getting soil from farms without reinstatement causing health hazards

Discussions on the concern was noted in the ESIA prepared for the project, borrow pit sites will be properly identified and rehabilitated after burrowing

Minute 06/03/2015 – Seepage from the dyke

The community complained of seepage from the dyke at various sections

The current design will resolve the seepage problem as it has proposed measures such as increasing the dyke base and use of concrete base in all the sections where seepage is noticed thus far.

Minute 07/03/2015 – Compensation Mode and value of compensation

PAPs raised fears of possibility of not being compensated appropriately for the land parcels to be acquired

RAP team clarified that compensation to the PAPs will be at full replacement cost as guided by the

WAY FORWARD

- PAPS appreciated the objectives of the project considering that the area is a flood prone area.
- PAPS requested for prompt compensation and adequate time to demolish and reconstruct their houses.
- PAPS requested for more consultative meetings as the project progresses.
- The meeting ended after 16:00 hours with a closing prayer.

**RESETTLEMENT ACTION PLAN FOR LOWER NZOIA IRRIGATION
PROJECT: REHABILITATION OF FLOOD PROTECTION STRUCTURES
Minutes of Public Participation Meeting Held at Nanjomi Village, Bunyala Central
Location on 21st March 2015 at 2pm**

MEMBERS PRESENT

NO	NAME	DESIGNATION
	Peter Oduori	Bunyala Central Location
	As per Attached Attendance list	Project Affected Persons
	Liya Mango	RAP team – consultant
	Godwin Sakwa	RAP team – consultant

AGENDA OF THE MEETING

- Share Project information with PAPs in regards to resettlement
- To discuss the issues the PAPS had regarding the resettlement
- Deliberate on best way forward of handling issues likely to result from Resettlement

PROCEEDINGS OF MEETINGS

The meeting started at 14:30 hours with introductions of the parties' present and opening remarks from the chief who welcomed all members present to the meeting and requested for a word of prayer.

REPORT FROM THE POTENTIAL AFFECTED PERSONS

The following are the issues that were presented by the community of Nanjomi Village:

- **Minute 01/03/2015 - Land ownership**
- PAPs do not have titles to the parcels they are occupying (land not yet adjudicated) PAPs worried they might not be eligible for compensation

During this meeting the PAPs requested the RAP team to help them resolve the land ownership issues through relevant offices, however the RAP team responded that the issues was outside the scope of RAP but will be forwarded to the respective land offices in the county.

RAP team clarified to the community that according to the Land Act 2012 and WB OP 4.12, every PAP will be eligible for compensation

Minute 02/03/2015 - Extent of Acquisition

The project is only acquiring section of the PAPs land, which makes it Partial acquisition; this also applies for the structures as majority will rebuild the houses within the same land parcels

The community members appreciated that the extend of acquisition is not much as many of them will still have much of their land remaining where they can re construct their structures. However they complained on the delays that are normally experienced during compensation as requested the consultants and relevant ministry to ensure that they are promptly compensated prior to commencement of civil works.

RAP team explained that the extent of acquisition is 17m from the centre of the dyke and 10m for right of way for maintenance, compensation

Minute 04/03/2015 – Canoe crossings

PAPs were worried that once the dyke is constructed it is likely to block the crossings that they currently use to cross from one bank of the river to the other, the major crossing cited was the one at Nalera village.

RAP team clarified that this has been provided in the ESIA prepared for the project, the design will be required to make provisions for people using canoe crossings along the dyke

Minute 05/03/2015 – Backflow menace

River Nzoia backflows at the delta and floods homestead not protected by the dyke on both banks of the river, the community complained of the menace on both the south bank and North bank, however the problem was more pronounced on the south bank where the settlements are many.

Ministry of Environment Water and Natural Resources will initiate studies to find a solution to this project during the design review stage of the feasibility study report.

Minute 05/03/2015 – Borrow Pits sites

Community raised concern on where the contractor will get soil for the works and that previous contractors have been getting soil from farms without reinstatement causing health hazards

Discussions on the Concern was noted in the ESIA prepared for the project, borrow pit sites will be properly identified and rehabilitated after borrowing

Minute 06/03/2015 – Seepage from the dyke

The community complained of seepage from the dyke at various sections

The current design will resolve the seepage problem as it has proposed measures such as increasing the dyke base and use of concrete base in all sections where seepage is prevalent.

Minute 07/03/2015 – Compensation Mode and value of compensation

PAPs raised fears of possibility of not being compensated appropriately for the land parcels to be acquired

RAP team clarified that compensation to the PAPs will be at full replacement cost as guided by the

WAY FORWARD

- PAPS appreciated the objectives of the project considering that the area is a flood prone area.

- PAPs requested for prompt compensation and adequate time to demolish and reconstruct their houses.
- PAPs requested for more consultative meetings as the project progresses.
- The meeting ended after 16:00 hours with a closing prayer.

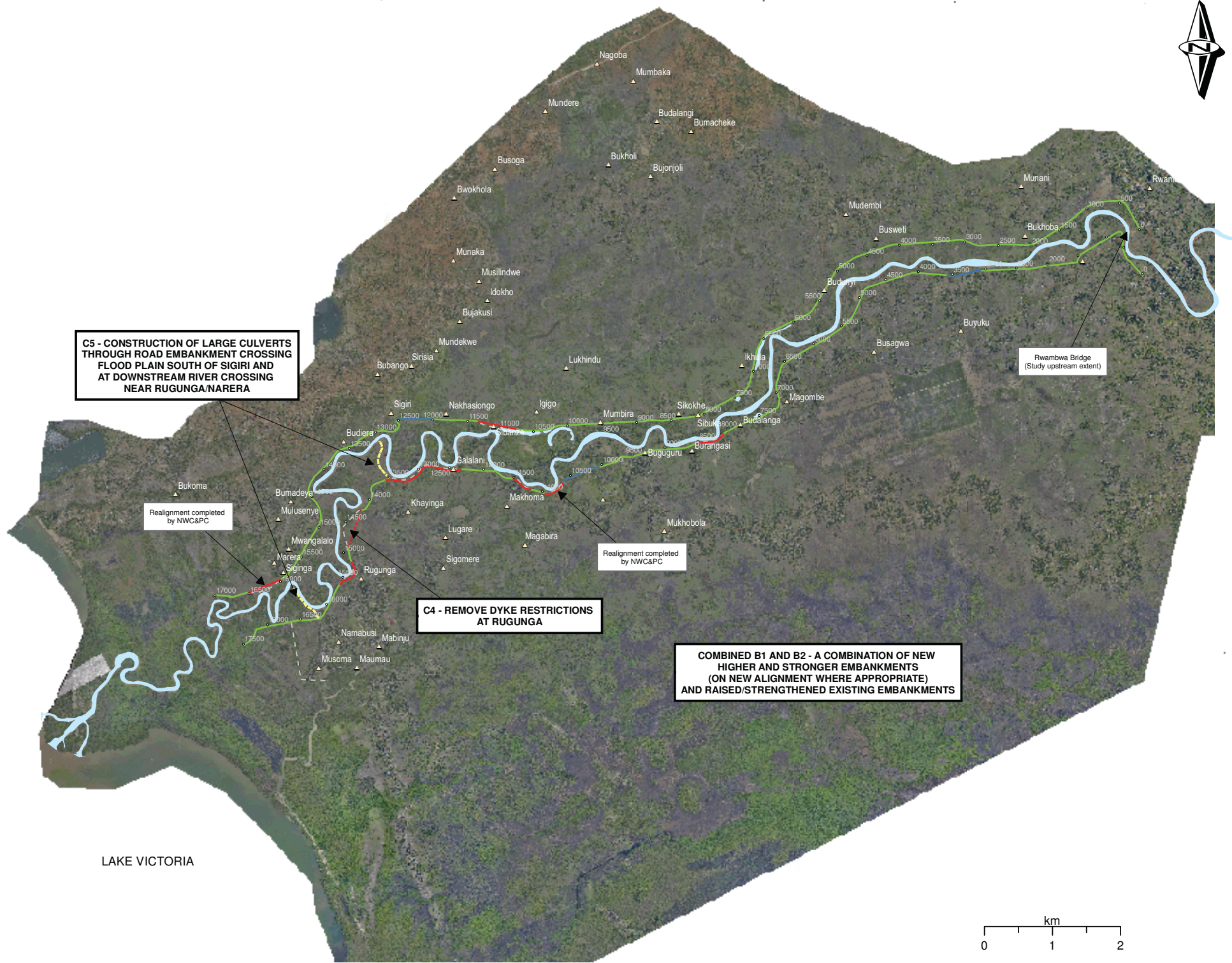
15.2 RAP FIELD SURVEY TOOL

15.3 DETAILED MAPS OF PROJECT



Legend

- River Alignment
- ▲ Villages
- Existing Dykes
- Chainages
- B1 New Realigned Dykes
- B1 Existing Dykes Replaced with New
- B2 Existing Dykes Improved
- ⋯ C4 Realigned Pinch Point
- C5 Culverts



CLIENT
Government of Kenya

PROJECT
Assessment of Levee Integrity and Floodplain Condition and Final Design of New Flood Protection Works in the Downstream Region of the Nzoia River

TITLE
Figure 2
Proposed Works Location
Within The Study Area

SCALE	DATE	DRAWN
1:50,000 at A3	Oct 2012	PM

Rev B
 Drawing Number 5076826/WA/050
 Status D
 DO NOT SCALE
 100
 0 10
 A1
 File: 5076826-WA-050-3-F.dwg
 Date: Sep 13, 2013 - 4:38pm
 Plotted by: makp5681



ATKINS
 IN ASSOCIATION WITH
Howard Humphreys(EA) Ltd
 Consulting Engineers.
 HOWARD HUMPHREYS HOUSE
 MUTHANGARI DRIVE
 P.O.Box 30156-00100, NAIROBI
 Phone 4445254/6, 4441835
 Fax 4440299

KEY
 1. EXISTING FLOOD DEFENCES

NOTES
 1. RIVER ALIGNMENT SHOWN IS BASED ON 2009 MAPPING CONDITIONS, VARIES DUE TO CHANNEL MOVEMENT AND DELTA OVER TIME
 2. RIVER NZOIA FERRY CROSSINGS AT SIGIRI AND RUGUNGA ARE FOR PEDESTRIAN TRAFFIC ONLY. THERE ARE NO VEHICLES CROSSINGS DOWNSTREAM OF RWAMBWA BRIDGE.

B	ISSUED FOR TENDER	FOO	03/09/13	HG	JC
A	ISSUED FOR APPROVAL	FOO	20/06/13	HG	JC
0	ISSUED FOR COMMENTS	PM	28/03/13	HG	JC
Rev	Description	By	Date	Chk'd	Auth

WS Atkins International Ltd
 CONSULTING ENGINEERS
 WOODCOTE GROVE
 ASHLEY ROAD
 EPSOM, SURREY, ENGLAND
 KT18 5BW
 Client
 Tel: (01372) 726140
 Fax: (01372) 740055
 www.atkinsglobal.com

GOVERNMENT OF KENYA
 MINISTRY OF STATE FOR
 SPECIAL PROGRAMMES

Project
 IMPROVEMENT OF FLOOD WATER STRUCTURES
 ALONG THE LOWER REACHES OF RIVER
 NZOIA - BUDALANGI, KENYA

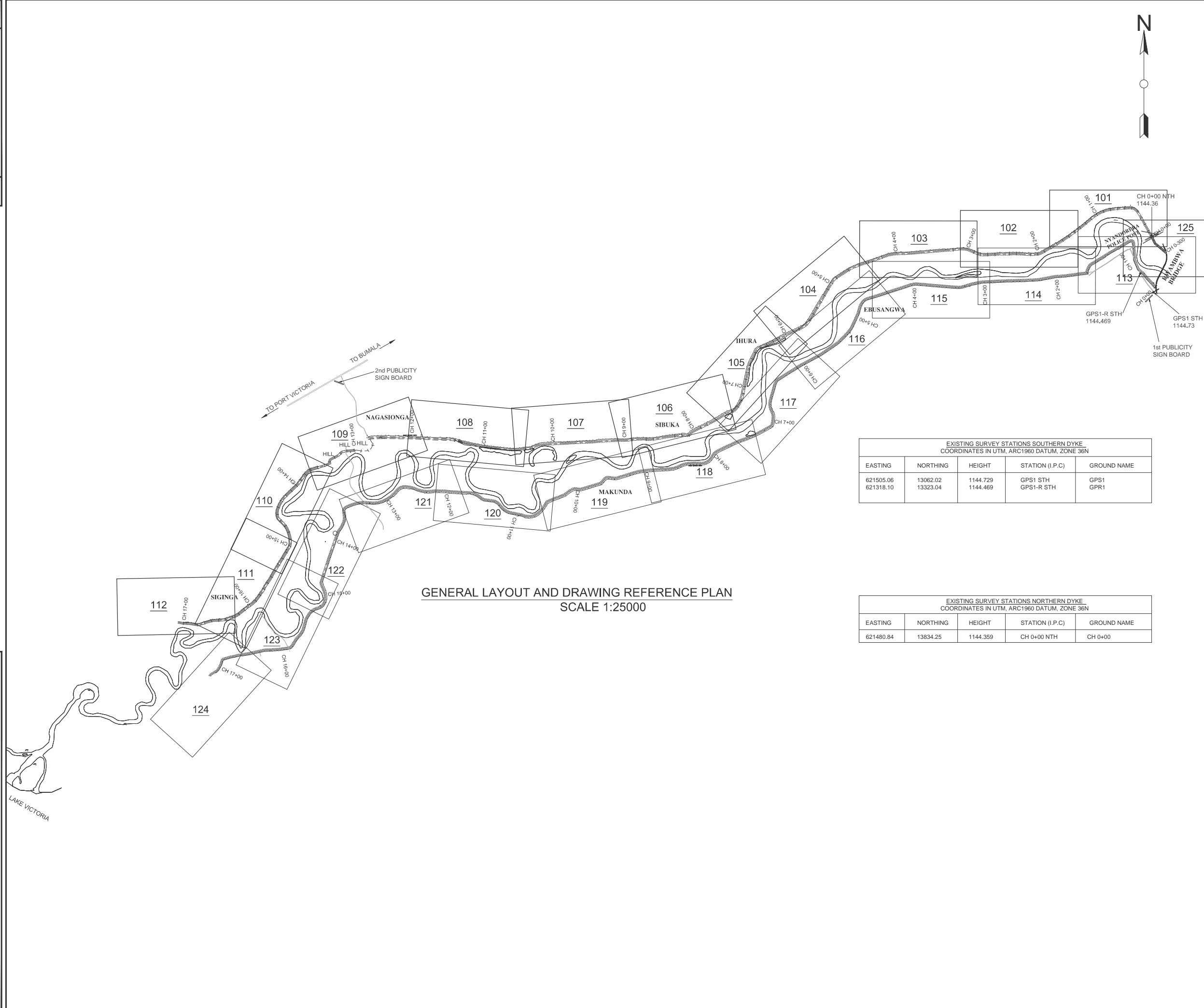
Title
 SITE LOCATION MAP

Sheet Size	Original Scale	Designed/Drawn SPO/PM	Checked HG	Authorised JC
A1	AS SHOWN	Date 22/11/12	Date 28/03/13	Date 28/03/13
Status	Drawing Number	Rev		
D	5076826/WA/050			B

DO NOT SCALE



A1



GENERAL LAYOUT AND DRAWING REFERENCE PLAN
 SCALE 1:25000

EXISTING SURVEY STATIONS SOUTHERN DYKE
 COORDINATES IN UTM, ARC1960 DATUM, ZONE 36N

EASTING	NORTHING	HEIGHT	STATION (I.P.C)	GROUND NAME
621505.06	13062.02	1144.729	GPS1 STH	GPS1
621318.10	13323.04	1144.469	GPS1-R STH	GPR1

EXISTING SURVEY STATIONS NORTHERN DYKE
 COORDINATES IN UTM, ARC1960 DATUM, ZONE 36N

EASTING	NORTHING	HEIGHT	STATION (I.P.C)	GROUND NAME
621480.84	13834.25	1144.359	CH 0+00 NTH	CH 0+00

ATKINSTM
 IN ASSOCIATION WITH

Howard Humphreys(EA) Ltd
 Consulting Engineers.
 HOWARD HUMPHREYS HOUSE
 MUTHANGARI DRIVE
 P.O.Box 30156-00100, NAIROBI
 Phone 4445254/6, 4441835
 Fax 4440299

- NOTES**
- ALL LEVELS AND CHAINAGES IN METRES
 - CONTRACTOR TO UNDERTAKE LEVEL CONTROL SURVEY PRIOR TO COMMENCING WORKS
 - ORIGINAL TOPOGRAPHICAL SURVEY (COORDINATES IN UTM, ARC1960 DATUM, ZONE 36N) TAKEN IN 2009 BY MAP SURVEYS. RE-SURVEYED AND UPDATED IN 2012. LEVELS SHOWN HERE HAVE BEEN REDUCED BY 921mm TO LIDAR DATUM ADOPTED FOR THIS DESIGN.

SURVEY INFORMATION ISSUED TO THE CONTRACTOR IS FOR INFORMATION ONLY. THE CONTRACTOR SHALL NOTE THAT LEVELS PROVIDED AS PART OF THE TOPOGRAPHIC SURVEY INFORMATION ARE TO A DATUM 921mm HIGHER THAN THE SITE DATUM USED FOR THE CONSTRUCTION DRAWINGS.

Rev	Description	By	Date	Chk'd	Auth
B	ISSUED FOR APPROVAL	FO	02/07/13	HG	JC
A	ISSUED FOR APPROVAL	FO	20/06/13	HG	JC
0	ISSUED FOR COMMENTS	PM	28/03/13	HG	JC

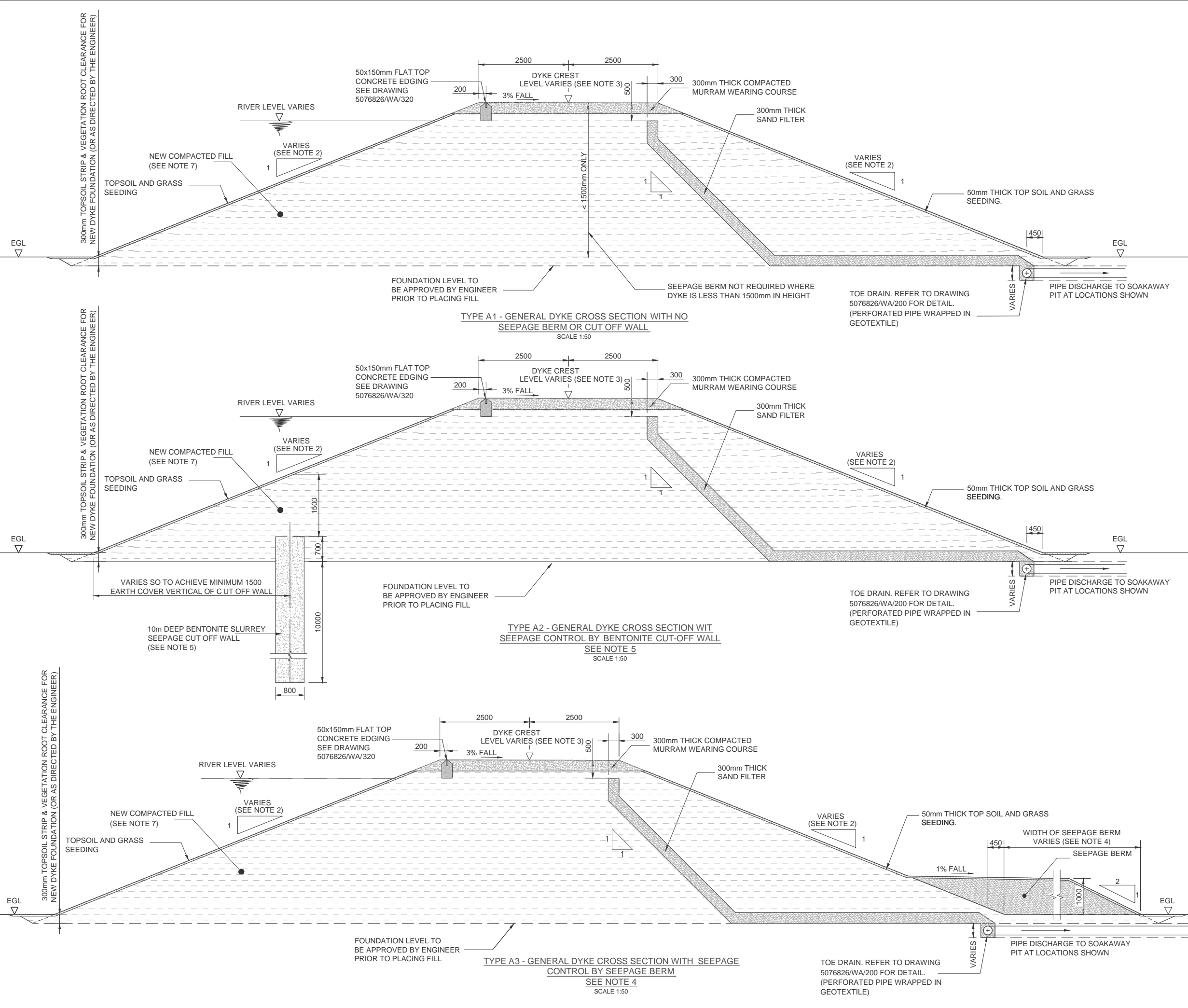
WS Atkins International Ltd
 CONSULTING ENGINEERS
 WOODCOTE GROVE
 ASHLEY ROAD
 EPSOM, SURREY, ENGLAND
 KT18 5BW
 Tel: (01372) 726140
 Fax: (01372) 740055
 www.atkinsglobal.com

GOVERNMENT OF KENYA
 MINISTRY OF STATE FOR
 SPECIAL PROGRAMMES

Project
 IMPROVEMENT OF FLOOD WATER STRUCTURES
 ALONG THE LOWER REACHES OF RIVER
 NZOIA - BUDALANGI, KENYA

Title
 OVERALL SITE KEY PLAN
 AND SURVEY CONTROL STATIONS

Sheet Size	Original Scale	Designed/Drawn	Checked	Authorised
A1	AS SHOWN	SPO / PM	HG	JC
Status	Drawing Number	Date	Date	Date
D	5076826/WA/100	22/11/12	28/03/13	28/03/13



ATKINS

IN ASSOCIATION WITH

Howard Humphreys (EA) Ltd
Consulting Engineers.
HOWARD HUMPHREYS HOUSE
MUTHANGARI DRIVE
P.O. Box 30156-00100, NAIROBI
Phone 4445254/6, 4441835
Fax 4440299

- NOTES:**
- ALL DIMENSIONS ARE IN MILLIMETRES, UNLESS NOTED OTHERWISE.
 - REFER TO LONG REFERENCE 'D' ON DRAWINGS 5076826/WA/101 TO 125 FOR SLOPE REQUIREMENTS.
 - REFER TO LONG SECTION REFERENCE 'A' ON DRAWINGS 5076826/WA/101 TO 125 FOR NEW DYKE CREST LEVEL. LEVEL GIVEN REFERS TO THE CENTERLINE OF THE DYKE.
 - REFER TO LONG SECTION REFERENCE 'E' ON DRAWINGS 5076826/WA/101 TO 125 FOR LOCATION & MINIMUM WIDTH OF SEEPAGE BERM.
 - REFER TO LONG SECTION REFERENCE 'F' ON DRAWINGS 5076826/WA/101 TO 125 FOR LOCATION OF CUT OFF WALLS.
 - TOE DRAINAGE TO DISCHARGE TO SOAKAWAYS AND EXISTING NATURAL DRAINAGE CHANNELS/SEASONAL STREAMS AT LOCATIONS TO BE DETERMINED ON SITE.
 - REFER TO SPECIFICATION FOR DYKE FILL MATERIAL.

SAFETY HEALTH AND ENVIRONMENTAL INFORMATION

IN ADDITION TO THE RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING RISKS AND INFORMATION:

CONSTRUCTION
1. PUBLIC SAFETY, VILLAGES IN CLOSE PROXIMITY TO THE DYKES AND DYKES USED FOR ACCESS.
2. DEEP EXCAVATIONS, RISK OF COLLAPSE AND FALLING IN.
3. FLOODING, RIVER LEVELS CAN RISE QUICKLY OUT OF BANK. IN EXTREME EVENTS THE DYKES CAN BE BREACHED OR OVER TOPPED.

OPERATION AND MAINTENANCE
1. PUBLIC SAFETY
2. NEW DYKES WILL NOT GIVE TOTAL PROTECTION FROM FLOODING.

DEMOLITION
1. PUBLIC SAFETY
2. FLOODING

DESIGNERS RISK ASSESSMENT REFERENCE: 5076552/2/DG22

Rev	Description	By	Date	Chk'd	Auth
B	ISSUED FOR APPROVAL	FOO	02/07/13	HG	JC
A	ISSUED FOR APPROVAL	FOO	21/06/13	HG	JC
0	ISSUED FOR COMMENTS	PM	28/03/13	HG	JC

WS Atkins International Ltd ©
CONSULTING ENGINEERS
WOODCOTE GROVE
ASHLEY ROAD
EPSOM, SURREY, ENGLAND
KT18 5BW
Tel: (01372) 726140
Fax: (01372) 740055
www.atkinsglobal.com

Client
**GOVERNMENT OF KENYA
MINISTRY OF STATE FOR
SPECIAL PROGRAMMES**

Project
**IMPROVEMENT OF FLOOD WATER STRUCTURES
ALONG THE LOWER REACHES OF RIVER
NZOIA - BUDALANGI, KENYA**

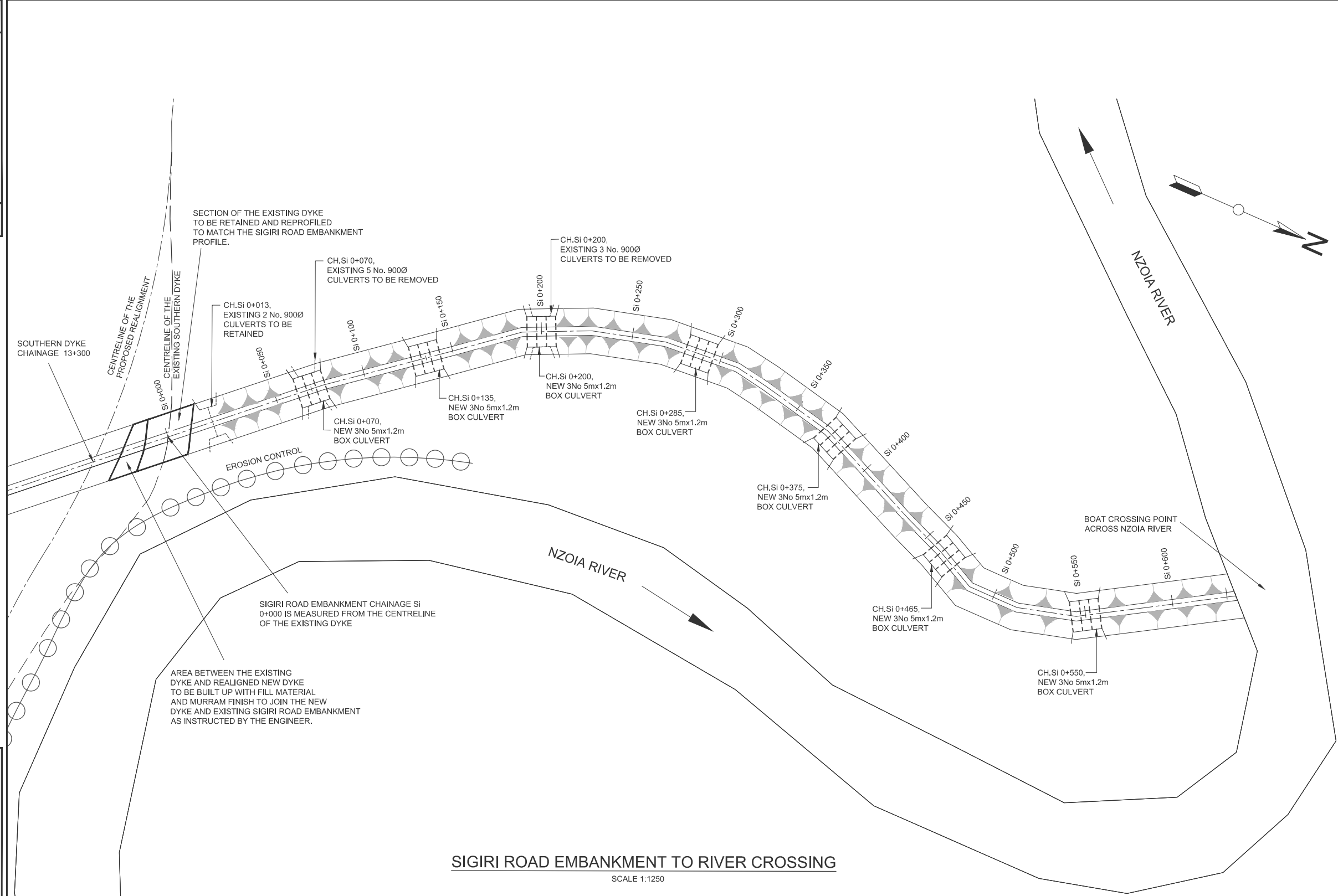
Title
**TYPE A GENERAL
DYKE CROSS SECTION**

Sheet Size	Original Scale	Designed/Drawn	Checked	Authorised
A1	1:50	SPO / PM	HG	JC
Status	Drawing Number	Date	Date	Date
D	5076826/WA/300	13/02/13	28/03/13	28/03/13

DO NOT SCALE



A1



SIGIRI ROAD EMBANKMENT TO RIVER CROSSING
 SCALE 1:1250

ATKINS
 IN ASSOCIATION WITH
HH Howard Humphreys(EA) Ltd
 Consulting Engineers.
 HOWARD HUMPHREYS HOUSE
 MUTHANGARI DRIVE
 P.O.Box 30156-00100, NAIROBI
 Phone 4445254/6, 4441835
 Fax 4440299

- NOTES:**
- CHAINAGE IN KILOMETRES
 - REFER TO DRAWING Nos.5076826/WA/401 TO 5076826/WA/403 FOR CULVERT CONSTRUCTION DETAILS
 - CHAINAGE PROVIDED FOR SETTING OUT REFERS TO THE CENTRELINE OF THE NEW CULVERTS
 - ROAD EMBANKMENT CREST LEVELS TO REMAIN THE SAME. CONTRACTOR TO BACKFILL WITH COMPACTED EXCAVATED MATERIAL TO ORIGINAL GROUND LEVEL.
 - SCOUR PROTECTION OMITTED FOR CLARITY, REFER TO DRAWING 5076826/WA/402 FOR DETAILS.

- LEGEND**
- NEW BOX CULVERT, 3No 5mx1.2m CLEAR OPENING
 - EROSION CONTROL

SAFETY HEALTH AND ENVIRONMENTAL INFORMATION

IN ADDITION TO THE RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING RISKS AND INFORMATION:

CONSTRUCTION
1. PUBLIC SAFETY, VILLAGES IN CLOSE PROXIMITY TO THE DYKES AND CROSSING IS USED FOR ACCESS.
2. FLOODING, RIVER LEVELS CAN RISE QUICKLY OUT OF BANK. IN EXTREME EVENTS THE DYKES CAN BE BREACHED OR OVER TOPPED.
OPERATION AND MAINTENANCE
1. PUBLIC SAFETY
2. STRUCTURES LOCATED BETWEEN NEW DYKES AND WILL BE LIKELY TO FLOOD
3. ACCESS TO ENTER STRUCTURES EXPOSED TO FLOOD RISK.
DEMOLITION
1. PUBLIC SAFETY
2. FLOODING

DESIGNERS RISK ASSESSMENT REFERENCE: 5076552/72/DG/22

A	ISSUED FOR APPROVAL	FOO	21/06/13	HG	JC
0	ISSUED FOR COMMENTS	PM	28/03/13	HG	JC
Rev	Description	By	Date	Chk'd	Auth

WS Atkins International Ltd
 CONSULTING ENGINEERS
 WOODCOTE GROVE
 ASHLEY ROAD
 EPSOM, SURREY, ENGLAND
 KT18 5BW
 Tel: (01372) 726140
 Fax: (01372) 740055
 www.atkinsglobal.com

Client
**GOVERNMENT OF KENYA
 MINISTRY OF STATE FOR
 SPECIAL PROGRAMMES**

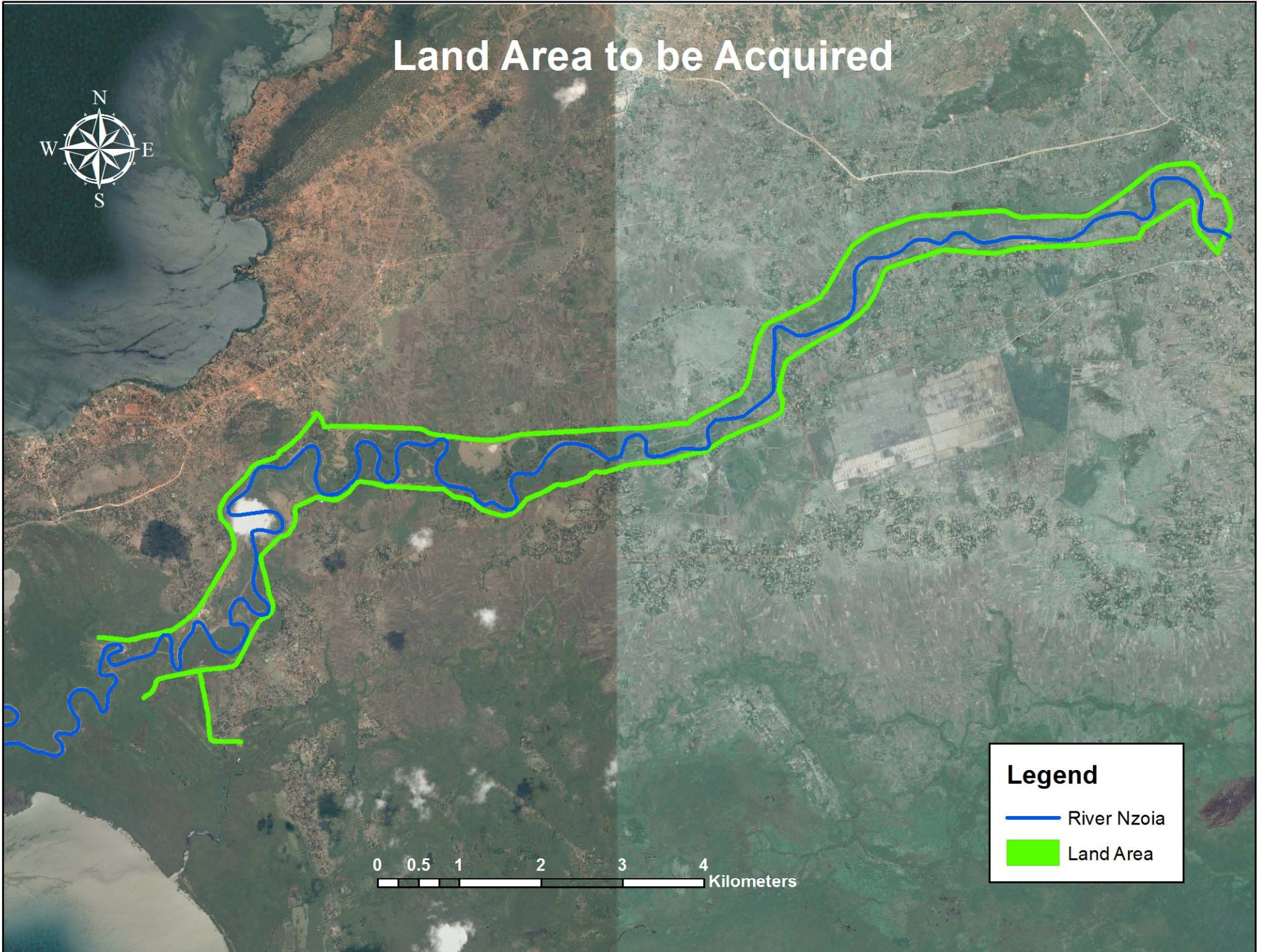
Project
**IMPROVEMENT OF FLOOD WATER
 STRUCTURES ALONG THE LOWER REACHES OF
 RIVER NZOIA - BUNLANGI, KENYA**

Title
**SIGIRI ROAD EMBANKMENT CULVERT
 SETTING OUT PLAN**

Sheet Size	Original Scale	Designed/Drawn	Checked	Authorised
A1	AS SHOWN	SPO/ PM	HG	JC
Date	Date	Date	Date	Date
22/11/12	28/03/13	28/03/13	28/03/13	28/03/13
Status	Drawing Number	Rev		
D	5076826/WA/400	A		

15.4 SELECTED PHOTOGRAPHS

Land Area to be Acquired



0 0.5 1 2 3 4 Kilometers

Legend

- River Nzoia
- Land Area

15.5 LIST OF CONSULTED STAKEHOLDERS

STAKEHOLDER CONSULTATION FORM

PROJECT	RESETTLEMENT ACTION PLAN FOR IMPROVEMENT OF FLOOD MITIGATION STRUCTURES ON LOWER NZOIA RIVER		
VENUE	NANJOMI MAGOMBE WEST / EAST S.LOC, BUNYALA CENTRAL LOCATION		
DATE	22/3/2015		

NAME	LOCATION	SUB-LOCATION	ID NUMBER	PHONE NUMBER	SIGNATURE
Victor O. Andei	Bunyala C	Magombe E	9104830	071695637	Quire
Simon Ochola	"	"	12468692	0727562772	
Fredrick Asanja	"	"	29316682	0708168333	etc
Peter OPIYO	"	Magombe W	0659300	0729026527	Pringo
John Alwaga	"	"	2145212	0717439653	
Barbhai / Didiyngi	-/-	-/-	2266722	0705922044	
John Mufumbi	"	"	226529	0720928362	Pringo
Fabiano Dunga	"	"	5684932		
Grace Ogungo Okoth	"	"	6185516		
Maria Akere Were	"	Magombe E		0713671475	Pringo
Raphael OPIYO	"	Magombe W	0528370		
Magongwu Asembo	"	"			
Mutebata Mayumba	"	"	13168297	0710331130	Okere
Wilfred Oromo	"	"	3881255		
Peter Wanyonyo Farasi	"	"	26086030	0728640261	Juma
Colbert Juma	"	"	27907302	0711413926	
PAUL - O. MAAOBA	"	Magombe west		0715843376	
Godfrey Amisi Ajamba	"	"	9649620	0714530744	Telhu
MUGURU MADINDO	"	"	9104486		ALBERDI
ALBERDI OGEMA	"	"	25871666	0717998882	x. Pinedo
Pascal Akello	"	"			Kano
Jacob Oloo	"	"			
Fred Khaduli Dnyango	"	Magombe E	28129317	07159609446	
Dismas Osoda	"	Magombe W	"		

N/BC

STAKEHOLDER CONSULTATION FORM

PROJECT	RESETTLEMENT ACTION PLAN FOR IMPROVEMENT OF FLOOD MITIGATION STRUCTURES ON LOWER NZOIA RIVER
VENUE	NAJOMI BUNYATA CENTRAL MACHOMBE WEST/EAST
DATE	22-03-015

NAME	LOCATION	SUB-LOCATION	ID NUMBER	PHONE NUMBER	SIGNATURE
Resula Apandi	Bunyata C	Machombe W			
Joyce Muryanga	"	"	11538947		
Narival Lesika Dgile	"	"	9104509	0714533533	
PETRA NDIRA WILRED	"	"	5992218		
Patrick Amara Ndara	"	"	7877804	07	
JAMES Okwaka	"	"	5379522	0716331375	
John Beda	"	"			
Alfred Dlongo	"	"			
Josephine Anyanga	"	"			
Susana Apandi	"	"			
Amyerida Adwoti	"	"			
Pascalina Anna	"	"			
Nicholas Ombabo	"	"	5683344	0711825722	MUKA
Angelina Nweta	"	"	8096751	0713138181	Patricia
Patrick A. Mwandala	"	"	20080713	0713834733	
Alex Dgeya	"	"	5850968	0707594923	
Christopher Sicha	"	"			
Cecilia Muediba	"	"	2263577	0701968491	
Catherine Mwaro Simani	"	"	1726823		
Vernica Nabwira Mwanali	"	"	16923509	10	
OPRELI Dgera	"	"	0713459764		
Jacinta Mwanidi Okumu	"	"	445878	0723847470	
Jane Achieno	"	"	14587869	0723841498	
Replina Juma	"	"			

N/BC

STAKEHOLDER CONSULTATION FORM

PROJECT	RESETTLEMENT ACTION PLAN FOR IMPROVEMENT OF FLOOD MITIGATION STRUCTURES ON LOWER NZOJA RIVER
VENUE	NANZONI BUNYALA CENTRAL MAGOMBE WEST/EAST
DATE	21/3/2015

NAME	LOCATION	SUB-LOCATION	ID NUMBER	PHONE NUMBER	SIGNATURE
CORNEL OJERA	BUNYALA CENTRAL	MAGOMBE W.	2056417	0734268449	<i>[Signature]</i>
TOM KEGULA GONZO	"	"	3336325	0721361348	<i>[Signature]</i>
JOSEPH OIENO OPAKA	"	MAGOMBE E	27975887	0714892379	<i>[Signature]</i>
STEPHEN OMBORI WERE	"	"	5685705	0708687963	<i>[Signature]</i>
MARIE A OUMA	"	MAGOMBE E		0706129120	<i>[Signature]</i>
ANTIKINA AOKO	"	MAGOMBE W.	568309.	-	<i>[Signature]</i>
VIANNI USIKU	"	MAGOMBE W.	29294191	0729058594	<i>[Signature]</i>
JACINTA AOKAKA	"	MAGOMBE W.	7508907		<i>[Signature]</i>
LINET ANYAKILO	"	"		0708283772	<i>[Signature]</i>
EUSELANCE AKINYI	"	"			<i>[Signature]</i>
CATHERINE MWARI	"	MAGOMBE E.	10707029.	0722407467	<i>[Signature]</i>
JOSEPH OIENO	"	MAGOMBE W.			<i>[Signature]</i>
AGATA ABAUSI	"	MAGOMBE W.	5683176	0715585086	<i>[Signature]</i>
PAUL NDIRA	"	MAGOMBE W.	86822798		<i>[Signature]</i>
ANTIKINA MWARI	BUNYALA CENTRAL	MAGOMBE E	7977601	0706626726	<i>[Signature]</i>
PAULINE AKITU ANSIRA	"	MAGOMBE W.	2237620		<i>[Signature]</i>
MARIE MASIGA	"	MAGOMBE W.			<i>[Signature]</i>
ANNA NAKA	"	MAGOMBE W.	3492242	0722537382	<i>[Signature]</i>
GEORGE KYAGORO.	"	"			<i>[Signature]</i>
MANIERI JICHO	"	"	29295237		<i>[Signature]</i>
MAGOMBE HAPULICE	"	"			<i>[Signature]</i>
FLORIAN N. DRWORI	"	MAGOMBE W.			<i>[Signature]</i>
LEUCIA PAMBA AFWUBWA	"	MAGOMBE W.			<i>[Signature]</i>
JOHN OMBORI OUMA	"	MAGOMBE W.	2738563	0702841241	<i>[Signature]</i>

STAKEHOLDER CONSULTATION FORM

IGIGO VILLAGE, BUNYALA EAST LOCATION

PROJECT	RESETTLEMENT ACTION PLAN FOR IMPROVEMENT OF FLOOD MITIGATION STRUCTURES ON LOWER NZOIA RIVER
VENUE	IGIGO VILLAGE, BUNYALA EAST LOCATION
DATE	20/3/2015

NAME	LOCATION	SUB-LOCATION	ID NUMBER	PHONE NUMBER	SIGNATURE
1 Musola Souda Pitalye	Bungala East	Budalangai	14530670	0724735162	
2 Roseyue Sindi Otdimu	Bungala East	Budalangai		0738357342	
3 Roseyue Sindi Otdimu	Bungala East	Budalangai	#24580586	07116579489	
4 Roseyue Sindi Otdimu	Bungala East	Budalangai		07114578742	
5 Roseyue Sindi Otdimu	Bungala East	Budalangai		0700181561	
6 Roseyue Sindi Otdimu	Bungala East	Budalangai		070456769	
7 Roseyue Sindi Otdimu	Bungala East	Budalangai	7308736	0716566913	
8 Roseyue Sindi Otdimu	Bungala East	Budalangai		07032041643	
9 Roseyue Sindi Otdimu	Bungala East	Budalangai			
10 Roseyue Sindi Otdimu	Bungala East	Budalangai	91043443	0734906019	
11 Roseyue Sindi Otdimu	Bungala East	Budalangai			
12 Roseyue Sindi Otdimu	Bungala East	Budalangai	13875122	0708162398	
13 Roseyue Sindi Otdimu	Bungala East	Budalangai	25662309	0717039510	
14 Roseyue Sindi Otdimu	Bungala East	Budalangai		071141502	
15 Roseyue Sindi Otdimu	Bungala East	Budalangai			
16 Roseyue Sindi Otdimu	Bungala East	Budalangai			
17 Roseyue Sindi Otdimu	Bungala East	Budalangai			
18 Roseyue Sindi Otdimu	Bungala East	Budalangai			
19 Roseyue Sindi Otdimu	Bungala East	Budalangai			
20 Roseyue Sindi Otdimu	Bungala East	Budalangai			
21 Roseyue Sindi Otdimu	Bungala East	Budalangai			
22 Roseyue Sindi Otdimu	Bungala East	Budalangai			
23 Roseyue Sindi Otdimu	Bungala East	Budalangai			
24 Roseyue Sindi Otdimu	Bungala East	Budalangai			

STAKEHOLDER CONSULTATION FORM

PROJECT RESETTLEMENT ACTION PLAN FOR IMPROVEMENT OF FLOOD MITIGATION STRUCTURES ON LOWER NZOIA RIVER
 VENUE 16160 VILLAGE, BUNYALA EAST LOCATION
 DATE 20/3/2015

NAME	LOCATION	SUB-LOCATION	ID NUMBER	PHONE NUMBER	SIGNATURE
49 Clement Mwaro	Bunyala East	Budalangi			C.M.
50 Pascaha Alor	Bunyala East	Budalangi			P.A
51 Jacinto Nasyuku	Bunyala East	Budalang			JM
52 Josephine Obare	Bunyala East	Budalang			JO
53 Jacinto Akumu	Bunyala East	Budalang			JA
54 Mary Nyula	Bunyala East	Budalang	26059787	0707537125	MA
55 Lilian Niyut	Bunyala East	Budalang			W
56 Everline Gyugi	Bunyala East	Budalang	2107509495	07159866080	S
57 Susan Atieno	Bunyala East	Budalang			P.m.
58 Patricia Muchari	Bunyala East	Budalang			CO
59 Cora Ogete	Bunyala East	Budalang			K
60 Adilia Kamalo	Bunyala East	Budalang			
61 John Okumu					
Thomas Oyauko					

STAKEHOLDER CONSULTATION FORM

PROJECT	RESETTLEMENT ACTION PLAN FOR IMPROVEMENT OF FLOOD MITIGATION STRUCTURES ON LOWER NZOIA RIVER
VENUE	AT IGIGO VILLAGE, BUNYALA EAST LOCATION
DATE	

NAME	LOCATION	SUB-LOCATION	ID NUMBER	PHONE NUMBER	SIGNATURE
25 BENEACE Okumu	Bungala East	MUDENGI	29537970	0718259289	
26 Odawa Bernard	Bungala East	Budalang'i	291149554	0708892303	
27 Musyau L. Abava	Bekani	Budalang'i	31911546	0725355830	
28 Skaddek m. Nangani	Bungala West	Bekani	14531892	0727031769	
29 Mwaia K. Okela	Bungala West	Bekani	21577768	0702253031	
30 Michael W. Magike	Bungala East	Budalang'i	9340706	0716152671	
31 Austino D. Mandeyi	Bungala East	Budalang'i		0726742591	
32 Stephen B. George	Bungala East	Budalang'i			
33 PETE R ODOGA	BUNYALA EAST	BUDANGI			
34 MALIGA PAISON	BUNYALA EAST	MUDENGI	30933345	0718161477	
35 NICHOLAS EMANUEL	BUNYALA EAST	BUDANGI			
36 MARIKE AGNES	BUNYALA WEST	SIGINGA	31968082	0701811092	
37 NYONGESA ELIAS	BUNYALA EAST	BUDANGI	21096887	0729572933	
38 Paul Simudu Busire	BUNYALA EAST	BUDANGI	5334126		
39 TETI MABWA ODIGA	"	"	24381225	0710615166	
40 MICHAEL MABWA	"	"			
41 AROSELI ANIRO	"	"	21908890	0728211578	
42 CHRISPINUS JUMA	"	"		0757283802	
43 LINDS RUDWA	"	"	11	11	
44 HENRY KADIMA BUIRE	BUNYALA EAST	BUDANGI	81267762	0725003873	
45 CHRISTOPHER JUMA	"	"	"	"	
46 Peter Nangusi	"	"	"	"	
47 DICKSON OKUMU	Bungala East	Budalang'i	13168447	0711159317	
48 PAUL OKITA	Bungala East	Budalang'i		072146949	

N/BW

STAKEHOLDER CONSULTATION FORM

PROJECT RESETTLEMENT ACTION PLAN FOR IMPROVEMENT OF FLOOD MITIGATION STRUCTURES ON LOWER NZOIA RIVER
 VENUE NABERA VILLAGE, SIGINGA SUB LOCATION, BUNYALA WEST LOCATION
 DATE 20/3/2015

NAME	LOCATION	SUB-LOCATION	ID NUMBER	PHONE NUMBER	SIGNATURE
BARTHOLOMEW ONGANGI	BUNYALA WEST	SIGINGA	9606703	0788723432	
NICOLA PETER NONERA	BUNYALA WEST	SIGINGA	30903001	0718161589	
EXCELSYME NIGHTI ODETU	BUNYALA WEST	SIGINGA	34930126	0710237542	
VIDEI MANDIHA KHAWWATHU	BUNYALA WEST	SIGINGA	31352231	0706-685526	
MARBARA NAIFULA AIONUS	BUNYALA WEST	SIGINGA			
MARBARA NANGIRA BUDOLA	BUNYALA WEST	SIGINGA			
PAMELA NAOWIRE MUSTAFA	BUNYALA WEST	SIGINGA			
ANNA RUELLO MUCANDA	BUNYALA WEST	SIGINGA	13196215	0712787538	
JUSTINE KHARIDU DIOYO	BUNYALA WEST	SIGINGA	9104734	0716510615	
GUERLINE JAUSIKU ALEPIA	BUNYALA WEST	SIGINGA			
LENOYA JUMBA OKUNDU	BUNYALA WEST	SIGINGA	6560457	0713662992	
JOSEPH BACIETI MABABA	BUNYALA WEST	SIGINGA	4210172	0701844247	
ALEX WIRE OMOTO	B/W	SIGINGA	14880389	072875259	
MSMOM ONGIRI KUBUKU	B/W	SIGINGA		0707862468	
SUSANI NAMULUMBA	B/W	SIGINGA			
GOERPE NONGA	B/W	BUKOMA	11717284	0711313396	
ALFRED NBTMUKURA	B/W	SIGINGA			
JOSEPHINE NAFIKA MAKINDEU	B/W	SIGINGA			
BENINICIA NDINGA	B/W	SIGINGA			

STAKEHOLDER CONSULTATION FORM

PROJECT	RESETTLEMENT ACTION PLAN FOR IMPROVEMENT OF FLOOD MITIGATION STRUCTURES ON LOWER NZOIA RIVER
VENUE	BUMBINJI 4 ROUNDS, KHATULA LOCATION
DATE	22.03.2015

NAME	LOCATION	SUB-LOCATION	ID NUMBER	PHONE NUMBER	SIGNATURE
John Kudombi	KHATULA	MABINTU	4793249	0723133557	[Signature]
DANIEL DJINDAKI NKEKI	KHATULA	LUKATE	A011011	074984976	[Signature]
Thomas SONCA	KHATULA	MABINTU	0116790	0711468218	[Signature]
ROBERT DJIRIMBO	KHATULA	MABINTU	1226580	072970993	[Signature]
KONGINUS LINUS OBEKO	HATULA	MABINTU	4310541	0708487551	[Signature]
MICHAEL OYABA	KHATULA	MABINTU	5685082	0716030143	[Signature]
EVANS OUMA	KHATULA	MABINTU	9165433	078886693	[Signature]
JAEOR B.O. NYAROLA	KHATULA	RUBUNGA	0972484	070623635	[Signature]
BEATRIX OZEO	MABINTU	MABINTU	14597904	0735-237925	[Signature]
DEUNIS KHAITE GARI	RUBUNGA	RUBUNGA	12881768		[Signature]
GABYS MIALABA	RUBUNGA	RUBUNGA	9980395	0728004771	[Signature]
RELIENA OYONGO	RUBUNGA	RUBUNGA	12601661	0716577897	[Signature]
EMMANUEL MUALABA	RUBUNGA	RUBUNGA			[Signature]
JAMES OTAMBO OGOBA	KHATULA	MABINTU	4603069	0701018943	[Signature]
CHRISTIE MARNDA	"	"			[Signature]
DAMEA DIALO DOKO	"	"	12685014	0712495182	[Signature]
CORNELIA MAKHA OBUWEI	"	DUBUNGA	4210893		[Signature]
DESULA KARWA WANRAMA	KHATULA	"			[Signature]
ABDI MICHAEL	"	MABINTU	10907020	0710616642	[Signature]
AUSTINE OUBEE	"	LUKATE	72685036	0701354579	[Signature]
FLORENCE CHRISTOPHERS PEYOKA	"	MABINTU	78971923	0700603293	[Signature]
KHABIANLU OYONDO APTENDI	KHATULA	KUKUMBA	257197374	07284235786	[Signature]
MACHONDA OYONDO MAMINGU	RUBUNGA	RUBUNGA	8027926	0715854809	[Signature]
AMANDA ATIMBO	DUBUNGA	KHATULA	2828616	07280736182	[Signature]

STAKEHOLDER CONSULTATION FORM

PROJECT	RESETTLEMENT ACTION PLAN FOR IMPROVEMENT OF FLOOD MITIGATION STRUCTURES ON LOWER NZOIA RIVER
VENUE	BUNYINYI GROUNDS, KHAJULA LOCATION
DATE	23/3/15

NAME	LOCATION	SUB-LOCATION	ID NUMBER	PHONE NUMBER	SIGNATURE
CHRISTOPHER MATHAMBA	Khasula	Mabunga	25346904	0719594483	
KEVIN JUMATH	KHAJULA	MABINJU	---	0728102051	
Fredrick Mwendwa Ngat	Khasula	Mabunga	25019414	0704607320	
DATACK KENYABAI	Khasula	Dugumga	91045703	0715452108	
JAMES KANYAMA	KHAJULA	MABINJU	22908784	0716527876	
FRANCIS S. YHAKEMBA	KHAJULA	MABINJU	20767677	0712841272	
CLEMENS BGIWINGO	KHAJULA	MABINJU	1720636	0711199822	
BENNIS ONYATHGO	KHAJULA	MABINJU			
JANEFESOR KADOGO	KHAJULA				
NICODIMINE MUREMBO	KHAJULA	SIGOMBEF	25869403	0714736874	
MARY ANNA DINDIGA	"	MABINJU	91535860	0733271705	
MARY SUCILU ATENIA	"	MABINJU	2027960	0711712031	
AROLINE GRACE ANDSRA	"	RUGUNGA	2027929	0716382817	
ROSE LUWANDI BOLOMA	"	RUGUNGA	2027929	0716382817	
WALTERIED HARWIRE DITAMP	"	MABINJU		0708159407	
GRACE NULU ARELE	"	MABINJU			
REINA BIDADI	"	MABINJU			
ANNA BADI	"	MABINJU			
ABAHU I DANIEL OTWANGI	"	MABINJU	30406619	078660045	
JAMES .M. OKROBI	KHAJULA	MABINJU	2928885	0729-091432	
MICHAEL S. NAMODI	KHAJULA	MABINJU	20232585	0713457556	
JACIN TA .M. KIDINDI	KHAJULA	MABINJU	07206504731	0720066731	
BETTESA MAFULA	KHAJULA	MABINJU	0606066	0719118309	

STAKEHOLDER CONSULTATION FORM

PROJECT	RESETTLEMENT ACTION PLAN FOR IMPROVEMENT OF FLOOD MITIGATION STRUCTURES ON LOWER NZOIA RIVER
VENUE	BUNDYI GROUNDS, KHATULA LOCATION
DATE	23/3/15

NAME	LOCATION	SUB-LOCATION	ID NUMBER	PHONE NUMBER	SIGNATURE
ROSE AGATHA	KHATULA	MABINGU			
WILMINTA AMUR	"	MABINGU			
ROSE ANA DESSA	"	MABINGU	21225378	07118190106	
ORADA O. FRANS	"	MABINGU	26582360	0713671458	
AGURU O. KEVIN	"	MABINGU	27980166	0729426091	
ROSEMARY FAKHUNTA	"	MABINGU	22919984	0729426091	
ADONS OMONO	"	"			X X X
EVANUS EKUMA OKUMU	"	"	22919984	0729426091	
FRANCIS OKELLO OKADA	KHATULA	MABINGU	23276643	0724911389	
HEZRON WERE	"	MABINGU			
DENIS ASABU DUBO	KHATULA	MABINGU	27406903	0718279105	
PILLEMOM OIGI	KHATULA	MABINGU		0718161812	
AFELIONG. H. MAMWA	"	MABINGU	0734460307	00330114	
VINCENT O OKUMU	KHATULA	MABINGU	26126300	0725361725	
NDUGENDA OKELLO	"	MABINGU			
DENIS WEDE MAMUNE	"	"	20263230	0714640338	
3-5 EDHAT OROMU	"	"			
KADREBU BUBES	KHATULA	MABINGU		07117630897	
ANESI SIKHONGA	"	"	9802959	0710123485	
WALTER WANDERA	KHATULA	MABINGU			
CHRISTOPHER OMONDI	"	"	31298620	0703783331	

B/K

STAKEHOLDER CONSULTATION FORM

PROJECT	RESETTLEMENT ACTION PLAN FOR IMPROVEMENT OF FLOOD MITIGATION STRUCTURES ON LOWER NZOIA RIVER
VENUE	MABINDU, MABINDU S.L.O.C for KHASULA LOCATION
DATE	23/3/15

NAME	LOCATION	SUB-LOCATION	ID NUMBER	PHONE NUMBER	SIGNATURE
HENDY MAJINA OKUMU	KHASULA	MABINDU	2072669	0713046481	[Signature]
ALPHONSE OMBWORI OLUKU	KHASULA	BUGUNGA	4211379	0705463784	[Signature]
ALFRED MUSODGA OMBWORI	KHASULA	BUGUNGA	16003784	070554827	[Signature]
LEUNDA NABUKI	"	MABINDU	0681989	0712596483	[Signature]
WASHINGTON MATAMBA	"	MABINDU	1726643	0725355719	[Signature]
PATRIK WABEDA OMBWORI	KHASULA	BUGUNGA	2506846		[Signature]
JOSEPH UBUYA	KHASULA	MABINDU			[Signature]
LEONDA MADIA	"	"	"		[Signature]
TEDESIA ANSOPU	"	"	"		[Signature]
EVELYNE NABWIDE	KHASULA	"	21938081	0706455737	[Signature]
JAMES UINDINI	"	"	1726651	0735743054	[Signature]
Oello Jockstone	KHASULA	Mabindu	28547114	0724208369	[Signature]
JAMES KANGWA OYAMBO	KHASULA	MABINDU	7897083	0711194937	[Signature]
MICHAEL PABU OIRO	KHASULA	MABINDU	4211677	0717879150	[Signature]
Makoto Mudefu Okumu	KHASULA	MABINDU	1720768		[Signature]
DICK ONYANGO	KHASULA	MABINDU			[Signature]
Jeffrey ORESO OJONG	KHASULA	MABINDU	0715854696	1268000	[Signature]
ELVIN KUBERA JUMANE	KHASULA	MABINDU	0712841249	12684937	[Signature]
Pascal OMBITO WAKWAKWA	KHASULA	BUGUNGA	4226479	0701844088	[Signature]
MICHELE ODINDI ODERO	KHASULA	MABINDU	10749645	0796443364	[Signature]
JOHN BUCUMWA	"	BUGUNGA	9105075	071040006	[Signature]
JARICK ASEMBO OUBA	"	MABINDU	25734722	0711674810	[Signature]
NICHOLAS MATOTA GOKO	"	"	25734722	0719383761	[Signature]
RAPHAZEL OMBWORI	"	MABINDU	4009420	0720099087	[Signature]

M/K

STAKEHOLDER CONSULTATION FORM

PROJECT	RESETTLEMENT ACTION PLAN FOR IMPROVEMENT OF FLOOD MITIGATION STRUCTURES ON LOWER NZOIA RIVER		
VENUE	MAKTHONA VILLAGE, LUGARE SUB LOCATION, KHATULA LOCATION		
DATE	31/03/2015		

NAME	LOCATION	SUB-LOCATION	ID NUMBER	PHONE NUMBER	SIGNATURE
Daniel NGBEHI	KHATULA	LUGARE	4211011	0714984706	<i>[Signature]</i>
HELEN A. WENZ	KHATULA	NIKORINDU	27042056	0705890892	<i>[Signature]</i>
ELORA O. WENZ	KHATULA	LUGARE			WENZ,
ANASTAS ALBWA	KHATULA	LUGARE			ALBWA
YVES NIREAR	KHATULA	LUGARE			<i>[Signature]</i>
MILORD A. ROSELINE	KHATULA	NIKORINDU	24048017	0716937992	<i>[Signature]</i>
FLORENCE A. OTHMANI	KHATULA	LUGARE	27358039	0702424289	<i>[Signature]</i>
ANASTAS NEMZANI	KHATULA	LUGARE		0713309745	ANASTAS
ELVINE ASIMBA	KHATULA	LUGARE	25208564		ASIMBA
ANASTAS NIMBA	KHATULA	LUGARE	052774	0704831175	NIMBA
ANASTAS NIMBA	KHATULA	LUGARE	25398093		NIMBA
ANASTAS NIMBA	KHATULA	LUGARE	25441342		NIMBA
MARY DROYA	KHATULA	LUGARE			DROYA
ANASTAS NGE	KHATULA	LUGARE			NGE
ANASTAS NIMBA	KHATULA	LUGARE			NIMBA
ANASTAS NIMBA	KHATULA	LUGARE	27354021	0705207463	NIMBA
MILORDE ANWA	KHATULA	LUGARE	31329544	0789517289	<i>[Signature]</i>
JEFITH ATENO	KHATULA	LUGARE			ATENO
MARGARET NAGESA UTICUS	KHATULA	LUGARE			UTICUS
LEONORA NIKORINDU	KHATULA	LUGARE			NIKORINDU
MARITINA N. ASIMBA	KHATULA	LUGARE	18904644	072916605	ASIMBA
MARITINA NEMZANI	KHATULA	LUGARE	1727223	0705865937	NEMZANI
ANASTAS ANIMBA	KHATULA	LUGARE	28967944	07039126102	ANIMBA

M/K

STAKEHOLDER CONSULTATION FORM

PROJECT	RESETTLEMENT ACTION PLAN FOR IMPROVEMENT OF FLOOD MITIGATION STRUCTURES ON LOWER NZOIA RIVER		
VENUE	MARHO MA	VILLAGE, LUGARE SUB LOC.,	KHATULA LOCATION
DATE	21/03/2015		

NAME	LOCATION	SUB-LOCATION	ID NUMBER	PHONE NUMBER	SIGNATURE
FRANCIS ODORE ODOUR	KHATULA	LUGARE	4211499	0713149171	FRANCIS
CHARLE MANGIRA ONGISO	KHATULA	LUGARE	13416708	0724789094	CHARLE
CLEMENT BIONGGE ODOUR	KHATULA	LUGARE	1786928	0700536968	CLEMENT
GUBATO ODUMBO	KHATULA	LUGARE	9606620	0711796815	GUBATO
ALEX KHUSU OKELO	KHATULA	LUGARE	4211018	0711134842	ALEX
JOHN ACHUCHI	KHATULA	LUGARE	1124666	0715779492	JOHN
EMMANUEL NGISI KHATUKO	KHATULA	LUGARE	7510334		EMMANUEL
DAVID MUGELI SUMI	KHATULA	LUGARE			DAVID
AMARLET WERE ANJARA	KHATULA	LUGARE			AMARLET
NICHOLOS KHUMUKA OCHOYA	KHATULA	LUGARE	2211802		NICHOLOS
NATIKA SIFANO	KHATULA	LUGARE	4088961	0788720921	NATIKA
WILBERFORCE OBOI NAWINDJA	KHATULA	LUGARE	8132946	0732519106	WILBERFORCE
JAMES KECITULA	KHATULA	LUGARE	9104437	0728276817	JAMES
KILIKITEL ANJANO	KHATULA	LUGARE	25053732	070416815	KILIKITEL
LUCAS OMPALA KHATOKO	KHATULA	LUGARE			LUCAS
HANNINGSON BUIRE BINGALE	KHATULA	LUGARE			HANNINGSON
LADDECE BUBU OCHOYA	KHATULA	LUGARE	4210730	0702021244	LADDECE
MARIN MWILO OBAMA	KHATULA	LUGARE	26728276	078787429	MARIN
ALEX JOHN	KHATULA	LUGARE	134573		ALEX
MOSES MUTATI JUMA	KHATULA	LUGARE			MOSES
DUNCAN AKLEBA KIRUK	KHATULA	LUGARE	27981424	0729957533	DUNCAN
JACOBO OPIYO OKILO	KHATULA	LUGARE	20231544	072359826	JACOBO
JACKSON BUNU OLENI	KHATULA	LUGARE			JACKSON
ROSE ODUMBO ODUGI	KHATULA	LUGARE	16123966		ROSE

STAKEHOLDER CONSULTATION FORM

PROJECT	RESETTLEMENT ACTION PLAN FOR IMPROVEMENT OF FLOOD MITIGATION STRUCTURES ON LOWER NZOIA RIVER
VENUE	MAKHTOMTA VILLAGE, LUGARE SUB LOCALITY KHATUWA LOCATION
DATE	21/3/2015

NAME	LOCATION	SUB-LOCATION	ID NUMBER	PHONE NUMBER	SIGNATURE
Edwin Abdi	Khatuwa	Mabintia	70902470	0705069125	
Parcal Ruba	Lugare	Lugare	27267728	0711199548	
Silas Oguba	Lugare	Lugare	4919192	0739730599	
Stephen Oteke	Lugare	Lugare	25835409		
John Wanders	Lugare	Lugare	24450248	0718182221	
Mugola John Joseph	Khatuwa	Lugare	31942466	0723100986	
Barolomeus Abada Mugola	Khatuwa	Lugare	4211071	0711150326	
Patric Nauriri	Lugare	Lugare	26728273	0734452301	
Victor Wapula	Lugare	Lugare		0737656571	
Joseph Odway	Lugare	Lugare		0703968288	
Landel Duran Okumu	Khatuwa	Mabintia	25547348	0708238458	
Isaac Olos	Lugare	Lugare			
Benjamin Agamba	Lugare	Lugare	27150355	0714956625	
Clare Anyang'o	Khatuwa	Lugare		0710579090	
Jane Kandira	Lugare	Lugare			
Jaginda Okumu	Lugare	Lugare	4211640		
Josephus Mungu	Lugare	Lugare			
Jainis Mungu	Lugare	Lugare	12684926	0701142623	
James Angira	Lugare	Lugare			
Magnet Wanders	Lugare	Lugare			
Easter Nakani Shada	Lugare	Lugare			
Anberua Akuku Okumu	Lugare	Lugare	83980777	0724133389	
Fegina Odo	Lugare	Lugare			
Peter Gohure	Lugare	Lugare			

