



Reviewed and Updated Resettlement Action Plan (RAP) for the Proposed Rehabilitation of Lodwar-Lokichogio-Nakodok Road (A1), 240 Km (Package 3)

Final Report

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Proponent	Consultant
Kenya National Highways Authority	Irene W. Muchoki
Blue Shield Towers, Hospital Road, Upper Hill	P.O. Box 53147,00200
P.O. Box 49712 – 00100, Nairobi Kenya	Nairobi, Kenya
	Tel; 0724 255 163/ 0735 003 332
Tel:+254-20-8013842	E-mail: imuchoki2004@gmail.com

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LIST OF ACRONYMS

ASAL	Arid & Semi-Arid Lands	
ACK	Anglican Church of Kenya	
CDF	Constituency Development Fund	
CSR	Corporate Social Responsibility	
DDP	District Development Plan	
DSG	District Steering Group	
EMCA	Environment Management and Coordination Act, 1999	
EMP	Environmental Management Plan	
EP	Entitled Person	
ESIA	Environmental and Social Impact Assessment	
GoK	Government of Kenya	
GPS	Global Positioning System	
Ha	Hectare	
IMA	Independent Monitoring Agency	
IMU	Independent Monitoring Unit	
IEC	Information Education and Communication	
ISK	Institution of Kenya Surveyors	
KeNHA	Kenya National Highways Authority	
KFS	Kenya Forest Service	
KPLC	Kenya Power & Lighting Company	
KURA	Kenya Urban Roads Authority	
KWS	Kenya Wildlife Service	
Km	Kilometres	
Km ²	Square Kilometres	
KRU	KeNHA Resettlement Unit	
KShs	Kenya Shillings	
m	Metres	
M	Million	
Mm	millimetres	
MoLHUD	Ministry of Lands, Housing and Urban Development	
NEMA	National Environment Management Authority	
OVC	Orphans and Vulnerable Children	
PAHs	Project Affected Households	
PAPs	Project Affected Persons	
RAP	Resettlement Action Plan	
PIU	Project Implementation Unit	
PPE	Personal Protective Equipment	
R&R	Resettlement & Rehabilitation	
RIC	RAP Implementation Committee	
RoW	Right of Way	
SDA	Seventh Day Adventist	
TOR	Terms of Reference	
UTM	Universal Transverse Mercator	
VIP	Vertical Information Point	

CERTIFICATION

Prepared by:

Irene W. Muchoki P.O. Box 53147, 00200 Nairobi, Kenya Tel; 0724 255 163/ 0735 003 332

E-mail: imuchoki2004@gmail.com

Assisted by

Name:	David Korir	
Position:	Registered Valuer	
Signed:		
Date/Stamp:		

For and on behalf of:

The Kenya National Highways Authority.

P.O. Box 49712 - 00100

Nairobi

Tel:+254-20-8013842

Email: samuel.omer@kenha.co.ke

Officer's Name:	Eng. Omondi Osewe
Position of Officer	-
Signed:	
Date/Stamp:	

EXECUTIVE SUMMARY

INTRODUCTION

Project Proponent

The Proposed Rehabilitation of Lodwar-Lokichogio-Nakodok Road (A1) is being implemented by Kenya National Highways Authority (KeNHA); Blue Shield Towers, Hospital Road, Upper Hill, P.O. Box 49712 – 00100, Nairobi Kenya, Tel:+254-20-8013842

Project Funding

The proposed rehabilitation of the Road (A1) is being funded by The Government of the Republic of Kenya (GOK) with support from the International Development Association (IDA), European Union (EU) and Japan International Cooperation Agency (JICA).

Project Background

The proposed rehabilitation of Lodwar-Lokichogio-Nakodok Road (A1) covers a total distance of 240km. The proposed road rehabilitation project is part of the South Sudan-Eastern Africa Regional Transport, Trade and Development Facilitation Program (SS-EARTTDFP). The entire road is located within Turkana County starting from Lodwar and running in a north-westerly direction to Lokichogio and into Southern Sudan at Nakodok. The proposed road route traverses urban towns of Lodwar, Kakuma, and Lokichogio. It also traverses the rural Turkana settlements areas and rural shopping centres of Nasiger, Duka Moja, Makutanao Gold, Nakalale, Lokore, Komotongai, Kalobeyei, Natira, Nakururum, Songot, and Lomidat. Several sections of the road have frequently been rendered impassable as a result of heavy rains. These heavy rains have caused flash flooding at the numerous river valleys along the road and completely submerge lagga crossings/ drifts making them unsafe for both motorised and non-motorised traffic to cross.

The road is a very important infrastructure to the area residents and the region as a whole. Its improvement will help the population in the region to get better access to markets and ensure that most commodities reach their destinations fresh and with ease. In addition, this infrastructure project will open the East African region as it is part of the famous LAPSSET project. The LAPSSET project involves the development of a new transport corridor from the new port of Lamu through Garissa, Isiolo, Maralal, Lodwar and Lokichogio to branch at Isiolo to Ethioipia and Southern Sudan, Passengers travelling between Lodwar to Lokichogio and vice versa have in the past been forced to sleep in the cold when sections of the road and the associated drifts are washed away by flash floods occasioned by heavy rainfall. The project area is arid and semi lands (ASAL) area with no or very little ground cover which does not trap or slow down the flow of run-off water from the hills during the rainy seasons. The fast running water hence quickly find its way onto the river valleys with great force hence causing destruction of drifts and anything else on its way. Rehabilitation of the road will open up the region and also help in enhancing economic growth, provision of security, enabling easy transportation of goods/services and creating more investment opportunities to both the local people and foreigners.

PROJECT OBJECTIVES

The Government of the Republic of Kenya (GoK) has in recent years been implementing comprehensive rehabilitation of major national roads, with the overall objective of improving transportation, enhancing road safety, reducing road user costs (including travel time) and promoting trade and socio-economic development.

It is in this respect that the Government of Kenya has identified that the road from Lodwar to Nakodok is an important link road that connects the Rift Valley area with the North Western area and also connects Kenya and South Sudan.

The Kenya National Highways Authority (KeNHA), a state corporation established under the Roads Act 2007 charged with the responsibility for the management, development, rehabilitation and maintenance of national highways intends to carry out the rehabilitation of Lodwar-Lokichogio-Nakodok Road (A1). The proposed rehabilitation will have the potential effect of creating environmental and social impacts through involuntary displacement and resettlement of persons living or generating livelihood along the Lodwar-Lokichogio-Nakodok Road (A1) where the road works will be carried out.

The rehabilitation of this road will require realignment to meet the required road standards for the "A" category assigned to this road. The implementation of this project will result in the need to acquire land and hence will cause displacement of persons living or doing businesses within the road corridor. The project proponent (KeNHA) intends to carry out the land acquisition and compensation for land and property following regulations stipulated in the Land Act, 2012 and other relevant legislations touching on compulsory acquisition of land and involuntary resettlement.

Road Design resulting into Land Acquisition

The proposed Lodwar – Lokichogio – Nadapal Road that is to be rehabilitated shall have a corridor of 60m. In flat/rolling sections of the proposed project, a carriageway width of 7m (two lanes) with a 2.0m wide paved shoulder on either side is proposed. In major built up town sections, a carriageway width of 7m, a parking lane of width 2.5m and a 2.5m wide footpath on either side of the carriageway is proposed; In village sections a carriageway width of 7m and a 2m width paved shoulder is proposed. The current road does not have such reserve area available for the proposed design and hence the need to acquire additional land.

OBJECTIVE OF RAP

The specific objectives of this RAP review is:

- i. To review and update the existing RAP of the project in line with the Bank's Policies;
- ii. To verify and review the census survey undertaken to ensure that all the potential PAPs are identified:
- iii. To verify and assess that the impacts of the proposed project on the PAPs livelihoods are identified and appropriate measures to minimize resettlement effects and safeguard livelihoods are recommended;
- iv. To undertake socio-economic survey of the RAP impacts and ensure that baseline data for monitoring and evaluation during the project implementation period are generated;
- v. To verify and update the asset inventory survey and ensure that all potential assets that will be affected by the proposed project area enumerated;
- vi. To verify and update the compensation at current Market prices, such asset inventory
- vii. To verify compliance with the Bank's Involuntary Resettlement Policy and any other national relocation and resettlement regulations that govern the infrastructural development sector
- viii. To provide guidelines about RAP to stakeholder and ensure they are participating in consultation including how to minimise resettlement impacts of the project
- ix. To recommend cost effective measures to be implemented to safeguard the livelihoods
- x. To prepare a reviewed Resettlement Action Plan (RAP) report compliant to the World Bank and Government of Kenya (GoK) regulations, the project's Resettlement Policy Framework (RPF) and in line with KeNHA and the Banks comments on the draft RAP report.

POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK

Local Legislation

The study review has been conducted in accordance with all the relevant legislations in Kenya pertaining to road construction and traffic regulations, land ownership and acquisition, relocation and resettlement among others. The Project was assessed and considerations were made on how the legislations and policies are triggered. These include the Land Act, 2012; the Land Registration Act, 2012; the Public Roads and Roads of Access Act; Valuers Act and Environment and Land Court Act.

Land Act, 2012

The key regulation guiding land acquisition and compensation for land and property is the Land Act, 2012.

In this Act, **Section 9** (1) stipulates that any land may be converted from one category to another in accordance with the provisions of this Act or any other written law and private land may be converted to public land by compulsory acquisition. Compulsory Land Acquisition and compensation is elaborated in the Land Act, 2012, Part Viii—Compulsory Acquisition of Interests in Land under Sections 107 to Section 127. Section 110. (1) Land may be acquired compulsorily under this Part if the Commission certifies, in writing, that the land is required for public purposes or in the public interest as related to and necessary for fulfilment of the stated public purpose. In Section 111. (1) If land is acquired compulsorily under this Act, just compensation shall be paid promptly in full to all persons whose interests in the land have been determined. (2) The Commission shall make rules to regulate the assessment of just compensation.

Notice Period for Land Acquisition

The Land Act 2012 provides under Section 112 (1) that the National Land Commission shall set aside thirty days for publishing notice of intention to acquire land. This will be followed by a cause notice of the inquiry to be published in the Gazette or county Gazette at least fifteen days before the inquiry to inquire land ownership status.

Section 120. (1) says that only after the award has been made, and the amount of the first offer has been paid, the Commission shall take possession of the land by serving on every person interested in the land a notice that on a specified day possession of the land and the title to the land will vest in the national or county governments as the case may be.

After just compensation payment being made in full the Commission shall provide adequate notice depending on the appropriate time required to put up a replacement structure. This will be done before taking possession of the acquired land. A notice period not exceeding six months is usually given. Section 155 (5) indicates that where there is unlawful occupation of land the person shall be served with a notice or oral communication shall be served with a notice to vacate within not more than sixty days.

FIELD CENSUS SURVEY

The design engineers prepared an initial RAP in 2013 as part of the feasibility study. The preliminary RAP was developed through a comprehensive process including documentary review, field visits and observation; census survey of the Project Affected Persons (PAPs); consultative meetings with PAPs and in-depth discussions with other stakeholders and was undertaken between 9th June and 10th July 2013. Data was collected through Observation and Interviews with the PAPs household heads/proxies, Government personnel and Focus Group Discussions.

Valuation methodology involved field surveys during when counting of the trees affected by the project (noting the type and sizes), identifying the structures affected (noting the ownership, building materials, use and condition), and identifying any crops to be affected by the project was undertaken. The rates used in the valuation of structures are derived from the Ministry of Public Works rates, and some comparable rates, while values for trees are derived from the rates provided by the Ministry of Agriculture and Forestry. In addition, a 15% statutory allowance of the value of the property acquired for the disturbance caused was added as outlined in the Kenyan constitution under compulsory acquisition.

In 2014, another census survey was carried out from 8th-31st December as part of the review and update of the initial RAP. An independent consultant undertook the update and review of the RAP in order to comply with the Bank requirements.

Findings of 2014 RAP

The existing human and commercial activities along the proposed Lodwar-Lokichogio-Nakodok road corridor include the following:

- Commercial and residential buildings along the road section within Lodwar, Kakuma and Lokichogio Towns where commercial activities are taking place;
- Turkana settlements areas and rural shopping centres of Nasiger, Duka Moja, Makutanao Gold, Nakalale, Lokore, Komotongai, Kalobeyei, Natira, Nakururum, Songot, Lomidat.
- Pasture/Community land on the rest of areas that are unoccupied away from the towns and centres.

Land Tenure/Ownership

The rehabilitation of the road entails expansion of the road within the ROW and therefore no acquisition of land is envisaged. However, PAPs have encroached on the ROW and established structures within the ROW. Furthermore, during the census survey, most of the PAPs claimed to posses' title deeds or allotment letters even though they are encroachers. This is an issue that KENHA and the County Government of Turkana need to resolve prior to resettlement. PAPs were however informed during the consultations that for as long as they were on the ROW they had no right to compensation for land and would only be compensated for structures, crops and other assets. The County Government of Turkana has a lot of communal land and should consider allocating the affected PAPs on the ROW with title deed alternative land away from the ROW.

Project Impacts

All the PAPs are on the Right of Way (ROW) and this means that they have no legal ownership over the land which they have erected their structures.

The entire project area is within Turkana County, a county generally referred to as the Arid and Semi-Arid Lands (ASALs) in Kenya. The main population groups in the counties are the Turkana and Somalia communities. However the town centres of Lodwar, Kakuma and Lokichogio are cosmopolitan where the inhabitants come from all over Kenya in search for employment and business opportunities. Kakuma Refugee Camp serves refugees who have been forcibly displaced from their home countries due to war or persecution. It was established in 1992 to serve Sudanese refugees, and has since expanded to serve refugees from Somalia, Ethiopia, Burundi, the Democratic Republic of Congo, Eritrea, Uganda, and Rwanda. According to current UNHCR statistics, the camp population stands at just close to 180,000 refugees. In 2007, Kakuma Refugee Camp hosted 21% of the total refugee population in Kenya (UNHCR Fact Sheet, September

2008). To cater for the refugees and the local population, there are over 32 aid agencies operating in the Turkana County.

The proposed rehabilitation of Lodwar-Lokichogio-Nakodok Road (A1) covers a total distance of 240km. The proposed road rehabilitation project is part of the South Sudan-Eastern Africa Regional Transport, Trade and Development Facilitation Program (SS-EARTTDFP). The entire road is located within Turkana County starting from Lodwar and running in a north-westerly direction to Lokichoggio and into Southern Sudan at Nakodok. The proposed road route traverses urban towns of Lodwar, Kakuma, and Lokichogio. It will also affect the rural Turkana settlements areas and rural shopping centres of Nasiger, Duka Moja, Makutanao Gold, Nakalale, Lokore, Komotongai, Kalobeyei, Natira, Nakururum, Songot and Lomidat.

Project Impacts arising from and acquisition include disruption of livelihood, loss of structures for business, loss of trees and crops, loss of communal facilities (boreholes) loss of cemeteries and loss of pastureland. **Table A** below elaborates on the impacts of land acquisition.

Table A: Project Impacts

- 45	able A. I Toject illipacts			
Nr	Location	Affected Items / Population	Impacts	
1.	Urban Centres (Lodwar, Makutano Gold, Kakuma and Lokichogio)	Land acquisition, Removal of commercial/ residential buildings	Loss of commercial/residential land currently belonging to private individuals and Government institutions, manyattas and commercial/residential houses Disruption of residential accommodation Relocation of cemetaries Interruption of the community social systems	
2.	Urban Centres	Businesses	Disruption of businesses Interruption of income streams	
3.	Community Land	Pasture for Llivestock	 Loss of community land Destruction of pastureland Exposure of local communities members and cattle to accidents Displacement of squatters who have erected their manyattas and other semi-permanent structures on the wayleave area 	
4.	Open Grassland	Pastures	Destruction of pastureland Exposure of livestock to accidents	
6.	Entire Route especially at the river valleys	IndigenousTrees	Loss of Mature Trees	

The road rehabilitation project will traverse a long stretch of land from Lodwar to Nakodok covering a distance of 240km with considerable levels of mitigable impacts. Dislacmen of majority of PAPs will mainly occur at various centres along the road. Commercial buildings and associated businesses will be affected by the proposed road rehabilitation project.

Project Affected Persons. The census was conducted following the design co-ordinates. The proposed rehabilitation activities will largely be along the current Lodwar to Nakodok road that has been redesigned and scheduled for rehabilitation. The cut-off date for the proposed rehabilitation of Lodwar-Lokichogio-Nakodok Road project is 8 December 2014 when the census of PAPs began. The cut-off dates were validated during the community consultation meetings held at the 7 centres. The total number of households and institutions (Individual land owners, structure owners, businessmen and institutions) that will be affected by the road project is 1,144 (6,227 people).

Vulnerable Groups - In the project area, there are vulnerable groups who were identified during the RAP review survey including 3,723 children out of a population of 6,227 PAPs, 21 orphaned children, 14 physically challenged persons, 58 widowed persons, 3 terminally ill persons. Children are the most vulnerable members of the population due to the fact that they form nearly half the PAP population and the effects related to displacement and disintegration of families. Squatters are also very vulnerable. The vulnerable groups will be given extra support during the resettlement exercise where dedicated assistance will be offered in order to ensure that they receive compensation in good time and the resettlement is carried without further suffering. There will be internal and external monitoring to ensure quick response to any distress.

Affected Structures and Trees

The road project will affect the following:

- Permanent Structures
 - Commercial and Residential Buildings
 - Boreholes on the way leave
- Semi-Permanent Structures
 - Commercial and Residential Structures
- Manyattas/ Temporary Structures
 - Residential Manyattas and Makeshift Kiosks

Trees

The area has shrubs that do not fall within the category for valuation and trees with commercial value. The trees within the road RoW is composed of a variety of acacia species, Kooboo Berry, Prosopis Juliflora (Mathege), Neem Tree, and Doum Palm. The trees have been valued using guidelines from Kenya Forest Service. Environmental restoration of the damaged plants will need to be considered as part of the project area rehabilitation.

Table B: Summary of Impacts

		Affected Land (Acres)	
#	Locality	Government	Individual
1	LODWAR	214.42	3.72
2	NASIGER	235.85	6.32
3	DUKA MOJA/NAPELILIM	138.48	7.31
4	MAKUTANO GOLD	89.93	6.20
5	NAKALALE	79.98	7.99
6	LOKORE/KOMOTAGAI	309.08	2.27
8	KAKUMA TOWN	263.29	15.92
9	KALOBEYEI	195.99	5.65
10	NATIRA/NAKURURUM	307.59	10.58
12	SONGOT	129.73	28.42
13	LOMIDAT	94.90	2.96
14	LOKICHOGGIO	51.00	22.54
15	NADAPAL	227.34	
	Sub-Total (Acres)	2,337.58	119.86

Business

#	Locality	Number of Businesses
1	LODWAR	6
2	NASIGER	1
3	DUKA MOJA	1
4	MAKUTANO GOLD	22
5	KAKUMA TOWN	196
6	KALOBEYEI	23
7	NAKURURUM VILLAGE	4
8	SONGOT VILLAGE	14
9	LOMIDAT VILLAGE	1
10	LOKICHOGGIO	229
	TOTAL NO. OF AFFECTED BUSINESSES	497

Graveyards

#	Locality	Total area of Grave Yard (Acres)
1	LODWAR	1.275
2	KAKUMA	0.951

Trees

#	Locality	No of PAPs	No of Trees
1	LODWAR	5	7
2	NAPEILILIM	1	1
3	KATUKURI	3	8
4	MAKUTANO GOLD	4	4
5	KAKUMA TOWN	18	195
6	KALOBEYEI	9	45
7	NATIRA VILLAGE	2	2
8	SONGOT VILLAGE	2	2
9	LOMIDAT VILLAGE	1	1
10	LOKICHOGGIO	21	458
Assu	ımption (15% Counted Trees)	66	723

Structures

		No of	No of
#	Locality	PAPs	Structures
1	LODWAR TOWN	19	59
2	KAWALASE	21	46
3	NASIGER	4	7
4	DUKA MOJA	1	1
5	KATUKURI VILLAGE	6	11
6	MAKUTANO GOLD- NAKALALE	24	42
7	MORU LINGARENGAN-NAKALALE	7	10

	8	LOKORE	5	9
	_		ŭ	· ·
	9	KAMOTOGAI- LOKORE	3	9
	10	KAKUMA	127	232
	11	LEGIO MARIA VILLAGE-KAKUMA	23	38
	12	NABEK VILLAGE	5	15
	13	NAKOIYO VILLAGE	2	12
	14	KALOBEIYEI	56	135
	15	NAWATOM VILLAGE /KALOBEIYEI	8	27
	16	NAKURURUM- LOKICHOGIO	38	46
	17	SONGOT- POSTA	77	137
	18	LAMIDAT VILLAGE - SONGOT LOCATION	23	35
	19	LOKICHOGIO TOWN	104	228
TOTAL NO. OF STRUCTURES				1099

Summary of Census Data

Activity	Results	
Proposed Rehab. of Lodwar-Lokichogio-Nakodok Rd (A1) Specifications		
Length of Road	240 km	
Road Wayleave	60 m	
PAP Population	6,227	
Adults	2,504	
Children	3,723	
Special Groups of Persons	96	
Widow	55	
Widower	3	
Orphans	21	
Physically Challenged	14	
Sick	3	
Category of Project PAHs	1,143	
Private Individuals	1,043	
Government	17	
Churches	18	
Private Companies	14	
Self Help Groups	16	
NGOs	3	
School/College	5	
Community Land	1	
Unknown	26	
No. of PAHs / Affected Property	1,143	
Land Only	194	
Structures Only	85	
Business Only	359	
Land & Structures	289	
Land & Trees	8	
Land, Structures & Business	78	
Land, Structures & Trees	42	

Others	88
Land and Structures	
Number of Individual Land Parcels	605
Size of Government Land to be acquired (Acres)	2,457
Government Land	2,338
Individual Land	120
Number of Structures	1,099
Affected Trees	
Number of PAPs	66
Number of Trees	723

INCOME RESTORATION

The objective of Resettlement Plan income restoration (IR) activities is to ensure that no project-affected persons are worse off than they were before implementation of this project. Restoration of pre-project levels of income is an important part of rehabilitating individuals, households and socio-economic and cultural systems of the affected communities.

There shall be two main types of income restoration, namely Land Based (arising from land acquisition to provide a 60m wide road corridor) and Non-Land Based (arising from loss of building structures, other properties and businesses).

Majority of the affected PAPs derive their livelihoods from business that will be negatively affected through relocation of businesses as well as disturbances during road construction and straining of social facilities. The proposed strategies for livelihood restoration in case of Lodwar – Lokichogio – Nadapal road project therefore will include expanding the existing social facilities to accommodate the increased population, resource utilisation before road clearance and employment of the PAPs with special reference to the vulnerable populations including the poor, sick, orphaned and female headed households as well as the physically challenged persons.

Other strategies will include business support revolving funds and trainings in entrepreneurship and ensuring full and timely compensation.

Land Based Income Restoration

The best option recognized for sustainable income restoration is land for land. This option will only be considered when a PAP is losing a significant portion of their land or the entire parcel of land. At the various town centres, the road project will affect a larger part of the commercial plots hence it would be appropriate to compensate the whole parcel of land since the remaining portion of land will be relatively small.

Non-Land Based Income Restoration

The non-land based income activities include wholesalers, retail traders selling grocery, tailoring, cyber cafes, restaurants, motor cycle repair which take place at town centres. These will be affected since the commercial buildings where they are operating from will be brought down to allow for improvement of the road hence they will need to be resettled elsewhere to continue earning a living from their commercial activities.

Source of Income Restoration

The sources of income and land details of the PAPs who shall be affected by land acquisition include commercial traders (retail shops, tailoring, motor bike repairs), service providers (cyber cafes, restaurant services, bookshop etc.), pastoralists and persons in

formal employment. Those having source of income from commercial activities and service provision are located at the towns and centres along the route. These commercial activities that will be affected by the proposed road project will require income restoration. However, it is anticipated that through employment of locals to provide skilled and unskilled labour, some source of income will be generated hence improving the livelihood of the affected persons and local population.

Entitlement Matrix

The Entitlement Matrix outlines the types of acquisition-caused losses (land and structures)

Land

- For the Community Land, KeNHA shall compensate the County Government for the affected land at the current market rates for land in the local areas.
- For squatters residing in the Community Land, KeNHA shall arrange for the resettlement of affected persons within the Community Land areas away from the way leave. The squatters consulted expressed their wish to be resettled in the neighbourhood of their current residence. Since there is plenty of open community land in their neigbourhood, their wishes could be easily fulfiled;
- For commercial land (plots) located along the project route, KeNHA shall pay compensation at the current market rate. Since the land parcels located at the towns or market centres are small, KeNHA may be compelled to acquire all of the affected plots since the remaining portions of land may not be commercially viable.
- The cost of land varies across the various rural areas and town centres traversed by the road as provided in **Annex 2**. Therefore KeNHA shall compensate for all affected land using the rates provided.

Structures

- For structures located on the Community Land and belonging to squatters compensation shall be paid using current market rate for putting up similar structures;
- For commercial structures affected by the project, compensation shall be paid using the current market rate for putting up similar structures.

Trees

There are trees scattered along the entire route and within the road ROW corridor. The trees within the road RoW is composed of a variety of acacia species, Kooboo Berry, Prosopis Juliflora (Mathege), Neem Tree, and Doum Palm. The trees have been valued using guidelines from Kenya Forest Service.

Disruption of Business

- There will be loss of business for those located within the project affected towns and commercial centres
- Compensation for disruption of business has been arrived at by considering the net monthly income of the business over period of six months after which the business is expected to been relocated and set up. This is expected to cushion the affected persons from disruption of earnings from their businesses;

The Market Value of land taken

Comparable sales method has been adopted for valuing the affected land. This is based on the open market comparison of the land with what other similar parcels of land are currently selling in the area. The comparability of the land is based on the use, location, site conditions and income related factors. The market-comparison method is ideal for establishing values of real estate and other goods in a competitive economy.

The most critical aspect of the comparative sales method is what constitutes comparability. This is usually in respect of properties, comparability of transactions and market conditions. Each of these aspects has to be thoroughly analysed to obtain an ideal rate. However non-homogeneity of real estate, the imperfections in its market structure, inadequate sales' data and falsified data on the recorded sale transactions and "change of directors" when a sale transaction has occurred are some of the principal factors which limit the application of the method. Where part of the property is acquired we have also taken into account to damage to the remainder of the property. This is for cases where the physical taking of part of the land reduces the value of the remainder by making it less convenient for some particular purpose. This form of loss is called damage by severance. This is because after severance the highest achievable use cannot be realized.

Structures

The valuation basis adopted for valuing the developments on the land taken for compensation is the current replacement cost or equivalent reinstatement basis or probable cost of acquiring similar premises for the same purpose. This is the amount it would cost to search for a supplier of the construction material, the cost to purchase, transport and insure the materials to the site, and the costs of erection of the premises, including professional fees, and completed to a standard as existing at the valuation date. It should be noted that the structures have not been valued at market value because replacement cost is not synonymous with value.

The main purpose of valuing the structures for compensation is to reinstate the owner to build similar structures on another site.

Trees

The trees were valued based on compensation schedules prepared by the Kenya Forest Service for various species depending on age and its future potential. The consultant also took into account the extent of utilization, type of species, quality of logs, diameter of the logs and quality of the log. The trees that were physically assessed were those mainly in settlement areas covering about 38 kilometers, which may account for approximately 15% of the whole stretch of 240 kilometers.

Cemetries in Lodwar and Kakuma

The valuation methodology for relocation of the cemetries is the replacement cost and market comparison approaches. Attributes taken into consideration is the costs of exhuming the bodies, new coffins, refilling old graves, transport of bodies to new grave-yard site, excavation of new graves and refilling and miscellaneous items like materials to bind the bodies. Cultural attachment either by the community or individually to the cemeteries and graves cannot be quantified in any monetary value. The new cemetry sites will be allocated by the Turkana County Government.

Boreholes

The methodology we have used in valuation for the borehole is the replacement cost approach where depreciation has not been taken into account. It is expected the project will set aside funds as per our valuation to drill the borehole in a location convenient to the

affected community and in consultations with the relevant professionals in the Kenya Government in order to restore flow of water to the community without any major disruptions.

Compensation for disturbance and other losses

In the valuation, the consultant has also taken into account losses not directly based on the value of interest on the land. Such losses normally arise as a result of the service of the notice to acquire the land and such loss must be capable of assessment at the date of the notice of intention to acquire the land. Very speculative losses have been ignored.

These losses include:

- Cost of removal, of lost assets;
- · Expenses incidental to removal of loose assets;
- Fixtures

Guidance on Valuation Determination

All structures affected were valued on replacement cost approach. The market rate was only applied to loss of rent for the period of reinstatement of the commercial buildings, which is based on the open market rent achievable in the market. **Table C** provides valuation implementation process.

Table C: RAP Valuation Process for Assets

Nr	Assets/Activities	Implementation Process	
1.	Acquired land with structures	 Steps: A detailed inventory of all affected persons, assets and stock requiring resettlement was made. Determination of the size of affected land that will be acquired. Accurate and real valuation of commercial and residential houses. Determine compensation packages according to valuation requirements . Provision of reasonable time period prior to moving, for salvage of building materials. PAP's may salvage any material without this being deducted from compensation entitlements. Provide temporary housing/shelter where necessary. 	
		 Recommendations: KeNHA shall pay compensation for acquired land, lost housing/ commercial structures and Trees. KeNHA to assist PAPs identify resettlement sites if necessary and provide assistance during relocation PAPs are entitled to remove any materials he or she wishes to salvage within one month of vacating the old premises. Land compensation based on the open market price comparison of the land to be valued with what other similar parcels of land are currently selling in the area taking into account the difference between them and those transacted on a willing- seller willing- purchaser basis. 	
2.	Land without structures	 Inventory Inventory of land parcels affected by project for acquisition including names, ID numbers, land sizes and land registration references. Compensation: The RAP data sheets eaborates out how each person is affected by the projectand indicates how much compensation will be paid for land and trees lost. 	
3.	Lost business profits and employee earnings	Where business profits are affected compensation will be paid according to valuation results of the enterprise monthly income computed over a period of six months which is deemed as the period required for reistament of lost income.	
4.	Trees	Trees There are no crops identified on the wayleave area during the survey. The project area has very infertile soil and harsh climate to support any crop	

Nr	Assets/Activities	Implementation Process
		farming. The trees were valued based on compensation schedules prepared by the Kenya Forest Service for various species depending on age and its future potential. The Consultant also took into account the extent of utilization, type of species, quality of logs, diameter of the logs and quality of the log. The trees that were physically assessed were those mainly in settlement areas covering about 38 kilometers which may account for approximately 15% of the whole stretch of 240 kilometers.
5.	Payments to the PAPs	Payments for acquired land, lost structures, trees and loss of business shall be made either through banks transfers into PAPs accounts or by issuance of cheues in favour of individual PAPs and distrituted through the local chief's office.

Total RAP Cost Estimate

Taking into account all factors, it is our opinion that compensation for land, structures, loss of business and trees to be affected during the Proposed Rehabilitation of Lodwar-Lokichogio-Nakodok Road (A1) and free from all encumbrances is KShs. 1,427,092,036 (Kenya Shillings One Billion Four Hundred Twenty Seven Million Ninety Two Thousand and Thrity Six Only) broken down as given in **Table D**. A 15% disturbance allowance for all affected land and structures has been included. The project may finance supporting infrastructure and resettlement activities. KenHA will finance the purchase of land and/or cash compensation.

Table D: Summary of Estimated Compensation Valuation (KShs)

No.	Property		Total Amount (KShs)
1	Land		451,727,365
	Government Land	268,821,815	
	Individual Land	182,905,550	
2	Structures		493,278,105
3	Loss of Business		286,780,698
4	Trees		33,910,000
5	Re-location of Graveyards/ Cemetries		161,395,868
	Grand-Total (KShs)		1,427,092,036

The budget should however be set higher than this to cover for other contingencies. In addition, there may be price variations occurring between the date of valuation and the time the actual compensation is paid out.

COMMUNITY CONSULTATION

Community Consultations (consultations with project affected persons, key stakeholders, local administration and NGOs dealing with livelihood of local populations) was done at two levels.

 7 Community meetings were held at the various points along the existing Lodwar-Lokichogio-Nakodok road

Table E: Community Consultation Meetings

	and a community concurrent modernings					
Nr	Dates	Administrative Location	Venue	No. of Participants		
1.	Tue 2 nd Dec. 2014 at	Lodwar Town	Mikeka Grounds. Lodwar	34		
	10:30am		Town			
2.	Tue 2 nd Dec. 2014 at	Napelilim	Nasiger Village Centre	220		

	2.00pm			
3.	Wed 3 rd Dec. 2014 at	Nakalale	Makutano Gold Centre	111
	9:30am			
4.	Wed 3 rd Dec.2014 at	Kakuma	Baraza Park, Kakuma	82
	2:30pm		Town	
5.	Thurs 4 th Dec 2014 at	Kalobiyei	Kalobiyei Village Centre	184
	9:30am			
6.	Thurs 4 th Dec 2014 at	Songot	Songot Chief's Office	132
	2.00pm		Compound	
7.	Fri 5 th Dec. 2014 at	Lokichogio	Anglican Church Grounds,	149
	10.00am		Lokichogio Town	
				912

- ii. There were oral interviews with PAPs, collection of household information and filling in of household questionnaires during the census survey.
- iii. Community consultation meetings were held to achieve the following:
 - To brief project affected persons and interested parties on the various aspects of the proposed project positive and negative impacts.
 - Validation of the cut-off date.

Invitations for Community Consultation Meetings

The PAP community members, NGOs and key stakeholders were invited to attend the Community Consultation Meetings via direct phone calls where possible and through the Assistant Chief and Chiefs Offices where public announcements were made at churches, previous barazas and mosques.

Participants overall expressed support for the project citing the positive development in the area that the project will bring and enhance their livelihoods and businesses. However they stressed that affected persons should be promptly and adequately compensated and there should be wide consultations at all stages of project implementation so as to address community concerns and expectations.

Issues Raised During Public Consultation Meetings

The issues raised during all the meetings were noted to be cross cutting. They include the following:

Table F: Community Consultation Meetings

_	_	Issues raised by PAPS in consultations	_	Response and /or proposed
				Mitigation Measure in RAP
1.	_	PAPs wished to know the plans that are in place to compensate the affected persons for their properties. They desired that sufficient time will be given to all the PAPs to relocate elsewhere once they are compensated and not to be hurried out of their current homes and business premises.	-	All affected persons or community affected by the project shall be involved and consulted before the commencement of road construction. Compensation will cover all affected property and shall be paid prior to road construction and PAPs given sufficient time to relocate.
2.	_	They wished the recruitment process for available job opportunities be more transparent so that not only the people who are closely connected to the chief and other local leaders benefit but all qualified and able locals should be given equal	I	It will be the obligation of the KeNHA and their Contractor awarded the contract to construct the road to consult with community leaders in identifying the candidates suitable for available employment opportunities.

		employment opportunity in the project		
3.	-	There was a proposal that the proponent should consider constructing bypass on the outskirts of Lodwar, Kakuma and Lokichogio towns to ensure that huge transit vehicles especially trailers, trucks should not pass through the towns causing congestion and traffic jams as the population of the towns grows	ı	The community leaders should liaise with the county government and other relevant authorities to plan and construct a bypass as the current road design does not include a bypass.
4.	-	There was concern on whether there could be bridges constructed over the river valleys to replace the laggas and drifts which have occasionally been flooded and destroyed during the heavy rain seasons making the roads impassable at the river crossings.	-	The design for the proposed rehabilitation of the road have provided for bridges at all the river crossings hence modern bridges will be constructed at all the necessary areas as per the design.
5.	_	Some community members were pessimistic on the realization of the project and its benefit to the local community saying that there has been too much talk and endless promises they claim have been done by various leaders at various forums on the rehabilitation of the road but no tangible work has been done on the road.	I	Since the project designs are ready and there are donors willing to fund the construction of the road, the construction works will start as soon as RAP is ready and approved, PAPs have been paid their compensation packages and relocated to other areas to clear the way leave area for the road construction.
6.	_	Concern was also raised over the risk that the rehabilitated road might pose to livestock and local community as they cross it or to those who might be living near the road. The local participants were eager to know what the design had provided for to curb possible accidents. They proposed that the road contractor should erect bumps at the town centres and other areas where animals cross. They also recommended the use of proper road signage to inform the road users and especially the drivers.	-	The road engineers have designed a mechanism to curb road accidents by e.g. providing for bumps and proper road signs in their design where animals cross the road and at the towns and shopping centres where human traffic is high and people likely to be crossing from one side of the road to the other. Speed limit shall be set for vehicles entering and leaving the towns. Speed bumps will also be established to slow down overspeeding vehicles in the towns. However, it will be upon the community and individual owners to take care of their grazing animals as they do it is currently to ensure they cross the road at the required places and avoid being hit by vehicles along the road.
7.	-	Community members did not know the size of the road reserve and most of their plots/lands had no registered documents. They were therefore concern whether they will be compensated without the legal documents to prove ownership of land	1	Details and information of ownership of land are with the chiefs, clan elders and village men, they will help the RAP team in identifying people who have been allocated land and plots on the wayleave and are currently claiming this land The affected will be required to

		relocate to another area outside the required way leave area. If the structure belong to the individual PAPs, she/he will be compensated for them. - KeNHA should clearly mark the wayleave as a means of communicating with the local community on the extent of their way leave and hence anybody claiming land within the way leave area should ask the County government to allocate them land elsewhere away from the way leave
8.	Concern was expressed over the possibility of the road project affecting graves within the proposed road corridor and what will be done to them during the road construction. The community expressed fear over the possibility of the graves being moved citing that it was a taboo to move the dead from their graves as the family which does this would be outcast from society as is would be alleged to be practicing witchcraft. Secondly, the Turkana community does not bury their dead in coffins hence moving the graves would be more difficult when the body is not in a coffin.	The whole grave will be excavated and there will be an agreement with the community and concern family on where the body will be re-buried to avoid the road having too many turns in an attempt to avoid every grave on its corridor.
9.	The participants were concern about cutting down of acacia trees, which are on the proposed way leave. They said that besides being of use as shades for the people and their livestock during the hot seasons, some of the very large ones offer shelter and shade where community meetings are held hence having sentimental values to the community. Secondly, these acacia trees produce pods which are used as food for both humans and animals especially during the dry season.	The trees along the road corridor will have to be uprooted if necessary especially if on the carriage way of the proposed road and trees of the same or similar type be replanted after the completion of the road project for the pastoralist farmers who depend on their leaves for their livestock food and others use the ponds produced by these trees for human and livestock food.
10.	The PAPs wanted to know what will happen if the road affects water sources e.g. boreholes and other public social amenities	 All affected persons or community have been sensitized and consulted on what the road project entails and this process shall continue throughout the implementation of the resettlement activities and the project. The Consultation will include the possible areas where alternative public facilities such as the boreholes would located to ensure continued convenience to the communities

11.	The PAPs wanted to know if government assumes ownership of affected property after they have been paid their compensation packages or they can be allowed to demolish and move them to their new locations	The government does not take nor possess any property/ structure after compensation. The PAPs are allowed to demolish and/ or move the affected property at their own cost and in the process save any reusable materials such as doors and windows. The government would result to demolishing such affected property only in the event that the PAP refuses
12.	They also wanted to know if compensation packages will be paid directly into individual PAPs bank accounts or shall be paid through their leaders nor their proxies.	or delays in removing them within the stipulated time — Property valuation will be done by the Consultant Valuer and thereafter compensation packages will be paid to individual PAPs directly into their bank accounts or issued with crossed cheques payable to the individual PAPs and not to their leaders nor their proxies.

INSTITUTIONAL ARRANGEMENTS FOR RAP IMPLEMENTATION

The overall responsibility of compensation and resettlement rests with the project sponsor, the Government of Kenya through KeNHA. The Ministry of Lands, notably the Government Valuer, is a key player whose responsibilities will be guiding the valuation and ascertaining the compensation rates. The National Land Commission in collaboration with the County Land Board, and Land Tribunal will closely participate in the RAP process and ensure timely execution of the whole process of compensation.

The RAP Implementation Committee

Effective implementation of the RAP will require an implementation committee. This committee shall have representatives from the Local Administration, Community Leaders, Ministry of Lands, Housing and Urban Development, KFS and KeNHA.

The RAP Committee shall have the responsibility of implementing and managing the Resettlement Plan, coordinating the resettlement activities and providing technical support. Project implementation support will be provided by various agencies at the National, County and Village levels. These include officers from KeNHA with various key disciplines, Government representatives from the Ministry of Lands, Housing and Urban Development, Kenya Forest Service, NGOs concern with social welfare, local administrative officers such as the County Commissioner and his Deputy, Chiefs and their Assistants, Village leaders and PAP representatives

RAP Implementation Schedule

As per the Lands Act 2012, no works are to commence before compensation has been paid, displaced persons are resettled and the land acquired. Additional assistance should be provided to the affected population in accordance with the RAP before, during and after the works are carried out.

The RAP Implementation schedule shall entail the following activities:

Public consultation and awareness campaign with the PAPs (throughout project phases)

- Carry out verification of the RAP for the entire road, socio-economic assessment of the PAPs and identification of affected land and structures and other physical features requiring evaluation (month 1-2)
- Acquisition of land for the proposed road upgrade to bitumen standard (month 2-4)
- Putting together the required machinery, legal and educational processes, training of resettlement staff (month 5)
- Compensation and Resettlement of PAPs. Sourcing for appropriate resettlement sites for displaced persons in consultation with affected persons and other relevant key stakeholders and project area provincial administration (month 6-9)
- Detailed road route site surveys and marking out the boundaries (Month 6-9)
- Clearing of site area & construction of the road (month 7-20)
- Monitoring and Evaluation of resettlement of PAPs especially vulnerable groups like women, children and disabled (Month 3 month 20)

Grievance Redress

The RAP provides for a formalized grievance redress mechanism to help reduce any complaints and grievances by the PAPs and to enhance the acceptance of rehabilitation and resettlement program through people's participation and support. Grievance redress mechanisms are necessary avenues for allowing project-affected persons to voice concerns about the resettlement and compensation process as they arise and, if necessary, for corrective action to be taken promptly. All efforts should be made to reduce unnecessary litigation by resolving disputes through mediation, negotiation and compromise in a congenial, fair and impartial setting. In cases where the litigation reaches the courts, the Honourable Court will be requested to expedite and resolve any litigation related to acquisition and/or compensation in the best interests of the project and the people.

During the resettlement process, all disputes will be referred to KeNHA (KRU) who may handle the grievance straight away or refer it to the PAP committee who will be asked to provide recommendations as to how it is to be addressed. If deemed necessary by the PAP committee the case will be re-investigated and depending on the nature of the issue, referred to the Land Compensation Tribunal or Public Complaints Committee. The Project Affected Persons Committees will be established at the affected market or village level and will be moderated by the elected chairman. The PAPs will elect a committee of not more than five members amongst themselves including a Chairperson and a Secretary. The committees should at minimum have 20% women and 20% youth representative to make it gender sensitive. Like most communities in Kenya, the Turkana people resolve local disputes through a local mechanism where the complainant reports the matter to the village elder in charge of his village. The leader listens and considers the elements of the matter and brings the warring parties together towards making them reach an agreement. If no agreement is achieved between the warring parties or the matter is beyond the mandate of the village elder, he escalates it to the higher offices of the assistant chief or the chief respectively. Therefore, consultation and grievance redress will be an ongoing process until proper resettlement is achieved.

KEY FINDINGS

The entire road project is in Turkana County from Lodwar to the Kenya/ South Sudan border:

- Displacement of persons will mainly occur at various town centres along the road;
- The local community, stakeholders and PAPs showed significant support the project
- Project affected persons at town centres expressed concern over the significant number of commercial buildings that are affected

- Project affected persons expressed concern on the transparency of the valuation and compensation to project displaced persons.
- The community awareness of the proposed project is rated very high with many expectant of the gains that will accompany its implementation while others were pessimistic due to endless promises that they claim have been made at various forums in the past on the rehabilitation of the road.

Wishes of the PAPs

- All PAPs are willing to be moved however full compensation must be guaranteed.
- Majority of the PAPs who have to be resettled would wish to be settled close to where their present habitat is located.
- The PAPs are a mix of locals and immigrant from other counties for business purposes.

Land Tenure

Majority of the land in the project area is community land with the process of adjudication on going and some individual/private organisation landowners either have land titles or are in the process of obtaining them.

CONCLUSIONS

The proposed rehabilitation of Lodwar-Lokichogio-Nakodok Road (A1) is a viable project that will benefit the community by improving transportation of people and goods, security, enhanced access to the northern areas of Kenya and increase in trade and economic activities in the region. The proposed project will create displacement of persons, loss of livelihood and some interference with resources and sensitive receptors during construction, however there are many shot and long-term benefits that will arise from the proposed project.

Where displacement or impact is unavoidable, appropriate mitigation measures will be put in place to reduce to a minimum or eliminate any undesirable effects of the project Majority of project affected persons are commercial entrepreneurs and some are pastoralists.

There was prior awareness and knowledge of the project from the initial RAP community sensitization and consultation exercise. After this study the project affected persons should all be continuously informed of the project progress and the timelines of the major activities like compensation offer negotiation, compensation payment, relocation and resettlement.

The Turkana County government and local communities in the proposed project area will fully support the project but requested to be fully informed on the plans and their concerns looked into. The communities also requested to be engaged in the planning and implementation at all levels so that they can be sure to get first-hand information and details regarding compensation and resettlement including timelines. There is also need to involve the chiefs of the areas where the road has affected households and pieces of land in order to verify the legal owners before compensation to avoid family feuds and mistrust.

RECOMMENDATIONS

 The Proposed Rehabilitation of Lodwar-Lokichogio-Nakodok Road (A1) project is viable, important for the local community and NGOs providing humanitarian assistance to populations living in remote areas. However the study has established that there will be significant displacement of persons requiring compensation and resettlement.

- 2. KeNHA should ensure that all affected persons are consulted and resettlement options offered to those affected. The PAPs should be fully compensated in a timely manner. The identification and acquisition of land for resettlement should be done with due consideration of the wishes of the affected persons and support given after resettlement to ensure that the project does not leave them worse off.
- 3. All the project affected persons who will be displaced or relocated, should be informed in good time (given approximately 1 month to prepare themselves for relocation) and modalities of conducting resettlement counselling put in place.
- 4. Majority of the affected parcels of land in the town and market centres where the road is going to pass are small plots and therefore will cause displacement and also loss of commercial structures. It is therefore recommended that KeNHA negotiates for acquisition of the affected portions of land plus compensation for any structures that may be demolished during project implementation. Land will need to be acquired within the town area close to the current site.
- 5. Consideration should be done to move the truck parking areas from its current proposed areas. These parking areas have been proposed on the current cemetery areas within Lodwar & Kakuma towns. The local communities proposed that an alternative site be selected within these towns to avoid relocating the cemeteries as it is a taboo among the community to "disturb" the dead.

1 INTRODUCTION

1.1 Background

In 2013, KeNHA prepared a preliminary Resettlement Action Plan (RAP) for the proposed rehabilitation of Lodwar-Lokichogio-Nakodok (A1) Road project. This review study involves verifying, reviewing and updating the RAP to ensure that the report present an independent assessment of potential resettlement and social impacts of the proposed project and to ensure that it is implemented in an environmentally and socially sustainable manner; and that it is in line with the World Bank Policy Operational Policy (OP) 4.12. PAP community has continued to encroach on the proposed road wayleave since the preliminary RAP study was carried out in 2013 therefore changing the number of potential PAPs and affected property that was initially enumerated. The community is aware of the proposed project and may have started doing business and constructing their houses on the wayleave with the intention of being compensated by the project proponent.

1.2 Initial RAP Methodology

Both primary and secondary data was collected during the survey of the project area. Primary data from the field was carried out as follows:

- Qualitative data was collected through field visits, site walks as well as public consultation; and
- Quantitative data was collected through a socio-economic, census and valuation survey
 of 100% of all the affected households. Using the cadastral maps and the GPS, affected
 properties were identified and interviews as well as measurements and photographs
 taken. The surveys were carried out between 9th June and 10th July 2013.

Secondary data was collected through a detailed literature review, which included a study of the following documents:

- ESIA Study Report for the project
- District Development Plans;
- Policies. Acts and Regulations:
- Project area topographical and cadastral maps;
- The World Bank Safeguard Policies

The field visits were undertaken to identify the properties to be affected by the project. During the field visits the following tasks were performed:

- Observation
 - This included observation of social and physical setting of the area as well as economic activities
- Identification of affected properties

 CRS devices were used to establish the extent of the language.
 - GPS device were used to establish the extent of the land and the property affected.
- Interviews and discussions
 Interviews were held with each of the PAPs household heads/proxies, Government personnel and Consultative group discussions with the PAPs for each cluster including Lodwar, Nakalale, Kakuma, Kalobiyei, Songot and Lokichogio.

1.3 Project Funding

The proposed rehabilitation of Lodwar-Lokichogio-Nakodok Road (A1) is likely to be funded by the International Development Association (IDA), European Union (EU) and Japan International Cooperation Agency (JICA).

1.4 Project Background

The proposed rehabilitation of Lodwar-Lokichogio-Nakodok Road (A1) covers a total distance of 240km. The proposed road rehabilitation project is part of the South Sudan-Eastern Africa Regional Transport, Trade and Development Facilitation Program (SS-EARTTDFP). The entire road is located within Turkana County starting from Lodwar and running in a north-westerly direction to Lokichoggio and into Southern Sudan at Nakodok. The proposed road route traverses urban towns of Lodwar, Kakuma, and Lokichogio. It will also affect the rural Turkana settlements areas and rural shopping centres of Nasiger, Duka Moja, Makutanao Gold, Nakalale, Lokore, Komotongai, Kalobeyei, Natira, Nakururum, Songot and Lomidat.

Several sections of the road have frequently been rendered impassable as a result of heavy rains. These heavy rains have caused flash flooding at the numerous river valleys along the road and completely submerge laggas crossings making them unsafe for both motorised and non-motorised traffic to cross. The road is a very important infrastructure to the area residents and the region as a whole. Its improvement will help the population in the region to get better access to markets and ensure that most commodities reach their destinations fresh and with ease.

In addition, this infrastructure project will open the East African region as it is part of the famous LAPSSET project. The LAPSSET project involves the development of a new transport corridor from the new port of Lamu through Garissa, Isiolo, Maralal, Lodwar and Lokichoggio to branch at Isiolo to Ethioipia and Southern Sudan. Passengers travelling between Lodwar to Lokichoggio and vice versa have in the past been forced to sleep in the cold when sections of the road and the associated laggas are washed away by flash floods occasioned by heavy rainfall.

The project area is arid and semi lands (ASAL) area with no or very little ground cover which does not trap or slow down the flow of run-off water from the hills during the rainy seasons. The fast running water quickly finds its way onto the river valleys with great force hence causing destruction of laggas and anything else on its way.

Rehabilitation of the road will open up the region and also help in enhancing economic growth, provision of security, enabling easy transportation of goods/services and creating more investment opportunities to both the local people and foreigners.

1.5 Project Area Socio-Economic Activities

The entire project area is within Turkana County, a county generally referred to as the Arid and Semi-Arid Lands (ASALs) in Kenya. The main population groups in the counties are the Turkana and Somalia communities. However the town centres of Lodwar, Kakuma and Lokichogio are cosmopolitan where the inhabitants come from all over Kenya in search for employment and business opportunities. Kakuma Refugee Camp serves refugees who have been forcibly displaced from their home countries due to war or persecution. It was established in 1992 to serve Sudanese refugees, and has since expanded to serve refugees from Somalia, Ethiopia, Burundi, the Democratic Republic of Congo, Eritrea, Uganda, and Rwanda. According to current UNHCR statistics, the camp population stands at just close to 180,000 refugees. In 2007, Kakuma Refugee Camp hosted 21% of the total refugee population in Kenya (UNHCR Fact Sheet, September 2008). To cater for the refugees and the local population, there are over 32 aid agencies operating in the Turkana County.

1.6 Scope of RAP

This reviewed and updated Resettlement Action Plan (RAP) Report is in fulfilment of the consultancy services for reviewing and updating of the Resettlement Action Plan (RAP) for the proposed rehabilitation of Lodwar-Lokichogio-Nakodok Road (A1), 240 km (Package 3) as required under the terms of the contract, signed on 12th January, 2015 between Kenya National Highways Authority (KeNHA) the client and the consultant. The proposed Lodwar-Lokichogio-Nakodok Road passes through various towns such as Lodwar, Kakuma and Lokichogio and Turkana settlements areas and rural shopping centres of Nasiger, Duka Moja, Makutanao Gold, Nakalale, Lokore, Komotongai, Kalobeyei, Natira, Nakururum, Songot and Lomidat. There are commercial buildings where the local and business people undertake various socio-economic activities.

1.7 Objectives of RAP

The implementation of the project shall result to displacement of people, loss of residential houses and commercial buildings, loss of tress and communal facilities e.g. boreholes, cemeteries and grazing land thus requiring a resettlement action plan (RAP). The purpose of the RAP study is to evaluate the project area and identify persons and property that will be affected by the proposed project so as to carry out appropriate and commensurate compensation and resettlement. This shall ensure that the displaced persons are not left worse off prior to project implementation. The RAP outlines the guiding principles to be followed when there is involuntary land acquisition in order to reduce to a minimum any adverse impacts to PAPs and enhance positive impacts. RAP applies to all displaced persons regardless of the total number of persons affected, the severity of the impact and whether or not they have legal title to the land. The RAP also sets out the framework for institutional arrangements, schedules, and other indicative budgets to facilitate any resettlement processes that will be necessitated as a result of this project.

The specific objectives of this RAP review is:

- i. To review and update the existing RAP of the project in line with the Bank's policies;
- ii. To verify and review the census survey undertaken to ensure that all the potential PAPs are identified;
- iii. To verify and assess that the impacts of the proposed project on the PAPs livelihoods are identified and appropriate measures to minimize resettlement effects and safeguard livelihoods are recommended;
- iv. To undertake socio-economic survey of the RAP and ensure that baseline data for monitoring and evaluation during the project implementation period are generated;
- v. To verify and update the asset inventory survey and ensure that all potential assets that will be affected by the proposed project are enumerated;
- vi. To verify and update the compensation at current market prices, such asset inventory
- vii. To verify compliance with the Bank's Involuntary Resettlement policy and any other national relocation and resettlement regulations that govern the infrastructural development sector
- viii. To provide guidelines about RAP to stakeholder and ensure they are participating in consultation including how to minimise resettlement impacts of the project
- ix. To recommend cost effective measures to be implemented to safeguard the livelihoods
- x. To prepare a reviewed Resettlement Action Plan (RAP) report compliant to the World Bank and Government of Kenya (GoK) regulations, the project's Resettlement Policy Framework (RPF) and in line with KeNHA and the Banks comments on the draft RAP report.

1.8 The Consultant Team

The resettlement action plan study team included the following experts:

- Team Leader/Expert In Resettlement Matters
- Highways Design Engineer
- Registered Land Valuer
- Sociologist/Community Development Expert
- Environmental Scientist,
- Socio-Economic Survey Team Members/Enumerators

2 PROJECT DESCRIPTION

2.1 Location of Proposed Road

KeNHA is planning the proposed rehabilitation project of Lodwar-Lokichogio-Nakodok (A1) Road. This is intended to meet the current and future traffic and socio-economic needs of the country and the region. The road is approximately 240 kilometres and is entirely located within Turkana County. It is the northernmost section of the A1 highway ending at Nadapal, the border with South Sudan. The proposed road will then extend to Nakodok in South Sudan. A1 is one of Kenya's main international/regional transport arteries.

The road project commences at Lodwar and ends at Nadapal at the border with South Sudan and then proceeds to Nakodok in South Sudan. From Lodwar the road runs in a north westerly direction generally traversing flat to rolling terrain. It then extends to Nadapal. It passes through the rural Turkana settlements areas and rural shopping centres of Nasiger, Duka Moja, Makutanao Gold, Nakalale, Lokore, Komotongai, Kalobeyei, Natira, Nakururum, Songot, and Lomidat. The road project is located in primarily plain to rolling terrain. However, short sections of the road pass through rolling to hilly terrain.

2.2 Condition of Current Road

In essence, the current road, which is proposed for rehabilitation, can be divided into three major sections:

- i. The Lodwar Town to Lokitang Turnoff section, which is 69 km and was constructed in the eighties by Put Sarajevo. This section is completely worn-out with vehicles resulting to driving through unoccupied land next to the various sections of the road that are worn out and have very rough surface and pot holes;
- ii. The Lokitang Turnoff to Lokichogio town which is 146Km was constructed by TAM in the nineties. This section is in fair to good condition, except for a section of the road between Kalobiyei and Songot that has completely been cut off by the flash floods. Vehicles have resulted to using a diversion nearby to avoid the destroyed section of the road
- iii. The Lokichogio Nadapal section (Sudan Border), which is 30Km. It is essentially an earth track widened at many locations with a grader. This section is very poor earth road with very sharp boulders.

Plate 1: View of the Lokichogio - Nadapal section. The section is a high security area

The existing road from Lodwar up to Lokichogio consists of two lane bituminous carriageway with narrow shoulders of about 0.5 to 1m wide. The condition of the thin bituminous pavement is generally fair to poor and extensive patch works and potholes are observed throughout the road stretch. Low embankment of 1m to 1.5m is generally available and the condition of side slope is stable in most of the sections. From Lokichogio to the end at Nadapal, only a gravel / earth track of approximately 2 lane width exists. The condition of the gravel track in this section is very poor.

Plate 2: The section of the road between Songot and Lokichogio which is in good bitumen condition. Its shoulders have overgrown vegetation covering some sections

Plate 3: The section of the road between Kalobiyei and Songot which has been destroyed and washed away by flash floods

2.3 Proposed Road design

The major geometric design elements constituting the cross-section are the carriageway, the shoulders and the ditches. The carriageway includes the travelled way, any auxiliary lanes such as acceleration and deceleration lanes, climbing lanes passing and bus bays and lay-bys.

The existing road geometry generally meets the required standards except at all drift locations and within town areas. To avoid urban conflict with through traffic on the heavy transport route, potential bypass options are explored for the urban centres such as Lodwar, Kakuma and Lokichogio. In addition, the project road has a number of existing drift crossings with substandard geometry.

Realignments are provided for in the current design at all the drift locations for the provision of high level bridges with appropriate approach geometry meeting the recommended standards.

In flat/rolling sections of the proposed project, a carriageway width of 7m (two lanes) with a 2.0m wide paved shoulder on either side is proposed. In major built up town sections, a carriageway width of 7m, a parking lane of width 2.5m and a 2.5m wide footpath on either side of the carriageway is proposed; In village sections a carriageway width of 7m and a 2m width paved shoulder is proposed.

2.4 Project Activities

2.4.1 Pre-Construction Phase

The pre-construction phase involves the following activities;

- Commissioning of the proposed project Feasibility study, Detailed Engineering Design and Tender Documentation, Environmental and Social Impact Assessment Study and getting the required approvals;
- Development of appropriate designs to improve and rehabilitate the road from Lodwar to Nakodok;
- Commissioning of a Resettlement Action Plan Study along the 60m wide road corridor covering the entire 240km to identify PAPs, affected land parcels and structures existing within the road corridor for appropriate census, valuation, compensation and relocation/ resettlement.
- Conducting a census of all the project affected persons, their socioeconomic status and special needs of the vulnerable groups
- Identification of affected parcels of land, structures and trees in preparation for compensation and land acquisition;
- Compensation for acquired land, affected trees and structures;
- Obtaining all relevant approvals from the various local authorities and relevant institutions;

2.4.2 The Construction and Operational Phase

The construction and operational phases will involve the following;

- Compensation and relocation/resettlement of PAPs;
- Demolition of existing structures and ground excavation;
- Identification of subsurface and above ground key service infrastructures like water pipes, drainage and sewer lines, power lines etc. and isolation to allow for construction;

- Construction of road deviations to accommodate traffic when the main road is under construction;
- Provision of appropriate deviations signs and erecting proper signage to guide traffic in order to avoid accidents;
- Use of construction vehicles and machinery such excavators, compressors, rollers, pickups and trucks etc. These machinery and vehicles will require proper maintenance at licensed garages within or close to the project area. There will be no on-site maintenance of vehicles;
- Use of qualified and licensed staff in operating machinery and vehicles to ensure safety of personnel, other road users and local population;
- Monitoring and Evaluation of the resettlement of PAPs. Refer to Annex 13 for Monitoring Indicators.

2.5 Need to Acquire Land for the Road Project

The land area to be acquired during the road rehabilitation project will be occupied by the road permanently. The selected route for the proposed road rehabilitation project minimizes disruption to settlements and natural resources. It is however unavoidable that a significant amount of land along the route currently owned, occupied or being used by different stakeholders for residential, commercial or grazing purposes will be compulsorily acquired for the road project due to re-alignment and improved road design.

This RAP study therefore determines the total number of households and PAPs affected by the project, the size of land to be acquired, the affected structures and trees and elaborate how they shall be compensated according to the relevant provisions of the laws of Kenya.

2.6 Impact of Road Upgrading Project

The RAP study has identified those persons within the project area who shall be displaced as a result of the project, and those persons who will be required to relinquish their land to the project. It also provides a socio-economic profile on the Project Affected People (PAP) and gives the cost of resettlement. The impacts of the project on the local community has been noted to vary from place to place along the road corridor from Lodwar to Lokichogio. The heaviest impact has been noted occur in Kakuma and Lokichogio towns where the project shall acquire the land parcels on both sides of the current road (small commercial plots) together with the commercial buildings resulting in loss of business premises, residential houses, loss of income from the commercial activities and loss of mature trees. Majority of PAPs carrying out business activities in these towns have expressed concern over loss of business.

There will be loss of structures for owners of manyattas that shall be brought down in Nasiger, Duka Moja, Makutanao Gold, Nakalale, Lokore, Komotongai, Kalobeyei, Natira, Nakururum, Songot and Lomidat. The road project will also affect part of the existing pastureland along the entire stretch of the road especially in the rural settings.

2.6.1 Project Impacts on Land and Structures

The main negative impacts of the project will arise from the need to acquire land for the road corridor and for other associated infrastructure like deviation roads for use during construction. The impacts of land acquisition will vary from one affected person or entity to another but may include (in part or full land acquisition for leasehold plots within the town or market centres). This is because the land parcels are small and remaining portions of land after acquisition may not be viable for occupation or for any meaniful economic activity. Other impacts include;

The permanent loss of acquired land and assets;

- The permanent loss of the productive potential of the acquired land and resources and, therefore, the loss of future food supplies and business;
- The permanent loss of community land largely used for grazing purposes;
- The permanent loss of residential accommodation and business premise;
- The temporary loss of land and assets for land used as road deviation during the construction phase of the project; and
- The possible loss of social cohesiveness and social networks when affected people or entities are required to move away from the project area.

The most extreme impacts will be felt by PAPs who will have to relinquish all or most of their land and other property and move to other locations, which may be some distance away from the project area. Less extreme impacts will be felt by PAPs who will lose smaller portions of their land and assets and who will not need to physically relocate from their current residence or place of business. Losses will not only be limited to property owners with legally recognised property rights but also by people without ownership rights, such as tenants and informal or itinerant land users and squatters.

Although not directly related to the acquisition of land for project purposes it is possible that construction teams may adversely impact land or property located outside the road corridor. These include contractors who will excavate road construction materials from the project area. The affected people will, therefore, suffer losses, which may be temporary or permanent and such displacement. A separate RAP will be prepared for material sites, which can only be identified by the contractors once they have been contracted.

2.7 RAP Study Field Investigations

Socio-economic survey along the entire road corridor, census of affected persons and valuation of their affected property was carried out during the fieldwork exercise. The consultant team administered questionnaires (key stakeholder and key informant questionnaires), conducted household interviews with the PAPs whose property were determined to be in the right of way of the road corridor and also carried out consultations meetings at 7 centres along the proposed route. Refer to **Annex 6** for PAP Household Questionnaire. The field investigations were carried out from Tuesday December 2, 2014 – Wednesday 31 December 2014. Project activities implemented include:

- 1) Road Route Survey using road chainage coordinates provided by road designers;
- 2) Census Survey for data on PAPs, affected land parcels, structures and trees;
- 3) Valuation of affected land, structures and trees;
- 4) Consultation meetings and validation of cut-off dates.

2.7.1 Road Route Survey

The RAP team surveyor carried out the road route survey as follows;

- Location of the positions of all the Road Chainage Points provided by the Road Design Engineers in UTM Arc 1960 Co-ordinate System;
- Using a hand held GPS instrument (accuracy to less than 2m) set in Arc 1960 reference System, the position of every coordinate at intervals of 100m were located on the ground making the centreline of the required way leave;
- A 30m distance on either side from the centreline of the road corridor was identified on the ground to be able to determine PAP household identity, affected land, trees and structures that fall within the road way leave;
- Land and every salient existing features (housing structures, trees, boundary fences, rivers, roads and power lines etc.) along the 60m road corridor were picked and documented;

- The100m located positions were used by the other experts in the field team to collect the relevant data for the RAP study.
- The road design coordinates were used to align the road between Lodwar and Lokichogio and compute the precise area to be acquired for every person affected by the project (PAP).
- The proposed road chainage coordinates are provided in **Annex 12.**

GPS Accuracy:

Since the weather was fine throughout the field survey, visibility was also good hence the positions provided by the GPS were in the order of 1m accuracy and therefore accepted for this task.

2.7.2 Sources of Data and Data Collection Tools

The consultant applied a variety of methodologies to ensure that impact and compensation assessments are based on current and verifiable socio-economic and demographic information.

Comprehensive interview guides for data collection were also developed for capturing information on PAPs bio data and contact details, source of income, number of children, adult male and female, type of land tenure, land size, number and type of structures.

2.7.3 Detailed Census Survey

The census survey that was carried out along the Lodwar to Lokichogio road involved data and information collection regarding the following features:

- Persons living or doing business within the proposed road corridor where information regarding household population, sources of income; income levels, level of education;
- Location of the project affected land, ownership and its size for value determination;
- Size and type of commercial structures including commercial buildings, residential houses, churches and schools for value determination;
- Type and size of trees and other vegetation for value determination;
- Commercial and social activities taking place within the road corridor to determine loss.

Interview guides and tables were used to record above data collected during the census survey.

The information collected during the field census survey include:

- Household demographic data;
- Means of livelihood and economic activities;
- Inventory of properties and housing structures, commercial structures, common or shared properties and infrastructure falling within the 60m road corridor;
- Land tenure:
- · Socio-Cultural activities; and
- Perception of the proposed road-upgrading project.

The PAPs were identified and consulted with the objective of establishing land ownership, the existing socio-economic conditions within the project area of influence and the immediate surroundings. The resettlement action plan study team used qualitative and quantitative techniques to collect data and information on the social and economic status of the community and the area along the road corridor

These included:

 Key Informant Interviews and semi-structured Interviews with the local administration including Village Elders, Assistant Chiefs, Chiefs, District Officers (DOs) and District Commissioners (DCs) of the project area;

- Questionnaires were administered to obtain views about the proposed projects and their perceived impacts from project affected households. All the households whose commercial and residential structures are within the road ROW were interviewed and detailed information regarding their property (land, houses and any other economic activity) were collected to assist in the evaluation process for compensation. For households where owners were not found during the interview contacts were obtained. The questionnaires used for collecting information include the following:
 - Household Questionnaire
 - Focused Group Discussion Guide
 - Key informant Guide
- Affected homesteads were visited and relevant information collected and recorded into a household questionnaire;
- Transect walks were also carried out to confirm the collected information and observation made on physical and environmental conditions;

A checklist of the information collected from each public consultation meeting guided the collection of data throughout the field exercise. The data was analysed at the end of the fieldwork. The questionnaires distributed to the stakeholders have been included in **Annex 7** and minutes of the consultation meetings are included in **Annex 8**.

2.7.4 Consultation Meetings

Seven (7) Consultation meetings were organized and conducted at various towns/centres along the route of the proposed road. Consultations were carried out with the community, key stakeholders, local leaders and PAPs through direct verbal interaction with them, oral interviews and the administration of relevant questionnaires. The purpose of the meetings was to elaborate on the various aspects of the proposed project and discuss project mitigation measures and alternatives. Projects aspects discussed during the meeting included land acquisition, compensation for land, structures, loss of business and trees and resettlement so as to make sure that all stakeholders and PAPs are able to make informed decisions and choices. The views and suggestions by the community, stakeholders and PAPs were recorded inform of minutes and used to enhance mitigation measures and alternatives aimed at minimizing project impacts and enhancing benefits

2.7.5 Cut-off date

The cut-off date for the proposed rehabilitation of Lodwar-Lokichogio-Nakodok Road project is 8 December 2014 when the census of PAPs began. The cut-off dates were validated during public consultation meetings held at the 7 centres.

2.8 Limitations of Study and Mitigations

Limitations/Challenges

- Many of the PAPs did not have land ownership documents and they also could not provide exact land boundaries.
- There were conflicting information on the ownership of land with Turkana County government indicating the land in the county is communally owned and the process of adjudication had started while some PAPs produced receipts and title deeds of the land they claimed they owned
- Issue of absentee PAPs (working away from the project area). However through the local chiefs some of the them were contacted;
- Issues of land were found to be sensitive hence respondents were not very free to engage in elaborate discussions.
- Lack of updated land allocation data at the local lands' office and missing and unclear land demarcation boundaries especially in the town centres.

Mitigations to Overcome Challenges

- There should be education/sensitization of PAPs to follow up on their land ownership documents since settlement of compensation on acquired land shall be based on production of acceptable land ownership documents.
- As required by the Land Act 2012 due process on land acquisition will be followed where the National Land Commission will be involved in the verification of those having interest in land before compensation is paid out. This shall be done once maps are finalized.
- Adequate dissemination of information regarding dates of carrying out PAP verification.
 At least 2 weeks' notice through local administration should be provided to PAPs before verification officers move to the ground.
- Education of PAPs on grievance redress mechanism and the setting up of a local RAP Implementation Committee (RIC) to carry out verification of ownership and land tenure.
- To avoid any suspicion or conflict during the process of land acquisition and compensation, KENHA Resettlement Unit (KRU) and RIC should fully involve the PAPs.

3 MINIMIZING RESETTLEMENT

3.1 Justification for Resettlement Action Plan

The proposed rehabilitation of Lodwar-Lokichogio-Nakodok Road will lead to physical displacement of people at the town and market centres and the squatters along the route of the proposed road, loss of structures and income sources/livelihood.

The Resettlement Action Plan is aimed at facilitating the evaluation of land and affected structures and trees, compensation and resettlement of project affected persons before project implementation, in accordance with applicable laws of Kenya. Involuntary Resettlement is triggered by this project due to land acquisition, loss of structures, businesses and trees and therefore requires the preparation of a Resettlement Action Plan. The RAP enumerates and ensures that all the Project Affected Persons (PAPs) are identified and compensated for the losses at current market value and they are also provided with rehabilitation assistance where applicable, in order to assist them to improve or sustain their pre-project living standards and income generating capacity.

The RAP Study established the following:

- There will be need for land acquisition from various individuals and organizations;
- Land will be acquired for the construction of the road and there shall be loss of structures therein:
- Land parcels belonging to private individuals and organizations that will be affected and are under leasehold tenure
- Land parcels that belong to the community
- There are permanent commercial buildings, semi-permanent buildings, a borehole pump house and temporary manyattas and kiosks that will be demolished;
- There are several trees that will be affected by the proposed road;
- Displacement of persons will largely occur at the towns and market centres;
- Special groups of persons affected by the project include, separated, widows, widowers, orphans and squatters

3.2 Project Guiding Principles

3.2.1 The Guiding Principles of the RAP Study

Whereas the road rehabilitation project will only affect persons along the road corridor mainly located at town centres where the road project affects commercial buildings, challenges arise from the fact that majority earn their livelihoods from these buildings hence creating uncertainties. It is therefore important that Kenya National Highways Authority (KeNHA) binds itself to the following guiding principles and forms a mechanism for prompt legal redress to any issues arising from the implementation of the project.

Principle 1: Resettlement must be avoided or brought to a minimum where it is not possible to eliminate. The consultant has proposed that the design takes into consideration existing settlements and avoids populated areas to minimize displacement of persons during project implementation.

Principle 2: Affected population must be exhaustively consulted and their views regarding the project are factored into the project implementation.

Principle 3: Pre-resettlement baseline data must be established. A household census and inventory of land, structures, trees and crops belonging to affected persons was carried out. This data has been used to determine the compensation package for the project affected persons and also as a basis for future monitoring of the resettlement activities.

Principle 4: Affected persons must be assisted in the relocation. *KeNHA undertakes to adequately compensate project-affected persons and ensure that the displaced persons relocate appropriately.*

Principle 5: The compensation is fair and adequate. Compensation packages were determined from the baseline information collected and prevailing market rates have been used to determine values of affected portions of land, lost assets and disturbance. KeNHA undertakes to make payments to the PAPs in accordance to the values provided in this RAP report and has provided for a grievance redress mechanism.

Principle 6: Resettlement must be executed as a development that benefits the Project Affected Persons (PAP). All the project-affected persons have been consulted through various forums and will be given first priority for any job opportunities arising from the project and their income streams maintained or improved.

Principle 7: Vulnerable groups must be identified and given an opportunity to participate in the process. These are persons that will be in a disadvantaged position. *All special groups of persons (widows, orphans, elderly and physically challenged) have been identified and will be given additional assistance to ensure that they do not undergo suffering and they do not suffer undue disadvantage*

Principle 8: Resettlement must be seen as an upfront project cost. In commissioning this RAP study, *KeNHA* is committed to ensuring that compensation cost is handled as an upfront cost. Valuation of affected land, structures and trees has been determined and *KeNHA* undertakes to have it included in the overall project cost. *KeNHA* shall carry out the entire process on behalf the Kenya Government following the Lands Act 2012.

Principle 9: An independent monitoring and grievance procedure must be in place. Whereas KeNHA will have its internal monitoring procedure put in place, the local administration will organize and implement an independent procedure of monitoring procedure for receiving any concerns or grievances during project implementation. This will be important to ensure that pending issues or new issues arising from the project implementation are attended to in a timely fashion.

3.2.2 Land Compensation Guiding Principles and Objectives

The project activities will include valuation of land, structures and trees, compensation and acquisition of affected land, compensation and demolition of existing structures, resettlement of PAPs and construction of the road. Concerns expressed during the PAP consultations include adequate and timely compensation of affected persons, acquisition of land and resettlement of affected persons within the local area to avoid drastic change of environment and departure from ancestral land.

• Due to lack of title deeds for many PAPs, majority expressed fear that they may not receive appropriate compensation from the relevant authorities. There are guiding principles that govern land compensation and resettlement. PAPs should be sensitized by their local leaders to follow up on their land ownership documents from the relevant authorities since settlement of compensation on acquired land would be based on production of acceptable land ownership documents. The RAP team put emphasis during the community meetings on the importance of having these documents acquired and ready at the time of compensation.

3.2.3 Implementation of the Guiding Principles

KeNHA through the road rehabilitation project has applied the RAP principles of avoid, minimise and mitigate during the design stage and instituting a Resettlement Action Plan (RAP) study to evaluate the socio-economic impact of the project (loss of land, structures, trees/crops and income generating activities) on the PAPs and propose compensation values and resettlement.

The loss of land, property, income and commercial and residential premises has been evaluated during implementation of this RAP study to establish associated values and costs that can facilitate appropriate compensation and resettlement. This RAP report outlines the guiding principles to be followed when involuntary land acquisition is undertaken, in order to minimise the adverse impacts to PAPs and enhance positive impacts. It applies to all displaced persons regardless of the total number affected, the severity of the impact and whether or not they have legal title to the land.

The RAP study considered the framework for institutional arrangements, legal framework covering the identification of agencies responsible for resettlement activities schedules, and other indicative budgets to facilitate any resettlement process that will be necessitated as a result of this project. Grievance redress mechanisms for the dissatisfied parties have been prepared and documented in the RAP Report.

This included affordable and accessible procedure for third-party settlement of disputes arising from resettlement; such grievance redress mechanisms have taken into account the availability of judicial recourse and community and traditional settlement mechanisms.

Valuation for land was based on the open market comparison with what other similar parcels of land are currently selling for in the area taking into account the difference between them on a willing seller willing purchaser basis. The comparability of the land is based on the use, location, site conditions and income related factors.

The valuation basis for developments on the land taken for compensation is the current replacement cost or equivalent reinstatement basis or probable cost of acquiring similar premises for the same purpose basing the unit cost on the Ministry of Lands, Housing and Urban Development current rates. This is the amount it would cost to search for a supplier of the construction material, the cost to purchase, transport and insure the materials to the site, and the costs of erection of the premises, including professional fees, and completed to a standard as existing at the valuation date.

The trees were valued based on compensation schedules prepared by the Kenya Forest Service for various species depending on age and its future potential. We shall also take into account the extent of utilization, type of species, quality of logs, diameter of the logs and quality of the log. All structures affected were valued on replacement cost approach basing the unit cost.

3.2.4 Guiding Principles for Compensation for Resettlement

The basic principles of resettlement to be adopted for the Project are as follows:

- Involuntary resettlement will be avoided or minimized by identifying possible alternative project designs and appropriate social, economic, operational and engineering solutions that have the least impact on the population in the project area;
- 2. The populations affected by the Project are defined as those who may stand to lose, as consequence of the Project, all or part of their assets which includes homes, productive lands, commercial properties, tenancies, income earning opportunities, social and

- cultural activities and infrastructure together with any other losses that may be identified in the resettlement planning;
- 3. Neither lack of legal rights to the assets lost, tenure status, nor social or economic status shall bar the affected person from entitlement to the compensation and rehabilitation objectives and measures outlined in the RAP;
- 4. The cut-off date for eligibility for compensation for physical assets affected by project activities such as the construction of the road will be the date of commencement of the census survey after the detailed design has been completed and validated during the consultation meetings where the instruments of compensation and resettlement will be disclosed to the PAPs;
- 5. All PAPs will be entitled to be compensated at replacement cost at current market value for affected assets, incomes and businesses; all severely affected PAPs will also be provided with transitional assistance and income restoration and other rehabilitation assistance which will be sufficient to improve or at least restore their pre-project living standards, income levels and productive capacity;
- 6. After the detailed design for the road has been finalised, a census and socio-economic survey will be conducted as the basis for resettlement planning and resettlement plan preparation. After the detailed design has been completed for each component, a detailed measurement survey will be carried out as a basis for compensation;
- 7. In the event of any population relocation, efforts will be made for existing social and cultural institutions of the people who are being resettled to be maintained to the greatest extent possible;
- 8. Preparation of RAPs, as part of sub-project preparation and implementation, is to be carried with the full participation of both affected people, as well as representatives of the local governments of the Project affected areas, community leaders, civil society and social organizations such as the Women Groups and NGOs;
- 9. Comments, concerns and suggestions of those consulted will be duly taken into consideration during the design and implementation phase of the resettlement plans
- 10. Consideration must be given and assistance provided, where necessary, to those most vulnerable to the adverse impacts of resettlement (including the poorest, female headed households, the disabled and elderly with no means of support, and those from minority groups) to mitigate their hardships and to assist them in improving their livelihoods. Their needs have been considered in the formulation of the RAP study and in the options and mitigation measures identified;
- 11. Adequate budgetary support will be fully committed and be made available to cover the costs of land acquisition and resettlement and rehabilitation within the agreed implementation period;
- 12. Appropriate reporting, monitoring and evaluation mechanisms will be identified and set in place as part of the resettlement management system. Monitoring and evaluation of the land acquisition process and the final outcome will be conducted independently of the executing agency;

3.3 Impact Mitigation Measures at Design Stage

The designs have been made to avoid as much as possible any settlements or commercial buildings thereby reducing displacement and resettlement. Where it was found to be difficult to avoid, appropriate design changes have been adopted to mitigate or reduce to a minimum any impacts arising from land acquisition and losses on investments and incomes.

3.4 Impact Mitigation Measures at Land Acquisition Stage

Mitigation measures during land acquisition stage include:

- Ensuring that there are adequate consultations with the all stakeholders and Project Affected Persons (PAPs) at every stage of project implementation.
- Verifying land tenure and ownership for compensation purposes;
- Creating awareness on land alternatives and resettlement options and identifying alternative land for relocation and resettlement;
- Ensuring that displaced persons are informed about options and rights pertaining to resettlement, offered choices and alternatives;
- Providing prompt compensation at full replacement cost for loss of land, assets attributable directly to the project; offer support after displacement for a transition period based on a reasonable estimate of the time likely be needed to restore their livelihood and standards of living;
- Providing development assistance in addition to compensation measures;
- Computing the actual number of persons to be compensated and resettled;
- Conducting resettlement process and monitoring progress of resettled persons;
- Preparing and keeping reports on resettled persons
- Development of a resettlement plan that adequately responds to community issues;
- Creating awareness on the project facts;
- Preparation of progress and monitoring reports and implementation of recommendations;
- Holding of PAP participation meeting at each of the major centres along the proposed road;
- Conducting Information Education and Communication (IEC) amongst the community and the project staff

3.5 Impact Mitigation Measures during Construction Stage

3.5.1 Mitigation Measures

Mitigation measures during road construction activities include:

- Ensuring that relocation and resettlement of all displaced persons is implemented before demolition of PAP structures located within the road corridor;
- HIV/Aids education awareness and provision of condoms at local and project level;

3.6 Preliminary Evaluation of Alternatives

After carrying out consultations with the project affected persons and the communities at Lodwar and Kakuma towns and after making ground observation following the proposed road design, the Consultant has proposed that the road should be re-routed to avoid affecting the many graveyards/ cemeteries at these locations. The local communities proposed that an alternative site be selected within these towns to avoid relocating the cemeteries, as it is a taboo among the community to "disturb" the dead.

The alternative routing will achieve the following positive results:

- Reduced interference with the cultural beliefs of the local communities as pertaining the
 potential disturbance of the dead who are usually buried without coffins.
- This may also reduce the cost of compensation for each of the affected grave including the cost of moving the graveyard and the dead to an alternative graves/ graveyards

4 PROJECT AREA SOCIO-ECONOMIC INFORMATION

4.1 The Socio-Economic Profile

This section looks at the social terrain of the project area. It focuses on the demographic and socio-economic characteristics of people in the project area with a view to providing a picture of the baseline socio-economic situation and to provide a basis for anticipating socio-economic impacts and designing appropriate mitigation measures. The population demographic data is secondary data obtained from Population and Housing Census - Kenya National Bureau of Statistics (2009). The data used to evaluate the project area socio-economic status is primary data obtained from the socio-economic survey conducted by the ESIA Study team between **November 12, 2014** and **December 5, 2014**.

4.2 Population and Demography of Turkana County

Turkana County has a population of 855,399 of which 53% are male and 47% female (KNBS, 2009). The population density in this vast county is low and varies from 1 person per Km² in Kibish Division to 29 persons per Km² in Kakuma Division, with a county average of 6.9 persons km², with a with a sex ratio of male/female 92:100. There are 123,191 households. The total population almost doubled changing from 450,860 in 1999 to 855,399 in 2009 this population change is almost double (89.7%) when compared with the National population change of 34.6% from 1999 to 2009.

4.3 Socio-economic Survey Results

The primary data collected during the socio-economic survey has been used to evaluate the baseline status of the project area community.

4.3.1 Age Distribution of Lodwar-Nakodok Road Corridor Residents

In **Figure 1**, majority of the respondents fall under the 31-50 years age bracket (51%) followed by respondents under the age of 30years (38%) with the minority being within the 51-70years age bracket (11%) (n=37). This implies that the population that will be affected by the project is largely economically active.

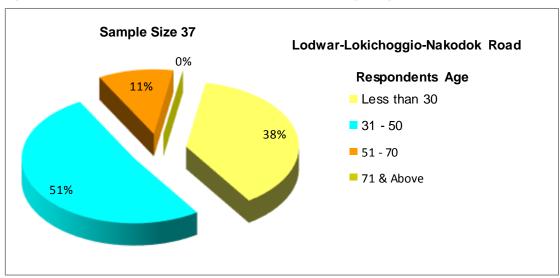


Figure 1: Lodwar-Nakodok Road Area Respondents According to Age

4.3.2 Quality of Housing of Residents along Lodwar-Nakodok Road

Majority of the Lodwar-Nakodok Road corridor respondents live in semi-permanent houses (72%) and another 10% live in permanent houses. This shows that the road corridor communities have changed their livelihood status and are slightly urbanized. The traditional housing unit (Manyattas) form 18% of the house structures in the road corridor (**Figure 2**) (n=40).

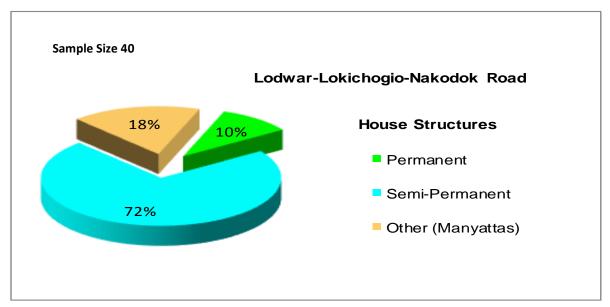


Figure 2: Quality of Housing along Lodwar-Lokichogio-Nakodok Road

Source: RAP Review Socio-economic Survey for Lodwar-Lokichogio- Nakodok Road 2014

4.3.3 Level of Education of Respondents along the Lodwar-Nakodok Road Corridor

Majority of the road project respondents has attained primary school level of education 35%) while an almost similar percentage (30%) have not attended formal education. See **Figure 3**

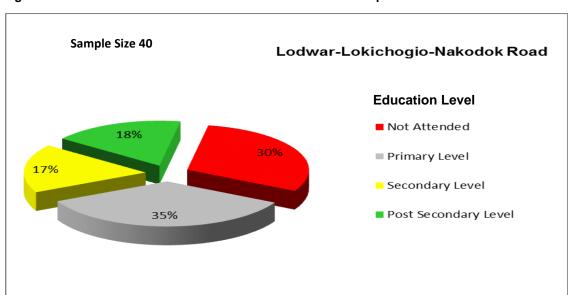


Figure 3: Education Levels of Lodwar-Nakodok Road corridor respondents

4.3.4 Religious Following

Majority of the Lodwar-Nakodok Rod corridor respondents were Protestants (53%) followed by Catholics (40%). See **Figure 4**

Sample Size 40

Lodwar-Lokichogio-Nakodok Road

0%

Religion of Respondents

Islam

Catholic

Protestant

Other

Figure 4: Lodwar-Nakodok Road Respondents According to Religious Following

Source: RAP Review Socio-economic Survey for Lodwar-Lokichogio- Nakodok Road 2014

4.3.5 Drinking Water Sources for Lodwar-Nakodok Road Corridor Respondents

When the study turned to the respondents' sources of drinking water along the Lodwar-Nakodok Road corridor, the results obtained were as shown in **Figure 5.** Majority of them use piped water source (70%) which reflects the urban nature of the project area. The 30% who use other source largely rely on water purchased from water vendors. The water vendors were noted to distribute the commodity on hand carts.

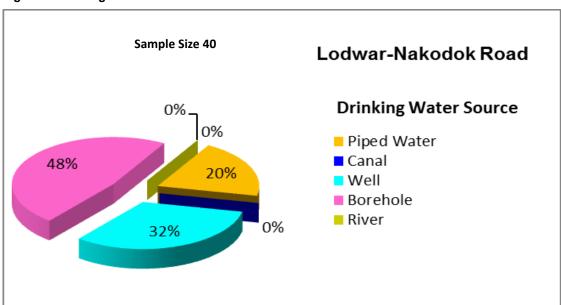


Figure 5: Drinking Water Sources for Lodwar-Nakodok Road Residents

4.3.6 Source of Energy for Cooking

Respondents from Lodwar-Nakodok Road corridor exclusively use two sources of energy for cooking (Charcoal 53% and Firewood 47%). This is a worrying trend when considering conservation of forest resources. See **Figure 6.** Firewood does not only deplete forest resources, it significantly contributes to air pollution resulting in Upper Respiratory Tract Infection (URTI) which is also reported as one of the most prevalent OPD diseases at almost every health facility in the project area. Sensitisation of the project area community should be carried out to educate them on the impacts of absolute reliance on natural vegetation for cooking energy (destruction of forest resources and health effects) Use of clean energy sources like gas and charcoal briquettes) should be promoted.

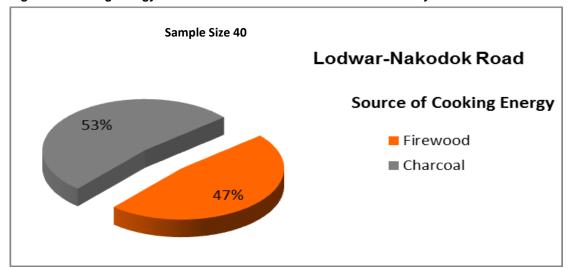


Figure 6: Cooking Energy for Lodwar-Nakodok Road Corridor Community

Source: RAP Review Socio-economic Survey for Lodwar-Lokichogio- Nakodok Road 2014

4.3.7 Source of Energy for Lighting

Majority of the project area respondents use Kerosene Lamp (40%). The special torch follows with 28% usage and electricity 17% and candles at 12%. As shown in shown in **Figure 7** (n=40). Use of kerosene lamps is unsafe health-wise and may contribute to respiratory and eye related diseases due to smoke emission.

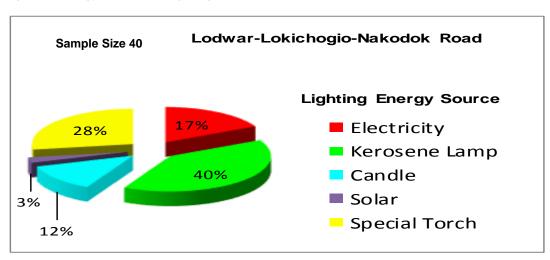


Figure 7: Energy Source for Lighting at the Lodwar-Nakodok Road Corridor

4.3.8 Distance to Health Centre/Dispensary

In the Lodwar-Nakodok Road corridor, respondents with access to a medical facility that are less than 2km (45%) are less than those who access a health centre more than 2km (55%) (n=40). See **Figure 8.** This confirms that health facilities (dispensaries/Health Centres and hospitals are not within easy reach for majority of the community members along the Lodwar-Nakodok Road corridor. Majority of the health facilities are located at major centres.

Distance to Nearest Health Centre

Less Than 2Km

More Than 2 Km

Figure 8: Distance to nearest Health Centre for respondents

Source: RAP Review Socio-economic Survey for Lodwar-Lokichogio- Nakodok Road 2014

4.3.9 Sanitation Facilities at the Lodwar-Nakodok Road

About 63% of the respondents along the Lodwar-Nakodok Road corridor use pit latrines. About 35% do not have any developed sanitary facility (use the bush) to answer the call of nature. A very small percentage (2%) has flush toilet facilities See **Figure 9**. When considering that a significant population (32%) use water from wells for drinking and given that groundwater is relatively shallow, there is cause for concern on health and sanitation of the community since the wells are located where community is residing.

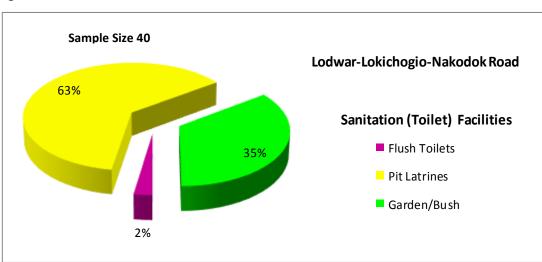


Figure 9: Sanitation Facilities at the Lodwar-Nakodok Road Corridor

4.3.10 Distance to the Nearest Market Centre

The respondents in the project area have access to a market or shop that is less than 2km away (66). See **Figure 10.** This suggests that project area community is able to access shops or markets for essential supplies.

Lodwar-Lokichogio-Nakodok Road

Distance to Nearest Shop/Centre

Less Than 2Km

More Than 2 Km

Figure 10: Distance to Nearest Market Centre

Source: RAP Review Socio-economic Survey for Lodwar-Lokichogio- Nakodok Road 2014

4.3.11 Source of Income for Lodwar-Nakodok Road Corridor Respondents

Respondents practicing business including livestock trade were the majority (43%) followed by those in employment (22%). Those carrying out casual jobs form 21% of the income generating activities and those carrying out farming a meagre 14% as shown in **Figure 11**.

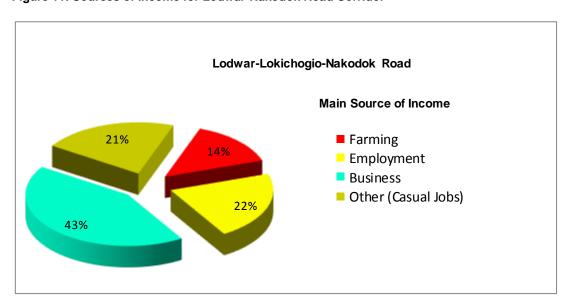


Figure 11: Sources of Income for Lodwar-Nakodok Road Corridor

4.4 Socio-cultural and economic environment

4.4.1 Population dynamics

Population density and distribution in Turkana partially reflects the prevailing ecological conditions, due to dependency on natural resources. About, 40% of the county is uninhabited, and 35 % is devoid of livestock. The areas with little or no population are in southern, south western and north western sections bordering West Pokot County and the Sudan respectively. About 40% of the population is found in and around settlements and irrigation schemes.

4.4.2 Human population size and density

Turkana County has a population of 855,399 of which 53% are male and 47% female (KNBS, 2009). The population density in this vast county is low and varies from 1 person per Km² in Kibish Division to 29 persons per Km² in Kakuma Division, with a county average of 6.9 persons km², with a sex ratio of male/female 92:100. There are 123,191 households in the County. The age distribution in the county is as follows: 0-14 years (46.0%), 15-64 years (51.6%), 65+ years (2.4%)

Table 1: Population of Turkana Central and North where the Project is located

Area			Population				
District	Division	Location	Male	Female	Total	Households	Density
Turkana			126,539	128,067	254,606	41,120	17
central	Central		28,531	29,759	58,290	11,437	70
		Lodwar	17,690	17,816	35,506	7,072	65
		township					
		Kanamkemer	10,841	11,943	22,784	4,365	79
Turkana			197,508	176,906	374,414	53,634	11
North	Kakuma		49,361	45,330	94,691	16,084	27
		Kakuma	37,624	34,126	71,750	12,787	113
		Pelekechi	6,769	6,647	13,416	1,863	12
		Nakalale	4,968	4,557	9,525	1,434	6
	Oropoi		32,144	29,390	61,534	8,265	11
		Kalobeyei	9,442	8,830	18,272	2,577	7
	Lokichogio		47,348	41,754	89,102	11,440	11
		Lokichongio	11,575	10,385	21,960	3,489	21
		Songot	4,404	3,774	8,178	1,077	6
		Loteteleti	3,820	3,487	7,307	867	16

Source: Population and Housing Census - Kenya National Bureau of Statistics (2009).

4.4.3 Human settlements

The Turkana are one of the most mobile populations in the world. Traditionally, there were no permanent settlements occupied by them. Small settlements were built during the colonial period, but very few Turkana were attracted to them. Following the droughts of the 1980s, approximately one-half of the Turkana population settled in, or adjacent to, large famine-relief camps. Today it is estimated that about one-third to one-half of the Turkana population remains settled.

Permanently and semi-permanently settled areas in the Turkana are found along Turkwel and Kerio rivers where irrigated farming is practiced and water is accessible and near Lodwar town. Along these areas, there exist peri-urban market centres with the necessary social and economic infrastructures like schools, health facilities and shopping centres.

Proximity to urban centres also affects the number and range of options open to those interested in livelihood diversification. According to research undertaken by Little (2005), pastoralists residing less than 40 km from towns typically have more alternative income generating options than those living further away. Proximity to an urban centre is also beneficial to residents because they can easily access societal amenities like hospitals, water, electricity and schools. Most charitable organizations are located in the urban centres and residents can benefit from their assistance, especially food. Casual and permanent jobs are readily available in urban centres. In addition, there is ready market to sell food stuffs and other things like charcoal and woven items.

4.4.4 Population Distribution along Lodwar- Nakodok Road Corridor

Along the project road corridor, the highest population density (>20 persons/km²) is noted to occur in major towns of Lodwar, Kakuma and Lokichogio. According to the Population Census of 2009 from Kenya National Bureau Statics the Population Density of Lodwar Township where the road project starts has 65 persons/km², Kakuma has 113 persons/km² and Lokichogio has 21 persons/km². Slightly lower but still significant population densities occur in areas between these major towns following the road corridor. This pattern is noted in the rest of the county where higher population density is influenced by major roads or natural resources.

It is also noted that it is in these major town centres where service institutions like schools, hospitals etc. are located. Since the project has the potential to generate impacts affecting resources and human populations, a much higher threshold of mitigations will be required to minimise impacts/inconveniences in the populated areas of the road corridor. These are also the major areas where significant displacements and resettlement due to the road project are expected to occur.

4.4.5 Land Tenure and Land Use

4.4.5.1 Land tenure

Since independence to date land tenure in Turkana County has been Trust Land and all land in the county is administered under the Trust land Act. The existing land tenure in the trust lands can be described as a quasi-customary/communal in that land rights are held in trust by the county councils. Because there have been no formal surveys or land adjudication in the whole of the county, land is still held communally by various communities under customary tenure, and is managed by the Local Authorities (Turkana County Council and Lodwar Municipal Council) on behalf of the communities. Under the new Constitution, 2010, the land is now considered as community land with all rights vested in them.

There are two categories of Trust land in Turkana County administered as centres that have development plans including; Lodwar, Lokichoggio, Kakuma, Kibish, Lokichar, Katilu, Lorugum, Kapedo Lokitaung, Lokori, Kainuk, Kaputir, Lopur, Kalokol where allotment letters are issued and the rest of the land under Turkana County Councils.

The Turkana County Government own all the community land and have provide land in the town centres on leasehold basis to private individuals; many of who were found to have no title deeds for the parcels of land and plots they own.

However, demarcation is being done in township areas to control haphazard developments. This has been done particularly in Lodwar and the main town of Kainuk, Kakuma and Lokichogio. The only currently available legal documents for proof of ownership of land are the allotment letters issued by the relevant Local Authorities and only in urban centres.

Within the countryside away from urban centres, the land-tenure system in Turkana is similar to that of many pastoral peoples. Grazing resources are open to all members of a territorial section. In general, water in rivers and streams when they are flowing, open pools, and shallow wells are not owned but open to all community members. However, deep wells dug through sand such as riverbank aquifers, clay, or rocks are owned by the individuals who dig them, and can be used by close relatives and friends. In northern Turkana, the rules governing access to grazing do not appear to be as strict as those found among the sections living in the south.

4.4.5.2 Land use

Nomadic pastoralism is the dominant land use in Turkana County. Other land use activities include small-scale agriculture along riverbanks and flood plains, scattered settlements, urban centres etc.

The Turkana County, although largely marginal, contains pockets of high potential rangelands, which are crucial to land use patterns. The mountains, hills, plains, streams, rivers and valleys create a highly heterogeneous ecosystem, but the marginal nature of the environment creates survival risks, which the pastoralists must cope with by multi-resource exploitation. In contrast to many East African pastoralists, the Turkana employ diverse food-procuring strategies that include fishing, farming, and gathering of wild foods, in addition to multi-species pastoralism. It is, however, the latter, which characterizes their economy.

Mobility is the principal mode of resource use, in response to the patchy rainfall distribution and concomitant patchy vegetation productivity. To take the best advantage of the diverse land resources and environmental variability, the Turkana manage multiple species of livestock, comprised of camels, goats, sheep, cattle and donkeys. Since each species has distinct dietary needs, the Turkana are able to exploit different expanses of the range during any period of the year. Cattle are confined to mountain areas and river courses during the dry season, and moved to the plains during the wet season, while the plains are endowed with sufficient browse for sheep and goats and camels during the wet and the dry season as well (Little, 1985).

Pasture and water resources seldom reoccur from year to year with any uniformity; rather, their distribution is characterized by patchiness. Thus, movements between different pastures are varied; firstly because of variable fodder and water supplies, secondly, because of poor security and thirdly, because of the particular requirements of each species (McCabe *et al.* 1985, Little 1985).

4.4.6 Livelihoods

The Turkana County is subdivided into four main livelihood zones based on their sources of income – pastoralism (64%), agro-pastoralism (16%), fishing based (12%), and peri-urban and urban (8%).

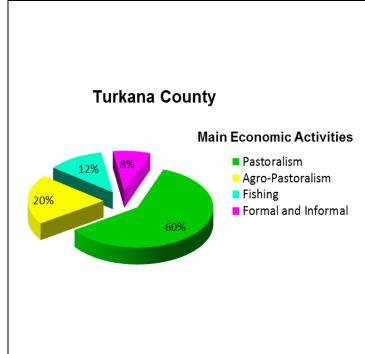


Figure 12: Livelihood Categories in Turkana

- Pastoral: covers most parts of northern and central divisions and supports 60% of total population.
 Main livestock kept are cattle, goats, sheep and camels.
- Agro-pastoral: located along the riverine areas of Turkwel and Kerio and supports 20% of the total population. The agro-pastoralists keep livestock and also practice small-scale farming. There are two rivers that support agricultural activities, Rivers Kerio and Turkwel.
- Formal and informal employment, petty trade: mainly in urban and peri-urban centres support 8% of total population.
- Fishing: supports 12% of total population mainly practiced along the western shores of Lake Turkana.

Source: University of Cambridge – Gregory Akall (Department of Geography)

Pastoralism is the main subsistence and economic activity in the county. It is estimated that about 60% of the population derive their livelihood from livestock-based activities. Fishing is an important activity along the lakeshore. Over the years, fish yields from the lake have been declining due to the drying of the Ferguson gulf and the state of insecurity in Todonyang (the mouth of river Omo). One section of the Turkana, the Ngibocheros, live along the shore of Lake Turkana and depend on fishing and aquatic hunting, as well as herding for subsistence

4.4.6.1 Livestock production

The Turkana people have adapted to the aridity and the spatial and temporal variability in climate by herding different species of livestock and by moving frequently. They are therefore primarily a pastoral people, with about 60% of the population depending on five species of livestock for their subsistence: Camels, cattle (Zebu), sheep, and goats provide most of their subsistence needs while donkeys are used to transport household goods during migrations. The livestock provide such products as milk, meat, hides, skins and ghee. The rest of the population depends on agro-Pastoralism, fishing and casual or formal labour in the urban areas. The highest numbers of livestock in Turkana are found in Lokitaung and Lokori divisions with the heaviest average concentrations being evident around the catchment areas of Kakuma, Kalokol, Lokori and Lorugum, but low around Lodwar and Katilu.

Plate 4: Animal Herding and Women Fetching Water at Lomidat

4.4.6.2 Fishing

Fishing in Lake Turkana is another, long standing economic activity. Fishermen along Lake Turkana migrate to follow the patterns of fish movement. Fishing supports 12% of total population and is mainly practised along the western shores of Lake Turkana. The pastoralists also supplement their livelihoods by selling the fish.

4.4.6.3 Aloe production

Aloe turkanensis is a native plant found in the hills on the Turkana/Ugandan border and has been valued for many years for its ethno-medicinal qualities. In places such as Oropoi and Latea, it is used locally to treat malaria, flesh wounds, and eye infections and to moisturize dry skin. Recently, however, the production and processing of Aloe has been seen as a potential candidate activity for livelihood diversification. Several organizations e.g. KEFRI and ITDG Practical Action have attempted to promote the production, processing and marketing of commercial Aloe.

However, the key challenges related to Aloe production include absence of market information and the poor organization of production and processing. There is substantial scope for the profitable expansion of Aloe in Turkana.

4.4.6.4 Charcoal Production & Sale

Charcoal is primarily produced along the Turkwel and Kerio Rivers and is sold along the main highway between Kainuk and Lokichogio. Although charcoal production is illegal in Turkana, the production offers small returns to those that produce it and despite its, destructive nature, the production and sale of charcoal continues and several bags for sale can be seen along the .the project road.

Plate 5: Charcoal on sale along the project road

4.4.6.5 Collection and sale of wild fruits

The collection and home use or sale of wild fruits is widespread throughout the County. The most common fruits sold include Doum Palm, Ngakalalio, Edong and Edapal, and Ebei. Trade in *Prosopis* pods especially around Lodwar and Kakuma is also becoming an important source of income. The pods are bought by Animal feeds manufacturing companies such as Sigma Feeds.

4.4.6.6 Mining

Gold mining has been prevalent in Turkana for many years. Whilst most gold mining operations in the contemporary period are labour intensive one man operations, gold mining in the recent past has been the domain of large businesses backed by significant political support. Currently, gold mining occurs primarily in Nakoriyek (on the road to Kanakurdio), Kimagur (on the main road before Lokichar), Lokiriama, Namorupus and Nadunga (west of Nakoriyek). Small-scale gold mining is also found in the southern part of the County at Nakwamoru and central parts at Makutano ('Gold') between Kakuma and Lodwar, where mining is not of a large-scale commercial nature, though an alluvial type of it is being exploited Turkana has abundant building sand and quarry materials.

4.4.6.7 Casual, waged labour and trade

The demand for casual labour in Turkana is in the form of agricultural or building jobs. However, in the case of agriculture, most casual jobs are available in the wet season with some herding opportunities are available in the dry season. Unfortunately, there is generalized lack of work opportunities in the area has led to many youngsters, often having completed their schooling, turning to crime. Within Turkana, there is a distinct lack of opportunities for waged or salaried labour. Formal and informal employment, petty trade; mainly in urban and peri-urban centres support 8% of total population.

Although one of the more isolated ethnic groups in Kenya, the Turkana still trade in small scale, selling livestock to buy grains and household needs. The Turkana traditionally traded livestock for iron with ethnic groups in the highlands of Uganda.

4.4.6.8 Honey production

According to Mwangi (2005), honey production is a commercially viable enterprise, especially along the riverine ecosystems (Turkwel and Kerio Rivers) and higher altitude locations close to the Ugandan border. The principal areas of honey production include Turkwel, Kalemunyang and Toyarabon (Turkwel Division); Lokapel and Kanaodon (Katilu Division); Kainuk, Loyapat (Kainuk Division), Lokwar, Ekwar, Kaptir, Nakwamuru, Kapelibok and Oropio. Local beehives are manufactured from logs cut from special types of trees. The most popular trees used to make beehives are the 'Echoke', locally known as a sycamore, and the 'Edurukoit', a type of Acacia.

4.4.6.9 Basket-making and handicrafts

Commercial basket-making (and associated activities) supports a network of producers, traders and transporters in Turkana and is especially important for the livelihoods of households located near urban centres and along dry-river valleys close to Lake Turkana. The most important sites for these types of activities include Lodwar, Kalokol and Eliye Springs (for basket-making); Kataboi, Kerio and Turkwel (for mat-making). Weaving material is readily available from the Doum Palm. In Turkana, women are the main producers of baskets, other woven goods and handicrafts, while men dominate the production of carved wooden products. The principal products produced include: mats, baskets and brooms, and the assortment of wooden goods produced include Turkana seats/stools, dolls, spoons, milk jugs, and cow skin jugs. In addition, modern earrings, bracelets and necklaces are also produced. Lodwar is the only centre that produces and sells modern bead work. Traditional beads made from local materials are still produced, for both sale and own use, by women throughout Turkana.

4.5 Public health

The lack of water in the area is a major cause of the poor standard of health endured by the Turkana. The health services in the area estimate that approximately 50% of the population are suffering from water borne diseases due to lack of clean water.

The major diseases that have regularly been reported in the Turkana are malaria, skin diseases, respiratory tract infections, and diarrhoea (Republic of Kenya 2007). Malaria can be prevented by the use of bed nets, but not everybody has the financial means to acquire nets. Most of these diseases are associated with poverty. Despite the fact that Turkana people are exposed to various diseases, there are very limited health centres in rural areas with and a doctor/patient ratio is estimated at 1:285,000 (Republic of Kenya 2011).

The average distance to the nearest health facility is 50 km. As mentioned elsewhere in this report, infrastructure is very poor, and there is no reliable public transport system. The result is that many people who need assistance never reach health facilities.

According to a 2007 study carried out among the rural Turkana population, HIV prevalence was 4.1% in rural areas and 8% in urban centres. In the same year, data from the AIDS and Sexually Transmitted Infections Coordinator (DASCO) in Turkana Central district indicated a prevalence rate of 6.7%, increasing to 14% in some urban centres.

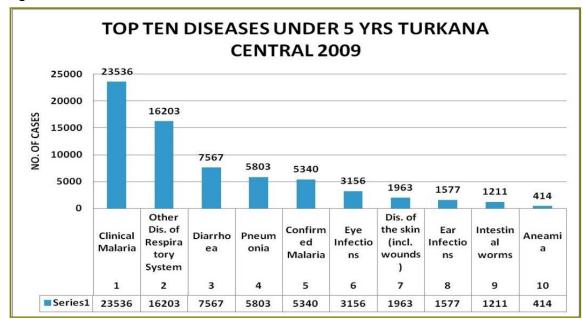


Figure 13: Prevalent Diseases in Turkana Central - 2009

Source: Ministry of Health

4.5.1 HIV and Aids

The HIV and Aids pandemic is currently a major development problem in the County. HIV prevalence stands at 8.3%, which is way above the national prevalence rate of 7.4 %. However, it is higher in central (9.1%) than in Turkana West (7.4%). The most affected areas are the townships along the Kitale - Lokichoggio high way and major fishing centres along Lake Turkana. The age group most affected is that of 15-49 years, which is also economically most productive. The County has 5 VCT sites and 3 institutions offering ARVs. The possible reasons for rapid increase in the HIV/AIDS cases can be attributed to the men who migrate in search of employment and leave their families behind, the morbidity of pastoralists, migration, and influx of refugees from neighbouring countries, presence of high risk groups in the County like the security officers, high rates of divorce and polygamy. In the management of the disease, the proposed roads project should focus on behavioural change, offering VCT services and home based care and support as well as the other thematic areas spelt out by the Kenya National HIV and Aids Strategic Plan (KNASP).

4.6 Education

The Turkana County has 175 pre-primary schools, 136 primary schools, eight secondary schools, two youth polytechnics and one medical training college. Enrolment in primary school is 122,883, with a teacher to pupil ratio of 1: 51 while secondary school enrolment is 48,004 with a teacher to pupil ratio of 1: 27.7. There are 2 tertiary institutions. Adult Literacy classes have an enrolment of 562.

Many people in Turkana have not accepted formal education as a social value leave alone as a human right. Many parents still deny their children their right to study and to be educated. In spite of free primary education, Turkana County registers one of the lowest gross enrolment, retention, and completion rates in the country:

- 33% of children with the age group 5-10 actually start school
- 69.2% drop out before finishing primary school
- Around 11% sit the Kenya Certificate of Primary Education (KCPE "Standard 8") exam and 4.9% go to secondary schools
- 22% drop out of secondary school before completing "Form 4"
- 4% sit Kenya Certificate of Secondary Education (KCSE "Form 4") exams.
- According to government estimates, 70 out of every 100 adults cannot read and write in any language.
- Illiteracy is considerably higher in females, with only 15 out of every 100 women able to read and write in any language.
- More than 50% of school age children do not attend school

The County has 290 ECD centres, 125 primary schools, 11 secondary schools and 4 Tertiary Institutions. The number of each type/level of education institution and its respective dropout rate is presented in **Table 2** below:

Table 2: Types of Education institutions and their Respective Drop-out Rates

#	Level of education institution	Number of education institution	Drop-out rate (%)
1.	ECD Centre	290	2.9%
2.	No. of primary schools	125	3.8%
3.	No. of secondary schools	11	2.5%
4.	Tertiary Institutions (Science & Technology Institutes, Youth Poly techniques and others)	4	-
	% Literacy rate	9.50%	

Source: Turkana Central and West District Development Plans

The education institutions along 2kms within the road corridor by district are as follows:

- Central District Friends School, Kare Academy, River Side Academy and Lokyo primary school.
- Turkana West Natuat, Nakaleri, Pelekecha, Aridzone, Lopwarim, Nagolomereti, Kalobeyei, Natira, Lukwaduyi, St. Luke Nakurulum, Lokudule, St. Mark, Terenkus, St. Patrick, Lomidet, Ann Mokila and Songot Primary schools. secondary schools include AIC Songot Secondary, Kakuma and Kakuma Boys secondary, Kakuma, Lokichogio Girls and St. John Lokichogio mixed

4.7 Poverty levels

The people of Turkana fundamentally depend on the natural systems and natural resources for existence and development. However, due to the harsh environmental conditions prevalent in the area, poverty levels are high, with 71% of the Turkana population living below poverty line. Poverty hinders access to basic needs such as health care, nutrition and education and poverty often leads to over-use and destruction of the environment.

While the county has a poverty level of over 71%, these level varies with the divisions as follows; Central (72%) Kaaling (57%) Kakuma (66%) Kalokal (71%) Katilu (51%) Kerio (52%) Kibish (59%) Lapur (55%) Loima (61%) Lokichar (65%) Lokichoggio (67%) and Lokitaung (67%).

There is no clear pattern of poverty distribution in the county as the poor and the rich exist side by side especially in the rural areas. However, most of the poor are found in the northern part and central plains due to recurrent droughts and diseases. Cattle rustling from

the neighbouring countries have worsened the situation. The Poor are also found in the major towns and market centres.

4.8 Gender dynamics

Among the Turkana, division of labour exists along gender lines, dictating general social roles and distinct daily activities performed by members of the society. As with most societies in Kenya, women's roles among the Turkana continue are centred on the house. Within the household, it is the general responsibility of the women to provide food and comfort for the household.

Their specific roles given include: Fetching firewood and water for household use; preparing food and gathering wild fruits for domestic consumption. Other roles include: watering the livestock other than cattle (goats, donkeys and camels) by scooping water from the wells; Preparation for migration to new locations; Milking the stock and portioning it out into different uses for the household; Care for weak animals that are left around the homestead when the men move with the other stock including weak and sick cattle, goats and camels and pregnant livestock that cannot cover the long distance in search for pasture and water; and Processing of hides and skins after the animals are slaughtered.

Due to scarcity of water and harsh environmental conditions, the role of women in searching for water and firewood puts a lot of strain as they often walk long distances, especially in the dry season.

Women also socialize the children into the Turkana way of life. As the children grow older, women concentrate on guiding and counseling girls into responsible adults who can function effectively in the Turkana society

The Turkana men have the following related roles: Ensuring that the livestock get pasture, exploration of good grazing land and water when the drought sets in, providing health care for the animals in the form of traditional herbs or modern veterinary medicines when available and providing security to the animals and household members. This is because the area is prone to cattle raiding and bandit attacks from neighboring ethnic communities.

The men also play a role in organizing family meetings to deliberate on matters relating to the clan and family, socialization of young boys into adult roles in the Turkana society by teaching them skills in herding (how to locate and identify good pasture/water source, herbs to cure diseases infecting the herd, etc.), social adult skills of being a good husband and father and protecting the herd and family, and as custodians of cultural values and morals. Men also make all decisions related to animal slaughter, migration, marriage and dowry payment and rituals and their performance

Joint or common roles between men and women include:

- Agriculture: For the Turkana living along Turkwel River, the men plough, while women plant, weed, and harvest;
- Fishing: This is done mostly by men, while women process and sell the fish;
- Weaving: Weaving of mats, baskets and hats for sale is mostly done by women although a few men also do it; and
- Business: men and women start small business activities such as charcoal selling, kiosk ownership, etc.

4.9 History and culture of the Turkana Community

The main tribe in the study area is the Turkana. They are divided into two broad groups; the forest people (*Nimonia*) and the people of the plains (*Nocuro*), which are divided into roughly

twenty clans (*ategerin*). These are: Ngibelai, Ngibotok, Ngibocheros, Ngichoro, Ngigamatak, Ngijie, Ngikajik, Ngikuniye, Ngikwatela, Ngilukumong, Ngimamong, Ngimazuk, Ngimonia, Ngiseto, Ngisiger, Ngisonyoka, Ngissir, Ngiturkan, Ngiwoyakwara and Ngiyapakuno. Each one of the clans is associated with a particular brand for its livestock, so that any Turkana can identify a relative in this way. Each clan also occupies a defined territory. No individual rights to forage exist and crossing to other territories requires permission from the elders and the "emuron" or seer of that territory. Each clan defends its territory and during periods of stress the elders may deny outsiders the access to the grazing area or impose a toll in livestock.

The Turkana generally live in extended family households (awi), and the family *awi* often involves two enclosures. One is the *awi napolon*, which is the main enclosure where the head of the family lives. The other is the *awi abor*, where the additional wives and their children, as well as married sons, live. The homestead's main entrance faces east, with the chief wife's day hut (*ekal*) and night hut (*akai*) on the west. Turkana families often build next to the *awi* of other families, creating the neighbourhoods that are the Turkana's effective communities. An "*awi*" consists of 9-15 people

The individual *awi* would congregate together into several units called *adakar* (*ngadakarin* in plural). Movement and management decisions are made at the *awi* and *adakar* levels. During dry periods the *ngadakarin*, household members and the animals are dispersed in different orbits to spread risk and capture existing opportunities. Among the different Turkana traditional institutions, the *Adakar* (grazing social unit) is the most important. The *Adakar* structures are based on security i.e. protection from organized raids, natural resources management and social-cultural links. It is headed by an elder's council, which has representation of all the herdsmen. All Turkana speak one language and follow one basic set of customary laws, but they do not recognize one global traditional governance or leadership. Consequently, the Adakar units are quite independent and autonomous.

Turkana marriages take place over a three-year period. Marriage is not complete until the first child has reached walking age. The purpose of this extended time is to ensure the ritual, spiritual, and social wellbeing of those involved. The bride price (paid by the bridegroom) usually involves quite cattle or camels, which come from the herds of the suitor, his father, his father's and mother's brothers, stock associates, and bond-friends. The wife occupies an important position in the *awi*, and maintains close ties with both her husband and her father and brothers.

The majority of the Turkana still follow their traditional religion: they believe in a God called *Kuj* or *Akuj*, associated with the sky and creator of all things. He is thought to be omnipotent but rarely intervenes in the lives of people. Contact between God and the people is made though a diviner (*emuron*). Diviners have the power to interpret dreams, foresee the future, heal, and make rain. Estimates are that about 15% of the Turkana are Christian

According to oral traditions the 'original' Turkana was the eastern vanguard of the 'Ateker,' groups of the eastern Nilotic linguistic family known as the central para-nilotes, which replaces the incorrect and misleading term 'Nilo-hamitic'. Traditionally, these tribal groups which share close linguistic ties with the Turkana are the Karamojong, Jie, Dodoth, Iteso, Ngangatom, and Toposa (Lamphear 1992). These tribal groups were Turkana neighbours and inhabited the Korten-Magos hills in the present day Karamoja district of Uganda at the beginning of the 18th century.

From the 1850s onwards, due to unfavourable climatic conditions in the Turkana region, leading to variable fodder and water supply, poor security, and because of the unique requirements of each stock species, Turkana pastoralists developed a flexible social system and a pastoral system well augmented with agriculture, hunting, gathering, and fishing

(Lamphear 1992). Turkana people also had competitive raiding relationships with the surrounding pastoralist tribes, except for a short period of cessation during British domination.

The Turkana, like their neighbours, have a livestock raiding culture. Raiding of traditional enemies was previously a means of expanding grazing lands, gaining access to new water sources and most importantly, an economic stratagem of self-restocking and improving social status by acquiring livestock from defeated enemies (Oba, 1992). This means that each raid is spontaneously followed by counter raids. Other motivation for raids in pastoral communities is the desire to reduce poverty and hunger, and acquire bride wealth.

4.9.1 Conflicts and cattle rustling

Cattle raids and resource-based conflicts are the main types and manifestations of conflicts in Turkana. The County's proximity to Ethiopia, Sudan, Uganda and hostile neighbouring districts in Kenya makes it one of the most affected areas by insecurity incidences. The leading aggressors (communities) include Toposa from Sudan and Pokot from Kenya and Uganda. Other includes Dodoth, Tapeth and Matheniko from Uganda, Didinga from Sudan and Merille from Ethiopia, Dongiro from Ethiopia and to a lesser extent the Samburu from Kenya. Traditionally, the Turkana do not raid amongst their people.

Environmental factors have also led to widespread drought in the area causing scarce resources such as arable land and water to become scarcer. Documented conflicts between various groups started in the late 1950s with cattle raiding and killings over territorial claims and grazing grounds. This has continued to date. The level of conflict still related to resource access (water, land) and is heightened during times when these resources are scarce but also now related to economic gain.

4.10 Physical infrastructure

Roads and means of transportation are essential to diffusing knowledge and technology, which facilitate the development of communities (either rural or urban). In the Turkana County, the infrastructure is generally very poor. There is only one major road passing through Turkana to Sudan and when it rains this is impassable in some sections. In the interior parts of Turkana, most of the roads and bridges are either damaged or destroyed. There is no reliable public transport system, and most people have only one option when traveling from one place to another: to walk. Some people have bicycles, but it can be hazardous to use them on bad roads.

The problem of poor roads and public transportation has negatively affected the livelihoods of Turkana people, for example, it is hard to get supplies into rural areas, and this limits trade with other regions. The Turkana people have no tradition of using carts and animal power to transport commodities and goods, and rely on carrying everything themselves.

There is only one Class A all-weather road from Kainuk to Lokichogio, covering a distance of 438km and another class B road running from Lodwar to Kalokol and covering a distance of 60km. There are two Class C roads, one of which runs from Lokichar to Lokori (a distance of 68km) while the other runs from Lokori to Kapedo (134km). Both are earth roads and are impassable during the rainy seasons. There are five post offices and six sub-post offices

There is also a poor road link between Kapenguria and Lodwar. However, the road is relatively good from Lodwar-Lokichogio. During the rainy season feeder roads to the Food Distribution Points (FDP) may be inaccessible thus delaying program implementation especially towards the northeast and south. During the same period overflowing *laggas* are

also impassable. The road network in the county consists of 319.2 km of bitumen surface, 296.7 km of gravel surface and 2030.5 km of earth surface.

4.11 Relief operations

Kenya has over the years hosted a large number of refugees fleeing conflicts in their countries. Most of the refugees are hosted in camps located in Kakuma and Dadaab in the arid Northern parts of the country. The Kakuma Refugee Camp is located within Kakuma town.

The camp was established in 1992 to cater for Sudanese refugees, majority of whom at that time were the Dinka people fleeing fighting between the Government of Sudan and the Sudanese People's Liberation Army (SPLA). Since 1992, the camp has expanded considerably and now covers an area of about 25 square kilometres (Kariuki, 2008). The number of refugees seeking asylum in Kakuma Refugee Camp had increased to over 80,000 by January 2010. To cater for the refugees and the local population, there are over 32 aid agencies operating in the Turkana.

The aid/relief agencies operating in Turkana include the United Nations High Commission for Refugees (UNHCR) is responsible for protection and assistance programmes in refugee camps, the World Food Programme (WFP), responsible for food distribution in the camp and sometimes to the local communities. Food aid is provided through Lutheran World Federation (LWF). International Rescue Committee (IRC) is responsible for implementation and management of health and nutrition programmes in the Kakuma refugee camp while GTZ-Rescue is responsible for firewood distribution and rehabilitation in the camp. GTZ also purchases firewood from the local communities.

Other relief agencies that also target the local communities are WFP, the Red Cross, the World Vision, Oxfam, UNICEF, the Samaritan's Purse, Jesuit Relief Services, Don Bosco, World Relief and USAID. In all, there are about 32 agencies operating in Turkana, including various Church organizations especially the Catholic.

The agencies mentioned above mainly deal with food and health issues. A nutrition survey conducted in Turkana in May 2010 put the Global Acute Malnutrition (GAM) at 16%, severe acute malnutrition (SAM) at 2% and moderately severe malnutrition at 16%. Nutrition surveys conducted in May 2009 indicated rates ranging from 20.2% to 28% for GAM and 2.5% to 3.4% for SAM respectively. Recently there has been policy shift in that families with children in supplementary and therapeutic feeding programmes are being included in general food distribution. Currently over 300,000 people are dependent on food aid in Turkana districts.

4.12 Oil exploration

A large part of the Kenyan geology also consists of the Precambrian basement rocks and the Tertiary volcanics that have covered many of sedimentary basins, which are now considered to be potential basins for oil exploration. For exploration purposes, the potential oil producing areas have been divided into exploration blocks. The Turkana region is under Block 10BA and 10A. Several wells have been sunk in the area including: LT-1 (Loperot) and LT-2 (Eliye Springs), drilled in 1992 by Shell Exploration and Production Kenya (SEPK) in Lokichar-Kerio sub-basins, penetrating chiefly the Palaeocene or younger strata;

Block 10BA is located in Turkana, which is part of the East African Rift System. The Block includes onshore areas to the east and west of Lake Turkana and offshore portions of the northern two thirds of Lake Turkana. Within the Block are several sub-basins and structural fault blocks that are considered part of the Kenya Rift. The Sub-basins include Lake

Turkana North, Lake Turkana Central, Lodwar North and Kerio North. Tullow (50%) in partnership with Africa Oil operates Block 10BB on 50:50 basis.

Loperot-1 well was drilled in the southern portion of the block in the Lodwar South subbasin. Shell's Eliye Springs-2 well was drilled in the northern portion of the Block. Block 10BB is about 500 km northeast of the commercial discoveries in Blocks 1 and 3A in Uganda, and 600 km southeast of producing fields in the Melut and Muglad Basins in Sudan. Block 10BB is in a similar rift valley system; however it is separated from these producing basins by major fault zones. Canadian oil and gas firm Africa Oil Corp is drilling in block 10BB in the Lokichar Basin.

Oil has been discovered in Turkana North District by British company Tullow Oil Turkana county is one of seven basins mapped in Tullow's 100,000 square kilometre exploration areas in Kenya and Ethiopia.

4.13 Trade, tourism and industry

4.13.1 Trade

The project County and sub county connects the rest of Kenya and is a transit area from port of Mombasa with the emerging markets of Southern Sudan. Internally, the major sectors that enable trade to thrive are the food sector where Turkana is a net importer of foodstuffs such as maize and beans. The County is a major producer of animal products, which includes live animals that are transported to other parts of the country. Beside these, the County produces a huge supply of fish, which forms the bulk of trade with other parts of Kenya.

The main towns namely: Lodwar, Kainuk/Lake Turkana area, Kakuma, Lokichar and Lokichogio area the main economic centres. Lodwar itself has three centres and a large population. Kakuma will also grow because it has a settled population. Lokichogio boasted to have hosted 52 NGOs but has now collapsed after many left to South Sudan or other parts. The proposed road may revamp the collapsed town. Currently there are 10 trading centres lying along the project route as presented in the **Table 3** below:

Table 3: Towns along the Project Road and Tax Income Generated

#	Name of market centre	Tax income generated	
1.	Nasiger	0	
2.	Gold	862,080	
3.	Lokore	0	
4.	Kakuma	4,889,280	
5.	Kalobiyei	697,200	
6.	Arumrum	0	
7.	Songot	0	
8.	Lomidat	372,000	
9.	Lokichogio	4,103,640	
10	Nadapal	0	
	Total	10,924,200	

Source: County Council of Turkana

Trade in the districts revolves around livestock products, general merchandise, and hospitality and service industry. Factors that inhibit trade development include poor road infrastructure, high cost of business and low purchasing power.

4.13.2 Industrialization

Kakuma and Lokichoggio towns are the major beneficiaries of all major trade investments in the County. Currently, it hosts all the major hotels, wholesale shops and manufacturing industries. Only *Jua Kali* establishments can be considered as industries in the project districts besides fish mongering.

4.13.3 Tourism

The County has tourism potential due to the presence of a rich cultural heritage of the Turkana people, Lake Turkana, Fishing and various species of wild animals. In addition, there is great potential for producing tourist goods such as mats and hats produced from the rampantly available palm leaves. The County has 52 hotels but only two are classified. The only existing financial services are commercial banks.

5 LEGAL FRAMEWORK

5.1 Introduction

The consultant team reviewed several relevant laws of Kenya and international conventions while reviewing the initial RAP Study. This RAP review has been carried out in line with these laws, regulations and conventions. The legal Framework of the RAP report considers these laws and legislations as relates to land acquisition, compensation and resettlement in Kenya. These are outlined below.

5.2 The Power of Eminent Domain

The Power of Eminent Domain is the right of the state to acquire land, using its sovereign power, for public purpose. National law establishes which public agencies have the prerogative to exercise eminent domain. It is the right of the state or its assignees to take private property for public purposes thus ousting the individuals or private rights to property.

In Chapter 4 of The Constitution of Kenya, 2010, Section 40 (3) 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 — (b) 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
- (ii) allows any person who has an interest in, or right over, that property a right of access to a court of law.

The Current Constitution of Kenya qualifies this power by among others specifying that there must be full just and prompt compensation whenever this power is used by the state. Having political sovereignty over a particular territory entitles state to interfere with private property rights.

In Kenya the Doctrine of Eminent Domain is more specifically embodied in the Land Act, 2012 (Act No. 6 Of 2012) of the Laws of Kenya, the Act that deals with modalities, rules, principals and procedures of compulsory acquisition and easements covered under Part X – Easements and Analogous Rights. However this Act is interpreted together with a superior law, Sec 40 of the Constitution of Kenya. Once land is compulsorily acquired; private property rights are extinguished and the land reverts to the original ``grantor'' the state. Any cancellation under subsection shall be effected in the prescribed form and the easement, or analogous right shall be extinguished on the date that the cancellation is recorded in the register.

Section 110. (1) Land may be acquired compulsorily under this Part if the Commission certifies, in writing, that the land is required for public purposes or in the public interest as related to and necessary for fulfilment of the stated public purpose.

This doctrine is triggered by the necessity of this government-sponsored project that will require that privately owned land revert back to the government. However, the proponent will ensure that all the private landowners who will relinquish land and other properties are fully compensated and appropriately resettled within acceptable timeline

5.3 Land Act, 2012

The land acquisition process shall be governed by the Land Act, 2012 (Act No. 6 of 2012). The Act governs land valuation for compulsory acquisition. The Valuers Act Cap 532 provides for Valuers Registration Board that regulates the activities and conduct of registered valuers. Land Registration Act, 2012 (Act No. 3 of 2012), that regulates the valuation of land rent and valuation for renting shall be governed by the Rating Act Cap 267. Land acquisition through the application of state powers as highlighted in the Land Act, 2012 No. 6 of 2012, the acquisition is involuntary (compulsory acquisition)

Methods of acquisition of title to land

Section 7. Title to land may be acquired through— (a) allocation; (b) land adjudication process; (c) compulsory acquisition; (d) prescription; (e) settlement programs; (f) transmissions; (g) transfers; (h) long term leases exceeding twenty one years created out of private land; or (i) any other manner prescribed in an Act of Parliament.

Under The Land Act, 2012 Section 107 whenever the national or county government is satisfied that it may be necessary to acquire some particular land under section 110, the respective Cabinet Secretary or the County Executive Committee Member shall submit a request for acquisition of public land to the Commission to acquire the land on its behalf. The Commission shall prescribe a criteria and guidelines to be adhered to by the acquiring authorities in the acquisition of land. The Commission may reject a request of an acquiring authority, to undertake an acquisition if it establishes that the request does not meet the requirements. Upon approval of a request, the Commission shall publish a notice to that effect in the Gazette and the county Gazette and shall deliver a copy of the notice to the Registrar and every person who appears to the Commission to be interested in the land. Upon service of the notice, the registrar shall make an entry in the register of the intended acquisition. Interested persons include any person whose interests appear in the land registry and the spouse or spouses of any such person, as well as any person actually occupying the land and the spouse or spouses of such person. All land to be compulsorily acquired shall be geo- referenced and authenticated by the office or authority responsible for survey at both the national and county government

Compensation to be paid

Section 111. (1) Says if land is acquired compulsorily under this Act, just compensation shall be paid promptly in full to all persons whose interests in the land have been determined. (2) The Commission shall make rules to regulate the assessment of just compensation.

Inquiry as to compensation

Section 112 (1) At least thirty days after publishing the notice of intention to acquire land, the Commission shall appoint a date for an inquiry to hear issues of propriety and claims for compensation by persons interested in the land, and shall— (a) cause notice of the inquiry to be published in the Gazette or county Gazette at least fifteen days before the inquiry; and (b) serve a copy of the notice on every person who appears to the Commission to be interested or who claims to be interested in the land. (2) The notice of inquiry shall call upon persons interested in the land to deliver a written claim of compensation to the Commission, not later than the date of the inquiry. (3) At the hearing, the Commission shall— (a) make full inquiry into and determine who are the persons interested in the land; and (b) receive written claims of compensation from those interested in the land. (4) The Commission may postpone an inquiry or adjourn the hearing of an inquiry from time to time for sufficient cause.

- (5) 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 of documents of title to the land.
- (6) 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.

Award of compensation

Section 113. (1) Upon the conclusion of the inquiry, the Commission shall prepare a written award, in which the Commission shall make a separate award of compensation for every person whom the Commission has determined to have an interest in the land. (2) Subject to Article 40 (2) of the Constitution and section 122 and 128 of this Act, an award— (a) shall be final and conclusive evidence of— (i) the size of the land to be acquired; (ii) the value, in the opinion of the Commission, of the land; (iii) the amount of the compensation payable, whether the persons interested in the land have or have not appeared at the inquiry; and (b) shall not be invalidated by reason only of a discrepancy which may thereafter be found to exist between the area specified in the award and the actual area of the land. (3) If an interest in land is held by two or more persons as co-tenants, the award shall state— (a) the amount of compensation awarded in respect of that interest; and (b) the shares in which it is payable to those persons.

Notice of award

Section 114. (1) On making an award, the Commission shall serve on each person whom the Commission has determined to be interested in the land, a notice of the award and offer of compensation. (2) Upon acquisition of land, and prior to taking posesion of the land, the Commission may agree with the person who owned that land that instead of receiving an award, the person shall receive a grant of land, not exceeding in value the amount of compensation which the Commission considers would have been awarded, and upon the conclusion of the agreement that person shall be deemed to have conclusively been awarded and to have received all the compensation to which that person is entitled in respect of the interest in that land. (3) An agreement under subsection (2) shall be recorded in the award

Payment of compensation

Section 115. (1) After notice of an award has been served on all the persons determined to be interested in the land, the Commission shall, promptly pay compensation in accordance with the award to the persons entitled thereunder, except in a case where— (a) there is no person competent to receive payment; or (b) the person entitled does not consent to receive the amount awarded; or (c) there is a dispute as to the right of the persons entitled to receive the compensation or as to the shares in which the compensation is to be paid.

(2) In any of the cases referred to in paragraphs (a), (b) and (c) of subsection (1), the Commission may at any time pay the amount of the compensation into a special compensation account held by the Commission, notifying any persons interested accordingly.

Survey where part of holding is acquired

Section 118. If part of the land comprised in documents of title has been acquired, the Commission shall, as soon as practicable, cause a final survey to be made of all the land acquired.

The road will require the acquisition of land within the affected areas. The Proponent is complying with the provisions of this Act in the process of acquiring such land for the road upgrading project. In accordance with the Act (sub-section 4), notice will be given before carrying out works with full description of the intended works and targeted place for inspection. For guidance, compensation values for acquired land, structures, trees and crops have been determined by a Registered Valuer and estimated values included in this report for implementation by KeNHA. The courts have the power to enforce a public right of way by or against any person. KeNHA will ensure compliance with legislation requiring that all persons owning property including land in marriage both execute transaction relating to the land and if a married person holds the title to the land the spouse is required to give consent for the transaction to be registered.

5.4 National Land Commission Act (2012)

To resolve any conflicts that may arise during the acquisition of the land for this project, Article 16 authorizes the commission to establish committees for the better carrying of their functions among them compulsory acquisition process as outlined in land Act (2012). This is further cascaded to the counties according to article 18 by establishing the County Land Management Boards, in consultation with the national and county governments. The Board's subject management of any transactions on land to scrutiny hence can be useful in resolving any disputes arising from land acquisition process for purposes of this project.

5.5 Prevention, Protection and Assistance to Internally Displaced Persons and Affected Communities No. 56 of 2012

The Act defines Internally Displaced Persons as a person or group of persons who have been forced to leave their homes or places of habitual residence as a result of large scale development projects. According to article 5(2) and 6(3), the government shall prevent such displacements except where it is justified by overriding public interests.

Article 12(1), authorizes the formation of a national Consultative Coordination Committee for internally displaced persons that can deal with matters that arise out of displacement and relocation. While article 22(1-5) explains the procedures for displacement induced by development projects, which should take into considerations the following:

- Seek the free consent and informed consent of the affected persons;
- Hold public hearings on the project planning
- Give justification for displacement and demonstrate that the displacement is unavoidable and no feasible alternative exist
- Give reasonable time to the persons affected to review the decision and challenge it if need be
- the displacement to be carried out in a manner that is respectful of the human rights of those affected, taking in particular into account the protection of community land and the special needs of women, children and persons with special needs
- The process to incorporate information for those affected and their effective participation, including by women, in planning, management of the displaced, and in defining suitable durable solutions;
- Provisions of safe, adequate and habitable sites and to the greatest practicable extent, of proper accommodation; and

- Creation of satisfactory conditions of safety, nutrition, health and hygiene and the protection of family unity.
- Ensure the presence of government official when the displacement and relocation is effected and the monitoring by the independent body.

The proposed project triggers this Act. The Proponent is complying with the requirements of this Act by carrying out an ESIA Study to assess project impacts and identify alternative routes to avoid structures where feasible and minimize involuntary resettlement. The potential economic and social impacts of the project have been assessed and cost of compensation determined in this report. Project-affected persons, host communities and other stakeholders have been consulted. PAPs have been informed of their rights including prompt compensation of acquired way leave land at the current market value and compensation at full replacement cost for loss of assets attributable to the project; assistance during relocation, and transitional support and development assistance.

5.6 Eviction and Resettlement Bill (2012)

Though the Bill targets at the persons who are evicted forcefully, it provides the procedures for resettlement that are relevant to a compulsory acquisition project. The guidelines are stated in article 12 as follows:

- That the relevant authorities shall facilitate the management and the handing over of the infrastructure present at the resettlement site.
- Special efforts to be made to ensure equal participation of women, minority and other vulnerable groups in all planning and implementation processes and in the distribution of basic services and supplies.
- Measures shall be taken to ensure, especially for those who are unable to provide for themselves, that—
 - (a) Members of the same family are not separated:
 - (b) People and their property are protected and secured;
 - (c) Essential medical services are accessible;
 - (d) Psychological and counseling services are provided;
 - (e) Special attention is paid to people with special needs:
 - (f) on-going treatment is not disrupted as a result of the resettlement:
 - (g) Spread of contagious and infectious diseases including HIV/AIDS at the resettlement sites are avoided;
 - (h) Essential food, potable water and sanitation are provided;
 - (i) Basic shelter and housing is provided;
 - (i) Education for children and child care facilities are provided;
 - (k) Essential livelihood resources are availed.

Further provisions are:

- Steps shall be taken to build the capacity and strengthen the ability of those resettled to be able to adjust to the new environment and tap potential opportunities that exist in the new area.
- Where eviction is inevitable, resettlement plans shall be developed that will incorporate
 provisions for sufficient resources and opportunities to the affected persons,
 compensation for losses incurred prior to the eviction and support during the transition
 period.
- The affected persons shall fully participate in the planning and implementation of the resettlement plan. The resettlement plan shall include appropriate physical planning.

Where large scale eviction of people is unavoidable, a detailed resettlement plan, timetable and budget shall be prepared.

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- As much as possible, preference should be given to land-based resettlement options especially for people from agricultural urban informal settings.
- The resettlement plan shall take into consideration the interests of the host community and in particular, the resettlers should be fully integrated socially and economically into host communities so that adverse effects on host communities are minimized.

The proposed project triggers the provisions of this Bill. The Proponent is taking into consideration the provisions of this Bill in commissioning this RAP study, which has considered its provisions. The Project-affected persons, host communities and other stakeholders have been consulted. PAPs have been informed of their rights including prompt compensation of acquired way leave land at the current market value and compensation at full replacement cost for loss of assets attributable to the project; assistance during relocation, and transitional support and development assistance.

5.6.1 The Valuers Act

The Act establishes a board (Valuers Registration Board-VRB) with the responsibility of registering the valuers and regulating their activities according to the provision of the Act.

In this project, the Act is triggered since a registered valuer is required to carry out valuation estimates for the project according to the regulations in the Act. The Valuer who is carrying of the valuation of the affected assets on behaalf of the proponent is registered in accordance to the Act.

5.7 Traffic Act Cap. 403

Section 70. Traffic Signs (1) Subject to and in conformity with such general or other directions as may be given by the Minister, a highway authority may cause or permit traffic signs to be placed on or near a road.

- 2) Traffic signs shall be of the prescribed size, colour and type except where the Minister authorizes the erection or retention of a sign of another character.
- 3) After the commencement of this Act, no traffic signs shall be placed on or near any road except under and in accordance with subsections (1) and (2) of this section: Provided that -
- i) nothing in this subsection shall apply to any notice in respect to the use of a bridge;
- ii) a highway authority or police officer of or above the rank of Inspector may authorize the erection of any traffic sign for any special purpose for a period not exceeding seven days, and such traffic sign shall be deemed to be lawful even though it does not conform to the requirements of this section.
- 4) All traffic signs shall be deemed to have been lawfully erected until the contrary is proved.
- 5) A highway authority may, by notice in writing, require the owner or occupier of any land on which there is any traffic sign or any object which so closely resembles a traffic sign that it might reasonably be taken to be such a sign to remove it, and if any person fails to comply with such a notice the highway authority may effect the removal, doing as little damage as may be, and may recover as a civil debt recoverable summarily from the person so in default the expense incurred in so doing:
- 6) Provided that this subsection shall not apply in the case of any sign or object so long as its retention is expressly authorized by the highway authority.

- **Section 71.** Closure of Roads (1) It shall be lawful for the highway authority or its authorized representative, for the purpose of preventing damage being caused to any road or for the purpose of carrying out any works which it may consider necessary or desirable in connexion with the maintenance or improvement of any road, to close the whole or any part of such road to all vehicles or any particular type of vehicles at any time for any period it may think fit.
- 2) It shall not be lawful for the driver or person in charge of a vehicle to drive or haul the vehicle or cause it to be driven or hauled over any bridge on or near which a conspicuous notice has been placed to the effect that such bridge is insufficient to carry traffic in excess of a specified weight, unless the gross weight of such vehicle and any trailer attached thereto is less than the weight specified or unless he has obtained the consent in writing of the highway authority.
- 3) It shall not be lawful for the driver or person in charge of any vehicle to drive or haul the vehicle or cause it to be driven or hauled over any portion of a road which is closed to traffic and where a conspicuous notice is displayed to the effect that the road is closed, unless he has received the permission in writing of the highway authority.

KeNHA will ensure that the appointed Contractor executing the construction works of rehabilitating the Proposed Lodwar-Lokichogio-Nakodok Road (A1) erects appropriate signs and creates motorable deviations

5.8 The Land Registration Act, 2012 (No. 3 of 2012)

Section 16. (1) The office or authority responsible for the survey of land may rectify the line or position of any boundary shown on the cadastral map based on an approved subdivision plan, and such correction shall not be effected except on the instructions of the Registrar, in writing, in the prescribed form, and in accordance with any law relating to subdivision of land that is for the time being in force.

Section 21. (1) Any person who defaces, removes, injures or otherwise impairs a boundary feature or any part of it unless authorized to do so by the Registrar commits an offence and is liable on conviction to imprisonment for a term not exceeding two years or to a fine not exceeding two hundred thousand shillings or to both.

Section 26. (1) The certificate of title issued by the Registrar upon registration, or to a purchaser of land upon a transfer or transmission by the proprietor shall be taken by all courts as prima facie evidence that the person named as proprietor of the land is the absolute and indefeasible owner, subject to the encumbrances, easements, restrictions and conditions contained or endorsed in the certificate, and the title of that proprietor shall not be subject to challenge, except — (a) on the ground of fraud or misrepresentation to which the person is proved to be a party; (b) where the certificate of title has been acquired illegally, un-procedurally or through a corrupt scheme. (2) A certified copy of any registered instrument, signed by the Registrar and sealed with the Seal of the Registrar, shall be received in evidence in the same manner as the original.

Section 31. (1) If a certificate of title or a certificate of lease has been issued, then, unless it is filed in the registry or the Registrar dispenses with its production, it shall be produced on the registration of any dealing with the land or lease to which it relates, and, if the certificate of title or the certificate of lease shows all subsisting entries in the register, a note of the registration shall be made on the certificate of title or the certificate of lease.

Section 93. (1) Subject to the law on matrimonial property, if a spouse obtains land for the co-ownership and use of both spouses or, all the spouses

- (b) the Registrar shall register the spouses as joint tenants. (2) If land is held in the name of one spouse only but the other spouse or spouses contribute by their labour or other means to the productivity, upkeep and improvement of the land, that spouse or those spouses shall be deemed by virtue of that labour to have acquired an interest in that land in the nature of an ownership in common of that land with the spouse in whose name the certificate of ownership or customary certificate of ownership has been registered and the rights gained by contribution of the spouse or spouses shall be recognized in all cases as if they were registered. (3) Where a spouse who holds land or a dwelling house in his or her name individually undertakes a disposition of that land or dwelling house—
- (a) the lender shall, if that disposition is a charge, be under a duty to inquire of the borrower on whether the spouse has or spouses have, as the case may be, have consented to that charge; or (b) the assignee or transferee shall, if that disposition is an assignment or a transfer of land, be under a duty to inquire of the assignor or transferor on whether the spouse or spouses have consented to that assignment.
- (4) If the spouse undertaking the disposition deliberately misleads the lender or, the assignee or transferee by the answers to the inquiries made in accordance with subsection (3) (a) or (3) (b), the disposition shall be void at the option of the spouse or spouses who have not consented to the disposition.

Section 98. (1) An owner of land or a lessor may, by an instrument in the prescribed form, grant an easement over the land, lease or a part of that land to the owner of another parcel of land or a lessee for the benefit of that other parcel of land. **(2)** The owner of land or a lessor referred to in subsection (1), who is transferring, assigning or leasing land or a lease may, in the transfer, assignment or lease, grant an easement for the benefit of the land transferred, assigned or leased over the land retained by him or her or reserve an easement for the benefit of land retained by him or her. **(3)** An instrument creating an easement shall clearly specify— (a) the nature of the easement and any conditions, limitations or restrictions subject to which it is granted; (b) the period of time for which it is granted; (c) the land, or the specific part of it burdened by the easement; and (d) the land to benefit from the easement, and shall, required by the Registrar, include in a plan that sufficiently defines the easement.

Section 103. (1) A person who—

(a) knowingly makes a false statement, orally or in writing, in connection with a disposition or other transaction affecting land or any other matter arising under this Act, or (b) knowingly gives a false information or makes a false statement, either orally or in writing, in connection with a call for information made under this Act or in connection with an investigation into the commission of any offence under this Act; (c) fraudulently procures— (i) the registration or issue of any certificate of ownership, or any other document or instrument relating to the land; (ii) the making of a entry or the endorsement of a matter on a document or instrument referred to in subparagraph (i); or (iii) the cancellation or amendment of the documents, instruments, entries or endorsements referred to in this paragraph. (d) fraudulently alters, adds to, erases, defaces, mutilates or destroys any document or instrument relating to land or any entry on or endorsement of any such document or instrument; suppresses or conceals from the Registrar, or any authorized officer exercising powers under this Act, or assist or joins in so doing, any material document, factor matter, commits an offence and is liable on conviction to a fine not exceeding five million shillings or imprisonment for a term not exceeding five years or to both such fine and imprisonment.

The acquisition of such lands where the proposed road traverses Centres, Township/Municipality plots will be undertaken in compliance with the provisions of this Act including the right for spouses to consent. As proof of land ownership; copies of land title, official Allotment letters and identity cards shall be used to confirm ownership and KeNHA undertakes to ensure just compensation at the current open market value.

KeNHA will ensure compliance with legislation requiring that all persons owning property including those in marriage both execute transaction relating to the land and if a married person holds the title to the land the spouse is required to give consent for the transaction to be registered.

5.9 Land (Group Representative) Act Cap 287

An Act of Parliament to provide for the incorporation of representatives of groups who have been recorded as owners of land under the Land Adjudication Act, and for purposes connected therewith and purposes incidental thereto. **3.** The Minister shall, by notice in the Gazette, appoint a person who is a public officer to be Registrar of Group Representatives to perform the duties and exercise the powers imposed and conferred on the registrar by this Act, and may appoint a Deputy Registrar of Group Representatives and such number of Assistant Registrars as he considers necessary, who shall all be subject to the directions of the Registrar of Group Representatives. 5. (1) Upon being notified under section 23 (5) (c) of the Land Adjudication Act that a group has been advised to apply for group representatives to be incorporated under this Act, the registrar shall convene a meeting of the members of the group, at a specified time and place, to – adopt a constitution; elect not more than ten and not less than three persons to be group representatives of the group; and elect persons to be the officers of the group in accordance with the constitution. (2) The registrar or a public officer appointed by him in writing for the purpose shall preside at the meeting to be held under section 5 of this Act.

5.10 Trust Lands Act Cap. 288

This is an Act of Parliament to make provision for Trust land. According to the Act, all the trust lands are vested in local county council within whose area of jurisdiction the land is situated. Additionally, each county council holds the trust land vested in it for the benefit of the persons ordinarily resident on the land, and give effects to rights, interests or other benefits in respect of the land as may be under the African Customary Law for being in force and applicable thereto; and be vested in any tribe or individual, subject to the rights for the Government to set apart and alienate any land required for public purposes, or for such other purposes as the County Council may think is beneficial. The Commissioner of Lands acts as the agent of the County Council in respect of any trust land which is to be set apart.

The Act is triggered since land in the town centres located along the route of the proposed route is leasehold land held in Trust by the local authorities and the occupants either have allocation letters or title deed for the land. The proponent shall comply with the provisions of the Section 7 of the Act that define how setting a part of the Trust land is carried out

5.11 The Land Control Act Cap 302

This is an Act of parliament to provide for controlling transactions in agricultural land. The Act requires approval of the Land Control Board for the following transactions to be legal and valid; (a) The sale, transfer, lease, mortgage, exchange, partition or other disposal of or dealing with any agricultural land which is situated within a land control area; (b) The division of any such agricultural land into two or more parcels to be held under separate titles, other than the division of an area of less than twenty acres into plots in an area to which the Development and Use of Land (Planning) Regulations, 1961 for the time being apply; (c) The issue, sale, transfer, mortgage or any other disposal of or dealing with any share in a private company or co-operative society which for the time being owns agricultural land situated within a land control area.

The Proponent undertakes to transact as per the above Act in acquiring agricultural land where the road shall pass through. All the interested parties will be required to be in attendance during negotiation and transfer of consideration for any acquired land.

5.12 Land Adjudication Act, Cap. 284

An Act of Parliament to provide for the ascertainment and recording of rights and interests in Trust land, and for purposes connected therewith and purposes incidental thereto

Section 13. (1) Every person who considers that he has an interest in land within an adjudication section shall make a claim to the recording officer, and point out his boundaries to the demarcation officer in the manner required and within the period fixed by the notice published under section 5 of this Act. (2) Every person whose presence is required by the adjudication officer, demarcation officer, recording officer, committee or board shall attend in person or by a duly authorized agent at the time and place ordered.

(3) If any person who is ordered to attend fails to attend in person or by a duly authorized agent, the demarcation, recording, adjudication or arbitration, as the case may be, may proceed in his absence. (4) If the demarcation officer or the recording officer considers that a person who has not made a claim has an interest in land within the adjudication section, he may but is not bound to, proceed as if that person had made a claim.

Most of the land in the project area is leasehold land held in Trust by the local authorities and the occupants either have allocation letters titles for the land. The proponent shall comply with the provisions of the Act in demarcating and ascertaining the ownership of the project affected Land that has been allocated to people.

5.13 Public Roads and Roads of Access Act (Cap. 399)

The Act provides for consolidation of laws relating to public transport. **Section 8** of the Act provides for the dedication, conversion or alignment of public travel lines including construction of access roads on adjacent lands from the nearest part of a public road. **Section 9. (1)** Where any owner or occupier of land is in respect of his land so situated in relation to a public road which is passable to vehicular traffic, or to a railway station or halt, that he has not reasonable access to the same, he may make application to the board of the district in which such land is situate for leave to construct a road or roads (hereinafter called a road of access) over any lands lying between his land and such public road or railway station or halt, and every such application shall be made in duplicate in the form and contain the particulars required by the First Schedule to this Act. **Sections 10 and 11**

allows for notices to be served on the adjacent land owners alerting and seeking permission to construct such access roads.

The proponent will facilitate compliance to this Act by ensuring all lands used for deviations are identified and owners alerted for permission.

5.14 World Bank Safeguard Policies relating to Relocation and Resettlement

5.14.1 Involuntary Resettlement: OP/BP 4.12

The Bank's Operational Policy 4.12: Involuntary Resettlement is triggered in situations involving involuntary taking of land and involuntary restrictions of access to resources. The policy aims to avoid involuntary resettlement to the extent feasible, or to minimize and mitigate its adverse social and economic impacts.

It promotes participation of displaced persons in resettlement planning and implementation, and its key economic objective is to assist displaced persons in their efforts to improve or at least restore their incomes and standards of living after displacement. The policy prescribes compensation and resettlement assistance to achieve its objectives and requires that borrowers prepare adequate resettlement planning instruments prior to Bank appraisal of proposed projects.

Bank experience indicates that involuntary resettlement under development projects, if unmitigated, often gives rise to severe economic, social, and environmental risks: production systems are dismantled; people face impoverishment when their productive assets or income sources are lost; people are relocated to environments where their productive skills may be less applicable and the competition for resources greater; community institutions and social networks are weakened; kin groups are dispersed; and cultural identity, traditional authority, and the potential for mutual help are diminished or lost. This policy includes safeguards to address and mitigate these impoverishment risks.

The Proponent complies with the requirements of OP 4.12. An ESIA Study has been carried out to assess project impacts and identify alternative routes to avoid structures where feasible and minimize involuntary resettlement. The potential economic and social impacts of the project have been assessed and cost of compensation determined in this report. Project-affected persons, host communities and other stakeholders have been consulted. PAPs have been informed of their rights including prompt compensation of acquired way leave land at the current market value and compensation at full replacement cost for loss of assets attributable to the project; assistance during relocation, and transitional support and development assistance.

5.14.2 Indigenous People: OP/BP 4.10-

The World Bank policy on indigenous peoples, OP/BP 4.10, Indigenous Peoples, underscores the need for Borrowers and Bank staff to identify indigenous peoples, consult with them, ensure that they participate in, and benefit from Bank-funded operations in a culturally appropriate way - and that adverse impacts on them are avoided, or where not feasible, mitigated or minimized.

This policy contributes to the Bank's mission of poverty reduction and sustainable development by ensuring that the development process fully respects the dignity, human rights, economies, and cultures of Indigenous Peoples. For all projects that are proposed

for Bank financing and affect Indigenous Peoples, the Bank requires the borrower to engage in a process of free, prior, and informed consultation. The Bank provides project financing only where free, prior, and informed consultation results in broad community support to the project by the affected Indigenous Peoples.

Indigenous Peoples are identified as possessing the following characteristics in varying degrees: self-identification as members of a distinct indigenous cultural group and recognition of this identity by others; collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in these habitats and territories; presence of distinct customary cultural, economic, social or political institutions that are separate from those of the dominant society and culture; and have an indigenous language; often different from the official language of the country or region

In Kenya, the indigenous peoples are mainly the pastoralists (estimated to be 25% of the national population) and hunter-gatherers as well as a as well as some fisher peoples and small farming communities. There is no specific legislation governing indigenous peoples in Kenya. The 2010 Constitution, however, specifically identifies minorities and marginalized communities as groups that are in need of heightened protection and attention from the state. The constitutional definition of minorities/marginalized communities, being broad, encompasses most of the groups that identify as indigenous peoples.

This policy (Indigenous People: OP/BP 4.10) is triggered; the proposed road project traverses through the Turkana pastoral community who reside in the arid and semi-arid lands and are also listed as indigenous peoples. The Turkanas entirely depend on pastoralism for their livelihoods and qualify to be indigenous peoples as they all face land tenure and resource insecurity, poor, service delivery, poor political representation, discrimination and exclusion.

5.15 Land Tenure and Related Legal Issues

Land tenure refers to the terms and conditions under which rights to land and land-based resources are acquired, retained, used, disposed of, or transmitted. Rules of tenure define how property rights to land are to be allocated within societies. They define how access is granted to rights to use, control, and transfer land, as well as associated responsibilities and restraints. In simple terms, land tenure systems determine who can use what resources, for how long, and under what conditions. Land tenure relationships may be well-defined and enforceable in a formal court of law or through customary structures in a community. Alternatively, they may be relatively poorly defined with ambiguities open to exploitation. In broad terms, land tenure rights are often classified according to whether they are formal/statutory or informal/customary.

- Formal property rights may be regarded as those that are explicitly acknowledged by the state and which may be protected using legal means. Statutory land tenure system is governed by modern law and supported by documentary evidence, such as a title deed or lease certificate, and administered by the government.
- Land ownership under the statutory tenure system is often built on freehold or leasehold entitlements to the land and offers exclusive rights to the owner, which guarantee land tenure security.
- Informal property rights are those that lack official recognition and protection. Customary land tenure system is governed by unwritten traditional rules and administered by traditional leaders. Active occupation or usage of a piece of land is the main evidence of ownership or an existing interest on the land. In customary tenure, access to land is

contingent upon tribal or community membership controlled by the chief. Households have strong, exclusive residential rights, seasonally exclusive rights to arable land, and shared rights to grazing land and natural resources. Land is not alienable from the community trust, so it cannot be used as collateral for loans. Land tenure is often categorized as:

5.15.1 Public Land

This is land owned by the Government for own purpose and which includes unutilised or delineated 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 Registration Act, 2012

5.15.2 Community/Trust Land

Community land refers to land lawfully held, managed and used by a specific community. It is a right of commons that exists within a community where each member has a right to use independently the holdings of the community. For example, members of a community may have the right to graze cattle on a common pasture. This creates a powerful system of land allocation regimes and a tenure system designed to preserve the asset base for current and future generations. Communities traditionally see land and kinship in a genealogical map through which access to land is attained. Families and individuals are allocated rights to use the land in perpetuity, subject only to effective utilization. The ultimate ownership (radical title) vests in the community.

5.15.3 Private Land

Private land refers to land held by an individual or other entity under freehold or leasehold tenure. It is the assignment of rights to a private party who may be an individual, a married couple, a group of people, or a corporate body such as a commercial entity or non-profit organization. For example, within a community, individual families may have exclusive rights to residential parcels, agricultural parcels and certain trees. Other members of the community can be excluded from using these resources without the consent of those who hold the rights. Alienation of private rights to land should take into account all other legitimate rights or interests (spouses and children rights or interests) held or claimed by other persons over the affected land.

Private land may be held under either of the following tenures;

• 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 of the Laws of Kenya governs freehold land. Freehold connotes the largest quantum of land rights, which the sovereign can grant to an individual. The absolute proprietorship was introduced with the intention of extinguishing customary tenure and replacing it with rights that would be individually and exclusively held.

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 to certain conditions, which must be observed. E.g. relating to developments and usage. Leasehold involves the derivation of rights from a superior title for a period of time, certain or capable of being ascertained and the enjoyment of such rights in exchange for

specific conditions including, but not limited to, the payment of rent. Leasehold tenure provides a flexible mechanism for transacting rights in land and for land use control. It is a private contractual right subject to the conditions imposed by the owner and grants exclusive rights to the leaseholder. Other tenure types include;

5.15.4 The Case of Group Ranches

The land tenure system, which exists in the group ranch areas of the ASAL of Kenya, could be described as communal in that the land is held in trust by a few selected people under Land (Group Representatives Act), Cap 287 of 1968 on behalf of the members of the group ranch. Group ranches are defined as; "demarcated area (s) of rangeland to which a group of pastoralists, who graze their individually owned herds on it, have official land rights".

The operative stature in this regard is the Land (Group Representatives Act). A group for the purposes of the Act is a "tribe, clan, family or other group of persons, whose land under recognized customary law belongs communally to the persons who are for the time being the members of the group, together with any person whose land the group is determined to be the owner" where such person has, under recognized customary law exercised rights in or over land which should be recognized as ownership.

5.16 Land Related Legal Issues

Broadly, interests in land can be grouped into two.

- The rights that are held through traditional African systems and
- Rights that derive from the English system introduced and maintained through laws enacted first by colonialists and later by the Independent Kenya governments.

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 Acts of Parliament.

a) Other Interests include:

- Reservations of other government or trust land to government ministries, departments or Parastatals for their use.
- Non-formalised defacto tenure by which people, individually or in groups invade and occupy other peoples government land particularly in the major urban centres.
- Minor interest such as easements, way-leaves and temporary occupation licences.

5.17 Valuation and Related legal Issues

The valuation practice in Kenya is governed by the Valuers Act Cap 532, which provides for a Valuers Registration Board that regulates the activities and conduct of registered valuers. Valuers in Kenya are registered upon application to the Board and are required to be full members of the Institution of Surveyors of Kenya (ISK). The Act governs the formation and composition of valuation practices including the qualification of partners and directors in charge of valuation. The Board also deals with discipline and complaints in respect to valuation practice. Other statutes that govern valuation are the Land Registration Act, 2012 that regulates the valuation for land rent while valuation for rating is governed by the Rating Act Cap 267. Land Act 2012 governs valuations for compulsory acquisition purposes.

The land, structures, trees/crops and income affected by the proposed project have been evaluated by a registered valuer following the relevant legislation stated above.

Table 4: Comparson of Kenyan and World Bank Policies on Resettlement and Compensation (N.B. Where there is a difference between national law and OP 4.12, the higher standard shall prevail.)

Types of Affected Persons/ Lost Assets	Kenyan Law	World Bank OP4.12	Comparison/Gaps
Section I: Property and land	d rights		
Land Owners	There are two systems of substantive land law, three systems of conveyances, and five systems of registration. The two systems of substantive law are under: (i) the <i>Indian Transfer of Property Act 1882 as amended by 1959 Amendment Act;</i> and (ii) <i>The Land Registration Act, 2012. part X Laws of Kenya; and Registration of Documents Act Chapter 285 Laws of Kenya;</i>	Through census and socio-economic surveys of the affected population, identify, assess, and address the potential economic and social impacts of the project that are caused by involuntary taking of land (e.g., relocation or loss of shelter, loss of assets or access to assets, loss of income sources or means of livelihood, whether or not the affected person must move to another location) or involuntary restriction of access to legally designated parks and protected areas Land-for-land exchange is the preferred option; compensation is to be based on replacement cost.	Kenya has no specific legislation that explicitly addresses the issues of involuntary resettlement or forced evictions. There are laws and legislations that have provisions referring to resettlement but they vary in substance and process.
Land Tenants/Squatters	Rentals and leases are valued separately. Landlord and Tenant (shops, hotels, catering, small businesses) Cap 301 Section 4 of the Act provides that: (i) notwithstanding the provisions of any other written law or anything contained in the terms and conditions of a controlled tenancy, no such tenancy shall terminate or be terminated, and no term or condition in, or right or service enjoyed by the tenant of, any such tenancy shall be altered, otherwise than in accordance with	For those without formal legal rights to lands or claims to such land that could be recognized under the laws of the country, the government should provide resettlement assistance in lieu of compensation for land, to help improve or at least restore those affected persons' livelihoods	Those without formal legal rights or claims to such lands are not entitled to be resettled or compensated.

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Types of Affected Persons/ Lost Assets	Kenyan Law	World Bank OP4.12	Comparison/Gaps
Land Users	the following provisions of this Act; (ii) a landlord who wishes to terminate a controlled tenancy, or to alter, to the detriment of the tenant, any term or condition in, or right or service enjoyed by the tenant under, such a tenancy, shall give notice in that behalf to the tenant in the prescribed form; Sections 117 and 118 cover expropriation of unregistered trust lands. Parliament may empower a county council to set apart trust land for: (i) the use and occupation of any public body or authority for public purposes; (ii) prospecting or mining purposes; or (iii) the use and occupation of any person or persons for a purpose which is likely to benefit the residents of the area. Trust lands refer to that land that is still under African customary tenure. The title of this land is said to vest in the Country Council in trust for its inhabitants, hence the term "Trusts" (Land Acquisition Act Chapter 288).	Identify and address impacts also if they result from other activities that are: (a) directly and significantly related to the proposed project, (b) necessary to achieve its objectives, and (c) carried out or planned to be carried out contemporaneously with the project.	No equivalence between Bank and Kenyan systems for identifying and addressing impacts resulting from project related activities.
Owners of non-permanent buildings	There are no specific provisions in Kenyan law and regulation dealing separately with non-permanent buildings.	For those without formal legal rights to lands or claims to such land or assets that could be recognized under the laws of the country, Bank policy provides for resettlement assistance in lieu of compensation for land, to help improve or at least restore their livelihoods.	

Types of Affected Persons/ Lost Assets	Kenyan Law	World Bank OP4.12	Comparison/Gaps	
Owners of permanent buildings	There are no specific provisions in Kenyan law and regulation dealing separately with permanent buildings.	Entitled to in-kind compensation or cash compensation at full replacement cost including labor and relocation expenses, prior to displacement		
Section II: Resettlement an	d Compensation Process	·		
Timing of compensation payments	"Provision is made by a law applicable to taking of possession or acquisition for the prompt payment of full compensation" (Land Act 2012)	Implement all relevant resettlement plans before project completion and provide resettlement entitlements before displacement or restriction of access. For projects involving restrictions of access, impose the restrictions in accordance with the timetable in the plan of actions.	There is no equivalence on implementing all relevant resettlement plans before project completion or on providing resettlement entitlements before displacement or restriction of access.	
Calculation of compensation and valuation	According to the Land Act 2012 the Collector of Compensation inspects the affected land and values it for compensation. After the inquiry, the Collector will issue an award depending on his own assessment. The award is issued in a prescribed form, together with a statement form. The prescribed form indicates the amount of compensation awarded, while the statement gives the landowners the option of acceptance or rejection of the award. If the land owner accepts the award, the collector will issue a cheque in settlement together with a formal "Notice of Taking Possession and Vesting" Compensation is based on the market value for private land (Part V)	Bank policy requires: (a) prompt compensation at full replacement cost for loss of assets attributable to the project; (b) if there is relocation, assistance during relocation, and residential housing, or housing sites, or agricultural sites of equivalent productive potential, as required; (c) transitional support and development assistance, such as land preparation, credit facilities, training or job opportunities as required, in addition to compensation measures; (d) cash compensation for land when the impact of land acquisition on livelihoods is minor; and (e) provision of civic infrastructure and community services as required.	There are no equivalent provisions on relocation assistance, transitional support, or the provision of civic infrastructure.	
Relocation and resettlement	The Land Registration Act, 2012 provides for the absolution proprietorship over (exclusive	To avoid or minimize involuntary resettlement and, where this is not	Kenyan laws do not appear to make provisions for avoidance or	

Types of Affected Persons/ Lost Assets	Kenyan Law	World Bank OP4.12	Comparison/Gaps
	rights) by the state, and such land can be acquired by the land under the Land Act 2012 in the project area. Furthermore, the Land Adjudication Act Chapter 95 provides for ascertainment of interests prior to land registrations under the Registered Lands Act.	feasible, to assist displaced persons in improving or at least restoring their livelihoods and standards of living in real terms relative to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher	minimizing of involuntary resettlement
Completion of resettlement and compensation	According to the new Constitution, "every person having an interest or right in or over property which is compulsorily taken possession of or whose interest in or right over any property is compulsorily acquired shall have a right of direct access to the High Court for the determination of his interest or right, the legality of the taking of possession or acquisition of the property, interest or right, and the amount of any compensation to which he is entitled:	Implement all relevant resettlement plans before project completion and provide resettlement entitlements before displacement or restriction of access. For projects involving restrictions of access, impose the restrictions in accordance with the timetable in the plan of actions.	There is no equivalence between Kenyan law and World Bank policies on implementing relevant resettlement plans before project completion or on providing resettlement entitlements before displacement or restriction of access.
Livelihood restoration and assistance	There are no specific provisions for livelihood restoration, but references are made to some form of assistance.	Livelihoods and living standards are to be restored in real terms to pre- displacement levels or better	Kenyan policy and legislation would need to be aligned with Bank policy to effectively guarantee rights of all affected persons of involuntary resettlement
Consultation and disclosure	Land Act 2012 also provides that: "Whenever the Minister is satisfied that the need is likely to arise for the acquisition of some particular land, the Commissioner may cause notice thereof to be published in the Gazette, and shall deliver a copy of the notice to every person who appears to him to be interested in the land."	Consult project-affected persons, host communities and local NGOs, as appropriate. Provide them opportunities to participate in the planning, implementation, and monitoring of the resettlement program, especially in the process of developing and implementing the procedures for determining eligibility for compensation benefits and development	Even though notices are made in the Gazette, the practice has been that where a mitigation plan affects local communities, proceedings are conducted in the local language. This is significant considering the composition of those most likely to be affected (e.g. squatters).

Types of Affected Persons/ Lost Assets	Kenyan Law	World Bank OP4.12	Comparison/Gaps
		assistance (as documented in a resettlement plan), and for establishing appropriate and accessible grievance mechanisms.	
Section III: Dispute Resolut	tion		
Grievance mechanism and dispute resolution	Grievance procedures may be invoked at any time, depending on the complaint. No person or community from whom land or other productive assets are to be taken will be required to surrender those assets until any complaints s/he has about the method or value of the assets or proposed measures are satisfactorily resolved.	Establish appropriate and accessible grievance mechanisms	

6 PARTICIPATION AND CONSULTATION

6.1 PAP and Community Consultation

The PAP consultation process involved carrying out a census survey of all households affected by the proposed project along the 240 kilometre stretch of the road (60 meters wide). The aim of the PAP consultation was to inform them of the proposed project and how they will be affected, determination of the size of land to be acquired and evaluation of settlements and other resources that will be affected by the road project. The census survey, field identification of PAPs and affected land, structures and trees was carried out from Monday December 8, 2014 to Wednesday 31 December, 2014.

Seven (7) Community meetings were held at the various points along the existing Lodwar-Lokichogio-Nakodok road. Community consultation meetings were carried out before field census survey and before carrying out household interviews. Stakeholders in the project area were identified and consulted with the objective of establishing the existing socio-economic conditions and community needs within the proposed project area and the immediate surroundings. This was done through visits to various County government offices and also during the community consultation meetings.

Table 5: Public Consultation Meetings

Nr	Dates	Administrative Location	Venue	No. of Participants
1.	Tue 2 nd Dec. 2014 at	Lodwar Town	Mikeka Grounds. Lodwar	34
	10:30am		Town	
2.	Tue 2 nd Dec. 2014 at	Napelilim	Nasiger Village Centre	220
	2.00pm			
3.	Wed 3 rd Dec. 2014 at	Nakalale	Makutano Gold Centre	111
	9:30am			
4.	Wed 3 rd Dec.2014 at	Kakuma	Baraza Park, Kakuma	82
	2:30pm		Town	
5.	Thurs 4 th Dec 2014 at	Kalobiyei	Kalobiyei Village Centre	184
	9:30am	•	, -	
6.	Thurs 4 th Dec 2014 at	Songot	Songot Chief's Office	132
	2.00pm	_	Compound	
7.	Fri 5 th Dec. 2014 at	Lokichogio	Anglican Church Grounds,	149
	10.00am		Lokichogio Town	

6.2 Objectives of Public Information and Consultation

Public information and awareness creation enlightens the PAPs on the importance of the project and how to positively handle the project impacts in a sustainable way. This is important in order to ensure that correct and accurate information is shared and misconceptions and wrong information does not take root thus interfering with the smooth implementation of the project.

The specific objectives of the consultation process were:

- To create awareness and garner up support for the proposed project;
- To engage the local community especially the Interested and Affected Parties about the project benefits, problems they anticipate with the project and how these can be overcome and mitigated against;

- To consult and gather recommendations from the local administration e.g. DC, DOs, Chiefs, Assistant Chiefs, Councillors, Village Elders and communities that have a stake in the project;
- To provide an opportunity to all the communities in the areas where the proposed road rehabilitation project is expected to pass to raise issues and concerns pertaining to the project, and allow the identification of alternatives and recommendations.
- Provide correct and accurate information regarding the project.

Plate 6: Community Meeting at Makutano Gold with a PAP raising a Question to the Consultants

Plate 7: Community Meeting at Kalobiyei Village Centre with the Consultant responding to the questions raised by the PAP community

6.3 Interviewing and Questionnaire Administration

The consultant team was able to carry out interviews with the PAPs and key stakeholders during the field census survey. The following questionnaires were used to collect information from PAPs and Key Stakeholders:

- Household Interview Schedules;
- · Key Stakeholders Questionnaires;
- Key Informant Interview Guide.

The household interviews were carried out on the PAPs to collect personal information of the PAPs including name of asset owner/household head, ID No., telephone contacts, gender, marital status, level of education, occupation, land ownership, land size, information on structures within the road ROW of the PAP land parcel including their coordinates.

Key stakeholders questionnaires were administered on the stakeholders who have direct or indirect interest in the project. Refer to **Annex 7**. A summary of the stakeholder feedback has been presented in **Annex 11**.

The community, PAPs and key stakeholders were invited to attend the public consultation meetings via direct phone calls, public announcement through local churches and mosques, through the Assistant Chief and Chiefs Offices where direct contact with the PAPs and key stakeholders were made.

Consultation Meeting Agenda

Agenda of the consultation meetings included the following:

- 1. A word of prayer by one of the participants.
- 2. Introduction of the participants.
- 3. Purpose of conducting the Consultation Meeting.
- 4. The proposed rehabilitation of Lodwar-Lokichogio-Nakodok Road (A1),
 - Project impacts
 - Displacement of Persons, Compensation and Resettlement
 - Mitigation of project impacts.
- 5. Views of the Participants on the Proposed Project.
- 6. Closing Remarks by Consultant.
- 8. A.O.B and Closing Prayer.

Plate 8: A woman participant raising her project related questions to the consultants at Lokichogio

6.4 Key Issues Raised by the Community, PAPs and Stakeholders

The community, PAPs and key stakeholders raised similar issues during the census survey and during the various consultation meetings. They wanted clarifications and assurances regarding the process of property evaluation, compensation payment, offering of resettlement assistance and job opportunities to the locals and mitigation measures during project implementation to reduce anticipated impacts. The issues raised include the following;

- i) PAPs wished to know the plans that are in place to compensate the affected persons for their properties. They desired that sufficient time will be given to all the PAPs to relocate elsewhere once they are compensated and not to be hurried out of their current homes and business premises.
- ii) They wished the recruitment process for available job opportunities be more transparent so that not only the people who are closely connected to the chief and other local leaders benefit but all qualified and able locals should be given equal employment opportunity in the project
- iii) There was a propose that the proponent should consider constructing bypass on the outskirts of Lodwar, Kakuma and Lokichogio towns to ensure that huge transit vehicles especially trailers, trucks should not pass through the towns causing congestion and traffic jams as the population of the towns grows
- iv) There was concern on whether there could be bridges constructed over the river valleys to replace the laggas and drifts which have occasionally been flooded and destroyed during the heavy rain seasons making the roads impassable at the river crossings.
- v) Some community members were pessimistic on the realization of the project and its benefit to the local community saying that there has been too much talk and endless promises they claim have been done by various leaders at various forums on the rehabilitation of the road but no tangible work has been done on the road.
- vi) Concern was also raised over the risk that the rehabilitated road might pose to livestock and local community as they cross it or to those who might be living near the road. The local participants were eager to know what the design had provided for to curb possible accidents. They proposed that the road contractor should erect bumps at the town centres and other areas where animals cross. They also recommended the use of proper road signage to inform the road users and especially the drivers.
- vii) Community members did not know the size of the road reserve and most of their plots/lands had no registered documents. They were therefore concern whether they will be compensated without the legal documents to prove ownership of land
- viii) Concern was expressed over the possibility of the road project affecting graves within the proposed road corridor and what will be done to them during the road construction. The community expressed fear over the possibility of the graves being moved citing that it was a taboo to move the dead from their graves as the family which does this would be outcast from society as is would be alleged to be practicing witchcraft. Secondly, the Turkana community does not bury their dead in coffins hence moving the graves would be more difficult when the body is not in a coffin.
- ix) The participants were concern about cutting down of acacia trees, which are on the proposed way leave. They said that besides being of use as shades for the people and their livestock during the hot seasons, some of the very large ones offer shelter and shade where community meetings are held hence having sentimental values to the community. Secondly, these acacia trees produce pods, which are used as food for both humans and animals especially during the dry season.

- x) The PAPs wanted to know what will happen if the road affects water sources e.g. boreholes and other public social amenities
- xi) The PAPs wanted to know if government assumes ownership of affected property after they have been paid their compensation packages or they can be allowed to demolish and move them to their new locations
- xii) They also wanted to know if compensation packages will be paid directly into individual PAPs bank accounts or shall be paid through their leaders nor their proxies.

Positive Economic and Social Impacts:

- Improve transport and security in the region.
- Employment opportunities and starting small businesses during construction for women and youth such as providing services to the workers (meals, laundry etc.).
- Improved roads network in the area.
- There will be less time spent on the road allowing for more time to be devoted socioeconomic development activities.
- Rehabilitated road will promote tourism and expand the economic base of the region.

Negative Economic and Social Impacts:

- There will be a high influx of people from other regions to the project area
- The community emphasized on consultations with the affected household members to ensure the successful implementation and commissioning of the proposed project.
- The proposed project will cause resettlement of communities when acquiring land for the road project.
- During construction there will be destruction of the environment.
- There will be increase in HIV/AIDS prevalence as a result of people moving in the area in search of opportunities and also increase in incidences of unwanted pregnancies.
- There may also be conflicts arising between members of the families after compensation packages are paid since each will claim ownership of the land and the household head may not use of compensation money for the mutual benefits of all the family members but may instead use the money for personal and selfish gains such as marrying an additional wife.
- The rich culture of the local Turkana people will be impacted by the influence from outsiders
- There will be potential increase in the number of accidents due to increase in vehicle speeds.

Plate 9: Locals standing and transacting business by the roadside in the Kalobieyi – Songot section of the road hence exposing themselves to possible accidents

6.5 Meetings During Implementation

The proponent will continuously hold meetings and consult with the PAPs during the Project Implementation Period as a means of evaluation and monitoring the progress of the resettlement process.

It will be important that the PAPs comfortably settle and continue with their lives. Some of the PAPs will be offered employment opportunities as semi-skilled and unskilled labourers and hence there will be continued communication with a sample of the affected people during project implementation. This will ensure continued support to the project by all the stakeholders since they will directly fetch the benefits that accrue from the project.

6.6 Consultations Proposed During Implementation

The affected communities will be consulted on a continuous basis throughout the project phases so that they can appreciate and offer support to the project. This process starts from the pre-design phase when the ESIA and RAP studies are being carried out by the consultants. During detailed design, the community and the local administration were consulted to gather preliminary data on landowners and asset holders. These consultations were done through community, PAP and key stakeholder meetings. During these meetings the PAPs will be informed about KeNHA's intention to acquire land for the proposed rehabilitation of Lodwar-Lokichogio-Nakodok Road (A1) and there will be compensation for the acquired land and the structures affected by the project at the current market rates. There will be further consultations when compensation offers will be given to the PAPs including actual date of compensation and demolitions. These consultative meetings shall include all stakeholders.

The information gathered from the project area will be confirmed with the local administration, county government and finally at the Ministry of Land to confirm who the registered land owners so that compensation for the land and other assets is released to them.

6.6.1 Information Dissemination

All stakeholders must be consulted and be effectively involved in a two-way communication with the project sponsors. Special efforts will be made to consult with women and vulnerable PAPs (physically challenged persons, widowed and the terminally ill persons). There will be an explicit public information strategy. This will include the use of mass media, possibly through radio, to advise the dates and times of PAP and public meetings, availability of documents, selection criteria, cut-off dates, and compensation measures. Public consultation should be preceded by providing all the relevant and accurate information to the PAPs.

Following disclosure of all relevant information, the Client will consult with and facilitate the informed participation of affected persons and communities, including host communities, in decision-making processes related to resettlement. Consultation will continue during the implementation, monitoring, and evaluation of compensation payment and resettlement process. Supply of information and consultation with different stakeholders should be through a language and medium they are comfortable with. In certain cases, for example, the land acquisition process, where the information is not easily understood by the people, KeNHA shall take responsibility for simplifying and ensuring that the whole process is understood by the project affected persons, using appropriate methods of communication.

6.7 Public Information Booklet (PIB)

A public Information booklet is used to provide information to the PAPs and other stakeholders. The information on the booklet includes possible questions and answers on the proposed project. These questions and answers on PIB are used as a guideline to facilitate communication between the proponent and the stakeholders. The object of having the PIB is to ensure that PAPs, their representatives and local governments in the affected areas fully understand the details of the resettlement programme and are fully informed as to the compensation and rehabilitation packages applicable to the Project. The PIB will be prepared by KeNHA and distributed to all PAPs in the Project area. Where necessary the Local Administration will be engaged to interpret the PIB in local languages.

Contents of the PIB will include; Brief description of the Project, Implementation Schedule, Project Impacts, Entitlements and Rights of PAPs, Resettlement and Rehabilitation policies for all types of impacts, institutions responsible for resettlement, Information dissemination to and consultations with PAPs and what to do if PAPS have a question and/or problem, Specific entitlements of PAPs, Description of the detailed impact of the Project on specific households, Compensation rates for each type of impact, Options for resettlement and rehabilitation and Date for delivery of entitlements

7 PROJECT IMPACTS AND ENTITLEMENT

7.1 Compensation Policy

Following the collection of the baseline data, market surveys for structures, land and crops, a compensation policy framework will be developed providing options for eligible PAHs and PAPs taking cognisance of the feedback from the various stakeholders. Meetings will be set up to disclose the various resettlement and compensations options available for all PAHs and PAPs. At the meeting the resettlement, rehabilitation assistance and compensation options available will be discussed in broad general terms and further meetings will be arranged to discuss with individual PAHs and PAPs the specific compensation options, resettlement and rehabilitation assistance that are applicable to each.

7.2 Project Impacts on the PAPs and Institutions

The main negative impacts of the project will arise from the need to acquire land for the road corridor and for other associated infrastructure like deviation roads for use during construction and truck parking areas. The impacts of land acquisition will vary from one affected person or entity to another but may include (in part or full land acquisition for leasehold plots within the Town or Market Centres). This is because the land parcels are small and remaining portions of land after acquisition may not be viable for occupation or for utilization in any meaniful economic activity. Refer to **Table 6** for project impacts. Some of the anticipated and expected project impacts include the following;

- The permanent loss of acquired land and assets;
- The permanent loss of the productive potential of the acquired land and resources and, therefore, the loss of future food supplies and business income (including livestock farming income);
- The permanent loss of recreational, community and other use of acquired land;
- The permanent loss of residential accommodation and business (including livestock farming) premises and structures acquired by the project;
- The temporary loss of land and assets for land used as road deviation during the construction phase of the project; and
- The possible loss of social cohesiveness and social networks when affected people or entities are required to move away from the project area.

The most extreme impacts will be felt by people who will have to relinquish all or most of their land and other property and move to other locations which may be some distance away from the affected project area. Less extreme impacts will be felt by people who will lose smaller portions of their land and assets and who will not need to physically relocate. Losses will not only be limited to property owners with legally recognised property rights but some impacts could possibly be felt by people without ownership rights, such as tenants and informal or itinerant land users and squatters.

Although not directly related to the acquisition of land for project purposes it is possible that construction teams may adversely impact on (e.g. damage) land or property located outside the road corridor. The affected people will, therefore, suffer losses which may be temporary or permanent and such displacement will need to be dealt with in accordance with the requirements of the resettlement action plan.

Table 6: Project Impacts

	Affacts Managed				
Nr	Location	Affected Items / Population	Impacts		
1.	Urban Centres (Lodwar, Makutano Gold, Kakuma and Lokichogio)	Land Acquisition, Removal of Commercial/Reside ntial Buildings	 Loss of commercial/residential land currently belonging to private individuals and Government institutions, manyattas and commercial/residential houses Disruption of residential accommodation Relocation of cemetaries Interruption of loan repayment schedule Interruption of the community social systems 		
2.	Urban Centres	Businesses	Disruption of businessesInterruption of income streams		
3.	Community Land	Pasture for Livestock	 Loss of community land Destruction of pastureland Exposure of local communities members and cattle to accidents Displacement of Squatters who have erected their manyattas and other semi-permanent structures on the wayleave area Borehole 		
4.	Open Grassland	Pastures	Destruction of pastureland Exposure of livestock to accidents		
5.	Main Road and Road Deviations	Local Population	 Generation of Noise, vibration and dust during road construction activities affectig local population Road Safety risks will rise from increased traffic 		
6.	Entire Route especially at the river valleys	IndigenousTrees	Loss of Mature Trees		

7.2.1 Property Losses

All land parcels affected in the town centres are small (plots) hence all land parcels will be acquired in whole and affected persons relocated elsewhere since the remaining portions of land cannot be used economically. The individual land parcels of land which are under leasehold (located within the centres and towns) will be fully acquired resulting to full acquisition. Squatters are located within community land, which are relatively large and therefore can easily be relocated within the same piece of land. As per the cut-off date of 8th December 2014, the total number of households and institutions (Individual land owners, structure owners, businessmen and institutions) that will be affected by the road project is 1,144.

7.3 Compensation Policy for Loss of Land and Structures

The Project will acquire additional land required to have a 60m wide way leave. The existing road will be rehabilitated with some re-alignment where new land will be required. Excavation of the existing road during construction and opening new areas for road deviations will be done. The road project will result in land acquisition and construction activities will result in loss of existing structures. The principles for compensation for this Project are as given below:

Compensation for Land and Structures

Area for each Land Parcel - The road project will require a 60m way leave covering a total distance of 240km. However, the required additional land is much less only covering road re-alignment. The length of the acquired land across each PAPs land has been determined by the Consultant Surveyor. This has been used to calculate the total way leave area on each individual parcel of land and hence cumulatively over the entire distance.

Compensation for affected Land for each PAP

Comparable sales method has been adopted for valuing the affected land. This is based on the open market comparison of the land to be valued with what other similar parcels of land are currently selling for in the area taking into account the difference between them on a willing seller willing purchaser basis. The comparability of the land is based on the use, location, site conditions and income related factors. The market-comparison method is ideal for establishing values of real estate and other goods in a competitive economy. The most critical aspect of the comparative sales method is what constitutes comparability. This is usually in respect of properties, comparability of transactions and market conditions. Each of these aspects has to be thoroughly analysed to obtain an ideal rate. However nonhomogeneity of real estate, the imperfections in its market structure, inadequate sales data and falsified data on the recorded sale transactions and "change of directors" when a sale transaction has occurred are some of the principal factors which limit the application of the method. Where part of the property is acquired we have also taken into account to damage to the remainder of the property. This is in cases where the physical taking of a part of the land might reduce the value of the remainder by making it less convenient for some particular purpose. This form of loss is called damage by severance. This is because after severance the highest achievable use cannot be realized.

Compensation for Structures

The valuation basis adopted for valuing the developments on the land taken for compensation is the current replacement cost or equivalent reinstatement basis or probable cost of acquiring similar premises for the same purpose. This is the amount it would cost to search for a supplier of the construction material, the cost to purchase, transport and insure the materials to the site, and the costs of erection of the premises, including professional fees, and completed to a standard as existing at the valuation date.

Compensation for trees

The trees were valued based on compensation schedules on market rates for various species depending on age and its future potential. The Consultant also took into account the extent of utilization, type of species, quality of logs, diameter of the logs and quality of the log. The trees that were physically assessed were those mainly in settlement areas covering about 38 kilometers, which may account for approximately 15% of the whole stretch of 240 kilometers.

Compensation for disturbance and other losses

The valuation has also taken into account losses not directly based on the value of interest on the land. Such losses normally arise as a result of the service of the notice to acquire the land and such loss must be capable of assessment at the date of the notice of intention to acquire the land.

Very speculative losses have been ignored. These losses include

- Cost of removal of loose assets:
- Expenses incidental to removal of loose assets;
- Fixtures

7.4 Methodology

The project recognised that households falling within a certain threshold due to the land acquisition process could become more vulnerable than others and may need additional rehabilitation assistance. Such PAHs or PAPs were identified and will be provided with additional support, assistance or compensation based on a reasonable and rational criterion.

The RAP activities undertaken by the project are designed and implemented to contribute additional assistance (transition allowance) to the rehabilitation of the affected households. The plan also provides a detailed schedule for the implementation of the RAP.

- The value of structures have been determined by a registered valuer based on current market rates for putting up a similar structure;
- Income restoration forms part of the monitoring programme carried out over a 3 year term with periodic reviews. Specific attention has been given to the requirements of women and vulnerable people including the women headed households, the elderly, illiterate and the physically challenged;
- Community development plans form part of the RAP and investigations on mitigation options carried when communities are negatively impacted by the project;
- Compensation considered vulnerability of the PAPs and not only the applicable laws of Kenya but also the World Bank Safeguard Policies.

7.4.1 Compensation Procedure

After valuation of the affected land and property, KeNHA will give each property owner a Letter of Offer showing the amount of money that they will be paid for each affected property. If the PAPs are satisfied with the amount indicated on the Offer Letter, they will sign the letter of offer and return it to KeNHA indicating their bank account details or their full names as per their national ID to enable KeNHA transfer the compensation money to their bank accounts or write them cheques.

Landowners will be required to prove ownership of the affected parcels of land by either a Title Deed or Letter of Allotment or any other land ownership documents that are recognized by law. A signed Letter of Offer forms a legally enforceable and formal agreement between KeNHA and the PAP. If the PAP is not satisfied with the valuation offer, they will be free to hire their independent valuer at their own cost who will provide their independent valuation which will be negotiated with the KeNHA Valuer to a arrive at an agreement. Should the negotiations between the two valuers fail; the matter will be referred to the Valuers Tribunal for final settlement.

7.4.2 Livelihood Restoration

The main objective of this RAP is to ensure that livelihoods are improved or restored to predisplacement levels. Compensation for affected land and property will therefore seek to facilitate full and smooth recovery without exposing the PAPs to vulnerability and this applies to people who are not just physically displaced but who are affected by loss of land, property and source of income that directly affects their livelihood. Livelihood restoration will be achieved through implementation of the following:

- Determination of average monthly income and compensation for loss of income for a period of six months to cushion displaced persons during transition period before source of income is restored.
- Payment of loss compensation prior to acquisition of land and property or resettlement of PAPs;
- Compensation for land, property and trees will be based on the following:
 - Value of acquired land will be determined using comparable open market land values considering cost of similar parcels of land are currently selling for in the area on a willing seller willing purchaser basis.
 - The valuation for affected structures has been determined using the current replacement cost or equivalent reinstatement basis or probable cost of acquiring similar premises for the same purpose. The valuation also takes into account market values for structures and materials.
 - The values for trees were based on compensation schedules prepared by the Kenya Forest Service for various species depending on age and future potential
- Wide consultation with the PAPs during the census survey where land and property were valued and Public Consultation Meetings.
- Prompt execution of compensation payment to PAPs.
- Education of PAPs on the positive and negative impacts of resettlement and mitigation measures:
- Provision of ample time for displaced persons to put up structures prior to relocation;
- Implementation of a monitoring programme to ensure displaced persons are well settled in their new environment and any emerging issues/challenges are promptly addressed.
- All the PAPs will be resettled very close to the project area hence priority in job opportunities will be given to the project affected persons as a way of quickly restoring their income streams.
- Opportunity of providing goods and services to the project construction teams shall be enhanced to provide PAPs with an opportunity to earn from the project.

Table 7 elaborates on the entitlement matrix where type of loss, entitled person, legal entitlements and restorative compensation for each type of loss is listed

Table 7: Entitlement Matrix

Nr	Types of Loss	Entitled Person	Legal Entitlements	Restorative Compensation
1.	Land	Land Owners who have genuine land Title Deeds or Letters of Allotments through customary or legal acquisitions. Leasehold Plots Freehold Community Land Government Land	Land or Cash Compensation for the area of land affected by the road upgrading at comparable land values within the same area, taking into account market values for the land	Land for Land compensation is the preferred option by the most of the PAPs. Such land would be similar in quality to the land owned by PAPs, close to the PAPs' current communities, and PAPs would be entitled to similar Title Deeds or Letters of Allotments
				Where only a small portion of land is affected cash for land compensation is preferred, taking into account market values for the land.
				Disturbance allowance is 15% of the market value of affected land
2.	Commercial and Residential Structures and Disruption of various	PAPS who own all types of structures in the project area whether they have land title or other legal entitlement to the land or not including squatters	Compensation for the entire structure at replacement cost as determined by the concerned appraisal committee without	Restorative compensation in accordance with the Land Act. Such compensation at full replacement value is aimed at enabling PAPs to build new structures, as and when necessary.
	Businesses	 Structures (Permanent and Semi- permanent Buildings, Manyattas Disruption of Various Private Businesses 	deduction for salvaged building materials. Such compensation would take into account market values for structures and materials.	Restorative compensation includes disturbance allowance, severance and injurious affection, and takes into account market values for structures and materials.
				Disturbance allowance is 15% of the market value of the cost of construction of affected structures
				Right to salvage assets and materials.
				Squatters to receive assistance to relocate to a place where they can reside and work legally. Squatters may also receive assistance to restore their livelihoods.

Nr	Types of Loss	Entitled Person	Legal Entitlements	Restorative Compensation
3	Trees	Private Individuals and the Turkana County Government	The trees were valued based on compensation schedules prepared by the Kenya Forest Service for various species depending on age and its future potential.	for valuation but are a source of pasture for the sheep, goats and camels that mainly feed on them. There are few trees whose valuation has been
4.	Cemeteries	Private Individuals and the Turkana County Government	Relocation of the entire cemeteries and Individual graves from current locations to new selected and acceptable locations	Cultural attachment either by the community or individually
5.	Borehole	Turkana County Government	Compensation for the entire structure at replacement cost as determined by the concerned appraisal committee without deduction for salvaged building materials	Disturbance allowance is 15% of the market value of affected borehole

8 VALUATION CRITERIA

The assets (buildings and other structures) and natural resources (trees) affected by the proposed road project were valued on the basis of their net current realistic market value. The valuation process was governed by the Valuers Act (Cap 532) of 2010 and was carried out by a Registered Valuer.

8.1 Valuers Act (Cap 532)

The valuation practice in Kenya is governed by the Valuers Act Cap 532, which provides for a Valuers Registration Board that regulates the activities and conduct of registered valuers. Valuers in Kenya are registered upon application to the Board and are required to be full members of the Institution of Surveyors of Kenya (ISK). The Act governs the formation and composition of valuation practices including the qualification of partners and directors in charge of valuation. The Board also deals with discipline and complaints in respect to valuation practice. Other statutes that govern valuation are the Land Registration Act, 2012 that regulates the valuation for land rent while valuation for rating is governed by the Rating Act Cap 267. Land Act 2012 governs valuations for compulsory acquisition purposes.

8.2 Valuation Methodology

Property values are affected by many factors, the relative importance of which will differ with each heterogeneous property. Some of the factors may be matters of opinion involving subjective judgement, which may therefore not be quantitatively measurable.

The assets affected by the proposed rehabilitation of Lodwar-Lokichogio-Nakodok road have been valued on the basis of their net current realisable market value for compensation purposes. Generally the principle of which compensation is based is that the value to the owner of the land taken would be greater than the market value. This is because there are questions of severance, injurious affection and disturbance. The only compensation to a disposed owner would be to put him into a position to reinstate himself on the 'other land' so as to be able to carry on his activities substantially, unaltered and undiminished. This would be a basis for compensation known as equivalent reinstatement. The above principles of compensation are contained to a large extend in the Land Act 2012 where the compensation is based on:-

- Market value of the land taken:
- Any damages sustained or likely to be sustained by reason of severing such land from his other land;
- Any damage from loss of profits over the land;
- Additional 15% market value for disturbance.

Section 22 of the Act states that where land is needed for access compensation will be limited to the damage done to trees, plants, growing crops and permanent improvements on the land, together with the periodical diminium in the profits of the land and adjoining land by reason of such use.

The following methodologies have been adopted for the affected assets as hereunder:

8.2.1 The Market Value of Acquired Land

Comparable sales method has been adopted for valuing the affected land. This is based on the open market comparison of the land to be valued with what other similar parcels of land are currently selling for in the area taking into account the difference between them on a willing seller willing purchaser basis. The comparability of the land is based on the use, location, site conditions and income related factors.

The market-comparison method is ideal for establishing values of real estate and other goods in a competitive economy. The most critical aspect of the comparative sales method is what constitutes comparability. This is usually in respect of properties, comparability of transactions and market conditions. Each of these aspects has to be thoroughly analysed to obtain an ideal rate. However non-homogeneity of real estate, the imperfections in its market structure, inadequate sales' data and falsified data on the recorded sale transactions and "change of directors" when a sale transaction has occurred are some of the principal factors which limit the application of the method.

Where part of the property is acquired, the Consultant has also taken into account damage to the remainder of the property. This is in cases where the physical taking of a part of the land might reduce the value of the remainder by making it less convenient for some particular purpose. This form of loss is called damage by severance. This is because after severance the highest achievable use cannot be realized

8.2.2 Structures

The valuation basis adopted for valuing the developments on the land taken for compensation is the current replacement cost or equivalent reinstatement basis or probable cost of acquiring similar premises for the same purpose. This is the amount it would cost to search for a supplier of the construction material, the cost to purchase, transport and insure the materials to the site, and the costs of erection of the premises, including professional fees, and completed to a standard as existing at the valuation date. Compensation will also take into account the market values of the structures. The main purpose of valuing the structures for compensation is to reinstate the owner to build similar structures on another site.

8.2.3 Trees

The trees were valued based on compensation schedules based on market rates for various species depending on age and its future potential. The Consultant also took into account the extent of utilization, type of species, quality of logs, diameter of the logs and quality of the log. The trees that were physically assessed were those mainly in settlement areas covering about 38 kilometers, which may account for approximately 15% of the whole stretch of 240 kilometers.

8.2.4 Cemetries in Lodwar and Kakuma

The valuation methodology for relocation of the cemetries is the replacement cost and market comparison approaches. Attributes taken into consideration is the costs of exhuming the bodies, new coffins, refilling old graves, transport of bodies to new grave-yard site, excavation of new graves and refilling and miscellaneous items like materials to bind the bodies. Cultural attachment either by the community or individually to the

cemeteries and graves cannot be quantified in any monetary value. The new cemetry sites will be allocated by the Turkana County Government.

8.2.5 Boreholes

The methodology we have used in valuation for the boreholes is the replacement cost approach where depreciation has not been taken into account. It is expected the project will set aside funds as per our valuation to drill the borehole in a location convenient to the affected community and in consultations with the relevant professionals in the Kenya Government in order to restore flow of water to the community without any major disruptions.

8.2.6 Compensation for disturbance and other losses

The valuation process has also taken into account losses not directly based on the value of interest on the land. Such losses normally arise as a result of the service of the notice to acquire the land and such loss must be capable of assessment at the date of the notice of intention to acquire the land. The Consultant has ignored very speculative losses.

These losses include

- Cost of removal of loose assets:
- Expenses incidental to removal of loose assets;
- Fixtures

8.2.7 Steps followed During Valuation

All structures affected were valued on replacement cost approach basing the unit cost on the Ministry of Lands, Housing and Urban Development current rates. The market rate was only applied to loss of rent for the period of reinstatement of the commercial buildings, which is based on the open market rent achievable in the market. **Table 8** provides valuation implementation steps that were followed.

Table 8: RAP Valuation Process for Assets

Nr	Assets/Activities	Implementation Process
1.	Acquired Land with Structures	 Steps: A detailed inventory of all affected persons, assets and stock requiring resettlement was made. Determination of the size of affected land that will be acquired. Accurate and real valuation of commercial and residential houses. Determine compensation packages according to valuation requirements. Provision of reasonable time period prior to moving, for salvage of building materials. PAP's may salvage any material without this being deducted from compensation entitlements. Provide temporary housing/shelter where necessary.
		 Recommendations: KeNHA shall pay compensation for acquired land, lost housing/ commercial structures and Trees. KeNHA to assist PAPs identify resettlement sites if necessary and provide assistance during relocation PAPs are entitled to remove any materials he or she wishes to salvage within one month of vacating the old premises. Land compensation values will be based on the open market price comparison of the land to be valued with what other similar parcels of land are currently selling in the area taking into account the difference between them and those transacted on a willing- seller willing- purchaser basis.

Nr	Assets/Activities	Implementation Process
2.	Land without structures	 Inventory Inventory of land parcels affected by project for acquisition including names, ID numbers, land sizes and land registration references. Compensation: The RAP data sheets eaborates out how each person is affected by the projectand indicates how much compensation will be paid for land and trees lost.
3.	Lost business profits and employee earnings	 Where business profits are affected compensation will be paid according to Valuation results of the enterprise monthly income computed over a period of six months which is deemed as the period required for reistament of lost income.
4.	Crops/Trees	Tree/seasonal crops: There are no crops identified on the wayleave area during the survey. The project area has very infertile soil and harsh climate to support any crop farming. KeNHA will pay compensation for trees based on compensation schedules prepared by the Kenya Forest Service for various species depending on age and their future potential
5.	Payments to the PAPs	Payments for acquired land, lost structures, trees and loss of business shall be made either through banks transfers into PAPs accounts or by issuance of Cheues in favour of individual PAPs and distrituted through the local chief's office.

9 RESETTLEMENT SITES

9.1 Method of Site Selection and Site Alternatives

The resettlement sites; if deemed necessary will be chosen through consultation with all displaced persons and host communities. Selection of the resettlement sites has been discussed with the project-affected persons, their representatives and local officials. The sites has been selected to meet the following favourable characteristics as possible:

- Available land for resettlement are very close to the affected commercial areas of Lodwar, Makutano Gold, Kakuma and Lokichogio;
- The sites are within the municipality where access roads are available hence are easily accessible:
- The sites offer good business prospects due to the existence of piped water, electricity and settlements that provide market potential;
- The identified resettlement sites are not in a protected area, classified forest, natural reserves or environmentally sensitive lands such as sloping terrain or shallow soils;
- Selected sites have low population density, large holdings and a good potential for further development;
- Selected resettlement sites are able to accommodate a reasonable number of projectaffected families at one location thereby minimizing the land and village development costs.
- Being near town centres, the selected sites are in close proximity to social infrastructure such as schools and hospitals.

9.2 Influx Management

Identified sites for resettlement of displaced persons are located close to the project area and thus represents an obvious collection point for job seekers. The proposed project is likely to attract a significant number of newcomers seeking employment or other opportunities associated with construction and operations of the project. The influx of large numbers of newcomers may have severe negative effects on host communities in and around the project area as well as on the project itself. To avoid such circumstances, the Proponent should take a proactive approach and prepare an influx management plan in association with RIC.

9.3 Resettlement Preference

Majority of the respondent PAPs preferred to be settled within the area of displacement since they have already established clientele and a good business base for themselves. Land for land compensation is preferred by majority of PAPs especially the squatters who have their structures on community land. Some PAPs preferred cash to land compensation so that they could enjoy the freedom of choice in choosing their resettlement sites either near or far away from the project area.

9.4 Resettlement Sites and Influx Management

9.4.1 Resettlement Sites

Majority of the displaced persons in Lodwar, Makutano Gold, Kakuma and Lokichogio; Towns own land and property within the local council area.

After compensation, these landowners will be able to acquire land within the same town area as they may choose. Turkana County Council have adequate land for resettlement which in consultation with KeNHA will avail land for the commercial PAPs to acquire and construct other commercial buildings to replace those affected by the project. The non-commercial PAPs will equally be offered land for resettlement by the Turkana County Council.

9.4.2 Influx Management

A census survey of the PAPs has been done and their names and property details recorded. The cut-off date for the Proposed Rehabilitation of Lodwar-Lokichogio-Nakodok Road (A1) project has been set as December 8, 2014 when the census of PAPs began. The cut-off date was validated during Public Consultation Meetings at the 7 centres when the resettlement instruments were disclosed to the PAPs. This data provides the platform to control influx management.

9.4.3 Host Community

The PAPs will be resettled on Turkana County Government land that is currently unoccupied as the most of the land in the County is communally held. The host community will largely be local community who have been carrying out their livelihood activities together with the PAPs. Representatives from the County government who indicated support for project also confirmed that the land is communally held and can availed to resettle displaced persons. Modalities of acquiring the land can be pursued with the respective County offices.

9.4.4 Preparation of Resettlement Sites

To ensure that the displaced persons resume normal or near normal livelihood and active production the following key activities should be implemented:

- There will be identification and discussions on the host sites coupled with initial visit by the PAPs on the earmarked resettlement sites by household representatives;
- Acquisition of land from County government and signing of agreements with PAPs before resettlement. Thus the process of land allocation should be completed before relocation;
- Construction of the resettlement sites and related public and infrastructure facilities as well as provision and/or strengthening of social facilities;
- Before resettlement, social adjustment is a priority for both the host community and PAPs as a result of the anticipated psychological constraints that come with changes.
- Resettlement of the homestead will be done as a unit to one site to ensure continued social support.
- The resettlement sites have the same characteristics as the former sites.
- Vulnerable Groups including the poor, sick, orphaned and vulnerable children will be given priority in employment opportunities arising from the project. Further during construction, there will be identification of appropriate micro-programs that could be provided under the project such as revolving fund financial incentives and assistance for housing construction among others;
- Public information and awareness creation will be conducted to enlighten the residents on the importance as well as the need for attitudinal change towards the project impacts.

9.4.5 Resettlement Options

The PAPs have been informed of feasible resettlement options, such as replacement land for those whose remaining piece of land cannot be used for resettlement, and non-land based income-generating options. Those affected persons who prefer will be provided the opportunity to shift to wage employment or to start a small business. Households that have to relocate will participate in identifying and selecting proponent assisted resettlement sites or to move to either group or individual relocation sites or to receive cash compensation and to make their own arrangements for relocation.

9.5 Resettlement Site Development (Infrastructure, Social Service, Etc.)

The Resettlement Receiving Areas (host sites) shall be improved in line with commercial economic modes of commercial traders who run businesses in the town centres. This will facilitate the PAPs who are mainly business entrepreneurs to adapt themselves to their new environment within the shortest time possible. Further, the land improvement shall ensure that the per-unit production in the receiving land is higher or equivalent to that before resettlement. This will ensure that the resettlers' production and standard is higher or equivalent to the original pre-resettlement level within the shortest time possible.

9.6 Livelihood Restoration

The road rehabilitation project will generate positive impacts which the proponent in consultation with the local administration can exploit at the benefit of the local community and in particular the PAPs. When these benefits are approportiately exploited, they will assist in ensuring that livelihoods are restored within managable time and space. Some of the livelihood restoration strategies which can be exploited include;

9.6.1 Supporting employment opportunities

The project is expected to create employment opportunities for members of the local communities during construction and operation phases. Besides the direct employment by the project, other forms of employment are likely to result from the spin-off effects including establishment of local markets for providing goods and services during construction. The employment opportunities will generate income and improve the standards of living in the project area and its environs, albeit on a small scale. Given that the levels of poverty are slightly high in some areas, these employment opportunities will provide a major positive economic boost to the region.

9.6.2 Corporate Social Responsibility (CSR)

The proponent is committed to corporate social responsibility. The following proposals may be considered by KeNHA as Corporate Social Responsibility Activities:

 Employing a Community Development expert to be responsible for community and social development programmes. This staff member would prioritize programmes with key representatives and local leaders from the surrounding community. The Client could develop an annual social fund for such projects.

- Providing an enabling environment for entrepreneurship, creativity and education to flourish through gradual build up of programmes
- It is suggested that a social fund be established and should be at the KeNHA's discretion at the first stage, but once the developments have started then the groups which have been established and registered could take over.
- PAPs requested for social amenities including water, electricity and schools for communities whose members are affected by the project.

9.6.3 Improvement on Road Safety

Sharing of information regarding improvement of road safety and convenience when the road is completed. Installation of appropriate road signages. There will be a tendency for vehicles to move faster on the improved roads. This will enhance understanding, appreciation and acceptance of the project.

10 INCOME RESTORATION

10.1 Introduction

Income restoration is the re-establishment of income sources and livelihoods of affected people. The resettled households will be affected by the resettlement activities. These negative effects will include loss of livelihood and income streams. Majority of the resettled households are pastoralists and small retail traders. A few of the PAPs are skilled and semi-skilled labourers. Others are entrepreneurs running their own large wholesalers businesses. There are rare cases of PAPs being employed in the hotel and NGO sectors and others in the Jua Kali industry. To minimize the negative economic impact of proposed road activities on commercial establishments, it is recommended that these establishments be treated in such a manner as to allow them to operate with minimal disruptions and/ or disturbances. An income restoration program ensures that the income streams of the PAPs are maintained and possibly enhanced to better standards.

The RAP enhances restoration of the residents' economic and income bases, mostly by promoting diversification and adoption of alternative economic activities. To realize this objective, there is need for the proposed project to incorporate other activities beyond normal compensation. These activities proposed to ensure minimal shock as well as fast recovery of losses and eventual realization of stability of incomes and livelihoods can be summarized as follows:

- Improve the land where PAPs are resettled including sinking of boreholes and constructing water pans to provide water for watering animals, domestic use, carrying out soil improvement, providing irrigation facilities and popularizing improved farming methods where feasible;
- Provide adequate integrated social facilities and infrastructures notably schools, water points, sanitation and health facilities
- Allocate appropriate amount of land; it is important that the per capita farmland holding is either higher or equivalent to vacated portions of land in both size and productivity.
- Carry out PAP sensitization and provide adequate information regarding acquisition, compensation and resettlement including the associated timelines.
- Professional training of the business PAPs and others on how to use compensation money wisely to improve their livelihood and their businesses and hence their personal lives

10.2 Income Restoration and Improvement Component

The Proponent through the local administration should provide recommendation letters to the PAPs who are in formal employment so as to facilitate speedy processing of their transfers to similar institutions within the resettlement sites. The PAPs in the Jua kali industry and small scale farmers should be advised and educated through a consultative process on how to sustainably propagate their business and farming activities in the resettlement sites to achieve better returns.

10.2.1 Land-Based Restoration Component

Land-based resettlement, a "land-for-land" approach is more beneficial since land is the key to reestablishment and contributes to cultural security. Exclusive cash compensation is least useful to the resettlers in the long run. The land-for-land approach is essential for resettlement despite criticisms that it denies the settlers the right to choose for themselves and that cash compensation could provide opportunities for opening family businesses. One important mechanism for implementing the land-for-land strategy is to identify several possible resettlement sites to provide alternative choice to the displaced.

The productive potential, quality of soil, availability of irrigation and portable water, and location of the new sites should be ideally better or at least equivalent to the acquired sites in order to make them most attractive to the settlers.

Furthermore, in selecting resettlement sites, attention should be paid to the possibility of off-farm income such as craft making and retail business by the unemployed PAPs to supplement family income. There are three significant issues related to monetary compensation:

- Evaluating the worth of property to determine the amount of payment;
- The timing of the payment;
- Determining noncash compensation where cash alone is not appropriate.

10.2.2 Non-Land Restoration Component

Cash Payments

Cash compensation disproportionately benefits some interest groups (i.e., big landlords and wholesalers, fuel dealers) and not so much poor and small-scale pastoralists, the landless, and women. Landless labourers are often the hardest hit group in the resettlement processes due to their lack of ownership and entitlement to land. As a group, women are also affected by forced resettlement and very rarely have their concerns considered and addressed in resettlement projects... In many cultures, women are involved with land-based activities and in herding animals; they are part of the productive work force and contribute substantially to the sustenance of the family. However, compensation monies mainly go to men, often leading to mistrust and division in the family. The men are the ones who mainly receive the compensation money and hence decide on its appropriation even if such decision is detrimental to the woman's interest and needs. Some men, often working hand in hand with corrupt officials, have fraudulently deprived indigenous people particularly the weaker ones such as illiterate, widows and elderly women of their rightful compensation.

Payment Timing

Compensation payments should be promptly paid out within reasonable time and not severely delayed. Severe delays would result to devaluation of the compensation award. Compensation money must be made available before the actual move so that displaced households can use the money to overcome or minimize the hurdles of dislocation. Compensation for land acquisition should not be limited to monetary payments to individuals but there should be appropriate compensation to the community of people to enable them to re-establish new communities:

Land Market Value

The market value of the land being acquired is used as the determining factor in calculating compensation. Displaced persons may find it difficult to acquire comparable land with the compensation money because of limited land market/higher value of land in the relocated area, where prices can double or even triple almost overnight. In addition, the costs for relocating, transporting, salvaging building materials, and so on can put financial strain on the resettlers. In such circumstances, cash compensation should be supplemented by providing "replacement assets" (e.g., house, land, shop) for resettling displaced persons.

10.2.3 Vulnerable Groups

Among the PAPs, special groups of persons were identified. These include; 21 Orphaned Children, 14 physically handicapped, 58 widowed persons, 3 terminally ill persons.

This group of persons are vulnerable to greater project impact and discrimination hence extra assistance is required to ensure that they are properly compensated and resettled. Among the PAPs identified in the project area, men head majority of the households. The Land Act 2012 recognises the role of spouses in land and property transactions where families reside. Consent from the spouse is mandatory hence the rights of the female spouse are well guarded.

10.3 Community Social Development Plan

A Community Social Development Plan outlines the important community social aspects of resettlement. Components that affect social status of PAPs during implementation of resettlement include: Land Acquisition and Resettlement, Socio-economic Information, Resettlement Policy Framework, Consultation and Participation, Relocation of Households and Resettlement, Income Restoration Strategy, Institutional Arrangements and Implementation, Resettlement Budget and Financing, Implementation Schedule, Monitoring and Evaluation and socio-cultural issues. The Social and Cultural beliefs of PAP and Host Communities have been taken into account to ensure smooth resettlement plan implementation.

10.4 Mitigation of Adverse Impacts at the Community Level

The negative impacts mentioned by the communities were loss of livelihoods, prostitution and increase in HIV/Aids cases, dust emission during construction, scaling down of farm sizes, cutting down of trees (shrubs), relocation of homesteads, differences and cultural beliefs between the resident community and the outsiders working for the project and community misconceptions on what the project can do to improve their livelihoods.

The main reasons behind the negative impacts mentioned by the communities are summarized in **Table 9** below.

Table 9: Community Identified Negative Impacts

Nr	Threats/Impacts	Main reason identified threat
1.	Massive demolition of structures in Town Centres and limited demolition of structures in area outside the town centres	Expanded way leave area
2.	Increase in social vices such as prostitution, HIV/Aids cases etc.	Previous experience of increased infection and prostitution during similar project implementation in other areas
3.	Cutting down of trees & shrubs	Loss of trees/shrubs
4.	Relocation of business structures	Previous experiences of non-compensation and unsuccessful resettlement during projects
5.	Cultural and religious based community squabbles	Non respect of the local culture by other development project execution teams
6.	Community misconceptions	Expectations that big projects must provide direct benefits to the local areas in which they are implemented

10.4.1 Mitigation for Negative Impacts

It will be important that the project proponent designs and implements an Information, Education and Communication (IEC) programme in the project area to minimise false expectations and misconceptions. This is particularly important given the controversies surrounding land issues.

It is recommended that the project work through the County government and document all aspects of this programme rigorously to adequately address issues that arise.

The proposed mitigations to threats and impacts identified are elaborated in Table 10.

Table 10: Assessments and Impact Significance Ranking

Nr	Threats/Impacts	Rating	Proposed mitigation measures
1.	Increase in social vices e.g. prostitution and HIV/AIDS cases	High	Information, Education and communication (IEC) conducted amongst the community and the project staff making them aware of the potential dangers and alternative behaviour that will be needed so as to protect themselves
2.	Loss of land sizes	High	 Compensation for the parts of land reduced from acquisition of the way leave by the proponent Awareness to the community on land use alternatives that promote intensive use of the remaining land
3.	Cutting down of trees	High	Support a re-afforestation of farm forestry initiatives where the communities are willing to participate in tree planting
4.	Relocation of commercial premises and homesteads	High	Timely Compensation of the household for loss of structures and relocation
5.	Cultural and religious Community squabbles	High	Project can promote activities that are common to the cosmopolitan communities and project employees that will provide for opportunities to create understanding such as sports
6.	Community Misconceptions	Medium	Awareness creation amongst the community on the project facts, what it can do and its limitations specifically to address expectations expressed during the RAP study consultation process and in the course of project implementation
7.	Compensation for structures	High	Regular communication with PAPs and timely compensation for losses
8.	Job Opportunities	High	Ensure engagement of PAPs and locals for skilled and unskilled job opportunities to enhance livelihood and enhance acceptance of the project by locals

11 GRIEVANCES REDRESS MECHANISM

During the public consultations in the project area, there were concerns expressed that include adequate and timely compensation of affected persons, acquisition of land and resettlement of affected persons within the local area to avoid drastic change of environment and departure from ancestral land. Due to lack of title deeds in the project area, majority of the PAPs expressed fear that they may not receive appropriate compensation from the relevant Authorities.

Grievance redress mechanisms are necessary avenues for allowing affected persons to voice concerns about the resettlement and compensation process as they arise and, if necessary, for corrective action to be taken promptly. Such mechanisms are important to achieving transparency in the acquisition and resettlement processes. Arising from the above observations, the Consultant proposes that all the grievances be addressed before commencing construction and that where all or significant part of the land is acquired requiring that displaced persons be resettled elsewhere, resettlement land should be sought within the local area and the affected communities be given an assurance of deserved consideration. Refer to **Annex 14** for a Draft Grievance Form.

11.1 Subject Matter of Grievances

11.1.1 Potential Sources of Grievances

The PAPs may have grievances on the value of compensation for land, movable and immovable assets, trees, human and livestock disturbance. Other grievances may arise from the loss of livelihood, disconnection of steams of income and reduction of earning capacity due to the involuntary resettlement.

11.1.2 Sensitization on Grievance Redress Mechanism

The PAPs were sensitized to the process of grievance redress mechanisms in various forums. These include the following:

Census Survey - The first forum was during the census survey where majority of the PAPs wanted to know why the RAP Study teams were administering questionnaires and measuring sizes of their structures. It was elaborated that the proposed road will affect their land and structures and there will be a process of valuation (determining cost of land structures affected) for compensation after valuation has been done. Where project affected persons do not agree with the valuation there will be mechanisms for lodging grievances)

Consultation Meetings – During the Consultation Meetings conducted at the various Centres, the PAPs were sensitized on the process of land and structure valuation for compensation determination and grievance redress mechanism should there be a need to lodge a complaint on the determined values or resettlement plan.

11.2 Method of Lodging Complaints

After valuation of assets, each identified PAP will be issued with a letter of award for their acceptance or otherwise before payment is released. In the event of a dispute or grievance, KeNHA will issue a grievance redress form (See **Annex 14** for Draft Grievance Redress Form) which will be completed by the aggrieved persons so as to reach a settlement within a period of one month. KeNHA shall not commence any construction

works before all public grievances are settled. KeNHA shall use all available mechanisms to ensure that the grievances are settled within a short time so as to reduce undue stress on the PAPs and delays in project implementation.

11.3 Proposed Procedure

In projects that require relocation and resettlement of people and loss of property and livelihood, grievance redress mechanisms are essential tools. These mechanisms allow the affected people to voice concerns about the compensation and resettlement process. The project sponsor is hence expected to take corrective action to address these grievances in consultation with the PAPs and other stakeholders. Such mechanisms are fundamental to achieving transparency in the resettlement process. A grievance redress mechanism is given in **Figure 14** below.

During the resettlement process, all disputes will be referred to KeNHA (KRU) who may handle the grievance straight away or refer it to the PAP committee who will be asked to provide recommendations as to how it is to be addressed. If deemed necessary by the PAP committee the case will be re-investigated and depending on the nature of the issue. referred to the Land Compensation Tribunal or Public Complaints Committee. The Project Affected Persons Committees will be established at the affected market or village level and will be moderated by the elected chairman. The PAPs will elect a committee of not more than five members amongst themselves including a Chairperson and a Secretary. The committees should at minimum have 20% women and 20% youth representative to make it gender sensitive. Like most communities in Kenya, the Turkana people resolve local disputes through a local mechanism where the complainant reports the matter to the village elder incharge of his village. The leader listens and considers the elements of the matter and brings the warring parties together towards making them reach an agreement. If no agreement is achieved between the warring parties or the matter is beyond the mandate of the village elder, he escalates it to the higher offices of the assistant chief or the chief respectively. Therefore, consultation and grievance redress will be an ongoing process until proper resettlement is achieved.

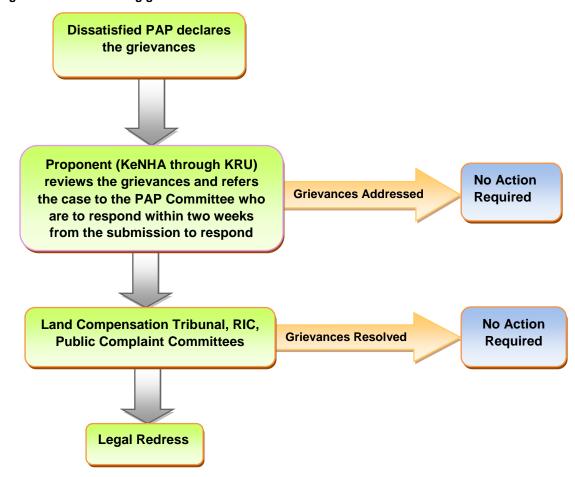


Figure 14: Chart showing grievance redress mechanism

11.4 Dispute Resolution and Grievance Mechanism

If the owner rejects the compensation award, the Land Act, 2012 will apply which involves the collector deposits the money in court pending the former's appeal The norm is to use peers and local leaders to first diffuse the conflict. Then an appeal is made to the County Council, addressed to the District Lands Officer at the District Steering Group (DSG), assisted by the local Land Control Board. Some form of grievance resolution takes place and the landowner can appeal to a Court of Law if the decision by the District Land Officer is not accepted. The decision of the High Court would be final and all such decisions must be reached within a full growing season after the complaint is lodged.

Grievance procedures may be invoked at any time, depending on the complaint. No person or community from whom land or other productive assets are to be taken will be required to surrender those assets until any complaints s/he has about the method or value of the assets or proposed measures are satisfactorily resolved.

If a complaint pattern emerges, the DSG, the local Land Control Board and the local Chief discusses possible remediation. The local leaders are required to give advice concerning the need for revisions to procedures. Once they agree on necessary and appropriate changes, then a written description of the changed process is made. The DSG and the local Land Control Board are responsible for communicating any changes to future

potential PAPs when the consultation process with them begins. Key Stakeholder contacts are given in **Annex 10.**

12 INSTITUTIONAL ARRANGEMENTS

The implementation of the RAP seeks to minimize resettlement by adopting viable alternatives and adequately addressing resultant impacts and calls for collaboration from all the stakeholders. This would therefore require a properly constituted structure for the administration of the same. The proposed road rehabilitation project has some positive/negative effects especially to those who may be displaced from the right of way through land acquisition hence there is a need to compensate them for the loss of their land and the developments and support during resettlement. This RAP report contains details of PAPs and resettlement budgets for compensation. Subsequet RAP studies shall be carried out to verify the PAPS and their property. The Kenya National Highways Authority (KeNHA) is therefore expected to institute the process before commencement of the project. The Commissioner for Lands in collaboration with the District Land Boards, and Land Tribunal will closely participate in the verification process and ensure timely execution of compensation and resettlement. The verification process will confirm the socio-economic characteristics of all project affected persons (PAPs), valuation of assets to be compensated and preparation of an updated list of the PAPs at the time KeNHA will start project implenmentation.

12.1 Organization Structure of RAP Implementation Committees

The implementation of the RAP requires collaboration from all the stakeholders. This requires a properly constituted structure for the administration of the same. The proposed project involves land acquistion, compensation and resettlement of affected people for the loss of their land and structures. There will also be need to monitor the progress of PAP livelihood restoration to ensure affected persos are not left worse off. The Institutional Framework clarifies the role of various stakeholders in the implementation and administration of the RAP. It further clarifies the role of PAPs and their responsibility in the entire exercise. The procedures to be followed along with the support facilities available and a timeframe for implementation of each of the activities. Internal and external committies will be involved in the RAP Implmentation process. These are:

- KeNHA RAP Implementation Unit (KRU)
- Local RAP Implementation Committee (RIC)
- PAP Committee

Table 11: RAP Implementation Committee

Nr	Committee Member	Committee Composition	Responsibility		
1.	KeNHA Resettlement Unit (KRU	Officers from KeNHA with various Key Disciplines	Oversee the RAP Implementation Process		
2.	Local RAP Implementation Committee (RIC)	Government representatives including Lands, Housing, Agriculture, Kenya Forest Service, NEMA, local Administrative Officers, local Community leaders, PAP representatives	Ensure a timely execution of the whole process and further clarifies the role of PAPs and their responsibility in the entire resettlement process		
3.	PAP Committee	Representatives chosen by the PAPs	Represent the PAPs & attend meetings to negotiate with KRU on behalf of KeNHA on issues related to compensation, resettlement & livelihood restoration		

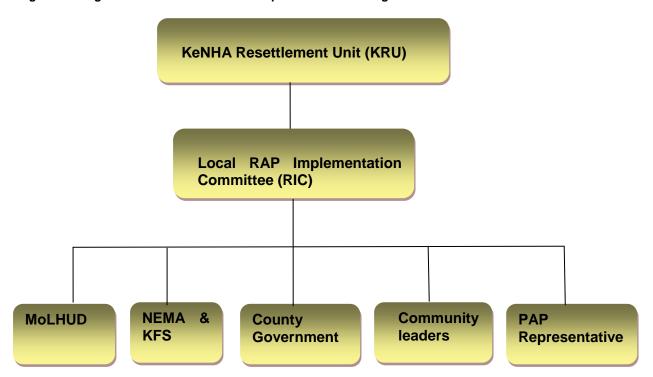


Figure 15: Organization Structure of RAP Implementation Arrangements

12.1.1 Proposed KeNHA Resettlement Unit (KRU)

KeNHA RAP Implementation Committee (KRU) – The team will be composed of persons from KeNHA with various key disciplines that can oversee the RAP implementation process. KenHA is the implementation agency

The final structure of the unit shall be provided by KeNHA. However the structure shall include professionals presented in Figure 16 below.

Figure 16: Proposed KeNHA Resettlement Unit (KRU) **Team Leader - Land Economist Legal Advisor** Socio-Economist **Building Technician Environmental & Social Specialist Accountant** Land Economist/ Valuer **Highways Engineer** Surveyor

12.1.2 Local RAP Implementation Committee (RIC)

RAP Implementation Committee (RIC) shall be formed by KeNHA to ensure a timely execution of the resettlement and further clarifies the role of PAPs and their responsibility in the entire resettlement process. The committee shall consist of Government representatives from line Ministries and Departments including Lands, Housing, Agriculture, Kenya Forest Service,, NEMA, County and local administration officers, local Community leaders, PAP representative for each of the centres where PAPs are concentrated. The various Ministerial and Departmental representatives will be appointed by KeNHA while PAP representaives will be elected by the PAPs at each of the areas and centres affected by the road project. The Committee will operate at the county level and will be chaired by the KeNHA sociologist incharge of the road project. The experts in the committee will include but not limited to the following: Legal Advisor, Surveyor, Highways Engineer, Socio-Economist, Environmental Expert, Community Liaison Officer, Database Officer, KeNHA Representative and Registered Valuer.

The committee's role will include resettlement and compensation, ensuring promotion of avenues to address grievances and ensuring continuous communication between the PAPs and KRU and other stakeholders. The experts will also provide assurance on fair and timely compensation.

12.1.2.1Responsibilities of the Local RAP Implementation Committee (RIC)

The RAP implementation committee will set out the framework for policies, principles, institutional arrangements schedules, and other indicative budgets to facilitate the project resettlement process. The Committee shall;

- Verify land tenure and ownership for compensation purposes;
- Provide Resettlement and compensation on the ground;
- Link the PAPs to other stakeholders:
- Create awareness on land alternatives and resettlement options and identification of alternative land for relocation and resettlement;
- Ensure that displaced persons are informed about their options and rights pertaining to resettlement, offered choices and provision of viable alternatives;
- Provide prompt compensation at full replacement cost for acquired land, losses of assets attributable directly to the project; offer support after displacement for a transition period, based on a reasonable estimate of the time likely/to be needed to restore their livelihood and standards of living;
- Provide development assistance in addition to compensation measures;
- Compute the Actual number of persons to be resettled and lost structures;
- Conduct resettlement and monitor progress of resettled persons

12.1.3 PAP Committee and Role of PAPs

Under the guidance of the KeNHA Resettlement Unit (KRU) a PAP Committee shall be formed. There will be various PAP committees elected by PAPs from the various town and rural centres along the whole stretch of the road. Each cluster of PAPs will select people among themseleves who will be capable of representing their views at the various forums where it will not be possible for all the PAPs to participate in person. Each PAP committee will consist of a Chairman, Secretary and Treasurer and 2 Members. The committees should at minimum have 20% women and 20% youth representative to make it gender and age sensitive.

Constitution of the PAP Committee The Committee will be composed of the following:

- Members from KeNHA
- Local Administration (DOs and Chief from the project area),
- An independent Valuer
- PAPs representatives

The PAPs representatives must be some of the PAPs. The committee will act as the voice of the PAPs. The PAP Committee shall be charged with the task of monitoring and evaluation of the PAPs and resettlement since they would be familiar with the various variables in the project area. It will therefore be enlisted to continue the post project evaluation system and conduct actual monitoring and reporting. The PAP committee will periodically provide KeNHA with collected data for report preparation.

12.2 Capacity/ responsibility of KeNHA (KRU)

The KRU will be responsible for the following:

- Ensure maximum participation of the affected people in the planning of their own resettlement and post resettlement circumstances.
- Oversee the formation of PAP Committee (PC)
- Accept financial responsibility for payment or compensation and other designated resettlement related costs.
- Ensure detailed valuation of the structures in order to determine the case to case value of each component of the project and agree upon a value for compensation.
- Ensure that the affected persons receive their compensation in terms of amounts agreed.
- Ensure monitoring and evaluation of the PAPs and the undertaking of appropriate remedial action to deal with grievances and to ensure that income restoration are satisfactorily implemented.
- Oversee the implementation of the RAP.

13 MONITORING AND EVALUATION

13.1 Internal Monitoring

The proponent (KeNHA) will conduct regular internal monitoring of the resettlement performance of the operation through the Resettlement Action Implementation Team which will be responsible for implementing resettlement and compensation activities and monitor its efficiency.

The objective of internal monitoring and supervision will be:

- To verify that the valuation of assets lost or damaged, and the provision of compensation, resettlement and other rehabilitation entitlements, has been carried out in accordance with the resettlement policies provided by the Government of Kenya.
- To oversee that the RAP is implemented as designed and approved;
- To verify that funds for implementation of the RAP are provided by the Project authorities in a timely manner and in amounts sufficient for their purposes and that such funds are used in accordance with the provisions of the RAP.

13.1.1 Responsibility

The Local RAP Implementation Committee (RIC) shall be charged with the task of monitoring and evaluation of the PAPs since they would be familiar with the various variables in the project area. It will therefore be enlisted to continue the post project evaluation system and conduct actual monitoring and reporting. The RIC shall periodically provide the Proponent with collected data for report preparation.

13.1.2 Performance Monitoring

Successful project management requires the ongoing monitoring of performance in order to generate data by which to judge the success or otherwise of a project. The data generated relates to the indicators to be monitored. It can be qualitative or quantitative in nature depending on the parameter being monitored. The data will be collected on a regular basis and accumulated. It is then analyzed and presented appropriately.

13.1.3 Impact Monitoring

The project will generate both positive and negative impacts, social monitoring is envisioned as an important process in the implementation of RAP. The monitoring programme will reveal changes and trends brought about by the presence and operations of the project. Such information will be useful in the formulation of sustainable project management and operation strategies.

The basic activities for a sound-monitoring programme for the road upgrading project once it starts operating should at least include the following parameters:

- Quality of life of the resettled persons
- Change in health trends of persons affected by the project
- Identification of unexpected environmental impacts

13.1.4 Monitoring and Evaluation Indicators

The main internal indicators that will be monitored regularly:

- That KeNHA's entitlements are in accordance with the approved policy and that the assessment of compensation is carried out in accordance with agreed procedures
- Payment of compensation to the PAPs in the various categories is made in accordance with the level of compensation described in the RAP
- Public information and public consultation and grievance redress procedures are followed as described in the RAP
- Relocation and payment of subsistence and shifting allowances are made in a timely manner
- Restoration of affected public facilities and infrastructure are completed prior to construction
- Formation of KeNHA Resettlement Unit (KRU) and Resettlement Implementation Committee (RIC).

Refer to **Annex 13** for Monitoring Indicators

13.1.5 Frequency of Monitoring

The frequency of monitoring is influenced by the parameter being monitored and its dynamic nature. The monitoring frequency will vary from monthly to yearly. The frequency of monitoring of other parameters will be determined by project implementers. Refer to **Table 12** for frequency of monitoring various RAP parameters

Table 12: Frequency of Monitoring

Nr	Parameter	Monitoring Frequency
1.	Payment of Compensation	Monthly
2.	Resettlement of PAPs in the new environment	Monthly
3.	Compliance with resettlement conditions	Monthly
4.	Health trends of PAPs	Quarterly
5.	PAP income restoration	Half Yearly
6.	Quality of life of PAPs	Quarterly
7.	School attendance of PAP children	Quarterly
8.	Effectiveness of mitigation measures	Monthly

13.2 External Monitoring

An independent monitoring unit (IMU) should be established to evaluate implementation of compensation and resettlement. The IMU shall be appointed to monitor the resettlement and compensation process and implementation of requirements to verify that compensation, resettlement and rehabilitation have been implemented in accordance with the agreed RAP. The IMU should include personnel with resettlement and social development experience and should include relevant representatives from KRU. The project-affected persons should be represented through relevant PAP Committee. The objective of this unit will also be to provide a forum for skills sharing and to develop institutional capacity. It is important that the Unit is able to maintain a strong, independent position and provide constructive feedback to the project to ensure the objectives are met.

13.2.1 Objectives

The IMU will also be involved in the complaints and grievance procedures to ensure concerns raised by PAPs are addressed.

More specifically, the IMU will carry out the following:

- Review the results of the internal monitoring and review overall compliance with the RAP:
- Assess whether relocation objectives have been met especially with regard to housing, living standards, compensation levels, etc.;
- Assess general efficiency of relocation and formulate lessons for future guidance
- Determine overall adequacy of entitlements to meet the objectives.

13.2.2 Agency Responsibilities

The proponent will hire an organization for the independent monitoring and evaluation of RAP implementation. The organization, to be called the Independent Monitoring Agency (IMA) will be specialized in social sciences and experienced in resettlement monitoring. The IMA should start its work as soon as the verification RAP Study has been completed.

13.2.3 Methodology

The Monitoring & Evaluation advisors will use the baseline information that has been collected included in this RAP report and would hence be in a position to note changes that may have occurred before and after resettlement.

The basis of comparison could be qualitative, although a quantitative measure could also be developed based on per capita maintenance costs. The Consultant would recommend land for land compensation rather than financial compensations for land. This would ensure that funds are not misused causing displacement to family members. The choice of the relocation site would depend the PAPs.

13.2.4 Detailed Measurement Survey

This method of survey will require the examination of all the affected households and valuation on the final valuation figures. This will be carried out after the detailed design survey has been carried out and the final route established.

13.2.5 Sample Socio-economic Survey

The sample socio-economic survey comprised of detailed census/inventories with affected households as well as formal and semi-formal discussions with sample focus groups. The consultant also developed a comprehensive questionnaire for household data collection. The questionnaire captured the following information:

- Household Bio data (Demographic information)
- · Sources of income
- Level of education
- Infrastructure inventories including land, common properties, Houses, fences, commercial properties and social services infrastructure.

13.2.6 Participatory Rapid Appraisals

Participatory Rapid Techniques was used to identify the PAPs along the route of the proposed project to identify possible project impact on human settlements and farmland. It was semi structured and carried out by an interdisciplinary team over a short time of field survey. This was the starting point in understanding the local situation and was a quick and easy way of gathering information. The process involved secondary data review, direct observation, semi structured interviews and key informants.

13.2.7 Database Management and Storage

The proponent shall prepare and maintain a well-organized database of all project information in both hard and soft form. The information shall be backed up in the safe to ensure continuity in the event of loss of the master files. This database will require updating when new project information is obtained, analysed and new reports generated.

13.2.8 Reporting

After monitoring and evaluation, reports shall be generated. Reporting stage will follow the analysing of information. The report will be in written form and can be made into PowerPoint presentation. These reports shall be put on the proponent website for access by interested and affected parties.

13.3 Evaluation Method of Monitoring Results

Evaluation of monitoring results may use either quantitative or qualitative methods, or a mix of the two. As a starting point it will be useful to consider the various sources and type of data to be evaluated then choose an appropriate method of presentation.

Numerical data which includes the size of acquired land, number of affected households and structures, age categories of Household heads of the PAPs and gender distribution of the PAP Household head have been analysed using quantitative methods while qualitative data which include the quality of life before and after resettlement will be analysed using qualitative methods.

Table 13: Monitoring and Social Management Plans

Nr	Social Impact	Project Stage	Mitigation Action Plans	Responsibility	Timeframe	Monitorable Indicators /
	Aspect					Cost Estimates (KShs.)
1.	Relocation of Business/homesteads	Pre-Construction	No Verify land tenure KeNHA Discuss with the resident/owner		Finalised before the start of construction	Alternative land for relocation identified
			Develop detailed resettlement			Resettlement Plan
			plan			Number of persons resettled
			Conduct resettlement			Reports on resettled persons
			Monitor resettled persons			Costs to be determined by resettlement in the plan
						At least six months duration
2.	Community misconceptions	Pre-Construction, Construction and Commissioning	Awareness creation amongst the community on the project facts	KeNHA Local provincial administration Local leaders	Commissioning of the project As required during implementation	Number of meetings held Community issues responded to Project progress reports and monitoring reports PAP Meeting during compensation Costs Estimated at KShs 50,000/= per meeting.
3.	Increase in social vices	Commissioning and Construction	Conduct Information Education	Ministry of Education	Regularly	Number meetings held
	vices	and Construction	and Communication (IEC) amongst the community and the		throughout the project duration	Number of condoms distributed
			project staff	Health Centres Provincial	project daration	Number of IEC materials distributed
				Administration		Project progress reports
			Provide condoms at village and	Local leaders		Costing- t/shirts, fliers, posters,
			project level Other development partners			road-shows, condoms, banners.

Nr	·		Responsibility	Timeframe	Monitorable Indicators /				
	Aspect					Cost Estimates (KShs.)			
4.	Loss of farm size	Pre-Construction	Verify land tenure	Ministry of Lands	Finalised before the	Resettlement Plan			
			Discuss with the resident/owner Develop a resettlement plan	Resettlement Plan Expert Resettlement Plan	start of construction	 Reports on loss of farm size Reports on adoption of alternative land use practices Cost as in the resettlement plan 			
			Create awareness on land alternatives Expert Ministry of Land			At least six months duration			
5.	Cultural and religious based community conflict	Construction	Promote activities that are common to the communities and project employees that create common understanding such as sports	Project management Local leaders	Ongoing during construction	 Number of joint meetings/activities held Progress reports of project Costs: activities once a month 			
6.	Security	Construction	Form joint security committees Create awareness amongst the traders and communities on cheating and deceit	Local community Provincial administration and the project contractor	Ongoing during construction	 Number of committees formed Number committee meetings held Records of incidences addressed 			

14 IMPLEMENTATION SCHEDULE

The implementation time schedule shall depend on the processes grouped under the three phases namely preparation, implementation and post implementation. Refer to **Table 14** for the project implementation schedule. The starting date is not definite as it was not indicated under the ToR but shall be pegged on:

- Identifying the responsibilities of the various parties that are to implement the resettlement plan;
- Identifying and measure the impact of the project on the people who live and work on land within the road ROW and the surrounding areas;
- Carrying out PAP verification;
- Presentation of policies to deal equitably with the Project Affected Persons (PAPs);
- Provide an opportunity for further consultation of PAPs and Stakeholders on the project plans and provide meaningful input into the design and implementation of the overall program;
- Developing compensation, relocation and rehabilitation measures that will enable the affected people to re-establish their lives on an equal or preferably better-than-before basis; and
- Preparing cost estimate of all measures required to achieve successful implementation of the compensation and resettlement program. Carry out review of the budget during project review;
- Carrying out monitoring of the PAPs resettlement.

Table 14: Project Implementation Schedule

Nr.	Task (Activity)		Period (Month)																		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	29
1	Public consultation and awareness campaigns with the PAPs.	٠	•	*	•	•	•	•	•	٠	•	•	•	•	•	•	•	•	•	•	•
2	A Verification RAP Study of the road corridor, Socio- economic activities of the PAPs and identification of structures and other physical features requiring evaluation.																				
3	Acquisition of land for road rehabilitation																				
4	Putting together the required machinery, legal and educational processes, training of resettlement staff																				
5	Compensation and resettlement of PAPs (Sourcing of resettlement sites in consultation with PAPs &stakeholders). Use of media like radio to disseminate information on meetings with PAPs					ı															
6	Detailed road route survey					1															
7	Clearing of proposed road corridor earmarked for rehabilitation and construction activities						İ														
8	Monitoring and evaluation of resettlement of PAPs especially vulnerable groups			*	*	•	•	•	•	•	*	•	•	•	•	•	*	•	•	•	•

15 COSTS AND BUDGETS

The RAP budget has been determined for the land parcels, structures, businesses and trees affected by the 240km long stretch of the Proposed Rehabilitation of Lodwar-Lokichogio-Nakodok Road (A1) project.

15.1 Total RAP Budget

Taking into account all factors, it is our opinion that compensation for land, structures, loss of business and trees to be affected during the Proposed Rehabilitation of Lodwar-Lokichogio-Nakodok Road (A1) and free from all encumbrances is KShs. 1,427,092,036 (Kenya Shillings One Billion Four Hundred Twenty Seven Million Ninety Two Thousand and Thirty Six Only), broken down as given in **Table 15.** Refer to **Annex 1 - 5** for the list of PAPs and the Valuation Tables. The project may finance supporting infrastructure and resettlement activities. KenHA will finance the purchase of land and cash compensation.

A 15% disturbance allowance for all affected land and structures has been included.

Table 15: Summary of Estimated Compensation Valuation (KShs)

No.	Property		Total Amount (KShs)
1	Land		451,727,365
	Government Land	268,821,815	
	Individual Land	182,905,550	
2	Structures		493,278,105
3	Loss of Business		286,780,698
4	Trees		33,910,000
5	Re-location of Graveyards/ Cemetries		161,395,868
	Grand-Total (KShs)		1,427,092,036

The budget should however be set higher than this to cover for other contingencies. In addition, there may be price variations occurring between the date of valuation and the time the actual compensation is paid out.

15.2 Flow of Funds

It will be the responsibility of KeNHA to channel payment directly to affected persons bank account with respect to land, houses, other structures and any allowances. KeNHA will also be responsible for contracting an independent institution to undertake the independent monitoring to evaluate how the compensation process is carried out and measure its success or otherwise.

15.3 Compensation Prices for Structures

Compensation price rates from different players vary considerably. For the purposes of this exercise, the current market cost of putting up a similar structure has been used to determine the compensation value for structures affected by the road project. Compensation price rates used varied from KShs 400 - 800 per sq. feet for temporary houses, KShs 900 – 1,200 per sq. feet for semi-permanent houses, and KShs 1,500 - 2,500 per sq. feet for permanent houses.

15.4 Project Approach

The calculation of replacement cost at current market values was made using information collected from both secondary and primary sources. There were direct interviews with project affected and interested persons located along the Lodwar-Lokichogio-Nakodok Road (A1) earmarked for rehabilitation and from the local administration.

Replacement cost at current market value for community and commercial land will be based on its productive potential or its current market value. Replacement cost at current market value of houses and structures will be based on current fair market prices for new building materials and labour, without any deductions made for depreciations or for salvaged building materials. The market value of land structures forms the basis for replacement cost at current market values of these assets.

15.5 Findings

Majority of the land in the project area is community land with the process of adjudication on going and some individual/private organisation land owners either have land titles or are in the process of obtaining them. The land parcels/ plots of land are relatively small and are under leasehold tenure. The parcels are located within the town centres.

The project area has plenty of land that would be acquired by the Proponent to resettle the PAPs as compensation for the land lost to the project. Consultations with the PAPs who are peasants indicated that land for land compensation would be more preferred option than cash compensation and they would prefer to be relocated within their neighbourhood. The areas affected by the road rehabilitation project do not have an active property market.

There is likely to be a hike in land prices from potential land sellers when the project is started since the demand for resettlement land will be higher.

16 CONCLUSIONS AND RECOMMENDATIONS

16.1 Summary of Key Findings

The entire road project is in Turkana County from Lodwar unto the Kenya/ South Sudan Border:

- Displacement of persons will mainly occur at various town centres along the road;
- The local community, stakeholders and PAPs showed significant support the project
- Project affected persons at town centres expressed concern over the significant number of commercial buildings that are affected
- Project affected persons expressed concern on the transparency of the valuation and compensation to project displaced persons.
- The community awareness of the proposed project is rated very high with many expectant of the gains that will accompany its implementation while others were pessimistic due to endless promises that they claim have been made at various forums in the past on the rehabilitation of the road.
- Some of the PAPs owning structures within the 60m ROW have title deeds for the land and some PAPs. It is however illegal to hold a title on ROW and therefore presents an issue.

Wishes of the PAPs

- All PAPs are willing to be moved however full compensation must be guaranteed.
- Majority of the PAPs who have to be resettled would wish to be settled close to where their present habitat is located.
- The PAPs are a mix of locals and immigrant from other counties for business purposes.

Table 16: Summary of General Census Data

No.	Activity		Results
1	Proposed Rehab. of Lodwar-Lokichogio-Nakodok	Rd (A1) Specifica	tions
1.1	Length of Road		240 km
1.2	Road Wayleave		60 m
2	PAP Population		6,227
2.1	Adults		2,504
2.2	Children		3,723
3	Special Groups of Persons		111
3.1	Widow		55
3.2	Widower		3
3.3	Orphans		21
3.4	Physically Challenged		14
3.5	Terminally ill		3
4	Category of Project PAHs		1,143
4.1	Private Individuals		1,043
4.2	Government		17
4.3	Churches		18
4.4	Private Companies		14
4.5	Self Help Groups		16
4.6	NGOs		3
4.7	School/College		5

4.8	Community Land	1
4.9	Unknown	26
5	No. of PAHs / Affected Property	1,143
5.1	Land Only	194
5.2	Structures Only	85
5.3	Business Only	359
5.4	Land & Structures	289
5.5	Land & Trees	8
5.6	Land, Structures & Business	78
5.7	Land, Structures & Trees	42
5.8	Others	88
6	Land and Structures	
6.1	Number of Individual Land Parcels	605
6.2	Size of Government Land to be acquired (Acres)	2,457
	Government Land	2,338
	Individual Land	120
6.3	Number of Structures	1,099
7	Affected Trees	
7.1	Number of PAPs	66
7.2	Number of Trees	723

16.2 Conclusions

The Proposed Rehabilitation of Lodwar-Lokichogio-Nakodok Road (A1) is a viable project that will benefit the community by improving transportation of people and goods, security, enhanced access to the northern areas of Kenya and increase in trade and economic activities in the region. The proposed project will create displacement of persons, loss of livelihood and some interference with resources and sensitive receptors during construction, however there are many shot and long term benefits that will arise from the proposed project.

Where displacement or impact is unavoidable, appropriate mitigation measures will be put in place to reduce to a minimum or eliminate any undesirable effects of the project Majority of project affected persons are commercial entrepreneurs and some are pastoralists.

There was prior awareness and knowledge of the project from the initial RAP community sensitization and consultation exercise. After this study the project affected persons should all be continuously informed of the project progress and the timelines of the major activities like compensation offer negotiation, compensation payment, relocation and resettlement.

Most of the land in the project area is community land with the process of adjudication on going and some individual/private organisation land owners either have land titles or are in the process of obtaining them. The affected land parcels where the owners are settled were keen to be informed on the criteria to be used in compensation so that they would be sure of their entitlement.

The Turkana County government and local communities in the proposed project area will fully support the project but requested to be fully informed on the plans and their concerns looked into. The communities also requested to be engaged in the planning and

implementation at all levels so that they can be sure to get first-hand information and details regarding compensation and resettlement including timelines. There is also need to involve the chiefs of the areas where the road has affected households and pieces of land in order to verify the legal owners before compensation to avoid family feuds and mistrust.

16.3 Recommendations

- 1. The Proposed Rehabilitation of Lodwar-Lokichogio-Nakodok Road (A1) project is viable, important for the local community and NGOs providing humanitarian assistance to populations living in remote areas. However the study has established that there will be significant displacement of persons requiring compensation and resettlement.
- 2. KeNHA should ensure that all affected persons are consulted and resettlement options offered to those affected. The PAPs should be fully compensated in a timely manner. The identification and acquisition of land for resettlement should be done with due consideration of the wishes of the affected persons and support given after resettlement to ensure that the project does not leave them worse off.
- 3. All the project affected persons who will be displaced or relocated, should be informed in good time (given approximately 1 month to prepare them for relocation) and modalities of conducting resettlement counselling put in place.
- 4. Majority of the affected parcels of land in the town and market centres where the road is going to pass are small plots and therefore will cause displacement and also loss of commercial structures. It is therefore recommended that KeNHA negotiate for acquisition of the affected portions of land plus compensation for any structures that may be demolished during project implementation. Land will need to be acquired within the town area close to the current site.
- 5. Consideration should be done to move the Truck parking areas from its current proposed areas. These parking areas have been proposed on the current cemetery areas within Lodwar & Kakuma towns
- 6. All staff operating machinery and vehicles should be qualified and licensed to ensure safety of personnel, other road users and local population:

16.4 Overall Opinion of the Consultant on the Proposed Road Rehabilitation Project

The Proposed Rehabilitation of Lodwar-Lokichogio-Nakodok Road (A1) is considered important, strategic and beneficial in improving transportation, enhanced security, enhanced commercial activities and provision of humanitarian assistance to the northern region. The consultant highly recommends that the proposed project be allowed to proceed taking into account the Designs, proposed Mitigation Measures and Social Management Plan.

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ANNEXES

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Annex 1: Sample of PAP Household Questionnaire

HOUSEHOLD QUESTIONNAIRE: <u>SURVEY OF AFFECTED HOUSEHOLDS</u> (<u>Strictly Confidential</u>)

Name of Interviewer		Date
Demographics:		
1. Name of Respondent		
2. LR No		(Owner or Occupier)
3. Male/Female		
4. Marital Status (Married/ S	ingle/ Widowed/ D	vivorced/ Separated/ Other
5. Date of Birth		OR Age in years
6. Level of Education attain	ed:	
Not attended any school	Primary	Secondary
Post-Secondary	Graduate	Post Graduate
7. ID/Passport No		
8. Main Occupation	Otl	her sources of income
9. Religion	Tribe	
10.Contacts: Tel	Postal A	Address
Village/Estate	Sub Ward	Ward
Sub County	County	r
GPS coordinates A) Geo	graphic	B) UTM
11.Status: Private landowne	er	Leasing land
Squatter	Other	Title Deed No
12.No. of adults in the house	ehold:	
13. No. of Children (depende	ents) in the househ	nold:

14. How many people live in your household (Dependants to HH):	
Provide Details below: Starting with HH	

#	Name	Sex (M/F)	Age (Yrs)	Level of Education	Occupation	Relationship with HH Head

Widov	nere people in the household with special needs (Elderly, Disabled, wed, orphaned) Yes/No If Yes, indicate type of disability.
Land:	
16. How I	ong have you lived here?
	is the land use (s)? (Commercial or subsistence). Give details
(M^2) (is the size of the land occupied and used by the household?
19.What (M²)	is the size of the land affected by the proposed project?
20.Type	of land acquisition effect? (Partial or Total)
how w	there been conflicts over this land (Y/N)? If yes whenvere they resolved?
Structure	es:
22.No. of	f structures & installations in the compound
23. Do yo	ou own the structure (s)? Yes/No
24. If No,	explain

25. If not, where does the (other) owner live?								
26. If you let, what is the rent paid per month? KES								
	27. Is the house connected to electricity? Yes/No							
For lighting?	For cooking?	Heating?						
	29. Is your house connected to the main sewerage system? Yes/No If no, how is human waste disposed of?							
30.Is your house connected to piped water? Yes/No If no, what is your source of water?								
Livelihoods:								
31. Main occupation per day	Income KE	S per month or						
32. Other sources of income?								
Source of Income	Location	Income Per Month per day						
33. Do you own livestock? Ye	es/No. If yes, how many	?						
34. Do you cultivate crops? Y								
Health & Community Par	rticipation							
35. What health services exis	t in your community							
36. Approximate distance to the health facility?(Km)								
37. What are the most common diseases found in the area?								
38. What measures do you have to curb/contain these diseases?								
39. Do you have anyone in your household who is terminally ill or disabled? Yes/No.								

	If Yes explain					
40	O. Are you actively involved in any group (self-help/women's group/men's group other); specify					
<u>Pu</u>	blic Institutions/Community Struct	ures:				
41	 What Public facilities are there in your neighbourhood? Schools, Hospitals, Place of Worship, Cattle Dip, Market Centre, Watering Point and Grazing areas 					
		ers of your household?				
	.Do you anticipate that the proposed or your ease of access to them? Yes					
 Δ+1						
		- f O N/ (N)				
44	.Have you neard about this project be whom?	efore? Yes/No If yes, from				
45	briefly)?	enefits of the proposed project (describe				
46	.What impacts do you think this proje	ct will have on you?				
[Positive Impacts	Negative Impacts				
-	•					
47	.What are your expectations from the	project?				
48	.Which aspects of cultural, sacred an by the project? Name and exact loca	d archeological sites might be threatened				
49	9. What challenges do you think the proposed project will face during construction commissioning and operation? Expand					
50	.Do you approve or disapprove the pr	roposed project?				

51.	What roles and contributions/sacrifices is your community willing to make for the proposed project? E.g. If the project has to pass through your land can you give up your land if offered compensation
52.	Would you prefer land for land compensation or cash for land compensation?
53.	If you were to be affected by the project and were required to relocate after compensation, where would you like to be resettled? Give possible resettlement options:

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Annex 2: Minutes of Consultation Meetings

MINUTES OF ESIA AND RAP STUDIES FOR PROPOSED UPGRADING OF THE LODWAR-LOKICHOGIO-NADAPAL ROAD HELD AT MIKEKA GROUNDS, LODWAR TOWN ON 2ND DECEMBER 2014 AT 10.00 AM

Number Present: 36

Attendance List:

No.	Name	No.	Name	No.	Name
140.		NO.		140.	
1	Elsie Ng'endo	13	John Eguman	25	Edward Ayacko
2	Carolyne Makhulungu	14	Sally Akiru	26	Doi Jomnngilimu
3	James Aletia	15	Jennipher Lomase	27	Daudi
4	Gabriel Ebulon	16	Rachael Lobei	28	Dan Ewoi
5	Lokolio Nachom	17	David Ekitala	29	Lazarus eroi
6	Mary Akai	18	Francis Emoni	30	Jackson
7	Alice Lomilio	19	Emase Ibrahim Ngipoocho	31	Stephan S. Porowa
8	Samuel Longatunyo	20	Esther Kachinga	32	Somn Kebenei
9	John Emuria	21	Florence Ekaran	33	Chris Mwangi
10	John Eregae	22	Jackson M. Eremond	34	John Otuoma
11	Liobur Muya	23	Eunice Apaiyo	35	Irene Muchoki
12	Edapal Aloo	24	Michael Muya	36	John Otuoma

AGENDA OF THE MEETING

- 1. Opening of the meeting/Word of prayer
- 2. Introduction of participants
- 3. Purpose of conducting the consultation/sensitization meeting with the community and relevant stake holders
- 4. Introduction of the proposed project and its various components, benefits and possible impacts/mitigation measures
- 5. Views and questions from the participants of the proposed project with responses and clarifications given by RAP review team
- 6. Closing remarks
- 7. A.O.B
- 8. Closing/prayer

Minute 01: Opening of the meeting

The meeting commenced with a word of prayer at 10.00 a.m. by Alice Lomulen.

The acting area chief Patrick Lorogoi welcomed all members and told them to embrace the long awaited road project.

Minute 02: Introduction of the participants

The acting area chief introduced the meeting organizers who included his colleagues and peers from both the central and county governments and the RAP review team. All organizers introduced themselves by stating their names and roles in the government and in the RAP review team. The RAP review team leader gave an introduction of the project and explained the positive and negative impacts that the project will have towards the community and the region.

Minute 03: Purpose of conducting the consultation

The Sociologist from the team of experts explained the importance of public participation and consultations before the project is undertaken. He explained that that would help in giving the communities a sense of ownership of the project. He also explained the importance of the project and stakeholders involvement in the project.

Minute 04: Views and questions from the participants of the proposed project with responses and clarifications given by RAP review team

Q: The proposed project is of national benefit, what plans are there to compensate the affected persons in the event that the road affects their property? By Johnson Opoko-Vice Chair Flep

A: Property valuation shall be done in order to compute compensation packages of the properties that shall be affected and damaged including trees, buildings and other structures.

Q: In the recruitment of locals for employment opportunities, chiefs were the ones who mostly benefited; will the proponent involve other local leaders in planning for employment? By Johnson Opoko-Vice Chair Flep

A: Before coming to this meeting we had involved the local authority and due to the commitments some of them had they could not make it here. It will be the obligation of the proponent to consult with community leaders and other local leaders in identifying the candidates suitable for employment. Sometimes bringing leaders like MCAs is difficult.

Q: Did the public meeting planners engage all relevant local leaders including the county representatives? By Michael Ekai-Community Member

A: While planning and inviting people to the meeting, the RAP team had involved the local authority but due to other commitments some of them have, they could not make to the meeting.

Q: Huge vehicles especially trailers, trucks should not pass through Lodwar town, what was the consultant's take on that? By Michael Ekai-Community Member

A: The community leaders should liaise with the county government to plan and construct a bypass as the current road design does not include a bypass.

Q: There was need for involvement of locals in employment By Michael Ekai-Community Member

A: In terms of employment the Turkana locals will be given first priority when it comes to job distribution.

Q: Would bridges be constructed also e.g. at Kawalase river, laggas and drifts? By Peter Ekale Ekim

A: The design for the proposed rehabilitation of the road have provide for bridges at all the river crossings hence modern bridges will be constructed at all the necessary areas as per the design.

Q: How would employment be done with regard to local people? By Peter Ekale Ekim

A: The contractor and KeNHA will offer employment opportunities to the local communities depending on the job vacancies available and available local skills and capabilities.

Q: There were people with property within the 60m corridor, how would the proponent deal with it? By Peter Ekale Ekim

A: All affected persons by or community by the project shall be involved and consulted before the commencement of road construction. Compensation will cover all affected property and shall be paid prior to road construction and PAPs given sufficient time to relocate.

Q: There has been too much talk on the rehabilitation of the road but no tangible work has been done on the road, when will the road be constructed? By Hassan Ekoole

A: Since the project designs are ready and there are donors willing to fund the construction of the road, the construction works will start as soon as RAP is ready and approved and PAPs have been paid their compensation packages and relocated to other areas to clear the way leave area for the road construction.

Q: Would the proponent or contractor employ Turkana people as first priority? By Hassan Ekoole

A: In terms of employment the Turkana locals will be given first priority when it comes to job distribution. Residents of Turkana shall be considered for the jobs that the contractor will offer.

Q: Could the contractor make bridges over laggas and not drifts so that people do not have to wait when it rains? By Hassan Ekoole

A: The design for the proposed rehabilitation of the road have provide for bridges at all the river crossings hence modern bridges will be constructed at all the necessary areas as per the design.

Q: Could there be a bypass for heavy vehicles outside town?

A: The community leaders should liaise with the county government to plan and construct a bypass as the current road design does not include a bypass.

Q: When will the construction if the road commence? (Benard Ekoi)

A: Since the project designs are ready and there are donors willing to fund the construction of the road, the construction works will start as soon as RAP is ready and approved and PAPs have been paid their compensation packages and relocated to other areas to clear the way leave area for the road construction

Q: The road might affect livestock, what would the contractor do to address possible accidents? (Benard Ekoi)

A: Safety measures will be enforced by KeNHA. Grazing near the road will be prohibited. Road signs shall be erected to alert the drivers of crossing animals. A speed limit shall be set to regulate the speed of motorists.

Q: What amount would be the wage rate for employment? (Benard Ekoi)

A: It will depend with rates of Lodwar and the type of work performed.

Q: What criteria would be used to employ locals? (Benard Ekoi)

A: It will be based on knowledge, experience and work available

Q: What were the safety measures for locals living next to the road? (Benard Ekoi)

A: Safety measures will be enforced by KeNHA. Selling of goods on the road is prohibited; grazing near the road is also prohibited.

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Road signs shall be erected to increase road safety

Q: Would the contractor only employ educated Turkanas or all? Michael Lobor-Local leader

A: The available jobs will be diverse ranging from skilled to unskilled labour. The jobs will be available to all locals whether Turkanas or not

Q: Community members did not know the size of the road reserve; most of their plots/lands had no registered documents, where would they go? David Esakor-Local leader

A: Details and information of ownership of land are with the chiefs, clan elders and village men, they will help the RAP team in identifying private parcels of land and their owners for valuation and compensation purposes.

Q: Most people have built their houses next to the road. Where would they go if required to relinquish the land for the road expansion? Would they be paid for the house only or given alternative land? By Mary Akai

A: The affected will be required to relocate to another area outside the required way leave area. If the land and structure belong to the individual PAPs, she/he will be compensated for both. The community committee on compensation lead by the chief will be in charge of identifying the owners of the plots. Minutes of the meeting will be vital to show the proceedings and resolutions made.

There being no any other business to discuss, the meeting came to an end at 12.00 pm by a word of prayer from David Ekitala.

MINUTES OF ESIA AND RAP STUDIES FOR PROPOSED UPGRADING OF THE LODWAR-LOKICHOGIO-NADAPAL ROAD HELD AT NASIGER LAGGA ON 2ND DECEMBER 2014 AT 2.00 PM

Number Present: 220

Attendance List:

	idance List:				
No.	Name	No.	Name	No.	Name
1	John Otuoma	75	Joshua Ekamuran	149	Wangiro Echwa
2	Elsie Ngendo	76	Edung Nakoli	150	Epur Lodeya
3	Carolyne Makhulungu	77	Paul Loluk	151	Aloto Ibuya
4	Edward Wahome	78	Peter Emulango	152	Akadeli Ekai
5	Chris Mwangi	79	Ekalale Etaan	153	Paulina Emase
6	Irene Muchoki	80	Ekiru Michael	154	Emojong Apur
7	Joseph Ekioor	81	Alex Etoot	155	Margret Apur
8	Joseph Enm	82	Eyomo Nachan	156	Elizabeth Asekon
9	Gideon Emonyang	83	Robert Epem	157	Winny Amuria
10	Peter Lokomar	84	Ekai Akodet	158	Lotiira Ekamais
11	Apua	85	Ewet Lokutan	159	Napei Ngimekuya
12	Lokoiioe Lominu	86	Etapan Lomuria	160	Christine Erot
13	Napvonyanb Lourien	87	Asinyen Eregae	161	Maximilla Karoi
14	James Ewoi	88	Damaris Nyipeyok	162	Anna Ikomwa
15	William Ebenyo	89	Rebecca Ngolan	163	Vivian Nabwel
16	Jama Ekeno	90	Aduk Edukon	164	Margret Adekei
17	Ayan Ome	91	Namenyana Eueesit	165	Alice Lotuko
18	Ekal Edukon	92	Edung Lokwasinyen	166	Susan Akadeli
19	Lomuria Eugene	93	Edapal Ngimekuya	167	Linnet Lomuria
20	Loter Esinyen	94	Enomo Akiru	168	Patricia Sammy
21	Meyan Nangiro	95	Louren Esekon	169	Selina Asekon
22	Elim Lokwawi	96	Apetet Elim	170	Agnes Ekuom
23	Amuron Edukon	97	Amoni Ewaar	171	Susan Amoni
24	John Moru	98	Ateban Ewaar	172	Hellen Lokaalei
25	Nakwawi Lokaala	99	Ikaal Amuron	173	Emase Lonyangakachekam
26	James Elipan	100	Selina Apun	174	Ledung Peter
27	Lokaala Akoolen	101	Nanyoki Lokulee	175	Esther Apori
28	Ekadeli Eregae	102	Hellen Ekurichanait	176	Ruth Longoli
29	Ekitela Apori	103	Jama Lochom	177	Agnes Napeyok
30	Apayo Samson	104	Hellen Ayanae	178	James Ebei
31	Sekon Lodio	105	Asekon Arupe	179	Thomas Ichodo
32	Epusire Tapen	106	Arukudi Naweet	180	Paulo Lobwin
33	Ipua Edukam	107	Alice Nangolol	181	Etaan Etiir
34	Peter Lopeyok	108	Lokol Nabor	182	Natodomer Akedor
35	Musee Lamulen	109	Apokot Achuka	183	Peikan Louren
36	Samuel Nakoli	110	Lopunicho Apori	184	Esinyen Agolor
37	Musee Kiapa	111	Hellen Nadongol	185	Noah Loter

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No.	Name	No.	Name	No.	Name
38	James Logiel	112	Rebecca Asukuku	186	Margret Ereg
39	Edung Lemuya	113	Selina Tioko	187	Alice erukon
40	Ekaate Edipot	114	Ngolan Nakoel	188	Philiminia Lorogoi
41	Losinyero Nakua	115	Jencinta Lokore	189	Paulina Arii
42	Atoo Ekuom	116	Nagsike Napeto	190	Esther Epat
43	Lomi Achukule	117	Rebecca Amoni	191	Edapal Ewoton
44	Patric Lowesia	118	Elizabeth Achuka	192	Alice Ekeno
45	Sammy Emuron	119	Elizabeth Apayo	193	Jencinta Ngomokia
46	Philip Lokol	120	Natuntum Ekingol	194	Lototua Lomulen
47	Nyachuro Itabo	121	Alice Etukoit	195	Joyce Akivu
48	Eregae Edukon	122	Apiding Elim	196	Lokirien Ekai
49	Saimon Ekitela	123	Ngisipaan Korodi	197	Franci Ekamais
50	Eyanae Lomitimio	124	Nabor Ngasike	198	Moru Lokato
51	Napeto Echowa	125	Achukut Kwee	199	Samal Lomodei
52	Ekalale Edoyaal	126	Susan Ayanae	200	Nakoli Loruman
53	Iria Longoli	127	Akodet Apakan	201	Natom Loruman
54	Samuel Ekeno	128	Esther Edupal	202	Echoeoe Nakali
55	Nakogon Lokoli	129	Nakucho Ngisaja	203	Napua Nyang
56	James Ewaor	130	Elo Looyo	204	Emal Namuret
57	Ewoton Esekon	131	Lolemu Nabor	205	John Auren
58	Benson Itao	132	Apur Lokaale	206	Erakwang Ekai
59	Lokakwangan Kitwang	133	Anna Asekon	207	Joseph Emase
60	James Ekalale	134	Atiir Ekalale	208	Esther Akeu
61	Engoomo Ekalale	135	Cecilia Lodeya	209	Isaac Elim
62	Estin Achuka	136	Aruto Lopua	210	Samson Maisa
63	Ekal Esukuku	137	Nakazelei Ekaale	211	Robert Lorot
64	Peter Losuru	138	Kuras Ngimekuya	212	Lodeya Etiir
65	John Nagis	139	Esinyen Ekai	213	Peter Ekipor
66	Alex Lochor	140	Idoko Christine	214	Esekon Lominae
67	Lokol Edukan	141	Awaar Echwaar	215	Meshack Ekadeli
68	David Ekuom	142	Agule Jamma	216	Ngasike Napeto
69	Emumia Esekon	143	Apua Auren	217	Esther Amekuri
70	John Ekal	144	Asurut Achuka	218	Asekon Edukan
71	Achuriot Edukan	145	Lobin Nakiru	219	Esther Nyanga
72	Ekitoe Nabor	146	Akal Ekiru	220	Adekei Edukon
73	Elim Ngisuru	147	Eripon Lookoli		
74	John Samial	148	Wachuch Emase		

AGENDA OF THE MEETING

- 1. Opening of the meeting/Word of prayer
- 2. Introduction of participants
- 3. Purpose of conducting the consultation/sensitization meeting with the community and relevant stake holders
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- 5. Views and questions from the participants of the proposed project with responses and clarifications given by RAP review team
- 6. Closing remarks
- 7. A.O.B
- 8. Closing/prayer

Minute 01: Opening of the meeting

The meeting commenced at 2.00 pm by a word of prayer from Pastor Robert Lorot. The acting area chief welcomed all members and told them to embrace the long awaited road project.

Minute 02: Introduction of the participants

The acting area chief introduced the meeting organizers who included his colleagues and peers from both the central and county governments and the RAP review team. All organizers introduced themselves by stating their names and roles in the government and in the RAP review team. The RAP review team leader gave an introduction of the project and explained the positive and negative impacts that the project will have towards the community and the region.

Minute 03: Purpose of conducting the consultation

The Sociologist from the team of experts explained the importance of public participation and consultations before the project is undertaken. He explained that that would help in giving the communities a sense of ownership of the project. He also explained the importance of the project and stakeholders involvement in the project.

Minute 04: Views and questions from the participants of the proposed project with responses and clarifications given by RAP review team

Q: There are graves within the road corridor, what would be done to them during the road construction? By Peter Lopeiyo

A: The road design cannot be change in an attempt to avoid just one grave: instead, the whole grave will be excavated and an area will be set aside for re-burial in co-operation with the community or affected family. In case of a cemetery, there would be consideration of the road design being change to avoid relocating an entire cemetery. This decision can only be made by the proponent after considering several other factors.

Q: Would the road project bring down trees along the road corridor yet they depended on them for fruits and pasture for their livestock? By Alex Elot

A: The trees along the road corridor will have to be uprooted and trees of the same or similar type be replanted after the completion of the road project for the pastoralist farmers who depend on their leaves for their livestock food and others use the ponds produced by these trees for human and livestock food.

Q: What would the proponent do to people staying on the road corridor? By James

A: They will be compensated for the affected property and be given sufficient time to relocate to new areas away from the proposed way leave area.

Q: What form of compensation would the proponent give for houses along the road for people who had temporary and permanent house? By John Nagis

A: Valuation of the houses shall be done depending on the type of the house and cost estimated together with 15% disturbance allowance. There shall be no discrimination on the type of structure.

Q: Pastoralists cross the road with livestock, would the road affect their movement? By Thomas Chodo

A: The community shall be limited to cross the road at specific areas only. These shall be areas with road signs and areas with speed limits that they will be required to use to avoid accidents.

Q: For those on the road corridor, how would their resettlement he handled by the proponent? By Agnes Lapeyo

A: The road corridor will be mapped to show where the road will pass before actual construction to know the affected individuals and their affected land size, tree and structures. These properties will be valued and compensation packages offered to each individual PAP

Q: Will it be only those with allotment letters who would be compensated or even those without? By Peter Miango

A: Compensation is for all whether with allotment letters or not. If you are living in a community land, the community shall be compensated and since not all members of the communal land shall be given money, they will be asked to choose a project that they will prefer to be of importance of them for consideration under KeNHA CSR program.

Q: Drivers who did not observe speed limit in market centres posed great risk to the community, what would the contractor do to address that? By Pastor Robert Loret

A: The road engineers have designed a mechanism to curb road accidents by e.g. providing for bumps and proper road signs in their design where animals cross the road and at the towns and shopping centres where human traffic is high and people likely to be crossing from one side of the road to the other Speed limit shall be set for vehicles entering and leaving the towns. Speed bumps will also be established to slow down over-speeding vehicles.

Q: Could the consultant consult every affected person or was this the only consultation encounter with the affected persons? By Margaret Adekai

A: There shall be other meetings organized with the project affected people only. The RAP Survey team shall visit and interview every PAPs as much as the PAPs will be available and those not available on the ground and their telephone numbers are available, they will be interviewed over the phone

Q: Would the contractor erect road signs? By Noah Lobilil

A: The road engineers have make provision of road signs in their design especially in areas where accidents are likely to occur to alert drivers of any potential danger on the road.

A.O.B

The community agreed that multiple mini bumps should be erected in areas crossed by livestock and at market centres, near public utilities e.g. hospitals and schools.

MINUTES OF ESIA AND RAP STUDIES FOR PROPOSED UPGRADING OF THE LODWAR-LOKICHOGIO-NADAPAL ROAD HELD AT NAKALALE (MAKUTANO GOLD) ON 3RD DECEMBER 2014 AT 9.00 AM

Number Present: 112

Attendance List:

No.	Name	No.	Name	No.	Name
1	Elsie Ngendo	38	Lokalei Eyenge	76	Echewa Apuyo
2	Edward Ayako	39	Justus Elim	77	Philip Erodi
3	Chris Mwangi	40	Anton Akorio	78	Eyeyen Nachikio
4	Caroline Makhulungu	41	John Espa	79	Benjamin Glamachi
5	Edward Wahome	42	Moses Ngikeny	80	Eriru Elamachi
6	John Otuama	43	Peter Namukan	81	Entikule Wachukul
7	Barnabas Eloiloi	44	Erongea Lobokoro	82	Etan Ekomwa
8	Ezral Lochoka	45	Ekal Ekali	83	Achim Lopiki
9	Willium Emus	46	Achome Lomil	84	Paul Esibiyan
10	Zakayo Lomanayo	47	Saimon Imo	85	Paulina Aroi
11	Francis Lomanjon	48	Sarahao Anam	86	Iria Enyanaham
12	Joseph Ebel	49	Damarie Ingule	87	Amedek Eyaman
13	James Lomuria	50	Selina Eurena	88	Lokwawi Whayow
14	Ikamar Ilamor	51	Anna Ekiru	89	Akomwa Engelen
15	Yomer Lorukia	52	Lina Ipaso	90	Namgow Nyirusio
16	Simion Ikoel	53	James Echukut	91	Anna Lukuri
17	Lukas Ekeru	54	Apaechei Tioko	92	Lodaan Nawesi
18	James Ekai	55	Nakalei Lamu	93	Pauline Akai
19	Peter Ekomwa	56	Lodua Lomil	94	Nancy Imutun
20	Peter Achwa	57	Kaikeny Angiron	95	Lren Mlee
21	Williuam Loyiir	58	Ngasoban Longele	96	Rebecca Ngikweny
22	Peter Eron	60	Emavikir Mukaa	97	Pricila Ewoi
23	Joseph Lopeto	61	Lokathio Jkare	98	Betrice Apem
24	Etonge Lotege	62	Wachele Engelan	99	Philipian Mwangi
25	Joseph Wambere	63	Kute Engelan	100	Christina Yeree
26	Joseph Epuk	64	Etaan Longoli	101	Elizabeth Epao
27	Michael Etao	65	Lokinding ngiroso	102	Margaret Longor
28	Jeremeh Apao	66	Akori Kuya	103	Maurine Namoton
29	Benson Asurao	67	Lokadui Amase	104	Arukundi Agiron
30	Madeve Lowao	68	Nawesi Ariong	105	Ajere Nyagana
31	John Atabo	69	Robert Lowoho	106	Lobe Abwalopok
32	James Enyangon	70	Ikapolo Anyaman	107	Jerenja Asiyen
33	Daniel Lomobok	71	Namiyo Nachukul	108	Akuwom Etiir
34	Abraham Lorogoi	72	Muya Ekoriongow	109	Losur Akidor
35	Peter Ekidor	73	Nagiro Sike	110	Akaale Ewoi
36	Anna Louyen	74	Atoot Lokidor	111	Akuala Loduwa
37	Peter Maraka	75	Nakuruka Eruhiricon	112	Irene Muchoki

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AGENDA OF THE MEETING

- 1. Opening of the meeting/Word of prayer
- 2. Introduction of participants
- 3. Purpose of conducting the consultation/sensitization meeting with the community and relevant stake holders
- 4. Introduction of the proposed project and its various components, benefits and possible impacts/mitigation measures
- 5. Views and questions from the participants of the proposed project with responses and clarifications given by RAP review team
- 6. Closing remarks
- 7. A.O.B
- 8. Closing/prayer

Minute 01: Opening of the meeting

The meeting commenced at 10.00 a.m. by a word of prayer from James Ikoel.

The area chief welcomed all members and told them to embrace the long awaited road project.

Minute 02: Introduction of the participants

The acting area chief introduced the meeting organizers who included his colleagues and peers from both the central and county governments and the RAP review team. All organizers introduced themselves by stating their names and roles in the government and in the RAP review team. The RAP review team leader gave an introduction of the project and explained the positive and negative impacts that the project will have towards the community and the region.

Minute 03: Purpose of conducting the consultation

The Sociologist from the team of experts explained the importance of public participation and consultations before the project is undertaken. He explained that that would help in giving the communities a sense of ownership of the project. He also explained the importance of the project and stakeholders involvement in the project.

Minute 04: Views and questions from the participants of the proposed project with responses and clarifications given by RAP review team

Q: Would the PAP be required to relocate from his current home immediately or after compensation money is paid? By Jeremiah Opao

A: Sufficient time will be given to all the PAPs to relocate elsewhere once they are compensated. After compensation packages are paid, the PAPs will be given 90 days to relocate elsewhere.

Q: There were existing graves on the road corridor, how would the contractor handle this? By Jeremiah Opao

A: The whole grave will be excavated and there will be an agreement with the community and concern family on where the body will be re-buried to avoid the road having too many turn in an attempt to avoid every grave on its corridor.

Q: The road project sometimes leaves behind degraded quarries, could the consultant clarify on that By Jeremiah Opao

A: It will be responsibility of KeNHA and the contractor to ensure that such quarries are rehabilitated after the completion of the road project e.g. covering with excavated top soil which is usually removed during initial construction of the road.

Q: The local land owners do not have supporting documents for their plots, how will they be assisted? By Zakayo Lominat

A: Details and information of ownership of land are with the chiefs, clan elders and village men, they will help the RAP team in identifying private parcels of land and their owners for valuation and compensation purposes.

Q: Could they be given adequate time by the proponent after being paid to enable them move? By Zakayo Lominat

A: Sufficient time will be given to all the PAPs to relocate elsewhere once they are compensated. After compensation packages are paid, the PAPs will be given 90 days to relocate elsewhere.

Q: Would the road project employ their people? By Simon Ikwele

A: The contractor and KeNHA will offer employment opportunities to the local communities depending on the job vacancies available and available local skills and capabilities

Q: Will every affected person be involved or will you work with their representatives in case they are away? By Simon Ikwele

A: The RAP Survey team shall visit and interview every PAPs as much as the PAPs will be available and those not available on the ground and their telephone numbers are available, they will be interviewed over the phone.

Q: Could the culverts be designed not to create laggas? By Ehukutu Lokoudekei

A: The new culverts will be constructed and erected in a manner not to create new laggas as the water that will collect in the culvert leaves them in the opposite side.

Q: Could the contractor spare trees on laggas? By Ehukutu Lokoudekei

A: The trees along the road corridor will have to be uprooted and trees of the same or similar type be replanted after the completion of the road project for the pastoralist farmers who depend on their leaves for their livestock food and others use the ponds produced by these trees for human and livestock food.

Q: Would the proponent give money or build houses for people during compensation? By Lochiata Epuri

A: Individual PAPs will be given a choice to choose between cash for land or land for land. However money will be paid as compensation for all affected structures as much as possible except for the disabled persons, widows and orphans who may require additional assistance in constructing their houses

Q: The community rely on trees for their livelihood, could the trees be spared during the road construction phase? By Lochiata Epuri

A: The trees along the road corridor will have to be uprooted and trees of the same or similar type be replanted after the completion of the road project for the pastoralist farmers who depend on their leaves for their livestock food and others use the ponds produced by these trees for human and livestock food.

Q: There were land disputes in market centres where people were asked to move from road reserves. Those living in plots behind could not allow those in front to move back, would this cause much chaos? By Selina Euren

A: There will be no displacement of people whose land and structures are not on the required road way leave. Only the affected ones who are mainly on the front row next to the road are the ones who will be affected and hence required to relocate.

Q: How would the contractor deal with environmental impacts e.g. oil spills from construction vehicles etc.?

A: Vehicles and machinery used in the road construction project shall be serviced at approved garages to ensure that they do not have oil leakages and there are no oil spills in project area. If oil is found to have spilled in an area, the place shall be dug up and soil scooped and dumped in a safe recommended place.

A.O.B

The existing road was constructed in 1986-1988 from Lodwar to Kakuma and reached Lokichogio in 1989.

In 1991, gold was discovered at the hills surrounding Makutano Gold and people both locals and outsides were attracted to Nakalale hence their settlement in the area. They were offered land for settlement by local leaders.

MINUTES OF ESIA AND RAP STUDIES FOR PROPOSED UPGRADING OF THE LODWAR-LOKICHOGIO-NADAPAL ROAD HELD AT BARAZA PARK, KAKUMA TOWN ON 3RD DECEMBER 2014 AT 2.30 PM

Number Present: 82

Attendance List:

No.	Name	No.	Name	No.	Name
1	Elsie Ng'endo	28	Elim Lokisiau.	55	Darius Abong
2	Irene Muchoki	29	Peter Loriko	56	Anthony Apem
3	John Otuoma	30	Kennedy Looyan	57	Peter Ekai Ekileta
4	Edward Ayacko	31	Losike Sale	58	Danson Ekuwam
5	Mio Francis	32	Eliud Kamaret	59	Simon Losike
6	Makhulungu Carolyne	33	Yohana Eteaba	60	Sifuna G. Simiyu
7	Edward Wahome	34	James Eweist	61	Yusuf Lokorikel
8	John Ekaale	35	Peter Edu	62	Chris Mwangi
9	Antony Sikirise	36	Loret Eripon	63	Moses Kai Kahaiyo
10	James Edonga	37	James Lochuch	64	Micheal Ichumar
11	Evans Koten	38	Jackson Echaman	65	Gorge Etiir
12	James Loyolo	39	Samson Emoni	66	Catherine Asinyen
13	Lomuria Joseph Ekaru	40	Solomon Esekon	67	Elijah Ekitela
14	Rashid Erukudi	41	Ngimoriitai Ekadeli	68	Jesiah Kebe
15	Albert Esekon	42	Simon Ekiru	69	Joseph Ekitoe
16	David Ereng	43	Lokipor Lobur	70	Lobelu Lotit
17	Mike Ekaru	44	Lokul Erokon	71	John Ikaru
18	Michael Lodolet	45	Kalumbio Loly	72	John Doke
19	Josphat Ewoi	46	Peter Lotwei	73	Paul Loter
20	Lomor E. Dominic	47	Sammy Fransico Ekaru	74	Moses Ekuom
21	Simon Emoni	48	Etiir Ekomul	75	Sharon Ekuom
22	Elele Ekal	49	John Bkulau	76	James Alemu
23	Joseph Lomukuny	50	Peter Ekarau	77	Ianae Obenyo
24	Hussein Lobuin	51	Roda Khatundi	78	Simon Erupi
25	Peter Nangolol	52	John Ekai	79	Nicholas Emekwi
26	Joseph Edung	53	Wycliffe Erukudi	80	Simon Nakaue
27	Hudheifa Eteles	54	Sammy Erukudi	81	Angiela Kawalathe
				82	Ekai

AGENDA OF THE MEETING

- 1. Opening of the meeting/Word of prayer
- 2. Introduction of participants
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- 6. Closing remarks
- 7. A.O.B
- 8. Closing/prayer

Minute 01: Opening of the meeting

The meeting commenced at 10.00 a.m. by a word of prayer from Andrew Ekeno.

The area chief welcomed all members and told them to embrace the long awaited road project.

Minute 02: Introduction of the participants

The acting area chief introduced the meeting organizers who included his colleagues and peers from both the central and county governments and the RAP review team. All organizers introduced themselves by stating their names and roles in the government and in the RAP review team. The RAP review team leader gave an introduction of the project and explained the positive and negative impacts that the project will have towards the community and the region.

Minute 03: Purpose of conducting the consultation

The Sociologist from the team of experts explained the importance of public participation and consultations before the project is undertaken. He explained that that would help in giving the communities a sense of ownership of the project. He also explained the importance of the project and stakeholders involvement in the project.

Minute 04: Views and questions from the participants of the proposed project with responses and clarifications given by RAP review team

Q: Was there any other land required for the road except the 60m corridor? By Andrew Njikoi

A: There will be more land required to be used for construction of truck parking bay.

Q: The Airstrip would likely to be relocated; was there need for consultation with the locals and county government before it was relocated? By Andrew Njikoi

A: A section of the air strip has been extended to the road reserve; therefore the airstrip fence may have to be moved further inside if found absolutely necessary. This will be done in consultation with the community, county government, KAA and KCAA.

Q: Would the consultant also hold meetings in villages or only in major towns? By Michael Nangomo

A: There shall be other meetings organized with the project affected people only. The RAP Survey team shall visit and interview every PAPs as much as the PAPs will be available and those not available on the ground and their telephone numbers are available, they will be interviewed over the phone

Q: Could the Consultant assure us first priority in employment would be given to the locals By John Egensilale

A: The contractor and KeNHA will offer employment opportunities to the local communities depending on the job vacancies available and available local skills and capabilities. People from Turkana County will be given first priority

Q: Which contractor would construct the road; would it be done by the ministry or by private contractor? By Yusuf Lokilel

A: The proposed road is a class "A" road which is of great magnitude and hence may will require a contractor from abroad as the local contractors may not have the capacity to handle this road.

Q: Since the locals were pastoralists, would the road be constructed to allow livestock to cross? By Phillip Lolim Silale

A: The road engineers have designed a mechanism to curb road accidents by e.g. providing for bumps and proper road signs in their design where animals cross the road and at the towns and shopping centres where human traffic is high and people likely to be crossing from one side of the road to the other Speed limit shall be set for vehicles entering and leaving the towns. Speed bumps will also be established to slow down over-speeding vehicles.

Q: How would the road affect their businesses located along the corridor By Ewoton Iriama

A: Businesses will be evaluated and valued. The owner of the business building will also be compensated by carrying out valuation of the building plus 15% disturbance allowance. Compensation shall be in two installments. In case there are orphans, widows or disabled members; they will be helped to relocate.

Q: How would the road affect businesses located along the road corridor? By James Namaton Nakoil

A: Businesses found on the road corridor shall be evaluated to estimate their worth and their owners compensated. Records of business progress and performance will be important during this exercise.

Q: The road would take 60 m, what about the existing narrow bridges? By Simon Lokala

A: The design for the proposed rehabilitation of the road have provide for bridges at all the river crossings hence modern bridges will be constructed at all the necessary areas as per the design.

Q: Could planted trees be compensated for also? By Simon Lokala

A: Compensation will be done on the damaged trees. The trees will be cut during the road construction but only where necessary. Re-afforestation and landscaping will be done along the road reserve on completion of the project.

Q: If trees are felled along the corridor would that not affect them? Samwel Epeon Lorobo

A: Most of the trees in this Arid and Semi-Arid area are used for shade and also as a source of food for both humans and livestock. Trees will be cut selectively and the ones cut will be replanted again after completion of the road project.

Q: Would there be a road shoulder? By Ishmael Etir

A: A road shoulder is provided for in the road design for this proposed road rehabilitation project which will be used by motorcycles, bicycles and pedestrians.

Q: How would the road affect churches, mosques etc By Ishmael Etir

A: If such structues are found on the road corridor, they will be evaluated and valuation done on them for compensation purposes.

Q: Another team was here last year on the same road. Was the consultant there on the same or a different mission? By Joseph Aletya

A: The team which carried out the initial RAP was part of the engineering design team but the current team is different and have been commissioned to review of what was done by the earlier team.

Q: How comes there is no Turkana in the RAP consultant's team? How would the Consultant go about carrying their assignment since they are new and do not know the local issues about the society? By Joseph Aletya

A: This is a neutral team hired by KeNHA to independently carry out the RAP review. The Consultant team is working closely on a day-today basis with local administration and the county government officials.

Q: Would it be only Turkanas or anybody from Turkana County to get employment? By Michael Ngugi Mwangi

A: There will be no discrimination in offering jobs opportunities on the project. Since the area is cosmopolitan, job opportunities will be offered to the local people whether they are Turkanas or not. Every local and qualified job seeker shall be considered equally.

A.O.B

There being no any other business, the meeting came to an end at 4.30pm. The meeting was closed by a word of prayer from Lotuk Joseph.

MINUTES OF ESIA AND RAP STUDIES FOR PROPOSED UPGRADING OF THE LODWAR-LOKICHOGIO-NADAPAL ROAD HELD AT KALOBEIYEI ON 4TH DECEMBER 2014 AT 9.30 AM

Number Present: 184

Attendance List:

No	Name	No.	Name	No.	Name
1	Chris Mwangi	62	Angela Lomokol	123	Ngimare Lorot
2	Irene Mushuki	63	Maria Nangiro	124	Emuria Ephas
3	Elsei Ngando	64	Angamo Lotubo	125	Akadai Mathew
4	Makhulungu Caroline	65	Akutan Longoli	126	Ngikeny Lotuko
5	Edward Wahome	66	Angolol Pedo	127	Epak John Ekai
6	Edward Ayako	67	Arukudi Lokalimde	128	Asinyen Ekali
7	John Otuoma	68	Anna Naboto	129	Lopel Esinyen
8	Kevin Ekomwa	69	Kasukwa Erot	130	Akitele Lokwasinga
9	Emmanuel Lopongo	70	Anna Samal	131	Akite Ngitiira
10	Peter Ataana	71	Asekon Ngmare	132	Etiir Lomoe
11	Andrew Lokorikwanga	72	Akiro Emoe	133	Ngito Lokirion
12	Julius Etabo	73	Aoo lokito	134	Achuka Ewoi
13	Elima Lopotio	74	Cecilia Nakadit	135	Arupe Pire
14	Lotope Ahalopatan	75	Ngataparin Lomaluk	136	Ayanea Lokadelio
15	Ekal Arupe	76	Loile Moine	137	Eweet Lolen
16	Aputur Loloe	77	Amoni Ebei	138	Lokala Edukon
17	Akutan Lotinder	78	Nakadit Losekona	139	Moru Egiron
18	Aleleo Lobeno	79	Emoria Pedo	140	Hellen Lopongoo
19	Ewas Akipetot	80	Ann Ngasike	141	Nancy Nagilae
20	Momtapel Gamary	81	Akitela Nawang	142	Angilina Adipo
21	Lomeo Eter	82	Longoli Nakitu	143	Negor Lopuna
22	Pontang Lomokori	83	Lokited Loyao	144	Eripon Ebwel
23	Lorem Desmond	84	Akone Lobowel	145	Akan Paulina
24	Patrick Karach	85	Timo Ewoi	146	Apong Lomaluk
25	Natoo Kadang	86	Akwee Epem	147	Asekon Etiir
26	Syleves Kapuo	87	Apakan Lokichar	148	Nakolek Ebonyo
27	Lokan Lokuno	88	Doke Erus	149	Akal Lopeto
28	Namoe Eweet	89	Ebwangan Lemuyu	150	Nakowam Lojero
29	Ekeru Lokukar	90	Nakodos Duruko	151	Ebenyo Lokal
30	Lobur Ebunguru	91	Sabina Arukudi	152	Amui Ebonyo
31	Regina Ekalu	92	Woolan Pedo	153	Naber Lokupoi
32	Erot Lokidino	93	Lokaale Ngimare	154	Lemki Nakula
33	Eregat Lotede	94	Nachere Lopie	155	Morungur Lokiyo
34	Martha Natipo	95	Akidor Lochampa	156	Michael Longole
35	Inoolan Maraka	96	Susan Nasuru	157	Joseph Loli
36	Emon Etoot	97	Hellen Akai	158	Esekon Jeff
37	Akaalale Ingitira	98	Napelilim Ngikuruka	159	Fredrick Ebwel

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No	Name	No.	Name	No.	Name
38	Elizabeth Nathukuri	99	Kaoi Akipetot	160	Mike Lounoi
39	Christine Asuku	100	Akorio Ewotot	161	Lojao Samuel
40	Ebwangon Lokito	101	Lothekona Iria	162	Tebo Geoffry
41	Regina Akung	102	Ekaren Ekai	163	Ekitela Paul
42	Akiru Lopoor	103	Hellen Marok	164	Ekwam Ekaran
43	Atokon Lochata	104	Jenifer Ekunot	165	Joseph Kapua
44	Akumomi Echwae	105	Lokori Lokamar	166	Lokaala Denies
45	Emoni Alos	106	Anna Nagule	167	Nakaitan Priselah
46	Lowoi Lobeyo	107	Akai Dorcas	168	Pooline Naithaki
47	Edukon Lomukeyo	108	Arukudi Kiel	169	Rose Lokwang
48	Aharon Ekal	109	Ajokon Solomon	170	Agule Natipo
49	Ebenyo Marimung	110	Peter Nakali	171	Rebecca Ngasike
50	Murunyang Elima	111	Lazil Raphael	172	Samuel Lokwer
51	Naselo Lotelim	112	Noah Ekai	173	Arine Moses
52	Loyelei Lokure	113	Sabina Eyaneya	174	Rebecca Loting
53	Awesit Rebeca	114	Meley Loboin	175	Rebecca Lochuro
54	Tioko Mary	115	Paulina Lopongo	176	Losike Lokiri
55	Kuya Muruaeth	116	Lukalei Ekeru	177	Alos Longol
56	Lokapel Lowowe	117	John Sibak	178	Lokoel Lotiir
57	Akamas Antona	118	Julius Aporon	179	Epuyo Lopito
58	Rebecca Lochomin	119	Epapa Ekwee	180	Arukon Loripon
59	Otanet Akal	120	Ariton Kokoi	181	Lowaakor Etor
60	Chila Regina	121	Johnny Lopuaro	182	Philip Alois
61	Christine Losire	122	Cosmas Lorot	183	Angolol Eyapan
				184	Lochas Johnston

AGENDA OF THE MEETING

- 1. Opening of the meeting/Word of prayer
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- 3. Purpose of conducting the consultation/sensitization meeting with the community and relevant stake holders
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- 5. Views and questions from the participants of the proposed project with responses and clarifications given by RAP review team
- 6. Closing remarks
- 7. A.O.B
- 8. Closing/prayer

Minute 01: Opening of the meeting

The meeting commenced at 09.30 a.m. by a word of prayer from Petro Likyo.

The area chief Mr. Emmanuel Longole Lopongo welcomed all members and told them to embrace the long awaited road project.

Minute 02: Introduction of the participants

The acting area chief introduced the meeting organizers who included his colleagues and peers from both the central and county governments and the RAP review team. All organizers introduced themselves by stating their names and roles in the government and in the RAP review team. The RAP review team leader gave an introduction of the project and explained the positive and negative impacts that the project will have towards the community and the region.

Minute 03: Purpose of conducting the consultation

The Sociologist from the team of experts explained the importance of public participation and consultations before the project is undertaken. He explained that that would help in giving the communities a sense of ownership of the project. He also explained the importance of the project and stakeholders involvement in the project.

Minute 04: Views and questions from the participants of the proposed project with responses and clarifications given by RAP review team

Q: What would happen if one doesn't agree with the consultant's valuer's valuation of his property? By John Angolol

A: Yany individual is allowed to get your own valuer to carry out an independent valuation for them but this will be at their own expense

Q: If a PAP's land would be partly affected, would he/she be required to move or would remain on the remaining portion of his/her land? By John Angolol

A: If the remaining part has economic value then you will possess it and in case the remaining portion is of no economic value, the government will buy the whole of it and compensate the PAP

Q: If he was presently located on the road corridor, how would that affect those behind them, would they also be affected? By Epakan Lopie

A: The road corridor only affects those on it and not those outside it or away from it.

Q: Some trees are on the road corridor, would they be affected? By Lomongin Alos

A: The trees along the road corridor will have to be uprooted and trees of the same or similar type be replanted after the completion of the road project for the pastoralist farmers who depend on their leaves for their livestock food and others use the ponds produced by these trees for human and livestock food.

Q: The community has no problem with the proposed road rehabilitation project, however they are concern whether the houses found to be on the wayleave will be compensated for? By Elim Lopotio

A: Valuation will be done on all affected structures found to be on the road's corridor and compensation made for them.

Q: Will the project proponent pay cash for affected structures or will he construct other houses for the affected households? By Elim Lopotio

A: The best and most commonly used option is to give money to the PAPs so that they construction of themselves new structures.

Therefore money will be paid as compensation for all affected structures as much as possible except for the disabled persons, widows and orphans who may require additional assistance in constructing their houses

Q: Would those without land registration documents be compensated? By Lokarach Patrick

A: Details and information of ownership of land are with the chiefs, clan elders and village men, they will help the RAP team in identifying private parcels of land and their owners for valuation and compensation purposes

Q: Livestock and people are hit by vehicles on the road, what would the contractor do to ensure that those accidents were minimized on a large road like the proposed one? By Johnny Loupwaro

A: The road engineers have designed a mechanism to curb road accidents by e.g. providing for bumps and proper road signs in their design where animals cross the road and at the towns and shopping centres where human traffic is high and people likely to be crossing from one side of the road to the other Speed limit shall be set for vehicles entering and leaving the towns. Speed bumps will also be established to slow down over-speeding vehicles.

Q: Was the consultant only there for the A1 road or also rural feeder roads? By Julius Etabo

A: The Consultant is only carrying out the RAP review for the A1 road which is a major highway under KeNHA, the feeder roads will remain a responsibility of the county government and the KERRA

Q: Was compensation about cash or the proponent would also give alternative land? By Julius Etabo

A: Individual PAPs will be given a choice to choose between cash for land or land for land. However money will be paid as compensation for all affected structures as much as possible except for the disabled persons, widows and orphans who may require additional assistance in constructing their houses

Q: He had a mud house next to the road, would it be compensated for? By Henry Etot

A: Valuation and Compensation will not discriminate against the semi-permanent houses. The process will be all inclusive irrespective of the type of structure

Q: Some people were sharing a common fence, who would be compensated for the fence? By Emmanuel Lopango-Area chief

A: If the fence was jointly constructed all of you shall be compensated and incase the fence was constructed by one person, the owner of the fence shall be compensated

Q: The project would affect water pipes, how would that be compensated for e.g. for Kalobeiyei Water Users Association? By Alfred Kapoko

A: It will be the responsibility of KeNHA through the road contractor to relocate the entire water pipeline from its current location to another desired location.

Q: How will the project affect trees on our farms along the road? By Sabina Arukudi

A: The trees along the road corridor will have to be uprooted and trees of the same or similar type be replanted after the completion of the road project for the pastoralist farmers who depend on their leaves for their livestock food and others use the ponds produced by these trees for human and livestock food

Q: How would the consultant address existing graves? By Sabina Arukudi

A: The whole grave will be excavated and there will be an agreement with the community and concern family on where the body will be re-buried to avoid the road having too many turn in an attempt to avoid every grave on its corridor.

Q: Would affected farms be compensated? By Janet Akal

A: The affected farms will be valuated to estimate their cost and then compensated.

A.O.B

The Lagga was washed at Kalobeiyei.

There was a lot of plant growth on both sides of the road between Kalobeiyei and Sogot centres that nearly covers the shoulders on both sides of the road and pose the risk of accidents for the pedestrians as they have no place to walk along and hence are forced to walk along the carriageway .

The meeting was closed by a word of prayer from Petero

MINUTES OF ESIA AND RAP STUDIES FOR PROPOSED UPGRADING OF THE LODWAR-LOKICHOGIO-NADAPAL ROAD HELD AT SONGOT ON 4TH DECEMBER 2014 AT 2.20 PM

Number Present: 132

	Name	NI.	Name	Nia	Nama
No.	Name	No.	Name	No.	Name
1	John Otuoma	45	Anna Lokwatodo	89	Lokodo Arupe
2	Edward Ayacko	46	Nanpeot Etoot	90	Akeno Amoru
3	Carolyne Makhulungu	47	Achok lodukach	91	Epeta Lokina
4	Edward Wahome	48	Teresa Aketela	92	Ekidor Lobek
5	Irene Muchoki	49	Nanepu Lokene	93	Lokija Silale
6	Elsie Ngendo	50	Napeyok Lokaalei	94	Kuaagete Lowangiro
7	Meshack Lokalei	51	Auma Alim	95	Nawiyongorot Lotikipi
8	Ekai Maraka	52	Ikaru Lorumor	96	Kakure Erus
9	Justus Eketai	53	Abenyo Amekwi	97	Veronica Edung
10	Moses Aturo	54	Natamakaruo Narok	98	Lokeele Kuelana
11	Lomoi Nyanga	55	Mary Naguai	99	Naro Egilan
12	Josphat Namuar	56	Luke Ekaal	100	Lokwawi Nichio
13	Amodoi Kulak	57	Joseph Elaar	101	Akuita Ereng
14	Geoffrey Eweet	58	Amoit Napuu	102	Arupe Lokare
15	Ekitela Lobuin	59	Akalale Anam	103	Akiru Ileeng
16	Ngorok Natukon	60	Magrate Adung	104	Napuu Lokare
17	Ekunoit Ewoi	61	Lulo Nagrajem	105	Napeikar Ekeno
18	Ismail Mohamed	62	Josphine Asekon	106	Amana Naligoi
19	Lochuro Erogo	63	Anna Losike	107	Eroo Lokuuta
20	Loikiiko Tunapo	64	Lojao Ekimomor	108	Akitela Ekom
21	James Longidiin	65	Lochilia Lomili	109	Esinyen Ewoi
22	Emuria Maraka	66	Ebei	110	Akalale Lokinei
23	Akolii Akuut	67	Ekitela Ebenyo	111	Akal Ebenyo
24	Lochipito Ekutan	68	Ekal Emoru	112	Akuwam Abwaal
25	Ekuyen Koyaan	69	Emejen Ebenyo	113	Ochom Ekom
26	Moses Ekiru	70	Emietono Kakure	114	Amarukor Puda
27	Gibril Nakieny	71	Lokawach Ekal	115	Kuya Ebokok
28	John Lochuno	72	Ekuwam Ekoony	116	Margaret Awoi
29	Ekiru John	73	Looya Ekoony	117	Anthony Lowoto
30	Ekunoit Lokieny	74	Ngoroklem Kai	118	Kimete Kidron
31	Loyelekai Etoot	75	Andrew Ebel	119	Laurnee Nangomo
32	Ehim Logiel	76	Ochol Lomonyo	120	Samuel Ekutan
33	Elija Kaikor	77	Erus Esuron	121	John Erupe
34	Asinyen Lokwatodo	78	Ekuwam Ikimat	122	Ekal Cosmas
35	Akiyen Akutuni	79	David Apua	123	GabrielEdapal
36	Maria Apa-Lobok	80	John Zonoluk	124	Charles Ekiru
37	Josephine Namoki	81	Ekuwam Namoe	125	Jeremiah Ekom
38	Margaret Akipor	82	Loloima Korobe	126	Lomedung Loris
39	Eebela Epayo	83	Erii Tuitus	127	Terry Akolong
40	Juma Paul	84	Ekuwam Lobek	128	Selima Naperi
41	Esinyen Napetet	85	Epeyon Echuman	129	Peter Atiyan
42	Sarah Awosit	86	Ewoton Muya	130	Lokipor Lochuch
43	Susan Ukai	87	Eyamae Eregae	131	EkaleEmuria
44	Luke Ekaal	88	Ereng Losike	132	Naweet Esekom

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AGENDA OF THE MEETING

- 1. Opening of the meeting/Word of prayer
- 2. Introduction of participants
- 3. Purpose of conducting the consultation/sensitization meeting with the community and relevant stake holders
- 4. Introduction of the proposed project and its various components, benefits and possible impacts/mitigation measures
- 5. Views and questions from the participants of the proposed project with responses and clarifications given by RAP review team
- 6. Closing remarks
- 7. A.O.B
- 8. Closing/prayer

Minute 01: Opening of the meeting

The meeting commenced at 02.20 p.m. by a word of prayer from Ekai Maraka.

The area chief welcomed all members and told them to embrace the long awaited road project.

Minute 02: Introduction of the participants

The acting area chief introduced the meeting organizers who included his colleagues and peers from both the central and county governments and the RAP review team. All organizers introduced themselves by stating their names and roles in the government and in the RAP review team. The RAP review team leader gave an introduction of the project and explained the positive and negative impacts that the project will have towards the community and the region.

Minute 03: Purpose of conducting the consultation

The Sociologist from the team of experts explained the importance of public participation and consultations before the project is undertaken. He explained that that would help in giving the communities a sense of ownership of the project. He also explained the importance of the project and stakeholders involvement in the project.

Minute 04: Views and questions from the participants of the proposed project with responses and clarifications given by RAP review team

Q: If a PAP is found to be within the 60m wayleave, would he be paid immediately or later? By Ekai Maraka

A: Compensation will be done after survey when the reviews RAP report which shall contain the valuation figure and is forwarded to the KeNHA for approval and payment.

Q: The community was worried whether they would be paid or just chased away By Julius Ekutan-community leader

A: There is nobody who will be chased away from their current place of residence, but will be paid compensation for all affected property on the road corridor and given sufficient time to plan and move to another place.

Q: The road affects water sources e.g. water pans and boreholes, could the consultant sensitize people on how the project might affect their resources and other social amenities By Josephat Namar

A: All affected persons or community have been sensitized and consulted on what the road project entails and this process shall continue throughout the implementation of the resettlement activities and the project.

Q: The community as pastoralists, how would the project protect their livestock and them? By Teresa Aktela

A: The road engineers have designed a mechanism to curb road accidents by e.g. providing for bumps and proper road signs in their design where animals cross the road and at the towns and shopping centres where human traffic is high and people likely to be crossing from one side of the road to the other Speed limit shall be set for vehicles entering and leaving the towns. Speed bumps will also be established to slow down over-speeding vehicles.

Q: Some livestock were not shepherded, how would the proponent protect them with that project? By Loya Akony

A: It will be upon the community and individual owners to take care of their grazing animals as they do it is currently to ensure they cross the road at the required places and avoid being hit by vehicles along the road.

Q: There were land disputes in market centres where people were asked to move from road reserves. Those living in plots behind could not allow those in front to move back, would this cause much chaos? By Andrew Ebei-Ex councilor

A: There will be no displacement of people whose land and structures are not on the required road way leave. Only the affected ones who are mainly on the front row next to the road are the ones who will be affected and hence required to relocate.

Q: Some graves were located along the road corridor, how would the Contractor deal with that? By Andrew Ebei-Ex councilor

A: The whole grave will be excavated and there will be an agreement with the community and concern family on where the body will be re-buried to avoid the road having too many turn in an attempt to avoid every grave on its corridor.

Q: Water pipes would be affected, what would the contractor do about this? By Andrew Ebei-Ex councilor

A: It will be the responsibility of KeNHA through the road contractor to relocate the entire water pipeline from its current location to another desired location

Q: What would the consultant do about property located near the road but not touched by the road? By Antony Lowoto

A: The Consultants are only concerned with all the properties on the road corridor. Any property outside the end of the corridor will not be affected whether it is near or it is far.

Q: When the proponent pays for affected property, does one take it away or does the government assume ownership? By Antony Lowoto

A: The government does not take nor possess any property after compensation. The PAPs are allowed to demolish and/ or move the affected property at their own cost and in the process save any reusable materials such as doors and windows. The government would result to demolishing such affected property only in the event that the PAP refuses or delays in removing them within the stipulated time.

Q: When would they be paid and how? By Paul Juma

A: Property valuation will be done by the Consultant Valuer and thereafter compensation packages will be paid to individual PAPs directly into their bank accounts or issued with cheques payable to the individual PAPs and not to their leaders nor their proxies.

Q: Would compensation be equal and how much will it be? By Paul Juma

A: Compensation will not be equal because it will vary with the level of effect, the kind and number of affected structure and acreage of land that is affected. The amount is going to be determined by valuation report.

Q: There were a lot of accidents on the road; could the proponent create speed bumps on the road? By Paul Juma

A: The road engineers have designed a mechanism to curb road accidents by e.g. providing for bumps and proper road signs in their design where animals cross the road and at the towns and shopping centres where human traffic is high and people likely to be crossing from one side of the road to the other Speed limit shall be set for vehicles entering and leaving the towns. Speed bumps will also be established to slow down over-speeding vehicles.

Q: How would they be paid, through MP, Chief, MCA or bank? By Namues Nomoe **A:** Compensation packages will be paid to individual PAPs directly into their bank accounts or issued with cheques payable to the individual PAPs and not to their leaders nor their proxies.

Q: After compensation, after how long would they be required to relocate? Terry Adome

A: Sufficient time will be given to all the PAPs to relocate elsewhere once they are compensated. After compensation packages are paid, the PAPs will be given 90 days to relocate elsewhere.

A.O.B

There are some PAPs with allotment letters and others do not, but mostly land is given locally by elders, chiefs etc. who should know and identify who has been allocated land where.

MINUTES OF ESIA AND RAP STUDIES FOR PROPOSED UPGRADING OF THE LODWAR-LOKICHOGIO-NADAPAL ROAD HELD AT LOKICHOGIO ON 5TH DECEMBER 2014 AT 10.00 AM

Number Present: 152

Attendance List:

	dance List:	Na	Nome	No	Name
No.	Name	No.	Name	No.	Name
1	Chris Mwangi	52	Marry Apor	103	Kefa Lochumo
2	Mio Francis	53	Ann Lokotom	104	Pamela Ewesit
3	Ekaru Joseph	54	Lokinya Etoot	105	Christine Ekakoron
4	Naukot Francis	55	Peter Monyes	106	Lucy Ekwel
5	Edward Ayako	56	Echuba Longalan	107	Jame Etoot
6	Simon Esikor	57	Echuman Lokwel	108	Fred Lokui
7	Rosemary Namalwa	58	Kai Kodeli	109	Isaac Epuo
8	Lucas Teple	59	Maria Emoria	110	David Ekiru
9	Aswaye Emuria	60	Dimidimi Lokori	111	Peter Tangkonyang
10	Alice Karenga	61	Lokamu Napoo	112	Paul Ereng
11	John Otuma	62	Ekuleu Ekomula	113	Ekai Lomon
12	David Imoni Epima	63	Ekal Kwanyanga	114	Alex Kiende
13	Eris Peter	64	Martha Lokinei	115	Aunda Ekadele
14	Ekusi Johnson	65	Lotering Erus	116	Simon Ekiru
15	Emoni Francis	66	Erus Akai	117	Akadele Imeran
16	Sospeter Nato	67	Lorim Joice	118	Acha Ahmmed
17	Donatus Ebengu	68	Asha Atabo	119	Selina Nakiru Achok
18	Echaydia Ekusi	69	Akimaf Nanyang	120	Anjeline Loriko
19	Lucas Ekai	70	Elim Lokitoi	121	Rosemary Alam
20	Christopher Ekai	71	Mandelina Lokaale	122	Christine Akope
21	Miramoe Nickleby	72	Mary Aenae	123	Hellen Kapua
22	John Losoro	73	Eregae Echuwa	124	Eurina Lokenya
23	Lucas Oteo	74	Eregae Echwa	125	Sylvester Moru
24	David Emuria	75	Naroo Kachoda	126	Mary Alondo
25	Kebo Losike	76	Alice Kinyonga	127	Vabrilian Alamach
26	Jacktone Eupe	77	Nalokio Johnson	128	Hassan Longilae
27	James Naakwe	78	Lotere Lokiteng	129	Monica Apem
28	Paul Lotikipi	79	Elia Nakeny	130	Antiriwa Erusi
29	John Ponon	80	Nakadio Epa	131	James Etoot
30	Peter Lojepe	81	Nagalok Dapol	132	Entabo Moses
31	Mzee Kiumba	82	Etoot Ngika	133	Nawato Ochuol
32	Edward Abok	83	Aropi Egipole	134	Saborn Maraka
33	Maltan Nakiru	84	Fatama ngitar	135	Ruth Arengae
34	Sammy Emejin	85	John Loteri	136	Margaret Namoe
35	Martine Mouma	86	Ann Agoma	137	Lokaele Napeikar
36	Adan Abraham	87	Arokudi Akai	138	Alabar Atabo
37	Abidi Todanya	88	Loromoro Loperamui	139	Arus Ebongoni
38	Lobokio Paul	89	Bernard Musulite	140	Mathew Kalale
39	Paul Etout	90	Lawrence Etoot	141	Brothbows Ekai
40	Apato Samoel	91	Lucy Akai	142	Losike Losidikoi
41	Raphael Kakai	92	Ronarld Ekwas	143	Rebecca Asmit
42	Nagomi Emoni	93	Kevin Nanok	144	Pasca Akai

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No.	Name	No.	Name	No.	Name
43	John Esiyen	94	Ezekiel Erot	145	Neama Akuom
44	Lokaar Kopeto	95	Nicholas Eroo	146	Simon Echuor
45	Nakam Engolon	96	Jesenter Mukao	147	David Timotim
46	Terry Arangi	97	Ester Aroo	148	John Etoot
47	Risper Akwama	98	Lucy Loyeele	149	Martin Ekeno
48	Benjamin Ejore	99	Peter Natoo	150	Irene Muchoki
49	Peter Mutei	100	John Lokapatei	151	John Otuoma
50	Jeremiah Ekal	101	David Ekaale	152	Elsie Ng'endo
51	Esanyo Nalima	102	Peter Eleman		

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- 5. Views and questions from the participants of the proposed project with responses and clarifications given by RAP review team
- 6. Closing remarks
- 7. A.O.B
- 8. Closing/prayer

Minute 01: Opening of the meeting

The meeting commenced at 10.00 am by a word of prayer from Pastor Miramoe Nickloby Ekiru. The area chief welcomed all members and told them to embrace the long awaited road project.

Minute 02: Introduction of the participants

The acting area chief introduced the meeting organizers who included his colleagues and peers from both the central and county governments and the RAP review team. All organizers introduced themselves by stating their names and roles in the government and in the RAP review team. The RAP review team leader gave an introduction of the project and explained the positive and negative impacts that the project will have towards the community and the region.

Minute 03: Purpose of conducting the consultation

The Sociologist from the team of experts explained the importance of public participation and consultations before the project is undertaken. He explained that that would help in giving the communities a sense of ownership of the project. He also explained the importance of the project and stakeholders involvement in the project.

Minute 04: Views and questions from the participants of the proposed project with responses and clarifications given by RAP review team

Q: The road reserve of 60m was too wide and hence taking too much of private land and resulting to demolishing of private buildings; could it be narrower than that? By Teresa Arangi

A: This is an international road which in future will be a dual carriage road. On this major highway this is the required standard. We cannot alter it. The 60 m allowance is for future expansion and installing of infrastructure such as water pipes, electricity poles

Q: Would social amenities e.g. water pans be affected and how? By Paul Ekal A: In case the road passes over a water pan, another one shall be constructed in consultation with the community on where the community desires a new one to be constructed for them away from the way leave area

Q: When would the road be constructed so that they could prepare? By Paul Ekal **A:** Since the project designs are ready and there are donors willing to fund the construction of the road, the construction works will start as soon as RAP is ready and approved and PAPs have been paid their compensation packages and relocated to other areas to clear the way leave area for the road construction

Q: Between the tenants and landlords, who would be compensated? By Paul Ekal **A:** The tenants who losses their business shall be compensated. The landlords will be compensated for their buildings and other structures found on the way leave.

Q: Was the road corridor a total of 60m or 62m? By Paul Ekal

A: The road corridor is 60m and not 62m. 30m from the centre line of the road from one side and 30 from the centre line of the road on the opposite side.

Q: Was it possible to have a bypass in order to avoid destroying property? By Paul Fkal

A: The community leaders should liaise with the county government to plan and construct a bypass as the current road design does not include a bypass.

Q: PAPs whose property is affected and he does not have documents, would he be compensated? By Lucas Ekai

A Details and information of ownership of land are with the chiefs, clan elders and village men, they will help the RAP team in identifying private parcels of land and their owners for valuation and compensation purposes.

Q: Would the proponent demolish structures at once or in stages? By Lucas Ekai **A** Sufficient time will be given to all the PAPs to demolish their structures and relocate elsewhere once they are compensated. After compensation packages are paid, the PAPs will be given 90 days to relocate elsewhere.

Q: Would the proponent pay us our money once and not in installments? By Lucas Ekai

A: It is the government's norm to pay compensation for structures in installments so that it can manage and monitor the resettlement process. Unless this order is changed, the process will remain the same. This can however be negotiated from case to case but the idea is to ensure that PAPs and their families are resettled fully and that compensation packages are not diverted elsewhere

Q: She had planted trees along the road corridor and she does not know what to do By Rosemary Namatwa

A: The trees along the road will have to be uprooted and trees of the same type be planted for the pastoralist farmers who depend on them for their livestock.

Q: Some of the community members had permanent houses while others had houses of less value, how would the proponent assist both during compensation? By Dahir Abdi

A: Valuation and Compensation will not discriminate against the semi-permanent houses. The process will be all inclusive irrespective of the type of structure.

Q: The community communally own much of the land to be affected by the road corridor, how would they be compensated? By Jenifer Akai

A: The community shall be compensated and since not all members of the communal land shall be given money, they will be asked to choose a project that they will prefer to be of importance of them for consideration under KeNHA CSR program.

Q: Some schools/institutions were within the road corridor, how would the consultant address this? By Joseph Logil

A: Physical land planning department of county government will provide alternative land for relocation of these public amenities where they cannot be avoided.

Q: How would the proponent compensate for trees cut, would the proponent plant others or compensate? By Nasir Ishmael

A: The trees along the road corridor will have to be uprooted and trees of the same or similar type be replanted after the completion of the road project for the pastoralist farmers who depend on their leaves for their livestock food and others use the ponds produced by these trees for human and livestock food

Q: What would be the procedures followed during compensation? By Nasir Ishmael **A:** Identification of ownership, valuation will be done to come up with current market value of the affected property/valuation to facilitate payment of compensation packages and relocation.

Q: There were public infrastructure e.g. water pipes, electricity lines/poles on road corridor; could the proponent devise a method of not interfering with them? By Nasir Ishmael

A: It will be the responsibility of KeNHA through the road contractor to relocate the entire water pipeline from its current location to another desired location

Q: How would the drift at Lokichogio be constructed given its present state? By Antony Ikim

A: The design for the proposed rehabilitation of the road have provide for bridges at all the river crossings hence modern bridges will be constructed at all the necessary areas as per the design.

Q: Culverts on the road were used to collect water for livestock. What would happen when contractor destroyed them? By John Lokinei

A: There is no road that can be constructed without a culvert; the ones that are destroyed will be substituted with new ones during the road construction process.

Q: Some people were squatters, where would they move to since they did not own the land along the road? By John Lokinei

A: The community still has more land that will be given to the affected squatters by the elders, chiefs and county government for their resettlement

Q: Some residents did not own the affected commercial buildings, but they own and run various business, they would hence lose livelihood, how would they be assisted? By Teresa Arangi

A: For businesses to be compensated for loss of business income, it will be necessary for business owners to produce records/documents to show the performance or progress of the business to enable compensation. Business value will in the meantime be estimated to determine the possible worth.

Q: Could the road be designed in such a way that it does not create new laggas or make other laggas to overflow and reach residential areas? By Michael Arema

A: The new culverts will be constructed and erected in a manner not to create new laggas as the water that will collect in the culvert leaves them in the opposite side. Once the culverts are constructed the pastoralists shall still have a place to water their livestock.

A.O.B

It was agreed that culverts should be designed to avoid creating laggas. Individuals who were given land by municipal council and had no title deeds were asked by the Consultant to go to sub-county and county offices to obtain allotment letters or lease or title deeds.

There being no any other business to discuss, the meeting ended by a word of prayer from Pastor Miromoe Nickleby Ekiru

		PANAFCON Ltd.

Annex 3: Consultation Meetings Attendance Registers

	PANAFCON Ltd.
Annex 4: Key Stakeholders Contacted During the RAP Revi	ew Study

KEY STAKEHOLDERS CONTACTED DURING THE RAP REVIEW STUDY

#	People Contacted	Information Provided
1.	Eng. Omondi Osewe Kenya National Highways Authority (KeNHA) Blue Shield Towers, Hospital Road, Upper Hill P.O. Box 49712 – 00100, Nairobi Kenya Tel:+254-20-8013842 Email: p.omondi@kenha.co.ke	Provided Management Support
2.	Eng. James Kariuki Kenya National Highways Authority (KeNHA) Blue Shield Towers, Hospital Road, Upper Hill P.O. Box 49712 – 00100, Nairobi Kenya Tel:+254-20-8013842 Email: j.kariuki@kenha.co.ke	 Provided Management Support Provided Project Information
3.	Mr. Walter Barongo Manager, Environmental and Social Interests Kenya National Highways Authority (KeNHA) Blue Shield Towers, Hospital Road, Upper Hill P.O. Box 49712 – 00100, Nairobi Kenya Tel:+254-20-8013842 E-mail: w.nyatwanga@kenha.co.ke	 Provided Management Support Provided Project Information
4.	Lochuch Esanyen Christopher Assistant Chief Lodwar Township Sub-Location Tel: 0729411104	 Received RAP Review Team Participated in PCM Hosted the PCM
5.	Joseph Tapen Chief Napelilim Location Tel. No: 0714405587	 Received RAP Review Team Participated in PCM Hosted the PCM
6.	Barnabas Eloiloi Ag Chief Nkalale Location Tel: 0715008479	 Received RAP Review Team Participated in PCM Hosted the PCM
7.	Cosmas Nakaya Chief Kakuma Location Tel: 0720916213	 Received RAP Review Team Provided Administration Support
8.	Emmanuel Lapongo Chief Kalobiyei Location Tel: 0724272924	 Received RAP Review Team Provided Administration Support

#	People Contacted	Information Provided		
9.	Meshack Lokalei Chief Songot Location Tel:0712700362	 Received RAP Review Team Provided Administration Support 		
10.	Daniel Losil Kakure Chief Lokichogio Location Tel: 0700783998	Received RAP Review Team Provided Administration Support		
11.	Hon. Immanuel Imana County Government Turkana County	Provided Administration Support		
12.	Dorcas Atabo Ekiru Loitalado Fuel Station Tel: 0700323197	Filled in RAP Stakeholder Questionnaire		
13.	Moses Kanaiyo Kai Tel: 0729399777	Filled in RAP Stakeholder Questionnaire		
14.	Jeremiah Nangolol Kakuma Motor Cycle Riders Group Tel: 0711633916	Filled in RAP Stakeholder Questionnaire		
15.	Cornerstone Ministries International Church Tel: 0727085782	Filled in RAP Stakeholder Questionnaire		
16.	Mohammed Said Hassan Dayah Bus Express Service Tel: 0720938985	Filled in RAP Stakeholder Questionnaire		
17.	Ekitela Elijah Lekuya Kiteyarai Self Help Group Tel: 0708283873	Filled in RAP Stakeholder Questionnaire		
18.	Kakuma Travellers Tel: 0720638036	Filled in RAP Stakeholder Questionnaire		
19.	Pentecostal Assemblies Of God Tel: 0716003846	Filled in RAP Stakeholder Questionnaire		
20.	Dayah Express Company Ltd Tel: 0721878874	Filled in RAP Stakeholder Questionnaire		
21.	Daniel Karanja Eldoret Express Company Tel: 0712032950	Filled in RAP Stakeholder Questionnaire		
22.	Ethiopian Orthodox Tewahedo Debrehail St. Gabriel Church Tel: 0713555300	Filled in RAP Stakeholder Questionnaire		

#	People Contacted	Information Provided			
23.	Natiir Dispensary Tel: 0724078465	Filled in RAP Stakeholder Questionnaire			
24.	Fr. Dominic Nariamao Legio Maria Of African Man Tel: 0728362541	Filled in RAP Stakeholder Questionnaire			
25.	African Inland Church Tel: 0714682826	Filled in RAP Stakeholder Questionnaire			
26.	Michael L. Nabuin St. Johns Catholic Lokichoggio Tel: 0727105688	Filled in RAP Stakeholder Questionnaire			
27.	Francis Kariuki Ragui Tel: 0711892389	Filled in RAP Stakeholder Questionnaire			
28.	Loruma Car Wash Garden Youth Group Tel: 0705759796	Filled in RAP Stakeholder Questionnaire			
29.	Josephat Lokiteed Ngibolon Tel: 0705131664	Filled in RAP Stakeholder Questionnaire			
30.	Enyaman Simon Full Gospel Church of Kenya Tel: 0727035749	Filled in RAP Stakeholder Questionnaire			
31.	Total Kenya Limited Tel: 0722203425	Filled in RAP Stakeholder Questionnaire			
32.	Peter Yegon, Mohammed Hussein and Leo Eremon Tel: 0723609683, 0722835468,0723672059	Filled in RAP Stakeholder Questionnaire			
33.	Abdikadir Hassan Ibrahim and Hashim Shaban Tel: 0722690061, 0722299500	Filled in RAP Stakeholder Questionnaire			
34.	Echip L. Obeid Tel:0710910346	Filled in RAP Stakeholder Questionnaire			
35.	Diocese of Lodwar Lokichoggio Catholic church Tel: 0734790147	Filled in RAP Stakeholder Questionnaire			
36.	Abdillahi Ogle Kakuma wholesalers Tel: 0720718617	Filled in RAP Stakeholder Questionnaire			
37.	Ekulan Etibol Nakereu Kakuma Baptist Church Tel: 0701830209	Filled in RAP Stakeholder Questionnaire			

#	People Contacted	Information Provided
38.	Emmanuel Lokai Post bank Mashinani Tel: 0706605473	Filled in RAP Stakeholder Questionnaire
39.	Nasiger Dispensary Tel: 0728677070	Filled in RAP Stakeholder Questionnaire
40.	Our Lady Of Fatima Catholic Church Tel: 0719680389	Filled in RAP Stakeholder Questionnaire
41.	Ahmed Mohammed Noor Almubarak Wholesalers Tel: 0722555563	Filled in RAP Stakeholder Questionnaire
42.	Richard Ekutan Tel: 0728611515	Filled in RAP Stakeholder Questionnaire
43.	James Chegem Turkana County Tel: 0710241047	Filled in RAP Stakeholder Questionnaire
44.	Ogle petroleum Tel: 0724940990	Filled in RAP Stakeholder Questionnaire
45.	Kenya Defense Forces Lokichogio Base Tel: 0725674676	Filled in RAP Stakeholder Questionnaire
46.	Kenya Airports Authority Lokichoggio Airport Tel: 0700374129	Filled in RAP Stakeholder Questionnaire

Annex 5: Analysis of Stakeholders Feedback

Analysis of Stakeholders Feedback

#	Stakeholder Name	Department/ Organization	Involvement or Role in Project	Stakeholder Interest, Goals, and Concerns	Stakeholder Priority	Follow-up Actions and Communication
1.	N/A	Kenya Airports Authority (KAA) Lokichogio Airport	Government Agency	The project will improve economic standards and bring in more investors and hence more job created. It will safe time on transportation of goods. The improved transport system empowers the locals to market their products easily and able to compete with other areas	A	Compensate the affected stakeholders The project should take the shortest time possible to avoid transport inconveniences
2.	N/A	Kenya Defense Forces (KDF) Lokichoggio Base	Government Agency	It will reduce the overall cost of repairs and maintenance of vehicles and reduce the amount of fuel used It will enhance the cross border trade that will in turn improve the living standards of the local community	A	Replace drifts with bridges to enhance the flow of traffic even during the rainy seasons
3.	Dorcas Atabo Ekiru	Loitalado Fuel Station	Stakeholder-Business	Easy access to various places and major towns. Interruption with businesses on the road corridor Improvement of transport hence increasing efficiency	В	Speed bumps should be erected because of crossing children and livestock to avoid possible accidents by over speeding vehicles. Erection of road signs to alert drivers. The project should proceed so that we realize its benefits
4.	Moses Kanaiyo Kai	N/A	N/A	Many incidences of accidents due to over speeding drivers Improvement and enhancement of development	В	Labeling of zebra crossing, construction of speed bumps and enactment of road signs. Corporate Social Responsibility (CSR) to be initiated e.g. construction of a permanent secondary school.

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#	Stakeholder Name	Department/ Organization	Involvement or Role in Project	Stakeholder Interest, Goals, and Concerns	Stakeholder Priority	Follow-up Actions and Communication
5.	Jeremiah Nangolol Kakuma Motor Cycle Riders Group Stakeholder-Welfare of boda boda riders		Relocation buildings, people and interruption of businesses from initial places. Job opportunities will be available to the locals of Turkana Efficient transport hence reducing the travelling hours	В	Affected PAPS should be compensated in advance so that they relocate earlier before the commencement of road construction.	
6.	N/A	Cornerstone Ministries International Church	Stakeholder- Community Service	Faster movement of goods and services. A portion of the church land building will be eaten up. Employment opportunities will be offered to the youths Relocation of buildings, people and businesses.	В	Compensation of the PAPS Compensation should be rendered in accordance to the valuation of one's property.
7.	Mohammed Said Hassan	Dayah Bus Express Service	Stakeholder-Business	Enhancement of development and employment. Effect on business during relocation. Affected persons will benefit when compensation will be initiated.	В	Speed bumps should be erected because of crossing children and livestock to avoid possible accidents by over speeding vehicles. Erection of road signs to alert drivers.
8.	Ekitela Elijah Lekuya	Kiteyarai Self Help Group	Stakeholder-offering service to the community	Creation of employment. Relocation of buildings, people and businesses.	В	Affected persons should benefit when compensation will be initiated.
9.	N/A	Kakuma Travellers	Stakeholder-Business	Compensation of PAPS. Relocation of buildings, people and businesses. Employment opportunities to the residents of the area.	В	Speed bumps should be erected because of crossing children and livestock to avoid possible accidents by over speeding vehicles.

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#	Stakeholder Name	Department/ Organization	Involvement or Role in Project	Stakeholder Interest, Goals, and Concerns	Stakeholder Priority	Follow-up Actions and Communication
						Erection of road signs to alert drivers.
10.	N/A	Pentecostal Assemblies Of God	Stakeholder- Community Service	Improvement of road which will lead to the growth of the economy of the area. Relocation of buildings, people and businesses. Environmental degradation such as excavation of land, pollution of air and water. Transport will be efficient hence reducing on the amount of fare charged to various destinations.	В	The local community should be given first priority by the contractor during employment. Compensation of PAPS before commencement of the project. Speed bumps should be erected because of crossing children and livestock to avoid possible accidents by over speeding vehicles. Erection of road signs to alert drivers.
11.	N/A	Dayah Express Company LTD	Stakeholder-business	Relocation of buildings, people and businesses.	В	Compensation of PAPS before commencement of the project. Community leaders and the community at large should be involved in the project implementation.
12.	Daniel Karanja	Eldoret Express Company	Stakeholder-business	More business opportunities will rise up. Improvement of road which will lead to the growth of the economy of the area. Relocation of buildings, people and businesses. Employment opportunities to the residents of the area.	В	Speed bumps should be erected because of crossing children and livestock to avoid possible accidents by over speeding vehicles. Erection of road signs to alert drivers. Construction of bridges instead of laggas would be preferable.
13.	N/A	Ethiopian orthodox Tewahedo Debrehail St. Gabriel	Stakeholder-Social services	Improvement of road which will lead to the growth of the economy of the area. Environmental degradation	В	Speed bumps should be erected in town centres because of school crossing children and in areas where livestock cross to avoid possible accidents by over

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14. Natiir Dispensary 15. Fr. Dominic Nariamao Legio Maria Of African Man 16. N/A African Inland Church 17. Michael L. Nabuin St. Johns Catholic Lokichoggio	Involvement or Role in Project Stakeholder Interest, Goals, and Concerns		Stakeholder Priority	Follow-up Actions and Communication
15. Fr. Dominic Nariamao Legio Maria Of African Man 16. N/A African Inland Church 17. Michael L. Nabuin St. Johns Catholic		such as tree felling.		speeding vehicles. Erection of road signs to alert drivers. Construction of bridges instead of laggas would be preferable. Creation of awareness on road safety to locals.
16. N/A African Inland Church 17. Michael L. Nabuin St. Johns Catholic	Stakeholder-Health services	Improvement of road which will lead to the growth of the economy of the area.	В	Speed bumps should be erected in town centres because of school crossing children and in areas where livestock cross to avoid possible accidents by over speeding vehicles. Erection of road signs to alert drivers. Construction of bridges instead of laggas would be preferable.
17. Michael L. Nabuin St. Johns Catholic	Stakeholder-Social services	Relocation of buildings, people and businesses. Transport system will be efficient. Compensation of PAPS.	В	N/A
Catholic	Stakeholder-Social services	Compensation of PAPS. Relocation of buildings, people and businesses. Attraction of investors will be promoted. Employment opportunities to the residents of the area.	В	Ensure employment is offered to the area residents.
	Stakeholder-Social services	Improvement of road which will lead to the growth of the economy of the area. Improvement of road which will	В	N/A

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#	Stakeholder Name	Department/ Organization	Involvement or Role in Project	Stakeholder Interest, Goals, and Concerns	Stakeholder Priority	Follow-up Actions and Communication
				lead to the growth of the economy of the area.		
				Accessibility to feeder roads will be easy.		
				Attraction of investors will be promoted.		
18.	Francis Kariuki Ragui	N/A	N/A	Improvement of road which will lead to the growth of the economy of the area. Improvement of road which will lead to the growth of the economy of the area. Easy access to other areas hence increasing transport efficiency.	В	Corporate Social Responsibility (CSR) to be initiated e.g construction of a permanent secondary school. Compensation should be done once.
19.	N/A	Loruma Car Wash Garden Youth Group	Stakeholder-Business	Employment opportunities will be offered to the youths. Relocation of buildings, people and businesses. Deterioration in business output.	В	Ensure employment is availed to take care of joblessness and idleness.
20.	Josephat Lokiteed Ngibolon	N/A	N/A	Relocation of buildings, people and businesses. Employment opportunities will be offered to the youths.	В	Speed bumps should be erected in town centres because of school crossing children and in areas where livestock cross to avoid possible accidents by over speeding vehicles. Erection of road signs to alert drivers. Construction of bridges instead of laggas would be preferable. Compensation of PAPS before commencement of the project.

#	Stakeholder Name	Department/ Organization	Involvement or Role in Project	Stakeholder Interest, Goals, and Concerns	Stakeholder Priority	Follow-up Actions and Communication
21.	Enyaman Simon Full Gospel Church of Kenya Stakeholder-Social services		Employment opportunities will be offered to the youths. Improvement of road which will lead to the growth of the economy of the area. Compensation of PAPS should be timely.	В	Creating awareness to those who will be affected by the road construction. Transparency has to be adhered to. There should be no any form of corruption right from the start to the end of the project	
22.	N/A	Total Kenya Limited	Stakeholder-Business	Easy transportation of products. Liability of accidents as pastoralists might lose their livestock. Improvement of road which will lead to the growth of the economy of the area.	В	Improvement of drifts to prevent flooding during rainy seasons or be substituted with bridges. Enhancing visibility at night on the road by putting reflectors.
23.	Peter Yegon, Mohammed Hussein and Leo Eremon	N/A	N/A	Easy transportation of products and people. Reduction of insecurity in areas where there is no road. Reduction in transportation cost as well as cost of food. Better standards of living of the residents. Employment opportunities will be offered to the locals.	В	Care to be taken during road construction to ensure that the environment is not degraded. Compensation of PAPS should be done to prevent any conflicts.
24.	Abdikadir Hassan Ibrahim and Hashim Shaban			N/A	В	The disadvantages that will arise out this project should be dealt with by the contractor and the proponent.
25.		Spring Water Ministries	Stakeholder-Social services	Improvement of road which will lead to the growth of the economy of the area especially	В	N/A

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#	Stakeholder Name	Department/ Organization	Involvement or Role in Project	Stakeholder Interest, Goals, and Concerns	Stakeholder Priority	Follow-up Actions and Communication
				the business sector.		
26.	Echip L. Obeid	N/A	N/A	Accessibility to other places will be easy. Improvement of road which will lead to the growth of the economy of the area especially the business sector. Time taken on the road will be reduced.	В	Dust emission from the road to be reduced through watering. Corporate Social Responsibility (CSR) to be initiated
27.	N/A	Diocese of Lodwar Lokichoggio Catholic church	Stakeholder-Social services	Accessibility to other places will be easy. Damage to vehicles will be reduced. Danger of accidents may be witnessed.	В	Road safety measures to be adhered to by pedestrians, bicycle riders, motorcycle riders and pastoralists crossing with animals.
28.	Abdillahi Ogle	Kakuma wholesalers	Stakeholder-business	Improvement of road which will lead to the growth of the economy of the area especially the business sector. Reduction in transportation cost as well as cost of food. Relocation of buildings, people and businesses. Attraction of investors. Employment opportunities will be offered to the youths. Compensation of PAPS should be timely.	В	N/A
29.	Ekulan Etibol Nakereu	Kakuma Baptist Church	Stakeholder-Social services	Compensation of PAPS should be timely.	В	N/A
30.	Emmanuel Lokai	Post bank Mashinani	Stakeholder-Business	Improvement of road which will lead to the growth of the economy of the area especially the business sector.	В	Construction of bridges instead of laggas would be preferable. Speed bumps should be erected
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#	Stakeholder Name	Department/ Organization	Involvement or Role in Project	Stakeholder Interest, Goals, and Concerns	Stakeholder Priority	Follow-up Actions and Communication
				Population will bulge in town centres.		in town centres because of school crossing children and in areas where livestock cross to avoid possible accidents by over
				Relocation of buildings, people and businesses.		speeding vehicles.
				Likelihood of accidents. Transport and communication will be efficient.		Erection of road signs to alert drivers. Designing of zebra crossing in towns or centres.
31.	N/A	Nasiger Dispensary	Stakeholder-Health service	Transport will be efficient. Likelihood of accidents. Spread of diseases such as HIV/AIDS by new habitants in the area.	В	Speed bumps should be erected in town centres because of school crossing children and in areas where livestock cross to avoid possible accidents by over speeding vehicles.
				Improvement of road which will lead to the growth of the economy of the area especially the business sector		
32.	N/A	Our Lady Of Fatima Catholic Church	Stakeholder-Social service	There will be development. Improvement of road which will lead to the growth of the economy of the area especially the business sector. Likelihood of accidents.	В	Speed bumps should be erected in town centres because of school crossing children and in areas where livestock cross to avoid possible accidents by over speeding vehicles. Erection of road signs to alert drivers.
				Land degradation. Relocation of buildings, people and businesses.		Designing of zebra crossing in towns, centres and overpopulated areas. Little damage to water pipes.
20	Abmod Melagrama d	Almouhanali	Ctokoholder Direitari	Compensation of PAPS.	D	N/A
33.	Ahmed Mohammed Noor	Almubarak Wholesalers	Stakeholder-Business	Improvement of road which will lead to the growth of the economy of the area especially the business sector.	В	N/A

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#	Stakeholder Name	Department/ Organization	Involvement or Role in Project	Stakeholder Interest, Goals, and Concerns	Stakeholder Priority	Follow-up Actions and Communication
				Relocation of buildings, people and businesses. There will be development.		
34.	Richard Ekutan	N/A	N/A	Transport and communication will be efficient. The project should be timely such that it should not take a long time to be completed. Relocation of buildings, people and businesses. Compensation of PAPS.	В	The road should be standard.
35.	James Chegem	Turkana county	Stakeholder-County government	Transport and communication will be efficient. Relocation of buildings, people and businesses. Employment opportunities will be offered to the locals.	В	Speed bumps should be erected in town centres because of school crossing children and in areas where livestock cross to avoid possible accidents by over speeding vehicles. Erection of road signs to alert drivers.
36.	N/A	Ogle petroleum	Stakeholder-Business	Relocation of buildings, people and businesses. Transport and communication will be efficient. There will be development.	В	Speed bumps should be erected in town centres because of school crossing children and in areas where livestock cross to avoid possible accidents by over speeding vehicles. Enhancing visibility at night on the road by putting reflectors.

Р	ANAFCON Ltd.
Annex 6: Lodwar-Lokichogio-Nakodok Road Design Coordi	nates

No.	E	N	No.	E	N	No.	E	N
1	788884.6	346347.0	841	741947.7	392728.8	1681	676172.6	424049.8
2	788873.5	346436.3	842	741863.3	392782.4	1682	676142.8	424145.3
3	788847.1	346532.6	843	741791.3	392829.1	1683	676113.0	424240.7
4	788812.0	346615.5	844	741721.0	392875.4	1684	676083.3	424336.2
5	788772.8	346707.5	845	741645.8	392924.8	1685	676053.5	424431.7
6	788741.8	346791.9	846	741562.2	392979.7	1686	676023.7	424527.1
7	788725.9	346880.3	847	741478.6	393034.6	1687	675993.9	424622.6
8	788716.2	346979.9	848	741395.1	393089.6	1688	675964.2	424718.1
9	788705.8	347059.1	849	741311.5	393144.5	1689	675934.4	424813.5
10	788657.9	347145.7	850	741236.3	393193.9	1690	675910.1	424889.8
11	788591.9	347192.2	851	741160.5	393242.5	1691	675874.0	424983.0
12	788498.9	347224.8	852	741083.9	393289.7	1692	675830.5	425073.0
13	788410.0	347238.1	853	741006.4	393335.5	1693	675779.9	425159.2
14	788330.1	347236.3	854	740919.4	393384.8	1694	675722.4	425241.0
15	788251.5	347222.2	855	740831.4	393432.3	1695	675672.2	425303.3
16	788154.1	347199.4	856	740742.5	393478.0	1696	675617.2	425374.5
17	788056.7	347176.7	857	740652.7	393522.0	1697	675562.4	425458.1
18	787969.0	347156.2	858	740576.7	393557.5	1698	675514.6	425545.9
19	787880.2	347143.6	859	740498.0	393592.6	1699	675474.0	425637.3
20	787783.1	347164.4	860	740406.0	393631.6	1700	675441.0	425731.7
21	787720.3	347203.8	861	740313.2	393668.8	1701	675415.8	425828.4
22	787666.7	347257.1	862	740219.6	393704.2	1702	675398.5	425926.9
23	787604.6	347322.2	863	740144.3	393731.1	1703	675390.5	426006.4
24	787535.6	347394.6	864	740059.0	393759.9	1704	675387.7	426106.4
25	787473.5	347459.8	865	739963.7	393790.2	1705	675393.1	426206.2
26	787411.4	347524.9	866	739867.8	393818.5	1706	675406.5	426305.3
27	787342.4	347597.3	867	739771.4	393844.9	1707	675422.6	426383.6
28	787280.3	347662.4	868	739674.4	393869.3	1708	675437.9	426472.3
29	787211.3	347734.8	869	739577.0	393891.9	1709	675440.2	426572.1
30	787142.3	347807.2	870	739506.5	393906.9	1710	675425.9	426671.0
31	787073.3	347879.6	871	739430.0	393922.0	1711	675395.4	426766.1
32	787018.1	347937.5	872	739331.6	393939.6	1712	675354.8	426846.3
33	786960.9	347993.3	873	739232.8	393955.3	1713	675310.7	426913.1
34	786892.5	348051.9	874	739153.6	393966.4	1714	675259.7	426987.2
35	786828.6	348099.9	875	739074.3	393976.6	1715	675203.1	427069.7
36	786755.4	348152.3	876	738994.9	393986.8	1716	675146.5	427152.1
37	786682.2	348204.6	877	738895.7	393999.6	1717	675089.9	427234.5
38	786600.8	348262.8	878	738806.5	394011.1	1718	675033.3	427317.0
39	786535.8	348309.3	879	738727.1	394021.3	1719	674982.3	427391.2
40	786454.4	348367.5	880	738647.8	394031.5	1720	674931.4	427465.4
41	786373.1	348425.7	881	738548.6	394044.3	1721	674874.8	427547.8

No.	E	N	No.	E	N	No.	E	N
42	786291.7	348483.9	882	738449.4	394057.1	1722	674818.1	427630.2
43	786210.4	348542.0	883	738449.4	394057.1	1723	674761.5	427712.6
44	786129.1	348600.2	884	738350.2	394069.8	1724	674704.9	427795.1
45	786055.8	348652.5	885	738251.1	394082.6	1725	674648.3	427877.5
46	785974.1	348710.2	886	738151.9	394095.4	1726	674591.7	427959.9
47	785891.9	348767.1	887	738052.7	394108.1	1727	674535.1	428042.4
48	785809.2	348823.3	888	737953.5	394120.9	1728	674478.5	428124.8
49	785734.4	348873.3	889	737854.3	394133.7	1729	674421.9	428207.2
50	785666.1	348918.1	890	737755.2	394146.5	1730	674370.9	428281.4
51	785591.9	348966.1	891	737656.0	394159.2	1731	674321.2	428356.5
52	785507.5	349019.7	892	737556.8	394172.0	1732	674269.9	428442.2
53	785422.6	349072.5	893	737458.1	394184.7	1733	674222.7	428530.4
54	785337.2	349124.6	894	737368.5	394197.1	1734	674179.9	428620.8
55	785251.5	349176.0	895	737269.7	394212.6	1735	674141.5	428713.1
56	785173.9	349221.6	896	737171.2	394230.2	1736	674107.7	428807.2
57	785087.4	349271.9	897	737073.1	394249.6	1737	674083.1	428883.3
58	785001.0	349322.3	898	736975.5	394271.1	1738	674052.4	428978.5
59	784914.6	349372.6	899	736878.3	394294.5	1739	674021.8	429073.7
60	784828.2	349422.9	900	736781.5	394319.8	1740	673994.2	429159.4
61	784741.8	349473.3	901	736685.3	394347.1	1741	673967.9	429234.9
62	784655.4	349523.6	902	736589.7	394376.3	1742	673933.7	429318.2
63	784569.0	349573.9	903	736494.6	394407.4	1743	673895.0	429399.4
64	784482.6	349624.2	904	736400.2	394440.4	1744	673853.6	429479.3
65	784396.1	349674.6	905	736306.5	394475.2	1745	673807.6	429568.1
66	784318.4	349719.9	906	736213.5	394512.0	1746	673761.6	429656.9
67	784249.2	349760.1	907	736121.2	394550.5	1747	673715.6	429745.7
68	784162.8	349810.4	908	736029.8	394591.0	1748	673671.2	429831.2
69	784076.4	349860.8	909	735939.1	394633.2	1749	673634.4	429906.3
70	783990.0	349911.1	910	735849.4	394677.3	1750	673598.3	429999.5
71	783903.6	349961.4	911	735760.5	394723.1	1751	673571.7	430095.9
72	783823.2	350008.2	912	735672.5	394770.7	1752	673556.0	430184.5
73	783757.4	350048.2	913	735585.6	394820.1	1753	673548.9	430264.1
74	783682.3	350097.8	914	735499.6	394871.1	1754	673546.1	430354.1
75	783601.4	350156.6	915	735414.7	394923.9	1755	673543.5	430454.0
76	783531.0	350212.6	916	735330.8	394978.4	1756	673540.9	430554.0
77	783455.6	350278.3	917	735248.1	395034.6	1757	673537.4	430629.9
78	783397.6	350333.3	918	735166.5	395092.4	1758	673521.7	430722.5
79	783326.3	350403.5	919	735086.0	395151.8	1759	673493.4	430807.8
80	783269.2	350459.5	920	735006.8	395212.8	1760	673447.4	430896.5
81	783197.9	350529.7	921	734928.8	395275.3	1761	673393.9	430968.8
82	783126.6	350599.8	922	734852.1	395339.5	1762	673330.3	431032.3

No.	E	N	No.	E	N	No.	E	N
83	783055.3	350669.9	923	734776.6	395405.1	1763	673261.8	431090.7
84	782984.0	350740.0	924	734709.8	395465.4	1764	673204.7	431146.7
85	782912.7	350810.1	925	734635.7	395532.5	1765	673143.0	431225.3
86	782855.7	350866.2	926	734561.6	395599.7	1766	673097.3	431302.7
87	782798.6	350922.3	927	734487.5	395666.8	1767	673056.2	431382.8
88	782734.5	350985.4	928	734413.4	395733.9	1768	673010.7	431471.8
89	782663.2	351055.5	929	734339.2	395801.1	1769	672965.1	431560.9
90	782612.8	351104.1	930	734265.1	395868.2	1770	672919.6	431649.9
91	782551.3	351155.3	931	734191.0	395935.4	1771	672874.0	431738.9
92	782468.2	351210.8	932	734116.9	396002.5	1772	672833.0	431819.0
93	782396.8	351248.9	933	734042.8	396069.7	1773	672793.6	431899.9
94	782308.4	351293.5	934	733968.7	396136.8	1774	672754.5	431992.0
95	782219.1	351338.5	935	733894.6	396203.9	1775	672720.8	432086.1
96	782129.8	351383.5	936	733820.5	396271.1	1776	672692.4	432182.0
97	782040.5	351428.5	937	733746.4	396338.2	1777	672669.5	432279.3
98	781960.2	351469.1	938	733672.3	396405.4	1778	672652.2	432377.8
99	781871.4	351515.1	939	733598.2	396472.5	1779	672640.4	432477.1
100	781783.1	351562.1	940	733524.1	396539.7	1780	672634.3	432576.9
101	781695.5	351610.3	941	733450.0	396606.8	1781	672633.9	432676.8
102	781608.4	351659.5	942	733383.2	396667.1	1782	672639.1	432776.7
103	781522.0	351709.7	943	733308.4	396733.6	1783	672650.0	432876.1
104	781444.7	351755.9	944	733233.0	396799.2	1784	672666.5	432974.7
105	781367.6	351802.3	945	733156.9	396864.1	1785	672688.5	433072.2
106	781306.5	351839.1	946	733080.2	396928.2	1786	672716.1	433168.4
107	781222.0	351890.1	947	733002.8	396991.5	1787	672749.0	433262.8
108	781136.4	351941.7	948	732924.8	397054.1	1788	672787.2	433355.2
109	781050.7	351993.3	949	732846.1	397115.8	1789	672821.3	433427.5
110	780965.1	352044.9	950	732766.8	397176.8	1790	672864.9	433517.5
111	780879.4	352096.5	951	732687.0	397237.0	1791	672908.5	433607.5
112	780793.8	352148.2	952	732606.5	397296.3	1792	672952.1	433697.5
113	780708.1	352199.8	953	732525.4	397354.8	1793	672995.7	433787.5
114	780622.4	352251.4	954	732443.7	397412.5	1794	673039.3	433877.5
115	780536.8	352303.0	955	732361.5	397469.4	1795	673082.9	433967.5
116	780459.7	352349.5	956	732278.7	397525.5	1796	673126.5	434057.5
117	780382.7	352396.0	957	732195.3	397580.7	1797	673165.7	434138.5
118	780315.9	352440.0	958	732111.3	397635.0	1798	673200.8	434221.3
119	780244.2	352494.4	959	732035.4	397683.3	1799	673225.6	434318.1
120	780169.2	352560.5	960	731950.9	397736.8	1800	673234.0	434417.6
121	780099.7	352632.4	961	731866.4	397790.4	1801	673225.7	434517.2
122	780048.1	352693.5	962	731782.0	397843.9	1802	673201.1	434613.9
123	779991.1	352763.2	963	731697.5	397897.4	1803	673160.7	434705.3

No.	E	N	No.	E	N	No.	E	N
124	779934.2	352832.9	964	731613.0	397950.9	1804	673119.3	434773.7
125	779871.0	352910.3	965	731528.6	398004.4	1805	673065.6	434858.1
126	779814.0	352980.0	966	731444.1	398058.0	1806	673012.0	434942.5
127	779750.8	353057.5	967	731359.6	398111.5	1807	672963.8	435018.5
128	779687.5	353134.9	968	731275.1	398165.0	1808	672920.3	435097.3
129	779624.3	353212.4	969	731190.7	398218.5	1809	672886.0	435191.1
130	779561.0	353289.8	970	731106.2	398272.0	1810	672867.7	435289.3
131	779497.8	353367.3	971	731021.7	398325.6	1811	672866.0	435389.1
132	779434.5	353444.7	972	730944.0	398374.8	1812	672880.9	435487.9
133	779371.2	353522.2	973	730861.5	398427.6	1813	672908.1	435573.6
134	779308.0	353599.6	974	730777.8	398482.4	1814	672942.7	435645.7
135	779244.7	353677.1	975	730694.7	398538.0	1815	672983.5	435717.1
136	779187.8	353746.8	976	730612.1	398594.4	1816	673028.4	435803.9
137	779131.7	353815.5	977	730530.1	398651.6	1817	673068.5	435895.5
138	779073.9	353886.2	978	730448.6	398709.6	1818	673102.3	435989.6
139	779017.0	353955.9	979	730367.8	398768.4	1819	673129.8	436085.7
140	778953.8	354033.4	980	730287.5	398828.0	1820	673150.9	436183.4
141	778896.8	354103.1	981	730207.8	398888.5	1821	673165.4	436282.4
142	778846.2	354165.0	982	730128.7	398949.7	1822	673173.2	436382.0
143	778785.9	354238.9	983	730050.2	399011.6	1823	673174.4	436482.0
144	778726.0	354312.2	984	729972.4	399074.4	1824	673169.0	436581.9
145	778666.1	354385.7	985	729895.1	399137.9	1825	673161.0	436661.4
146	778617.4	354442.9	986	729826.1	399195.7	1826	673150.7	436760.9
147	778552.8	354505.5	987	729749.7	399260.1	1827	673142.5	436840.5
148	778473.0	354565.7	988	729673.2	399324.5	1828	673135.3	436940.2
149	778395.2	354610.8	989	729596.7	399389.0	1829	673132.9	437040.2
150	778312.7	354646.8	990	729520.2	399453.4	1830	673134.7	437130.2
151	778238.1	354675.6	991	729443.7	399517.8	1831	673141.2	437229.9
152	778154.1	354707.9	992	729367.2	399582.2	1832	673152.5	437329.3
153	778070.1	354740.3	993	729290.7	399646.6	1833	673168.3	437428.0
154	777976.8	354776.3	994	729214.2	399711.0	1834	673185.4	437516.4
155	777892.9	354808.7	995	729137.7	399775.4	1835	673202.6	437604.7
156	777808.9	354841.0	996	729061.2	399839.9	1836	673216.4	437693.6
157	777724.9	354873.4	997	728984.7	399904.3	1837	673221.5	437793.5
158	777640.9	354905.8	998	728908.3	399968.7	1838	673215.5	437893.2
159	777558.7	354942.2	999	728831.8	400033.1	1839	673198.4	437991.7
160	777474.4	354995.8	1000	728755.3	400097.5	1840	673173.9	438078.3
161	777400.2	355062.7	1001	728678.8	400161.9	1841	673140.8	438161.9
162	777349.5	355124.5	1002	728602.3	400226.3	1842	673103.2	438236.3
163	777302.8	355201.3	1003	728540.7	400277.4	1843	673057.6	438321.5
164	777268.1	355284.3	1004	728459.9	400336.3	1844	673010.4	438409.6

No.	Е	N	No.	E	N	No.	E	N
165	777246.3	355371.5	1005	728374.5	400388.3	1845	672963.1	438497.8
166	777236.8	355460.9	1006	728303.7	400425.5	1846	672916.7	438584.5
167	777230.5	355540.7	1007	728214.9	400471.4	1847	672874.3	438665.7
168	777216.2	355619.3	1008	728126.1	400517.3	1848	672829.9	438755.3
169	777183.8	355713.8	1009	728046.1	400558.7	1849	672787.5	438845.9
170	777146.8	355784.7	1010	727967.7	400602.7	1850	672747.2	438937.4
171	777094.4	355857.8	1011	727888.4	400663.5	1851	672709.0	439029.8
172	777031.7	355922.2	1012	727826.6	400728.8	1852	672672.8	439123.1
173	776963.1	355980.5	1013	727771.3	400799.8	1853	672642.1	439207.7
174	776894.2	356038.3	1014	727710.8	400878.5	1854	672610.0	439302.4
175	776840.5	356083.3	1015	727660.1	400941.3	1855	672585.5	439378.5
176	776771.5	356141.1	1016	727587.7	401010.1	1856	672555.2	439473.8
177	776704.8	356197.0	1017	727504.9	401066.0	1857	672524.8	439569.1
178	776641.3	356250.3	1018	727414.0	401107.4	1858	672494.4	439664.4
179	776564.6	356314.5	1019	727317.5	401133.1	1859	672466.9	439750.0
180	776488.0	356378.8	1020	727228.1	401142.7	1860	672433.3	439844.2
181	776434.3	356423.7	1021	727138.2	401146.8	1861	672395.8	439936.9
182	776365.4	356481.6	1022	727038.3	401151.2	1862	672354.6	440028.0
183	776296.4	356539.4	1023	726941.8	401155.5	1863	672309.6	440117.3
184	776218.4	356601.9	1024	726848.6	401161.7	1864	672261.0	440204.7
185	776137.9	356661.3	1025	726749.2	401172.6	1865	672208.9	440290.1
186	776055.2	356717.4	1026	726660.1	401185.2	1866	672153.8	440372.5
187	775970.2	356770.2	1027	726561.1	401199.3	1867	672101.7	440446.9
188	775900.8	356809.9	1028	726462.1	401213.3	1868	672044.4	440528.9
189	775821.2	356851.9	1029	726363.1	401227.4	1869	671987.1	440610.9
190	775740.2	356891.1	1030	726264.1	401241.4	1870	671944.5	440672.7
191	775648.5	356931.1	1031	726165.1	401255.5	1871	671900.6	440745.3
192	775555.4	356967.4	1032	726066.0	401269.6	1872	671860.9	440826.1
193	775460.8	357000.0	1033	725967.0	401283.6	1873	671825.5	440919.5
194	775384.6	357024.2	1034	725868.0	401297.7	1874	671799.4	441016.0
195	775289.2	357054.4	1035	725769.0	401311.8	1875	671783.1	441114.6
196	775213.0	357078.5	1036	725670.0	401325.8	1876	671776.9	441194.4
197	775127.2	357105.7	1037	725571.0	401339.9	1877	671773.2	441284.3
198	775031.9	357135.9	1038	725472.0	401353.9	1878	671769.1	441384.2
199	774936.5	357166.1	1039	725373.0	401368.0	1879	671765.5	441474.1
200	774860.3	357190.2	1040	725274.0	401382.1	1880	671761.8	441564.1
201	774774.5	357217.4	1041	725175.0	401396.1	1881	671757.7	441664.0
202	774698.2	357241.6	1042	725076.0	401410.2	1882	671754.3	441753.9
203	774621.9	357265.7	1043	724977.0	401424.3	1883	671752.4	441853.9
204	774526.6	357295.9	1044	724878.0	401438.3	1884	671752.8	441953.9
205	774440.8	357323.1	1045	724779.0	401452.4	1885	671755.4	442053.9

No.	E	N	No.	E	N	No.	E	N
206	774345.5	357353.3	1046	724690.0	401465.7	1886	671759.6	442143.8
207	774259.7	357380.5	1047	724602.8	401487.8	1887	671766.4	442243.5
208	774180.2	357405.9	1048	724511.1	401527.3	1888	671775.4	442343.1
209	774099.3	357436.7	1049	724427.1	401581.5	1889	671786.7	442442.5
210	774009.5	357480.6	1050	724360.0	401641.3	1890	671798.7	442531.7
211	773932.6	357527.3	1051	724297.2	401705.8	1891	671814.1	442630.5
212	773860.1	357580.5	1052	724227.6	401777.6	1892	671829.6	442719.1
213	773799.6	357632.9	1053	724157.9	401849.3	1893	671845.2	442807.8
214	773740.8	357687.1	1054	724088.3	401921.1	1894	671860.9	442906.5
215	773679.8	357753.1	1055	724032.8	401978.7	1895	671874.5	443005.6
216	773632.7	357829.6	1056	723967.5	402054.4	1896	671885.8	443105.0
217	773601.3	357913.9	1057	723913.4	402126.7	1897	671894.8	443204.6
218	773587.0	358002.6	1058	723863.2	402201.0	1898	671901.5	443304.3
219	773591.5	358102.3	1059	723807.4	402284.0	1899	671906.0	443404.2
220	773607.8	358180.6	1060	723757.3	402358.8	1900	671908.2	443504.2
221	773629.3	358278.2	1061	723703.4	402443.0	1901	671908.2	443604.2
222	773647.9	358356.0	1062	723652.9	402529.3	1902	671905.9	443704.2
223	773679.0	358451.0	1063	723605.8	402617.5	1903	671901.3	443804.1
224	773719.4	358542.5	1064	723562.2	402707.5	1904	671894.4	443903.8
225	773763.3	358621.0	1065	723522.2	402799.1	1905	671885.3	444003.4
226	773819.9	358703.4	1066	723485.8	402892.3	1906	671873.9	444102.7
227	773877.7	358772.4	1067	723453.1	402986.8	1907	671860.2	444201.8
228	773933.3	358829.8	1068	723424.2	403082.5	1908	671846.0	444290.7
229	773996.7	358893.7	1069	723401.2	403170.6	1909	671828.1	444389.1
230	774067.2	358964.6	1070	723377.9	403266.7	1910	671809.0	444482.2
231	774130.6	359028.6	1071	723354.3	403363.9	1911	671787.9	444574.7
232	774199.0	359101.4	1072	723330.8	403460.9	1912	671766.1	444662.1
233	774258.1	359169.3	1073	723310.9	403538.6	1913	671739.8	444758.5
234	774308.5	359231.4	1074	723281.6	403634.2	1914	671711.2	444854.4
235	774356.6	359292.7	1075	723247.1	403728.1	1915	671680.5	444949.5
236	774401.2	359349.4	1076	723207.7	403819.9	1916	671647.7	445044.0
237	774463.0	359428.0	1077	723163.3	403909.6	1917	671612.7	445137.7
238	774524.8	359506.6	1078	723114.2	403996.6	1918	671575.6	445230.5
239	774586.6	359585.2	1079	723060.4	404080.9	1919	671536.4	445322.5
240	774648.4	359663.9	1080	723002.2	404162.2	1920	671499.4	445404.5
241	774702.8	359735.6	1081	722946.1	404232.6	1921	671460.6	445485.8
242	774729.4	359777.9	1082	722888.9	404302.1	1922	671415.4	445573.1
243	774767.4	359859.4	1083	722825.3	404379.3	1923	671375.4	445644.3
244	774793.7	359955.7	1084	722761.8	404456.5	1924	671323.4	445729.7
245	774801.7	360025.2	1085	722704.3	404525.8	1925	671268.2	445813.0
246	774804.2	360115.1	1086	722638.4	404601.0	1926	671215.9	445886.3

No.	E	N	No.	E	N	No.	E	N
247	774805.7	360195.1	1087	722570.1	404674.0	1927	671157.4	445967.4
248	774808.1	360285.1	1088	722508.3	404739.4	1928	671098.9	446048.5
249	774819.4	360374.3	1089	722441.9	404814.2	1929	671040.4	446129.6
250	774843.0	360461.1	1090	722384.2	404883.3	1930	670981.9	446210.7
251	774873.8	360534.9	1091	722320.7	404960.5	1931	670923.4	446291.8
252	774919.0	360612.6	1092	722257.1	405037.6	1932	670864.8	446372.9
253	774963.3	360674.6	1093	722193.5	405114.8	1933	670818.0	446437.8
254	775018.6	360750.4	1094	722130.6	405191.1	1934	670765.4	446510.7
255	775077.5	360831.2	1095	722073.6	405262.2	1935	670706.8	446591.8
256	775129.3	360904.8	1096	722013.2	405341.9	1936	670648.3	446672.9
257	775183.6	360988.7	1097	721955.0	405423.2	1937	670589.8	446754.0
258	775225.2	361058.2	1098	721899.2	405506.2	1938	670537.3	446827.1
259	775272.8	361144.8	1099	721845.8	405590.7	1939	670483.7	446906.7
260	775304.5	361207.4	1100	721794.8	405676.7	1940	670434.2	446986.6
261	775339.2	361279.5	1101	721746.2	405764.1	1941	670389.6	447064.8
262	775378.1	361360.7	1102	721700.2	405852.9	1942	670347.7	447144.5
263	775412.8	361432.8	1103	721656.7	405942.9	1943	670301.9	447233.4
264	775456.0	361522.9	1104	721615.7	406034.2	1944	670260.7	447313.3
265	775490.7	361595.0	1105	721577.4	406126.5	1945	670214.8	447402.2
266	775529.6	361676.2	1106	721541.7	406220.0	1946	670169.0	447491.1
267	775572.9	361766.3	1107	721508.7	406314.3	1947	670127.8	447571.1
268	775611.9	361847.4	1108	721478.4	406409.6	1948	670081.9	447660.0
269	775645.5	361917.4	1109	721450.8	406505.7	1949	670043.2	447734.2
270	775681.1	361991.7	1110	721425.9	406602.6	1950	669993.0	447816.3
271	775709.6	362053.0	1111	721403.8	406700.1	1951	669939.1	447888.3
272	775735.9	362120.4	1112	721384.5	406798.2	1952	669886.7	447948.8
273	775761.6	362206.6	1113	721369.4	406887.0	1953	669820.7	448023.9
274	775777.8	362285.0	1114	721353.3	406985.7	1954	669761.2	448091.5
275	775787.8	362367.1	1115	721337.1	407084.3	1955	669695.1	448166.5
276	775790.8	362464.2	1116	721321.0	407183.0	1956	669629.1	448241.6
277	775785.1	362554.0	1117	721304.8	407281.7	1957	669563.0	448316.7
278	775773.2	362633.1	1118	721288.7	407380.4	1958	669503.2	448383.9
279	775755.3	362711.1	1119	721272.6	407479.1	1959	669435.3	448457.3
280	775735.1	362798.8	1120	721256.4	407577.8	1960	669372.7	448522.0
281	775718.1	362887.1	1121	721241.8	407666.6	1961	669308.8	448585.3
282	775704.2	362976.1	1122	721223.7	407754.7	1962	669236.2	448654.1
283	775692.6	363075.4	1123	721197.4	407851.2	1963	669162.0	448721.2
284	775685.5	363165.1	1124	721164.7	407945.7	1964	669086.3	448786.6
285	775682.2	363235.0	1125	721125.9	408037.8	1965	669016.9	448843.9
286	775680.9	363325.0	1126	721080.9	408127.1	1966	668946.3	448899.7
287	775682.1	363395.0	1127	721030.2	408213.3	1967	668875.0	448954.5

No.	E	N	No.	E	N	No.	E	N
288	775686.6	363484.9	1128	720973.8	408295.8	1968	668803.6	449009.3
289	775695.3	363584.5	1129	720912.0	408374.4	1969	668724.3	449070.2
290	775706.6	363673.8	1130	720845.1	408448.8	1970	668660.8	449118.9
291	775717.5	363742.9	1131	720780.9	408511.8	1971	668581.5	449179.8
292	775731.0	363821.8	1132	720715.0	408573.1	1972	668505.7	449238.1
293	775745.8	363910.6	1133	720641.8	408641.2	1973	668430.8	449295.5
294	775758.6	364008.0	1134	720568.6	408709.4	1974	668359.4	449350.3
295	775766.2	364089.3	1135	720495.4	408777.5	1975	668287.1	449404.0
296	775772.1	364169.1	1136	720422.2	408845.7	1976	668213.8	449456.2
297	775778.8	364258.9	1137	720349.0	408913.8	1977	668139.4	449506.8
298	775785.5	364348.6	1138	720275.9	408981.9	1978	668055.6	449561.3
299	775792.9	364448.4	1139	720202.7	409050.1	1979	667970.5	449613.9
300	775800.3	364548.1	1140	720129.5	409118.2	1980	667893.0	449659.6
301	775806.9	364637.8	1141	720056.3	409186.4	1981	667805.7	449708.4
302	775813.6	364727.6	1142	719983.1	409254.5	1982	667717.4	449755.3
303	775820.3	364817.3	1143	719909.9	409322.7	1983	667628.0	449800.2
304	775826.2	364897.1	1144	719836.7	409390.8	1984	667546.7	449838.8
305	775832.1	364976.9	1145	719777.4	409444.4	1985	667455.5	449879.7
306	775836.0	365056.8	1146	719699.5	409507.1	1986	667372.6	449914.8
307	775833.2	365146.7	1147	719617.6	409564.5	1987	667279.7	449951.8
308	775820.8	365245.9	1148	719532.2	409616.4	1988	667186.0	449986.6
309	775801.3	365333.8	1149	719443.5	409662.6	1989	667101.0	450016.2
310	775770.8	365428.9	1150	719352.0	409702.9	1990	667015.5	450044.4
311	775740.3	365502.9	1151	719258.0	409737.0	1991	666930.0	450072.6
312	775708.8	365576.4	1152	719162.0	409764.9	1992	666844.6	450100.8
313	775673.3	365659.1	1153	719064.4	409786.5	1993	666768.9	450126.7
314	775633.9	365751.0	1154	718965.5	409801.5	1994	666676.0	450163.7
315	775594.5	365842.9	1155	718865.9	409810.0	1995	666585.4	450206.0
316	775563.0	365916.5	1156	718765.9	409812.0	1996	666514.4	450243.0
317	775533.9	365991.0	1157	718668.4	409807.6	1997	666426.1	450289.7
318	775511.4	366067.7	1158	718586.4	409800.3	1998	666352.4	450328.7
319	775495.9	366146.2	1159	718486.8	409791.3	1999	666274.7	450367.0
320	775486.7	366235.7	1160	718387.2	409782.2	2000	666182.8	450406.6
321	775487.1	366335.6	1161	718287.6	409773.1	2001	666089.0	450441.0
322	775498.6	366434.9	1162	718188.0	409764.1	2002	665993.4	450470.3
323	775513.2	366503.4	1163	718088.4	409755.0	2003	665906.1	450492.2
324	775537.1	366590.1	1164	717988.8	409746.0	2004	665828.0	450509.6
325	775561.5	366676.8	1165	717889.3	409736.9	2005	665740.2	450529.5
326	775580.4	366744.1	1166	717799.6	409729.4	2006	665653.9	450554.8
327	775599.1	366811.6	1167	717699.8	409722.4	2007	665561.0	450591.7
328	775617.2	366899.7	1168	717600.0	409716.9	2008	665472.0	450637.3

No.	E	N	No.	E	N	No.	E	N
329	775625.1	366994.7	1169	717500.0	409712.9	2009	665396.1	450685.6
330	775622.3	367079.2	1170	717400.1	409710.3	2010	665324.7	450740.4
331	775612.9	367149.7	1171	717310.1	409709.3	2011	665255.6	450803.9
332	775590.4	367241.2	1172	717210.1	409708.6	2012	665193.8	450863.9
333	775561.0	367320.5	1173	717110.1	409707.9	2013	665119.4	450930.6
334	775520.4	367400.8	1174	717010.1	409707.3	2014	665050.0	450987.9
335	775479.0	367469.2	1175	716910.1	409706.6	2015	664970.4	451048.5
336	775437.3	367537.5	1176	716810.1	409705.9	2016	664896.8	451100.3
337	775395.5	367605.7	1177	716710.1	409705.2	2017	664822.9	451151.6
338	775354.3	367673.0	1178	716615.9	409704.6	2018	664757.6	451197.8
339	775306.8	367750.7	1179	716520.1	409702.6	2019	664678.6	451259.1
340	775254.6	367836.0	1180	716420.2	409697.8	2020	664602.9	451324.4
341	775207.6	367912.7	1181	716320.6	409690.0	2021	664537.8	451386.6
342	775165.8	367981.0	1182	716221.1	409679.4	2022	664469.1	451459.2
343	775113.6	368066.3	1183	716122.0	409666.0	2023	664416.8	451519.7
344	775061.4	368151.6	1184	716023.4	409649.6	2024	664359.3	451589.0
345	775009.2	368236.9	1185	715925.2	409630.5	2025	664295.5	451665.9
346	774967.5	368305.1	1186	715827.7	409608.5	2026	664231.6	451742.9
347	774915.3	368390.4	1187	715730.8	409583.8	2027	664171.8	451815.0
348	774868.3	368467.2	1188	715634.7	409556.3	2028	664110.3	451889.1
349	774822.8	368541.6	1189	715539.4	409526.0	2029	664052.5	451958.6
350	774785.3	368603.9	1190	715454.3	409496.5	2030	663995.3	452027.6
351	774744.8	368672.9	1191	715360.0	409463.3	2031	663931.4	452104.5
352	774705.0	368742.4	1192	715265.7	409430.1	2032	663867.6	452181.5
353	774656.5	368829.8	1193	715171.3	409396.9	2033	663803.7	452258.4
354	774618.5	368900.2	1194	715077.0	409363.7	2034	663746.2	452327.7
355	774574.3	368984.5	1195	714982.7	409330.5	2035	663688.7	452397.0
356	774535.8	369060.1	1196	714908.3	409301.2	2036	663624.9	452473.9
357	774496.0	369140.8	1197	714821.6	409251.5	2037	663561.0	452550.9
358	774461.4	369212.9	1198	714758.1	409202.9	2038	663497.1	452627.8
359	774427.1	369285.2	1199	714679.8	409140.7	2039	663433.3	452704.7
360	774392.8	369357.5	1200	714601.5	409078.5	2040	663369.4	452781.7
361	774350.0	369447.8	1201	714523.2	409016.3	2041	663305.5	452858.6
362	774307.1	369538.2	1202	714459.2	408968.4	2042	663241.7	452935.6
363	774264.2	369628.5	1203	714367.1	408930.6	2043	663177.8	453012.5
364	774225.6	369709.8	1204	714267.7	408925.0	2044	663114.0	453089.5
365	774184.4	369789.8	1205	714172.0	408952.3	2045	663050.1	453166.4
366	774130.7	369874.1	1206	714092.3	409007.4	2046	662986.2	453243.4
367	774068.7	369952.5	 1207	714037.0	409068.8	2047	662922.4	453320.3
368	774001.5	370022.4	1208	713970.4	409129.2	2048	662864.9	453389.6
369	773939.9	370078.1	1209	713893.2	409175.2	2049	662801.4	453466.9

No.	E	N	No.	E	N	No.	E	N
370	773865.5	370144.8	1210	713811.0	409211.7	2050	662744.9	453537.0
371	773803.7	370200.2	1211	713719.4	409251.9	2051	662682.3	453614.9
372	773746.3	370251.6	1212	713637.1	409288.2	2052	662619.7	453692.9
373	773686.7	370305.0	1213	713553.4	409321.3	2053	662557.1	453770.9
374	773612.3	370371.7	1214	713457.5	409349.4	2054	662494.5	453848.9
375	773545.2	370431.8	1215	713359.2	409367.8	2055	662434.0	453924.3
376	773476.0	370489.2	1216	713259.6	409376.4	2056	662375.6	453997.0
377	773391.5	370542.6	1217	713159.7	409375.2	2057	662319.2	454067.2
378	773300.3	370583.4	1218	713070.8	409366.1	2058	662256.6	454145.2
379	773214.2	370609.3	1219	712980.9	409354.7	2059	662194.0	454223.2
380	773127.1	370632.2	1220	712881.7	409342.2	2060	662131.4	454301.2
381	773030.4	370657.5	1221	712782.4	409329.6	2061	662068.8	454379.1
382	772933.7	370682.9	1222	712683.2	409317.1	2062	662006.2	454457.1
383	772836.9	370708.2	1223	712584.0	409304.5	2063	661949.9	454527.3
384	772759.5	370728.5	1224	712484.8	409292.0	2064	661887.3	454605.3
385	772672.5	370751.3	1225	712395.5	409281.1	2065	661827.0	454680.4
386	772585.4	370774.1	1226	712296.0	409270.9	2066	661768.4	454753.5
387	772498.4	370797.0	1227	712196.3	409262.7	2067	661705.8	454831.4
388	772401.6	370822.3	1228	712096.5	409256.5	2068	661655.9	454894.0
389	772333.9	370840.1	1229	711996.6	409252.3	2069	661603.7	454967.3
390	772256.5	370860.3	1230	711896.6	409250.1	2070	661557.7	455044.6
391	772159.8	370885.7	1231	711806.6	409249.7	2071	661518.4	455125.5
392	772072.8	370908.6	1232	711706.6	409249.7	2072	661482.7	455208.2
393	771987.1	370936.2	1233	711606.6	409249.6	2073	661440.0	455287.3
394	771896.0	370977.2	1234	711506.6	409249.6	2074	661380.8	455367.8
395	771826.9	371017.5	1235	711406.6	409249.5	2075	661310.5	455438.8
396	771753.2	371071.3	1236	711306.6	409249.5	2076	661239.3	455493.7
397	771694.5	371123.7	1237	711206.6	409249.4	2077	661174.5	455540.7
398	771633.7	371190.0	1238	711106.6	409249.4	2078	661105.0	455597.9
399	771580.3	371262.4	1239	711006.6	409249.4	2079	661032.8	455667.0
400	771530.2	371348.9	1240	710906.6	409249.3	2080	660972.8	455734.0
401	771490.7	371440.7	1241	710806.6	409249.3	2081	660911.8	455813.3
402	771464.5	371526.7	1242	710706.6	409249.2	2082	660857.4	455897.1
403	771446.7	371604.7	1243	710606.6	409249.2	2083	660814.3	455976.1
404	771429.1	371682.8	1244	710506.6	409249.1	2084	660773.1	456067.2
405	771411.6	371760.8	1245	710406.6	409249.1	2085	660739.3	456161.3
406	771392.7	371838.6	1246	710306.6	409249.0	2086	660713.1	456257.8
407	771365.7	371913.8	1247	710206.6	409249.0	2087	660694.7	456356.0
408	771318.3	372001.7	1248	710106.6	409249.0	2088	660684.2	456455.4
409	771257.0	372080.5	1249	710006.6	409248.9	2089	660681.6	456555.4
410	771186.2	372145.9	1250	709906.6	409248.9	2090	660686.6	456651.9

No.	E	N	No.	E	N	No.	E	N
411	771117.1	372192.8	1251	709806.6	409248.8	2091	660695.2	456734.8
412	771036.2	372232.1	1252	709706.6	409248.8	2092	660700.9	456824.6
413	770961.7	372261.1	1253	709606.6	409248.7	2093	660700.1	456924.6
414	770884.8	372290.8	1254	709516.6	409248.9	2094	660691.8	457024.2
415	770793.7	372325.9	1255	709416.7	409252.0	2095	660676.0	457122.9
416	770700.4	372361.9	1256	709317.0	409259.1	2096	660652.8	457220.2
417	770607.1	372397.8	1257	709217.6	409270.3	2097	660622.4	457315.4
418	770513.8	372433.8	1258	709118.7	409285.3	2098	660589.8	457399.3
419	770420.5	372469.8	1259	709020.6	409304.4	2099	660549.3	457490.7
420	770327.2	372505.7	1260	708923.2	409327.3	2100	660509.3	457571.3
421	770233.9	372541.7	1261	708826.9	409354.1	2101	660465.8	457650.1
422	770149.9	372574.1	1262	708731.7	409384.7	2102	660419.0	457726.9
423	770066.5	372607.8	1263	708637.8	409419.2	2103	660363.1	457809.9
424	769984.1	372643.9	1264	708545.4	409457.3	2104	660303.4	457890.1
425	769893.7	372686.8	1265	708454.6	409499.1	2105	660244.2	457962.3
426	769804.9	372732.6	1266	708365.5	409544.5	2106	660181.4	458035.7
427	769717.5	372781.3	1267	708278.3	409593.5	2107	660122.8	458104.0
428	769631.7	372832.7	1268	708193.1	409645.8	2108	660057.7	458180.0
429	769555.5	372880.6	1269	708110.1	409701.6	2109	659999.2	458248.3
430	769470.8	372933.8	1270	708037.2	409754.3	2110	659934.1	458324.3
431	769386.2	372987.0	1271	707956.5	409813.5	2111	659869.1	458400.2
432	769301.5	373040.2	1272	707875.9	409872.6	2112	659804.0	458476.1
433	769225.3	373088.0	1273	707795.2	409931.7	2113	659738.9	458552.1
434	769148.2	373134.4	1274	707714.6	409990.8	2114	659680.4	458620.4
435	769059.6	373180.8	1275	707638.6	410046.5	2115	659621.8	458688.8
436	768968.1	373221.2	1276	707568.5	410095.9	2116	659556.8	458764.7
437	768874.2	373255.6	1277	707482.9	410147.6	2117	659491.7	458840.7
438	768778.3	373283.8	1278	707393.5	410192.4	2118	659433.1	458909.0
439	768680.8	373305.8	1279	707300.9	410230.0	2119	659374.6	458977.3
440	768582.0	373321.3	1280	707225.2	410256.0	2120	659309.5	459053.3
441	768492.4	373329.8	1281	707140.0	410284.8	2121	659244.5	459129.2
442	768402.6	373335.6	1282	707055.7	410316.3	2122	659179.4	459205.2
443	768302.8	373342.0	1283	706965.1	410358.7	2123	659126.5	459265.2
444	768213.0	373347.8	1284	706883.6	410405.3	2124	659057.4	459337.5
445	768123.2	373353.6	1285	706811.4	410452.2	2125	658985.2	459406.6
446	768033.4	373359.4	1286	706735.8	410501.0	2126	658917.6	459466.1
447	767933.6	373365.9	1287	706646.3	410545.4	2127	658839.8	459528.9
448	767853.8	373371.0	1288	706550.9	410575.1	2128	658767.5	459582.4
449	767754.0	373377.5	1289	706462.7	410592.6	2129	658684.7	459638.4
450	767664.2	373383.4	1290	706364.6	410611.9	2130	658599.4	459690.7
451	767564.6	373392.9	1291	706276.1	410628.6	2131	658512.0	459739.2

No.	E	N	No.	E	N	No.	E	N
452	767465.5	373406.3	1292	706176.6	410638.2	2132	658432.1	459780.6
453	767386.7	373419.9	1293	706076.7	410636.1	2133	658350.9	459822.6
454	767288.8	373440.4	1294	705987.5	410624.7	2134	658263.3	459868.0
455	767201.5	373462.2	1295	705888.6	410609.8	2135	658183.4	459909.3
456	767105.5	373490.1	1296	705789.7	410594.8	2136	658094.6	459955.3
457	767020.1	373518.5	1297	705690.8	410579.9	2137	658005.8	460001.3
458	766935.8	373549.9	1298	705592.0	410565.0	2138	657917.0	460047.2
459	766843.4	373588.3	1299	705502.8	410552.4	2139	657828.2	460093.2
460	766752.8	373630.4	1300	705403.3	410542.7	2140	657748.3	460134.6
461	766663.8	373676.2	1301	705303.5	410537.7	2141	657659.5	460180.6
462	766576.8	373725.4	1302	705203.5	410537.5	2142	657579.5	460221.9
463	766491.8	373778.0	1303	705113.5	410540.6	2143	657490.7	460267.9
464	766419.7	373826.5	1304	705023.7	410536.6	2144	657401.9	460313.9
465	766360.4	373869.2	1305	704935.2	410520.4	2145	657339.5	460345.6
466	766289.1	373924.2	1306	704856.5	410506.8	2146	657257.3	460382.3
467	766212.3	373988.2	1307	704758.1	410520.5	2147	657163.5	460416.8
468	766138.1	374055.2	1308	704681.3	410560.4	2148	657077.1	460442.1
469	766066.6	374125.2	1309	704607.8	410599.2	2149	656979.5	460463.6
470	766011.5	374183.2	1310	704509.6	410614.2	2150	656880.6	460478.3
471	765964.6	374235.1	1311	704430.6	410602.1	2151	656790.9	460485.4
472	765904.6	374302.2	1312	704342.1	410585.7	2152	656690.9	460486.6
473	765837.8	374376.7	1313	704252.4	410580.0	2153	656591.1	460480.7
474	765771.1	374451.1	1314	704162.8	410588.4	2154	656492.0	460467.7
475	765704.4	374525.6	1315	704073.6	410600.4	2155	656394.0	460447.8
476	765637.7	374600.1	1316	703974.5	410613.7	2156	656297.7	460421.0
477	765579.3	374665.3	1317	703875.4	410627.0	2157	656203.6	460387.4
478	765517.6	374734.2	1318	703776.3	410640.3	2158	656129.7	460356.7
479	765457.5	374801.2	1319	703677.2	410653.6	2159	656037.4	460318.1
480	765410.8	374853.4	1320	703578.1	410666.9	2160	655963.6	460287.3
481	765344.1	374927.9	1321	703479.0	410680.2	2161	655879.7	460254.7
482	765277.4	375002.3	1322	703379.9	410693.5	2162	655785.2	460222.0
483	765210.6	375076.8	1323	703280.8	410706.8	2163	655689.5	460193.2
484	765143.9	375151.3	1324	703181.6	410720.1	2164	655592.6	460168.2
485	765098.0	375202.6	1325	703082.5	410733.4	2165	655494.9	460147.0
486	765043.0	375262.3	1326	702983.4	410746.8	2166	655396.4	460129.8
487	764980.5	375327.0	1327	702884.3	410760.1	2167	655297.3	460116.5
488	764923.5	375383.2	1328	702785.2	410773.4	2168	655197.8	460107.2
489	764850.5	375451.5	1329	702686.1	410786.7	2169	655097.9	460101.8
490	764783.2	375511.2	1330	702587.0	410800.0	2170	654997.9	460100.4
491	764714.3	375569.2	1331	702487.9	410813.3	2171	654898.0	460103.0
492	764636.1	375631.5	1332	702388.8	410826.6	2172	654798.2	460109.6

No.	E	N	No.	E	N	No.	E	N
493	764564.2	375685.6	1333	702289.6	410839.9	2173	654698.7	460120.1
494	764482.7	375743.6	1334	702190.5	410853.2	2174	654619.5	460131.1
495	764399.6	375799.2	1335	702091.4	410866.5	2175	654520.5	460145.2
496	764314.9	375852.4	1336	702002.2	410878.1	2176	654431.2	460157.9
497	764228.8	375903.2	1337	701902.7	410888.1	2177	654342.1	460169.1
498	764141.2	375951.4	1338	701802.9	410894.8	2178	654252.4	460175.9
499	764061.3	375992.7	1339	701713.0	410899.2	2179	654152.4	460178.1
500	763998.4	376023.5	1340	701613.1	410904.2	2180	654052.5	460174.5
501	763925.5	376058.4	1341	701513.3	410909.1	2181	653954.2	460165.4
502	763836.1	376101.4	1342	701413.4	410914.0	2182	653873.6	460154.8
503	763746.0	376144.7	1343	701313.5	410918.9	2183	653783.3	460142.8
504	763655.8	376188.0	1344	701213.6	410923.8	2184	653694.9	460133.2
505	763565.7	376231.2	1345	701113.7	410928.7	2185	653605.0	460131.1
506	763475.5	376274.5	1346	701023.9	410933.2	2186	653505.3	460138.2
507	763394.4	376313.5	1347	700934.2	410941.2	2187	653406.8	460155.1
508	763305.0	376358.3	1348	700835.9	410959.4	2188	653310.4	460181.8
509	763216.9	376405.6	1349	700740.0	410987.3	2189	653226.4	460213.8
510	763130.2	376455.4	1350	700647.2	411024.6	2190	653136.8	460258.1
511	763045.0	376507.7	1351	700575.7	411060.5	2191	653052.0	460311.0
512	762971.0	376555.8	1352	700487.0	411106.7	2192	652980.5	460365.7
513	762903.6	376602.1	1353	700415.6	411142.6	2193	652921.1	460419.3
514	762822.6	376660.8	1354	700322.3	411178.5	2194	652856.0	460481.4
515	762743.4	376721.8	1355	700225.3	411202.5	2195	652783.6	460550.4
516	762673.5	376778.4	1356	700126.1	411214.3	2196	652718.4	460612.4
517	762596.0	376841.7	1357	700036.1	411214.7	2197	652646.0	460681.4
518	762526.4	376898.7	1358	699946.1	411212.2	2198	652573.6	460750.4
519	762456.7	376955.7	1359	699846.2	411209.4	2199	652501.2	460819.4
520	762387.0	377012.6	1360	699746.2	411206.6	2200	652428.8	460888.4
521	762324.9	377063.0	1361	699646.3	411203.8	2201	652356.4	460957.3
522	762243.9	377121.7	1362	699546.3	411201.0	2202	652284.0	461026.3
523	762158.6	377173.8	1363	699446.3	411198.2	2203	652221.2	461086.7
524	762069.5	377219.1	1364	699356.4	411196.1	2204	652158.6	461155.2
525	761984.3	377254.5	1365	699256.4	411197.7	2205	652104.0	461226.8
526	761901.2	377282.5	1366	699156.6	411204.0	2206	652051.0	461311.5
527	761823.8	377302.9	1367	699067.1	411213.1	2207	652006.4	461401.0
528	761736.0	377322.7	1368	698967.6	411223.5	2208	651970.7	461494.4
529	761648.2	377342.4	1369	698868.1	411233.9	2209	651944.3	461590.7
530	761560.4	377362.1	1370	698768.7	411244.3	2210	651927.3	461689.3
531	761474.8	377381.8	1371	698669.2	411254.7	2211	651920.2	461778.9
532	761396.1	377405.3	1372	698569.8	411265.1	2212	651918.2	461868.9
533	761303.5	377443.0	1373	698470.3	411275.6	2213	651911.0	461958.6

No.	Е	N	No.	Е	N	No.	Е	N
534	761215.4	377490.1	1374	698370.9	411286.0	2214	651895.6	462047.2
535	761148.8	377534.4	1375	698271.4	411296.4	2215	651869.2	462143.7
536	761084.6	377582.2	1376	698172.0	411306.8	2216	651837.3	462227.8
537	761012.1	377635.5	1377	698072.5	411317.2	2217	651792.9	462317.4
538	760943.5	377676.4	1378	697973.0	411327.6	2218	651739.8	462402.0
539	760869.9	377707.8	1379	697873.6	411338.0	2219	651684.9	462473.3
540	760773.2	377732.9	1380	697774.1	411348.5	2220	651626.9	462542.1
541	760683.7	377741.4	1381	697674.7	411358.9	2221	651580.7	462607.4
542	760584.1	377735.1	1382	697575.2	411369.3	2222	651534.2	462695.8
543	760515.5	377721.0	1383	697485.7	411378.8	2223	651503.8	462780.4
544	760438.5	377699.6	1384	697386.4	411390.8	2224	651484.8	462858.1
545	760349.7	377674.5	1385	697287.4	411404.7	2225	651464.9	462945.9
546	760255.6	377647.9	1386	697188.7	411420.7	2226	651442.7	463043.4
547	760188.2	377628.9	1387	697090.3	411438.6	2227	651422.6	463131.1
548	760117.4	377610.9	1388	696992.3	411458.5	2228	651398.1	463228.1
549	760021.6	377597.1	1389	696894.7	411480.3	2229	651373.9	463314.8
550	759933.5	377595.1	1390	696797.6	411504.0	2230	651344.8	463410.4
551	759842.1	377603.8	1391	696700.9	411529.7	2231	651313.2	463505.3
552	759744.6	377625.7	1392	696604.8	411557.2	2232	651282.9	463590.1
553	759650.8	377660.0	1393	696509.3	411586.7	2233	651249.2	463684.2
554	759562.2	377706.3	1394	696414.3	411618.1	2234	651215.4	463778.3
555	759488.0	377757.2	1395	696320.0	411651.4	2235	651181.7	463872.4
556	759415.5	377810.6	1396	696235.9	411683.4	2236	651147.9	463966.6
557	759335.1	377870.0	1397	696143.9	411722.6	2237	651117.5	464051.3
558	759254.6	377929.3	1398	696053.6	411765.6	2238	651087.1	464136.0
559	759198.3	377970.9	1399	695965.2	411812.3	2239	651053.3	464230.1
560	759125.0	378023.2	1400	695878.8	411862.7	2240	651030.7	464296.4
561	759066.3	378061.3	1401	695794.6	411916.6	2241	651008.5	464393.8
562	758980.1	378111.8	1402	695712.7	411973.9	2242	650999.8	464473.3
563	758909.1	378148.8	1403	695633.3	412034.7	2243	650991.3	464572.9
564	758836.6	378182.6	1404	695556.5	412098.7	2244	650983.6	464662.6
565	758744.0	378220.2	1405	695486.4	412162.0	2245	650975.0	464762.2
566	758678.0	378243.5	1406	695415.7	412226.2	2246	650964.1	464851.5
567	758601.5	378267.0	1407	695339.2	412290.7	2247	650944.4	464939.3
568	758514.3	378289.4	1408	695260.5	412352.3	2248	650916.1	465024.7
569	758426.8	378310.2	1409	695179.5	412410.9	2249	650874.9	465115.7
570	758339.2	378330.9	1410	695096.4	412466.6	2250	650823.8	465201.7
571	758248.9	378352.4	1411	695011.3	412519.0	2251	650770.0	465273.8
572	758154.3	378374.8	1412	694933.6	412564.6	2252	650702.2	465347.1
573	758066.8	378395.6	1413	694847.4	412615.2	2253	650634.5	465406.4
574	757988.9	378414.1	1414	694761.2	412665.8	2254	650552.8	465464.0

No.	E	N	No.	E	N	No.	E	N
575	757901.4	378434.9	1415	694674.9	412716.5	2255	650465.2	465512.2
576	757813.8	378455.7	1416	694588.7	412767.1	2256	650372.9	465550.4
577	757736.0	378474.1	1417	694502.4	412817.7	2257	650276.9	465578.2
578	757658.6	378494.7	1418	694416.2	412868.3	2258	650188.4	465594.5
579	757564.2	378527.5	1419	694329.9	412918.9	2259	650089.6	465610.3
580	757472.9	378568.2	1420	694252.3	412964.5	2260	650001.9	465629.8
581	757385.5	378616.6	1421	694176.7	413013.2	2261	649920.1	465667.0
582	757310.5	378666.4	1422	694097.9	413074.8	2262	649836.6	465698.9
583	757247.3	378715.4	1423	694025.6	413143.7	2263	649747.2	465696.0
584	757180.4	378775.5	1424	693960.3	413219.4	2264	649658.6	465679.7
585	757118.2	378840.6	1425	693902.7	413301.1	2265	649560.3	465661.7
586	757055.3	378918.3	1426	693858.1	413377.7	2266	649486.0	465653.3
587	756999.2	379001.1	1427	693817.3	413448.1	2267	649438.4	465667.5
588	756957.8	379074.0	1428	693758.8	413529.1	2268	649400.1	465699.1
589	756922.9	379146.0	1429	693690.9	413602.5	2269	649377.1	465743.1
590	756886.7	379224.1	1430	693614.8	413667.2	2270	649373.5	465797.6
591	756848.9	379305.8	1431	693531.4	413722.3	2271	649389.9	465886.1
592	756815.3	379378.4	1432	693451.1	413762.9	2272	649408.6	465984.3
593	756777.4	379460.0	1433	693368.2	413797.8	2273	649424.8	466067.3
594	756735.4	379550.8	1434	693287.1	413836.8	2274	649449.6	466159.4
595	756693.4	379641.5	1435	693201.4	413888.4	2275	649478.0	466244.8
596	756659.7	379714.1	1436	693121.2	413948.0	2276	649503.3	466320.7
597	756626.1	379786.7	1437	693047.2	414015.1	2277	649533.6	466411.4
598	756588.3	379868.3	1438	692986.4	414081.5	2278	649558.5	466493.4
599	756554.6	379940.9	1439	692929.9	414151.5	2279	649571.1	466571.0
600	756512.6	380031.7	1440	692873.5	414221.7	2280	649569.5	466670.8
601	756479.0	380104.2	1441	692808.6	414297.7	2281	649551.0	466758.8
602	756441.1	380185.9	1442	692740.4	414370.8	2282	649516.8	466842.6
603	756399.1	380276.6	1443	692676.5	414434.3	2283	649471.1	466919.3
604	756369.7	380340.2	1444	692605.3	414504.5	2284	649428.0	466986.7
605	756340.2	380403.7	1445	692534.0	414574.6	2285	649374.2	467071.0
606	756302.4	380485.3	1446	692462.8	414644.8	2286	649320.4	467155.3
607	756268.8	380557.9	1447	692391.5	414714.9	2287	649277.3	467222.7
608	756226.7	380648.7	1448	692320.2	414785.1	2288	649231.2	467300.0
609	756184.7	380739.4	1449	692249.0	414855.2	2289	649191.0	467391.4
610	756142.6	380830.1	1450	692177.7	414925.4	2290	649164.8	467485.3
611	756104.8	380911.8	1451	692113.5	414988.5	2291	649152.6	467556.7
612	756063.2	381001.6	1452	692046.4	415048.4	2292	649137.0	467655.5
613	756024.9	381084.2	1453	691965.9	415107.6	2293	649121.4	467754.3
614	755991.3	381156.8	1454	691879.9	415158.5	2294	649105.8	467853.1
615	755957.7	381229.4	1455	691789.2	415200.6	2295	649092.2	467942.0

No.	E	N	No.	E	N	No.	E	N
616	755919.8	381311.0	1456	691694.8	415233.4	2296	649080.8	468041.4
617	755878.5	381400.2	1457	691597.6	415256.6	2297	649074.3	468140.3
618	755840.0	381483.4	1458	691498.5	415270.0	2298	649071.0	468221.1
619	755806.8	381555.9	1459	691398.6	415273.5	2299	649067.4	468311.0
620	755774.2	381640.0	1460	691298.9	415266.9	2300	649063.4	468410.9
621	755751.1	381716.6	1461	691200.3	415250.4	2301	649059.4	468510.8
622	755730.2	381814.4	1462	691113.3	415227.3	2302	649055.3	468610.8
623	755719.0	381903.7	1463	691027.4	415200.5	2303	649052.0	468690.7
624	755715.2	382003.6	1464	690941.5	415173.7	2304	649042.3	468780.1
625	755720.5	382103.4	1465	690854.9	415149.2	2305	649016.3	468876.5
626	755734.8	382202.3	1466	690756.9	415129.5	2306	648974.6	468967.3
627	755758.0	382299.5	1467	690657.6	415117.9	2307	648918.5	469049.9
628	755790.0	382394.3	1468	690557.7	415114.4	2308	648856.9	469115.4
629	755822.0	382468.3	1469	690457.8	415119.2	2309	648786.2	469171.0
630	755861.8	382548.2	1470	690358.7	415132.1	2310	648718.9	469214.2
631	755902.4	382628.6	1471	690260.9	415153.0	2311	648634.3	469267.5
632	755942.9	382708.9	1472	690184.0	415174.9	2312	648549.7	469320.9
633	755983.4	382789.3	1473	690088.0	415203.1	2313	648465.1	469374.2
634	756015.0	382857.9	1474	689992.1	415231.3	2314	648380.6	469427.6
635	756041.3	382948.5	1475	689896.2	415259.5	2315	648296.0	469480.9
636	756050.1	383037.9	1476	689800.2	415287.7	2316	648211.4	469534.3
637	756040.9	383137.3	1477	689704.3	415315.9	2317	648126.8	469587.6
638	756023.9	383205.2	1478	689608.3	415344.1	2318	648047.6	469637.6
639	756004.0	383272.3	1479	689512.4	415372.3	2319	647974.6	469683.7
640	755980.9	383354.2	1480	689416.5	415400.5	2320	647898.8	469732.2
641	755969.7	383438.3	1481	689320.5	415428.7	2321	647835.5	469781.0
642	755977.0	383537.8	1482	689234.7	415455.8	2322	647766.4	469853.2
643	755998.6	383614.7	1483	689140.8	415490.3	2323	647715.2	469927.1
644	756031.3	383687.7	1484	689048.7	415529.2	2324	647672.6	470006.4
645	756070.0	383769.0	1485	688958.6	415572.4	2325	647626.4	470095.1
646	756094.7	383834.4	1486	688878.9	415614.4	2326	647580.3	470183.7
647	756112.9	383932.5	1487	688790.7	415661.4	2327	647534.1	470272.4
648	756110.1	384032.3	1488	688720.0	415698.8	2328	647487.9	470361.1
649	756086.5	384129.3	1489	688629.9	415742.1	2329	647446.3	470441.0
650	756048.4	384210.7	1490	688537.5	415780.4	2330	647403.9	470520.3
651	756002.2	384275.9	1491	688443.2	415813.5	2331	647352.9	470606.4
652	755938.1	384338.9	1492	688347.1	415841.3	2332	647297.9	470689.9
653	755869.5	384397.2	1493	688249.7	415863.7	2333	647245.3	470762.9
654	755801.0	384455.5	1494	688151.1	415880.7	2334	647186.2	470843.5
655	755732.4	384513.8	1495	688051.8	415892.2	2335	647132.9	470916.1
656	755663.8	384572.1	1496	687963.5	415897.9	2336	647073.7	470996.7

No.	E	N	No.	E	N	No.	E	N
657	755595.2	384630.4	1497	687872.2	415903.6	2337	647014.6	471077.3
658	755526.7	384688.7	1498	687772.6	415912.4	2338	646961.3	471149.9
659	755450.5	384753.4	1499	687673.3	415924.0	2339	646911.0	471224.4
660	755389.5	384805.2	1500	687574.3	415938.4	2340	646867.8	471314.5
661	755313.3	384870.0	1501	687485.6	415953.6	2341	646841.7	471400.5
662	755244.0	384928.9	1502	687387.1	415971.1	2342	646819.9	471487.8
663	755176.2	384986.6	1503	687298.5	415986.8	2343	646788.9	471572.2
664	755107.6	385044.9	1504	687199.7	416001.9	2344	646745.6	471651.1
665	755046.9	385096.5	1505	687100.3	416012.9	2345	646699.6	471716.5
666	754977.4	385154.2	1506	687000.5	416019.7	2346	646641.0	471797.6
667	754914.8	385203.9	1507	686900.6	416022.3	2347	646588.3	471870.5
668	754843.1	385258.4	1508	686800.6	416020.9	2348	646536.4	471944.0
669	754778.3	385305.3	1509	686700.7	416015.2	2349	646487.6	472019.6
670	754696.1	385362.2	1510	686601.2	416005.4	2350	646442.0	472097.2
671	754612.4	385416.9	1511	686502.2	415991.5	2351	646392.8	472184.3
672	754533.1	385465.9	1512	686403.9	415973.5	2352	646343.5	472271.3
673	754467.3	385505.5	1513	686306.3	415951.4	2353	646298.7	472350.6
674	754403.1	385544.2	1514	686209.8	415925.3	2354	646255.0	472428.0
675	754323.4	385592.2	1515	686114.5	415895.2	2355	646212.4	472507.3
676	754244.6	385639.7	1516	686020.5	415861.1	2356	646171.5	472589.3
677	754167.5	385686.1	1517	685927.9	415823.2	2357	646128.9	472678.0
678	754090.5	385732.7	1518	685837.1	415781.4	2358	646085.7	472768.1
679	754013.8	385779.8	1519	685748.0	415735.9	2359	646042.4	472858.3
680	753936.3	385828.4	1520	685669.2	415692.5	2360	645999.2	472948.4
681	753869.9	385870.2	1521	685582.9	415644.6	2361	645964.7	473020.6
682	753793.7	385918.3	1522	685511.0	415606.6	2362	645928.1	473102.9
683	753751.1	385944.4	1523	685419.1	415567.3	2363	645894.5	473186.4
684	753668.5	385979.7	1524	685323.9	415537.0	2364	645860.7	473280.5
685	753600.4	385995.6	1525	685226.1	415516.0	2365	645830.8	473375.9
686	753533.6	386016.1	1526	685126.8	415504.5	2366	645809.1	473452.9
687	753459.0	386065.7	1527	685026.9	415502.5	2367	645779.2	473548.3
688	753406.1	386111.6	1528	684944.1	415507.8	2368	645744.9	473642.2
689	753352.9	386157.1	1529	684857.3	415513.2	2369	645706.0	473734.3
690	753295.8	386197.6	1530	684757.3	415510.7	2370	645667.4	473815.6
691	753216.2	386239.4	1531	684658.1	415498.6	2371	645620.4	473903.9
692	753131.2	386268.8	1532	684560.5	415476.9	2372	645569.3	473989.8
693	753062.7	386282.7	1533	684465.5	415445.9	2373	645520.3	474065.3
694	752973.5	386295.0	1534	684382.9	415410.2	2374	645468.4	474150.8
695	752888.4	386306.7	1535	684310.7	415375.8	2375	645425.2	474229.7
696	752825.0	386316.3	1536	684217.8	415338.8	2376	645381.2	474319.5
697	752736.7	386333.5	1537	684121.9	415310.7	2377	645342.3	474409.4

No.	Е	N	No.	E	N	No.	Е	N
698	752649.4	386355.2	1538	684023.8	415291.6	2378	645306.2	474494.1
699	752553.7	386384.3	1539	683924.3	415281.8	2379	645263.4	474584.5
700	752469.2	386415.1	1540	683824.3	415281.3	2380	645221.9	474664.3
701	752393.5	386446.7	1541	683744.5	415286.8	2381	645172.4	474751.2
702	752314.0	386484.5	1542	683654.7	415291.4	2382	645130.3	474819.2
703	752226.1	386532.0	1543	683554.7	415289.2	2383	645080.5	474894.2
704	752157.7	386573.5	1544	683455.2	415279.3	2384	645032.9	474970.5
705	752083.1	386623.8	1545	683356.8	415261.8	2385	644989.0	475060.3
706	752018.8	386671.5	1546	683269.6	415239.7	2387	644934.3	475241.9
707	751947.4	386726.2	1547	683183.2	415214.5	2388	644922.0	475331.0
708	751875.9	386780.9	1548	683087.2	415186.4	2389	644918.1	475419.1
709	751820.0	386823.1	1549	683010.0	415165.4	2390	644914.8	475500.8
710	751739.2	386876.9	1550	682911.7	415147.2	2391	644901.3	475599.8
711	751658.3	386922.5	1551	682812.1	415138.8	2392	644883.6	475677.8
712	751567.8	386964.8	1552	682712.2	415140.3	2393	644866.0	475766.1
713	751474.2	387000.0	1553	682612.9	415151.6	2394	644856.8	475853.3
714	751378.1	387027.7	1554	682515.2	415172.7	2395	644844.8	475934.5
715	751288.2	387046.4	1555	682420.0	415203.4	2396	644799.1	476022.7
716	751201.1	387060.0	1556	682328.4	415243.3	2397	644736.2	476081.7
717	751122.0	387072.1	1557	682241.1	415292.1	2398	644675.0	476138.4
718	751033.1	387085.7	1558	682159.1	415349.3	2399	644631.4	476216.6
719	750935.0	387100.7	1559	682089.9	415406.8	2400	644618.6	476315.1
720	750855.1	387112.9	1560	682016.5	415474.6	2401	644636.7	476392.7
721	750756.3	387128.0	1561	681946.6	415546.2	2402	644672.8	476471.0
722	750657.4	387143.1	1562	681880.7	415621.4	2403	644709.4	476557.3
723	750578.3	387155.2	1563	681818.8	415699.9	2404	644739.4	476642.1
724	750479.5	387170.3	1564	681771.9	415765.4	2405	644764.3	476728.6
725	750408.9	387181.9	1565	681715.0	415847.0	2406	644787.2	476815.6
726	750332.8	387201.0	1566	681657.8	415929.0	2407	644816.8	476911.1
727	750257.9	387228.9	1567	681606.2	416002.7	2408	644847.4	476995.8
728	750178.0	387270.2	1568	681552.2	416074.7	2409	644885.6	477088.2
729	750111.8	387315.1	1569	681488.0	416151.3	2410	644928.1	477178.7
730	750053.4	387365.0	1570	681419.3	416224.0	2411	644973.6	477264.8
731	749995.2	387424.3	1571	681346.6	416292.7	2412	645018.7	477345.7
732	749932.9	387489.3	1572	681270.0	416356.9	2413	645067.5	477433.0
733	749870.7	387554.3	1573	681189.8	416416.6	2414	645111.4	477511.5
734	749815.3	387612.1	1574	681106.3	416471.6	2415	645149.0	477582.1
735	749753.1	387677.1	1575	681019.7	416521.6	2416	645184.9	477664.6
736	749704.6	387727.6	1576	680933.7	416564.9	2417	645216.0	477759.6
737	749654.0	387775.9	1577	680857.6	416599.7	2418	645237.3	477857.3
738	749590.5	387824.4	1578	680766.6	416641.1	2419	645248.4	477950.4

No.	E	N	No.	E	N	No.	E	N
739	749503.5	387873.6	1579	680675.5	416682.6	2422	645261.7	478226.3
740	749420.1	387906.0	1580	680584.5	416724.0	2423	645266.4	478326.1
741	749332.2	387926.9	1581	680493.5	416765.4	2424	645271.1	478426.0
742	749232.7	387935.6	1582	680402.5	416806.8	2425	645275.3	478515.9
743	749152.8	387931.6	1583	680311.5	416848.2	2426	645279.5	478605.8
744	749054.6	387913.0	1584	680220.5	416889.6	2427	645287.9	478695.4
745	748969.6	387883.7	1585	680129.4	416931.1	2428	645306.6	478793.6
746	748887.0	387848.1	1586	680038.4	416972.5	2429	645328.0	478870.7
747	748813.6	387816.2	1587	679956.8	417010.4	2430	645356.2	478966.6
748	748731.1	387780.3	1588	679868.0	417056.3	2431	645384.4	479062.6
749	748639.4	387740.4	1589	679781.5	417106.5	2432	645409.8	479148.9
750	748556.7	387704.8	1590	679705.1	417154.2	2433	645435.2	479235.3
751	748471.6	387675.7	1591	679620.4	417207.3	2434	645460.6	479321.6
752	748383.2	387659.4	1592	679535.7	417260.4	2435	645488.8	479417.5
753	748293.3	387656.4	1593	679451.0	417313.6	2436	645517.0	479513.5
754	748204.0	387666.7	1594	679374.7	417361.4	2437	645545.2	479609.4
755	748107.8	387693.6	1595	679288.6	417412.2	2438	645570.6	479695.8
756	748017.3	387735.9	1596	679209.3	417454.6	2439	645594.7	479782.5
757	747935.1	387792.5	1597	679120.7	417501.0	2440	645615.1	479870.1
758	747869.9	387854.5	1598	679032.1	417547.4	2441	645633.3	479968.4
759	747812.1	387923.5	1599	678952.3	417589.1	2442	645646.8	480067.5
760	747755.3	387993.3	1600	678871.6	417628.8	2443	645655.6	480167.1
761	747692.2	388070.8	1601	678778.3	417664.8	2444	645659.5	480257.0
762	747629.1	388148.4	1602	678682.0	417691.7	2445	645659.3	480357.0
763	747565.9	388226.0	1603	678583.6	417709.2	2446	645655.3	480446.9
764	747502.8	388303.5	1604	678484.0	417717.2	2447	645650.3	480546.8
765	747446.0	388373.3	1605	678384.0	417715.6	2448	645645.3	480646.7
766	747382.9	388450.9	1606	678304.4	417708.5	2449	645640.3	480746.5
767	747319.8	388528.4	1607	678214.5	417703.8	2450	645635.3	480846.4
768	747256.7	388606.0	1608	678114.8	417710.3	2451	645630.3	480946.3
769	747199.8	388675.8	1609	678016.6	417729.1	2452	645625.3	481046.2
770	747136.7	388753.4	1610	677921.6	417760.0	2453	645622.2	481126.1
771	747073.6	388830.9	1611	677831.2	417802.5	2454	645623.9	481226.1
772	747010.5	388908.5	1612	677746.7	417856.0	2455	645632.4	481325.7
773	746947.4	388986.1	1613	677669.6	417919.5	2456	645643.9	481405.9
774	746884.2	389063.6	1614	677601.0	417992.2	2457	645659.5	481503.6
775	746821.1	389141.2	1615	677542.0	418072.9	2458	645675.2	481602.4
776	746758.0	389218.8	1616	677495.2	418156.8	2459	645689.4	481691.3
777	746694.9	389296.3	1617	677461.0	418233.3	2460	645703.6	481780.1
778	746631.8	389373.9	1618	677421.1	418325.0	2463	645736.1	482057.9
779	746575.0	389443.7	1619	677381.1	418416.7	2464	645732.6	482147.8

No.	E	N	No.	E	N	No.	E	N
780	746521.3	389509.7	1620	677341.1	418508.3	2465	645721.0	482237.0
781	746461.3	389583.3	1621	677301.1	418600.0	2466	645698.8	482334.5
782	746398.2	389660.9	1622	677261.2	418691.7	2467	645671.0	482420.1
783	746335.1	389738.4	1623	677221.2	418783.3	2468	645641.0	482504.9
784	746272.0	389816.0	1624	677181.2	418875.0	2469	645611.0	482589.8
785	746220.4	389877.1	1625	677141.3	418966.7	2470	645581.1	482674.7
786	746157.2	389941.2	1626	677105.3	419049.2	2471	645547.8	482769.0
787	746096.5	389993.2	1627	677072.9	419133.1	2472	645514.5	482863.3
788	746015.1	390051.2	1628	677045.8	419229.3	2473	645481.2	482957.5
789	745937.3	390096.3	1629	677028.2	419327.7	2474	645447.9	483051.8
790	745864.9	390130.5	1630	677020.5	419427.4	2475	645414.7	483146.1
791	745790.9	390160.7	1631	677022.0	419517.3	2476	645381.4	483240.4
792	745698.1	390198.2	1632	677027.1	419598.5	2477	645352.0	483325.5
793	745605.4	390235.7	1633	677027.0	419697.2	2478	645321.0	483420.6
794	745512.7	390273.1	1634	677017.9	419796.7	2479	645292.0	483516.3
795	745420.0	390310.6	1635	676999.6	419895.0	2480	645264.9	483612.6
796	745336.6	390344.4	1636	676972.5	419991.2	2481	645241.5	483699.5
797	745254.1	390380.3	1637	676945.3	420066.4	2482	645215.5	483796.0
798	745173.8	390421.0	1638	676910.5	420160.2	2483	645189.5	483892.6
799	745096.1	390466.4	1639	676875.7	420253.9	2484	645163.5	483989.1
800	745021.3	390516.3	1640	676840.9	420347.7	2485	645137.5	484085.7
801	744941.7	390576.9	1641	676806.1	420441.4	2486	645111.5	484182.2
802	744866.4	390642.7	1642	676778.9	420516.6	2487	645088.1	484269.1
803	744809.4	390698.8	1643	676749.2	420612.1	2488	645064.6	484356.0
804	744748.9	390765.4	1644	676725.0	420709.2	2489	645038.6	484452.6
805	744694.8	390832.5	1645	676706.4	420807.4	2490	645017.2	484529.7
806	744644.8	390899.7	1646	676693.4	420906.5	2491	644983.4	484623.7
807	744591.2	390972.0	1647	676686.0	421006.2	2492	644940.4	484714.0
808	744531.7	391052.4	1648	676684.3	421106.2	2493	644888.5	484799.4
809	744472.2	391132.8	1649	676688.3	421206.1	2494	644828.4	484879.3
810	744424.3	391196.9	1650	676698.0	421305.6	2495	644760.7	484952.8
811	744367.2	391268.5	1651	676713.3	421404.5	2496	644702.3	485007.5
812	744303.0	391343.0	1652	676734.1	421502.2	2499	644482.4	485211.6
813	744236.4	391414.4	1653	676760.5	421598.7	2500	644409.1	485279.6
814	744170.9	391479.5	1654	676792.4	421693.5	2501	644335.8	485347.6
815	744097.3	391547.2	1655	676829.5	421786.3	2502	644262.5	485415.6
816	744021.1	391611.9	1656	676871.9	421876.8	2503	644192.3	485480.8
817	743942.3	391673.5	1657	676914.3	421956.2	2504	644123.2	485544.8
818	743861.1	391731.8	1658	676951.6	422027.0	2507	643940.6	485743.1
819	743777.6	391786.8	1659	676986.5	422120.6	2508	643884.7	485825.9
820	743692.0	391838.5	1660	677005.3	422218.7	2509	643835.9	485913.2

No.	E	N	No	-	E	N	No.	E	N
821	743604.3	391886.7	16	61	677007.7	422318.5	2510	643794.5	486004.2
822	743525.3	391926.3	16	62	676993.4	422417.4	2511	643766.5	486079.7
823	743460.4	391956.5	16	63	676963.0	422512.5	2512	643733.6	486173.6
824	743369.5	391998.2	16	64	676922.4	422592.8	2513	643700.6	486268.0
825	743296.8	392031.5	16	65	676874.4	422668.8	2514	643670.9	486352.9
826	743215.0	392069.1	16	66	676820.4	422753.0	2515	643639.0	486437.0
827	743124.1	392110.8	16	67	676766.5	422837.2	2516	643600.0	486518.1
828	743033.2	392152.5	16	68	676712.5	422921.4	2519	643459.4	486748.6
829	742942.3	392194.2	16	69	676658.5	423005.6	2520	643406.6	486833.5
830	742860.6	392231.9	16	70	676604.6	423089.8	2521	643353.8	486918.5
831	742779.3	392270.5	16	71	676550.6	423174.0	2522	643305.9	486994.6
832	742698.4	392309.9	16	72	676496.7	423258.2	2523	643251.2	487066.0
833	742617.9	392350.1	16	73	676448.1	423334.0	2524	643178.8	487134.8
834	742528.9	392395.8	16	74	676401.5	423411.0	2525	643095.9	487190.5
835	742449.4	392437.9	16	75	676356.0	423500.0	2526	643004.9	487231.8
836	742361.5	392485.6	16	76	676317.4	423592.2	2527	642908.4	487257.4
837	742282.9	392529.4	16	77	676288.7	423677.5	2528	642825.0	487267.8
838	742204.7	392574.0	16	78	676261.9	423763.4	2529	642729.5	487277.2
839	742118.4	392624.6	16	79	676232.1	423858.9	2530	642630.0	487287.0
840	742032.8	392676.2	16	30	676202.4	423954.3	2531	642593.6	487290.5

Annex 7: Monitoring Indicators

Subject	Indicator	Variable
Land	Acquisition of land	Area of communal land acquired by KeNHA road project Area of private land acquired? Area of government land acquired?
Buildings/Structures	Acquisition of buildings	Number, type and size of private buildings acquired Number, type and size of community buildings acquired Number, type and size of government buildings acquired
	Acquisition of other structures	Number, type and size of other private structures acquired Number, type and size of other community structures acquired
Trees and Crops	Acquisition of trees	Number and type of trees cut
Compensation, Reestablishment and Rehabilitation	Compensation and re-establishment of affected owners/individuals	Number of homesteads affected (buildings, land, trees, crops) Number of owners compensated by type of loss Amount compensated by type and owner Number of replacement houses constructed Size, construction, durability and environmental suitability of Replacement houses Possession of latrines Water supply access
	Re-establishment of community resources	Number of replacement businesses constructed Number of community buildings replaced Number, type of plants lost Number of seedlings supplied by type Number of trees planted
Hazards and Disturbances	Introduction of nuisance factors	Number of homesteads affected by hazards and Disturbances from construction (noise levels, dust, Increased traffic levels)
Social/Demographi c	Changes to homestead structure	Homestead size (births, deaths, migration in and out) Age distribution Gender distribution Marital status Relationship to homestead head Status of "vulnerable" homesteads
	Population migration	Residential status of homestead members Movement in and out of the homestead (place and residence Of homestead members)
	Changes to access	Distance/travel time to nearest school, health centre, church, shop, village
	Changes to health status	Nutritional status of resettled homestead members Number of people with disease by type (STDs, diarrhoea, malaria, immunizable disease) Mortality rates Access to healthcare services (distance to nearest facility, cost of services, quality of services) Utilization of healthcare services Disease prevention strategies Extent of educational programmes Latrine provision at schools (schoolchild population per VIP on site)

	Changes to status of women	Participation in training programmes Use of credit facilities Land holding status Participation in related activities and enterprises
	Homestead earning capacity	Ownership of capital assets Land holding status (tenure) Changes to livestock ownership:pre and post disturbance Value of livestock sales, and imputed value of barter transactions Employment status of economically active members Skills of homestead members Earnings/income by source, separating compensation payments Changes to income earning activities – pre and post disturbance Amount and balance of income and expenditure Realization of homestead income restoration plans (components implemented, net income achieved) Possession of bank and savings accounts Access to income generating natural resource base (wood, grass, sand, stones)
	Changes in social organization Population influx	Organizational membership of homestead members Leadership positions held by homestead members Growth in number and size of settlements, formal and
		informal Growth in market areas
Consultation	Information dissemination	Number, position, staffing of Information Centres Staffing, equipment, documentation of Information Centres Activities of Information Centres Number of people accessing Information Centres Information requests, issues raised at Information Centres
	Grievances resolved	Number of grievances registered, by type Number of grievances resolved Number of cases referred to court
	Consultation programme operation	Number of local committees established Number and dates of local committee meetings Type of issues raised at local committees meetings Involvement of local committees in KeNHA development planning Number of participating NGOs
Training	Operation of training programme	Number of local committee members trained Number of affected population trained in Project related courses
Management	Staffing	Number of implementing agencies by function Number of GoK ministry officials available by function Number of office and field equipment, by type
	Procedures in operation	Census and asset verification/quantification Procedures in place Effectiveness of compensation delivery system Number of land transfers effected Coordination between local community structures, KeNHA and GoK officials

Annex 8: Draft Grievance Form

Date:

Public Grievance Form

Resettlement Action Plan (RAP) Public Grievance Form

Address:
Telephone:
Email:
English:
Kiswahili:
What is the Problem?
Who did it happen to?
Where did it happen?
What is the result of the problem?
One time incident/grievance (Date:)
Happened more than once (How many times))
Ongoing (Happening Now))
m?

Signature:Date:

Please return this form to:

Kenya National Highways Authority Blue Shield Towers, Hospital Road, Upper Hill P.O. Box 49712 – 00100, Nairobi Kenya

Tel:+254-20-8013842