



THE KENYA POWER AND LIGHTING COMPANY LIMITED

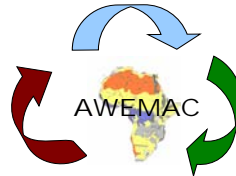
RESETTLEMENT ACTION PLAN

FINAL REPORT

PROPOSED 132KV TRANSMISSION LINE LESSOS – KABARNET –
NYAHURURU - NANYUKI



ENVIRONMENTAL CONSULTANTS



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MARCH 2010

SUBMISSION OF DOCUMENTATION

I, **Prof. Jacob K. Kibwage**, on behalf of Africa Waste and Environment Management Centre submit the following Resettlement Action Plan, Final Report, for the Proposed 235Km Transmission Line 132KV Lessos – Kabarnet – Nyahururu - Nanyuki. To my knowledge all information contained in this report is accurate and a truthful representation of all findings as relating to the project.

Signed at **NAIROBI** on this day of **2010**

Signature.....

Director, AWEMAC

ESIA/Audit Lead Expert Reg. No. 0126

SUBMISSION OF DOCUMENTATION

I, on behalf of Kenya Power and Lighting Company, receive this Resettlement Action plan, Final Report, for the Proposed 235Km Transmission Line 132KV Lessos – Kabarnet – Nyahururu – Nanyuki.

Signed at **NAIROBI** on this day of**2010**

Signature.....

Deputy Manager, Safety Health and Environment,

The Kenya Power and Lighting Company Limited

PROPOSED 132KV TRANSMISSION LINE, LESSOS – KABARNET – NYAHURURU – NANYUKI

RESETTLEMENT ACTION PLAN

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ABBREVIATIONS

AFD	Agence Francaise de Development
AIDS	Acquired Immune Deficiency Syndrome
ESIA	Environmental and Social Impact Assessment
ERC	Energy Regulatory Commission
EU	European Union
HHs	Households
HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome
IFC	International Finance Corporation
IPPs	Independent Power Producers
KenGen	Kenya Electricity Generating Company Ltd
KPLC	Kenya Power and Lighting Company
KRU	KPLC Resettlement Unit
kV	Kilo Volts
M&E	Monitoring and Evaluation
MoE	Ministry of Energy
MoU	Memorandum of Understanding
NEMA	National Environment Management Authority
PAPs	Project Affected People
RAP	Resettlement Action Plan
RLA	Registered Land Act
UETCL	Uganda Electricity Transmission Company
WB	World Bank

EXECUTIVE SUMMARY

The KPLC Least Cost Power Development Plan identified various 132 KV developments for improving the performance of the Kenya electricity network to cater for the increasing load growth and meet the 2030 vision objectives. To meet this objective, KPLC intends to construct approximately 235 km of a single circuit 132 kV transmission line from the Lessos substation to Nanyuki substation. The Kenya Power & Lighting Company Limited is expecting to receive funds from World Bank for the Construction of the Transmission Line. This project is expected to have widespread positive impacts on the overall socio-economic status and livelihoods of the electricity users and the project affected people (PAPs). However, the project will have some minor negative effects especially to those who may be displaced from the way-leave. A resettlement Action Plan is therefore required to guide the process.

Purpose

The main objective of RAP was to ensure proper guidelines and procedures are adhered to in the mitigation of the adverse impacts that might occur during the project implementation in order to ensure that the PAPs along the transmission line will not be affected due to the resettlement operations by the adverse impacts of the project. The Resettlement Action Plan (RAP) was prepared to ensure that the losses that will be incurred along the transmission line by PAPs will be addressed and that they are assisted to develop their social and economic potential. This will enable them to restore their living standards and income. RAP ensures that the affected people are not worse off than they were before the project came to place and this will be put in place where consideration will be put on women, vulnerable groups, disabled and children who are usually the most affected in such situations. For RAP to comply with international best practices for resettlement of the affected people KPLC shall bind itself to the World Bank principles

Findings

The RAP report was compiled in consideration of the grievances redress procedures of the PAPs, socio-economic and the legal framework in the projected area, in areas that would require resettlement which were identified and proposed for relevant compensation and entitlements. The RAP report also provides implementation framework and accountability and monitoring and evaluation mechanism. Key findings from the study are:

- During the study it was revealed that a total of 134 families would be displaced between Lessos and Nanyuki. It was noted that the displacement along the line would be as follows:
 - a) Lessos to Bindura settlement – 12 families
 - b) Senetwo Centre to Kapkenda area – 16 families
 - c) Kabarnet town – 49 families
 - d) Kituro to Kipkaech area – 24 families
 - e) Marigat town outskirts– 14 families
 - f) Mochongoi area– Rumuruti – 8 families
 - g) Samburu Manyatta Village – 3 families
 - h) Nanyuki area – 8 families.
- During the project implementation, monitoring need to be in place to ensure the issues that may arise are addressed and PAPs are well resettled. This will be achieved through good planning of the project in the operational phase.
- The consultations held during the site visits and the public baraza with the PAPS, chiefs, Provincial administration and the local communities, they requested the proponent to consider the youths during the construction phase by giving them casual jobs, compensate those who will be affected in time so that they may be able to relocate and should also provide electricity to the rural areas where the line is passing.

In minimizing resettlement, KPLC will ensure that the densely settled areas where the line passes through like Kituro Centre (36N 081157, UTM 0052844) and Kabarnet Town (36N 0807523 UTM 0053180) are avoided as much as possible, in that they would look into alternative route that have few people to be displaced like the forests and valleys. In areas like Small Town (36N 0777090 UTM 0038127) where the Transmission line passes through the shopping centre the engineers would have to re-route the line to pass through the nearby farms because the area has big farms. The Census and Socio economic surveys gave details of the affected persons i.e. property to be affected, farming activities, housing types, food security and education level of affected on the proposed line

There are legal requirements within the Laws of Kenya that Resettlement of such magnitude should adhere to. The resettlement process will adhere to the provisions of the Constitution of Kenya, the Land Acquisition Act, Energy Act 2006, trust Land Act.

During the field study, the consultants identified key areas that the proposed 132KV single circuit transmission line from Lessos to Nanyuki is likely to negatively impact on

population households, developed infrastructure and natural resources. The proposed line traverses across three major steep escarpments in Keiyo, Kabarnet and Laikipia area, and some human settlements. Most areas which are settled along the route from Lessos to Nanyuki are: Kapserton and Terige Village in Tulwet Sublocaton-Uasin Gishu District; Kayenga Village and Small town in Mosop location-Keiyo District; Kituro centre and Kabarnet town- Baringo District; Kapkechir and Thigio Villages in Muchongoi Division, Rabai, Naserian and Kivumbini Villages in Yator Sublocaton, Marigat District; Samburu Manyatta, Ichuga, Ruai Villages in Nanyuki, Laikipia East District.

The proposed project will lead to inconveniences to the society within which the project area and will require adequate economic rehabilitation of the affected people with due vetting of their entitlements. KPLC will compensate affected people for loss of physical assets, revenue, and income resulting from economic displacement or physical relocation whether these losses are temporary or permanent.

The estimated total cost of compensation for the proposed project is KShs 89,899,525.00 (USD \$1,214,858.45).

Methodology

The objectives of the study were met using systematic, integrated, participatory and collaborative approaches. The information that was collected was through field investigations, focus group discussions, thematic maps, census, inventory, document reviews, photography and key informant interviews. Some of the people we consulted were local chiefs, community leaders, Non-governmental interested groups, KPLC staff and the affected people among others.

Recommendations

The affected persons should be compensated by KPLC in time in order for them to make necessary arrangement for their relocation and should ensure those affected are paid according to the prevailing market rates of the areas affected. Those who will have identified areas where KPLC should relocate them KPLC should go ahead to make arrangement for purchase of the land and replace the structures as they were in the affected persons land.

Because the line will pass through forests like Lariak, Marmanet and Ol Arabel, KPLC should negotiate with forest department so that they have a common understanding on how they will mitigate the forest after cutting down the trees however there is need also for the Proponent to consult those who own conservancies where the line will traverse

because it would interfere with the wild animals' general behaviour. Those who will be affected need to be consulted before moving out given that most of them have lived in the land for a long time and really value their ancestral land.

KPLC should live up to social corporate responsibility whereby they should assist the communities living in the project areas in activities like revegetation, supply of clean drinking water and rural electrification programme to such persons in Manyatta Tutu village along Nanyuki Rumuruti road opposite sweet waters tented camp who requested for a drilling of borehole for drinking water.

TRANSMISSI ON LINE SECTION	NUMBER OF AFFECTED PERSONS	NO OF PERSONS		GENDER RATIO		EDUCATION LEVEL			OCCUPATION			OMMON DISEASES					
		BELLOW 18 YEARS AGE	ABOVE 65 YEARS AGE	MALE	FEMAL E	PRIMARY	SECONDA RY	TERTIAR Y	FARMER	BUSINE SS	CIVIL SERVA NTS	MALARIA	FEVE R	DIA BET ES	MAL NUTR ITION	TYPH OID	SKIN RUSH
Lessos - Tulwet Section	64	31	6	38	26	44	4	3	17	5		3		1			
Small Town	68	31	10	38	30	40	17	8	18	7		3	5		1	1	
Kabarnet Town	247	134	20	115	132	13	35	9	17	22	8	2	1				
Kituro- Kabarnet	112	46	12	61	51	67	33	6	22	10	3	3	3	1			
Marigat(Kiv umbini	71	27	8	39	32	50	9	2	11	20	3	5	1		1	3	
Mochongoi	26	12	6	12	14	19	8	1	13	2	4	3	2				
Manyatta Samburu	23	12	3	9	14	13	4		3	3	2						
Nanyuki	38	13	4	21	17	30	11	2	11	11	2	1					
Total	649	306	69	333	316	276	121	31	112	80	22	20	12	2	2	4	1

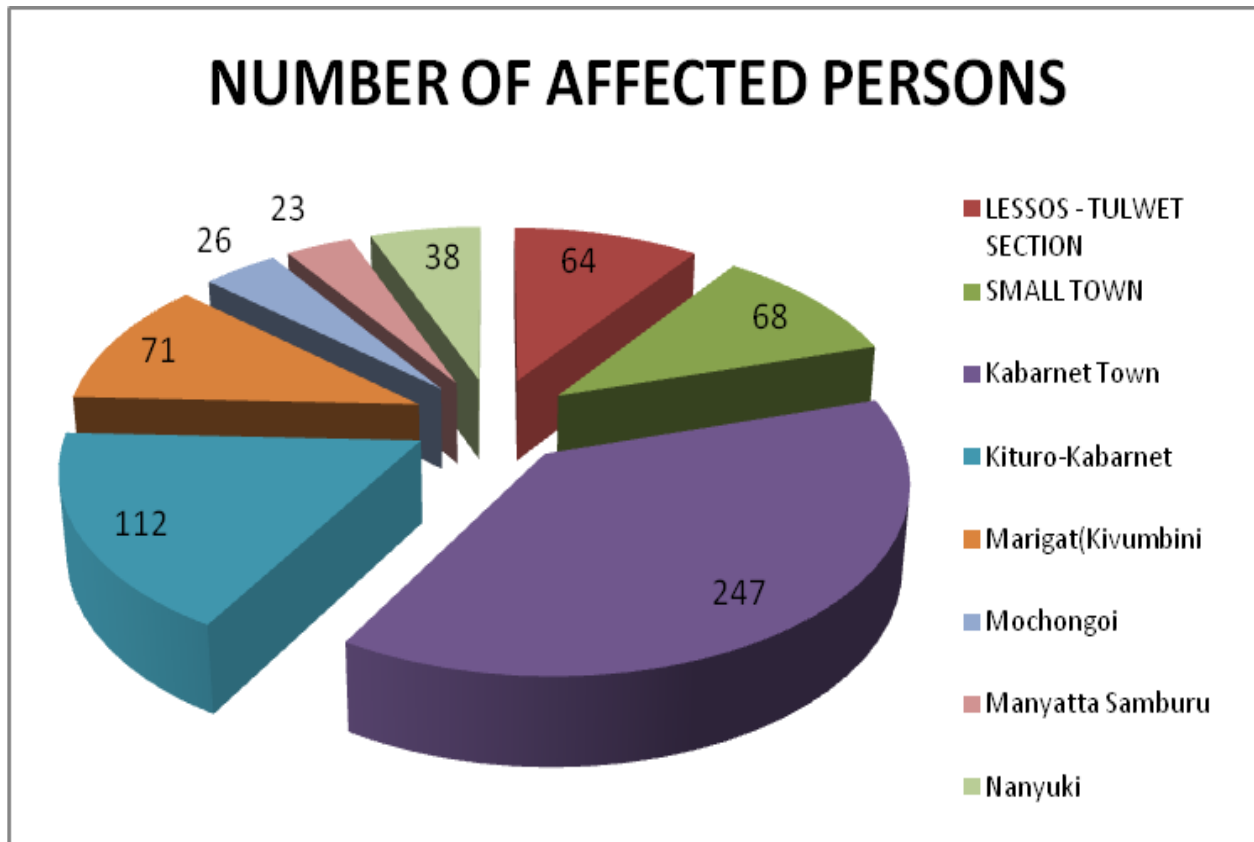


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1 INTRODUCTION

1.1 Project Background

Kenya's power sector falls under the Ministry of Energy (MOE), which offers the general oversight and policy direction. The Energy Regulatory Commission (ERC) is an independent body responsible for the regulatory function of the energy sector. The Kenya Electricity Generation company limited (KenGen) is a government owned utility providing 85% of the electricity generated in Kenya. The Kenya power and lighting company (KPLC) is responsible for electricity transmission, distribution and supply to customers. KPLC purchases bulk power through power purchase agreements from KenGen, Independent Power Producers (IPPS) and the Uganda Electricity Transmission Company (UETCL).

The KPLC Least Cost Power Development Plan identified various 132 KV developments for improving the performance of the Kenya electricity network to cater for the increasing load growth and meet the Vision 2030 objectives. To meet these objectives, KPLC intends to construct approximately 235 km of a single circuit 132 kV transmission line from the Lessos main-grid station to Nanyuki substation, through Kabarnet and Nyahururu. The Kenya Power & Lighting Company Limited is expecting to receive funds from World Bank for the Construction of the Transmission Line.

This project is expected to have widespread positive impacts on the overall socio-economic status and livelihoods of the electricity users and the Project Affected People (PAPs). However, the project will have some minor negative effects especially to those who may be displaced from the way leave. A Resettlement Action Plan is therefore required to guide the process.

1.2 Project Components

The proposed 132 kV transmission line is to be constructed to cover a distance of 235km from Lessos main-grid station to Nanyuki substation with a way leave of 30m wide, 15m on either side of the centre line.

1.2.1 Towers

Transmission line conductors are strung on line suspension tower and bend (strain) towers. For the proposed 132 kV transmission line between Lessos and Nanyuki substations, compact cross-rope suspension structure and self supporting towers might be used. The towers will be between 30-50 meters in height depending on the physical terrain and a total footprint area of approximately 15 m x 15 m is required.

1.2.2 Way Leave

The way leave width for a 132 kV transmission line is 30 m i.e. 15 m on either side of the center line. The way leave trace is required to ensure the safe construction, maintenance and operation of the power line. Any farming activities except commercial tall trees such as Mango, Avocado tree can be practiced underneath the power line.

1.2.3 Route Selection

The final route line will be selected after KPLC surveyors explore different options by keeping in mind the three basic principles i.e. avoidance, minimization and mitigation. The final route line has to be selected following various factors and comprehensive analysis and due consideration given to agricultural land, social impacts, number of families affected, and cost of compensation and extent of resettlement. The proposed route begins from Lessos substation (coordinates: 36N 0764685 UTM 0030846) to Nanyuki substation (37N 028156, UTM 0009033), through the following Towns and Centres:

- Tulwet centre (36N 0756872 UTM 0025354)
- Mosop/ Small town (36N 0777090 UTM 0038127)
- Kabarnet town (36N 0807523 UTM 0053180)
- Kituro centre (36N 081157, UTM 0052844)
- Marigat Area (37N 0168448, UTM 0051339)
- Muchongoi Area (37N 0191807, UTM 0040062)
- Rumuruti Area (37N 0221751, UTM 0027215)

1.3 Objectives of the Resettlement Action

The main objectives of the Resettlement Action Plan (RAP) were as follows:

- To generate baseline data for monitoring and evaluation of how well the mitigation will be implemented during the project cycle.
- To recommend cost effective measures to be implemented to mitigate against the expected impacts.
- To identify and quantify different categories of project-affected persons (PAPS) who would require some form of assistance, compensation, rehabilitation or relocation
- To verify the adherence and compliance of the World bank Safeguard policies

1.4 Scope of Work

RAP was prepared to ensure that the losses that will be incurred along the transmission line by PAPs will be addressed and that they are assisted to develop their social and economic potential. This will enable them to restore their living standards and income. RAP ensures that the affected people are not worse off than they were before the project came to place and this will be put in place where consideration will be put on women, vulnerable groups, disabled and children who are usually the most affected in such situations.

1.5 Resettlement Guiding Principles

For RAP to comply with international best practices for resettlement of the affected people KPLC shall bind itself to the World Bank principles mentioned below to guide them:

- i. **Consultation with PAPs:-** the rights and interest of the PAPs were heard and effected to their interest so that they don't feel cheated
- ii. **Minimization of resettlement as an Action:** - In order to adhere to this KPLC has tried as much as possible to ensure that the design of the line has minimal displacement.
- iii. **Availability in relocation of the affected persons:** - KPLC will ensure and guarantee the provision of any necessary compensation for people whose land will be disturbed to make way for the transmission lines, or any other disturbances. This will be done in line with the Word Bank policies and guidelines.
- iv. **Negotiated compensation options** - a consensus must be reached with those who will be affected so that a fair and equitable compensation made for land, houses and trees that are disturbed and paid according to the prevailing markets rates of the local areas.
- v. **Resettlement must take place to ensure PAPs benefit:** - those who are affected should be employed and sub contracted opportunities that arise from the project.
- vi. **Establishment of resettlement baseline data:** - the following activities were done successfully to re-establish the affected property. Activities undertaken before displacement were:
 - Inventory of landholding and immovable(building and structures) in order to determine fair and reasonable compensation levels or mitigation
 - A census detailing household composition and demography. The asset inventories were used to determine and negotiate entitlements, while the census information was required to monitor homestead reestablishment. The information obtained from the inventories and census was entered into a database to facilitate resettlement planning, implementation and monitoring.

- vii. **Vulnerable social groups:** - These are groups that include those with minimal assets, the illiterate, and the aged (those PAPs of more than 65 years). These are often physically weaker, and usually need special help in the relocation/disturbance phase. In particular, female-headed households may lose out to more powerful households when assets will be demolished to make way for the transmission line. KPLC has to ensure that the pre-resettlement database specifically identifies vulnerable social groups and makes provision for them to be included in consultative forum. KPLC will also ensure that these groups are given the necessary protection to ensure that they get equitable access to replacement resources. Also KPLC shall make specific reference to vulnerable social groups given particular attention in the monitoring process.
- viii. **Resettlement upfront project cost:** - Unless resettlement is built in as an Up-front project cost, it tends to be under budgeted, whereby money gets diverted away from the resettlement budget to ‘more pressing’ project needs. KPLC will therefore ensure that compensation costs, as well as those resettlement costs that fall within their scope of commitment, are considered in the overall project budget as up-front costs.
- ix. **An independent monitoring and grievance procedure:** - In addition to setting up of monitoring mechanism within KPLC , an independent Team comprising local administration , friendly NGO officials and the locals will undertake monitoring of the resettlement as an aspect of the project. All the generated grievance procedures will be organized in such a way that they are accessible to all affected parties, with particular concern for the situation of vulnerable groupings. Monitoring will specifically take place via measurement against the pre-resettlement database.
- x. **World Bank’s operational procedure on forced resettlement:** - The World Bank’s operational policy 4.12 on involuntary resettlement will be adhered to. It requires that involuntary resettlement be avoided where feasible, or minimized, exploring all viable alternative project designs. Where it is not feasible to avoid resettlement, resettlement activities should be conceived and executed as sustainable development programs, providing sufficient investment resources to enable the persons displaced by the project to share in project benefits. Displaced persons should be meaningfully consulted and should have opportunities to participate in planning and implementing resettlement programs. They should also be assisted in their efforts to improve their livelihoods and standards of living or at

least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of the project implementation, whichever is higher. KPLC shall adhere to their standards.

1.6 Methodology

The methodology used by the consultant included participatory approach, where public meetings and key informants (District Officers, Chiefs, KPLC Way leaves officers, property officers, electrical engineers and local Authorities) were interviewed. The methodology used by the consultant is described below:-

- i. Consultation with the affected people along the proposed line was done as part of participatory approach.
- ii. Socioeconomic surveys of all the affected people (including seasonal, migrant and host population). A comprehensive questionnaire for data collection was developed, whereby it captured the following information: household bio-data, livelihoods, infrastructure inventories including land, common properties, houses, fences, trees, commercial properties and social services infrastructure.
- iii. Thematic maps that identified features as population settlement, infrastructure, soil composition, natural vegetation areas, water resources and land use pattern.
- iv. Analysis of survey and studies to establish compensation parameters, to design appropriate income restoration.
- v. GPS was used to help in identifying the affected structures and persons along the proposed line from Lessos to Nanyuki through Kabarnet, Marigat and Rumuruti areas.
- vi. Assets Inventory was used to show lost and affected assets at the household, enterprise and community level.

2 SOCIOECONOMIC STUDIES

2.1 Census, Assets Inventories, Natural Resource Assessments, and Socioeconomic Surveys

2.1.1 Project Area

The proposed Lessos – Kabarnet -Kenya Power and Lighting Company transmission line commences from the Kenya national power grid station at Lessos which is in Nandi District and traverses other four districts to end in Nanyuki Town. The other districts where the transmission line passes are: Uasin Gishu, Keiyo, Baringo, Marigat, and Laikipia West and East Districts. The major local people found along the Lessos to Fluorspar area are the Kikuyu and the Kalenjins; from Fluorspar, Kabarnet, Marigat, Mochongoi area comprises of the Kalenjins (Turgens) and Njemps ethnic groups; and from Kabel, Rumuruti, up to Nanyuki the common communities are the Kalenjins, Kikuyu, Maasai, and Samburu ethnic groups.

The majority of the people in the affected areas depend mainly on land for agriculture (irrigated land, rain-fed land, fishing, commerce and trade), livestock keeping, woodlots, seasonal labor, and remittance; big portions of land used for conservation which is tourism attraction activity, and these are the main source of their socio-economic income as shown in Figure. 1 below:

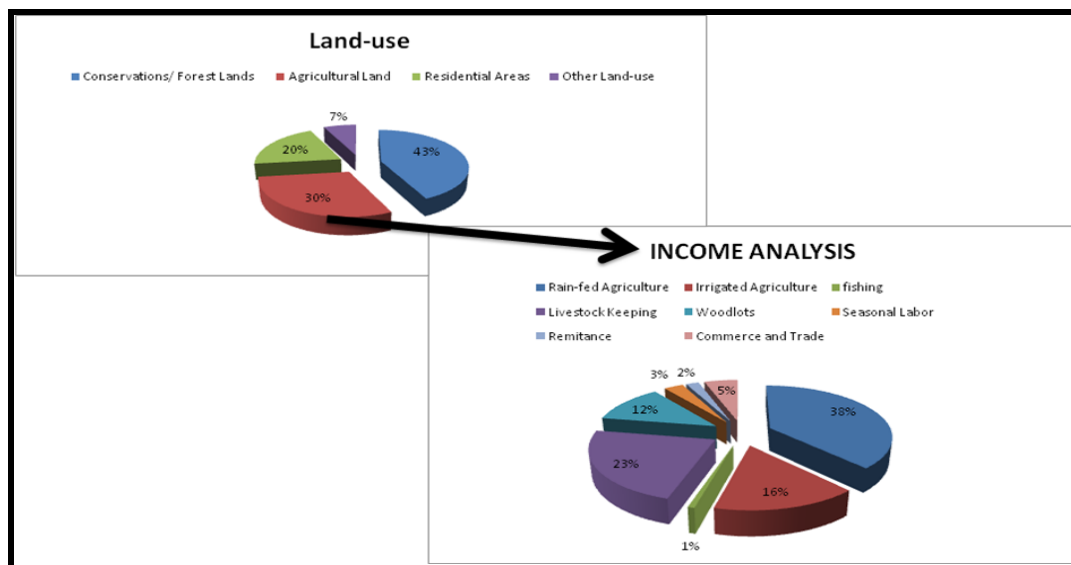


Figure 1: Land use relationship to income

As shown from the figure above, agricultural activities are the major land use activity with 30%, while livestock keeping takes about 15%, 0.75% is taken by Lake Baringo, Lake

Bogoria and other water bodies which are the source for domestic water and for fishing; while the remaining 54% is used for forest and wildlife conservation. The crops grown are maize, beans, millet, sorghum, potatoes, coffee, sunflower, and pyrethrum. Most of the agricultural land is rain-fed.

Cultivation practices especially by the use of irrigation methods have generally dictated the settlement profile. Places or areas with subsistence farming farmers tend to be located on their peripheries since this is the source of income, and to where there is a busy road tend to pull homes along it with families setting up commercial centres with small kiosks being established for income generation.

2.1.2 Households Socio-cultural Profile

The social, economic and political status of women in the entire project area is relatively weak. Apart from land ownership, most women are subjected to early marriages where their roles are confined to the household chores, agricultural production, food preparation, and child rearing. They depend on men economically who make the decision of the family. Women's access to formal education is low in the affected areas. About 60% of the female respondents did totally not attend any school (see Table 1 and Figure 2, next page). This is a high percentage as to that of men who attended school, even at primary level. Men are mainly involved in herding of livestock, busy in the burning of charcoal for economic gain and also provide security to the family and community due the effects of attack from bandits and other ethnic community, and on the other hand, young and old men are found in groups around the shopping centres idling. This is mainly noticed in the Rift Valley districts as compared to the other parts of Nanyuki where men are involved fully in supporting the family.

Children are the most vulnerable members of the population due to the effects of drought, famine, effects of diseases, and to the long distances of schools where they can go and acquire primary education. This is experienced in all along the five districts. Infant mortality rate has drastically reduced along the study areas. Out from our observation were that the rates were generally low due to the introduction of the government's Constituency Development Fund (CDF) health projects and with presence of different kinds of NGOs around the study districts women are getting training and medical facilities for their children.

Table 1: Level of Education of Respondents

Gender	Highest Level of Education of Respondent				
	Primary	Secondary	Tertiary	Never attended	Total
Male	52.12%	21.61%	8.05%	18.22%	100.0%
Female	54.73%	23.05%	2.06%	20.16%	100.0%
Average	53.44%	22.34%	5.01%	19.21%	100.0%

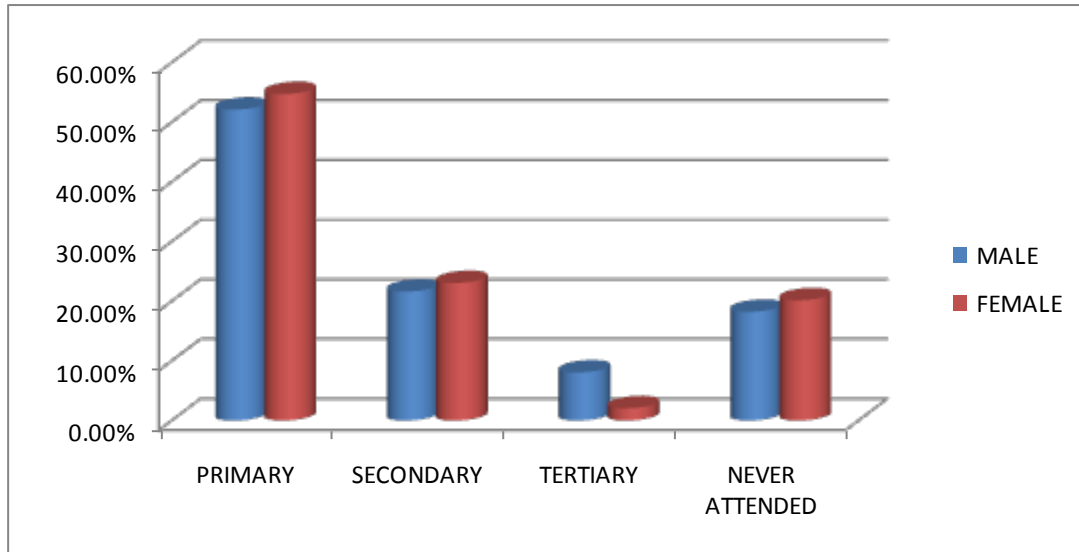


Figure 2: Level of education of the attendants

2.1.3 Housing

The types of housing in the project affected areas consist of different kind of housing such as permanent, semi-permanent and temporary housings. The temporary housing are those ones which are grass thatched, made of polythene materials, iron sheets, and some made of timber. Plates 1 and 2 are some of the houses found in the project area.



Plate 1: Homesteads affected in Marigat area

From our study in the project area shows that 10% of the respondents are living in permanent housing structures, 65% in semi-permanent housing, and the rest 25% live in temporary housings. These results give a clear picture of the socio-economic situation of poor standards of living and high poverty level of the households within the project study area.

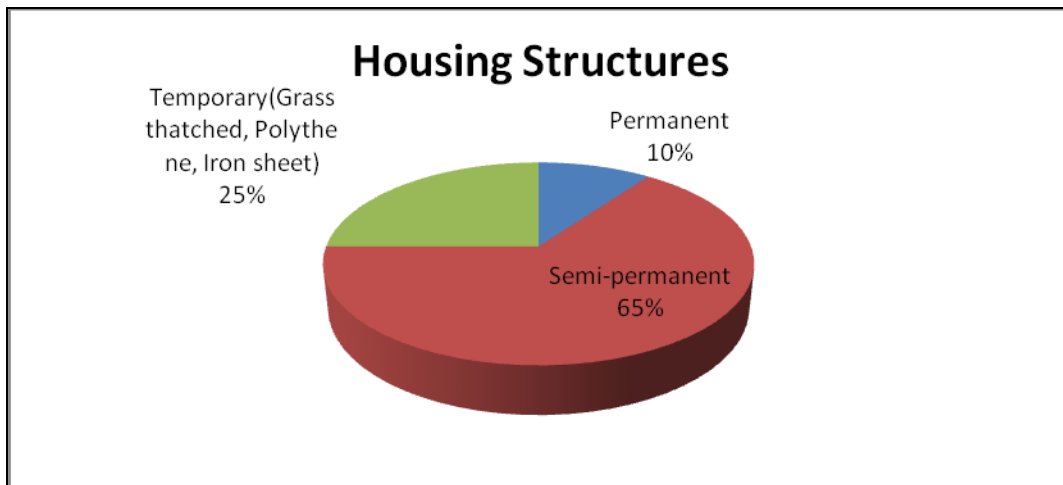


Figure 3: Types of housing

2.1.4 Food Security

The areas between Rumuruti and Mochongoi, then from the Kapkenda Sub-location to Lessos town are agriculturally productive even though most of the areas are ASAL areas, as compared to areas like district where there is limited farming activities as they depend on rain for harvesting. Households within these areas practice mixed subsistence farming and cash crop farming. The subsistence farming consists of crops such as maize, beans, cowpeas, potatoes, among others. These harvests are used for household consumption and for economic purposes, and this has improved food security within these areas. The cash crops grown in these areas include coffee, pyrethrum, sunflower, cotton among others. The produce from cash crops are also used for buying food for the families hence contributes to food security in the households.

Areas within Baringo and Kerio Valley where the land is covered by the invaded alienated species (*prosopis*), and with top soil has been washed down the streams due to the effects of erosion. Along these areas, there are limited agricultural activities. People tend to keep goats and cattle and the other activity is the charcoal burning since there are a lot of acacia trees and shrubs available in Baringo and Keiyo Districts.



Plate 2: Arid land in Marigat, Baringo District

2.2 Categories of impacts and people affected

2.2.1 Design of electric power transmission line system

Electricity power transmission systems include the transmission line, its right-of-way (ROW), switchyards, substations, and access or maintenance roads. The principal structure of the transmission line includes the line itself, conductors, towers, and supports (e.g. guy wires). The voltage and capacity of the transmission line affects the size required for these principal structures. Self supporting single circuit steel structures are used for 161kV or larger lines. Up to 1000kv transmission lines are possible. Transmission lines can range from several kilometers to hundreds of kilometers in length. Transmission lines are primarily overland systems and can be constructed to span or cross wetlands, streams, rivers, and near shore areas of lakes, bays etc.

For the proposed project, the transmission line is an overhead line 132kV covering a distance of 235km to be constructed between Lessos substation (Uasin Gishu District) and Nanyuki substation (Laikipia East District). The line requires a way leave of 30m wide below it, 15m on either side of the centre line.

2.2.1.1 Potential Environmental Impacts

Electric power transmission lines are linear facilities that affect natural and socio-cultural resources. In general, the environmental impacts to natural, social, and cultural resources increase with increasing length of the line. As a linear facility, the impacts of the transmission lines occur primarily as the voltage of the line increases, requiring larger supporting structures and ROWs. Negative environmental impacts of transmission lines are caused by construction, operation and maintenance of transmission lines. Clearing of vegetation from sites and way leave and construction of access roads, pad foundations for the towers, and substations are the primary sources of construction related impacts. Operation and maintenance of the transmission line will involve chemical or mechanical control of vegetation in the way leave and occasional line repair and maintenance. These, plus the physical presence of the line itself, will be a source of environmental impacts.

Socio-economic benefits that would result from this power transmission line project include creation of employment for the local people, reduced cost of electricity, and strengthening the local and national economy. However, this power transmission line may produce complex negative impacts. The impacts on natural resource e.g. forest clearing (Ol Arabel Forest) causing loss of vegetation cover, noise pollution during construction from the transportation vehicles, and impacts from the radiation of the power line during operation of the project.

A wide variety of indirect negative impacts will be attributed to the transmission line during the construction and maintenance whereby there would be new land settlement and induced developments. These include impacts of unplanned land developments and disruption of local land ownership.

2.2.1.2 People Affected by the Transmission Line

The people living along the vicinity of the proposed project power transmission line and around the power substations will be mostly affected by the project. People living in Kabarnet town, Tulwet Centre, Small town, and Kivumbini village (Marigat) will be displaced since there are many people residing or operating in these areas are on the way leave of proposed line.

The people living at far distances from the project and the entire population of a Kenya will benefit indirectly by the project since the economy will be strengthened due to improvement of power supply in the country.

2.3 Consultations on Surveys with Affected People

A total of seven well represented public meetings were conducted in centers nearest to areas likely to be affected by the transmission line. A total of 169 persons attended the meetings aimed at facilitating consultation with affected population regarding information of the new project, its advantages and disadvantages and therefore participatory identification of alternative sites for the project and PAPs, assessment of advantages and disadvantages of each site and to select preferred sites. However, most affected persons preferred to be compensated in cash for them to freely choose to resettle in preferred sites.

2.4 Updates to Census, Assets Inventories, Natural Resource Assessments, and Socioeconomic Surveys

Updates shall be done as per the monitoring evaluation schedule of this report (*chapter 11*).

3 LEGAL FRAMEWORK

This section describes the relevant local laws and customs that will apply to resettlement of people affected by the Lessos – Kabarnet – Nyahururu – Rumuruti transmission line project.

3.1 Relevant Local Laws and Customs for Resettlement

3.1.1 Constitution of Kenya

Section 75 of the Constitution of Kenya guarantees protection from the deprivation of property. The section however provides for instances when a property may compulsorily be acquired. These instances include *inter alia* development or utilization of property to promote the public benefit. The section provides that the necessity for acquisition is such as to afford reasonable justification for the causing of hardship that may result to any person having an interest in or right over property. It further makes provision for prompt payment of full compensation.

3.1.2 The Land Acquisition Act

The Land Acquisition Act is an Act of Parliament that makes provision for the compulsory acquisition of land for the public benefit. The Act restates the provision in the Constitution that where land is acquired compulsorily, full compensation shall be paid promptly to all persons interested in the land.

Section 6 (1) provides that where the Government is satisfied that any land is required for the purposes of a public body, and that the acquisition of the land is necessary in the interests of defense, public safety, public order, public morality, public health, town and country planning or the development or utilization of any property in such manner as to promote the public benefit, such land may be acquired compulsorily.

The Proponent has undertaken a survey and developed a Resettlement Action Plan (RAP) for those who will be affected by the proposed project. The Proponent shall adhere to the requirements of the Act in the implementation of land acquisition.

3.1.3 Energy Act 2006

The Energy Act 2006 also provides for the compulsory acquisition of land for any purposes of a license. In this project, KPLC will require to acquire land that lies along the transmission line. Under section 54 of the Act, where the Minister in consultation with the

Energy Regulatory Commission is satisfied that it is the public interest to do so he may acquire the land in accordance with the laws relating to compulsory acquisition of land. Section 54 (3) provides that KPLC as the licensee shall bear all the costs relating to the acquisition of land.

Section 55 of the Act, makes provision for situations where any tree or hedge obstructs or interferes with the construction of any power supply line. The licensee is required to give a seven days notice to the owner or occupier of the land on which the tree or hedge is growing to lop or cut the same. The licensee shall be responsible for the expenses incurred by such owner in complying with such notice. Any disputes between such owner and licensee shall be referred to the Energy Regulatory Commission and any appeal from the decision of the Commission lies with the Energy Tribunal.

The Act contains various specifications touching on electrical products. The Proponent shall ensure that commodities and codes of practice utilized in the project adhere to the provisions of this Act.

3.1.4 Trust Land Act Chapter 288 of the Laws of Kenya

The Trust Land Act makes provision for Trust land which under Section 115 of the Constitution is vested in the county council within whose area of jurisdiction it is situated. This land is held under customary land tenure. The Constitution also provides that each county council shall hold the Trust land vested in it for the benefit of the persons ordinarily resident on that land and shall give effect to such rights, interests or other benefits in respect of the land as may, under the African customary law for the time being in force and applicable thereto, be vested in any tribe, group, family or individual.

Section 118 of the Constitution empowers the Government to cause the county councils to set apart Trust land for public purposes. Section 7 of the Trust Land Act provides that where land is to be set apart, the county council shall cause a notice in respect thereof to be published in the Gazette. The said notice shall specify the boundaries of the land required to be set apart and the purpose for which the land is required to be set apart, and shall also specify a date before which applications for compensation are to be made to the District Commissioner.

Under Section 8 of the Act, where land is set apart under section 7, full compensation shall be promptly paid by the Government to any person who has any right to occupy any part

thereof under African customary law for the time being in force and applicable to the land, or who is, otherwise prejudicially affected by the setting apart. Section 9 of the Act gives mandate to the District Commissioner after consultation with the Divisional Board, to assess the compensation to be awarded. Such compensation shall be assessed in respect of the loss of the right of occupation or in respect of the applicant having been otherwise prejudicially affected.

Section 10 provides for the right of and process of appeal. An appeal from the decision of the District Commissioner lies with the Provincial Agricultural Board in the province in which the land is situated. Any party to an appeal to the Provincial Agricultural Board who is dissatisfied with the decision of that Board may appeal to the Resident Magistrate's Court and any party to an appeal to the Resident Magistrate's Court who is dissatisfied with the decision may appeal to the High Court whose decision shall be final.

The Trust Land Act in Section 38 further provides that a way-leave license may be granted to any person empowering him and his servants and agents to enter upon Trust land vested in the council and to lay pipes, make canals, aqueducts, weirs and dams and execute any other works required for the supply and use of water, to set up electric power or telephone lines, cables or aerial ropeways and erect poles and pylons therefore, and to make such excavations as may be necessary for the carrying out of any such purposes, and to maintain any such works as aforesaid.

In any case where a way-leave license over any such land has been applied for and the lessee or the holder of the mining right will suffer loss by reason of disturbance or damage to his interest, he shall be entitled to compensation therefore in such sum as may be agreed upon between the licensee and the lessee or holder, as the case may be, or, in default of such agreement, such sum as may be determined by the Minister.

In this project, the land lying along the transmission line is required by Kenya Power and Lighting Company Limited for the transmission of power with a view to promoting the public benefit.

Kenya Power and Lighting Company Limited is a public body for the purposes of the Act and this project. Section 2 of the Act defines a public body as:

- (a) The Government; or
- (b) any authority, board, commission or other body which has or performs, whether permanently or temporarily, functions of a public nature, or which engages or is

about to engage in the exploitation of natural resources or the provision of power or any other activity which is of benefit to the public.

The Proponent has undertaken a survey and commissioned a Resettlement Action Plan (RAP) study which complies with the provisions of the Act. Public consultations have also been undertaken extensively in the affected project area

3.2 World Bank Safeguard Policies

The objective of the World Bank's environmental and social safeguard policies is to prevent and mitigate undue harm to people and their environment in the development process. These policies provide guidelines for bank and borrower staffs in the identification, preparation, and implementation of programs and projects. Safeguard policies have often provided a platform for the participation of stakeholders in project design, and have been an important instrument for building ownership among local populations. (World Bank, 1999-2006)

3.2.1 Involuntary Resettlement: OP/BP 4.12

Resettlement due to infrastructure development is not a new phenomenon in Kenya but the government has no Policy Document or Act that aims at ensuring that persons who suffer displacement and resettlement arising from such development activities can be compensated adequately for their losses at replacement costs. The proponent plans to implement the World Bank's Operational Policy 4.12 which has been designed to mitigate against impoverishment risks associated with Involuntary Resettlement and the restoration or improvement of income-earning capacity of the Project Affected People (PAP). The policy requires full public participation in resettlement planning and implementation and describes the conditions that borrowers are obliged to meet in operations involving involuntary resettlement.

The proposed project triggers resettlement and relocation in the project area especially for community members with small parcels of land. The scope of study included development of a Resettlement Action Plan (RAP) as an integral part of the EIA study in order to facilitate evaluates the project impacts holistically.

3.2.2 Indigenous Peoples: OP/BP 4.10

The objective of this policy is to ensure that;

- i). The development process fosters full respect for the dignity, human rights, and cultural uniqueness of indigenous peoples;
- ii). Adverse effects during the development process are avoided, or if not feasible, ensure that these are minimized, mitigated or compensated; and
- iii). Indigenous peoples receive culturally appropriate and gender and inter-generationally inclusive social and economic benefits.

This policy will not be triggered since there are no indigenous people who live on the proposed line that will be affected by the project.

3.2.3 Physical Cultural Resources: OP/BP 4.11

This policy assists in preserving physical cultural resources and helps reduce chances of their destruction or damage. The policy considers Physical Cultural Resources (PCR) to be resources of archeological, paleontological, historical, architectural, and religious (including graveyards and burial sites), aesthetic or other cultural significance. The project shall traverse several homes in rural Kenya thus it shall stumble onto several burial sites within the affected homesteads; since the tradition of burying the deceased within the homesteads is practiced in the project area. The community members likely to be affected by the project have suggested that such sites should be avoided as much as possible through consultations with individual home owners before project implementation to enable develop appropriate mitigation measures. The proposed project will have no effect to the physical cultural resources because they are not present in the proposed route for the transmission line.

3.2.4 OP 7.60 Projects in Disputed Areas

The objective of this policy is to ensure that projects in disputed areas are dealt with at the earliest possible stage:

- a) So as not to affect relations between the Bank and its member countries;
- b) So as not to affect relations between the borrower and neighboring countries;
- c) So as not to prejudice the position of either the Bank or the countries concerned.

This policy is triggered if the proposed project will be in a "disputed area". Questions to be answered include:

- Is the borrower involved in any disputes over an area with any of its neighbors?
- Is the project situated in a disputed area?
- Could any component financed or likely to be financed as part of the project be situated in a disputed area?

The proposed transmission line does not pass through any disputed area. It is recommended any dispute over area earmarked for project development should be dealt with at the earliest possible stage.

3.2.5 World Bank Safeguard Policy BP 17.50- Public Disclosure

This policy encourages Public Disclosure (PD) or Involvement as a means of improving the planning and implementation process of projects. This procedure gives governmental agencies responsibility of monitoring and managing the environmental and social impacts of development projects particularly those impacting on natural resources and local communities. The policy provides information that ensures that effective PD is carried out by project proponents and their representatives. The BP requires that Public Involvement should be integrated with resettlement, compensation and indigenous peoples' studies. Monitoring and grievances address mechanism should also be incorporated in the project plan.

The proposed project incorporated public participation and stakeholders' consultation as part of the E&SIA studies in order to collect the views of the local communities and their leaders for incorporation in the project mitigation plan. The consultation was successful and the community members gave a number of views that have been considered in the mitigation plan.

3.3 Gaps between Local Laws and World Bank (IFC) Policies

1. Both the Constitution and the Land Acquisition Act provide that compensation for compulsory acquisition of land shall be paid to persons interested in the land. Section 2 of the Land Acquisition Act defines a "person interested", in relation to land or a building, means a person who has an interest in or right over the land or building. This

means that squatters or persons who do not legally own the land or have a legal interest in the land are not entitled to compensation for compulsory acquisition of the land. The World Bank policy contained in the International Finance Corporation Handbook for Preparing a Resettlement Plan (IFC Handbook) provides that those eligible for compensation and assistance are:

- i) those who have legal right to the land or other affected assets; and
- ii) those who do not have formal legal rights to land or other assets, but who have claim to such legal rights by virtue of occupation and use of those assets.

Under the World Bank Policy, squatters who occupied the project area are entitled to resettlement assistance.

2. In the cases where land to be acquired has plant and machinery attached thereto or permanently fastened thereto, Section 6A provides that if the Commissioner shall require the person interested to remove the same, the person interested shall sever and remove them at his own expense. The Section further provides such plant and machinery shall not be included in the computation of the compensation payable under the Act. Loss of income and assets are not covered. The provisions of the laws of Kenya differ from those contained in the IFC Handbook in that the IFC Handbook requires that compensation should cover loss of physical assets, revenue and income resulting from economic displacement or physical relocation.
3. Under Section 9 of the Act, the Commissioner of Lands shall, after making a full inquiry determine who are the persons interested in the land and what compensation is payable to each of the persons whom he has determined to be interested in the land.
4. Section 12 of the Act provides for the grant of land in lieu of a compensation award. The land granted must however not exceed in value the amount of compensation which would otherwise have been awarded. The World Bank Policy provides that the new land should be equivalent or superior in productive potential to the land acquired.
5. Section 34 exempts transactions relating to such land from stamp duty. Interested persons claiming under an award or agreement made under this Act shall be liable to pay a fee for a copy thereof. The World Bank policy however goes further and provides for exemption from all transaction costs such as registration fees, etc. The policy further provides that the new land should be prepared for productive levels similar to those of the land from which the interested persons have been displaced.

3.4 Entitlement Policies for Each Category of Impact

World Bank policy requires that a project sponsor should undertake all land acquisition, provide compensation for lost assets and initiate resettlement related to a project before that project commences. The compensation framework specifies all forms of asset ownership or use rights among the population affected by the project.

The categories of impacts include loss of physical assets, revenue and income resulting from economic displacement or physical relocation.

3.4.1 Physical Assets

Physical assets include land, structures, trees and other assets. The Constitution of Kenya in Section 75 provides for the compulsory acquisition of land for the public benefit and further provides for prompt payment of full compensation as per the provisions of the applicable law.

Under Section 9 of the Land Acquisition Act, the Commissioner of Lands is mandated to determine who are the persons interested in the land and what compensation is payable to such persons. Section 12 of the Act provides for the grant of land in lieu of a compensation award. The land granted must however not exceed in value the amount of compensation which would otherwise have been awarded. In cases where there are plant and machinery on land to be acquired, Section 6A empowers the Commissioner to require the person interested to remove the same at such person's own expense.

Energy Act 2006 in Section 54 provides for compulsory acquisition of land that is required for purposes of a license issued under the act. Though the act does not specifically provide for compensation for the land so acquired or the structures thereon, it does however state that the Licensee shall bear all the costs in relation thereto. Section 55 provides that where trees or hedge likely to interfere with power lines are cut or lopped the licensee shall pay the owner thereof the expenses reasonably incurred in respect thereof. The Act does not however provide for compensation for the loss of the trees or hedge.

The provisions for compensation in the above laws however relate only to persons with legal title or interest in the affected land.

The IFC Bank policy on compensation however is that if compensation procedures are not addressed under domestic law, the project sponsor – in this case KPLC shall establish a method of delivering compensation either cash payments or in kind allocations.

Under the IFC policy those entitled to compensation for loss of land or other assets such as dwellings and crops include those who have formal legal rights to land or other affected assets and those who do not have such formal legal rights but who have claim to such legal rights by virtue of occupation or use of those assets. The policy requires the sponsor of women whose incomes tend to be lower and less stable than those of men who are not disadvantaged in the process of compensation.

The IFC policy further provides that whether physical relocation is required or not, affected people should be given prompt and effective compensation at full replacement value for loss of assets due to project activities.

3.4.2 Revenue & Income

The laws of Kenya do not specifically provide for loss of income. Indeed Section 6A of the Land Acquisition Act provides that plant and machinery shall not be included in the computation of the compensation payable under the Act. Loss of income and assets are not covered. The IFC policy however provides for the participation of affected persons in planning and implementing resettlement activities as well as to restore and improve their livelihoods. The policy further requires that affected persons be provided with transitional financial support, land preparation, agricultural inputs and credit facilities and training and employment opportunities. Where income generating capacity is affected, IFC encourages resettlement to be undertaken as a sustainable development initiative that leads to improved standard of living for the project affected people.

3.4.3 Social Services

Whereas Kenya's domestic laws do not make specific provision for compensation for loss of social services, IFC policy makes such provision. Where social services such as schools, health centres, shops, etc are to be affected as in the project herein, the project sponsor is required to make good. The sponsor may establish a sheltered and serviced marketplace central to the relocation site to encourage enterprises to relocate with affected population. KPLC is required to make every effort to ensure continuity of social services provided.

It is clear from the foregoing that domestic law is inadequate in the Resettlement Action Plan. The IFC policy will therefore be utilized in this project.

3.5 Entitlement Matrix

The project proponent (KPLC) under the law is required to prepare an **Entitlement Matrix** (*See Table 2, next page*), with respect to both temporary and permanent displacement. Based on the following principles an Entitlement Matrix was developed for the proposed project:

- All categories of affected people, including property owners and land right holders, tenants, squatters, sharecroppers, grazers, nomadic pastoralists and other natural resource users, shopkeepers, vendors and other service providers, communities, and vulnerable groups;
- All types of loss associated with each category, including loss of physical assets; loss of access to physical assets; loss of wages, rent, or sales earnings; loss of public infrastructure; and,
- All types of compensation and assistance to which each category is entitled, including: compensation for or replacement of land and natural resources; compensation for structures, assets, wages, rent, or sales earnings; moving assistance and post-resettlement support such as technical assistance, extension and skills training, and access to credit.

Table 3: Entitlement Matrix

SN	Type of loss	Entitled person	Legal entitlement
1.	Land	Any land owners whose land ownership is recognized under the laws of land e.g. Customary or Private	Compensation for the area (Wayleave) of land affected at prevailing market rates
2.	Loss of any structure; residential, business, granary, latrine/bathroom, animal shade	Any person who owns any structure whether he/she have or does not have legal proof of land ownership	Compensation as agreed upon between the proponent and the facility owner for the entire structure at replacement cost based on the prevailing market rate
			Free transportation to relocation site for moveable structures affected
3.	Other fixed structures e.g. house fence, paddock fence, fish pond	Respective properties owners	Compensate the owners after an elaborate consultation with the affected persons and accredited asset valuation experts
4.	Facilities with certain cultural or spiritual value attached to them by the society living near them (e.g. a shrine or a grave)	The responsible society/persons	Compensate the responsible persons/society to their satisfaction including costs of relocating the facility to a new site
5.	Woodlot/Houselot/Forest/Pasture/Crops affected	Owners of woodlot / houselot / forest / pasture / crops affected	Compensation of woodlot / houselot / forest / pasture / crops affected at prevailing market rates
6.	Public infrastructure affected by the project e.g. Telephone lines, water supply line, etc.	Members of the public whose connections have been interfered with	Proponent to restore the public infrastructure to the satisfaction of the general public
			Compensation to cover cost of restoring the facilities

4 VALUATION AND COMPENSATION

4.1 Economic Rehabilitation

Projects leading to inconveniences to the society within which the project is located requires adequate economic rehabilitation of the affected people with due vetting of their entitlements. The project proponent will compensate affected people for loss of physical assets, revenue, and income resulting from economic displacement or physical relocation whether these losses are temporary or permanent. The project proponent has established transparent methods for the valuation of all assets affected by the project as required under the laws of the land. These methods included consultation with the affected individuals together with their representatives, to assess the adequacy and acceptability of the proposed compensation to ensure the economic rehabilitation of all the affected people.

4.1.1 Compensation Rates

Adequate compensation rates have been drawn by the proponent based on the prevailing market rates of the affected facility in the RAP document. The established compensation rates have been applied throughout the project components with consistency in the respective project phases with allowances for adjustment for a case of the staggered compensation payments.

4.2 Restoration Strategies, Change in Livelihoods and, Variation with Area of Impact

The restoration strategies applied by the proponent to ensure income restorations to the affected communities are as discussed below which rather revolves round compensation. The overall objective of the adopted strategies is to ensure no negative change in the livelihood of the affected persons and their respective activity. The strategies aim at livelihood promotion through various economic incentives to the affected.

4.2.1 Land-based Compensation

Land-based resettlement options for this project should be provided to displaced people whose livelihoods are based on use of the land and rather own a land small enough no to require them further stay within the land. These options may include resettlement on or access to land acquired or purchased for resettlement based on the wish of the affected person. The following are the guiding principles for land-land compensation option:

- New land should be equivalent or superior in productive potential to the land from which people will be displaced;
- New land should be located in reasonable proximity to land from which people will be displaced;

- New land should be provided free of any “transaction costs” such as registration fees, transfer taxes, or customary tributes;
- New land should be prepared for productive levels similar to those of the land from which people will be displaced; preferably, affected people should be paid by the project to do this work.

4.2.2 Cash Compensation

This compensation option is adopted where the affected persons choose cash rather than land-for-land compensation after an informed consultation. The following are the World Bank guiding principles for cash compensation option:

- Compensation rates should be calculated in consultation with representatives of affected populations to ensure that rates are fair and adequate;
- Compensation for land, crops, trees, and other fixed assets should be sufficient to enable affected people to restore their standard of living after resettlement;
- Compensation for structures should cover full replacement cost exclusive of depreciation and inclusive of all fees such as construction permits and title charges and labour costs;
- Compensation payments should be made before any acquisition of assets or physical resettlement takes place unless those payments are staggered to enable affected people to begin preparation of new sites;
- Compensation for dismantled infrastructure or disrupted services should be paid to affected communities, or to local institutions as appropriate, at full replacement cost, before civil works begin;
- Compensation for lost earnings should be paid to proprietors and employees for the duration of work stoppages resulting from the relocation of enterprises.

Most of the people affected preferred cash compensation. Based on these guidelines a budget of Ksh. 89,899,525.00 (see Budget).

4.3 Risks of Impoverishment

To ensure the affected persons are not in any way rendered poor by the proposed project, all categories of affected people, including property owners and land right holders, tenants, squatters, sharecroppers, grazers, nomadic pastoralists and other natural resource users, shopkeepers, vendors and other service providers, communities, and vulnerable groups were identified. All types of loss associated with each category above, including loss of physical assets; loss of access to physical assets; losses of wages, rent, or sales earnings; loss of public infrastructure were factored in. All types of compensation and assistance to which each category is entitled, including compensation for or replacement of land and natural resources; compensation for structures,

assets, wages, rent, or sales earnings; moving assistance and post-resettlement support such as technical assistance, extension and skills training, and access to credit were also factored in.

4.4 Consultation with Affected Populations

To ensure the interests of the affected persons are fully entrenched in the RAP process and income restoration, the consultant adopted a thorough consultation with the affected persons, representatives of any affected group, any interested group and the various administrative and government departments all through the project area. The consultation is as described in the Participation and Consultation Chapter of this report which was all encompassing.

4.5 Monitoring of Income Restoration

The income restoration strategies aim at ensuring the affected persons are reinstated to their prevailing state at the beginning of the project and adequate measures are in place to assist them progress further. The monitoring process and the responsible parties are as described in the Monitoring and Evaluation section of this RAP document. The key indicators of the performance of the income restoration measures within the restoration strategies adopted are:

- Poverty variation among the affected persons
- Conflicts within the affected persons, social, political, crime rate or religious

5 RESETTLEMENT MEASURES

5.1 Efforts to Minimize Displacement

During the final design of the project, the KPLC will ensure that the densely settled areas where the line passes through like Kituro Centre (36N 081157, UTM 0052844) and Kabarnet Town (36N 0807523 UTM 0053180) are avoided as much as possible, in that they would look into alternative areas that have few people to be displaced like the forests and valleys. In areas like Small Town (36N 0777090 UTM 0038127) where the Transmission line passes through the shopping centre the engineers would have to re-route the line to pass through the nearby farms because the area has big farms.

5.2 Results of Efforts

The result of minimizing resettlement will ensure the areas that might be greatly affected by the displacement during the implementation of the project are avoided. These areas include:

- i) Kituro areas which has 24 people to be displaced in urban plots.
- ii) Kituro Health Centre, serving over 11,000 persons in the Sub-location
- iii) Kabarnet area has 49 owners of rental houses.
- iv) Small Town Shopping centre where 5 property owners depend on the Centre for their activities

5.3 Mechanisms to Minimize Displacement during Implementation

- i) KPLC should liaise with relevant agencies like Forest Department to get permission to ensure the transmission line utilizes mostly the Kapkut Forest area to avoid displacement of people near Kituro Centre; however the areas where KPLC will clear the way leave they should ensure afforestation is done in areas that they have cleared in the forest to restore its aesthetic value. The asset owners at Kituro and Kabarnet objected the proposed transmission line passing through the human residential estates.
- ii) Mostly the transmission lines will follow road corridors and there should be very limited compensation requirements. The section following roads adjacent to conservation areas will accommodate wildlife movement in their design and mitigate visual landscape intrusion and avoid unnecessary tree cutting or displacement of people.

- iii) Willing buyer/willing seller—the affected individuals, if willing to sell their assets on voluntary basis 1)KPLC will provide the company productive investment of the sales income exist; 2) the transaction will take place with the seller’s informed consent; and 3) the seller will be provided with fair compensation based on prevailing market values. In the absence of land markets, KPLC should establish a compensation structure that enables sellers of land and assets to restore their livelihoods to levels equivalent to or better than those maintained at the time of sale.
- iv) Due to displacement of the PAPs, KPLC should help them in ensuring that they are well resettled and provide them with social amenities like water and rural electrification.
- v) Application of principles outlined in section 1.5 of this report

5.4 Resettlement Sites

During the field study, the consultants identified key areas that the proposed 132KV single circuit transmission line from Lessos to Nanyuki is likely to negatively impact on population households, developed infrastructure and natural resources. This line requires 15m by 15m Way leave, running to a near straight line to minimize impacts as a result of meanders and associated costs of compensation and design. The proposed line traverses across three major steep escarpments in Keiyo, Kabarnet and Laikipia area, and some human settlements.

5.4.1 Process of Identifying and Involving PAPs

Project Affected Persons (PAPs) were identified in the following series of steps, as per World Bank guidelines and Kenya Power Way leave Regulations:

- **Step One:** Thematic mapping of the identified features such as population settlements, infrastructure, natural vegetation areas, water resources and land use patterns.
- **Step Two:** Taking of a census survey that facilitated enumeration and registration of the affected persons according to locations (Village level), noting their full names, age, contacts, education level, main sources of income and their specific geographical coordinates position.
- **Step Three:** Conducting an inventory of anticipated lost and affected assets at the households, their enterprises and as a community.

- **Step Four:** Undertaking of household Socio-economic survey and studies of all affected population.
- **Step Five:** Analysis of the results of surveys and studies to establish compensation parameters to design appropriate income restoration and sustainable development initiatives and thereafter identify baseline monitoring indicators.
- **Step Six:** Public Consultation through local Administration Barazas. A total of seven well represented Public meetings were conducted in centers nearest to areas likely to be affected by the transmission line. A total of 169 persons (see appendices) attended the meetings aimed at facilitating consultation with affected population regarding information of the new project, its advantages and disadvantages and therefore participatory identification of alternative sites for the project and PAPs, assessment of advantages and disadvantages of each site and to select preferred sites. However, most affected persons preferred to be compensated in cash for them to freely choose to resettle in preferred sites.

Most areas which are settled along the route from Lessos to Nanyuki are: Kapserton and Terige Village in Tulwet Sublocaton-Uasin Gishu District; Kayenga Village and Small town in Mosop Location-Keiyo District; Kituro centre and Kabarnet town- Baringo District; Kapkechir and Thigio Villages in Muchongoi Division, Rabai, Naserian and Kivumbini Villages in Yator Sublocaton, Marigat District; Samburu Manyatta, Ichuga, Ruai Villages in Nanyuki, Laikipia East District.

5.4.2 Allocation of Agricultural Land, Pasture/ Rangeland

The new project does not involve allocation of agricultural land or pasture/rangeland since this is a 30 meters Way leave line with its towers approximately 50-60meters high, therefore allowing continued practice of agricultural crop farming and livestock keeping beneath the line so long as it's not tree planting which may cause electric faults on wires. During meetings, the affected individuals were involved thoroughly in the discussion. This involved briefing on the new project design, Way leave requirements and World Bank and Kenya Power Lighting Company Way leave guidelines for similar projects. The PAPs were then asked to give their consent and their questions answered as regards the project. The meetings were coordinated by the Consultant and attended by Stakeholders, interested groups, Local chiefs and Divisional Officers, including Area chiefs, sub-chiefs, area Councilors and KPLC regional representatives.

5.4.3 Affected Areas

According to feasibility studies conducted by Norconsult Ltd in October, 2008, it was noted that approximately, 20 households with 200 persons shall be affected by the proposed 132KV transmission line. In regards to this study, there are about 134 households with over 1,000 persons to be affected. The natural resources, and associated environmental and social impacts sites vary from site to site along the proposed route from Lessos to Nanyuki. These include trees in Ol Arabel and Marmanet Forest, possible visual interference of wildlife in migration corridors in Mutara ranch near Ol Pajeta Conservancy.

5.4.4 Community Sites and House Replacement Strategy

According to the findings of the full Social and Environmental Impact Assessment Study, while walking through the proposed transmission line, the project does not require community relocation sites, since only individual assets and households were being affected by the proposed line. About 90 percent of the PAPs are willing to relocate their houses to designated areas within their compounds on condition that they are compensated fully for construction labour, materials and inconvenience allowance. All the PAPs were involved in a participatory process guided by consultants, GPS navigation expert to identify sites, and carry out assessment of advantages and disadvantages of each site based on their preferences. After identification of houses within the proposed way leave, the PAPs were then involved in developing an acceptable resettlement strategy for housing replacement, whereby, a committee of PAPs within a given area was selected, after which a deliberations of proposed cost of housing materials and labour was done specific to the area. The resultant compensation budget was compared to the values of the consultant's Valuation Expert.

5.5 Area Description of the Proposed 132KV Transmission line

5.5.1 Lessos - Keiyo Section

The proposed 132KV Transmission line starts at the current substation at Lessos, Eastward into Terige Village, Kesses District which is a sparsely populated area. Maize is a major cash crop in this area. The terrain is generally flat with valleys such as Tulwet valley. The line cuts across a home in Kaisagat village, Tulwet Sub-location at elevation 2,160M 36N 0756872 UTM 0025354 in Uasin Gishu District. It then descends into Terige Farm with few settlements, passes approximately 350m away from the existing Kapserton Primary School, after which it suddenly drops into Kapserton Valley, running close to Tulwet Centre. The line runs alongside a rugged hill slope through large scale Bindor Farms covering at least 8

Kilometers before crossing the Eldoret-Burnt Forest Tarmac Road, which is approximately 4 Kilometers from Cheptiret Town. Common vegetation planted in this area is Eucalyptus trees. Most homes are fenced with barbed wires. Most land is privately owned and consists of medium scale farms. Other common vegetation growing along these areas includes thorny bushes and *Acacia Nubica* trees. The region is sparsely populated and rather remote. The line then traverses through maize crop farms before crossing into Senetwo village, in Marichor Sub-location, and Kariange and Kapkoras villages, in Mosop Sub-location through Small Town centre in Keiyo District. The line then heads to Keiyo escarpment to drop at Iten - Kabarnet road. The common crops in this section include Kales, Irish Potatoes, Maize and Beans, including Nappier grass (*see Plate 3*). Livestock kept are Cattle, Goats and Sheep at small scale.

In this area settlements/ homes are far apart, therefore not much resettlement will be required. During the study, it was noted that 12 households would be displaced to allow the way leave for the transmission line.

Table 4: Cost estimates for assets in Tulwet Sub-location

ITEM	QUANTITY	COMPENSATION COST (KSH)
Land		750,000.00
Houses & Structures	39	2,535,000.00
Trees	5% of Sub-Total	37,500.00
TOTAL		3,322,500.00

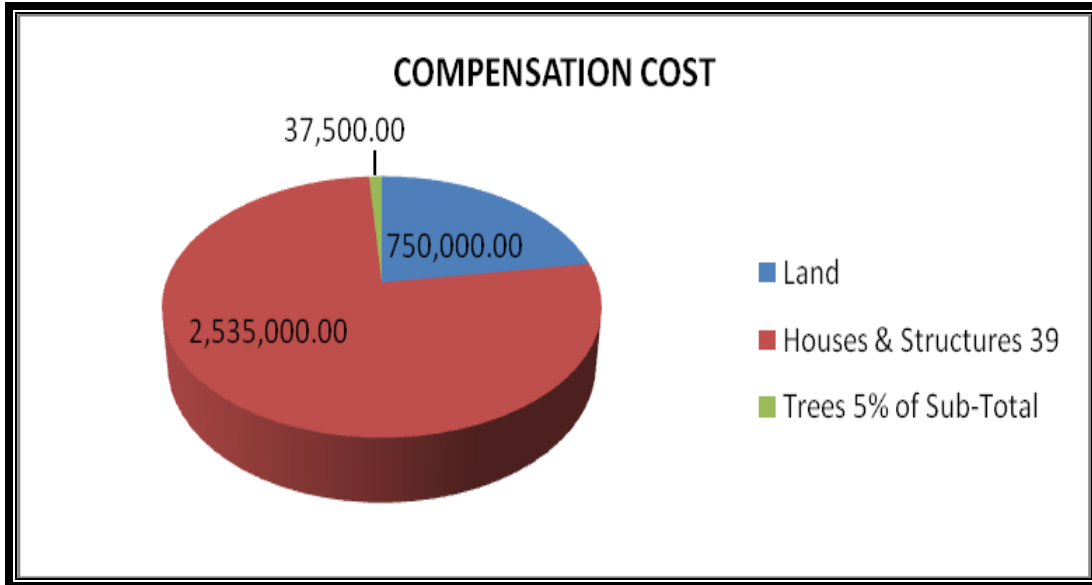


Figure 4: Summarized cost estimates in Tulwet Sub-location



Plate 3: Crops of Maize and Kales within the proposed in Kapkenda Sublocation, Keiyo District

Table 5: Cost estimates in Small Town and Mosop area

ITEM	QUANTITY	COMPENSATION COST(KSH)
Land		1,165,000.00
Houses & Structures	65	4,970,000.00
Trees	5% of Sub-Total	58,250.00
TOTAL		6,193,250.00

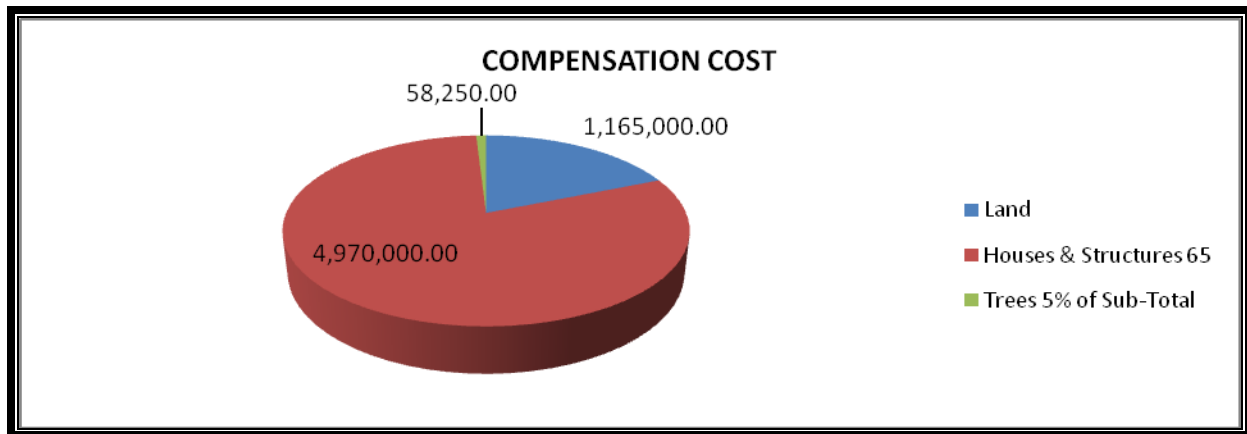


Figure 5: Summarized cost estimates at Small Town Centre and Mosop area

5.5.2 Keiyo Escarpment – Kabarnet

The line emerges and runs along the right side of Iten- Kabarnet Tarmac Road, crossing Chebloch Gorge and Kerio River, in an area with brown clay soils that is heavily eroded. The line passes Kapkelewa and Kiboimo area enroute Kapkogorwa village, Kaptimbor Sublocation in Kabarnet division, Baringo District. The area is generally stony and slopes towards Kipteitei River beneath Nandi Hills. This area is approximately 350metres away from the existing Kabarnet 33kV substation.

The proposed line ascends the hills close to Kabarnet Town Westward, towards Kaprogonya, Kapsetor and Mumol villages and estates in Kaprogonya Sub-location. This is an urban set up, which is densely populated and many developed permanent houses both for rental and as private homesteads (*see Plate 4*). Most land is sub-divided into plots and is privately owned with a few spaces set aside for public facilities, for Example Baringo District Hospital and Cereal Stores.



Plate 4: Permanent rental houses within Kaprogonya, Kabarnet town

Mumol Primary School near Ewone River is one of such facilities where the proposed line cuts through affecting six classrooms in the small school compound. The proposed 132kV line was aimed at avoiding Baringo Town Centre; however the number of urban settlements that shall be affected is high and is subject to increase by the time the line is built given the level of rapid developments in the area since it is a major town in the District. The line then drops the steep slopes of Mumol village into a moderately populated valley behind Kasoiyo Centre.

There were 65 households that were identified to be affected by this project in the Keiyo-Kabarnet area, most of which own permanent houses.



Plate 5: Classrooms at Mumol Primary School within the way leave at Kabarnet town

Table 6: Cost estimates for assets in Kabarnet town

ITEM	QUANTITY	COMPENSATION COST (KSH)
Land		5,945,000.00

Houses & Structures	160	31,825,000.00
Trees	5% of Sub-Total	297,250.00
TOTAL		38,067,250.00

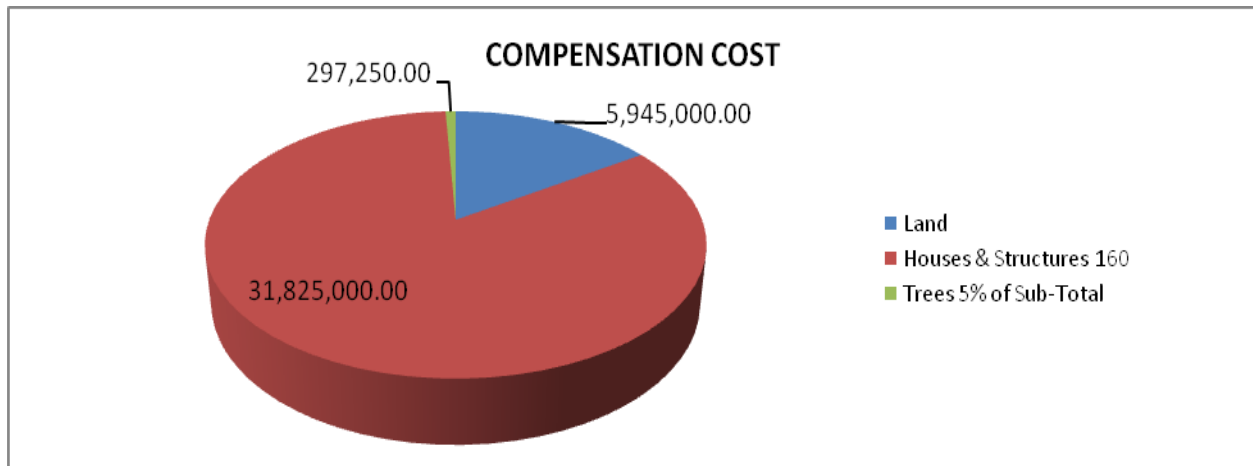


Figure 6: Summarized cost estimates at Kabarnet town

5.5.3 Kabarnet –Kituro- Marigat Section

The line runs from Mumol village in Kabarnet, along undulating slopes of the Kapsirkong Hills crossing the Kabarnet-Marigat Road, behind Christian Children Fund (CCF)–Morop Centre, located approximately 270 Meters away from Kituro Polytechnic. The line ascends from a steep Kinyo Valley at Kituro Coffee Factory through a section of Kinyo Forest to rise at elevation 1944M, 36N 0809660, UTM 0053049. The line traverses through Kapchesir Village, Kituro Sub-Location crossing Pit Latrines at Kituro Primary School, a homestead for Current area Chief and rolling over five Permanent blocks for Administration, Maternity and Laboratory Wards in Kituro Health Centre. The Centre is the one of the Community Public Facility that serves over 11,000 people in four neighboring Sub locations.

The line crosses the Kituro Market Centre crossing over six developed plots before passing through point of elevation 1984M, 36N 081157, UTM 0052844 rising over Muitanyi Hills before dropping into Koruget Valley towards Marigat-Kabarnet-Nakuru junction (*see Plate 6*). Kituro is an up coming densely populated area, and most land is sub-divided into plots and development activity is on going. The area between Kituro and Marigat through

Kimalel is sparsely populated area dominated by bush land and *Prosopis juliflora* (locally known as “Mathenge’ because of its invasive nature).

This section from Kabarnet to Marigat has a total number of 24 households residing/operating along the line’s way leave and would be displaced. There is also at the Kituro Health Centre that would be affected if the proposed line is not rerouted.



Plate 6: Shops and Health Centre within the way leave at Kituro Division, Kabarnet

Table 7: Cost estimates of assets in Kabarnet and Kituro area

ITEM	QUANTITY	COMPENSATION COST (KSH)
Land		2,745,000.00
Houses & Structures	82	19,633,000.00
Trees	5% of Sub-Total	137,250.00
TOTAL		22,515,250.00

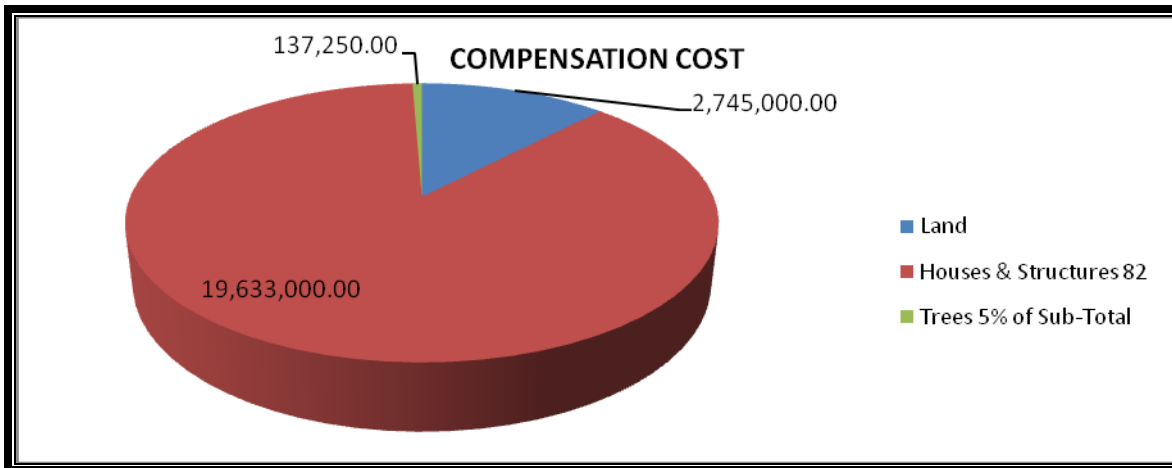


Figure 7: Summarized cost estimates (Ksh.) from Kabarnet to Kituro

5.5.4 Marigat – Mochongoi Section

The line crosses Marigat-Nakuru-Kabarnet roads junction at points CB1 and CB2, where it crosses Kivumbini Village, and Rabai Village then turning Eastward to Naserian Village at point ZZ (37N 0168448, UTM 0051339) located in Eldume Sub-Location. The line will affect about 13 persons in the above villages, where land is owned communally by the Group ranch community and structures owners have no title deeds. The line crosses a heavily eroded 30 metres wide River Pekerra before dissecting the area between Lake Bogoria and lake Baringo, connecting through steep Chebinyinyi hills at point XX (37N 0182059, UTM 0046795), and then turns along Risiati valley at points WW (37N 0186790, UTM 0046004) and VV (37N 0188963, UTM 0044805). The line crosses Kapsokum ridges (see Plate 7) at point UU (37N 0190389, UTM 0042667). This area is rough, and remote; dominated by the *Prosopis juliflora* (Mathenge) trees and shrubs as the main vegetation. There are steep valleys within Laikipia Escarpments, near Muchongoi. The area is inhabited by the Jemps people as indigenous community. The line runs through Rasiati hills at point TT (37N 0190764, UTM 0042089), then takes off from point SS (37N 0191419, UTM 0041716) to point RR (37N 0221751, UTM 0027215).

There were 14 households identified that would be displaced. Most of these are at Kivumbini village in Marigat area. The estimated cost of compensation is summarized below (see table 8)



Plate 7: Kapsokum Ridges (left) and Rasiat Valley (Right) in Mochongoi Division, Marigat District

Table 8: cost estimates of assets in Marigat area

ITEM	QUANTITY	COMPENSATION COST (KSH)
Land		600,000.00
Houses & Structures	37	971,000.00
Trees	5% of Sub-Total	30,000.00
TOTAL		1,601,000.00

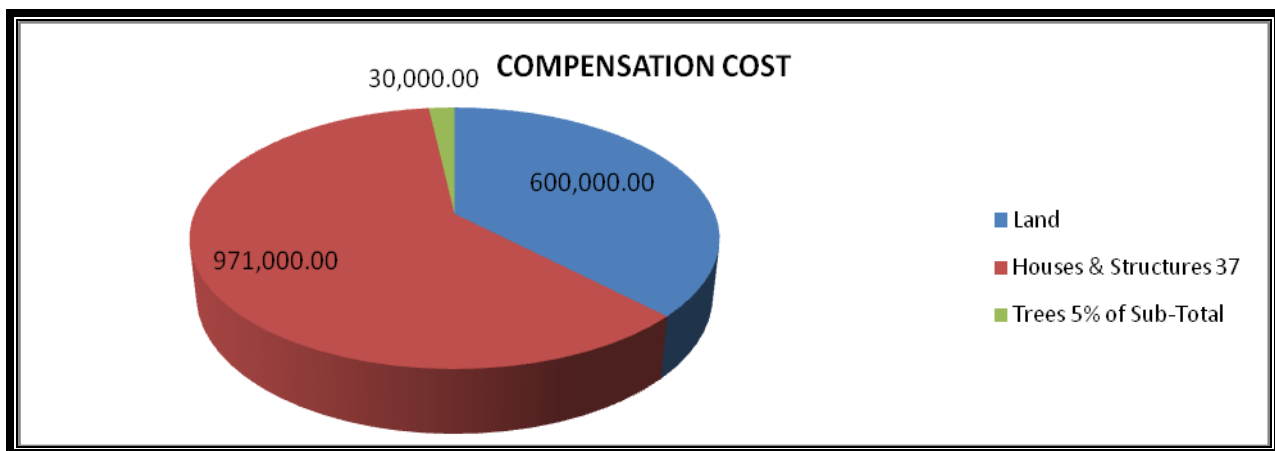


Figure 8: Summarized cost estimates at Marigat

5.5.5 Muchongoi – Rumuruti Section

This is the longest stretch that takes off from point XX (37N 0182059, UTM 0046795) through WW, VV, UU through point RR (37N 0191807, UTM 0040062) to QQ. This is an

area that has undergone much forest destruction due to human settlement and is left with short stunted bushes, thorny acacia species, mature stands of blue gum and gravelia trees.

The proposed line traverses between the following spots: Lariak settlement scheme, near Kanyuka Dam, sparsely populated Kapkechir valley in Kapkechir village, Kapkechir Sub-location, Mochongoi Division. Major cash crops include irrigated tomatoes, maize, Cabbages and potatoes (see Plate 9 below).



Plate 8: A section of Ol-Arabel Forest near Kamasia gate valley



Plate 9: Crops of maize and potatoes within the way leave in Thigio village, Mochongoi Division

The proposed transmission line passes right across a sparsely Thigio village located on the hillside of Ol Arabel forest and a few scattered semi permanent houses. The road network consists of meander that goes round the hill from one level to another. The land type is mainly individual owned parcels of land. To be affected is a homestead at point **RR9** (Elevation 2022m, 37N 0196268, UTM 0036041).



Plate 10: New semi-permanent house and Kitchen within the way leave in Thigio Village

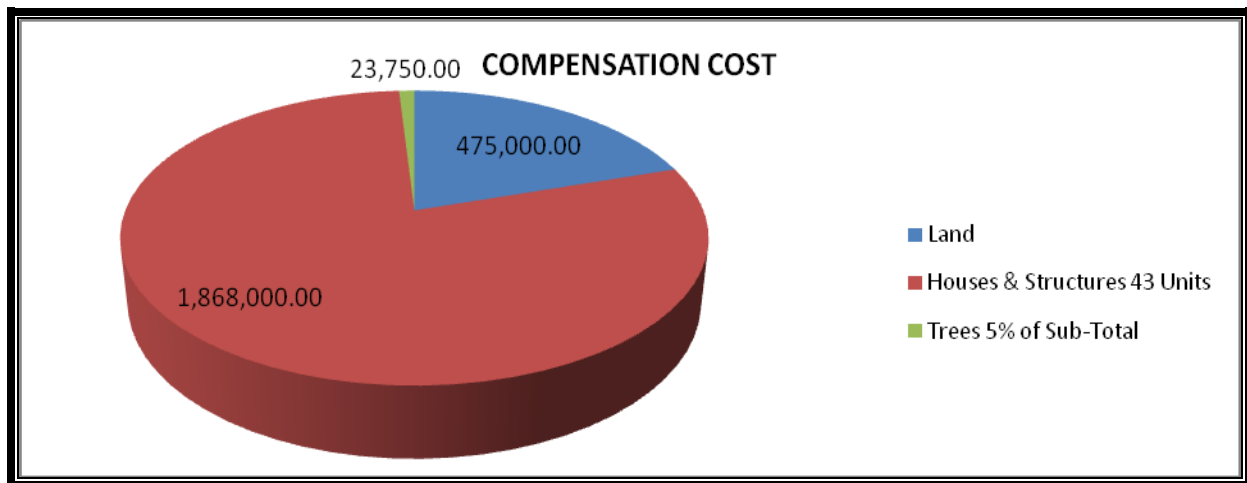
The proposed transmission line crosses the gate of Kanyuka Dam at point, **RR4** (Elevation 1953m, 37N 0197516, UTM 0034616), in Lariak settlement scheme where large scale irrigation farming of major crops like Maize and horticultural crops like Tomatoes, Spinach, Cabbage and Kales are grown. Other common domestic animals kept in the scheme are dairy cows, sheep and chicken. The line then descends into the valley with River Ngarashi, a tributary of Ol Arabel River in Lariak settlement at a point **RR2** (Elevation 1969m, 37N 0199981, UTM 0031431).



Plate 11: Kanyuka Dam, Neighbouring Swamp, and Irrigated tomatoes produced from Lariak Settlement Scheme

Table 9: Cost estimates for assets in Mochongoi – Rumuruti Area

ITEM	QUANTITY	COMPENSATION COST (KSH)
Land		475,000.00
Houses & Structures	43 Units	1,868,000.00
Trees	5% of Sub-Total	23,750.00
TOTAL		2,366,750.00

**Figure 9: Summarized cost estimates from Mochongoi to Rumuruti**

The transmission line bisects through farmland with nearest home, located at point **RR1** (Elevation 1970m, 37N 0199919, UTM 0031351) This is located 200m away from the Karandi-Kabel murram road that connects to Mochongoi, then the transmission line connects angle Point (QQ, Elevation 2010m, 37N 0201424, UTM 0031462) is 100m close to Karandi- Kinamba road.

The transmission line takes off at Point (QQ, Elevation 2010m, 37N 0201424, UTM 0031462) is 100m close to Karandi- Kinamba road. It's the turning point of the line that comes from Lariak settlement scheme. The proposed line transects through point (**NN3**, 37N 211540, UTM 0027203.8703) along the Lariak hills. This is forested area therefore about 34 stems of immature indigenous trees has to be cut to pave way for construction of the proposed line. However it's dominated by shrubs. Main activity in the area is livestock keeping, including goats and sheep.

The proposed transmission line crosses the road that leads to a nearby Aiyam Secondary School at point **NN2** (Elevation 1994m, 37N 0211990, UTM 0033196). The area is characterized with Acacia shrubs and stems of Eucalyptus tree along most compounds in sparsely populated area of Rumuruti District. The Landscape of the area between Karandi and Rumuruti including Lariak Hills and Forest is generally bare and flat communally owned land.

The transmission line connects current Rumuruti 33KV Substation; located at point **NN1** (Elevation 1853m, 37N 0225641, UTM 0028760). The adjacent land next to existing Substation along the Rumuruti-Nyahururu road is still virgin and is dominated by stunted Acacia shrub that covers a stretch of about 3.5km. The proposed 132KV transmission line slightly diverts northward along the existing 33/11kV line that comes from Nyahururu to Rumuruti. No human displacements are expected in this section of the project site.

5.5.6 Rumuruti – Nanyuki Substation:

The proposed 132KV transmission line takes off from Rumuruti town at point **MM** (37N 0221751, UTM 0027215), running generally along the Rumuruti-Nanyuki road, almost parallel to the existing 33KV transmission line, crossing the road at 90 degrees at some points. From Rumuruti Substation, it crosses Ewaso-Narok River, River Pesi and Mutara. The only developments along this line are Mutara Shopping Center and ADC Ranch but this will not be affected by the above project since the line runs for about 25 Kilometers within the government road reserve, behind the developed area, but within the Mutara Agricultural Development Cooperation (ADC) Ranch for livestock, at **MM3** (Elevation 1958m, 37N 0240751, UTM 0008961). The transmission line crosses River Mutara at point **MM1** (Elevation 1949m, 37N 0240058, UTM 008872). After River Mutara, the line is proposed to run along the road reserve, opposite Ol Pajeta Conservancy. The dominant vegetation is mainly *Lantana Camara*, and Acacia thorny shrubs. Free range a cattle grazing is majorly practiced, including Zebu cattle, and goats.

Along the proposed line, 11 households of the Samburu Manyatta settlement located about 100m away from the road to Nanyuki at **CCC** (Elevation 1797m, 37N 0272752, UTM 003629) shall be affected. The village is characterized by temporary houses and structures (see Plate 12 below).



Plate 12: The Samburu Manyatta Tutu village along Nanyuki - Rumuruti Road

Table 10: Cost estimates of assets in the Samburu Manyatta village

ITEM	QUANTITY	COMPENSATION COST (KSH)
Land		90,000.00
Houses & Structures	13	330,000
Trees	5% of Sub-Total	4,500
TOTAL		424,500.00

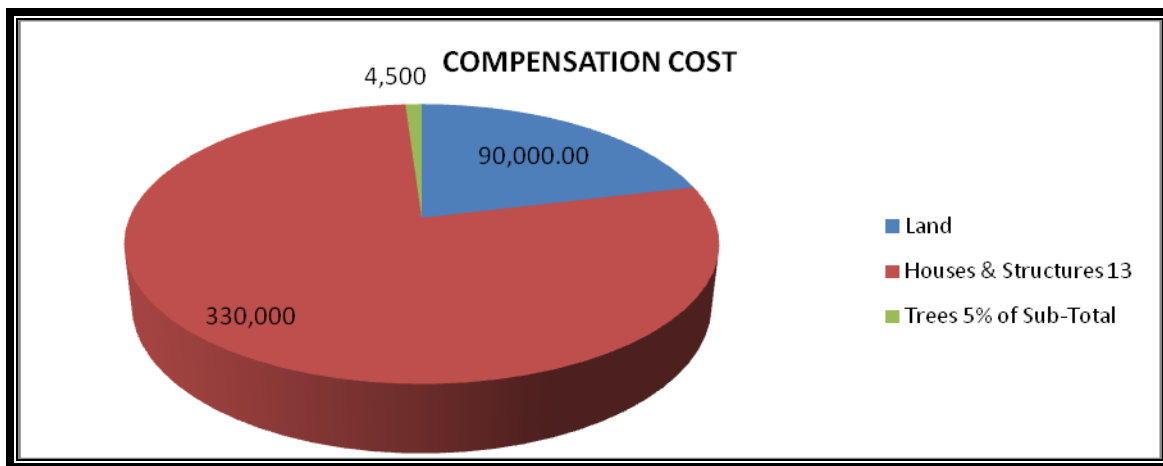


Figure 10: Summarized cost estimates of Samburu Manyatta Village

At angle point BB (37N 0275465, UTM 009358), the proposed 132KV line crosses the road into Nanyuki Ranching Limited on the right side, running for about 7km within the ranch up to angle point AA (37N 028156, UTM 0009033), opposite Dol- Dol Rumuruti and Nanyuki road junction. The line moves through Air force field at point A9a (Elevation

1903m, 37N 0283236, UTM 0003355), where the line crosses the road that leads to Laikipia Airfield main gate, to current Nanyuki Substation. This is 100meters away from Nanyuki Water and Sewerage Company (NAWASCO) sedimentation tanks and meshed wire fence. The proposed transmission line then moves up to point A8a (Elevation 1904m, 37N 0283225, UTM 0002451), near three Manyatta structures and point A7b/a (Elevation 1904m, 37N 0283222, UTM 0002402). It's envisaged that with the approval of Kenya Civil Aviation Authority (KCAA) and DOD the proposed line may go through the Air Force Base field in Nanyuki.



Plate 13: Sites neighbouring DoD Airfield and NAWASCO

The single circuit transmission line then scales down into a remote area and crossing through points A6 (Elevation 1901m, 37N 0283335, UTM 0001589) and a seasonal swamp at point A5 (Elevation 1900m, 37N 0283310, UTM 0001828) in Ruai village, Majengo Sub-location, Laikipia East District. From this point, the proposed line ascends into an area under development by Laikipia Teachers SACCO, at point A4 (Elevation 1915m, 37N 0283300, UTM 0001245). It's assumed that, by the time of construction of this project, about three homes may require resettlement. The line then crosses through a Hay field and Wheat farm as it connects the section corner of the existing 132KV transmission line from Lanet at point A2 (Elevation 1913m, 37N 0283154, UTM 0000444). The main livestock kept in this area are dairy cows and goats.



Plate 14: Hay field near Nanyuki substation and homestead in Ruai Village

Table 11: Cost estimates of assets in Nanyuki Town

ITEM	QUANTITY	COMPENSATION COST
Land		1,800,000.00
Houses & Structures	35	2,658,000
Trees	5% of Sub-Total	90,000
TOTAL		4,548,000.00

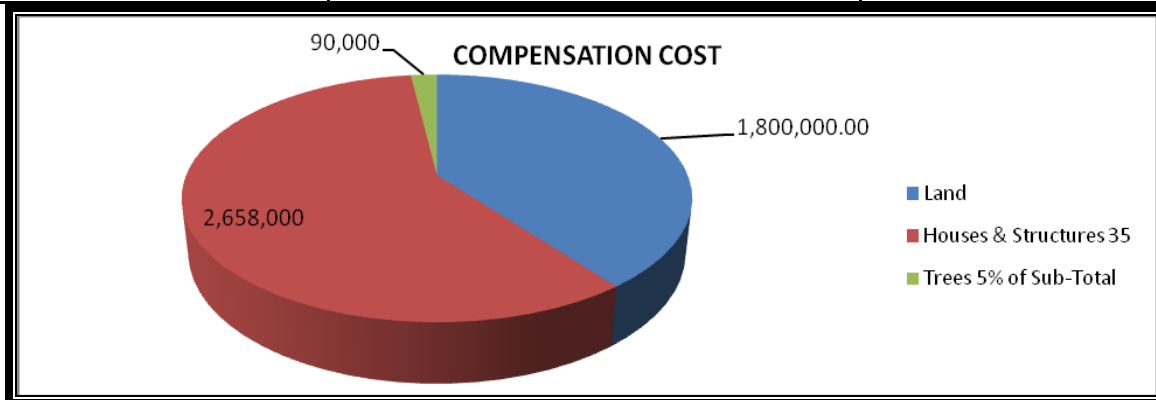


Figure 11: Summarized cost estimates at Nanyuki

The existing 132KV transmission line from Lanet runs to the Nanyuki substation at point A1 (37N 0284888, UTM 9999834), along the 200m wide and 1.4KM long existing Way leave. If this Way leave is utilized, it may require design and construction of a double circuit 132KV line to support the existing line from Lanet and the new proposed transmission line from Lessos.



Plate 15: Existing Nanyuki substation and the encroached way leave of the 132kV Lanet - Nanyuki line

Table 12: Summary of Houses and Structures Affected

AREA	NUMBER	ESTIMATED COST (KSH)
Tulwet Area (Lessos)	39	3,322,500.00
Small Town Centre and Mosop Area	65	5,328,350.00
Kabarnet Town	160	38,067,250.00
From Kabarnet to Kituro Centre	82	22,515,250.00
Marigat Town	37	1,601,000.00
From Mochongoi to Rumuruti Area	43	2,366,750.00
Samburu-Manyatta Village	13	424,500.00
Nanyuki Town	35	4,548,000.00
TOTAL	474	78,173,500.00

Table 13: PAPs in Lessos Uasin-Gishu District

S.N	NAME/ INSTITUTION	PROPERTY	LAND DESCRIPTION	OBSERVATION ON STRUCTURES	COORDINATES	CONTACT
1.	Joseph Matelong	- 1 semi permanent house - Live fence - 1bathroom - 1animal shed	Private land, Kapkoi Village	Wooden wall and iron sheets roof	36N 0764685 UTM 0030846	0724-843907
2.	Jackson Koech	- 1 semi permanent house - Live fence - 1Temporary kitchen - 1 Temporary latrine	Private land, Bindura Village	Residence made of iron sheets and mud wall while temporary house is grass thatched and mud wall	36N 0764563 UTM 0030821	0710-838085
3.	Ajelina Cheruto	- 3 Semi permanent house - 10 Meters Barbed wire	Bosnia Village	Wooden wall and iron sheets roof	36N 0763656 UTM 0030144	0727-651631
4.	Ezekiel Lipwama	- 1 Semi Permanent - 9Meters Barbed wire - 1 temporary Kitchen	Half an Acres private land, Bindura Village	Iron sheets roof and mud wall. Temporary Thatched and mud wall	36N0763726 UTM 0030202	Bindura Village
5.	Joseph Kipkoech	- 1semi permanent house - 5Meters Barbed wire/live fence - 1Temporary kitchen - 1semi permanent	Private land five acres, Bindura Village	Iron sheets roofing mud wall for residence Thatched roof and mud wall	36N0764043 UTM0030392	Bindura Village

S.N	NAME/ INSTITUTION	PROPERTY	LAND DESCRIPTION	OBSERVATION ON STRUCTURES	COORDINATES	CONTACT
		latrine & bathroom - Grainery temporary				
6.	Reuben Cheruyout	- A Wooden grainery - 10 blue gum trees	Kapserton Village	Iron sheets and timber	36N0757807 UTM0026115	0725632 806
7.	Shadrack Chebunyei	- A Temporary House - A Temporary Kitchen - Temporary Grainery	Terige Farm	Thatched house	36N 0757076 UTM 0024476	0720466 241
8.	Zakayo Cheplimo	- 1 semi permanent house	Community land 0.3 acreas, Kapserton Village	Mud wall and iron sheets	N/A	0711588 633
9.	Samuel Bett	- 1 semi permanent house	Private land , Terige Farm	Wood wall and iron sheets	36N 0757399 UTM0025793	0721865 413 0720050 014
10.	Catherine Kisorio	- 3 Latrines and Bathroom permanent - 1 semi permanent house	Kapkawa village	Iron sheets permanent Timber and iron sheets	36N 0757084 UTM 0025493	0716378 405
11.	Catherine Sambu	- 3 Semi permanent house - Barbed wire - 1semi permanent kitchen	Private farm 0.5 acreas Koisagat Village	Mud wall, wooden wall and iron sheets	36N 0756872 UTM 0025352	0725-000 667

S.N	NAME/ INSTITUTION	PROPERTY	LAND DESCRIPTION	OBSERVATION ON STRUCTURES	COORDINATES	CONTACT
12.	Daniel Tarus	- 2 semi permanent house - Live fence	Private farm 18 acreas Kapkoyi village	2 Semi permanent and live fence	36N 0764722 UTM 0030873	0714-296 714

Table 14: PAPs in Mosop Location, Keiyo District

S.N	NAME/ INSTITUTION	PROPERTY	LAND DESCRIPTION	OBSERVATION ON STRUCTURES	COORDINATES	CONTACT
13.	Willy Cheruiyot	- A Semi-permanent Granary	Leasehold (Chebaon village)	Structure is made of timber and iron-sheets	36N 0777090 UTM 0038127	0722241995
14.	Daniel Ngetich	- A Semi permanent Shop	Leasehold (Senetwo Village)	Structure is made of timber and iron-sheets	36N 0777750 UTM 0038450	0724554407
15.	Caroline Kibet	- Semi permanent Residential houses - Live fence - A Semi permanent kitchen	Leasehold (Senetwo Village)	1 Structure is made of mud and roofed with iron-sheets 1 Structure is made of mud and thatched with grass The Kitchen is made of timber and roofed with iron-sheets	36N 0777607 UTM 0038375	0711499036
16.	Shadrack Kiprotich	- A Semi permanent Residential house. - Live fence - A Temporary Latrine/Bathroom	Leasehold (Kerionge, Village, Mosop Location, Kapkenda Sublocation)	Residential house made of wooden wall and iron-sheets roof	36N 0784086 UTM 0042668	0720568665

S.N	NAME/ INSTITUTION	PROPERTY	LAND DESCRIPTION	OBSERVATION ON STRUCTURES	COORDINATES	CONTACT
17.	Allan Kipkemboi	- A Temporary Residential House - Bamboo fence	Communal land (Kapkaras Village)	House made of Timber Dry bamboo fence	36N 0786140 UTM 0044587	0723874394
18.	Joseph Marindany	- A Temporary Residential houses - A Temporary timber house	Communal land (Kapkaone Village)	Old grass thatched house made of mud and poles	36N 0776600 UTM 0037856	0728218796 0726468169
19.	Zipporah Chepketer	- Semi permanent Residential houses - 30Meters Barbed wire fence - Semi permanent kitchens - A Semi permanent Latrines	Communal land (kaongura village)	Residential house and the Kitchen are made of mud wall and iron sheets. Latrine is made of timber iron sheets	36N 0773601 UTM 0036270	0717778448 0770442351
20.	Hillary Chemweno	- A Semi permanent Shop	Leasehold land (Small Town)	Shop is made of Timber wall and iron sheets roof	N/A	0721217137
21.	Kennedy Cheruiyot	- A Semi permanent Residential House. - Live/ Barbed wire	Leasehold land (Small Town)	Residential house is made of mud wall and iron sheets. Cyprus live fence Chicken shed is	36N 0782988 UTM 0041859	0727489818

S.N	NAME/ INSTITUTION	PROPERTY	LAND DESCRIPTION	OBSERVATION ON STRUCTURES	COORDINATES	CONTACT
		fence. - A Semi permanent Granary. - A Chicken Shed		made of iron sheets and Timber		
22.	Joel Kamworor	- 10 Semi permanent Rental rooms. - Semi permanent (2bathrooms, 2toilets) - 5 Shops.	Leasehold Land (Small town)	Residential house the shop and the wash rooms are made of Timber wall and iron sheets roof	36N 0782953 UTM 0041768	0722464433
23.	Wilson Kiptoo	- Semi permanent (2bedrooms) Residential houses. - Live fence - A Semi permanent Kitchen - A Semi permanent Latrine	Leasehold Land (Keronge Village, Marehor Location, Cherota Sublocation)	Residential houses and the wash rooms are made of Timber wall and iron sheets roof. Fence is of cyprus	36N 0784119 UTM 0042675	0720282148
24.	Kimoi Kiptoo	- A Temporary house	Communal land (Keronge Village, Marehor Location, Cherota Sublocation)	House is made of Mud wall and is grass thatched	36N 078 4070 UTM 0042651	0722795628

S.N	NAME/ INSTITUTION	PROPERTY	LAND DESCRIPTION	OBSERVATION ON STRUCTURES	COORDINATES	CONTACT
25.	Tukei Moya	- A Semi permanent Residential house. - A Temporary Kitchen. - Barbed wire fence	Communal land (Bindura Village)	Residential house made of mud and iron sheets. Kitchen is made of mud and grass	36N 0763727 UTM 0030186	6597712
26.	Julius Rono	- A semi permanent residential house. - A kitchen - A Latrine - A Granary - A chicken shed - Barbed wire fence	Communal land (Bindura Village)	House, Kitchen, and chicken shed made of mud and iron sheets.	36N 0764052 UTM 0030371	0719650384 0712512198
27.	William Kemboi	- Semi permanent residential houses - A temporary kitchen - A Granary	Communal Land (Keronge Village)	House is made of mud wall and roof made of iron sheets. Kitchen is made of mud and grass thatched Granary made of timber and iron sheet	36N 0784035 UTM 0042653	0726923375 0725497970
28.	William Powen	- 12 Meters Temporary bamboo fence	Leasehold land (Stage one)	Latrine is made of bamboo and of live Cyprus fence.	36N 785789 UTM 0044127	0725509511 0725483453

S.N	NAME/ INSTITUTION	PROPERTY	LAND DESCRIPTION	OBSERVATION ON STRUCTURES	COORDINATES	CONTACT
		- A Semi permanent Latrine. - A semi permanent Granary - A Temporary animal shed		Granary is made of iron sheets and timber. Animal shed is made of timber		

Table 15: PAPs in Kabarnet Location, Baringo District

	NAME/ INSTITUTION	PROPERTY	LAND DECSRIPTION	OBSERVATION ON STRUCTURES	COORDINATES	CONTACT
29.	Simon Chesire	- 5 Permanent Houses	Kaprogonya	Rental Houses	36N 0807523 UTM 0053180	0722427850 0722588541
30.	Joseph Kipkorir	- 1 semi-permanent toilet - Paddock fence	Kasooyo 3 Acres Parcel no. 1031		36N 0807454 UTM 0053086	
31.	Alexander Tomno	- 2 permanent house - 16Meters Barbed wire fence - Permanent Granary - Permanent water tank	Kasooyo	1 rental house	36N 0807054 UTM 0053005	0718304191
32.	Wesley Kiptibai	- 1 permanent house - Live fence - Semi-permanent toilet/bathroom	Kapsesat	House still under construction	36N 0805631 UTM 0053003	0724759703
33.	Musa Cheboi	- 1 Permanent house - Barbed wire fence	Kaprogonya	House in good condition	Point KL4	
34.	Charles Koimet	- 18Meters Semi-	Kasooyo	Land in way leave	36N 0807420	0722863042

		<ul style="list-style-type: none"> - permanent fence - 3 permanent toilets - A semi-permanent animal shed 	50x100m		UTM 0053073	
35.	Thomas Kurui	<ul style="list-style-type: none"> - 2 Semi-permanent houses - 9Meters Barbed wire fence - Semi-permanent toilet - Semi-permanent kitchen - Semi-permanent Animal shed 	Kaprogonya	Land on way leave Napier, guava, pawpaw, avocado, mangoes grown	36N 0804502 UTM 0053460	0723924965
36.	Zachariah Kurui	<ul style="list-style-type: none"> - A semi-permanent house - Barbed wire fence - A semi-permanent kitchen - A semi-permanent 	<p>Kaprogonya</p> <p>2 Acres</p> <p>L.R no.1480</p>	Land on way leave with Maize, bananas, Vegetables	36N 0806375 UTM 0053065	0723843786

		latrine				
37.	John Rotich	- Barbed wire fence - Semi permanent kitchen	Kasooyo Parcel no. 1032	5 Acres 3 Avocado trees	36N 0806256 UTM 0053059	0723219986
38.	William Kisera	- A semi-permanent house	Mumol, Parcel No. 55, 0.5 Ha	2 tall trees within the way leave. Other land bare	36N 0806164 UTM 0053020	0722740202 0720891332
39.	Moses Kibet	- A semi-permanent house	Mumol	Land surrounded by 5 tall trees	36N 0806134 UTM 0053023	0722740202
40.	Job Kiplagat	- A Permanent house	Mumol		36N 0806299 UTM 0053033	0720917684
41.	Mary Chesaina	- A semi-permanent house	Mumol		36N 0806283 UTM 0053034	0711696730
42.	Maurice Komen	- A semi-permanent house - 5Meters Barbed wire fence - Semi-permanent kitchen - Semi-permanent toilet - A semi-	Kapsortor 50x100m	Bananas, Maize and cassava grown on way leave The plot is too small for expansion	36N 0810805 UTM 0052882	0722216396 0722444216

		permanent shop				
43.	Chergon Kapsir	- A semi-permanent house (20x12) - Barbed wire fence - Semi-permanent kitchen	Kapchesir	Maize, Napier on land	36N 0809660 UTM 0053049	0712821621
44.	Mary Talam	- A permanent house - Barbed wire fence - Permanent granary - Semi-permanent kitchen	Kapchesir	Napier grass farm, cassava. Lemon, bananas, avocado, oranges	Point GF8	0713453917 0722873140
45.	Esther Kipmochoi	- A semi-permanent house - Barbed wire fence - Semi-permanent kitchen	Mumol 695 2 Acres		36N 0806228 UTM 0053030	0728514804

46.	Salina Ruto	- A Permanent house - 7Meters Barbed wire fence - Permanent kitchen - permanent bathroom semi-permanent chicken shed	Kaprogonya 50x100m		36N 08055608 UTM 0053081	0722142725 0722142725
47.	Joshua Seroney	- 2 permanent houses - 30Meters Permanent fence - 1 permanent toilet	Kapsesat 0.1 Ha	2m away from line	36N 0805556 UTM 0053020	0720270778
48.	Joshua Tuitoek	- 8 rooms Semi-permanent	Kaprogonya	Rental rooms	36N 0802053 UTM 0053028	0720270778
49.	William Chepyegon	- 2 semi-permanent rooms	Kaprogonya		36N 0805625 UTM 0053018	
50.	Francis Cheptoo	- 1 semi-permanent house - 12Meters Barbed wire	Kaprogonya Parcel no. 253 1 Acre	Fruit trees, Maize, beans	36N 0804721 UTM 0053340	0721675641

		<ul style="list-style-type: none"> - fence - Semi-permanent kitchen - Semi-permanent toilet - Temporary granary 				
51.	Simon Serem	<ul style="list-style-type: none"> - 1 permanent house - permanent fence - Semi-permanent kitchen - Semi-permanent toilet - 1 well 	<p>Kapsesat</p> <p>2 Acres</p> <p>L.R no. 770</p>	New houses	36N 00805504 UTM. 0020570	0728403000
52.	Christopher Kipsetim	<ul style="list-style-type: none"> - 1 Permanent house 	<p>Mumol</p> <p>50x10m, No. 1665</p>	Under Construction (4 rooms)	36N 806333 UTM 053031	0722998317
53.	Robert Chelagat	<ul style="list-style-type: none"> - 3 semi permanent 	Kaprogonya	Rental houses	36N 806358 UTM 053069	0720599461 0

		houses - 2 semi-permanent toilets				
54.	Reuben Keitany	- 3 permanent houses - 2 permanent water tanks	Kaprogonya	Rental houses	36N 0805452 UTM 0053069	0727926702
55.	Zachariah Keitany	- 1 permanent house	Kaprogonya		36N 0805452 UTM 0053009	0725920774
56.	Christina Kibet	- 2 semi-permanent rooms - 2 semi-permanent toilets	Kaprogonya		36N 0805578 UTM 0053034	0723991736
57.	Gideon Kurgat	- 9 semi-permanent rooms	Kaprogonya		36N 0805465 UTM 0053092	0720850061
58.	Philemon Kipngwen	- 1 permanent house - 2 temporary animal sheds	Kaprogonya		36N 0805087 UTM 0053256	
59.	Luka Chergon	- 1 permanent house	Kaprogonya	3 bedrooms	36N 0805020 UTM 0053278	0720756218
60.	Isaac Kurui	- 1 permanent	Kaprogonya		36N 0805020	0722824306

		house			UTM 0053266	
61.	Mark Kipyegon	- Farm	Kaprogonya	Farm crops	36N 0805763 UTM 0053056	
62.	Mumol Primary School	- 3 permanent classrooms - Barbed wire fence	Mumol	Peter Jemtich - Headmaster	36N 0805919 UTM 0053051	0720370196
63.	Philip Kiplagat	- 1 permanent house - Permanent kitchen - Permanent toilet	Kaprogonya 2 plots	-	36N 0805485 UTM 0053325	0724683442
64.	David Kangogo	- 2 permanent rooms - 1 semi-permanent toilet - 5 permanent shops	Kaprogonya		36N 0806019 UTM 0053128	0711333517
65.	Samuel Cheptoo	- 8 units semi-permanent	Kapsesat	Timber	36N 8052280 UTM 0053151	0721614812
66.	Peter Songol	- 1 permanent house	Kapsesat	Timer/ Iron sheets	36N 8052279 UTM 0053153	
67.	John Sogoti	- 1 permanent house - 1 semi permanent	Kapsesat	-	36N 8052277 UTM 0053156	

68.	Julius Kiplagat	- 4 timber houses	Kapsesat		36N 8052277 UTM 0053162	0721616255
69.	Joshua Kipkorir	- 4 permanent rooms	Kapsesat	-	36N 8052275 UTM 0053168	
70.	Patrick Borr	- 1 semi-permanent house	Kapsesat	-	36N 805147 UTM 0053183	
71.	John Kamau	- 1 semi-permanent house	Kapsesat	-		0722327179
72.	Benson Kemboi	- 1 permanent house	Kapsesat	-	36N 805086 UTM 0053221	
73.	Julius Chelego	- 8 semi-permanent units	Kapsesat	-	36N 805061 UTM 0053228	
74.	Miriam Ngetich	- 1 permanent house	Kapsesat	-	36N 805024 UTM 0053280	
75.	David Chepsergon	- 3 semi-permanent houses - 1 latrine	Kapsesat Plot 402 Plot 221	Rentals	36N 804850 UTM 0053284	0724300739
76.	Erick Cheptoo	-	Kapsesat	-	36N 803620 UTM 0053201	Kapsesat
77.	Mary Nyakamet	- 1 permanent house	Kapsesat	-	36N 803590 UTM 0053168	Kapsesat

Table 16: PAPs in Kituro Location, Baringo District

S.N	NAME/INSTITUTIONS	PROPERTY	LAND DESCRIPTION	OBSERVATION ON STRUCTURES	COORDINATES	CONTACT
78.	Kituro Health Centre	- 5 Permanent Blocks (2 blocks still under construction)	Community	Located at Kituro Centre, along Kabarnet Road	36N 0810473 UTM 0052911	0722227284
79.	William Sirme Kogo	- 3 Semi-permanent structures (timber and Iron Sheets)	Community (Leasehold)	Business premises located at Kituro Centre	36N 0810544 UTM 0052913	-
80.	Philip Kipkemei	- Residential rooms (semi-permanent) - Kitchen - Eater tank - semi permanent Shops - 1 permanent shop	Allocated by community (Plot no. 15)	Business premises located at Kituro Centre	36N 0810520 UTM 0052913	0721443924
81.	Philip Chepkongor	- Coffee (200 trees)	2.5 Acres Private	11 household members affected	N/A	0727001520

S.N	NAME/INSTITUTIONS	PROPERTY	LAND DESCRIPTION	OBSERVATION ON STRUCTURES	COORDINATES	CONTACT
		- 1 Semi permanent house - 1 semi-permanent Toilet - 1 temporary grass house - Wire Fence - Fruit trees				
82.	David Lootis	- 1 semi-permanent house - Banana, Coffee, Pawpaw, Sugar cane, Oranges, Maize, plantation - Trees	3 Acres L.R no. 256 (Private)	10 household members residing	36N 0810577 UTM 0052989	0724082867
83.	Johana Chepkong'a	- 1 permanent house (6 rooms)	0.4 Acres LR. No. 545	9 household members	36N 0810598 UTM 0052995	0712476524

S.N	NAME/INSTITUTIONS	PROPERTY	LAND DESCRIPTION	OBSERVATION ON STRUCTURES	COORDINATES	CONTACT
		- 1 permanent toilet - Bananas - Wire fence - Maize and beans				
84.	Ruto Tuitoek	- 1 semi-permanent house (timber) - 1 temporary kitchen - Temporary fence - Temporary chicken shed - 10 trees	0.5 Acre	3 household members	36N 0810912 UTM 0052861	-
85.	Stephen Chemitei	- 1 semi-permanent house (iron sheets) - 1 permanent shop - 1 permanent	50x100m	11 household members	36N 0810971 UTM 0052872	0726132644

S.N	NAME/INSTITUTIONS	PROPERTY	LAND DESCRIPTION	OBSERVATION ON STRUCTURES	COORDINATES	CONTACT
		store - 1 metallic water tank - 1 temporary chicken shed				
86.	Edwin Tomno	- 1 permanent house - 1 barbed wire and cypress fence - 1 water tank - 20 trees	2 Acres	7 household members	36N 0810476 UTM 0052919	0722108167
87.	Julius Toroitich	- 1 temporary house (timber) - 1 temporary toilet - Temporary granary	0.4 Ha	9 household members	36N 0810480 UTM 0052924	0721737058 0728587671
88.	Peter Chesaina	- 1 semi permanent house - 1 temporary	7 acres	-	36N 081152 UTM 0052844	0720282148

S.N	NAME/INSTITUTIONS	PROPERTY	LAND DESCRIPTION	OBSERVATION ON STRUCTURES	COORDINATES	CONTACT
		<ul style="list-style-type: none"> - fence - 1 semi-permanent kitchen - 1 temporary toilet/ bathroom 				
89.	Paul Bosmett Yator	<ul style="list-style-type: none"> - 1 semi-permanent house 	0.5 acres, plot no. 510	Other structures in the plot not affected	36N 0810722 UTM 0052883	0717154348 0712716771
90.	Kimoi Cheptoo Samwel Kiptoo	<ul style="list-style-type: none"> - 1 semi-permanent house - Barbed wire fence - I poultry shed - I grave 	L.R no. 1286, 1.38acres	Lemon and Oranges farm,	36N 0819841 UTM 0052956	6597712
91.	Shadrach Rotich	<ul style="list-style-type: none"> - 1 semi-permanent house 	Parcel no.366, 4.16 Ha.	4 people affected, Napier grass and indigenous grass.	36N 0819837 UTM 0052935	0728004695
92.	Edwin Cheptarus	<ul style="list-style-type: none"> - 1 semi-permanent house - Barbed wire 	8 (50x100) plots L.R No. 1613 & 274/5	13 fruit trees, 20 cypress trees	36N 0810865 UTM 0052802	0726923375 0725497970

S.N	NAME/INSTITUTIONS	PROPERTY	LAND DESCRIPTION	OBSERVATION ON STRUCTURES	COORDINATES	CONTACT
		fence - 1 semi-permanent kitchen - 1 semi-permanent latrine				
93.	Samuel Kapilmeth Kiptoo	- 1 permanent house - Barbed wire fence - 1 temporary kitchen - 1 semi-permanent toilet - 1 semi-permanent granary - 1 temporary animal shed	1.28 Ha	Mango and Lemon trees on way leave	36N 0812827 UTM 0052811	0725509511 0725483453
94.	Isaiah Chebet	- 1 semi permanent house	-	-	36N 0812646 UTM 0052809	0725235377

S.N	NAME/INSTITUTIONS	PROPERTY	LAND DESCRIPTION	OBSERVATION ON STRUCTURES	COORDINATES	CONTACT
		- Temporary fence				
95.	David Kangogo	- 1 permanent house - 1 semi permanent kitchen - permanent toilets - Barbed wire fence 1 store 1 slaughter house	Plot no. 1430, 0.09Ha	20 banana plantations, trees, Napier grass, Sweet potatoes	36N 0812896 UTM 0052823	0729457362
96.	Stephen Kipsoi	- 1 semi-permanent house - temporary toilets - Barbed wire fence	3 Acres	10 trees	36N 0812726 UTM 0052819	0710226129
97.	Zaphania Chepsergon	- 1 semi-permanent house, toilet,	0.5 Ha L.R no. 1423	100 trees	36N 0812856 UTM 0052925	0725862662

S.N	NAME/INSTITUTIONS	PROPERTY	LAND DESCRIPTION	OBSERVATION ON STRUCTURES	COORDINATES	CONTACT
		Kitchen				
98.	John Komen	- 1 permanent house - Semi-permanent latrine, kitchen	0.1 Ha	Trees	36N 0812886 UTM 0052960	0720874985
99.	Tomno Chelimo	- 1 semi-permanent house, kitchen, latrine - Live fence	L.R. no. 276	40 trees	36N 08128921 UTM 0052993	0723609712
100.	Mark Komen	- 1 permanent house	0.1Ha	Trees 6 people affected	36N 08128987 UTM 0052982	
101.	Solomon Komen	- 1 permanent house - Latrine, kitchen, fence	0.1 Ha	11 people affected	36N 08128987 UTM 0052982	0724602293

Table 17: PAPs in Naserian, Rabai and Kivumbini Villages in Marigat District

S.N	NAME/INSTITUTION	PROPERTY	LAND DECSRIPTION	OBSERVATION ON STRUCTURES	COORDINATES	CONTACT
102	Jackson Lekesio	- 1 semi-permanent temporary residence(iron sheets and mud walls - 1 temporary thorn branch fence	Community Land	Located at Naserian village near Marigat	37N 0168448 UTM 051340	-
103	Wilson Kaburgei Chesang	- 1 semi-permanent 3 bedroom house of iron sheet roof and stone walls	Community land			
104	Sote Kimunge	- 1 semi-permanent iron sheet roof and timber walls - 1 temporary iron sheet shed and tree branches	Private	Rabai Village near Marigat	36N 0832038 UTM 0050627	0723 003747
105	Johnson Tiana	- 1 semi permanent iron sheet house - live fence with Prosopis - I temporary thatch roof with mud wall	Private 1/4 acre land	Lamargwen village near Marigat	37 N 0168744 UTM 0050457	0729416386

		<ul style="list-style-type: none"> - 1 semi-permenet iron sheet pit latrine - 1 semi-pperment iron sheet chicken house 				
106	Leita Lemanoi	<ul style="list-style-type: none"> - 2 temporary stick and grass houses - A cactus fence - A Poles and grass kitchen - A Poles stick and grass latrine - 1 Poles and grass granary - 1 Poles animal shed - 1 Iron sheet made chicken pen 	Private land	Sokotei Village near Marigat	37 N 0168445 UTM 0047205	0711341076
107	Valentin Chepsigon	1 Semi-permanent iron sheet roof and timber residence	Community land	Kivumbini village near Marigat	36N 0831455 UTM 0051105	N/A
108	James Kiptoo	1 semi-permanent iron sheet roof and residence timber	Community land	Kivumbini village near Marigat	36N0831452 UTM 0051094	0721932011
109	Peninah Seusi	1 temporary iron sheet roof and stick	Community land	Kivumbini village near Marigat	36N0831428 UTM 0051108	0723325406

		animal shed				
110	Josephine Chelanga	1 temporary mud wall and iron sheet roofed residence	Community land	Kivumbini village near Marigat		
111	Samuel Chepyegon	- 1 permanent iron sheet roofed, block walled and timber residence - 15 Meters of barbed wire/kei-apple tree fence - An iron sheet made bathroom and Latrine - An animal shed made of iron sheets - A temporary servant quarters	Community land	Kivumbini village near Marigat	36N 0831434 UTM 0051097	0725847103
112	David Kanini	- A semi permanent house - 14 meters wooden fence - An iron sheet walled Pit latrine	Community land	Kivumbini village near Marigat	36N 0831493 UTM 0051092	0723454709
113	Julius Kibet	1 temporary iron sheet house	Community land	Rabai Village near Marigat	36N0832366 UTM 0050354	0714003366

114	Sote Marano	1 residential house made of iron sheet	Community land(50*30M)	Kivumbini village near Marigat	36N0831541 UTM 0051047	
115	Peter Kachuma	- Semi-permanent iron sheet houses - A barbed wire fence - An Pit latrine made of Iron sheet - A iron sheet chicken peen - A live fence cow pen - 1 iron sheet granary	Private	Naserian Village, near Marigat	37N0168495 UTM 0051230	0714532828

Table 18: PAPs in Karandi and Mochongoi Division, Marigat District

S.N	NAME/ INSTITUTIONS	PROPERTY	LAND DESCRIPTION	OBSERVATION ON STRUCTURES	COORDINATES	CONTACTS
116	Mr. Kamau Njirigo	<ul style="list-style-type: none"> - semi-permanent houses - 8Meters temporary wooden fence - A Semi-permanent Kitchen - A Semi-permanent Pit Latrine - A semi-permanent Chicken cage - 2 Animal shed 	3 acres of private land in Karandi area, Nyahururu	<ul style="list-style-type: none"> - Iron sheet roof - Mud walls reinforced with timber. A family of Six persons. - Wire meshed cage 		0727-888641
117	Antony Kosgey	<ul style="list-style-type: none"> - semi permanent house - A Temporary kitchen 	Settlement Thigio Village	<ul style="list-style-type: none"> - Wooden wall and iron roofs - Grass roof and mud wall 	37N 0196268 UTM 0036041	0725-337169
118	Isaac Kahiga	<ul style="list-style-type: none"> - 2semi permanent - A house fence - A kitchen - bathroom/Latrine - An animal shed - Residence incomplete 	Thigio village private land	Wood, iron sheets	37N 0195990 UTM0036403	725-353 9
119	Joseph Mwangi	Semi permanent	Ichuga Village	Wood, iron sheets	37N 0284103	-

		- Asemi permanent - A kitchen - 2 rooms Pit Latrine		and barbed wire	UTM 10000	
120	John Mwangi	- A permanent - Barbed wire - A kitchen semi permanent - Latrine permanent(toilet and Bathroom) - A temporary - A temporary goat/chicken	Thigio village Private Land Quarter an acre	Bricks and iron sheets	37N 0196065 UTM 0036314	-
121	Stephen Mureithi	- A Four permanent residence - House fence - Kitchen temporary - A latrine temporary • A paddock fence - A Grainery semi-permanent	Rereshwa Village Private land 4 acreas	Wooden and iron sheets	37N 0197408 UTM 00035155	
122	David Matai	- A Semi Permanent - ATemporary latrine/bathroom	Thigio Village	Iron sheets, wooden windows, mud wall	37N 0196350 UTM 0036032	0726-795 499

Table 119: PAPs in Samburu Manyata Village

S.N	NAME/ INSTITUTIONS	PROPERTY	LAND DESCRIPTION	OBSERVATION ON STRUCTURES	COORDINATES	CONTACTS
123	Julius Lengerded	- 1 semi permanent (Kiosk and Hotel) - Temporary fence - Latrine temporary	Trust land	Iron sheets and iron sheets	37N 0273683 UTM 0008789	-
124	Kalaya S.	- Temporary residence - House fence - Latrine - Temporary animal shed	Trust land	Iron sheets, mud wall Fence branches and polls	37N0273699 UTM 0008763	-
125	Parkusa Mildo	1 semi permanent	Trust land	Timber and iron sheets		0727-048993

Table 20: PAPs in Sewage, Ruai and Ichuga Villages in Nanyuki

S.N	NAME/INSTITUTIONS	PROPERTY	LAND	DESCRIPTION/ OBSERVATION	COORDINATES	CONTACTS
126	Mr.Mugambi Kamau	- A temporary house - A 15Meter Berbed wire fence - A semi-permanent Pit Latrine and bathroom	Leased land in Ruai Village , Nanyuki	Iron sheet roof with wooden walls	37N 0283393, UTM 0001032	P.O.Box 32 Nanyuki
127	Mr. Ann Muthoni	- A semi-permanent house	Gichuga Village , Nanyuki	Iron sheet roof with timber made walls. A family of Four persons.	37N 0284888, UTM 9999834	P.O.Box 136 Nanyuki
128	Mr. Alexander Vithian	- 25 Mature Blue gum tree	Oshinyati Village, Nanyuki	<u>Eucalyptus grandis</u>	37N 0283849, UTM 0004274	0733678111
129	Mr. John Kabuonyoya	- A Four bedrooms semi permanent house - 18 Meters of Berbed wire fence - A semi permanent Pit latrine and bathroom - A wooden Animal shed - A Dog cage	Parcel Number 542, in Ruai village, Nanyuki.	Iron sheet roof with timber made walls. Old berbed wire fence. A family of Five persons.	37N 0283463, UTM 0001234	0720-466127

130	Mr. Frank Mang'anga	<ul style="list-style-type: none"> - A Four bedrooms semi permanent house - 30 Meters of iron sheet fence - A semi permanent Kitchen - A wooden Animal shed - 4600 Liters Plastic tank with pipes 	½ Acres Private land in Ishuga village, Nanyuki	Iron sheet roof with mixed blocks and wooden walls. A family of Four persons.	37N 0283754, UTM 0000444	0721-151537
131	Mr. James M. Mwai	<ul style="list-style-type: none"> - Permanent houses - 15 Meters Live fence Kay Apples - A Semi-permanent Animal shed - A Semi permanent, Poultry house 	Ishuga Village in Nanyuki. Parcel Number 4.	Iron sheet roof with stone walls. A family of Four persons.	37N 0283786, UTM 0000193	0723-532108, P.O.Box 1520 ,Nanyuki
132	Mr. Njukuya Lenareyo	<ul style="list-style-type: none"> - Semi-permanent houses - 25Meters berbed wire fence - Semi-permanent Animal shed - Semi permanent, Pit 	Sewage Village, Nanyuki	Iron sheet roof with mud walls.	37N 0283225, UTM 0002451	0713-476 442

		Latrine				
133	Mr. John Wachira	<ul style="list-style-type: none"> - 2 bedrooms Permanent house with servant quarter, Kitchen and Toilet room - 10 Meters berbed wire fence - A Semi-permanent Animal shed 	¼ an Acre land in Ishuga Village, Nanyuki	Iron sheet roof with walls made of Blocks. Wooden animal shed. A family of Four persons.	37N 0284317, UTM 000025	0271-406259
134	Mr. James Wamae	<ul style="list-style-type: none"> - A semi permanent house - 12 Meters of berbed wire fence - A semi permanent Kitchen - A semi-permanent servant quater - A semi-permanent Pit latrine - A wooden Animal shed 	1.5 Acre of private land in Ishuga Village, Nanyuki.	Iron sheet roof with mixed blocks and wooden walls. A family of Six persons.	37N 0282473, UTM 000014	0722-309399

6 COMMUNITY PARTICIPATION AND GRIEVANCE PROCEDURES

World Bank/ IFC performance standards stipulates that any displaced persons and their communities and any host communities receiving them should be provided with timely and relevant information, consulted on resettlement options and offered opportunities to participate in planning, implementing and monitoring resettlement.

World Bank/ IFC requirements for Public Consultation are being used as the primary point of reference. The requirements with respect to public consultation and disclosure in environmental assessment for projects are set out in Performance Standard 1: Social and Environmental Assessment and Management Systems. Section 19 defines Community Engagement as *“on-going process involving the client’s disclosure of information. When local communities may be affected by risks or adverse impacts from a project, the engagement process will include consultation with them. The purpose of community engagement is to build and maintain over time a constructive relationship with these communities. Community engagement will be free of external manipulation, interference, or coercion, and intimidation, and conducted on the basis of timely, relevant, understandable and accessible information.”*

During the fieldwork a number of community meetings were conducted within the footprint of the project with households that are likely to be affected by the project and with local administration, community leaders and elders. House – to house interviews/ consultations of PAPs were also conducted.

6.1 Stakeholders

During the public consultations multiple groups of stakeholders were consulted. The stakeholders were those who have an interest in the project development, and who will be involved in the further consultative process. The main groups of stakeholders are:

6.1.1 Directly Affected People

Directly affected people are those who reside in or derive their living from the proposed wayleave of the 132 KV transmission line. These people will lose their property to KPLC through compensation of land assets, physical assets, trees and crops. In this project there are approximately 134 household owners that will be directly affected by the project.

All the directly affected people were informed and consulted on major issues concerning relocation, livelihood rehabilitation and income restoration. They all participated in the socio economic survey.

6.1.2 Indirectly Affected Persons

This group of stakeholders includes all those who reside in areas neighbouring the project area or are reliant on resources in the project area and will have no change or the project may not adjust their livelihood e.g. groups such as those residing far from the project area but have farms near the proposed project area. The study identified communities around Nanyuki, Ol Pajeta, Two two village, Mutara ranch, Ngarenyiro market, Kinamba in Nyahururu, Ol Arabel forest, Kivumbini Village in Marigat, Kipkaech centre, Health centre in Kituro market, small town in Keiyo and Tulwet in Lessos.

6.1.3 Government Agencies and Other Organizations

These include:

- Office of the president
- Provincial Administration (Provincial Commissioners, District Commissioners, District Officers, Area Chiefs and Assistant Chiefs)
- National Environment Management Authority (NEMA), - Uasin Gishu, Keiyo, Baringo, and Laikipia Districts
- Ministry of Lands
- Ministry of Roads
- Ministry of Agriculture
- County Councils
- Ministry of Labour, department of Occupational Health and Safety
- Air force Base, Nanyuki (DoD)
- Sweet Waters Tented Camp, Ol-pejeta Ranch
- Ol-Pejeta Conservancy management
- Ngarenyiro Police Station in Laikipia West District
- Ngarenyiro Market shop owners
- Checkpoint Market – Rumuruti
- Matigali Village – River Pesi in Rumuruti District
- Ol- Arabel Forest Station Kenya Forestry Service (KFS)

6.2 Resettlement Preparation and Planning

Compensation to PAPs shall be made before resettlement process commences. This will be done at either the KPLC offices or at the local Chief's/ District Officer's office, upon approval. After compensation, a minimum of three month notice shall be given to the affected people before the resettlement exercise commences, so as to allow relocation and salvage of necessary assets by PAPs. KPLC may compensate for the assets without the PAPs necessarily relocating.

The objectives of these consultations were aimed to secure the participation of all people affected by proposed transmission line during the resettlement planning and implementation, particularly in the following areas:

- alternative project design;
- assessment of project impacts;
- resettlement strategy;
- compensation rates and eligibility for entitlements;
- choice of resettlement site and timing of relocation;
- Assessment of development opportunities and initiatives; procedures for redressing grievances and resolving disputes; and
- mechanisms for monitoring and evaluation and for implementing corrective actions.

6.2.1 Methods and Approach

The consultation team consisted of Valuers, Surveyors, Environment & Social Impact Assessment Specialist and a Socio-Economist. In all cases, the team was accompanied by a local representative and local administration. The local representatives were instrumental in the selection of venues and timing for the meetings.

In order to have adequate participation of the communities, notices were given to respective communities through the local area Chiefs and Elders. These leaders assisted in mobilization of the community to attend public consultative meetings. In addition, pictorial aids showing the locations of the different project area were prepared and used during information gathering and dissemination.

6.2.2 Socio-economic Survey

During the consultation process, a socio-economic survey was conducted by the team of consultants throughout the project area. Interviews were held with individual PAPs in order to establish a socio economic status baseline for the PAPs that could facilitate future monitoring after resettlement. The survey also included questions about opinions/suggestions on livelihood restoration, sites for relocation and type of compensation. Information was gathered by use of structured questionnaires which was administered by the team of consultants.

6.2.3 Community Meetings

Community meetings were held within the project area to give information about the project and gather people's perceptions, opinions, suggestions and fears about the project. The community meetings acted as a forum for discussions between the RAP team and the

community members. The information gathered was used as input into the Resettlement Action Plan

Interviews with the stakeholders were carried out from 24th to 27th November 2009 through administering well-structured questionnaires. Comprehensive public participation meetings were held on 17th and 18th December 2009 in the presence of administrative leaders, community leaders and the residents who are likely to be affected by the project along the wayleaves trace.

6.2.3.1 Issues Raised:

The following is a summary of the views of the stakeholders interviewed:

- The project may lead to displacement of the residents.
- Resettlement of residents may interfere enormously with their livelihoods since they will have to move businesses, schools, Health centre at Kituro and Kabarnet area.
- There was expressed fear at Air Force Base in Nanyuki is a protected area and the project may interfere with operations of the aircrafts. Though the distance of the proposed line to the airstrip is over 500 meter.
- There would be increased pollution from transport vehicles during construction.
- There would be electromagnetic radiations and risk of electrocution that may affect those residing near the way leave.
- There would be possibility of insecurity in some areas due to the influx of other people during construction phase.
- The project will lead to cutting down of trees which are very important in some areas that are very arid, for example Ol Arabel forest, Nginyo forest
- There would be loss of land and property since residents may be required to relocate e.g. at Kituro, Kipkaech, Small town and Kabarnet.

6.3 Implementation and Monitoring

KPLC personnel will continue to conduct a series of meetings and hearings with the Project affected people, informing them of the results of any survey conducted and the plans for the area. In these meetings there will also be negotiations to determine when the actual resettlement will take place.

The RAP will be implemented by KPLC. A KPLC Resettlement Unit for the project has been constituted and is charged with the responsibility of monitoring and supervision of RAP implementation.

6.4 Dissemination of RAP Information

The resettlement process or compensating PAPs will require communication or dialogue with the stakeholders, until implementation of the RAP is over. Extensive consultation with the potentially affected persons is continuing through ongoing meetings with project affected people. The Issues that would be discussed include:

- Environmental and Social Impacts of the project
- Mechanisms through which asset valuation will take place.
- Mode of compensation
- Extent of compensation i.e. who are entitled for compensation and why.
- Where the PAPs will collect their compensation
- The proposed date when the project will begin
- Cut – off date

In addition to these issues for disseminating to the affected individuals and families, the KPLC will emphasize on:-

- PAPs to make their issues, claims and concerns known.
- PAPs will have right of access to the formally established grievance process and will be entitled to make their complaints known.
- The Monitoring team will have the right to visit and interview PAPs.
- PAPs through the grievance procedure process will be able to contact the monitoring and evaluation team to ensure that their concerns are heard.

The PAP RAP Committee and KPLC Resettlement Unit members will attend all PAPs consultation meetings and inform them of the procedures and schedule for compensation payment, reorganization and resettlement arrangements among others.

7 GRIEVANCE REDRESS

7.1 Process of Registering and Addressing Grievances

Dissatisfactions may arise through the process of compensation for a variety of reasons, including disagreement on the compensation value during valuation for assets, controversial issue on property ownership etc. To address the problem of PAPs during implementation of compensation, a Grievance Redress Committee will be established in project affected areas.

The composition of the Grievance Redress Committee is depicted below:

- Representative of local Administration (Chair person)
- Representative of Land Administration (Secretary)
- Representatives local Elders (Members)in the respective affected areas

The main function of the committee would be arbitration and negotiation based on transparent and fair hearing of the cases of the parties in dispute between PAPs and the implementing agencies for local government. The committee gives solution to grievances related to compensation amounts, delays in payment of compensation or provision of different type of resettlement assistance.

The identified PAPs will each be issued with a Letter of Award (see Annex viii) for their acceptance or otherwise before payment is made. In case of any grievance, KPLC will issue a Grievance Form, (see Annex ix) to be filled by the aggrieved persons so as to reach a settlement within a period of three month. Constructions would not commence until public grievances are settled.

7.2 Mechanism for Appeal

Disputes will be referred to KPLC and then if necessary, the PAPs Committee who will be asked to provide recommendations as to how it is to be addressed. The Committee may decide that the case be re-investigated and, depending on the nature of the grievance, it may be referred to the National Environmental Tribunal or Public Complaints Committee.

8 INSTITUTIONAL ARRANGEMENTS

8.1 Institutional Framework

The major issue in land acquisition, resettlement implementation and management is the appropriate institutional framework for all concerned parties including the project developer. It is important to ensure timely establishment and effective functioning of appropriate organizations mandated to plan and implement land acquisition, compensation, relocation, income restoration and livelihood programs.

The project is primarily a project of the Kenya Power & Lighting Company Limited (KPLC). However there are other institutions that are relevant to this project in order to ensure successful implementation of the Resettlement Action Plan.

8.1.1 Kenya Power & Lighting Company Limited

KPLC is a limited liability company responsible for the transmission, distribution and retail of electricity throughout Kenya. KPLC owns and operates the national transmission and distribution grid, and retails electricity to more than 1,200,000 customers throughout Kenya. KPLC is required by the Energy Act 2006 to obtain a license from the Energy Regulatory Commission for the transmission and distribution of electricity and to comply with all conditions subject to which the license is issued.

The following is the role of KPLC in the resettlement process:

- Oversee the implementation of the RAP.
- Oversee the formation of PAP RAP Committee (PRC)
- Ensure maximum participation of the affected people in the planning of their own resettlement and post resettlement circumstances.
- 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.
- Pay the affected people compensation to the 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.
- Ensure initial baseline data is collected for the purposes of monitoring and evaluation report as per the indicators provided by the RAP.

8.1.2 Kenya Electricity Generating Company, (KenGen)

KenGen is the successor of the Kenya Power Company (KPC) which was registered as a limited liability company in 1954 and was under the management of KPLC. In January 1997, the management of KPC was formally separated from KPLC as a direct outcome of the new reforms being undertaken in the energy sector and the entire economy. The terms of restructuring of the power sector effectively resulted in a separation of functions, with KPC being responsible for power generation while KPLC became responsible for transmission and distribution. On 2nd October 1998, KPC was re-launched under a new name and corporate identity, The Kenya Electricity Generating Company (KenGen) Ltd.

KenGen is the leading electric power generation company in Kenya, producing about 80 percent of electricity consumed in the country. The company uses various sources to generate electricity ranging from hydro, geothermal, thermal and wind. Hydro is the leading source, with an installed capacity of 677.3 Megawatts, which is about 60% of the country's total installed capacity. KenGen sells in bulk the power generated to KPLC which in turn distributes the same to consumers.

KenGen is required by the Energy Act 2006 to obtain a license from the Energy Regulatory Commission to generate electricity and to comply with all conditions subject to which the license is issued. KenGen has institutional structures for managing the environmental and socio-economic issues arising from their projects.

8.1.3 Energy Regulatory Commission

The Energy Regulatory Commission established under Section 4 of the Energy Act 2006 is the regulator in the energy sector. Section 5 of the Act provides that the mandate of the Commission is *inter alia* to regulate importation, exportation, generation, transmission, distribution, supply and use of electrical energy. Section 6 details the powers of the Commission. These include among others, the power to issue, renew, modify, suspend or revoke licenses and permits for all undertakings and activities in the energy sector. The Commission is also empowered to formulate, enforce and review environmental, safety and quality standards for the energy sector in coordination with other statutory authorities. Section 30 of the Act specifies the factors that the Commission shall take into account in granting or rejecting licenses. These include the impact of any undertaking on the socio-cultural or recreational life of the community. The Commission shall also consider the need to protect the environment and conserve the natural resources in accordance with the Environmental Management and Coordination ACT 1999.

The Commission is also empowered to determine matters referred to it by either licensees or owners or occupiers of land affected by electric power projects.

8.1.4 National Environmental Management Authority (NEMA)

NEMA is established under the Environmental Management & Coordination Act. The mandate of NEMA as spelt out in Section 9 of the Act is *inter alia* is to exercise general supervision and co-ordination over all matters relating to environment and to be the principal instrument of Government in the implementation of all policies relating to the environment. NEMA is further mandated to promote integration of environmental considerations into development policies, plans, programmes and projects with a view to ensuring proper management and rational utilization of environmental resources on a sustainable yield basis for the improvement of the quality of human life.

NEMA is involved in the resettlement process through the National Environment Tribunal (NET) with the Public Complaints Committee, in addressing disputes of resettlement and compensation to.

8.1.5 Local Administration

The role of the local Administration in the resettlement process is to assist in consultations with the stakeholders. It comprises of the following officers:

- Provincial Commissioners
- District Commissioners
- District Officers
- Chiefs
- Assistant Chiefs
- Clan/ Village Elders

In the implementation of the project herein, Kenya Power & Lighting Company is enjoined to collaborate with the above institutions to ensure compliance with all the requirements relevant with the project.

8.2 PAP RAP Committee (PRC)

Under the guidance and coordination of KPLC Resettlement Unit, the PRC to be formed will act as a voice of those affected by the resettlement and will be a recognised body by the KPLC. It is proposed that the committee shall comprise of the following:

1. National Environmental Management Authority (NEMA) officer
2. Lawyer, Kenya Power & Lighting Co. Ltd.
3. Valuer, Kenya Power & Lighting Co. Ltd.
4. Two Project affected people Representatives – to be appointed by PAPs

5. Local council representative
6. District Valuer or any Independent Valuer
7. Surveyor
8. The local area chiefs, assistant chiefs and Village elders
9. District Land Adjudication and Settlement Officer
10. District Social Development Officer

The committee shall have a Chairperson and Secretary appointed by the PAPs. The Chairperson ought to be from the local area. The Committee will be concerned with the following:

- **Public Awareness**, it includes extensive consultation with the affected people so that they can air their concerns, interests and grievances.
- **Compensation**: this involves ratifying compensation rates and also serves as dispute resolution body to negotiate and solve any problem that may arise relating to resettlement process. If it is unable to resolve any such problems, will channel them through the appropriate grievance procedures laid out in this RAP.
- **Monitoring and Evaluation** this involves developing the monitoring and evaluation protocol
- **Logistics**: this involves exploring all mechanisms by which RAP can be implemented
- **Employment and Training**, this involves employment protocol in the project (if any) for those who can not find alternative employment.

8.3 Community Consultation

Resettlement or compensating PAPs needs communication or dialogue with the stakeholders, as such it is a never-ending exercise, until implementation of RAP is over. This has been outlined in the guiding principles 2 in section 1.5 of this report. The consultant undertook an extensive consultation with the PAPs and we are aware the KPLC staff has also done considerable bit of work towards this end. In our discussions, we encouraged the community and the PAPs to:

- i) Be open and make known their concerns and claims
- ii) Be free to access the formally established grievance process for lodging complains
- iii) Allow and give the necessary assistance to the M&E team
- iv) KPLC personnel would continue to conduct a series of consultation and counseling meetings with the PAPs. During these meetings, the PAPs will be informed of the results of the survey findings and plans for the area including actual date of demolitions. These consultative meetings should include all stakeholders.

8.4 Compensation of the PAPs

Compensation to PAPs shall be made before demolition commences. Either this will be done at the KPLC offices or at the local chief's office, whichever will be appropriate after approval by all the parties concerned. After compensation, a minimum of three-month notice shall be given to the affected people before the demolition exercise commences, to allow relocation and salvage of necessary asset by the PAPs. Tenants shall likewise be given at least three-month notice before actual demolition to give them ample time to relocate. The sites shall be handed over to KPLC once all the PAPs have been fully compensated.

9 IMPLEMENTATION SCHEDULE

9.1 Implementation

The implementation of the RAP calls for collaboration from all the stakeholders. This would require a properly constituted structure for the administration of the same.

9.2 Implementation Timelines

The implementation times will be pegged on the following process

- KRU is constituted
- PC is constituted
- PC signs off on the RAP. This constitutes KPLC acceptance of the terms of the RAP.
- KPLC draws up offer documents for affected people and advertises the fact that offers will be made.
- The affected people review the offers made and enter into agreements with KPLC.
- The affected people will have to identify alternative sites surrender the land and move off the project site. These affected people shall do this on the basis of “willing buyer-willing seller principle”.
- Monitoring of the “willing buyer - willing seller” affected people begins

Table 21: Gantt Chart showing Implementation Timelines

ID	TASK NAME	START	FINISH	MONTH 1				MONTH 2				MONTH3			
				Wk1	Wk2	Wk3	Wk4	Wk1	Wk2	Wk3	Wk4	Wk1	Wk2	Wk3	Wk4
1	Implementation Tasks	MON 1/3/10	FRI 21/5/10												
2	KRU Constituted	MON 1/3/10	FRI 5/3/10												
3	Collection of M&E Baseline	MON 8/3/10	FRI 12/3/10												
4	Valuation of Assets	MON 15/3/10	FRI 2/4/10												
5	Formation of PC	MON 29/3/10	FRI 2/4/10												
6	PC and KRU meeting	MON 5/4/10	FRI 9/4/10												
7	PC Comments on RAP	MON 5/4/10	FRI 9/4/10												
8	PC Signs Compensation	MON 12/4/10	FRI 16/4/10												
9	Announce of Compensation	MON 12/4/10	FRI 16/4/10												
10	Category1: A B,C,D agree	MON 12/4/10	FRI 16/4/10												
11	Category 1: A B,C,D agree	MON 19/4/10	FRI 23/4/10												
12	M&E	MON 19/4/10	FRI 7/5/10												
13	Category 2: E,F,G,H agree	MON 3/5/10	FRI 14/5/10												
14	Category 2: E,F,G,H agree	MON 10/5/10	FRI 14/5/10												
15	M&E	MON 17/5/10	FRI 21/5/10												
16	Reporting	MON 1/3/10	FRI 21/5/10												
17	RAP Final Report	MON 1/3/10	FRI 5/3/10												
18	Category 1 - M&E Report	MON 19/4/10	FRI 23/4/10												
19	Category 2 - M&E	MON 26/4/10	MON 30/4/10												
20	Comments on Reports	MON 3/5/10	FRI 14/5/10												
21	Final M&E Report	MON 17/5/10	FRI 21/5/10												

10 COSTS AND BUDGETS

The areas that were identified to be affected by the transmission line for the resettlement options were identified by the RAP team. The expected budget costs in the following areas include:

- Tulwet Location
- Small town centre in Mossop location
- Kabarnet area
- Kabarnet-Kituro area
- Marigat area
- Samburu Manyatta
- Nanyuki area

10.1 PAPs in Tulwet Location

The total numbers of PAPs to be affected in Tulwet location are 12 families, where (38.7%) were women and (61.3%) are men. The average family size of PAPs is five (5). Among the 12 affected households identified during the survey most of the households were male headed. The statistics reveal that all household in this area carryout agricultural activity as their main livelihood. Other sources of income in this area are formal employment, business, casual Labour and pension.

Land

Most land within in the project is private owned land and most households have title deeds. The size of the land in Tulwet location that will be affected is estimated to cost KShs. 700,000.00.

Residential Houses

The total number of residential houses and other structures in this area are 39. The estimated cost of new residential houses and other structures in this band is KShs. 2,535,000.00.

Crops and Trees

The land surrounding the projects area is used for agricultural activities (100% of households in this area). The main crops that are grown in the area are maize and wheat. Since the main reason for resettlement is noise disturbance and not land acquisition,

farmers will be allowed to continue growing their crops and harvesting them until an agreed time.

Trees mostly found in the project area are the indigenous ones most of these trees do not produce new yields after cutting. Due to this, farmers usually cut the trees after they have matured and sell them for different purposes. Thus compensation rate of these trees is based on current market prices. The compensation cost for crops and trees is KShs. 37,500.00.

10.2 Small Town Centre in Mosop Location

The total numbers of PAPs to be affected in this area are 14 households with a total number of 68. Of this number, 27 representing (39.7%) are women and 51.5 (51.5%) are men. The average family size of PAPs within the area is five (5). Eighty five percent of households in these area carryout agricultural activities. Other sources of income in this area: formal employment (5%), business (5%), casual labour (3%) and pension (2%).

Land

Most land within in the area is privately owned. The estimated cost of land in this area is KShs. 1,165,000.00.

Residential Houses

The total number of residential houses and other structures in the project area is 65. The estimated cost of residential houses and other structures in this area is KShs. 4,970,000

Crops and Trees

The land surrounding the projects are is used for agricultural activities (67% of households in this area). The main crops that are grown in the area are maize, wheat and kales. Since the main reason for resettlement is wayleave disturbance and not land acquisition, farmers will be allowed to continue harvesting their crops until an agreed time.

Trees mostly found in the project area are the Pine and Eucalyptus trees. Most of these trees do not produce new yields after cutting. Due to this, farmers usually cut the trees after they have matured and sell them for different purposes. Thus compensation rate of these trees is based on current market prices. The estimated compensation cost for crops and trees are Kshs. 58,250. 00.

10.3 Kabarnet Area

The total numbers of PAPs to be affected in this area are 35 households with a total number of 136. Of this number, 67 representing (49.3%) were women and 64 (47.13%) are men. The average family size of PAPs within the area is four (4). Most of the households in these areas have plot and are carrying out small scale agricultural activities. Other sources of income in this area: formal employment (60%), business (30%), casual labour (5%) and pension (2%).

Land

Most land within the project area is privately owned urban plots. The estimated cost of land in this area is KShs. 5,945,000.00.

Residential Houses

The total number of residential houses and other structures in the project area is 160. The estimated cost of residential houses and other structures in this area is KShs. 31,825,000.00.

Crops and Trees

The land surrounding the projects are used for small scale agricultural activities. The main crops that are grown in the area are maize, Cabbage, fruits and kales, while trees are eucalyptus, pine, cypress and Gravelia. The compensation rate of these trees is based on current market prices. The estimated compensation cost for crops and trees are KShs. 297,250.

10.4 Kabarnet to Kituro

The total numbers of PAPs to be affected in this area are 19 households with a total number of 101. Of this number, 40 representing (39.6%) were women and 54(53.5%) are men. The average family size of PAPs within the area is six (6).

Land

Most land within in the project is privately owned in semi urban area. The estimated cost of land in this area is KShs. 2,745,000.00.

Residential Houses

The total number of residential houses and other structures in the project area is 82. The estimated cost of residential houses and other structures in this area is KShs. 19,633,000.00.

Crops and Trees

The land surrounding the projects is used for small scale agricultural activities. The main crops that are grown in the area are maize, fruits and kales. Since the main reason for resettlement is wayleave disturbance and not land acquisition, farmers will be allowed to continue harvesting their crops until an agreed time.

Trees mostly found in the project area are the indigenous ones; most of these trees do not produce new yields after cutting. Due to this, farmers usually cut the trees after they have matured and sell them for different purposes. Thus compensation rate of these trees is based on current market prices. The estimated compensation cost for crops and trees are KShs. 137,250.00.

10.5 Marigat Area

The total numbers of PAPs to be affected in this area are 14 households with a total number of 71. Of this number, 29 representing (40.81%) were women and 34(47.8%) are men. The average family size of PAPs within the area is six (6).

Land

Most land within in the project is owned by the community. The estimated cost of land in this area is KShs. 600,000.00.

Residential Houses

The total number of residential houses and other structures in the project area is 37. The estimated cost of residential houses and other structures in this area is KShs. 971,000.00.

Crops and Trees

The land surrounding the projects is pastoralist land and very little agricultural land. The main crops that are grown in the area are maize. Since the main reason for resettlement is noise disturbance and not land acquisition, farmers will be allowed to continue harvesting their crops until an agreed time.

Trees mostly found in the project area are the indigenous ones like the Acacia species. The compensation rate of these trees is based on current market prices. The estimated compensation cost for crops and trees are KShs. 30,000.00.

10.6 Mochongoi

The total numbers of PAPs to be affected in this area are 6 households with a total number of 26. Of this number, 14 representing (53.8%) were women and 14 (46.1%) are men. The average family size of PAPs within the area is six (6).

Land

Land within in the project is privately owned and settlement schemes. The estimated cost of land in this area is KShs. 475,000.00.

Residential Houses

The total number of residential houses and other structures in the project area is 43. The estimated cost of residential houses and other structures in this area is KShs. 1,868,000.00.

Crops and Trees

The land surrounding the projects are is used for agricultural activities (67% of households in this area). The main crops that are grown in the area are maize, onions and kales. Trees mostly found in the project area are the indigenous ones Most of these trees do not produce new yields after cutting. Due to this, farmers usually cut the trees after they have matured and sell them for different purposes. Thus compensation rate of these trees is based on current market prices. The estimated compensation cost for crops and trees are KShs. 23,750.00

10.7 Samburu Manyatta

The total numbers of PAPs to be affected in this area are 3 households with a total number of 23. Of this number, 14 representing (60.9%) were women and 9(39.1%) are men. The average family size of PAPs within the area is eight (8).

Land

Most land within in the project is trust land. The estimated cost of land in this area is KShs. 90,000.00. However, the village occupies a large portion of the road reserve.

Residential Houses

The total number of residential houses and other structures in the project area is 13. The estimated cost of residential houses and other structures in this area is KShs. 330,000.00.

Crops and Trees

The land surrounding the projects is pastoralist land.

Trees mostly found in the project area are the indigenous ones like the Acacia species. The compensation rate of these trees is based on current market prices. The estimated compensation cost for crops and trees are Kshs. 4,500.00.

10.8 Nanyuki Area

The total numbers of PAPs to be affected in this area are 10 households with a total number of 36. Of this number, 15 representing (41.67%) were women and 21(58.33%) are men. The average family size of PAPs within the area is four (4). Most of the households in these areas have plot that they are developing and small scale agricultural activities. Other sources of income in this area: formal employment (60%), business (30%), casual labour (5%) and pension (2%).

Land

Most land within in the project is privately owned. The estimated cost of land in this area is KShs. 1,800,000.00.

Residential Houses

The total number of residential houses and other structures in the project area is 35. The estimated cost of residential houses and other structures in this area is KShs. 2,658,000.00.

Crops and Trees

The compensation rate of these trees is based on current market prices. The estimated compensation cost for crops and trees are KShs. 90,000.00.

Table 22: Summary of PAPs and Cost of Compensation

Areas affected	Size of Land (Acres)	No. of Households	Total Number of residents	Total number of Structures
1.Tulwet Location	155.68	12		39
2.Smalltown	126.02	14	68	65
3.Kabarnet town	96.37	35	136	160
4.Kituro-Kabarnet	37.07	19	101	82
4.Marigat (Kivumbini)	81.55	14	71	37
5.Mochongoi	155.68	6	26	43
6.Manyatta Samburu	14.83	3	23	13
7.Nanyuki	51.89	10	36	35
TOTALS	719.09	113	461	474

Table 23: summary of Total Compensation Cost

AREA	Land Compensation Cost	Houses & Structures Compensation Cost	Trees Compensation Cost	Sub Total Compensation Cost
Tulwet Sublocaton	750,000.00	2,535,000.00	37,500.00	3,322,500.00
Small Town Centre and Mosop Area	1,165,000.00	4,105,000.00	58,250.00	5,328,250.00
Kabarnet	5,945,000.00	31,825,000.00	297,250.00	38,067,250.00
From Kabarnet to Kituro	2,745,000.00	19,633,000.00	137,250.00	22,515,250.00
Marigat	600,000.00	971,000.00	30,000.00	1,601,000.00
From Muchongoi to Rumuruti	475,000.00	1,868,000.00	23,750.00	2,366,750.00
Samburu-Manyatta Village	90,000.00	330,000	4,500	424,500.00
Nanyuki	1,800,000.00	2,658,000	90,000	4,548,000.00
Sub Total 1	13,570,000.00	63,925,000.00	678,500.00	78,173,500.00
Disturbance Allowance	15%			11,726,025.00
Total (KShs)				89,899,525.00
Total(USD)\$				1,198,660.30

11 MONITORING AND EVALUATION

In order to guarantee that the compensation plan is smoothly performed and the benefit of the affected persons be well treated, the implementation of the compensation plan will be under monitoring throughout the whole process. Monitoring will be divided into two parts, i.e. internal and external monitoring.

11.1 Monitoring and Evaluation

11.1.1 Internal Monitoring

It is the responsibility of the proponent to conduct regular internal monitoring of the resettlement performance of the operation through KRU, which will be responsible for implementing resettlement and compensation activities. The monitoring should be a systematic evaluation of the activities of the operation in relation to the specified criteria of the condition of approval.

The objective of internal monitoring and supervision will be:

- a) 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 GOK and World Bank/ IFC
- b) To oversee that the RAP is implemented as designed and approved;
- c) 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.

The main internal indicators that will be monitored regularly:

- i) That the KPLC's entitlements are in accordance with the approved policy and that the assessment of compensation is carried out in accordance with agreed procedures
- ii) Payment of compensation to the PAPs in the various categories is made in accordance with the level of compensation described in the RAP
- iii) Public information and public consultation and grievance procedures are followed as described in the RAP
- iv) Relocation and payment of subsistence and shifting allowances are made in a timely manner
- v) Restoration of affected public facilities and infrastructure are completed prior to construction

11.1.2 External Monitoring and Evaluation

The Consultant recommends that an Independent Monitoring Unit (IMU) 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 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:

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

The Consultant recommends that KPLC establish an IMU that draws on personnel with resettlement and social development experience. The Consultant further recommends that relevant representatives from the, KRU. The project affected persons should be represented through relevant Public complaints committee and Provincial commissioner(PC).

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.

The RAP would be implemented by KPLC. The KRU and PC will carry out the M&E. The KRU will be responsible for the overall M&E while the PC will monitor and evaluate respective communities where they will have been formed.

Progress and performance of the RAP would be before, during, and after implementation. Using the baseline information that is being compiled by the consultant through this RAP report, the M&E advisors would be in a position to note changes that may have occurred before and after resettlement. Some of the baseline indicators that are relevant to this study are:

1. **Income statistics:** Average annual family income within the communities should not fall below an agreed upon factor in the first 18 months after the move. Data should indicate that the socio-economic situation of the affected people is stable after one year. If, after a year, the situation of PAPs are found to be deteriorating further interventions may be considered.
2. **Entitlement Listing.** In the event of relocation to alternative site for the PAPs such site should have comparable services and amenities to the previous site. The basis of comparison could be qualitative, although a quantitative measure could also be developed based on per capita maintenance costs. The consultant has however recommended financial compensations rather than relocation. Thus, the choice of the relocation site would depend on the PAPs.

11.1.3 Responsible Parties

Due to the magnitude of the project, it is recommended that PC be charged with the task of monitoring and evaluation of the PAPs. It will therefore be enlisted to continue the post project evaluation system and conduct actual monitoring and reporting. KPLC will obtain Category M&E reports from the PCs for compilation.

11.1.4 Methodology for monitoring

The approaches and methods used would require regular dialogue and surveys of the affected communities. The dialogue will provide a forum for affected parties to air any grievances or complaints that may arise. The survey will provide a more objective form of progress measurement to complement the more subjective consultations/dialogue.

11.1.5 Data Collection

Qualified census personnel will collect data from a respectable research firm or government agency. The surveys should be conducted with the full consent and permission of affected parties.

11.1.6 Data Analysis and Interpretation

The data should be able to measure changes in net welfare based on pre-resettlement profile and post resettlement conditions. Where negative welfare is noted, KPLC should immediately address the same.

11.1.7 Reporting

Post-resettlement monitoring results should be subject to review by, representatives of the affected community through the PC and representatives of KPLC. The Monitoring Team must write its reports before the end of each visit and submit them to the KPLC Project Manager and the PC. The Monitoring team should structure its reporting in conjunction with accepted variables, (*See Annex IX*).

ANNEXES

- I. Census and survey instruments
- II. Interview questionnaire
- III. Copies of notices for the public consultative meeting
- IV. Minutes of the public meetings
- V. Lists of attendance for the public meetings
- VI. List of Coordinates
- VII. Letter of Award
- VIII. Grievance Form
- IX. Format to be used in monitoring and reporting on RAP implementation

Annex I: Census and Survey Instruments

Illustrative Census Format

Household Number.....						Map Reference			
Number.....									
Village Name.....									
Date.....									
	Name	Sex	Age	Relation to Household	Primary Occupation	Notes/Secondary Occupation	Highest level of education	Income Remittance	Illness symptoms within past 2 weeks *
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									

- Illness symptoms code:- 1) Diarrhea, : 2) Skin rash :3)fever, : 4) Other (Specify)

Land Assets Inventory

Household Number:.....							Date:.....					
Village Name:.....							Coordinates:.....					
Parcel No.	Land Holding Type						Tenure	Observation	Land taken (ha)	Net Production (\$/year)	Market Value (\$)	
		Rain-fed (ha)	Irrigated (ha)	Pasture (ha)	Fishpond (ha)	Woodlot (ha)						Houselot (ha)
	Net return/yr/ha (\$)											
	Value per ha (\$)											
1.												
2.												
3.												
4.												
Total												
%Taken												
Lost/ Production (\$)												
Replacement cost												

Physical Assets Survey (sample)

Household

No:.....Date:.....

.....

Village:.....Coordinates.....

.....

Photograph:.....

Item	Quantity	Description/Construction Type	Replacement Cost		Total Cost	Observation
			materials	Labour		
Residence						
House fence						
Kitchen						
Latrine/bathroom						
Paddock fence						
Grainery						
Animal shed						
well						
Harvest shrine						
Grave						

Income Stream Analysis (sample)

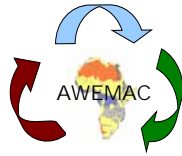
Annuals income from various sources

Household		Income sources									
Reg: No	Fam ily size	Rain Fed Agriculcu lture	Irrigate d Agricult ure	Fishi ng	All typ es	Woodl ots	Seaso nal labour	Remitta nce	Comm erce and Trade	Total HH Net Inco me	Inco me Per Capit a
Total											
Percent age											
Averag e											

Database Format for Assessing and Processing Compensation Claims (sample)

Reg No.	Owner/Head of Household	CROPS				Total crop value	Crop Land		Structures		Total Compensation
		maize	Beans	Potatoes	Mangoes		Total Ha.	Total Value	Area in Sq M	Total Value	

Annex II: Interview Questionnaire (Sample)



Africa Waste and Environment Management Centre

Nairobi Office:

Muthaiga Mini Market, Left Wing, 3rd Floor,

P.O. Box 63891-00619, **NAIROBI**

Tel : +254 20-2012408/ 0722-479061,

Email : awemac_ken@yahoo.com

Website : www.awemac.org

**TITLE: ENVIRONMENTAL SOCIAL IMPACT ASSESSMENT AND RESETTLEMENT ACTION PLAN FOR THE CONSTRUCTION OF 235 KM OF 132Kv CIRCUIT TRANSMISSION LINE
 CLIENT/PROONENT: KENYA POWER AND LIGHTING COMPANY (KPLC)
 LINE: FROM NANYUKI-NYAHURURU/RUMURUTI-KABARNET-LESSOS.
 QUESTIONNAIRE FOR LOCAL COMMUNITY MEMBERS/SURROUNDING ENTERPRISES
 AND ANY OTHER WOULD BE AFFECTED/INTERESTED PARTY**

Our client and the proponent mentioned above is proposing to undertake the proposed Construction of 235 Km of 132kV Circuit Transmission line from Nanyuki-Nyahururu/Rumuruti-Kabarnet-Lessos. As a member of the local community/surrounding enterprises or an interested/ a would be affected party we request for your comments on the expected socio-economic and environmental impacts of the proposed project. As a requirement of EMCA 1999 Section 58, on Environmental Impact Assessment, public participation is an important exercise for achieving the fundamental principles of sustainable development.

1). a) what is the distance between your house/enterprise/residence and the project site?

(Tick where applicable)

(A). Less than 100 m (B). Between 100-500 m (C). Between 500-1000 m (D) over 1km

b) Do you think you or your enterprise(s) will be affected by the above proposed project?

() YES () NO, If NO, go to question 5 below.

2). If YES, what positive socio-economic and environmental impacts do you anticipate during the construction and operation stages of the project?

.....

3). what negative socio-economic and environmental impacts do you anticipate during the construction and operation stages of the project?

.....

4). Make suggestions on the measures the developer needs to put in place during the construction and operation stages?.....

.....

5). What is your general opinion on the Project?

Name:

Postion/Designation.....

Full address:

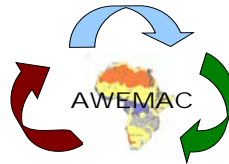
Date:.....

Tel:

Signature:

Annex III: Notices for the Public Consultative Meetings

07/12/2009



AFRICA WASTE AND ENVIRONMENT MANAGEMENT CENTRE

Muthaiga Mini Market, Left Wing, 3rd Floor,

P.O. Box 63891-00619, Nairobi, Kenya

Tel: +254 20-2012408/ 0722-479061

E-mail: awemac_ken@yahoo.com,www.awemac.org**PUBLIC NOTICE!**

**PUBLIC MEETINGS ON ENVIRONMENTAL SOCIAL IMPACT ASSESSMENT AND
RESETTLEMENT ACTION PLAN (RAP) FOR THE PROPOSED CONSTRUCTION OF
235 KM OF 132Kv CIRCUIT TRANSMISSION LINE FROM NANYUKI-
NYAHURURU/RUMURUTI-KABARNET-LESSOS.**

Our client and the proponent, Kenya Power and Lighting Company (KPLC) is proposing to undertake the above mentioned project. The proponent proposes to Construct 132 kV Circuit transmission line from Nanyuki-Nyahururu/Rumuruti-Kabarnet-Lessos. The local community/or neighbour to the proposed project site, are hereby asked to attend a public meeting scheduled to take place as indicated below:

Date: THURSDAY 17th December, 2009

Venue 1: MAJENGO CHIEF' S OFFICE; NANYUKI TOWN; Time: 10.00 A.M

Venue 2: OPEN GROUND AT THE SAMBURU MANYATTA in Tetu Village

(NEAR SWEET WATERS TENTED CAMP / OL-PAJETA CONSERVANCY GATE) Time: 3.00.P.M

The purpose of the meeting is to collect views from the general public and any other party who in any way will/ might be affected by the proposed project within its project cycle. As a requirement of EMCA 1999 Section 58 on Environmental Impact Assessment, public participation is an important exercise for achieving the fundamental principles of sustainable development.

Contact persons:-

Mr. Elijah Muthusi-0721802056, Dominic Munyao- 0715708670

Mr. David Milimo (Assistant Chief Thingithu Location) 0721-290344

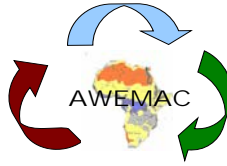
Mr. Kalaya Ole Kaikil (Samburu Manyatta Elder) 0724-658170

NEMA 2009 LICENCE NO.0044

Prof Jacob K. Kibwage

Lead Environmental Consultant, Africa Waste and Environment Management Centre

07/12/2009



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Date: FRIDAY 18TH December, 2009

Venue: MUCHONGOI D.O'S OFFICE BARAZA PARK; Time: 11.00 A.M

The purpose of the meeting is to collect views from the general public and any other party who in any way will/ might be affected by the proposed project within its project cycle. As a requirement of EMCA 1999 Section 58 on Environmental Impact Assessment, public participation is an important exercise for achieving the fundamental principles of sustainable development.

Contact persons:-

Mr. Elijah Muthusi-0721802056, Dominic Munyao-0715708670

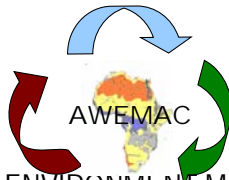
Chief Muchongoi 0721-290344

NEMA 2009 LICENCE NO. 0044

Prof Jacob K.Kibwage

Lead Environmental Consultant, Africa Waste and Environment Management Centre

07/12/2009



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Date: FRIDAY 18th December, 2009

Venue: MARIGAT KIVUMBINI VILLAGE; Time: 3.00 P.M

The purpose of the meeting is to collect views from the general public and any other party who in any way will/ might be affected by the proposed project within its project cycle. As a requirement of EMCA 1999 Section 58 on Environmental Impact Assessment, public participation is an important exercise for achieving the fundamental principles of sustainable development.

Contact persons:-

Mr. Elijah Muthusi-0721802056, Dominic Munyao-0715708670

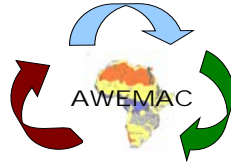
Julius Kibet (Village Elder) 0710-546507

NEMA 2009 LICENCE NO. 0044

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07/12/2009

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NYAHURURU/RUMURUTI-KABARNET-LESSOS.**

Our client and the proponent, Kenya Power and Lighting Company (KPLC) is proposing to undertake the above mentioned project. The proponent proposes to Construct 132 kV Circuit transmission line from Nanyuki-Nyahururu/Rumuruti-Kabarnet-Lessos. The local community/or neighbour to the proposed project site, are hereby asked to attend a public meeting scheduled to take place as indicated below:

Date: THURSDAY 17th December, 2009

Venue: TULWET CENTRE; Time: 10.00 A.M

The purpose of the meeting is to collect views from the general public and any other party who in any way will/ might be affected by the proposed project within its project cycle. As a requirement of EMCA 1999 Section 58 on Environmental Impact Assessment, public participation is an important exercise for achieving the fundamental principles of sustainable development.

Contact persons:-

Mr. Theobald Luchidio-0722440312, David Andalla-0722887625

Elizabeth Maiyo (Chief Tulwet) 0711-775847

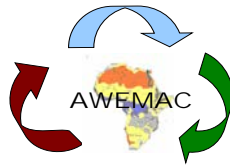
Samuel Too (Village Elder) 0724-786277

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Our client and the proponent, Kenya Power and Lighting Company (KPLC) is proposing to undertake the above mentioned project. The proponent proposes to Construct 132 kV Circuit transmission line from Nanyuki-Nyahururu/Rumuruti-Kabarnet-Lessos. The local community/or neighbour to the proposed project site, are hereby asked to attend a public meeting scheduled to take place as indicated below:

Date: THURSDAY 17th December, 2009

Venue: MOSOP LOCATION AT SMALL TOWN; Time: 2.00 P.M

The purpose of the meeting is to collect views from the general public and any other party who in any way will/ might be affected by the proposed project within its project cycle. As a requirement of EMCA 1999 Section 58 on Environmental Impact Assessment, public participation is an important exercise for achieving the fundamental principles of sustainable development.

Contact persons:-

Mr. Theobald Luchidio-0722440312, David Andalla-0722887625

Andrew Kiptanui (Chief) 0722-598989

David Kiptoo 0720-865665

NEMA 2009 LICENCE NO. 0044

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07/12/2009



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PUBLIC NOTICE!

PUBLIC MEETING ON ENVIRONMENTAL SOCIAL IMPACT ASSESSMENT AND RESETTLEMENT ACTION PLAN (RAP) FOR THE PROPOSED CONSTRUCTION OF 235 KM OF 132Kv CIRCUIT TRANSMISSION LINE FROM NANYUKI- NYAHURURU/RUMURUTI-KABARNET-LESSOS.

Our client and the proponent, Kenya Power and Lighting Company (KPLC) is proposing to undertake the above mentioned project. The proponent proposes to Construct 132 kV Circuit transmission line from Nanyuki-Nyahururu/Rumuruti-Kabarnet-Lessos. The local community/or neighbour to the proposed project site, are hereby asked to attend a public meeting scheduled to take place as indicated below:

Date: THURSDAY 17th December, 2009

Venue: KABARNET TOWN HALL; Time: 10.00 A.M

The purpose of the meeting is to collect views from the general public and any other party who in any way will/ might be affected by the proposed project within its project cycle. As a requirement of EMCA 1999 Section 58 on Environmental Impact Assessment, public participation is an important exercise for achieving the fundamental principles of sustainable development.

Contact persons:-

Mr. Theobald Luchidio-0722440312, David Andalla-0722887625

Edwin Tumno (Chief Kituro) 0722-108167

Daniel Cheserem 0720-271022

NEMA 2009 LICENCE NO. 0044



Prof Jacob K.Kibwage

Lead Environmental Consultant, Africa Waste and Environment Management Centre

Annex IV: Minutes of the Public Consultative Meetings

MINUTES OF PUBLIC MEETING FOR THE PROPOSED KENYA POWER AND LIGHTING COMPANY (KPLC) PROJECT HELD AT TULWET SHOPPING CENTRE ON 17TH DECEMBER, 2009

AGENDA

1. Construction of 235km of 132Kv circuit transmission line from Lessos-Kabarnet-Nyahururu/Rumuruti-Nanyuki.
2. A.O.B

Preliminaries

The meeting began at 11:40am, chaired by the consultant, Dr. Kapiyo. A prayer was given by one of the community member (Mrs.Veronicah Tarus), after which everyone in the meeting introduced themselves and the consultants (Mr.Theobald Luchidio and Mr. Andala David) explained the purpose of the meeting for the further discussions and to get the view of the residents for their advice.

Min 01/12/2009: Project Description

The consultant Dr. Kapiyo gave a comprehensive project description; he explained what are to be affected with the project. Things to be affected are such as: housings, trees, land among other things. He also explained the purpose of the project to be done and thereafter being submitted to KPLC for review and compensation before the project commences. The consultant stated on the resettlement procedures.

Min 02/12/2009: Public Concerns

The views of the public were as follows:

- Notice to Vacate

The attendants asked when and how long the project would take since they have small parcels of lands and would like to continue using their land. The consultant advised on procedure of acquisition of the wayleave.

- Resettlement

An attendant asked of a case where the wayleave takes all of his land then forced to move to another area, then what will happen to their developments like boreholes, latrines, trees and houses among others.

- Compensation

The attendants requested for the payments to be done according to the prevailing rates in the market. The consultants advised on proper compensation of their properties as

long as there is proper agreement after the valuation is done before the construction and the operation of the power line.

- Construction of 132KV Transmission power line

The attendants asked for the expected impacts of the project, where the consultants explained the types of impacts to expect and they also asked for the employment of their youths in the same project during construction.

- Operation of the power line

The consultant told the attendants to continue using their lands so long as on the wire line passes over.

Min 03/12/2009: Project Alternatives

The attendants had no objection of the power line passing on their lands so long as they would be paid faithfully.

Min 04/12/2009: A.O.B

The attendants requested for another meeting since the land involves community and therefore required further consultation.

The sub-chief also asked for a further study for Kapserton since there are many settlements in that area.

The attendants asked for the cultural issues to be clearly addressed in the report i.e. issues such as the line affecting the house of the mother and is forced to move to another place living behind the rest of the family like sons who already have built on the same land.

The local community in attendance had no objection of the proposed project since it is a government project and source of development of the country.

Adjournment

There being no other business for discussion, the meeting was adjourned at 1:00pm with a closing prayer from one of the attendants Mrs. Veronica Tarus.

SECRETARY

Name: Andala David Sign: Date:

CONSULTANT

Name: Dr. Kapiyo O. Sign: Date:

CONFIRMED BY

Name: Prof. Jacob Kibwage Sign: Date:

**MINUTES OF PUBLIC MEETING FOR THE PROPOSED KENYA POWER AND LIGHTING COMPANY
(KPLC) PROJECT HELD AT SMALL TOWN CENTRE ON 17TH DECEMBER, 2009**

AGENDER

3. Construction of 235km of 132Kv circuit transmission line from Lessos-Kabarnet-Nyahururu/Rumuruti-Nanyuki.
4. A.O.B

Preliminaries

The meeting began at 2:40pm, chaired by the consultant, Dr. Kapiyo. A prayer was given by one of the community member (Mr. Shadrack Cheum), after which everyone in the meeting introduced themselves and the consultants (Mr.Theobald Luchidio and Mr. Andala David) explained the purpose of the meeting for the further discussions and to get the view of the residents for their advice.

Min 01/12/2009: Project Description

The consultant Dr. Kapiyo gave a comprehensive project description; he explained what are to be affected with the project. Things to be affected are such as: housings, trees, land among other things. He also explained the purpose of the project to be done and thereafter being submitted to KPLC for review and compensation before the project commences. The consultant stated on the resettlement procedures.

Min 02/12/2009: Public Concerns

The views of the public were as follows:

- Notice to Vacate

The attendants asked when and how long the project would take since they have small parcels of lands and would like to continue using their land. The consultant advised on procedure of acquisition of the wayleave.

- Resettlement

An attendant asked of how they would be settled by the proponent, and the consultant explained on the laid down procedures on how they would be effectively be resettled after compensation.

- Compensation

An attendant asked whether it's we who are to pay for the compensation of the land and the properties or is it the proponent to pay for the compensation. The consultant then clearly advised on our duties as environmental consultants.

There was a request by the attendants if they could have a cross valuation for their properties i.e. by their own valuer, government valuer, and KPLC valuer. There was

concern on the compensation issues and requested if it could be done according to the current market value.

The consultant advised them on the importance of the power line coming from Lessos to Nanyuki.

- **Construction of 132KV Transmission power line**

The attendants requested if the line can be diverted to another area since the power line was proposed to pass directly over there already developed shopping centre and the cost for development is more expensive than the cost of land. Then the consultants explained that we are working on the proposed line to give the KPLC engineers the views of the community affected and the picture on how the route is like so that they can come up with a proper route for the line.

- **Operation of the power line**

One of the attendants asked for the anticipated impacts of the power line, especially the effects of the radiation of the power line, but Dr. Kapiyo explained that the effects of the radiation had already been taken care of by the scientists by the use of earth wire lines.

Min 03/12/2009: Project Alternatives

The attendants especially those with business premises requested for the diversion of the line to another area since it passes over their business premises and the anticipated income for their businesses will affect many people in their families for along time about one to two years during the project acquisition and construction, and if so then there should be a proper way of compensating them.

Min 04/12/2009: A.O.B

The attendants first congratulated the team for creating awareness for the incoming project of KPLC line. Members also asked how the community would benefit from the proposed power line passing on their centre if not their area, which the consultant clearly explained on the expected benefits.

Members requested KPLC to participate in improving public utilities/amenities in their area, e.g. health centres, water facilities among others.

Members requested KPLC to improve on the sceneries they have in their area, places such as view points to the Kerio valley for the purpose of foreign and local tourist attraction point which would further benefit the community as a whole. Though Dr. Kapiyo told them to form groups with leaders who would give out their views to the KPLC which is the project proponent.

The local chief of the area was very grateful of the power line passing over their land, but requested for fair compensation from the company for the people and their properties.

Conclusion

The local community in attendance had no objection of the proposed project since it is a government project and source of development of the country.

Adjournment

There being no other business for discussion, the meeting was adjourned at 4:20pm with a closing prayer from one of the attendants Mr. Shadrack Cheum.

SECRETARY

Name: Andala David

Sign: Date:

CONSULTANT

Name: Dr. Kapiyo O.

Sign: Date:

CONFIRMED BY

Name: Prof. Jacob Kibwage

Sign: Date:

N/B: A copy of attendance list for the meeting is attached to these minutes.

MINUTES OF PUBLIC MEETING ON PROPOSED 235KM TRANSMISSION LINE 132KV LESSOS-KABARNET-NYAHURURU-NANYUKI, HELD ON 18^H DECEMBER 2009 AT THE D.Os OFFICE, MOCHONGOI DIVISION, MARIGAT DISTRICT

AGENDA

1. Introduction and brief remarks by the chair
2. Project Description brief by the project team leader
3. Proposed project impacts
4. Affected persons views and comments
5. Recommendations
6. A.O.B

Preliminary

The meeting was called to order at 10.20a.m, chaired by the area-acting chief, Mr. Stephen Lobeles on behalf of the D.O and flanked by the administration police inspector After this the opening prayers were said by a pastor in attendance The chairperson asked everyone in attendance to introduce himself or herself starting with the team leader. Most of those identified as Project Affected Persons (PAPS) were present or had sent their representatives. At least fifteen people attended

Min 1/09/09: Opening Remarks

The chair of the meeting cautioned about the security of the area due to it being a border area of several communities and traversing across two districts, and congratulated the team for calling upon the office on arrival at the area. He then invited the team leader to give a brief project description. The team leader gave a brief overview of the whole project in its detail and components including the background to the whole programme in which this particular project falls under. He explained that the need for Environmental and Social Impact Assessment (ESIA) and Resettlement Action Plan (RAP) as stipulated in the National laws; and the World Bank guidelines regarding such projects; and stressed the need for this public consultative and hence participation He also stated that the purpose of the meeting was to create awareness of the proposed project, to obtain views/concerns of the stakeholders, and to clarify issues that are not clear about the project

Min 2/09/09: Proposed project impacts

The project team leader went through the motions of the impacts that are expected from the setting up of such a project and not excluding; the requirement for right of way in the way leaves required that would lead to displacement hence the need for compensation of

those affected by the way leave. The team leader then explained to detail the criteria, means, and standards to be used in effecting the ESIA and RAP and these were evident. He also assured them that all safeguard in terms of developed versus undeveloped plot. Alternatives to the proposed route were also deliberated as this was seen to ameliorate the anticipated impacts.

Min 3/09/09: Issues Raised

The team leader and chair invited the members to give their views regarding the project as they wished, and the following concerns were raised:

- **Access to electricity**

Most of those present at the meeting were of the opinion that they have never benefited from earlier electricity projects and therefore were wary that these would not benefit them as well but the team leader explained the smaller distribution line projects were not of equal importance and impact as the big transmission line project. They were therefore of the conclusion that the project will benefit the nation and in return other users and the future generations due to its nature and magnitude as the benefits of the commodity to be transmitted were varied and necessary.

- **Cost of electricity**

Some members' present and especially affected persons were of the opinion that despite the initial loss of property, they would also benefit from the lowered cost of electricity in the long run as most had also applied for the same commodity

- **Employment opportunities**

Those present at the meeting were aware of the benefits that would be directly befall them once the project took off, as there were many youths in the area who were unemployed. Hence, their access to non-technical jobs will benefit the youths and the communities at large.

- **Community involvement**

Most of those present decried the sorry state of the forests in the area and used this forum to appeal to the administration, project owners and other stakeholders to be involved at all stages of the project. In response, the team leader explained that the proposed line project would take all considerations so as not only to be economically viable, but also environmentally sound, and socially acceptable.

- **Census results**

Some of those present were not convinced that the list of those affected as exhaustive but were assured by the team leader that the ESIA and RAP process as continuous and further consultations would continue at all levels of the project lifecycle. They were also assured that the compensation would be guided and determined by national and World Bank standards.

Min 04/09/09: Recommendations and conclusions

Transparency in valuation and determination was seen as an issue that needed to be addressed by the proponent before negotiations commence, to remove the feeling that some people have been shortchanged.

Min 05/09/09: A.O.B

All present were supportive of the project and having being assured that their concerns would be taken into account.

Adjournment

There being no other business for discussion the meeting was adjourned at 12.09 p.m with closing prayers said by the pastor.

SECRETARY

NAME: Dominic Munyao SIGN..... DATE.....

CONSULTANT

NAME: Prof Jacob Kibwage SIGN:..... DATE.....

Confirmed by:

NAME..... SIGN..... DATE.....

**MINUTES OF PUBLIC MEETING ON PROPOSED 235KM TRANSMISSION LINE 132KV
LESSOS-KABARNET-NYAHURURU-NANYUKI, HELD ON 17^H DECEMBER 2009 AT
MAYATTA IN TWO TWO VILLAGE OPPOSITE SWEETWATERS TENTED CAMP, LAIKIPIA
DISTRICT**

AGENDA

1. Introduction and brief remarks by the chair
2. Project Description brief by the project team leader
3. Project ramifications and impacts
4. Issues raised
5. Recommendations
6. A.O.B

Preliminary

The meeting was called to order at 2.00p.m, chaired by the Manyatta elder, Mr.Peter Kuraru The chairperson asked everyone in attendance to introduce himself or herself starting with the team leader. It was noted that most of the identified project affected persons were present or their representatives. At least twenty-two people attended.

Min 1/09/09:Project description brief by team leader

The team leader gave a brief overview of the whole project in its detail and components He explained that the need for Environmental and Social Impact Assessment(ESIA) as stipulated in the National laws and the world bank guidelines and stressed the need for this public consultative and hence participation He also stated that the purpose of the meeting was to create awareness of the proposed project, to obtain views/ concerns of the stakeholders, and to clarify issues that are not clear about the project most of this issues that came to the fore are related to employment ,displacement and compensation.

Min 2/09/09: Project ramifications and impacts

The project team leader gave an overview of the real and the perceived impacts ones that include; the requirement for right of way in the way leaves required that would lead to displacement hence the need for compensation of those affected by the way leave. The team leader explained further the impacts to the natural and built environment. The people affected by the project wanted to know the details as contained in the feasibility study details and the earlier process of identifying the affected people; and estimates of the people and property affected but later valuations would be carried out to determine the market values of the affected property before any displacement are affected. He also

assured them that all safeguard policies including NEMA and World Bank guidelines regarded.

Min 3/09/09: Issues Raised

The team leader invited the members to give their views regarding the project and the following issues and concerns were raised:

- **Expected project take off**

Most of those present at the meeting were concerned that the project may take off before they complete their preparations for relocation but were assured by the team leader that these processes take time and it would not be before one year should it take off proper and the due process is followed. They were also informed that these projects are in a major programme that is spread over the whole 2020-year plan target that involves increasing rural access from 4% to 40%.

- **Direct benefits**

Those at the meeting expressed concern at the direct benefits that accrue to such projects may not trickle down to the locals through employment opportunities but they were assured that they would be considered for non-technical jobs during the project cycle. Other indirect benefits were seen to be imminent should the project take off.

- **Compensation process**

The members of public affected by the project questioned the compensation rates to be applied in assessment of the property but were assured that the national guidelines and the World Bank guidelines would be applied in the process and qualified valuers would be applied in the process. Another question that emerged was the property or new developments that were to be developed after the present property have been identified. These property not included in the RAP would be confirmed once a full census of the property is established.

Min 04/09/09: Recommendations and conclusions

All those present at the meeting were of the opinion that; the project was beneficial to themselves and the nation at large and would support it as long as their interests (compensation, employment, and displacement) are taken care of before the project takes off.

Min 05/09/09: A.O.B

There was not any other business to discuss.

Adjournment

There being no other business for discussion the meeting was adjourned at 2.40 p.m.

SECRETARY

NAME: Dominic Munyao SIGN..... DATE.....

CONSULTANT

NAME: Prof Jacob Kibwage SIGN:..... DATE.....

Confirmed by:

NAME..... SIGN..... DATE.....

**MINUTES OF PUBLIC MEETING ON PROPOSED 235KM TRANSMISSION LINE
132KV LESSOS-KABARNET-NYAHURURU-NANYUKI, HELD ON 17^H DECEMBER
2009 AT THE CHIEFS OFFICE, NANYUKI LOCATION, LAIKIPIA DISTRICT**

AGENDA

1. Introduction and brief remarks by the chair
2. Project Description brief by the project team leader
3. Project ramifications and impacts
4. Project alternatives
5. Issues raised
6. Recommendations
7. A.O.B

Preliminary

The meeting was called to order at 10.25a.m, chaired by the area chief, Mr. Ramesh Gathogo. The chairperson asked everyone in attendance to introduce himself or herself starting with the team leader. It was noted that most of the identified project affected persons were present or their representatives. At least fifteen people attended.

Min 1/09/09: Opening Remarks

The team leader gave a brief overview of the whole project in its detail and components. He explained that the need for Environmental and Social Impact Assessment (ESIA) as stipulated in the National laws and the world bank guidelines and stressed the need for this public consultative and hence participation. He also stated that the purpose of the meeting was to create awareness of the proposed project, to obtain views/ concerns of the stakeholders, and to clarify issues that are not clear about the project.

Min 2/09/09: Project ramifications and impacts

The project team leader gave an overview of the real impacts and the perceived ones that include; the requirement for right of way in the way leaves required that would lead to displacement hence the need for compensation of those affected by the way leave. The team leader explained at length that the process already done was identifying the affected people; and estimates of the property affected but later valuations would be carried out to determine the market values of the affected property before any displacement are affected. He also assured them that all safeguard in terms of developed versus undeveloped plot would be put into consideration. He also tabled these guidelines so that all may see them for assurance that they would be applied in these situations.

Min 3/09/09: Issues Raised

The team leader and chair invited the members to give their views regarding the project as they wished, and the following concerns were raised:

- **Human Health**

Some of those present at the meeting were wary of the presence of the high-tension wires in their immediate environment, especially leukaemia but the team leader explained that these studies were not yet completed and hence these are at present only perceived risks that cannot be quantified empirically.

- **Air Force area and effects on birdlife**

The members present some who were conservationists wondered if the birdlife and migratory animals would be affected by this development as they cross this area coupled with the presence of the airfield in the immediate neighbourhood but were assured of these issues were to be mitigated fully in the ESIA.

- **Valuation Process**

An affected party with a developed plot near the substation at Nanyuki was wary of her plot since she had already applied for electricity and had done a lot of wiring in readiness for the electricity but was assured by the team leader that the actual valuation was site, area specific as is where is basis and the due standards would be followed to the letter in the same vein most affected persons were wary of their acceptance of the project, if direct benefits would be imminent but they were informed that this would take in first before any other benefits can trickle down. This is because; this was explained to them as a transmission line and not a distribution line with clear differences as explained earlier.

- **Alternative route**

Another member of those in the meeting tried to explain that an alternative route could be found from among the large ranches at Ndurukuma; as these are not only tourist circuit about three kilometres from the town but are largely undeveloped expanse of about 120 acres. This was his bid to ensure that the proposed route moves away from the developed areas and thus creating resettlement problems in this exercise. However, in response the team leader explained that the proposed line route was found to be the economically viable, environmentally sound, and socially acceptable.

- **Generation options and underground cabling**

One of those present wondered if the line can be diverted to other existing lines but it was seen to be a case of overloading the existing load of the line. Another member wondered if the power were produced, using other means would still need transmission lines but it was agreed that no other feasible means were available now in the country. Underground cabling was also discussed but it was found to create more risky activities due to people digging up these lines. Concerns were raised by some of those present about the risk of Maasai Moran climbing these pylons to be put up but the team leader assured them that the necessary occupational health and safety issues will be adhered to hence these risks are reduced significantly.

- **Effect on Productivity of Humans**

One of those present enquired about the impacts of these high voltage lines on the livestock, houses if not removed from the way leaves and were worried about their impact on productivity of the populace, and saw this as a cheap way of controlling the human population increase in the country.

Min 04/09/09: Recommendations and Conclusions

It was agreed that the proposed project had these attributes and certain conclusions and recommendations could be made:

- An analogy of the relationship between the proposed project and other infrastructure projects and this was seen to be in tandem with the energy sector access scale up programme goals and objectives of increasing access from 4% to 40% by 2020.
- The chair concluded that these objections to the project they are seen to be objective and not subjective as the analysis would be done to determine the best possible route.
- The residents said that they were supportive of the project as it is a good idea but on condition that the route generates alternatives

Min 05/09/09: A.O.B

The team leader and the chair upon exhaustion of the views gave a final take on the alternatives and assured them that all views would be taken down and recorded and the forwarded to the necessary authorities for further action. The team leader assured the residents that recommendations for the project would be made accordingly.

Adjournment

There being no other business for discussion the meeting was adjourned at 11.30 a.m.

SECRETARY

NAME: Dominic Munyao SIGN..... DATE.....

CONSULTANT

NAME: Prof Jacob Kibwage SIGN:..... DATE.....

Confirmed by:

NAME..... SIGN..... DATE.....

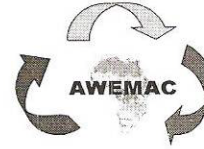
Annex V: Lists of Attendance for the Public Meetings

**PUBLIC CONSULTATIVE MEETING
ON THE PROPOSED CONSTRUCTION OF 235 KM OF 132KV CIRCUIT TRANSMISSION LINE:
FROM LESSOS-KABARNET-NYAHURURU/RUMURUTI -NANYUKI.**

CLIENT/PROPONENT: KENYA POWER AND LIGHTING COMPANY (KPLC)

ENVIRONMENTAL CONSULTANT

**Africa Waste and Environment Management Centre,
Muthaiga Mini Market Complex,
Left Wing 3rd floor,
P.O. Box 63891-00619,
MUTHAIGA - NAIROBI
Tel 020 2012408 Email: awemac_ken@yahoo.com Website: www.awemac.org
NEMA Reg. No. 0527**



**LIST OF ATTENDANCE FOR THE MEETING HELD AT THE SITE DATE..... OF
DECEMBER 2009 TIME: 2:30, VENUE..... S.M.A.B.L.....**

NAMES	RESIDENCE	OCCUPATION	SIGNATURE
Philip kimetto	Chepkorio	Farmer	<i>[Signature]</i>
M.K. MAINA	CHEPKORIO	Farmer	<i>[Signature]</i>
Francois K. Laalaci	Chepkorio	Farmer	<i>[Signature]</i>
William K. Kinsara	CHEPKORIO	CHIEF - CHEPKORIO	<i>[Signature]</i>
William Kamau	CHEPKORIO	FARMER/RUMURUTI	<i>[Signature]</i>
NELSON B. KIPSABIT.	MARICHOLO LOCATION	CHIEF	<i>[Signature]</i>

AGENDA

1. Public participation in KPLC Lessos-Nanyuki Transmission line

2. AOB

CONFIRMED BY:

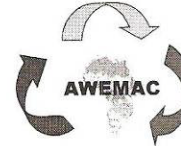
NAME Andala David SIGNATURE *[Signature]* DATE 17/12/2009

**PUBLIC CONSULTATIVE MEETING
ON THE PROPOSED CONSTRUCTION OF 235 KM OF 132KV CIRCUIT TRANSMISSION LINE:
FROM LESSOS-KABARNET-NYAHURURU/RUMURUTI -NANYUKI.**

CLIENT/PROONENT: KENYA POWER AND LIGHTING COMPANY (KPLC)

ENVIRONMENTAL CONSULTANT

**Africa Waste and Environment Management Centre,
Muthaiga Mini Market Complex,
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P.O. Box 63891-00619,
MUTHAIGA - NAIROBI
Tel 020 2012408 Email: awemac_ken@yahoo.com Website: www.awemac.org
NEMA Reg. No. 0527**



**LIST OF ATTENDANCE FOR THE MEETING HELD AT THE SITE DATE..... OF
DECEMBER 2009 TIME: 2.30VENUE.....Small.....N.Narket**

NAMES	RESIDENCE	OCCUPATION	SIGNATURE
DAVID KIPKODI	CHEROTARUB-LOC.	FARMER	[Signature]
CAROLINE KIBET	FLAX	FARMER	[Signature]
Sally J. Kimereng	CHEPKORIO Sub.	FARMER	[Signature]
Zipora Jipoketo	Horro FLD	FARMER	[Signature]
WILSON KIPKODI			
MUSA KIPKAGAT	CHEPKORIO	FARMER	[Signature]
AMON KIPKORIR	CHEPKORIO	FARMER	[Signature]
MUSA BIRILWA	C	farmer	[Signature]
Simion KAMWONG	C	"	[Signature]
JOSPH CHEMUNJI		"	[Signature]
JOHN KIPKAGAT		"	
Brea Kinola	Chepkoria C	T. Merchant	[Signature]
HILDA KIMWANI	Chepkoria	T. Merchant	[Signature]
DANIEL NING'ETI	Flax (Sect Two)	B. man	[Signature]
Kedi Chemuyot	Chepkorio	B. man	[Signature]
Julius Idibashi	Ohankwido	B/ man	[Signature]
Luka KIMWANI	"	B. man	[Signature]
Joel K. Geron	Chepkoria	Farmer	[Signature]
Gerald KIPARUS	Chepkorio	Farmer	[Signature]
SAMSON CHEPKORIO	CHEPKORIO	B. man	[Signature]
Shadrack Chemuyot	Muthaiga	Business	[Signature]
JOEL KAMWONG	Chepkorio	"	[Signature]
Joseph Chemuo	Small Town	B/ man	[Signature]
PETER K. MAWA	Small Town	B/ man	[Signature]
Nelip J. Sanyal	Small Town	B/ man	[Signature]
DAVID K. MAWA	Small Town	Farmer	[Signature]
SAMSON KIPKAGAT	B. man Small	B. man	[Signature]
SHADRACK KIPKAGAT	cherota sub-lo	farmer	[Signature]

AGENDA

1. Public participation in KPLC Lessos-Nanyuki Transmission line
2. AOB

CONFIRMED BY:

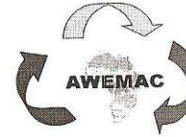
NAME: Andala David SIGNATURE: [Signature] DATE: 17/12/2009

**PUBLIC CONSULTATIVE MEETING
ON THE PROPOSED CONSTRUCTION OF 235 KM OF 132KV CIRCUIT TRANSMISSION LINE:
FROM LESSOS-KABARNET-NYAHURURU/RUMURUTI -NANYUKI.**

CLIENT/PROPONENT: KENYA POWER AND LIGHTING COMPANY (KPLC)

ENVIRONMENTAL CONSULTANT

**Africa Waste and Environment Management Centre,
Muthaiga Mini Market Complex,
Left Wing 3rd floor,
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MUTHAIGA - NAIROBI**



Tel 020 2012408 Email: awemac_ken@yahoo.com Website: www.awemac.org

NEMA Reg. No. 0527

Samburu Manupatta - Two Two Village

LIST OF ATTENDANCE FOR THE MEETING HELD AT THE SITE DATE: 17th OF
DECEMBER 2009 TIME: 2 PM. VENUE: SAMBURU MANUPATTA

NAMES	RESIDENCE	OCCUPATION	SIGNATURE
Elijah Muthusi	NAIROBI	ESIA & RAP EXPERT	<i>[Signature]</i>
Andrew Mburu	Nairobi	ESIA & RAP EXPERT	<i>[Signature]</i>
LUPORJE MATHUKO	Samburu Manupatta	Pastor	<i>[Signature]</i>
Peter Kwarau	TWO-TWO	Bl man	<i>[Signature]</i>
JOHN NGITHA	TWO TWO	Bl man	<i>[Signature]</i>
Johnson Kaituma	Two Two	Bl man	<i>[Signature]</i>
JOSEPH MAMTALI	TWO TWO	Bl man	<i>[Signature]</i>
JULIUS LENGETIA	TWO-TWO	Bl man	<i>[Signature]</i>
JOSEPH LEKULIPAN	TWO-TWO	Bl man	<i>[Signature]</i>
SAMMY KEMBITI	TWO-TWO	Bl man	<i>[Signature]</i>
NELSON RIPOI	Two - Two	Bl Man	<i>[Signature]</i>
KALAYA KAGIZI	TWO-TWO	Bl man	<i>[Signature]</i>
LENTITANI LOKOJA	TWO-TWO	Bl man	<i>[Signature]</i>
SIMON KOKSIE	TWO-TWO	Herdsman	<i>[Signature]</i>
Jestina MILTO	Two - Two	Bl man	<i>[Signature]</i>
Sakoma MATHAZ	Two Two	Bl man	<i>[Signature]</i>
NYAGAKA MAMUNGA	NAIROBI	TEAM LEADER	<i>[Signature]</i>
Dominic MUYAO	NAIROBI	ESIA & RAP EXPERT	<i>[Signature]</i>
Karukai Lemunsh	Two - Two	Bl man	<i>[Signature]</i>
Ole Karukuli	Two - Two	Herdsman	<i>[Signature]</i>
Lemurkishan	Two - Two	Herdsman	<i>[Signature]</i>
Pifain Lekukuli	Two Two	Herdsman	<i>[Signature]</i>

84
07146484
072888253
0724128754
0727116218
0722219114
0724809478
0710698116
0724658174
0726994851
0727048993
0729553260
075285070
N/A
N/A
N/A
N/A

AGENDA

1. Public participation in KPLC Lessos-Nanyuki Transmission line
2. AOB

CONFIRMED BY:

NAME
Elijah Muthusi
Peter Kwarau

SIGNATURE
[Signature]
[Signature]

DATE.....
17/12/2009
17/12/2009

PUBLIC CONSULTATIVE MEETING
ON THE PROPOSED CONSTRUCTION OF 235 KM OF 132KV CIRCUIT TRANSMISSION LINE:
FROM LESSOS-KABARNET-NYAHURURU/RUMURUTI -NANYUKI.

CLIENT/PROPONENT: KENYA POWER AND LIGHTING COMPANY (KPLC)

ENVIRONMENTAL CONSULTANT

Africa Waste and Environment Management Centre,
Muthaiga Mini Market Complex,
Left Wing 3rd floor,
P.O. Box 63891-00619,
MUTHAIGA - NAIROBI



Tel 020 2012408 Email: awemac_ken@yahoo.com Website: www.awemac.org

NEMA Reg. No. 0527

LIST OF ATTENDANCE FOR THE MEETING HELD AT THE SITE DATE ¹⁷~~18~~ OF
DECEMBER 2009 TIME: 10:30 AM VENUE: ~~M.A. Tenge Chief's office~~

NAMES	RESIDENCE	OCCUPATION	SIGNATURE
ELIJAH MUTHAIGA	NAIROBI	ESIA EXPERT	[Signature]
Dominic Muryoo	NAIROBI	"	[Signature]
ALEXANDER WRATISLAW	KAKINDIA RD. NUK	Retired	[Signature]
JOSEPH KAMAU FOR PETER M. KENKESY	NYERI	TRENCH FARM	[Signature]
DOUGLAS M. KAMAU	NANYUKI	NANYUKI	[Signature]
JOHN WACHIRA	NANYUKI	NANYUKI	[Signature]
JOHN KARUA	NANYUKI	Teacher	[Signature]
IRENE MURITHI	NANYUKI	HOUSEWIFE	[Signature]
ATHAN IMBURU	NANYUKI	RESIDENT	[Signature]
JAMES WAMBE	NANYUKI	RESIDENT	[Signature]
JOHN WELINDI	Op. Bus	TOWNSMAN	[Signature]
RAMESH GATHOGO	NANYUKI	CHIEF	[Signature]
Ann Wangari	KARATINA	Housewife	[Signature]
NYAKA NYAMWETA	NAIROBI	TEAM LEADER	[Signature]

- AGENDA**
 1. Public participation in KPLC Lessos-Nanyuki Transmission line
 2. AOB

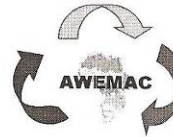
CONFIRMED BY:
 NAME SIGNATURE DATE.....
 Elijah Muthaiga [Signature] 17/12/2009
 RAMESH GATHOGO [Signature] 17/12/09 CHIEF
 NANYUKI LOCAL

**PUBLIC CONSULTATIVE MEETING
ON THE PROPOSED CONSTRUCTION OF 235 KM OF 132KV CIRCUIT TRANSMISSION LINE:
FROM LESSOS-KABARNET-NYAHURURU/RUMURUTI -NANYUKI.**

CLIENT/PROPONENT: KENYA POWER AND LIGHTING COMPANY (KPLC)

ENVIRONMENTAL CONSULTANT

**Africa Waste and Environment Management Centre,
Muthaiga Mini Market Complex,
Left Wing 3rd floor,
P.O. Box 63891-00619,
MUTHAIGA - NAIROBI
Tel 020 2012408 Email: awemac_ken@yahoo.com Website: www.awemac.org
NEMA Reg. No. 0527**



LIST OF ATTENDANCE FOR THE MEETING HELD AT THE SITE DATE 18th OF
DECEMBER 2009 TIME: 10 AM VENUE: P.O.S. OFFICE... MOCHONGUI

NAMES	RESIDENCE	OCCUPATION	SIGNATURE
Elijah Mutthmsi	Nairobi	ESIA & RAP EXPERT	<i>[Signature]</i>
Dominic Mwangi	Nairobi	ESIA & RAP EXPERT	<i>[Signature]</i>
DAVID MATIAS	ITHGIO	FARMER	<i>[Signature]</i>
SOS PETER G. MWAI	ITHGIO	FARMER	<i>[Signature]</i>
ISAACH KATHGA	ITHGIO	FARMER	<i>[Signature]</i>
ESTHER CHERCHUMBA	ITHGIO	FARMER	<i>[Signature]</i>
STEPHEN MURUTHI	ITHGIO	FARMER	<i>[Signature]</i>
JOHN MWANGI	ITHGIO	BUSINESS MAN	<i>[Signature]</i>
JANE SANG	ITHGIO	FARMER	<i>[Signature]</i>
YVONNE RHEBET	ITHGIO	FARMER	<i>[Signature]</i>
ANTHONY MBURY	NAIROBI	ESIA & RAP	<i>[Signature]</i>
JOSEPH KANDARA	MOCHONGUI	STAFF P.O.S	<i>[Signature]</i>
STEPHEN LOBOK	MOCHONGUI	AG. CHIEF, MOCHONGUI	<i>[Signature]</i>
MOSES LEMURUKA	MOCHONGUI	INSPECTOR	<i>[Signature]</i>
WILSON KABUNDU	MOCHONGUI	CHIEF, MOCHONGUI	<i>[Signature]</i>

TEL:
0721 802056
0715708070
0726795499
0727706668
0725353249
0726655353
0721 149702
0729348747
0715348222
0722-9673041
0710-179923
0720330732
0725590421
0720852604
0724970626

AGENDA

1. Public participation in KPLC Lessos-Nanyuki Transmission line
2. AOB

CONFIRMED BY:

NAME SIGNATURE DATE.....

Elijah Mutthmsi *[Signature]*
 Moses Lemuruka *[Signature]* DISTRICT OFFICER 18/12/2009
 MOCHONGUI DIVISION
 STEPHEN MOLOK LOBOK *[Signature]* 18/12/2009

Annex VI: List of Coordinates

LIST OF COORDINATES PICKED DURING THE ESIA STUDY FOR THE PROPOSED SINGLE CIRCUIT 132KV TRANSMISSION LINE-MARIGAT- NANYUKI ROUTE :
(UTM SYSTEM FOR ZONE 37N)

Points	Northing	Easting
YY1	005123	0168495
YY2	0050457	0168744
YY3	0048845	0168594
RRR3	0038256	0194092
RRR2	0038497	0193788
RRR1	0038148	0194328
RRR	0036408	0195988
RR9	0036041	0196268
RR8	00035155	0197408
RR7	0035688	0196642
RR6	0035892	0196453
RR5	00348980	0197367
RR4	0034616	0197516
RR3	0031747	0200288
RR2	0031431	0199981
RR1	0031351	0199919
NN3	0027203	211540
NN2	0033196	0211990
NN1	0028760	0225641
MM8	0027658	0226033
MM7	0027878	0226328
MM6	0027238	0226721
MM5	0022369	0232919
MM4	009650	0239369
MM3	0008961	0240751
MM1	008872	0240058
LLL	0010685	0264799
KKK	0010685	0265969
JJJ	0010021	0266355
CCC	003629	0272752
A9a	0003355	0283236
A8a	0002451	0283225
A7b/a	0002402	0283222
A18b	0006296	0282719
A17b	0005272	0283183
A16b	0004587	0283556

A15b	0004413	0283682
A14b	0004345	0283481
A13b	0004419	0283749
A12b	0004224	0283849
A11b	0003879	0284085
A10b	0003879	0284085
A9b	0003845	0284071
A8b	0003256	0283668
A7b/a	0002402	0283222
A6	0001589	0253335
A5	0001828	0283310
A4	0001245	0283300
A3	0000704	0283252
A2	0000444	0283154
A1	9999834	0284888

Initial Coordinates for the proposed 132KV transmission line from Lessos-Nanyuki as per scoping report.

POINTS	NORTHING	EASTING
Nanyuki-Rumuruti-Marigat		
E	816140.752	53102.300
AA	9033.983	281560.284
BB	9358.869	275465.336
CC	9015.249	271775.652
DD	12524.147	261640.771
E	4529.961	283795.797
FF	9429.987	249590.228
GG	9394.424	242655.46
HH	11516.381	238283.305
H	21042.186	234401.216
JJ	26628.78	229283.701
KK	27960.063	224399.415
LL	28243.992	224076.282
MM	27215.298	221751.886

NN	27203.8703	211540.219
OO	29913.314	205835.832
PP	31423.694	203019.099
QQ	31462.705	201424.764
RR	40062.507	191807.889
SS	41716.609	191419.013
TT	42089.528	190764.71
UU	42667.364	190389.863
VV	44805.831	188963.722
WW	46004.476	186790.597
XX	46795.957	182059.672
YY	47013.56	168447.299
ZZ	51340.04	163128.402
Marigat-Kabarnet-Lessos section		
A	836480.362	47013.56
B	831161.465	51340.04
C	826418.26	52947.206
D	817947.424	52164.156
E	816140.752	53102.300
F	811890.794	52735.070
G	808513.405	53170.655
H	807348.837	53059.381
I	805333.529	53004.785
J	804283.173	53580.711
K	804208.207	54293.683
L	803200.21	54804.295
M	803034.334	54785.625
N	799108.099	51010.927
O	793629.317	49916.055
P	790010.026	49912.76
Q	787881.028	48891.441
R	785962.972	44157.191
S	781747.586	40803.897
T	777614.264	38385.606
U	773941.924	36470.662
V	767104.545	32544.331
W	756837.359	25383.244
X	755891.594	24317.339

DETAILED COORDINATES OF THE MARIGAT - KABARANET - LESSOS ROUTE AT INTERVAL OF 500 METERS				
	L - K		D - C	
N=782138.880 E=41115.167 Z=0.000	LK1	N=803423.228 E=54691.323 Z=0.000	DC1	N=826162.399 E=52923.554 Z=0.000
N=782530.174 E=41426.437 Z=0.000	LK2	N=803646.247 E=54578.350 Z=0.000	DC2	N=825913.460 E=52900.542 Z=0.000
N=782921.468 E=41737.707 Z=0.000	LK3	N=803869.265 E=54465.378 Z=0.000	DC3	N=825664.522 E=52877.530 Z=0.000
N=783312.762 E=42048.977 Z=0.000	LK4	N=804092.284 E=54352.405 Z=0.000	DC4	N=825415.583 E=52854.518 Z=0.000
N=783704.056 E=42360.247 Z=0.000			DC5	N=825166.644 E=52831.506 Z=0.000
N=784095.350 E=42671.517 Z=0.000	K - J		DC6	N=824917.706 E=52808.494 Z=0.000
N=784486.644 E=42982.787 Z=0.000	KJ1	N=804234.349 E=54045.053 Z=0.000	DC7	N=824668.767 E=52785.482 Z=0.000
N=784877.938 E=43294.057 Z=0.000	KJ2	N=804260.491 E=53796.424 Z=0.000	DC8	N=824419.828 E=52762.470 Z=0.000
N=785269.232 E=43605.327 Z=0.000			DC9	N=824170.890 E=52739.458 Z=0.000
N=785660.526 E=43916.597 Z=0.000	J - I		DC10	N=823921.951 E=52716.446 Z=0.000
	JI1	N=805160.012 E=53099.927 Z=0.000	DC11	N=823673.012 E=52693.434 Z=0.000
	JI2	N=804940.802 E=53220.123 Z=0.000	DC12	N=823424.074 E=52670.422 Z=0.000
	JI3	N=804721.592 E=53340.319 Z=0.000	DC13	N=823175.135 E=52647.410 Z=0.000
N=786150.721 E=44620.602 Z=0.000	JI4	N=804502.383 E=53460.515 Z=0.000	DC14	N=822926.197 E=52624.398 Z=0.000
N=786338.470 E=45084.014 Z=0.000			DC15	N=822677.258 E=52601.386 Z=0.000
N=786526.219 E=45547.426 Z=0.000	I - H		DC16	N=822428.319 E=52578.374 Z=0.000
N=786713.967 E=46010.837 Z=0.000	IH1	N=805583.438 E=53011.555 Z=0.000	DC17	N=822179.381 E=52555.361 Z=0.000

N=786901.716 E=46474.249 Z=0.000	IH2	N=805833.346 E=53018.325 Z=0.000	DC18	N=821930.442 E=52532.349 Z=0.000
N=787089.465 E=46937.661 Z=0.000	IH3	N=806083.254 E=53025.096 Z=0.000	DC19	N=821681.503 E=52509.337 Z=0.000
N=787277.213 E=47401.072 Z=0.000	IH4	N=806333.162 E=53031.866 Z=0.000	DC20	N=821432.565 E=52486.325 Z=0.000
N=787464.962 E=47864.484 Z=0.000	IH5	N=806583.071 E=53038.636 Z=0.000	DC21	N=821183.626 E=52463.313 Z=0.000
N=787652.711 E=48327.896 Z=0.000	IH6	N=806832.979 E=53045.406 Z=0.000	DC22	N=820934.687 E=52440.301 Z=0.000
	IH7	N=807082.887 E=53052.177 Z=0.000	DC23	N=820685.749 E=52417.289 Z=0.000
			DC24	N=820436.810 E=52394.277 Z=0.000
			DC25	N=820187.871 E=52371.265 Z=0.000
N=788331.840 E=49107.703 Z=0.000	G - F		DC26	N=819938.933 E=52348.253 Z=0.000
N=788782.651 E=49323.964 Z=0.000	GF1	N=811736.708 E=52754.942 Z=0.000	DC27	N=819689.994 E=52325.241 Z=0.000
N=789233.463 E=49540.226 Z=0.000	GF2	N=811488.762 E=52786.920 Z=0.000	DC28	N=819441.056 E=52302.229 Z=0.000
N=789684.274 E=49756.487 Z=0.000	GF3	N=811240.815 E=52818.898 Z=0.000	DC29	N=819192.117 E=52279.217 Z=0.000
	GF4	N=810992.869 E=52850.876 Z=0.000	DC30	N=818943.178 E=52256.205 Z=0.000
	GF5	N=810744.923 E=52882.854 Z=0.000	DC31	N=818694.240 E=52233.193 Z=0.000
N=790510.025 E=49913.212 Z=0.000	GF6	N=810496.976 E=52914.832 Z=0.000	DC32	N=818445.301 E=52210.181 Z=0.000
N=791010.025 E=49913.667 Z=0.000	GF7	N=810249.030 E=52946.809 Z=0.000	DC33	N=818196.362 E=52187.169 Z=0.000
N=791510.025 E=49914.123 Z=0.000	GF8	N=810001.083 E=52978.787 Z=0.000		
N=792010.025 E=49914.579 Z=0.000	GF9	N=809753.137 E=53010.765 Z=0.000	C - B	
N=792510.025 E=49915.035 Z=0.000	GF10	N=809505.191 E=53042.743 Z=0.000	CB1	X=830917.025 Y=51422.865 Z=0.000

N=793010.024 E=49915.491 Z=0.000	GF11	N=809257.244 E=53074.721 Z=0.000	CB2	X=830680.248 Y=51503.093 Z=0.000
	GF12	N=809009.298 E=53106.699 Z=0.000	CB3	X=830443.470 Y=51583.322 Z=0.000
	GF13	N=808761.351 E=53138.677 Z=0.000	CB4	X=830206.693 Y=51663.550 Z=0.000
N=794119.623 E=50014.037 Z=0.000			CB5	X=829969.916 Y=51743.779 Z=0.000
N=794609.928 E=50112.019 Z=0.000	F - E		CB6	X=829733.139 Y=51824.007 Z=0.000
N=795100.234 E=50210.001 Z=0.000	FE1	N=815875.944 E=53079.419 Z=0.000	CB7	X=829496.362 Y=51904.236 Z=0.000
N=795590.539 E=50307.983 Z=0.000	FE2	N=815626.872 E=53057.897 Z=0.000	CB8	X=829259.585 Y=51984.464 Z=0.000
N=796080.845 E=50405.965 Z=0.000	FE3	N=815377.800 E=53036.375 Z=0.000	CB9	X=829022.808 Y=52064.693 Z=0.000
N=796571.151 E=50503.947 Z=0.000	FE4	N=815128.729 E=53014.853 Z=0.000	CB10	X=828549.254 Y=52225.150 Z=0.000
N=797061.456 E=50601.929 Z=0.000	FE5	N=814879.657 E=52993.332 Z=0.000	CB11	X=828312.477 Y=52305.378 Z=0.000
N=797551.762 E=50699.911 Z=0.000	FE6	N=814630.585 E=52971.810 Z=0.000	CB12	X=828075.700 Y=52385.607 Z=0.000
N=798042.067 E=50797.893 Z=0.000	FE7	N=814381.513 E=52950.288 Z=0.000	CB13	X=827838.923 Y=52465.835 Z=0.000
N=798532.373 E=50895.875 Z=0.000	FE8	N=814132.441 E=52928.766 Z=0.000	CB14	X=827602.146 Y=52546.064 Z=0.000
	FE9	N=813883.369 E=52907.244 Z=0.000	CB15	X=827365.368 Y=52626.292 Z=0.000
	FE10	N=813634.297 E=52885.722 Z=0.000	CB16	X=827128.591 Y=52706.521 Z=0.000
	FE11	N=813385.225 E=52864.201 Z=0.000	CB17	X=826891.814 Y=52786.749 Z=0.000
N=799468.540 E=51357.457 Z=0.000	FE12	N=813136.153 E=52842.679 Z=0.000	CB18	X=826655.037 Y=52866.978 Z=0.000
N=799828.981 E=51703.986 Z=0.000	FE13	N=812887.081 E=52821.157 Z=0.000		
N=800189.422 E=52050.515 Z=0.000	FE14	N=812638.010 E=52799.635 Z=0.000	B - A	

N=800549.863 E=52397.044 Z=0.000	FE15	N=812388.938 E=52778.113 Z=0.000	BA1	X=831471.771 Y=51087.631 Z=0.000
N=800910.303 E=52743.573 Z=0.000	FE16	N=812139.866 E=52756.591 Z=0.000	BA2	X=831782.078 Y=50835.223 Z=0.000
N=801270.744 E=53090.102 Z=0.000			BA3	X=832092.384 Y=50582.815 Z=0.000
N=801631.185 E=53436.631 Z=0.000	E - D		BA4	X=832402.690 Y=50330.406 Z=0.000
N=801991.626 E=53783.160 Z=0.000	ED1	N=816362.622 E=52987.090 Z=0.000	BA5	X=832712.997 Y=50077.998 Z=0.000
N=802352.067 E=54129.690 Z=0.000	ED2	N=816584.493 E=52871.880 Z=0.000	BA6	X=833023.303 Y=49825.590 Z=0.000
N=802712.507 E=54476.219 Z=0.000	ED3	N=816806.364 E=52756.670 Z=0.000	BA7	X=833333.609 Y=49573.181 Z=0.000
	ED4	N=817028.235 E=52641.460 Z=0.000	BA8	X=833643.916 Y=49320.773 Z=0.000
	ED5	N=817250.106 E=52526.250 Z=0.000	BA9	X=833954.222 Y=49068.365 Z=0.000
	ED6	N=817471.976 E=52411.040 Z=0.000	BA10	X=834264.528 Y=48815.956 Z=0.000
	ED7	N=817693.847 E=52295.830 Z=0.000	BA11	X=834574.835 Y=48563.548 Z=0.000
			BA12	X=834885.141 Y=48311.139 Z=0.000
			BA13	X=835195.447 Y=48058.731 Z=0.000
			BA14	X=835505.754 Y=47806.323 Z=0.000
			BA15	X=835816.060 Y=47553.914 Z=0.000
			BA16	X=835816.060 Y=47553.914 Z=0.000
			BA17	X=836126.366 Y=47301.506 Z=0.000

DETAILED COORDINATES OF THE NANYUKI-RUMURUTI-MARIGAT ROUTE AT INTERVALS OF 500METRES

ZZ -YY				
ZY1	N=163283.555 E=51213.835 Z= 0.000	KK - JJ		
ZY2	N=163438.708 E=51087.631 Z= 0.000	KJ1	N=224592.376 E=27907.469 Z= 0.000	
ZY3	N=163593.861 E=50961.427 Z= 0.000	KJ2	N=224785.337 E=27854.874 Z= 0.000	
ZY4	N=163749.015 E=50835.223 Z= 0.000	KJ3	N=224978.298 E=27802.280 Z= 0.000	
ZY5	N=163904.168 E=50709.019 Z= 0.000	KJ4	N=225171.258 E=27749.686 Z= 0.000	
ZY6	N=164059.321 E=50582.815 Z= 0.000	KJ5	N=225364.219 E=27697.092 Z= 0.000	
ZY7	N=164214.474 E=50456.610 Z= 0.000	KJ6	N=225557.180 E=27644.497 Z= 0.000	
ZY8	N=164369.627 E=50330.406 Z= 0.000	KJ7	N=225750.140 E=27591.903 Z= 0.000	
ZY9	N=164524.780 E=50204.202 Z= 0.000	KJ8	N=225943.101 E=27539.309 Z= 0.000	
ZY10	N=164679.934 E=50077.998 Z= 0.000	KJ9	N=226136.062 E=27486.715 Z= 0.000	
ZY11	N=164835.087 E=49951.794 Z= 0.000	KJ10	N=226329.023 E=27434.120 Z= 0.000	
ZY12	N=164990.240 E=49825.590 Z= 0.000	KJ11	N=226521.983 E=27381.526 Z= 0.000	
ZY13	N=165145.393 E=49699.385 Z= 0.000	KJ12	N=226714.944 E=27328.932 Z= 0.000	
ZY14	N=165300.546 E=49573.181 Z= 0.000	KJ13	N=226907.905 E=27276.338 Z= 0.000	
ZY15	N=165455.699 E=49446.977 Z= 0.000	KJ14	N=227100.866 E=27223.743 Z= 0.000	
ZY16	N=165610.853 E=49320.773 Z= 0.000	KJ15	N=227293.826 E=27171.149 Z= 0.000	
ZY17	N=165766.006 E=49194.569 Z= 0.000	KJ16	N=227486.787 E=27118.555 Z= 0.000	
ZY18	N=165921.159 E=49068.365 Z= 0.000	KJ17	N=227679.748 E=27065.960 Z= 0.000	
ZY19	N=166076.312 E=48942.160 Z= 0.000	KJ18	N=227872.708 E=27013.366 Z= 0.000	
ZY20	N=166231.465 E=48815.956 Z= 0.000	KJ19	N=228065.669 E=26960.772 Z= 0.000	
ZY21	N=166386.618 E=48689.752 Z= 0.000	KJ20	N=228258.630 E=26908.178 Z= 0.000	
ZY22	N=166541.772 E=48563.548 Z= 0.000	KJ21	N=228451.591 E=26855.583 Z= 0.000	
ZY23	N=166696.925 E=48437.344 Z= 0.000	KJ22	N=228644.551 E=26802.989 Z= 0.000	
ZY24	N=166852.078 E=48311.139 Z= 0.000	KJ23	N=228837.512 E=26750.395 Z= 0.000	

ZY25	N=167007.231 E=48184.935 Z= 0.000	KJ24	N=229030.473 E=26697.801 Z= 0.000
ZY26	N=167162.384 E=48058.731 Z= 0.000	KJ25	N=229223.434 E=26645.206 Z= 0.000
ZY27	N=167317.538 E=47932.527 Z= 0.000		
ZY28	N=167472.691 E=47806.323 Z= 0.000	JJ - II	
ZY29	N=167627.844 E=47680.119 Z= 0.000	J11	N=229418.795 E=26481.302 Z= 0.000
ZY30	N=167782.997 E=47553.914 Z= 0.000	J12	N=229553.889 E=26333.825 Z= 0.000
ZY31	N=167938.150 E=47427.710 Z= 0.000	J13	N=229688.984 E=26186.348 Z= 0.000
ZY32	N=168093.303 E=47301.506 Z= 0.000	J14	N=229824.078 E=26038.871 Z= 0.000
ZY33	N=168248.457 E=47175.302 Z= 0.000	J15	N=229959.172 E=25891.393 Z= 0.000
ZY34	N=168403.610 E=47049.098 Z= 0.000	J16	N=230094.267 E=25743.916 Z= 0.000
		J17	N=230229.361 E=25596.439 Z= 0.000
YY -XX		J18	N=230364.455 E=25448.962 Z= 0.000
YX1	N=168647.273 E=47010.364 Z= 0.000	J19	N=230499.549 E=25301.485 Z= 0.000
YX2	N=168847.248 E=47007.167 Z= 0.000	J110	N=230634.644 E=25154.007 Z= 0.000
YX3	N=169047.222 E=47003.970 Z= 0.000	J111	N=230769.738 E=25006.530 Z= 0.000
YX4	N=169247.197 E=47000.773 Z= 0.000	J112	N=230904.832 E=24859.053 Z= 0.000
YX5	N=169447.171 E=46997.577 Z= 0.000	J113	N=231039.927 E=24711.576 Z= 0.000
YX6	N=169647.146 E=46994.380 Z= 0.000	J114	N=231175.021 E=24564.099 Z= 0.000
YX7	N=169847.120 E=46991.183 Z= 0.000	J115	N=231310.115 E=24416.621 Z= 0.000
YX8	N=170047.094 E=46987.986 Z= 0.000	J116	N=231445.210 E=24269.144 Z= 0.000
YX9	N=170247.069 E=46984.790 Z= 0.000	J117	N=231580.304 E=24121.667 Z= 0.000
YX10	N=170447.043 E=46981.593 Z= 0.000	J118	N=231715.398 E=23974.190 Z= 0.000
YX11	N=170647.018 E=46978.396 Z= 0.000	J119	N=231850.492 E=23826.712 Z= 0.000
YX12	N=170846.992 E=46975.200 Z= 0.000	J120	N=231985.587 E=23679.235 Z= 0.000
YX13	N=171046.967 E=46972.003 Z= 0.000	J121	N=232120.681 E=23531.758 Z= 0.000
YX14	N=171246.941 E=46968.806 Z= 0.000	J122	N=232255.775 E=23384.281 Z= 0.000
YX15	N=171446.916 E=46965.609 Z= 0.000	J123	N=232390.870 E=23236.804 Z= 0.000
YX16	N=171646.890 E=46962.413 Z= 0.000	J124	N=232525.964 E=23089.326 Z= 0.000
YX17	N=171846.864 E=46959.216 Z= 0.000	J125	N=232661.058 E=22941.849 Z= 0.000

YX18	N=172046.839 E=46956.019 Z= 0.000	J126	N=232796.153 E=22794.372 Z= 0.000
YX19	N=172246.813 E=46952.822 Z= 0.000	J127	N=232931.247 E=22646.895 Z= 0.000
YX20	N=172446.788 E=46949.626 Z= 0.000	J128	N=233066.341 E=22499.417 Z= 0.000
YX21	N=172646.762 E=46946.429 Z= 0.000	J129	N=233201.435 E=22351.940 Z= 0.000
YX22	N=172846.737 E=46943.232 Z= 0.000	J130	N=233336.530 E=22204.463 Z= 0.000
YX23	N=173046.711 E=46940.035 Z= 0.000	J131	N=233471.624 E=22056.986 Z= 0.000
YX24	N=173246.686 E=46936.839 Z= 0.000	J132	N=233606.718 E=21909.509 Z= 0.000
YX25	N=173446.660 E=46933.642 Z= 0.000	J133	N=233741.813 E=21762.031 Z= 0.000
YX26	N=173646.635 E=46930.445 Z= 0.000	J134	N=233876.907 E=21614.554 Z= 0.000
YX27	N=173846.609 E=46927.249 Z= 0.000	J135	N=234012.001 E=21467.077 Z= 0.000
YX28	N=174046.583 E=46924.052 Z= 0.000	J136	N=234147.096 E=21319.600 Z= 0.000
YX29	N=174246.558 E=46920.855 Z= 0.000	J137	N=234282.190 E=21172.123 Z= 0.000
YX30	N=174446.532 E=46917.658 Z= 0.000		
YX31	N=174646.507 E=46914.462 Z= 0.000	II - HH	
YX32	N=174846.481 E=46911.265 Z= 0.000	IH1	N=234476.695 E=20856.976 Z= 0.000
YX33	N=175046.507 E=46911.265 Z= 0.000	IH2	N=234552.175 E=20671.766 Z= 0.000
YX34	N=175246.430 E=46904.871 Z= 0.000	IH3	N=234627.654 E=20486.555 Z= 0.000
YX35	N=175446.354 E=46898.478 Z= 0.000	IH4	N=234703.134 E=20301.345 Z= 0.000
YX36	N=175646.379 E=46898.478 Z= 0.000	IH5	N=234778.613 E=20116.135 Z= 0.000
YX37	N=175846.354 E=46895.281 Z= 0.000	IH6	N=234854.093 E=19930.925 Z= 0.000
YX38	N=176046.328 E=46892.084 Z= 0.000	IH7	N=234929.572 E=19745.714 Z= 0.000
YX39	N=176246.302 E=46888.888 Z= 0.000	IH8	N=235005.052 E=19560.504 Z= 0.000
YX40	N=176446.277 E=46885.691 Z= 0.000	IH9	N=235080.531 E=19375.294 Z= 0.000
YX41	N=176646.251 E=46882.494 Z= 0.000	IH10	N=235156.011 E=19190.083 Z= 0.000
YX42	N=176846.226 E=46879.298 Z= 0.000	IH11	N=235231.490 E=19004.873 Z= 0.000
YX43	N=177046.200 E=46876.101 Z= 0.000	IH12	N=235306.970 E=18819.663 Z= 0.000
YX44	N=177246.175 E=46872.904 Z= 0.000	IH13	N=235382.449 E=18634.453 Z= 0.000
YX45	N=177446.149 E=46869.707 Z= 0.000	IH14	N=235451.903 E=18449.242 Z= 0.000
YX46	N=177646.124 E=46866.511 Z= 0.000	IH15	N=235533.408 E=18264.032 Z= 0.000

YX47	N=177846.098 E=46863.314 Z= 0.000	IH16	N=235608.887 E=18078.822 Z= 0.000
YX48	N=178046.072 E=46860.117 Z= 0.000	IH17	N=235684.367 E=17893.611 Z= 0.000
YX49	N=178246.047 E=46856.920 Z= 0.000	IH18	N=235759.846 E=17708.401 Z= 0.000
YX50	N=178446.021 E=46853.724 Z= 0.000	IH19	N=235835.326 E=17523.191 Z= 0.000
YX51	N=178645.996 E=46850.527 Z= 0.000	IH20	N=235910.805 E=17337.981 Z= 0.000
YX52	N=178845.970 E=46847.330 Z= 0.000	IH21	N=235986.285 E=17152.770 Z= 0.000
YX53	N=179045.945 E=46844.134 Z= 0.000	IH22	N=236061.764 E=16967.560 Z= 0.000
YX54	N=179245.919 E=46840.937 Z= 0.000	IH23	N=236137.244 E=16782.350 Z= 0.000
YX55	N=179445.894 E=46837.740 Z= 0.000	IH24	N=236212.723 E=16597.139 Z= 0.000
YX56	N=179645.868 E=46834.543 Z= 0.000	IH25	N=236288.203 E=16411.929 Z= 0.000
YX57	N=179845.843 E=46831.347 Z= 0.000	IH26	N=236363.682 E=16226.719 Z= 0.000
YX58	N=180045.817 E=46828.150 Z= 0.000	IH27	N=236439.162 E=16041.509 Z= 0.000
YX59	N=180245.791 E=46824.953 Z= 0.000	IH28	N=236514.641 E=15856.298 Z= 0.000
YX60	N=180445.766 E=46821.756 Z= 0.000	IH29	N=236590.121 E=15671.088 Z= 0.000
YX61	N=180645.740 E=46818.560 Z= 0.000	IH30	N=236665.600 E=15485.878 Z= 0.000
YX62	N=180845.715 E=46815.363 Z= 0.000	IH31	N=236741.080 E=15300.667 Z= 0.000
YX63	N=181045.689 E=46812.166 Z= 0.000	IH32	N=236816.559 E=15115.457 Z= 0.000
YX64	N=181245.664 E=46808.969 Z= 0.000	IH33	N=236892.038 E=14930.247 Z= 0.000
YX65	N=181445.638 E=46805.773 Z= 0.000	IH34	N=236967.518 E=14745.037 Z= 0.000
YX66	N=181645.613 E=46802.576 Z= 0.000	IH35	N=237042.997 E=14559.826 Z= 0.000
YX67	N=181845.587 E=46799.379 Z= 0.000	IH36	N=237118.477 E=14374.616 Z= 0.000
YX68	N=182045.561 E=46796.183 Z= 0.000	IH37	N=237193.956 E=14189.406 Z= 0.000
		IH38	N=237269.436 E=14004.195 Z= 0.000
XX - WW		IH39	N=237344.915 E=13818.985 Z= 0.000
XW1	N=182256.930 E=46762.956 Z= 0.000	IH40	N=237420.395 E=13633.775 Z= 0.000
XW2	N=182454.189 E=46729.955 Z= 0.000	IH41	N=237495.874 E=13448.565 Z= 0.000
XW3	N=182651.447 E=46696.954 Z= 0.000	IH42	N=237571.354 E=13263.354 Z= 0.000
XW4	N=182848.706 E=46663.953 Z= 0.000	IH43	N=237646.833 E=13078.144 Z= 0.000
XW5	N=183045.964 E=46630.951 Z= 0.000	IH44	N=237722.313 E=12892.934 Z= 0.000

XW6	N=183243.223 E=46597.950 Z= 0.000	IH45	N=237797.792 E=12707.724 Z= 0.000
XW7	N=183440.481 E=46564.949 Z= 0.000	IH46	N=237873.272 E=12522.513 Z= 0.000
XW8	N=183637.740 E=46531.948 Z= 0.000	IH47	N=237948.751 E=12337.303 Z= 0.000
XW9	N=183834.998 E=46498.947 Z= 0.000	IH48	N=238024.230 E=12152.093 Z= 0.000
XW10	N=184032.257 E=46465.946 Z= 0.000	IH49	N=238099.710 E=11966.882 Z= 0.000
XW11	N=184229.515 E=46432.945 Z= 0.000	IH50	N=238175.189 E=11781.672 Z= 0.000
XW12	N=184426.774 E=46399.944 Z= 0.000	IH51	N=238250.669 E=11596.462 Z= 0.000
XW13	N=184624.032 E=46366.943 Z= 0.000		
XW14	N=184821.291 E=46333.941 Z= 0.000	HH- GG	
XW15	N=185018.549 E=46300.940 Z= 0.000	HG1	N=238463.233 E=11429.055 Z= 0.000
XW16	N=185215.808 E=46267.939 Z= 0.000	HG2	N=238643.162 E=11341.730 Z= 0.000
XW17	N=185413.066 E=46234.938 Z= 0.000	HG3	N=238823.090 E=11254.404 Z= 0.000
XW18	N=185610.325 E=46201.937 Z= 0.000	HG4	N=239003.019 E=11167.079 Z= 0.000
XW19	N=185807.584 E=46168.936 Z= 0.000	HG5	N=239182.947 E=11079.754 Z= 0.000
XW20	N=186004.842 E=46135.935 Z= 0.000	HG6	N=239362.876 E=10992.428 Z= 0.000
XW21	N=186202.101 E=46102.934 Z= 0.000	HG7	N=239542.804 E=10905.103 Z= 0.000
XW22	N=186399.359 E=46069.933 Z= 0.000	HG8	N=239722.733 E=10817.777 Z= 0.000
XW23	N=186596.618 E=46036.931 Z= 0.000	HG9	N=239902.661 E=10730.452 Z= 0.000
		HG10	N=240082.589 E=10643.126 Z= 0.000
WW - VV		HG11	N=240262.518 E=10555.801 Z= 0.000
WV1	N=186965.723 E=45907.883 Z= 0.000	HG12	N=240442.446 E=10468.475 Z= 0.000
WV2	N=187140.849 E=45811.287 Z= 0.000	HG13	N=240622.375 E=10381.150 Z= 0.000
WV3	N=187315.976 E=45714.692 Z= 0.000	HG14	N=240802.303 E=10293.824 Z= 0.000
WV4	N=187491.102 E=45618.096 Z= 0.000	HG15	N=240982.232 E=10206.499 Z= 0.000
WV5	N=187666.229 E=45521.500 Z= 0.000	HG16	N=241162.160 E=10119.173 Z= 0.000
WV6	N=187841.355 E=45424.904 Z= 0.000	HG17	N=241342.089 E=10031.848 Z= 0.000
WV7	N=188016.481 E=45328.308 Z= 0.000	HG18	N=241522.017 E= 9944.522 Z= 0.000
WV8	N=188191.608 E=45231.713 Z= 0.000	HG19	N=241701.946 E= 9857.197 Z= 0.000
WV9	N=188366.734 E=45135.117 Z= 0.000	HG20	N=241881.874 E= 9769.871 Z= 0.000

WV10	N=188541.860 E=45038.521 Z= 0.000	HG21	N=242061.803 E= 9682.546 Z= 0.000
WV11	N=188716.987 E=44941.925 Z= 0.000	HG22	N=242241.731 E= 9595.221 Z= 0.000
WV12	N=188892.113 E=44845.329 Z= 0.000	HG23	N=242421.660 E= 9507.895 Z= 0.000
		HG24	N=242601.588 E= 9420.570 Z= 0.000
VV -TT			
VT1	N=189074.689 E=44639.439 Z= 0.000	GG - FF	
VT2	N=189185.656 E=44473.047 Z= 0.000	GF1	N=242855.458 E= 9395.449 Z= 0.000
VT3	N=189296.623 E=44306.655 Z= 0.000	GF2	N=243055.455 E= 9396.475 Z= 0.000
VT4	N=189407.589 E=44140.262 Z= 0.000	GF3	N=243255.452 E= 9397.501 Z= 0.000
VT5	N=189518.556 E=43973.870 Z= 0.000	GF4	N=243455.450 E= 9398.526 Z= 0.000
VT6	N=189629.523 E=43807.478 Z= 0.000	GF5	N=243655.447 E= 9399.552 Z= 0.000
VT7	N=189740.490 E=43641.086 Z= 0.000	GF6	N=243855.444 E= 9400.578 Z= 0.000
VT8	N=189851.456 E=43474.694 Z= 0.000	GF7	N=244055.442 E= 9401.603 Z= 0.000
VT9	N=189962.423 E=43308.301 Z= 0.000	GF8	N=244255.439 E= 9402.629 Z= 0.000
VT10	N=190073.390 E=43141.909 Z= 0.000	GF9	N=244455.437 E= 9403.655 Z= 0.000
VT11	N=190184.357 E=42975.517 Z= 0.000	GF10	N=244655.434 E= 9404.680 Z= 0.000
VT12	N=190295.324 E=42809.125 Z= 0.000	GF11	N=244855.431 E= 9405.706 Z= 0.000
VT13	N=190406.290 E=42642.732 Z= 0.000	GF12	N=245055.429 E= 9406.732 Z= 0.000
VT14	N=190514.811 E=42474.754 Z= 0.000	GF13	N=245255.426 E= 9407.757 Z= 0.000
VT15	N=190623.685 E=42306.921 Z= 0.000	GF14	N=245455.423 E= 9408.783 Z= 0.000
VT16	N=190732.539 E=42139.120 Z= 0.000	GF15	N=245655.421 E= 9409.809 Z= 0.000
		GF16	N=245855.418 E= 9410.834 Z= 0.000
TT -SS		GF17	N=246055.416 E= 9411.860 Z= 0.000
TS1	N=190938.469 E=41990.494 Z= 0.000	GF18	N=246255.413 E= 9412.885 Z= 0.000
TS2	N=191112.228 E=41891.460 Z= 0.000	GF19	N=246455.410 E= 9413.911 Z= 0.000
TS3	N=191285.987 E=41792.426 Z= 0.000	GF20	N=246655.408 E= 9414.937 Z= 0.000
		GF21	N=246855.405 E= 9415.962 Z= 0.000
SS - RR		GF22	N=247055.402 E= 9416.988 Z= 0.000
SR1	N=191464.785 E=41521.917 Z= 0.000	GF23	N=247255.400 E= 9418.014 Z= 0.000

SR2	N=191510.556 E=41327.225 Z= 0.000	GF24	N=247455.397 E= 9419.039 Z= 0.000
SR3	N=191556.328 E=41132.533 Z= 0.000	GF25	N=247655.400 E= 9419.039 Z= 0.000
SR4	N=191602.100 E=40937.841 Z= 0.000	GF26	N=247855.392 E= 9421.091 Z= 0.000
SR5	N=191647.872 E=40743.149 Z= 0.000	GF27	N=248055.389 E= 9422.116 Z= 0.000
SR6	N=191693.643 E=40548.457 Z= 0.000	GF28	N=248255.387 E= 9423.142 Z= 0.000
SR7	N=191739.415 E=40353.765 Z= 0.000	GF29	N=248455.384 E= 9424.168 Z= 0.000
SR8	N=191785.187 E=40159.073 Z= 0.000	GF30	N=248655.381 E= 9425.193 Z= 0.000
		GF31	N=248855.379 E= 9426.219 Z= 0.000
RR -QQ		GF32	N=249055.376 E= 9427.245 Z= 0.000
RQ1	N=191956.974 E=39929.189 Z= 0.000	GF33	N=249255.373 E= 9428.270 Z= 0.000
RQ2	N=192106.059 E=39795.871 Z= 0.000	GF34	N=249455.371 E= 9429.296 Z= 0.000
RQ3	N=192255.144 E=39662.554 Z= 0.000		
RQ4	N=192404.229 E=39529.236 Z= 0.000	FF - EE	
RQ5	N=192553.314 E=39395.918 Z= 0.000	FE1	N=249778.635 E= 9497.090 Z= 0.000
RQ6	N=192702.399 E=39262.600 Z= 0.000	FE2	N=249967.042 E= 9564.193 Z= 0.000
RQ7	N=192851.484 E=39129.282 Z= 0.000	FE3	N=250155.449 E= 9631.296 Z= 0.000
RQ8	N=193000.569 E=38995.964 Z= 0.000	FE4	N=250343.856 E= 9698.399 Z= 0.000
RQ9	N=193149.654 E=38862.646 Z= 0.000	FE5	N=250532.263 E= 9765.502 Z= 0.000
RQ10	N=193298.739 E=38729.328 Z= 0.000	FE6	N=250720.670 E= 9832.605 Z= 0.000
RQ11	N=193447.824 E=38596.010 Z= 0.000	FE7	N=250909.077 E= 9899.708 Z= 0.000
RQ12	N=193596.909 E=38462.692 Z= 0.000	FE8	N=251097.484 E= 9966.811 Z= 0.000
RQ13	N=193745.994 E=38329.375 Z= 0.000	FE9	N=251285.891 E=10033.913 Z= 0.000
RQ14	N=193895.079 E=38196.057 Z= 0.000	FE10	N=251474.298 E=10101.016 Z= 0.000
RQ15	N=194044.164 E=38062.739 Z= 0.000	FE11	N=251662.705 E=10168.119 Z= 0.000
RQ16	N=194193.249 E=37929.421 Z= 0.000	FE12	N=251851.112 E=10235.222 Z= 0.000
RQ17	N=194342.334 E=37796.103 Z= 0.000	FE13	N=252039.519 E=10302.325 Z= 0.000
RQ18	N=194491.419 E=37662.785 Z= 0.000	FE14	N=252227.926 E=10369.428 Z= 0.000
RQ19	N=194640.504 E=37529.467 Z= 0.000	FE15	N=252416.333 E=10436.531 Z= 0.000
RQ20	N=194789.589 E=37396.149 Z= 0.000	FE16	N=252604.740 E=10503.634 Z= 0.000

RQ21	N=194938.674 E=37262.831 Z= 0.000	FE17	N=252793.147 E=10570.737 Z= 0.000
RQ22	N=195087.759 E=37129.513 Z= 0.000	FE18	N=252981.554 E=10637.839 Z= 0.000
RQ23	N=195236.844 E=36996.196 Z= 0.000	FE19	N=253169.961 E=10704.942 Z= 0.000
RQ24	N=195385.929 E=36862.878 Z= 0.000	FE20	N=253358.368 E=10772.045 Z= 0.000
RQ25	N=195535.014 E=36729.560 Z= 0.000	FE21	N=253546.775 E=10839.148 Z= 0.000
RQ26	N=195684.099 E=36596.242 Z= 0.000	FE22	N=253735.182 E=10906.251 Z= 0.000
RQ27	N=195833.184 E=36462.924 Z= 0.000	FE23	N=253923.589 E=10973.354 Z= 0.000
RQ28	N=195982.269 E=36329.606 Z= 0.000	FE24	N=254111.996 E=11040.457 Z= 0.000
RQ29	N=196131.354 E=36196.288 Z= 0.000	FE25	N=254300.403 E=11107.560 Z= 0.000
RQ30	N=196280.439 E=36062.970 Z= 0.000	FE26	N=254488.810 E=11174.663 Z= 0.000
RQ31	N=196429.524 E=35929.652 Z= 0.000	FE27	N=254677.217 E=11241.765 Z= 0.000
RQ32	N=196578.609 E=35796.334 Z= 0.000	FE28	N=254865.624 E=11308.868 Z= 0.000
RQ33	N=196727.694 E=35663.017 Z= 0.000	FE29	N=255054.031 E=11375.971 Z= 0.000
RQ34	N=196876.780 E=35529.699 Z= 0.000	FE30	N=255242.438 E=11443.074 Z= 0.000
RQ35	N=197025.865 E=35396.381 Z= 0.000	FE31	N=255430.845 E=11510.177 Z= 0.000
RQ36	N=197174.950 E=35263.063 Z= 0.000	FE32	N=255619.252 E=11577.280 Z= 0.000
RQ37	N=197324.035 E=35129.745 Z= 0.000	FE33	N=255807.659 E=11644.383 Z= 0.000
RQ38	N=197473.120 E=34996.427 Z= 0.000	FE34	N=255996.066 E=11711.486 Z= 0.000
RQ39	N=197622.205 E=34863.109 Z= 0.000	FE35	N=256184.473 E=11778.589 Z= 0.000
RQ40	N=197771.290 E=34729.791 Z= 0.000	FE36	N=256372.880 E=11845.691 Z= 0.000
RQ41	N=197920.375 E=34596.473 Z= 0.000	FE37	N=256561.287 E=11912.794 Z= 0.000
RQ42	N=198069.460 E=34463.155 Z= 0.000	FE38	N=256749.694 E=11979.897 Z= 0.000
RQ43	N=198218.545 E=34329.838 Z= 0.000	FE39	N=256938.101 E=12047.000 Z= 0.000
RQ44	N=198367.630 E=34196.520 Z= 0.000	FE40	N=257126.508 E=12114.103 Z= 0.000
RQ45	N=198516.715 E=34063.202 Z= 0.000	FE41	N=257314.915 E=12181.206 Z= 0.000
RQ46	N=198665.800 E=33929.884 Z= 0.000	FE42	N=257503.322 E=12248.309 Z= 0.000
RQ47	N=198814.885 E=33796.566 Z= 0.000	FE43	N=257691.729 E=12315.412 Z= 0.000
RQ48	N=198963.970 E=33663.248 Z= 0.000	FE44	N=257880.136 E=12382.515 Z= 0.000
RQ49	N=199113.055 E=33529.930 Z= 0.000	FE45	N=258068.543 E=12449.617 Z= 0.000

RQ50	N=199262.140 E=33396.612 Z= 0.000	FE46	N=258256.950 E=12516.720 Z= 0.000
RQ51	N=199411.225 E=33263.294 Z= 0.000	FE47	N=258445.357 E=12583.823 Z= 0.000
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RQ55	N=200007.565 E=32730.023 Z= 0.000	EE - DD	
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RQ57	N=200305.735 E=32463.387 Z= 0.000	ED2	N=259427.234 E=12678.589 Z= 0.000
RQ58	N=200454.820 E=32330.069 Z= 0.000	ED3	N=259626.749 E=12664.669 Z= 0.000
RQ59	N=200603.905 E=32196.751 Z= 0.000	ED4	N=259826.264 E=12650.748 Z= 0.000
RQ60	N=200752.990 E=32063.433 Z= 0.000	ED5	N=260025.779 E=12636.828 Z= 0.000
RQ61	N=200902.075 E=31930.115 Z= 0.000	ED6	N=260225.294 E=12622.907 Z= 0.000
RQ62	N=201051.160 E=31796.797 Z= 0.000	ED7	N=260424.809 E=12608.987 Z= 0.000
RQ63	N=201200.245 E=31663.480 Z= 0.000	ED8	N=260624.324 E=12595.066 Z= 0.000
RQ64	N=201349.330 E=31530.162 Z= 0.000	ED9	N=260823.839 E=12581.146 Z= 0.000
		ED10	N=261023.354 E=12567.225 Z= 0.000
QQ - PP		ED11	N=261222.869 E=12553.305 Z= 0.000
QP1	N=201624.705 E=31457.812 Z= 0.000	ED12	N=261422.384 E=12539.385 Z= 0.000
QP2	N=201824.645 E=31452.920 Z= 0.000	ED13	N=261621.899 E=12525.464 Z= 0.000
QP3	N=202024.585 E=31448.028 Z= 0.000		
QP4	N=202224.525 E=31443.136 Z= 0.000	DD - CC	
QP5	N=202424.465 E=31438.244 Z= 0.000	DC1	N=261829.764 E=12458.714 Z= 0.000
QP6	N=202624.405 E=31433.352 Z= 0.000	DC2	N=262018.758 E=12393.281 Z= 0.000
QP7	N=202824.346 E=31428.459 Z= 0.000	DC3	N=262207.751 E=12327.848 Z= 0.000
		DC4	N=262396.744 E=12262.414 Z= 0.000
PP - OO		DC5	N=262585.738 E=12196.981 Z= 0.000
PO1	N=203195.358 E=31329.181 Z= 0.000	DC6	N=262774.731 E=12131.548 Z= 0.000
PO2	N=203371.617 E=31234.668 Z= 0.000	DC7	N=262963.724 E=12066.115 Z= 0.000
PO3	N=203547.876 E=31140.155 Z= 0.000	DC8	N=263152.718 E=12000.681 Z= 0.000

PO4	N=203724.136 E=31045.642 Z= 0.000	DC9	N=263341.711 E=11935.248 Z= 0.000
PO5	N=203900.395 E=30951.129 Z= 0.000	DC10	N=263530.704 E=11869.815 Z= 0.000
PO6	N=204076.654 E=30856.615 Z= 0.000	DC11	N=263719.698 E=11804.381 Z= 0.000
PO7	N=204252.913 E=30762.102 Z= 0.000	DC12	N=263908.691 E=11738.948 Z= 0.000
PO8	N=204427.466 E=30668.504 Z= 0.000	DC13	N=264097.684 E=11673.515 Z= 0.000
PO9	N=204605.431 E=30573.076 Z= 0.000	DC14	N=264286.678 E=11608.082 Z= 0.000
PO10	N=204781.690 E=30478.563 Z= 0.000	DC15	N=264475.671 E=11542.648 Z= 0.000
PO11	N=204957.949 E=30384.050 Z= 0.000	DC16	N=264664.665 E=11477.215 Z= 0.000
PO12	N=205134.208 E=30289.537 Z= 0.000	DC17	N=264853.658 E=11411.782 Z= 0.000
PO13	N=205310.468 E=30195.024 Z= 0.000	DC18	N=265042.651 E=11346.349 Z= 0.000
PO14	N=205486.727 E=30100.511 Z= 0.000	DC19	N=265231.645 E=11280.915 Z= 0.000
PO15	N=205662.986 E=30005.998 Z= 0.000	DC20	N=265420.638 E=11215.482 Z= 0.000
PO16	N=205663.075 E=30006.164 Z= 0.000	DC21	N=265609.631 E=11150.049 Z= 0.000
		DC22	N=265798.625 E=11084.616 Z= 0.000
OO - NN		DC23	N=265987.618 E=11019.182 Z= 0.000
ON1	N=206019.983 E=29825.847 Z= 0.000	DC24	N=266176.611 E=10953.749 Z= 0.000
ON2	N=206200.559 E=29739.869 Z= 0.000	DC25	N=266365.605 E=10888.316 Z= 0.000
ON3	N=206381.298 E=29654.232 Z= 0.000	DC26	N=266554.598 E=10822.883 Z= 0.000
ON4	N=206561.955 E=29568.424 Z= 0.000	DC27	N=266743.591 E=10757.449 Z= 0.000
ON5	N=206742.612 E=29482.617 Z= 0.000	DC28	N=266932.585 E=10692.016 Z= 0.000
ON6	N=206923.269 E=29396.809 Z= 0.000	DC29	N=267121.578 E=10626.583 Z= 0.000
ON7	N=207103.927 E=29311.001 Z= 0.000	DC30	N=267310.571 E=10561.149 Z= 0.000
ON8	N=207284.584 E=29225.194 Z= 0.000	DC31	N=267499.565 E=10495.716 Z= 0.000
ON9	N=207465.241 E=29139.386 Z= 0.000	DC32	N=267688.558 E=10430.283 Z= 0.000
ON10	N=207645.898 E=29053.578 Z= 0.000	DC33	N=267877.552 E=10364.850 Z= 0.000
ON11	N=207826.475 E=28967.600 Z= 0.000	DC34	N=268066.545 E=10299.416 Z= 0.000
ON12	N=208007.051 E=28881.622 Z= 0.000	DC35	N=268255.538 E=10233.983 Z= 0.000
ON13	N=208187.870 E=28796.155 Z= 0.000	DC36	N=268444.532 E=10168.550 Z= 0.000
ON14	N=208368.527 E=28710.348 Z= 0.000	DC37	N=268633.525 E=10103.117 Z= 0.000

ON15	N=208549.185 E=28624.540 Z= 0.000	DC38	N=268822.518 E=10037.683 Z= 0.000
ON16	N=208729.842 E=28538.732 Z= 0.000	DC39	N=269011.512 E= 9972.250 Z= 0.000
ON17	N=208910.418 E=28452.754 Z= 0.000	DC40	N=269200.505 E= 9906.817 Z= 0.000
ON18	N=209091.075 E=28366.946 Z= 0.000	DC41	N=269389.498 E= 9841.384 Z= 0.000
ON19	N=209271.733 E=28281.139 Z= 0.000	DC42	N=269578.492 E= 9775.950 Z= 0.000
ON20	N=209452.390 E=28195.331 Z= 0.000	DC43	N=269767.485 E= 9710.517 Z= 0.000
ON21	N=209633.047 E=28109.523 Z= 0.000	DC44	N=269956.478 E= 9645.084 Z= 0.000
ON22	N=209813.785 E=28023.886 Z= 0.000	DC45	N=270145.472 E= 9579.651 Z= 0.000
ON23	N=209994.362 E=27937.908 Z= 0.000	DC46	N=270334.465 E= 9514.217 Z= 0.000
ON24	N=210175.100 E=27852.271 Z= 0.000	DC47	N=270523.459 E= 9448.784 Z= 0.000
ON25	N=210355.676 E=27766.293 Z= 0.000	DC48	N=270712.452 E= 9383.351 Z= 0.000
ON26	N=210536.253 E=27680.314 Z= 0.000	DC49	N=270901.445 E= 9317.917 Z= 0.000
ON27	N=210717.072 E=27594.848 Z= 0.000	DC50	N=271090.439 E= 9252.484 Z= 0.000
ON28	N=210897.729 E=27509.040 Z= 0.000	DC51	N=271279.432 E= 9187.051 Z= 0.000
ON29	N=211078.386 E=27423.233 Z= 0.000	DC52	N=271468.425 E= 9121.618 Z= 0.000
ON30	N=211259.044 E=27337.425 Z= 0.000	DC53	N=271657.419 E= 9056.184 Z= 0.000
ON31	N=211439.701 E=27251.617 Z= 0.000		
		CC -BB	
NN - MM		CB1	N=271974.791 E= 9033.795 Z= 0.000
NM1	N=211740.219 E=27204.097 Z= 0.000	CB2	N=272173.929 E= 9052.341 Z= 0.000
NM2	N=211940.219 E=27204.321 Z= 0.000	CB3	N=272373.067 E= 9070.887 Z= 0.000
NM3	N=212140.219 E=27204.545 Z= 0.000	CB4	N=272572.206 E= 9089.432 Z= 0.000
NM4	N=212340.219 E=27204.768 Z= 0.000	CB5	N=272771.344 E= 9107.978 Z= 0.000
NM5	N=212540.219 E=27204.992 Z= 0.000	CB6	N=272970.482 E= 9126.524 Z= 0.000
NM6	N=212740.219 E=27205.216 Z= 0.000	CB7	N=273169.620 E= 9145.069 Z= 0.000
NM7	N=212940.218 E=27205.440 Z= 0.000	CB8	N=273368.759 E= 9163.615 Z= 0.000
NM8	N=213140.218 E=27205.663 Z= 0.000	CB9	N=273567.897 E= 9182.161 Z= 0.000
NM9	N=213340.218 E=27205.887 Z= 0.000	CB10	N=273767.035 E= 9200.707 Z= 0.000
NM10	N=213540.218 E=27206.111 Z= 0.000	CB11	N=273966.174 E= 9219.252 Z= 0.000

NM11	N=213740.218 E=27206.335 Z= 0.000	CB12	N=274165.312 E= 9237.798 Z= 0.000
NM12	N=213940.218 E=27206.558 Z= 0.000	CB13	N=274364.450 E= 9256.344 Z= 0.000
NM13	N=214140.218 E=27206.782 Z= 0.000	CB14	N=274563.588 E= 9274.889 Z= 0.000
NM14	N=214340.218 E=27207.006 Z= 0.000	CB15	N=274762.727 E= 9293.435 Z= 0.000
NM15	N=214540.217 E=27207.230 Z= 0.000	CB16	N=274961.865 E= 9311.981 Z= 0.000
NM16	N=214740.217 E=27207.453 Z= 0.000	CB17	N=275161.003 E= 9330.527 Z= 0.000
NM17	N=214940.217 E=27207.677 Z= 0.000	CB18	N=275360.142 E= 9349.072 Z= 0.000
NM18	N=215140.217 E=27207.677 Z= 0.000		
NM19	N=215340.217 E=27207.901 Z= 0.000	BB - AA	
NM20	N=215540.217 E=27208.125 Z= 0.000	BA1	N=275665.052 E= 9348.223 Z= 0.000
NM21	N=215740.217 E=27208.348 Z= 0.000	BA2	N=275864.769 E= 9337.578 Z= 0.000
NM22	N=215940.217 E=27208.572 Z= 0.000	BA3	N=276064.485 E= 9326.932 Z= 0.000
NM23	N=216140.216 E=27209.020 Z= 0.000	BA4	N=276264.201 E= 9316.286 Z= 0.000
NM24	N=216340.216 E=27209.243 Z= 0.000	BA5	N=276463.918 E= 9305.640 Z= 0.000
NM25	N=216540.216 E=27209.467 Z= 0.000	BA6	N=276663.634 E= 9294.995 Z= 0.000
NM26	N=216740.216 E=27209.467 Z= 0.000	BA7	N=276863.351 E= 9284.349 Z= 0.000
NM27	N=216940.216 E=27209.691 Z= 0.000	BA8	N=277063.067 E= 9273.703 Z= 0.000
NM28	N=217140.216 E=27209.915 Z= 0.000	BA9	N=277262.784 E= 9263.058 Z= 0.000
NM29	N=217340.216 E=27210.138 Z= 0.000	BA10	N=277462.500 E= 9252.412 Z= 0.000
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NM31	N=217740.216 E=27210.586 Z= 0.000	BA12	N=277861.933 E= 9231.121 Z= 0.000
NM32	N=217940.216 E=27210.810 Z= 0.000	BA13	N=278061.650 E= 9220.475 Z= 0.000
NM33	N=218140.215 E=27211.033 Z= 0.000	BA14	N=278261.366 E= 9209.829 Z= 0.000
NM34	N=218340.215 E=27211.257 Z= 0.000	BA15	N=278461.083 E= 9199.183 Z= 0.000
NM35	N=218540.215 E=27211.705 Z= 0.000	BA16	N=278660.799 E= 9188.538 Z= 0.000
NM36	N=218740.215 E=27211.928 Z= 0.000	BA17	N=278860.516 E= 9177.892 Z= 0.000
NM37	N=218940.215 E=27211.928 Z= 0.000	BA18	N=279060.232 E= 9167.246 Z= 0.000
NM38	N=219140.215 E=27212.152 Z= 0.000	BA19	N=279259.949 E= 9156.601 Z= 0.000
NM39	N=219340.215 E=27212.376 Z= 0.000	BA20	N=279459.665 E= 9145.955 Z= 0.000

NM40	N=219540.214 E=27212.823 Z= 0.000	BA21	N=279659.382 E= 9135.309 Z= 0.000
NM41	N=219740.214 E=27213.271 Z= 0.000	BA22	N=279859.098 E= 9124.664 Z= 0.000
NM42	N=219940.214 E=27213.271 Z= 0.000	BA23	N=280058.814 E= 9114.018 Z= 0.000
NM43	N=220140.214 E=27213.495 Z= 0.000	BA24	N=280258.531 E= 9103.372 Z= 0.000
NM44	N=220340.214 E=27213.719 Z= 0.000	BA25	N=280458.247 E= 9092.726 Z= 0.000
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NM49	N=221340.213 E=27214.837 Z= 0.000	BA30	N=281456.830 E= 9039.498 Z= 0.000
NM50	N=221540.213 E=27215.061 Z= 0.000		
NM51	N=221740.213 E=27215.285 Z= 0.000	AA-E	
		AE1	N=281649.201 E= 8854.836 Z= 0.000
MM -LL		AE2	N=281738.119 E= 8675.689 Z= 0.000
ML1	N=221935.037 E=27295.645 Z= 0.000	AE3	N=281827.036 E= 8496.542 Z= 0.000
ML2	N=222118.188 E=27375.992 Z= 0.000	AE4	N=281915.953 E= 8317.395 Z= 0.000
ML3	N=222301.339 E=27456.339 Z= 0.000	AE5	N=282004.871 E= 8138.248 Z= 0.000
ML4	N=222484.491 E=27536.686 Z= 0.000	AE6	N=282093.788 E= 7959.100 Z= 0.000
ML5	N=222667.642 E=27617.033 Z= 0.000	AE7	N=282182.705 E= 7779.953 Z= 0.000
ML6	N=222850.793 E=27697.379 Z= 0.000	AE8	N=282271.623 E= 7600.806 Z= 0.000
ML7	N=223033.944 E=27777.726 Z= 0.000	AE9	N=282360.540 E= 7421.659 Z= 0.000
ML8	N=223217.095 E=27858.073 Z= 0.000	AE10	N=282449.457 E= 7242.512 Z= 0.000
ML9	N=223400.247 E=27938.420 Z= 0.000	AE11	N=282538.375 E= 7063.365 Z= 0.000
ML10	N=223583.398 E=28018.767 Z= 0.000	AE12	N=282627.292 E= 6884.217 Z= 0.000
ML11	N=223766.549 E=28099.114 Z= 0.000	AE13	N=282716.209 E= 6705.070 Z= 0.000
ML12	N=223949.700 E=28179.461 Z= 0.000	AE14	N=282805.127 E= 6525.923 Z= 0.000
		AE15	N=282894.044 E= 6346.776 Z= 0.000
		AE16	N=282982.961 E= 6167.629 Z= 0.000
		AE17	N=283071.879 E= 5988.482 Z= 0.000

	AE18	N=283160.796 E= 5809.334 Z= 0.000
	AE19	N=283249.714 E= 5630.187 Z= 0.000
	AE20	N=283338.631 E= 5451.040 Z= 0.000
	AE21	N=283427.548 E= 5271.893 Z= 0.000
	AE22	N=283516.466 E= 5092.746 Z= 0.000
	AE23	N=283605.383 E= 4913.599 Z= 0.000
	AE24	N=283694.300 E= 4734.452 Z= 0.000
	AE25	N=283783.218 E= 4555.304 Z= 0.000

Annex VII: Letter of Award (Sample)

Kenya Power & Lighting Company Ltd,
P.O Box 30099-00100,
Nairobi, Kenya
Ref. No.

Mr./Mrs./Ms.....
.....

ENERGY ACT 2006
PROJECT: ENERGY RECOVERY STRATEGY
PLOT NO. (PART)
COMPENSATION

IN PURSUANCE OF SECTION 10 of the (Energy Act 2006) having concluded the inquiry relating to the purchase of the acquisition of land described above, I HEREBY AWARD you the sum of

Kshs.....

.....in respect of your interest in the land and permanent improvements acquired for the development of the above project.

I hereby give the following particulars relating to the acquisition:-

- a) The area of the land to be acquired is. Approximately.
- b) The total value of land and improvements is in my opinion Ksh.....
.....
- c) The total amount of compensation payable for the land and improvements is Kshs.....
- d) The compensation HEREBY AWARDED is payable to the following persons

Interested in the land:

.....
.....
.....

If you accept the above compensation award, Please sign this statement and send a copy of the same to me as soon as possible.

DATED this day of 2009

Managing Director
Kenya Power & Lighting Company ltd,

Annex VIII: Public Grievance Form

RPP RAP Reference No.	
Full Name	
Contact Information Please mark how you wish to be contacted (mail, telephone, e-mail)	Address: _____ _____ _____ Telephone: ----- Email: -----
Preferred Language for Communication(Please mark how you wish to be contacted)	English Kiswahili
National Identity Number	
Description of Incident or Grievance:	What happened? Where did it happened? Who did it happen to? What is the result of the problem
Date of Incident/Grievance	One time incident/grievance(date-----) Happened more than once(How many times-----) Ongoing (Currently experiencing problem.....)
What would you like see happen to solve the problem?	

Signature:

Date:

Please return this form to:

Kenya Power and Lighting Company Limited
Security, Health and Environment (SHE) Department
Stima Plaza, Kolobot Road, Parklands,
P.O. BoX 30099-00100,Nairobi-Kenya

Annex IX: Format for Monitoring and Reporting on RAP Implementation

SUBJECT	INDICATOR	VARIABLE
Land	Acquisition of land	<ul style="list-style-type: none"> - Area of cultivation land acquired for KPLC developments • Area of communal land acquired for KPLC developments • Area of private land acquired • Area of government land acquired
Buildings/ Structures	Acquisition of buildings	Number, type and size of private buildings acquired <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • Number, type and size of other community structures
Trees and Crops	Acquisition of trees	Number and type of trees c
	Destruction of crops	Crops destroyed by area, type and ownership
Compensation, Re-establishment and Rehabilitation	Compensation and re-establishment of affected owners/individuals	Number of homesteads affected (buildings, land, trees, crops) <ul style="list-style-type: none"> • 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

SUBJECT	INDICATOR	VARIABLE
		<ul style="list-style-type: none"> • Number of replacement businesses constructed
	Re-establishment of community resources	Number of community buildings replaced <ul style="list-style-type: none"> • 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, blasting, increased traffic levels)
Social/ Demographic	Changes to homestead structure	Homestead size (births, deaths, migration in and out) <ul style="list-style-type: none"> • Age distribution • Gender distribution • Marital status • Relationship to homestead head • Status of “vulnerable” homesteads
	Population migration	Residential status of homestead members <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • Number of people with disease, by type (STDs, diarrhoea, malaria, immunizable disease) • Mortality rates • Access to health care services (distance to nearest facility, cost of services, quality of services)

SUBJECT	INDICATOR	VARIABLE
		<ul style="list-style-type: none"> • Utilization of health care services • Disease prevention strategies • Extent of educational programmes • Latrine provision at schools (school child population per VIP on site)
	Changes to educational status	Literacy and educational attainment of homestead members <ul style="list-style-type: none"> • School attendance rates (age, gender) • Number, type of educational establishments
	Changes to status of women	Participation in training programmes <ul style="list-style-type: none"> • Use of credit facilities • Landholding status • Participation in KPLC-related activities and enterprises
	Homestead earning capacity	Ownership of capital assets <ul style="list-style-type: none"> • Ownership of equipment and machinery • Landholding size, area cultivated and production volume/value, by crop (cash and subsistence crops) • Landholding status (tenure) • Redistribution of cultivation land • Changes to livestock ownership: pre- and post disturbance • Value of livestock sales, and imputed value of barter transactions • Consumption of own livestock production • Employment status of economically active members • Skills of homestead members • Earnings/income by source, separating compensation payments • Changes to income-earning activities (agriculture) – pre- and post disturbance • Changes to income-earning activities (off-farm) – pre- and post disturbance

SUBJECT	INDICATOR	VARIABLE
		<ul style="list-style-type: none"> • Amount and balance of income and expenditure • Possession of consumer durables • Realisation 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 organisation	<ul style="list-style-type: none"> Organisational membership of homestead members • Leadership positions held by homestead members
	Population influx	<ul style="list-style-type: none"> Growth in number and size of settlements, formal and informal • Growth in market areas
Consultation	Consultation programme operation	<ul style="list-style-type: none"> 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 KPLC development planning • Number of participating NGOs
	Information dissemination	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Number of grievances registered, by type • Number of grievances resolved • Number of cases referred to court

SUBJECT	INDICATOR	VARIABLE
Training	Operation of training programme	Number of local committee members trained • Number of affected population trained in Project-related training 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 • Co-ordination between local community structures, KPLC and GoK officials