



Kenya Electricity Transmission  
Company Limited

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ETHIOPIA – KENYA POWER SYSTEMS INTERCONNECTION PROJECT  
Environmental and Social Impact Assessment and Resettlement Action Plan

DRAFT RESETTLEMENT ACTION PLAN (RAP) REPORT

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Tropics Consulting  
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## ABBREVIATIONS AND ACRONYMS

<b>AfDB</b>	African Development Bank
<b>CBO</b>	Community-Based Organization
<b>BP</b>	World Bank Procedure
<b>DO</b>	District Officer
<b>EAPP</b>	Eastern Africa Power Pool
<b>EEPCo</b>	Ethiopian Electric Power Corporation
<b>EPA</b>	Environmental Protection Agency (Ethiopia)
<b>ESIA</b>	Environmental and Social Impact Assessment
<b>ESMP</b>	Environmental and Social Management Plan
<b>HVDC</b>	High Voltage Direct Current
<b>IAPs</b>	Interested and affected parties
<b>IDP</b>	Internally Displaced Person
<b>IUCN</b>	International Union for the Conservation of Nature and Natural Resources (World Conservation Union)
<b>km</b>	Kilometer
<b>m</b>	Meter
<b>KPLC</b>	Kenya Power & Lighting Company Ltd
<b>MoE</b>	Ministry of Energy (Kenya)
<b>KETRACO</b>	Kenya Electricity Transmission Company Limited
<b>MDG</b>	Millennium development Goal
<b>NEMA</b>	National Environment Management Authority (Kenya)
<b>NGO</b>	Non-Governmental Organization
<b>OD</b>	Operational Directives
<b>OP</b>	World Bank Operational Policy
<b>RAP</b>	Resettlement Action Plan
<b>RoW</b>	Right of Way



**ENVIRONMENTAL AND SOCIAL STUDY EXPERTS**

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## EXECUTIVE SUMMARY

The Ethiopia – Kenya Transmission Line is a major part of the proposed Ethiopia – Kenya Power Systems Interconnection Project which was conceived by governments of the two countries as a precursor to future energy trade between the two countries and in the region as part of the Eastern Africa Power Pool (EAPP). Representative firms for Ethiopia and Kenya for purposes of project implementation are EEPCo and KETRACO respectively. Feasibility study, Environmental and Social Impact Assessment (ESIA) and Resettlement Action Plan (RAP) studies were undertaken by a German consulting firm, Fichtner in 2009. With the aim of progressing the project further, a joint venture of Tropics of Ethiopia and Gamma Systems Ltd of Kenya were awarded the Contract in April 2011 to review the Fichtner report and update the report given that many changes have taken place in both countries.

This RAP Report covers the Kenyan portion of the project. A review of the 2009 proposed right-of-way RoW was carried out in view of comments from the financiers and other stakeholders on environmental hotspots mainly around Matthews Range and Losai Game Reserve in Samburu and Mandera Counties respectively. The stakeholders also wanted a more detailed assessment of the birds and wild animals migratory routes and mitigation measures be put in place against the impacts. It was also envisaged that a more direct and hence shorter route could be established to link the terminal substations at Sodo and Suswa in Ethiopia and Kenya respectively.

The study commenced with the review of Fichtner 2009 report and collection of baseline data which culminated in selecting of an optimized route which was approved by the EEPSCO, KETRACO and the financiers. Field data in a proposed RoW band of 65 m wide was collected through household census and community consultations. During field data collection minor changes on the proposed RoW were effected so as to avoid physical and topographical structures. The field data was analysed and results are discussed in this report.

Study findings indicate that the Kenyan section of RoW is 612 km long. Some major community structures including schools, dispensaries, churches, etc. were found to have been constructed on the proposed RoW established under the 2009 study. These structures have now been avoided and consequently the compensation cost has reduced drastically. A route change was also effected at the region near Wamba Town so as to avoid Matthews Range Forest Reserve. .

Compensation has been worked out based on a Resettlement Policy Framework (RPF) prepared by KETRACO for transmission line projects which is in line with Kenyan statutes, WB and AfDB policies as well as other safeguard policies. A formula has been worked out for compensation. PAPs who do not have to relocate will get 30% compensation for their land. PAPs who have to relocate within their piece of land will get 70% of the value of their land, with separate compensation at market rates for replacement of assets on the land. The PAPs will receive 100% of the value of their land when they have to relocate elsewhere; in addition, they will receive separate compensation for loss of structures and/or income (for business premises within the wayleave). Compensation for primary assets which include dwellings and associated structures and for secondary structures has been worked out based on KPLC rates reviewed on 26th April 2011. Disturbance and assistance for disadvantaged persons, both at 15% was added to the assets value. For annual crops such as maize, beans, vegetables, etc and some perennial crops such as coffee, it was assumed that only 10% will be damaged during construction. Compensation for community assets was also computed using KPLC rates. The budget for compensation worked out at KShs. **1,195,732,635.00** which is equivalent to US\$ **14,067,442** at exchange rate of KShs. 85 to the dollar.

This RAP report has set out a comprehensive governance structure, conflict resolution process and regular internal and external auditing for the RAP implementation process. The recommendations and conclusions are:

- (i) A cut-off date to be determined as per KETRACO Resettlement Policy Framework.

- (ii) All the PAPs and communities consulted requested for compensation. It is therefore recommended that all the PAPs and communities be compensated for loss of land and assets as provided for in this RAP.
- (iii) County RAP Committees to be formed prior to commencing on the compensation. Internal and external monitoring and evaluation committees to be formed.
- (iv) Grievance redress and monitoring register be set-up and the process be publicized in the affected areas.
- (v) Prior to compensation, detailed valuation of affected assets in the presence of the PAPs and community representatives; undertaken and up- date value of the affected assets negotiated with the PAPs and communities for payment.
- (vi) Prior to compensation and resettlement, the PAPs and affected communities be given free counselling, training on financial management and offered legal assistance where required.
- (vii) The vulnerable PAPs be identified and documented for special assistance as laid out in this RAP.
- (viii) During construction of the proposed transmission line, local communities be given first priority in the employment of skilled and unskilled labour.
- (ix) During the construction phase, due diligence be undertaken in Laikipia, Isiolo, Samburu and Marsabit Counties that respects cultural properties and practices of the local communities. The results of the due diligence will be used in scheduling of the work and compensating vulnerable persons under this RAP.
- (x) Public registers of the resettlement process be kept throughout the entire resettlement period.

This Final Report incorporates queries and comments raised by the stakeholders during the Stakeholders' conference that took place on the 8<sup>th</sup> December 2011 at the Safari Park Hotel Nairobi and others that were received after the conference.

## INTRODUCTION

Ethiopia and Kenya both have undersized electricity sectors, with a total installed capacity about 3,800 MW (~1,100 MW in Kenya and ~2,000 MW in Ethiopia). Power shortages or unreliability of supply is common in the two countries. The poor quality and variability of electricity service is characterized by low voltage levels and voltage fluctuations. Blackouts are also frequent happenings.

Ethiopia has substantial potential capacity estimated at 45,000 MW from hydro alone. Developing this potential and interconnecting Ethiopia and Kenya for power trade would result in mutual benefits for both countries. In view of that, the Government of the Federal Democratic republic of Ethiopia and the Government of the Republic of Kenya have reached an understanding to implement a power interconnection project between the two systems.

In furtherance of this potential mutual benefit, Ethiopia and Kenya signed a memorandum of understanding, on May 7, 2006 which underscored the need to recognize the comparative advantage of power system interconnection between the two countries.

The interconnection system was first initiated by the Ethiopian Electric and Power Corporation in 1982 through a Power Planning Study which showed a strong need for Ethiopia - Kenya Power System Interconnection. Such a power interconnection system has potential of enabling the two countries to benefit through shared experience and resources in terms of hydropower generation, and technically cooperate in power generation, transmission, rural electrification and customer services.

For realization of such power trade, the Ethiopian Electric Power Corporation (EEPCo) and the Ministry of Energy (MoE) of Kenya became the implementing agencies for the respective countries. MoE has since delegated its role to the Kenya Electricity Transmission Company Limited (KETRACO), a firm fully owned by the Government of Kenya. EEPCO and KETRACO are currently actively involved in joint planning of the power interconnection system.

The Ethiopia – Kenya Power System Interconnection Project is a regional venture that has the potential of developing into a vital part of electricity power exchange in Africa. The proposed high voltage transmission line linking Ethiopia to Kenya will form a major part of the interconnection and will serve to close a major gap on the high voltage grid within the Eastern Africa Power Pool (EAPP) countries, because it will ultimately serve as one of the links between Northern and Southern Africa regions.

In furtherance of the joint cooperation between the Ethiopia and Kenya in this respect, a Feasibility Study was undertaken in 2009 together with Environmental and Social Impact Assessment (ESIA) and Resettlement Action Plan (RAP) by Fichtner GmbH & Co. Reports of the respective studies were finalized in 2009.

The Ethiopia – Kenya Power Systems Interconnection will create transmission capacity needed in interchange of electric power between Ethiopia and Kenya. The project will give rise to some negative impacts including people being resettled and properties and services relocated. As a result, a Resettlement Action Plan was prepared by Fichtner in 2009 based on the African development Bank and World Bank policies and guidelines; and the Kenyan legislations and regulations. The RAP is now being updated along the same route, other options having being disqualified due to technical reasons. The aim of the RAP is to assess potential socio-economic impacts (positive and negative) of the proposed transmission line. In addition the RAP study deals with solutions to socio-economic issues relating to land acquisition, disruption to economic activities and livelihoods and resettlement of PAPs, which arise from the project implementation.

The underlying principles in preparation of the RAP report requires that (i) Involuntary resettlement should be avoided or minimized where feasible; (ii) if feasible, resettlement activities should be conceived and executed as sustainable development programs where the Project Affected Persons

(PAPs) share in project benefits; (iii) displaced persons should be fully consulted and have opportunities to participate in planning and implementing of resettlement programs; and (iv) displaced persons should be assisted in their efforts to improve their livelihoods and standards of living or at least restore them, in real terms, to pre-displacement levels.



**Fig. 2.1 - Part of the Project-Affected Area**

# **PROJECT BACKGROUND**

## **1.1 General**

Ethiopia and Kenya have both small electricity sectors, with a total installed capacity below 4,000 MW. Despite the availability of enormous energy resources, per capita energy consumption is among the lowest in the world, about 40 kWh/yr in Ethiopia and 145 kWh in Kenya. Besides, power shortages and unreliability of supply are common. This poor quality electricity supply is characterized by low voltage levels and voltage fluctuations beyond acceptable levels, resulting in frequent blackouts and brownouts.

Insufficient reserve capacity to meet fluctuations in hydro-generation (in case of severe drought conditions) has also led to unreliable power supply and need for industry to maintain costly back-up. This lack of reliable supply is contributing to reduced economic competitiveness.

Ethiopia is well endowed with a huge hydro generation potential which is estimated at approximately 45,000 MW. In line with the country's energy policy, the Government intends to develop these indigenous resources for domestic consumption and export. The Government of Ethiopia is interested in effecting power system interconnection with its neighbouring countries as part of its export strategy and for mutual benefit.

The enormous potential for electricity trade in the Eastern Nile countries coupled with its socio-economic and environmental benefits will pioneer the idea of a regional power market and enhance the East African Power Pool (EAPP). A major setback to the development of such a market is insufficient transmission infrastructures. This project is expected to help overcome this setback and in addition, create transmission capacity needed in interchange of electric power between Ethiopia and Kenya, in the long run. Further, the project is expected to generate investment opportunities in electricity infrastructure and also give rise to development of other related industries.

## **1.2 Objective of Study**

The objective of this study is to:

- (i) Review Fichtner's RAP report of 2009;
- (ii) Review the four alternative routes which were recommended for further studies under Fichtner's report and arrive at an optimized route;
- (iii) Based on the new optimized route, prepare RAP and ESIA reports to be adopted by the Transmission Line design consultant in the preparation of detailed route design.

With the above consideration, Tropics Consulting Engineers Plc of Ethiopia and Gamma Systems Ltd of Kenya were on April 7, 2011 jointly awarded a contract to undertake the review of the ESIA and RAP reports. In accomplishment of this, the Consultants were to prepare a route selection report with recommendations of optimized route for approval by the Clients and stakeholder. On approval of the selected route, the Consultants were to undertake detailed RAP study which is the subject of this report and a separate ESIA report.

## **1.3 Scope of Work**

This RAP report sets out to describe the project area, the project-affected persons (PAPs) and communities. The baseline conditions including demographic characteristics, household character, socio-economic conditions of the project-affected area and the impact of the project on the PAPs and communities has been described and statistics presented. The report identifies positive impacts on the households, communities and other stakeholders so that they can be enhanced and negative impacts so that they can be mitigated. Such negative impacts include temporary and permanent

relocation, demolition of dwellings, businesses, public facilities, limited utilization of land, trespass during project implementation and operations and maintenance. All this has been studied to facilitate compensation of PAPs to reduce their suffering and win their support for the project.

The scope of work as set out under the Contract states that the Consultant shall:

- Undertake a socio-economic survey of the communities along the proposed line route;
- Conduct a census of the affected persons, including identification of any vulnerable groups and indigenous populations;
- Develop an eligibility criteria and establish a cut-off date;
- Evaluate and prepare an inventory of the affected properties;
- Evaluate all other socio-economic costs;
- Conduct public consultations/awareness creation of the relevant stake-holders taking into consideration the gender concerns and vulnerable groups;
- Identification of alternative relocation sites, where affected persons might have to be resettled;
- Develop adequate livelihood restoration mechanisms;
- Prepare the resettlement implementation costs;
- Preparation of implementation schedule;
- Develop a monitoring and evaluation methodology;
- Consider the relevant legal provisions for land acquisition and resettlement during preparation of an appropriate re-settlement action plan;
- Prepare and submit a detailed resettlement action plan; and
- Develop a conflict resolution mechanism.

#### **1.4 Route Optimization**

The Consultant reviewed Fichtner's 2009 ESIA/RAP reports and used desk study data and preliminary route inspection to identify alternative options and detailed four options in a Draft Route Selection Report which was submitted to the Client.

Fig. 3.1 below shows the four transmission route options A, B, A/C and D that were subjected to desk and field analysis that culminated in selection of an optimized route for ESIA and RAP studies.

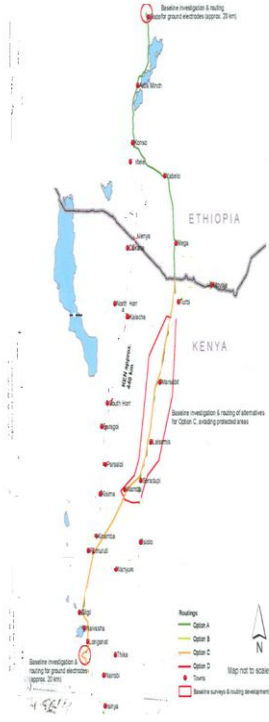
Fig. 3.1: Transmission Line Route Options

Option A

Option B

Option A/C

Option D





Line optimization in Kenya involved comparison of environmental impacts in respect of four main preselected route options: A, B, C and D. These options were analysed in detail in respect of Marsabit National Park, Losai Game Reserve and Matthews Range Forest Reserve. These areas have been the subject of discussions among the main stakeholders including financiers, Clients, PAPs and affected communities.

Route Option A in Kenya was the earliest selected route in 2008. It comprised a 649 km route entering Kenya at coordinates N389760, E498488. It runs along the Isiolo – Marsabit highway through Marsabit National Park and Losai Game Reserve and ran in a southerly direction up to Isiolo Town where it turned westwards through Nyandarua and Nakuru Counties to terminate at Suswa substation. This route was found to be unsuitable.

. Option B is 669 km long and crosses the Ethiopia - Kenya border near Moyale (at coordinates N351638, E390917). It then turned westwards south of Matthews Range to traverse Nyandarua and Nakuru Counties and terminate at Suswa substation. The option was found to be technically unsuitable.

Route Option C in Kenya was suggested in 2008 after modification of Option A. Its length was 693 km and crossed the border at coordinates N399889, E419125. It ran along the Isiolo – Marsabit highway which traverses Marsabit National Park. It passed through a mountain pass in the Matthews Range and then re-joined the common route through Nyandarua and Nakuru Counties to terminate at Suswa substation. This was found to be the most optimal route since it was well serviced by public roads which could be used for transportation during construction and for O&M. The section traversing Marsabit National Park and Losai Game reserve is already traversed by a major highway linking Kenya and Ethiopia. The environmental impact is imposed by the highway and the proposed transmission line is highlighted in the ESIA Report. This option was the most preferred and following field public consultations it was diverted south of the Matthews Range and thus bypassed the sensitive Matthews Range Forest Reserved. With this diversion it also avoiding numerous *manyattas* of the Samburu people and also avoided several public assets that were constructed after the 2009 Fichtner study.

Route Option D was suggested in 2011 as an effort to bypass Marsabit National Park, Losai Game Reserve and Matthews Range while attempting to shorten the length of the proposed transmission line by following a more direct route. It turned out to be 647 km, . The proposed option route crossed the Ethiopia - Kenya border at coordinate point N474141, E294831 and ran in a southerly direction through Marsabit, Samburu, Baringo and Nakuru Counties to terminate at the proposed Suswa substation. This option was found unsuitable as it passed through the Chalbi desert an area that is prone to prolonged flooding after rain seasons which would make transmission line construction expensive and difficult. It was therefore rejected.

The Consultants completed the transmission line route optimization by submitting the Final Route Selection Report followed by the Draft Inception Report. The Draft Inception Report was reviewed and resubmitted after incorporating comments received from the stakeholders. The Consultants have subsequently conducted field data collection which includes household census and community consultations whose results are herein presented. During the household and community consultations the approved route option C in Kenya (overall A/C) was diverted southwards to avoid the Matthews Range. Further consultations to support the decision were conducted among the group ranches and community conservancies in the area and the decision endorsed. After field data collection, further minor route changes were effected along the entire route in order to avoid newly constructed schools and shopping centres with a view to complying with KETRACO's Resettlement Policy Framework.

The Clients and stakeholders approved Option A/C as the optimum route upon which the Consultant carried out more detailed ESIA/RAP studies and submitted Draft Final Reports as per the Contract. The preferred Option A/C is the original route studied under the Fichtner 2009 report with slight variations. The major points for preference of the A/C Option route above Options B and D were:

- The other alternative routes (Option B or D) did not achieve the 10 – 15% reduction in length as originally expected by the stakeholders;
- Option D which was shorter by 81 km was found to be traversing marshlands which had the potential of making the project more expensive in construction and in operation and maintenance;

## **1.5 RAP Methodology**

The RAP study commenced with the review of the Fichtner 2009 RAP report. The proposed transmission line route optimization was undertaken through a thorough desk-top study of the route selected under the 2009 study and from stakeholders comments on the route selected in 2009. Two other alternative routes were studied in detail and the finally-accepted Option A/C was selected for in-depth study. RAP considerations as well as ESIA parameters played a major role in the finally selected route.

Baseline data for the optimized transmission line route was collected and reviewed with the aim of understanding the household and community character of the PAPs. On the basis of the baseline data, the social-economic setting of the entire RoW was established. Such baseline data included but was not necessarily limited to the following:

- Demography
- Socio-economic activities
- Cultural issues
- Administrative boundaries
- Road and rail networks
- Protected reserves including forests, wildlife reserves, etc
- Main physical features

With a good knowledge of the project-affected area, a programme of field data collection was prepared and two data collection questionnaires (household and community) prepared. Household questionnaires were administered to 100% of the households and control questionnaires after every 10 households selected randomly to the left or right of the proposed RoW. Communities to whom questionnaires were administered were selected arbitrarily where they were brought together by a common activity such as being members of a farming community, residents of a trading centre, belonging to a religious group, being members of a development project such as a school, health centre, etc. Others interviewed under this classification were NGOs operating in the region, CBOs such as ranching and wildlife conservancy groups and GoK administrators in the various departments operating within the project area. Field data collection combined the role of public awareness about the project, community consultations, collection of views of the PAPs and affected communities as well as preparation of the line RoW map.

### **1.5.1 Data Collection and Analysis**

During field data collection, information relating to compensation was gathered. Such information included:

- Land ownership
- area of affected land and related land-use
- Area of affected buildings and other fixed-assets

- Affected community assets
- Affected Government and public assets

For purposes of this study, a household refers to all the people living within the same building as a family where they share common resources, cook and eat from the same pot. Such a household is headed by one person. Members of a household may also include others living in a homestead but may or may not have a kinship and/or blood ties with the household head. A farm helper, for example, is part of a household. In this context the household head will be the recipient of compensation since he/she is responsible for construction and/or relocation.

100% of households on the RoW were consulted plus one control household randomly selected one kilometre to the left or right of the RoW after every tenth household. Communities along the RoW were consulted through a public *baraza* (public gathering) which served as information sharing forums and for data collection. During the field data exercise, numerous minor RoW realignments were carried out to avoid developments that have come up after the 2009 study.

The field data was analyzed using SPSS 15.0 statistical computer software, the results of which are presented in this report. During data analysis, estimates of affected asset values was carried out which provided the RAP budget.

### **1.5.2 Public Participation and Consultation**

Field data collection at any point on the RoW was preceded by making contact with the relevant area Government administrators such as chief, sub-chief, District Officer (DO). Other key persons who played this role were religious leaders in and around religious missions, head teachers in and around large educational facilities, etc. These community opinion leaders played the role of providing information about the community and its culture while they helped organize community mobilization and peer consultations.

Also consulted during the field data collection were community business organizations (CBOs) including the wildlife conservancy management, group ranching management organizations as well as non-governmental organizations (NGOs).

### **1.5.3 Preparation of RAP Report**

This RAP Report was prepared in accordance with guidelines of the African development Bank and World Bank; legislations and other regulations currently in force in Ethiopia and Kenya. The Fichtner 2009 RAP has been updated to capture demographic, socio-economic and route changes while incorporating stakeholders' views which arose from the RAP field study. The aim of the RAP is to assess the potential social impacts (positive and negative) of the proposed transmission line highlighting of socio-economic issues relating to land acquisition, loss of economic activities and livelihoods, resettlement and displacement of households and community assets.

This RAP report has documented the process of resettlement of PAPs and fulfills the project objective to avoid or minimize involuntary resettlement to ensure that affected individuals and households and/or displaced communities consultations are documented, participation of PAPs in the resettlement planning process is well thought out and organized, and that PAPs are adequately compensated to the extent that at least their pre-displacement incomes are restored in a fair and transparent process. Such a process must ensure that people and enterprises affected by the project are compensated for any loss of property and/or socio-economic displacement arising from the project. The report sets out to document the process applied in providing PAPs with opportunities to restore or improve their living standards and income earnings capacity to at least pre-project levels while providing guidelines to stakeholders participating in the mitigation of adverse social impacts of the project which include rehabilitation and resettlement operations in order to ensure that PAPs are not impoverished by adverse social impacts of the project.

On the overall the report seeks to inform in a step-by-step manner how resettlement of PAPs, communities and other project-affected entities have been involved in the entire process of resettlement so that they can identify with the project and render their support to it.

The Draft RAP Report was prepared. The report was circulated for stakeholders' comments. A one-day stakeholders' conference was held. During the conference queries and comments were raised by the stakeholders. Other queries and comments were received by mail. The comments and response to them are highlighted in the schedule in Appendix 1 and have been incorporated in this Final Report.

## PROJECT DESCRIPTION

The Ethiopian - Kenya Power interconnection project involves establishing power transmission facilities (power transmission line and substations) between Ethiopia and Kenya to export up to 2000 MW of electricity. The interconnecting transmission link between Ethiopia and Kenya is approximately 1045 km long. The power system analysis and the preliminary results of the economic/financial evaluation showed preference for a solution that was fully or partially based on long-distance HVDC link. The design addressed two types of transmission line configurations: a conventional double circuit 400 kV AC and a  $\pm 500$  kV bipolar DC line. The finally-adopted transmission line was envisaged to have a minimum transmission capacity of 2000 MW for the  $\pm 500$  kV HVDC bipolar configuration.

Converter substations were planned at Wolayta/Sodo in Ethiopia and Suswa in Kenya. At the Suswa substation site, the integration of the converter station with the existing transmission system is through a 400 kV HVAC busbars on which outgoing transmission lines will be terminated.

### 1.6 Project Area

#### 1.6.1 Marsabit County

The proposed HVDC transmission line roughly dissects Kenyan territory diagonally into two parts in a south-westerly direction. It enters Kenya west of Moyale town close to the north-eastern frontier and passes through six counties of Marsabit, Samburu, Isiolo, Laikipia, Nyandarua and Nakuru Counties as shown in Fig. 4.2 below.

Marsabit County lies at the border of Ethiopia and Kenya. Most of the county is mainly low-lying at 400 and 700 masl. Land-use in the county is mainly livestock rearing and nomadic pastoralism is the major way of life. The area is interspersed with several mountain ranges and hills including the Ndoto Mountains (2660 m) to the west, and Marsabit Mountain (1545 m) within Marsabit Town. The county is home to the Burji, Boran, Ariaal and Rendille communities who are mainly traders, pastoralists and also carry out some irrigation farming. The soil distribution is influenced by intensive variation in relief, climate, past volcanic activities and the underlying rocks. Marsabit County is arid with low and unreliable rainfall ranging between 75 and 400 mm annually. The average temperatures range between 26 and 32°C. These temperatures are higher within the Chalbi Desert. The desert is rocky and devoid of vegetation, except for few scattered Acacia species. It has a mean annual rainfall of 200 mm in the lowlands and 800 mm in the highlands.

Marsabit has no perennial rivers except seasonal rivers which are water-bearing when rare and usually torrential rain falls in the desert. Marsabit County also has no permanent rivers although mountain run-offs provide temporary surface water in the lowlands mainly through Milgis and Merille Rivers. The highlands are interspersed with several permanent lakes, including Lake Paradise and several water-filled craters on Mount Marsabit. The only permanent water bodies in the entire Chalbi Desert region, besides Mount Marsabit, are Lake Turkana to the West and Uaso Ng'iro River in Samburu County to the South. Uaso Ng'iro River plays an important role in supporting pastoral livelihood and is currently utilized by the pastoralist Samburu, Ariaal, Rendille, Somali, and Boran tribes. The uplands landscapes with altitude ranging from 1,300 to 1,358 masl are a generally cool environment with higher woody canopy cover. The soil is dominantly brown loam with moderate drainage, which is mostly used as dry season grazing, but currently much of it is used for crop cultivation and settlements. Low-lying landscape at altitudes ranging from 1,079 to 1,296 masl are warm and mostly covered with low scrub vegetation, used mainly as grazing area especially for goats and camels. Hilly topography in the surrounding of farms and settlements is mostly reserved as pasture for calves and weak animals (Kalo).

Vegetation in Marsabit can be described in four categories: woodland, dwarf shrub bushland, shrubland and thickets. Woodland can only develop with subsidiary water supply along channels and permanent rivers. The bushland is characterized by *Acacia tortilis*, *Commiphora africana*, *Grewia* species and dwarf shrubs such as *Lippia carvioidora* and *Vernonia cinerascens*. Forests contain mostly trees of 7 - 40 m height or more, with often interlocking crowns. Evergreen forests

are characterized by trees that may shed leaves, but the canopy as a whole remains green throughout the year (e.g. composed of trees such as *Olea eurpaea* subsp. *cuspidata*). Deciduous forests are characterized by trees that lose their leaves during the dry season (e.g. *Acacia* and *Combretum* spp.).

### **1.6.2 Samburu County**

Samburu County lies between 1,600 and 2,300 masl but less than 1% of its total land mass is arable. The hills cover an area of approximately 9,933 ha and covered by dense vegetation which provides potential for wildlife conservation. The county is vulnerable to natural hazards such as drought and floods along the Ewaso Ng'iro River and human confrontations for pasture and water. Recurring drought has resulted in loss of range biodiversity with a result of low vegetation cover. Constant migrations by the pastoral communities in search of water and pasture have enhanced environmental degradation as new tracts of land are cleared to provide temporary settlements. Another factor that has enhanced environmental degradation is exploitation of the scarce vegetation for fuel. The soil distribution in the county is complex and is influenced by intensive variation in relief, climate, past volcanic activities and the underlying rocks.

Samburu County is dry almost throughout the year and rainfall is generally scarce and unreliable. Rainfall is distributed within two seasons in a year with an average of approx. 580 mm. The county lies astride the equator which gives it two distinct seasons: wet and dry. It is mainly semi-arid with rainfall varying significantly from one year to another. The rainfall in the region is influenced by three distinct rain periods in Kenya, the 'long' rains which are usually experienced from April to May, the 'short' rains in November and the 'continental' rains which fall sporadically from July to September. December, January and February are generally the driest months. Rainfall is associated with heavy thunderstorms in most cases. The north receives less rainfall than the south. The average annual rainfall distribution ranges from less than 500 mm in the dry areas to over 800 mm in the wet areas.

Samburu County has three perennial rivers: Ewaso Ng'iro, Isiolo and Kama. Isiolo River is the main water source for Isiolo Town while the irrigation potential of the other rivers is yet to be determined. Preliminary assessments indicate that ground water and surface water potential in the region are limited. Other areas such as Sericho Division have poor quality water due to high salinity, except for areas where volcanic rocks dominate. Such areas cover approximately 10% of the county. Water is scarce due to few reliable sources (dams, springs and pans) and this often the course of conflict, which leads to persistent insecurity in the county.

The dominant tree species in Samburu County is *Acacia*. Fire-adapted grassland is common in the semi-arid central parts of the county, which is partly as a result of human activities giving rise to frequent fires, charcoal burning and over-grazing.

Land use and natural vegetation types in the Upper Ewaso Ng'iro basin depend on the altitude, climate and soils. On mountain slopes, moist montane forests dominate. There are also riverine forests especially in higher altitude, and dry forests in the drier highlands such as Matthews Range. Shrub grasslands and bush grasslands occupy much of the Laikipia Plateau area, while in the plains of Isiolo and Samburu, shrubland is dominant.

### **1.6.3 Laikipia and Isiolo Counties**

The Laikipia Plateau is a zone of transition from the drier Marsabit and Samburu Counties to the north and wet highlands of Nyandarua to the south. A large portion of the central region is utilized for large scale ranching, while wheat and barley are grown on the wet high altitudes. Small scale subsistence farming settlements continues to spread spring up. Pastoralists inhabit the northern region, which experiences a harsh and fragile environment. In those areas where overgrazing is widespread, it gives rise to soil erosion and general land degradation. Areas of Laikipia have three main vegetation types: mixed *Acacia* bushland, open grassland and *Acacia* woodland.

#### 1.6.4 Nyandarua County

Nyandarua County has a total land area of 3,304 km<sup>2</sup>. It lies between latitudes 0° 8' N and 0° 50' N and between longitudes 35° 13' E and 36° 42' E. The county borders Laikipia County to the north, Nyeri and Murang'a Counties to the east, Kiambu County to the south and Nakuru County to the west. Nyandarua County mainly lies in the Aberdares highland, comprising the Kinangop Plateau, Ol Kalou/Ol Joro Orok Plateau and Ol Kalou/Ol Joro Orok Salient. The Aberdare Ranges run across Nyandarua County. Soil types in the county are red and of volcanic origin and rich in organic matter.

Laikipia and Nyandarua Counties experience two rainy seasons per year. The long rains are typical between March and May, and the short rains between September and November. The annual average rainfall is about 800 mm, which supports agriculture. Agriculture is important in the county, as it is the main occupation of the residents, and crops of this region are delivered to the nearby urban centres like Nairobi, Nakuru, Gilgil and over larger distances to cities like Mombasa and Kisumu.

Large areas of Nyandarua County are forested; Aberdares forest is of particular interest. Forests comprise mostly trees of 7 - 40 m height or more, with often interlocking crowns. Evergreen forests are characterized by individual trees that may shed leaves, but the canopy as a whole remains green throughout the year (e.g. composed of trees such as *Olea eurpaea* subsp. *cuspidata*). Deciduous forests are characterized by trees that lose their leaves during the dry season (e.g. *Acacia* and *Combretum* spp.). These are found between Shamata and Ndaragwa areas.

Lake Ol Bolossat is an internal drainage basin whose swamps have a high salt content possible due to high evaporation rate and partly to nature of sediments that constitute the area. It is situated between the northwestern slopes of Aberdares Mountains and Dunderi Ridge which are the main catchments. The IBA offers a variety of habitats ranging from open water through the floating marsh/swamps, open grasslands and riverine forests along rivers and springs that feed the lake.

#### 1.6.5 Nakuru County

Nakuru County lies at an average altitude of 1,890 masl, in the Rift Valley Province. Soil composition in the county is complex as it is influenced by intensive variation in relief rainfall climate, past volcanic activities and the underlying rocks. The soil distribution in the project area is complex and is influenced by intensive variation in relief, climate, past volcanic activities and the underlying rocks. The main soil types in the Naivasha basin are *calcic gleysols*, *andohaplic pheozems*, *gleyic cambisols*, *ando-calcic regosols*, *lithosols*, and *calcic xerosols*, from the *lacustrine* plain through the volcanic plain to the volcanic hills respectively. Generally, the soils in the study area have high phosphorus, calcium, magnesium and potassium concentrations but are low in respect of nitrogen and carbon.

*Pyroclastics*-ashes, agglomerates and tuffs cover a considerable proportion of the area over the entire volcanic plain southerly of lake Naivasha. During the eruptions of the Longonot volcano, easterly winds caused the heaviest accumulations of the ejected ashes to occur in and around the study area. More recent *pyroclastics* are acidic in composition. The ashes are usually inter-bedded with other volcanic soils. The most recent eruptions are reported to be approximately 2000 years ago.

The project-affected part of Nakuru County lies within the range of the Intertropical Convergence Zone. The rainfall distribution has a bi-modal character. The long rains are experienced from April to June and the short rains from October to November. Mount Kenya and the Aberdare Ranges capture moisture from the easterly monsoon winds, casting a significant rain shadow over the Lake Naivasha Basin. The spatial distribution of the rain varies from approx. 600 mm at Naivasha Town to approximately 1,700 mm at the slopes of the Aberdare Ranges.

During the rainy season rainfall usually occurs in the afternoon. The rain intensities can be very high, reaching 100 mm/hour. Long cycles of wet and dry conditions in the region result in large fluctuations of Lake Naivasha's water level. Days are generally warm but rarely hot and nights are cool. In Naivasha Town the maximum and minimum temperatures are 37°C and 5°C respectively with the mean lying around 16°C.

Lake Naivasha lies in the Eastern Rift Valley at an altitude of 1,890 masl and covers approximately 100 km<sup>2</sup>. The lake is of recent geological origin, and is ringed by extinct or dormant volcanoes, including Mounts Longonot, Ol Karia and Eburu. Naivasha's water is supplied by the permanent Malewa and Gilgil Rivers, which respectively drain the Aberdare mountains and the Rift Valley floor to the north, by the seasonal Karati River (also draining from the Aberdares) and from substantial ground-water seepage. The Malewa contributes 90% of the surface water entering the lake, which has no surface outlet. It is thought that a combination of underground outflow and sedimentation of salts keeps the lake fresh, unlike other endorheic lakes in the eastern Rift Valley. Naivasha includes three chemically distinct water bodies:

- the main lake (approx. 15,000 ha, max. depth approx. 8 m) incorporates a partially submerged crater,
- the Crescent Island lagoon (max. depth approx. 18 m) at its eastern end is largely isolated at low water levels, and
- the small (approx. 550 ha) somewhat alkaline Lake Oloidien to the south-east, separated by papyrus *Cyperus papyrus* swamp and an isthmus of *Acacia* woodland.

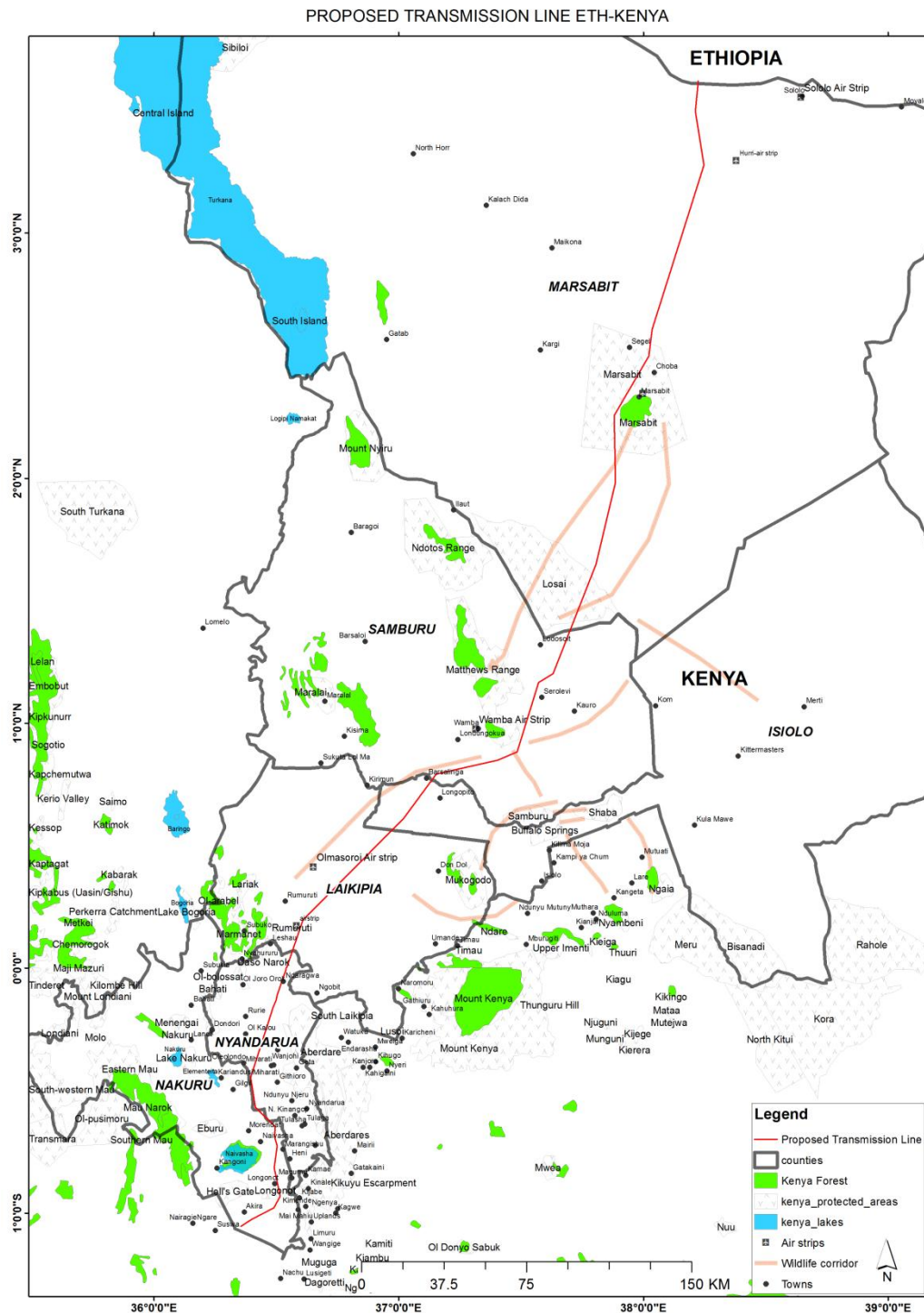
The lake's levels fluctuate enormously, and Naivasha has been dry within historic times.



**Fig. 4.1 - Donkeys in Chalbi Desert**



## 1.7 Route Description



The proposed transmission line route crosses from Ethiopia into Kenya approximately 90 km west of Moyale town (grid E 421519, N 397867) and traverses Marsabit, Samburu, Laikipia, Isiolo, Nyandarua and Nakuru Counties. From Moyale the transmission line route runs along the Great North Highway (Marsabit – Moyale Road) in a southerly direction. From Marsabit the route runs southwards at outside the road reserve up to Marsabit Town. From Marsabit towards Logologo it runs approximately 0.5 km on the western side of the road through Laisamis to Merille. From Merille it runs to the eastern side of the Marsabit – Isiolo highway at a maximum of approximately 0.5 km outside the road reserve. It crosses to the west of the highway just before Serolipi where it runs up to the road junction to Wamba. It then turns in the south-westerly

direction to Barsaliga where it crosses the Ewaso Ng'iro River into Isiolo County where it traverses a stretch of fairly flat land covered by thorny shrubs and bushes, and then turns southwards to the Ngorbit Plateaus and ridges, dropping altitude into Laikipia County. The route continues through the extreme western section of Mpala Ranch which is covered by scattered thickets and bushes. It crosses Mutara River and then traverses the diminished Pesi Swamp into Ndaragwa. The route runs westwards on top of the ridge approximately 1km from Shamata and then sharply drops altitude to the flat plains of Lake Ol Bolossat, four kilometres east of the lake. It then traverses the Olkalou Settlement Scheme with its adulating ridges and cuts across Malewa River and then runs along the river up to Malewa Farm where it turns in a south-easterly direction, climbs a steep hill and runs along the Rift Valley and Central provincial boundary. The route then drops altitude to the flat land of Marangishu (karati) and onwards to Kijabe after crossing the two Nakuru – Nairobi highways near Naivasha on the new highway and near Mai-Mahiu on the old highway. The route then passes six kilometers east of Mt. Longonot to terminate at the proposed Suswa Substation.

In addition to the above Transmission Line, there will be a HVDC ground substation which will require electrode line, which is a single conductor that departs from the substation and is connected to the ground. The point of connection to the ground can be located as few as 2 Km away from the HVDC line which can also carry the electrode conductor, but from 15km to 20 km away from the substation. This means that a supplemental line to carry the electrode can be as short as 2 km or as long as 20 km. It is proposed at Suswa area,

## 1.8 Description of the Proposed Works

The main activities for implementation of the project shall include clearing of bushes and cutting of trees over 4.5 m high that fall within the 65 m RoW corridor. This work may at certain places be preceded by clearing of bushes scrub to create temporary vehicular passage to facilitate conveyance of construction materials and personnel from the nearest road position to the transmission line corridor. 45 m steel-lattice towers will be erected at regular intervals to support the overhead conductors. Each steel towers will be supported on 4 m deep reinforced concrete foundation measuring 17 X 17 m. The formwork for the foundation will be 30 X 30 m but will be removed after the foundation sets. In this respect an area measuring 17 X 17 m will permanently be occupied by the tower footings at regular intervals along the entire transmission line. Fig. 4.2 below shows a typical tower and foundation details.

This means that the major socio-economic impact of the project will be temporary vehicle access passages and the 65 m RoW bush clearance both of which will be allowed to re-grow. The undergrowth under the RoW will, however, be limited to 4.5 m high trees and shrubs. Farming activities will be impacted mainly during construction phase and to a lesser extent during O&M through destruction of crops and grazing area and clearing of plantation forests and orchards by removal of all trees above 4.5 m high. Whereas perennial crops will be allowed to be grown under the transmission line, trees and bushes above 4.5 m high will not be allowed to grow under the transmission line.

The transmission line route was amended during the field consultations so as to avoid community structures such as schools, dispensaries, churches, etc; most of which have been constructed after the 2009 report. Dwelling, business and community buildings that cannot be avoided will be compensated and demolished to give way to the 65 m RoW. Household secondary buildings such as cow shed, chicken houses, barns, outdoor kitchens and latrines, gate-houses, etc shall be demolished but free-ranging grazing and chicken raring will be allowed under the transmission line.

As for the HVDC ground substation, the **final site for the electrode conductor** has not yet been decided, **however** a preliminary **review of the potential site** was carried out to understand the nature and magnitude of any potential social impacts. Based on this field review, the social impacts are likely to be minimal. The sitting of the electrode will require approximately 25 hectares of privately owned land **within a 15 km radius of the substation. For safety purposes this land will be fenced.** Most of the land around the sub-station site is owned by private ranch owners. **Land to be acquired within the 15km radius of the substation for the**

**electrode conductor should be selected where there are no people, structures or encumbrances.** Generally, there do not appear to be people or structures on **most of the land in this 15 km radius** therefore no additional social impacts or entitlements other than those already noted in this RAP are anticipated. However, when the final siting of the line is defined a more detailed socioeconomic baseline survey and census will be carried out and, if necessary, policy entitlements for any additional impacts not already defined in this RAP will be prepared. When the routing of this short supplemental line is defined an Abbreviated Resettlement Action Plan (ARAP) in accordance with the valuation, entitlement and other provisions of this RAP will be prepared and include the following: (i) socioeconomic baseline and census of the affected population; (ii) consultations with affected people on potential impacts and mitigation measures; and (iii) a timetable for resettlement activities and associated budget. The RAP will be submitted to the Bank for review prior to the commencement of works on this line and before any resettlement activities can commence.

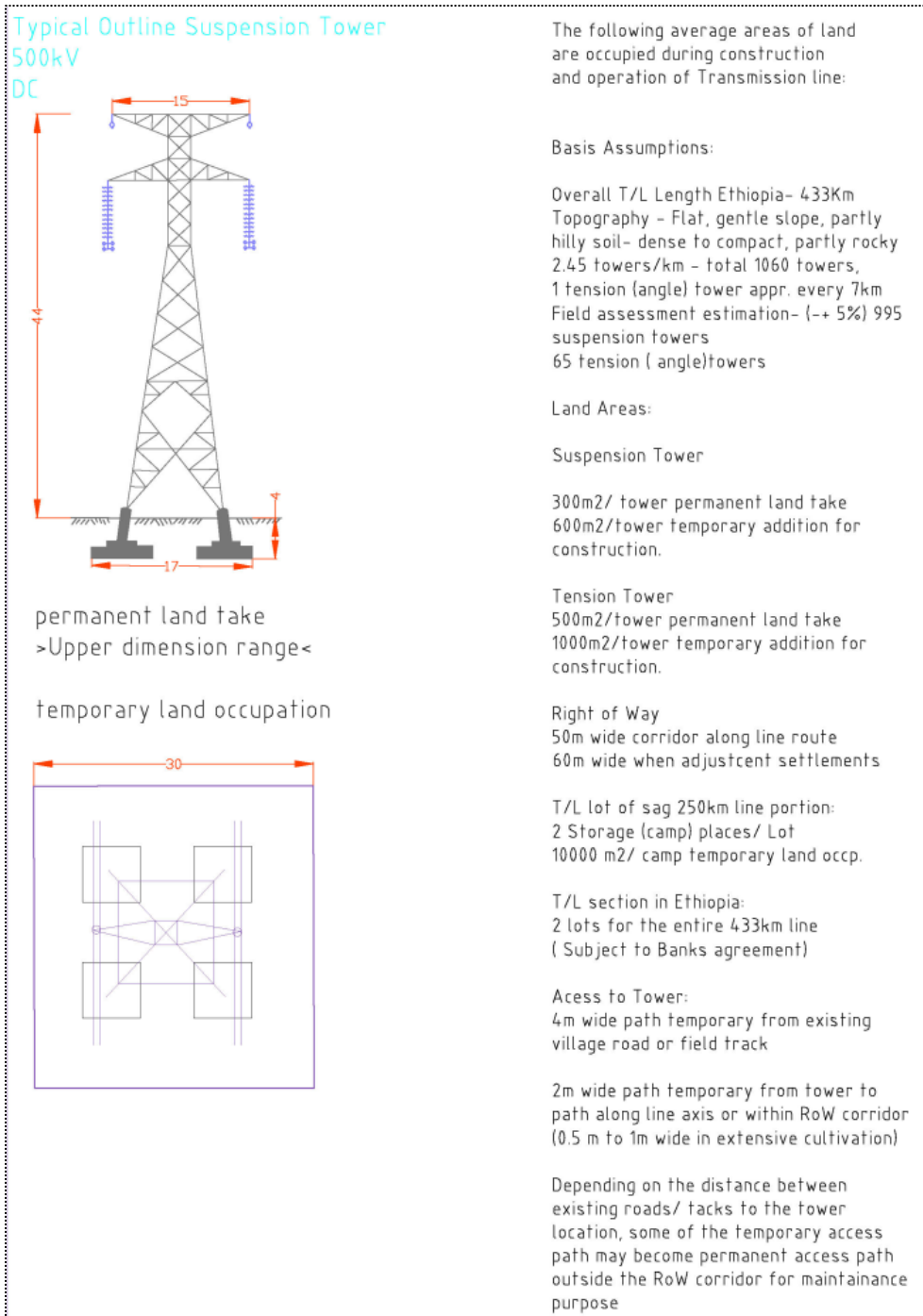


Fig 4.2 – Typical TL Tower and Foundation

## 1.9 Transmission Line Corridor

A corridor 65 m wide, 32.5 m on either side of the centre-line linking the entry point of the proposed transmission line at the Ethiopia – Kenya border and Suswa substation was investigated in detail. The investigation included desk and field studies whose findings are documented in this report. Table 1 in Appendix 2 shows details of the positioning, angle points, geographical positions and administrative areas traversed by the proposed transmission line.

### 1.10 Requirement for Land

The total land area traversed by the RoW in Kenya is 39.39 km<sup>2</sup>. This area covers privately-owned land, public land, community land, trust land, etc. This report provides details on the modes of compensation, budget and management of the compensation process. There has not been found any need for outright purchase of land but wayleaves agreements will form the basis for compensation and re-location of assets where necessary.

## 1.11 Operations and Maintenance Activities

Modern operation and maintenance procedures for transmission lines employ use of technology including electronic fault-finding techniques and overflying of the line by helicopter. Except where heavy engineering work such as replacement of tower members is necessary, most of the maintenance work on transmission lines is done using helicopters. For this reason, the temporary vehicle access passage constructed during installation and the bushes cleared during installation are allowed to re-grow. Trees and bushes are however cropped to a maximum height of 4.5 m for the entire lifetime of the transmission line.

## 1.12 Resettlement Cost Components

Consistent with WB OP/BP 4.12 and associated Annex and the relevant AfDB Policy on Involuntary Resettlement, affected persons, irrespective of their legal status are eligible for some form of compensation if they occupied the land before the entitlement cut-off date which is the date when the assessment of persons and their property in the project area is carried out. The key determinant for compensation is on the basis of a pre-project census during which all residents were identified. Replacement costs have been categorized separately from houses, structures, crops and trees. Resettlement will not necessarily require (except by choice of the PAP) relocation to another village or area. In most cases the PAPs will chose to step back within their compounds. The Physically Displaced Persons will be allocated alternative sites and/or given materials to replace their structures affected by the project. The PAPs will be informed of the different options available during the disclosure process. The vulnerable PAPs will receive special assistance in establishing replacement homes.

Compensation and entitlements will be triggered by particular and specific impacts resulting from the project. Using a holistic approach, these general impacts emanating from the project shall include losses at household and community level (public assets, commercial assets, and communal assets). Losses will mainly fall into the following categories:

- Loss of assets (structures and agricultural land)
- Loss of livelihood
- Loss due to severance

Category 1 Structures: Those who will lose all structures such as residential, kiosks, stalls, etc. and have relevant licenses; those who will lose some part of their structures such as residential, kiosks, stalls, etc. and have relevant licenses; those who will lose all structures such as residential, and have not acquired relevant license; and those who will lose some part of their structures such as residential, kiosks, stalls, etc. and have no relevant ownership documents e.g. Title Deeds.

Category 2 Agricultural Land: Those who will lose all land which they have titles to; those who will lose partial land and have titles; those who will lose all land and have no titles; those who will lose partial land and have no titles; those who will lose all trees; those who will lose part of their trees; those whose crops will be damaged during construction.

Entitlement Matrix: The Kenyan law recognizes compensation for loss of property including houses, crops and trees due to implementation of development projects. The law recommends a fair compensation for loss of property. The government has established a compensation principle which includes: compensation for loss of property is paid at market value. Property loss falls under four categories namely property owners, business tenants, residential tenant, encroachers (using land) and squatters. Table 4.2 below shows the compensation entitlements for PAPs. Land ownership will be analysed and categorized into ownership by title, ownership by lease, ownership by trust, ownership by squatting, etc. Based on ownership types, compensation will be computed. Special compensation will be given as per KETRACO Resettlement Policy Framework for disturbance, loss of earnings, to special groups such as the disadvantaged persons (e.g. vulnerable persons).

**Table 4.2 – Compensation Entitlements for PAPs**

Asset	Process
Land with Structures	<p><b>Steps:</b></p> <ul style="list-style-type: none"> <li>a) A detailed inventory of all persons, possessions, assets and stock requiring resettlement will be made</li> <li>b) Accurate and real valuation of dwelling will be taken</li> <li>c) Determine compensation packages according to valuations will be carried out</li> <li>d) Allow a reasonable time period prior to moving, for salvage of building materials. PAP's shall salvage any material without the same being deducted from their compensation entitlements</li> <li>e) Provide temporary housing/shelter if necessary</li> </ul> <p><b>Recommendations:</b></p> <ul style="list-style-type: none"> <li>a) KETRACO will pay compensation for the lost housing structures</li> <li>b) KETRACO will provide transport for the occupants and their belongings to their new place of residence</li> <li>c) The owner will be entitled to remove any materials he/she wishes to salvage within one month of vacating the old dwelling</li> <li>d) KETRACO will provide transport for these materials, other than masonry, to the new residential site</li> </ul>
Land without structures	<ul style="list-style-type: none"> <li>a) <b>Inventory:</b> As part of the RAP phase, KETRACO will acquire names and contact details of all persons affected by the project</li> <li>b) <b>Compensation:</b> The RAP data sheet prepared will spell out how each person is affected and indicates how much compensation will be paid for crops and trees lost</li> </ul>
Business loses and employment earnings within the wayleave.	<p>Where within the wayleave business profits are affected, compensation will be paid in accordance with documented valuation &amp; audited results of the business' monthly income</p>
Crops/Fruits/Trees on PAP plantation	<ul style="list-style-type: none"> <li>a) <b>Tree/perennial crops:</b> Harvesting of the crops will be given a first priority but where harvesting is not possible, counting of the affected crops will be done by a registered valuer and KETRACO agent in the presence of the owner. Computation of the costs will be done according to market rates and payments thereafter made either at KETRACO offices, or through the local chief's office</li> <li>b) <b>Annual crops:</b> Crops will be harvested by the owner and therefore no compensation will be paid for crops. Where crops cannot be harvested, KETRACO will pay compensation at the market rate</li> </ul>

## **LEGAL AND INSTITUTIONAL FRAMEWORK**

### **1.13 Legal Framework for Land Acquisition and Compensation**

#### **1.13.1 The Constitution of Kenya, 2010**

The main legal framework which will guide the Environmental and Social Impact Assessment (ESIA) as well as the Resettlement Action Plan (RAP) is the Constitution of Kenya 2010 under which environmental issues, land issues and compensation are given prominence. Issues of environments are given due prominence. Under Chapter 4 – The Bill of Rights, Article 42 provides for the rights of environmental protection of persons and the right to enact environmental laws to ensure such protection. Part 2, Article 70 provides for the enforcement of environmental rights. There is on-going work to enact laws under the new Constitution but currently the EMCA is the principal legislation that regulates environmental matters.

The Constitution spells out conditions for ownership of land by the state, community and individuals (citizens and non-citizens). Under Sub-section 60(1)g, communities are encouraged to settle land disputes through recognized local community initiatives consistent with the Constitution. Sub-Article 62(1)c, states that private land can be transferred to the State by way of sale, reversion or surrender and under 62(1)h, all roads and thoroughfares are provided for by Act of Parliament. The Constitution classifies community land under 63(2)d(i) land lawfully held, managed or used by specific communities as community forests, grazing areas or shrines; and (ii) ancestral lands and lands traditionally occupied by hunter-gatherer communities. Section 63(2)d(4) Community land shall not be disposed of or otherwise used except in terms of legislation specifying the nature and extent of the rights of members of each community individually and collectively.

The proposed transmission line will traverse land owned by individuals and communities in Nakuru, Nyandarua and parts of Laikipia. It will traverse trust land in parts of Laikipia, in Isiolo, Samburu and Marsabit Counties. The Constitution will by and large be triggered by the land compensation issue.

#### **1.13.2 The Energy Act, No. 12 of 2006**

The main sector-specific law that regulates the electricity sub-sector in Kenya is the Energy Act, 2006. The Act establishes the Ministry of Energy (MoE), Energy Regulatory Commission (ERC), Kenya Electricity Generating Company (KenGen), Kenya Power and Lighting Company (KPLC) and Kenya Electricity Transmission Company (KETRACO).

The Energy Act, 2006 provides for the way an electricity supply licensee is permitted to enter land for purposes of constructing electric lines. It highlights the process of establishing wayleaves and compensation for wayleaves, how complaints relating to compensation can be settled and the issue of compulsory acquisition of land for wayleaves purposes. Several other statutes complement the Energy Act in the regulation of the electricity sub-sector.

This Act will be triggered through entering of land for purposes of wayleaves establishment and for construction of transmission line.

#### **1.13.3 Environmental Management and Coordination Act, No. 8 of 1999**

The Environmental Management and Coordination Act No. 8 of 1999 (EMCA) is an Act of Parliament that provides the establishment of an appropriate legal, institutional and regulatory framework for environmental management.

The EMCA was developed as a framework law. It is the only legislation that contains the most comprehensive system of environmental management in Kenya. The Act is based on the recognition that improved legal and administrative co-ordination of the diverse sectoral initiatives is necessary in order to improve national capacity for environmental management. It has the main purpose of coordination and supervision of a wide range of environmental issues, which are contained in the regulations and guidelines. Section 3 of the Act highlights the General Principles

that guide its implementation. Every person in Kenya is entitled to a clean and healthy environment and has the duty to safeguard and enhance it.

The Act is implemented through an institutional set up that includes the National Environment Council (NEC), National Environmental Management Authority (NEMA), Public Complaints Committee, National Environment Tribunal and the Board of Trustees for the Environment Trust Fund among others.

How provisions of EMCA are triggered is analysed and covered in details in the ESIA Report.

#### **1.13.4 The Occupation Safety and Health Act (OSHA), 2007**

This Act applies to all workplaces and workers associated with it; whether temporary or permanent, with the aim of securing the safety, health and welfare of workers and non-workers. It is recommended that all sections of the Act relating to this project be observed. OSHA Action Plan shall be developed and shall provide a clear statement of intent and a plan of action for the prevention of accidents and occupational illnesses and injuries.

How provisions of the Act are triggered is analyzed and covered in details in the ESIA Report.

#### **1.13.5 Work Injury Compensation Benefit Act 2007**

This Act provides for the compensation of employees on work related injuries and diseases contracted in the course of employment and for connected purposes. The act includes compulsory insurance for employees. The project is likely to trigger this act as it shall employ both skilled and unskilled labourers during construction and operation phases of the project, the contractor therefore must ensure this acts' requirement is observed.

How provisions of the Act are triggered is analysed and covered in details in the ESIA Report.

#### **1.13.6 Land Planning Act Cap 303**

Section 9 of the subsidiary legislation (the development and use of land Regulation 1961) requires that before the Local Authority submits plans to the minister for approval, steps should be taken as may be necessary to acquire the consent of owners of the land affected by such plans. Comments and objections made by the landowners should be submitted and mitigated with the intent to reducing conflict of interest with other socio-economic activities.

This Act will be triggered by requirement for coordinated wayleaves, consent, acquisition and compensation. To ensure compliance with this Act, this RAP report has set out a detailed procedure to guide land acquisition, compensation for wayleaves and for lost assets.

#### **1.13.7 Land Control Act Cap 302**

This act of parliament controls transactions on agricultural land. The act is supported with the land control regulations and land control. This Act is triggered by the fact that the proposed transmission line will cross productive agricultural land in Nakuru, Nyandarua and Laikipia Counties.

#### **1.13.8 Land Acquisition Act 295**

This Act provides guidelines on land expropriation by the State or Government for the general benefit of the community. The Act considered that the owners of the acquired land should be compensated and their grievances addressed. The requirements of this Act are triggered by KETRACO's intention to acquire land or enter into wayleaves agreements with land owners.

The Land Acquisition Act (Cap 295) provides for the compulsory acquisition of private land and property held under Registered Lands Act, Cap 300 and the Land Titles Act, Cap 281. Public land administered under the Government Lands Act, Cap 280 but used for private development in leases can also be compulsorily acquired under the Land Acquisition Act. Stringent conditions have been set out under the Act in the event that compulsory acquisition must take place. In this case compensation may take two forms. One form is cash compensation and the other is land



compensation. Cash compensation is provided for under section 9 of the Act. The amount entitled to the land owner is paid directly to them but in situations of prolonged dispute, the commissioner of lands is required to deposit the money in a court of law pending resolution of the dispute. Section 12 of the Act allows the Commissioner of Lands to award land of equivalent value as compensation

This RAP Report sets out a coordinated transparent system for land acquisition, compensation and wayleaves agreements so as to facilitate planning for the entire process; the RAP therefore offers mitigation against compensation impacts.

#### **1.13.9 Way leave Act 292**

The Act provides for certain undertakings to be constructed e.g. transmission lines, pipelines, canals, pathways etc, through, over or under any lands. This project is under the provision of the Act. Section 3 of the Act states that the Government may carry any works through, over or under any land whatsoever, provided it shall not interfere with any existing buildings or structures of an on-going activity.

In accordance with the Act (Section 4), notice will be given to community members before carrying out works and it shall provide a full description of the intended works and targeted place for inspection. Any damages caused by the works would then be compensated to the owner as per the section.

This will be the main legislation guiding wayleaves agreements, compensation for loss or damage to assets, loss of earnings and general inconvenience.

#### **1.13.10 The Registered Land Act Chapter 300 Laws of Kenya**

This Act provides for the absolute proprietorship over land (exclusive rights). Such land can be acquired by the state under the Land Acquisition Act in the project area. The project traverses some areas where land ownership is regulated by the Act. Section 14(1) of the Registered Land Act (Cap 300) gives squatters the right of ownership of the land they have occupied for a period specified under Section 12 of the Limitation of Actions Act as 10 consecutive years. This provision does not apply to Government Land. It therefore rules out any compensation of squatters on Government Land.

The Act will be triggered by the fact that the land will be required to be procured and hence the Proponent shall need to comply with the provisions of the Act in land acquisition within the areas where the Act is in force.

#### **1.13.11 Trust Lands Act (Cap 288)**

A large proportion of the land through which the proposed transmission line traverses falls under the Trust Land Act. Trust lands and those living within the jurisdiction of such land have received special consideration under the new Constitution of Kenya, 2010 and therefore in considering compensation and resettlement under the Act special considerations will be made to address provisions which will be triggered by issues of acquisition, compensation and disadvantaged persons.

#### **1.13.12 Public Roads and Roads of Access Act (Cap. 399)**

During the construction phase of the project, access to the site areas will be required for construction vehicles and machinery. Where access roads do not exist, the Proponent shall seek permission from the appropriate authorities and land owners to create such vehicular access passages as necessary for use during the construction phase. Where such passages will link into the existing roads and where the flow of traffic will be affected by the project, the necessary permits will be sought.

### **1.13.13 Local Government Act, Chapter 265 of the Laws of Kenya**

The Energy Act, 2006 requires any applicant for a license to liaise with Local Authorities affected by its proposed activities and obtain their consents prior to submitting an application for a license to the Electricity Regulatory Commission. The project will trigger the provisions of this Act and therefore the proponent will be required to adhere to the bylaws of the relevant local authorities.

### **1.13.14 The Standards Act, Chapter 496 of the Laws of Kenya**

The Electricity Regulatory Commission is empowered to enforce safety regulations and to ensure that electrical apparatus and building wiring works meet the standards set by the Kenya Bureau of Standards or where no such standards exist, compliance with the relevant international standards approved by the Kenya Bureau of Standards.

This Act will be triggered in this context through ensuring safety of people living near the line and the substations. Mitigation of this impact is addressed in the ESIA Report.

### **1.13.15 Agriculture Act (Cap 318)**

The Agriculture Act contains provisions for promoting agricultural development. It is implemented by the Ministry of Agriculture. The long term objective of the Act is to ensure the development of arable land in accordance with the sound practice of good land use. It therefore stresses the need for conservation of soil and its fertility and has provisions for soil erosion control. Through these provisions it has the means to control one of the most important pollutants: namely, sediments eroded from agricultural lands. By regulating the utilization of different categories of land for various agricultural purposes, the Act strives towards sustainable utilization of land resources.

The Act will be triggered by the fact that most of the affected land is agricultural while most of the affected assets will be linked to growing of crops and animal husbandry.

### **1.13.16 Forests Act (Cap 385 and Act No. 7 of 2005)**

The Forestry Act is regulated by the Ministry of Environment and Natural Resources. The Act contains the provisions for establishment, control and regulation of Government forests and other forests in Kenya. It regulates the conservation of vegetation of all types (both indigenous and exotic). The Act provides the regulations for the exploitation of these resources and their sustainable management.

The Act will be triggered due to the necessity for clearing trees and shrubs during the project implementation most of which will not be allowed to re-establish to its full height for the entire project life.

### **1.13.17 Wildlife (Conservation and Management) Act (Cap 376)**

This act of parliament is implemented by the Ministry of Environment and Natural Resources in conjunction with other relevant government agencies such as Kenya Wildlife Service. The act contains provisions for the preservation and control of wild fauna and flora. The spirit of the Act is to ensure that Kenya's fauna and flora continue to flourish in their natural habitats. Various national parks and game reserves apply the act in protecting flora and fauna in their areas of jurisdiction.

Apart from the biological impacts which have been covered in the ESIA Report, the Act will also be triggered due to compensation of individuals and communities who live and derive their livelihood from wildlife conservancies which are interspersed through Laikipia, Samburu and Marsabit Counties. This RAP Report addresses this impact.

## **1.14 Institutional Framework**

### **1.14.1 Ministry of Energy**

The Ministry of Energy is responsible for all the issues related with energy in the Republic of Kenya. The Ministry is in charge of enforcement of the Energy Act, 2006. The energy sector is mainly made up of two sub-sectors; electricity and petroleum sub-sectors. Other sub-sectors are still not fully developed but the Ministry is exploring their viability and ways to develop them.

The Energy Act, 2006 has established the Energy Regulatory Commission and the Rural Electricity Authority.

### **1.14.2 Energy Regulatory Commission**

Energy Regulatory Commission (ERC) is established under the Energy Act, 2006 with the following objectives and Functions:

- (i) Regulate the electrical energy, petroleum and related products, renewable energy and other forms of energy;
- (ii) Protect the interests of consumer, investor and other stakeholder interests;
- (iii) Maintain a list of accredited energy auditors as may be prescribed;
- (iv) Monitor, ensure implementation of, and the observance of the principles of fair competition in the energy sector, in coordination with other statutory authorities;
- (v) Provide such information and statistics to the Minister as he may from time to time require;
- (vi) Collect and maintain energy data;
- (vii) Prepare indicative national energy plan; and
- (viii) Perform any other function that is incidental or consequential to its functions under the Energy Act or any other written law.

Under the Energy Act, 2006, ERC is mandated with the task of licensing electricity generating, transmission and distribution entities.

The Energy Act, 2006 spells out the procedures to be followed when entering land for purposes of installing electricity conductors. The Act also spells out procedure for negotiating and paying out compensation to those affected by an electricity-related project. It lays out procedures to be followed where compulsory acquisition is necessary. The Act spells how affected persons dissatisfied by the decision of the ERC can appeal to the Energy Appeals Board. Those dissatisfied with the ruling of the Energy Appeals Board can appeal to the High Court.

The Energy Act, 2006 gives authority to the electricity provider to enter land during operation and maintenance of the electricity installations and to lop tree branches where such branches encroach on the wayleaves. The Act also gives direction on how electrical lines should interact with other infrastructure such as roads and railway lines.

### **1.14.3 Ministry of Lands**

Land management in Kenya is vested in the Government under the Ministry of Lands. The Ministry is made up of the following five departments:

- Department of Administration and Planning;
- Department of Lands;
- Department of Land Adjudication and Settlement;
- Department of Survey; and
- Department of Physical Planning.

The Ministry also houses the following five semi-autonomous bodies:

- Land Arbitration Tribunal;
- Valuers Registration Board;
- Estate Agents Registration Board;

- Land Control Boards
  - Divisional Boards
  - Provincial Boards
  - Provincial Appeals Boards
  - Central Appeals Board
- Physical Planning Liaison Committee.

The Ministry of Lands is charged with the enforcement and regulation of all the Acts relating to land which include:

- Government Land Act (Cap 280);
- Registration of Titles Act (Cap 281);
- Land Titles Act (Cap 282);
- Trust Lands Act (Cap 288);
- Registered Land Act (Cap 300);
- Land (Group Representation Act) – Cap 287;
- Transfer of Property Act Chapter Group 8;
- Trustees (perpetual succession) Act Cap 164;
- Physical Planning Act No. 6 of 1996;
- Valuation of Rating Act, Chapter 266; and
- Valuers Act, Chapter 532.

#### **1.14.3.1 Land Management**

Department of Lands is headed by Chief Lands Registrar. Its core functions are:

- Preparation, registration and issuance of title deeds for all categories of land, including also registrations of transactions relating to land.
- Assessment and collection of stamp duty, conveyancing and other land transaction fees.
- Incorporation of Trusts under the trustees (perpetual succession) Act Cap 164 laws of Kenya.
- Hearing of appeals to the chief land Registrar under sec. 150 (1) of the Registered lands Act (cap 300) on any refusal by the Deputy Chief Land Registrar or other Land Registrars to cancel or effect any registration.
- Hearing of land partition and boundary disputes under sec (104 and 21 of the Registered Lands Act (Cap 300).
- Hearing of land claims under the Land Titles Act (Cap 282) laws of Kenya.
- Custody, maintenance and updating of land Records.
- Stating cases to the Attorney General under various land statutes.

The Department of Survey is the official agency of the Government of Kenya on all matters affecting land surveys and mapping. Its' main functions are:

1. To provide and maintain plans for property boundaries in support of the Land Registration throughout the country.
2. To provide all kinds of topographical and thematic maps in both rural and urban areas of the country for use by other Government Departments and the general public (including tourist visitors).

The department has survey offices in eight (8) provinces and forty-seven (47) counties manned by Provincial and County Surveyors respectively. The department has been in existence since 1903.

The key role of the Department of Physical Planning is the production of physical development plans. The urban and rural areas of Kenya are facing problems related to poor infrastructure, poverty, environmental degradation and declining urban areas. All these have a direct implication on the well being of the society and the planner of today is duty-bound together with other stakeholders to provide solutions to tackle the issues.

Implementation of the Physical Planning Act Cap 286 has enabled the public to participate in the planning process.

The Land Arbitration Tribunal is a quasi-judicial body established under Section 147 of the Government Lands Act Cap.280 (GLA) for the purpose of hearing and determining any disputes arising under the Act.

The Tribunal consists of a Chairman and four members who are professionally qualified on legal and land matters. The Tribunal is appointed to serve for a period of 3 years.

Land Control Boards are established by the Minister responsible for Lands by legal notice in the Kenya Gazette to control the following dealings relating to agricultural land within a land control area, i.e. an area to which the Minister has applied the Land Control Act, Cap. 302 by notice in the Gazette:

- The sale, transfer, lease, mortgage, exchange, partition or other disposal of or dealing with any agricultural land which is situated within a land control area;
- The issue, sale, transfer, mortgage or any other disposal of or dealing with any share in a private company or co-operative society which for the time being owns agricultural land situated within a land control area.

Physical Planning Liaison Committees are provided under section 7 of the Physical Planning Act. They include the following:

- National Physical Planning Liaison committee;
- Municipal Physical Planning Liaison Committee; and
- County Physical Planning Liaison Committee.

The purposes of the Committees are:

- (i) National Physical Planning Liaison committee:
  - To hear and determine appeals lodged by a person or local authority aggrieved by the decision of any other liaison committee;
  - To determine and resolve physical planning matters referred to it by any of the other liaison committees;
  - To advise the Minister on physical planning policies, planning standard and economic viability of any proposed subdivision of urban or agricultural land; and
  - To study and give guidance and recommendations on issues relating to physical planning which transcend more than one local authority for purposes of co-ordination and integration of physical development.

Other Liaison committees functions are:-

- To inquire into and determine complaints made against the Director in the exercise of their functions under this Act or local authorities in the exercise of their functions under this Act;
- To enquire into and determine conflicting claims made in respect of application for development permission;
- To determine development applications for change of user or subdivision of land which may have significant impact on contiguous land or be in breach of any condition registered against a title deed in respect of such land;
- To determine development relating to industrial location dumping sites or sewerage treatment which may have injurious impact on the environment as well as applications in respect of land adjoining or within a reasonable vicinity of safeguarding areas; and
- To hear appeals lodged by persons aggrieved by decisions made by the Director or local authorities under this Act.

Members of the committees comprise various departmental heads, District Commissioners (or successors to the post to be created under the Constitution of Kenya 2010), chairmen of local

authorities and County Physical Planners. Under the Constitution of Kenya 2010, since districts have been replaced by Counties, the post of district commissioner is expected to be replaced by County Representative which is an elective post. The Law which will define the administration post that will replace the district commissioner's is yet to be passed.

Where a party does not accept the decision of the county or municipal liaison committee it can appeal to the National Liaison Committee. Appeals against the National Physical Planning Liaison Committee are handled by the High Court.

#### **1.14.3.2 Development Control**

Control of development is a key function of the department in consultation with local authorities, Commissioner of Lands and the Developers. This normally involves the implementation and monitoring whether provisions in the approved Development Plan are complied with.

The issues addressed in Development Control include land subdivisions, extension of leases, change of users and building plans, etc. No development should be undertaken without grant of development permission by the Local Authority. Development applications are submitted to the Local Authority by using Form PPA 1.

The following procedure is followed in applying for development permission. Development Applications on subdivision/change of user must be:

- Accompanied by a plan duly prepared as provided by the Land Control Board (LCB) regulations section 2 (2) and the Physical Planning Act. 1996 section 41 (2) that the plan be prepared by a registered Physical Planner;
- Development applications for building plans should be accompanied by the relevant drawings and specifications prepared by a Registered Architect;
- The local Authority on receipt of the development applications, shall immediately or within 30 days send a copy of the development application on form PPA 1 to the Director of Physical Planning/County Physical Planner and other relevant authorities in the county for comments, among them the County Land Officer, County Surveyor etc.;
- The Physical Planner on receipt of the said copy (Form PPA 1) shall collect Appropriation in Aid (AIA), consider and process the application and then enter the required information in the subdivision Register. The Physical Planner shall then send it back to the local authority with comments. The other authorities would do likewise.
- The local authority shall process the form and the decision whether the development is approved or not to approved on form PPA 2. The decision should be communicated in writing to the applicant within 30 days of the decision being made after consideration comments from the County Physical Planning Officer and other relevant authorities.
- One of the conditions to be attached to approval of any application for permission to develop is the issuance of Form PPA 5 (Certificate of compliance) by the County Physical Planning Officer. The certificate is only issued when the applicant has fulfilled all the conditions attached to the approval as indicated on Form PPA 2 and/or when the approved physical development plan and the approved development proposal.
- On approval of the application for development, the local authority will issue notification to that effect on Form PPA 2 addressed to the applicant and copied to all the relevant authorities and other stakeholders.
- In the case of subdivisions/amalgamations, the applicant will furnish the surveyor with the Land Control Board consent and Form PPA 2 together with approved scheme, after which the mutations/survey plans will be prepared. The County Physical Planning Officer will issue form PPA 5 (certificate of compliance) if satisfied that the survey plan/mutations are in accordance with the approved scheme.
- The Land Registrar shall be furnished with Land Control Board consent, Form PPA 2, Form PPA 5 and a copy of the approved subdivision/amalgamation on freehold land.

- All applications for development permission relating to leasehold land: be it for subdivision/amalgamation, extension of lease, change of user or building plans shall be circulated to the Commissioner of Lands/County Lands Officer for consent before approval by the local authority. Once approval for such applications is granted, the local authority will communicate this decision to the Commissioner of Lands/County Land Officer through Form PPA 2 and form PPA 5 to enable the Commissioner of Lands effect the necessary documentation as required under the relevant laws.
- A local authority can issue an Enforcement Notice where development has taken place without development permission or in contravention of development condition. Such a Notice should specify the offensive development or condition and the corrective action required within a specified period.

The Minister has power to direct a local authority take such action, as he considers appropriate for development control without undue delay on the part of any person.

### **1.14.3.3 Resettlement**

Department of Land Adjudication and Settlement which consists of two divisions namely:

- Land Adjudication, which deals with Land Adjudication, Consolidation, Group Ranches,
- Settlement, which deals with settlement of landless citizens.

The department operates in six (6) provinces:-

- Central• Coast• Rift Valley• Nyanza• Eastern• Western. It also operates in 47 counties.

Four Acts of Parliament govern the mandate of the department namely:-

- Land Consolidation Act (Cap 283)
- Land Adjudication Act (284)
- Group Representatives Act (Cap 287)
- Agriculture Act (Cap 318).

### **1.14.3.4 Land Adjudication Division**

This division is mandated to ascertain rights and interests on land in trust land areas and transformation of ownership from customary tenure to individual ownership through demarcation, survey and registration.

The division operates under the following three Acts of Parliament:

- Land Consolidation Act (Cap 283)
- Land Adjudication Act (284)
- Group Representatives Act (Cap 287)

## **1.15 Other Notable Guidelines and Safeguard Policies**

### **1.15.1 African Development Bank Guideline, procedures and policies:**

The following AfDB guidelines, procedures and policies are likely to be triggered by this project:

- Guidelines under the Handbook on Stakeholder Consultation and Participation in ADB Operations;
- Cooperation with Civil Society Organizations Policy and Guidelines;
- Environmental and Social Assessment Procedures for African Development Bank's Public Sector Operations;
- Annex 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14,15, and 16 of the ESIA Procedures for AfDB Public Sector Operations;

- Gender Policy , 2001;
- Bank Group Policy on Power Reduction, 2004
- Involuntary Resettlement Policy, 2003;
- The African Development Bank Group Policy on Disclosure of Information, 2005; and
- African Development Bank Group’s Policy on the Environment; 2004

### **1.15.2 The World Bank Safeguard Policies**

The following WB guidelines, procedures and policies are likely to be triggered by this project:

- 
- OP 4.04 and BP 4.04 and Annex A – Natural Habitats;
- OP 4.01 and Annex B – Environmental Assessment;
- 
- 
- OP 4.11 and BP 4.11 – Physical Cultural Resources; and
- OP 4.12 – and Annex A – Involuntary Resettlement

### **1.16 Influence of Institutional and Legal Framework on the Project**

Power transmission lines characteristically generate impacts such as acquisition and maintenance of the right-of-way (RoW), clearing of vegetation from sites and line corridor; construction of vehicular access passages, tower pads, and substations which are the most obvious sources of construction-related impacts. The area of immediate impact will be the line corridor RoW of 65 m width along the entire length of the transmission line. Parallel strip of land traversing vegetation will also be completely cleared of all trees, scrub and undergrowth above a height of 150 mm during construction phase. Appropriate clearance between conductors and vegetation/structures along this corridor will be maintained throughout the life of the transmission line. Cropping and grazing beneath the conductors is normally permitted. Most disturbances to the environment occur during the construction phase of the project. It should however be noted that both positive and negative impacts will result from the project implementation.

The assessment of environmental and social impacts will be presented qualitatively and quantitatively depending on the issues. The potential impacts will be described as per the guideline set by the legal framework in Kenya and Ethiopia, policies and guidelines of the institutions and stakeholders involved in the project as well as AfDB and the World Bank safeguard policies and procedures.

On the overall, the legal frameworks, institutional frameworks, guidelines and safeguards listed above will be used whenever triggered for purposes of enhancing the project’s potential impacts reducing suffering caused by negative impacts; thereby achieve acceptance and support of the project by the affected persons and communities. Some of the notable positive and negative impacts of the project are highlighted below:

#### **1.16.1 Potential Positive Impacts**

The following potential positive impacts were identified during scoping and field data collection.

##### **1.16.1.1 Employment Opportunities**

Employment opportunities will be offered to skilled and unskilled workers and during the construction phase. In addition, there will arise, opportunities for establishing shops, restaurants, etc. and engaging in income generating activities especially for women.

##### **1.16.1.2 Additional Electric Power Capacity**



With the additional substations and transmission line, there will be increased capacity and reliability of power supply. This additional capacity will have a positive impact by being able to meet the ever rising power demand across the whole country.

#### **1.16.1.3 Development of ICT Hubs**

Currently Ethiopia and Kenya are developing rural-based ICT networks that are geared to benefit the local populations and supply local schools with ICT terminals as ICT is being integrated into school curriculum in line with the countries' MDGs. The policy is to incorporate optical-fibre ground wire (OPGW) in all new lines. The study will examine the potential of OPGW to supply power to broad-band communication telecommunication hubs, mobile telephone networks and digital television to population centers and schools along the project affected area.

#### **1.16.1.4 Conservation Measures**

Access to adequate and affordable energy for households and industry will help in rolling back the rate of deforestation and thus help in conserving water resources. Access to affordable energy will revolutionize transportation and farming methods hence cutting down on emissions of CO<sub>2</sub>, NO<sub>x</sub> and SO<sub>x</sub> to the atmosphere and thus help in reducing the effects of global warming. The study will elaborate on this situation as applicable to the project.

### **1.16.2 Potential Negative Impacts**

A full environmental and social impact is presented along-side this RAP Report. The study makes detailed assessment of the prevailing conditions along the RoW and recommends mitigation measures for the negative impacts of the project.

Detailed and in-depth impact assessment has been made in this report with regard to:

- Impacts on partial or total loss of agricultural land
- Impact on partial or total loss of trees and shrubs
- Impact on damage to crops and grazing area
- Impact on loss of dwellings, business premises and community assets
- Impact on loss of other fixed assets by individuals, communities and others
- Impact on partial or total relocation
- Impact on places of worship, memorials, burial places, etc.
- Impact on loss of earnings
- Impact on disturbance arising from any of the above
- Impact on disadvantaged persons

### **1.17 Analysis of Gaps between Legal and Institution Frameworks and Bank Policies**

#### **1.17.1 Cultural Properties**

1.17.2 Under Sections 11 and 44, the Constitution of Kenya, 2010 recognizes that right of individuals in observing their national and cultural rights. It is expected that future law reforms will provide for these rights under different circumstances. EMCA, 1999 provides for regulatory framework which has almost no social coverage in it. The WB OP. 4.11 however provides for how existing or perceived infringement on physical cultural properties has to be screened and documented. Gender

The Constitution of Kenya, section 60(1)(f) seeks to eliminate gender discrimination in law, customs, and practises related to land and property. Sections 81(b), 175(C) and 177(1)(b) provides for no more than two-thirds of elected members in elective bodies, representation of

devolved government and special seats of elective assemblies. Sections 91(1)(f) and 91(2)(a) provides for observance of gender equality and equity the running and founding of political parties and similarly with the Judicial service Commission as provided for under Section 172(2)(b). The AfDB Gender Policy 2001 reinforces the provisions of the Constitution by providing detailed direction on how gender issues are handled in the course of a project. This policy was therefore observed during public consultations and in the course of RAP report preparation.

## SOCIOECONOMIC BASELINE CONDITIONS

### 1.18 Administration Boundaries

The proposed Ethiopia – Kenya Transmission Line traverses the two countries: Ethiopia and Kenya. As shown on Fig. 4.2, the proposed transmission line route crosses from Ethiopia into Kenya approximately 90 km west of Moyale town at grid point E 421519, N 397867. The RoW then traverses six counties, namely: Marsabit, Samburu, Laikipia, Isiolo, Nyandarua and Nakuru. It terminates at the proposed Suswa substation which is located at the boundary of Nakuru, Narok and Kajiado Counties.

The headquarters for Marsabit, is at Marsabit Town, for Samburu is at Maralal, for Laikipia it is at Nanyuki for Isiolo is at Isiolo Town, for Nyandarua is at Nyahururu and for Nakuru is at Nakuru Town. According to the Constitution of Kenya 2010, the county is going to be the lowest level of government administration and the centre for development in a devolved government system. In this respect therefore, all activities concerning compensation will be centred at the headquarters of the six counties in which the proposed transmission line will traverse.

### 1.19 Profile of the Population in the Project Area

#### 1.19.1 Demographic Information

**Table 6.1 – Population of Affected Counties**

County	Male	Female	Total
Marsabit	151,112	140,054	291,166
Samburu	112,007	111,940	223,947
Laikipia	198,625	200,602	399,227
Isiolo	73,694	69,600	143,294
Nyandarua	292,155	304,113	596,268
Nakuru	804,582	798,743	1,603,325
<b>Total</b>	<b>1,632,175</b>	<b>1,625,052</b>	<b>3,257,227</b>

Source: 2009 National Population Census Report

Information of Table 6.2 below was derived from household census.

**Table 6.2: Ethnic Composition of PAPs**

ETHNIC_GROUP	COUNTY				Grand Total	Percentage of Respondents
	Nyandarua	Marsabit	Nakuru			
Gikuyu	213	1	126		340	96.31
Masai			3		3	0.85
Meru	1				1	0.28
Rendile		6			6	1.70
Sakuye	2				2	0.57
Luo	1				1	0.28
Others						0.01
<b>Grand Total</b>	<b>217</b>	<b>7</b>	<b>129</b>		<b>353</b>	<b>100.00</b>

Table 6.1 above describes total populations in the affected counties while Table 6.2 describes the ethnic communities encountered along the RoW where data was initially computed from 433

households that were interviewed but after re-routing the RoW to avoid Matthews Range and community structures 386 households remained affected by the project.



**Fig. 6.1 - Household and Community Consultations**

## **1.19.2 Special Affected Groups**

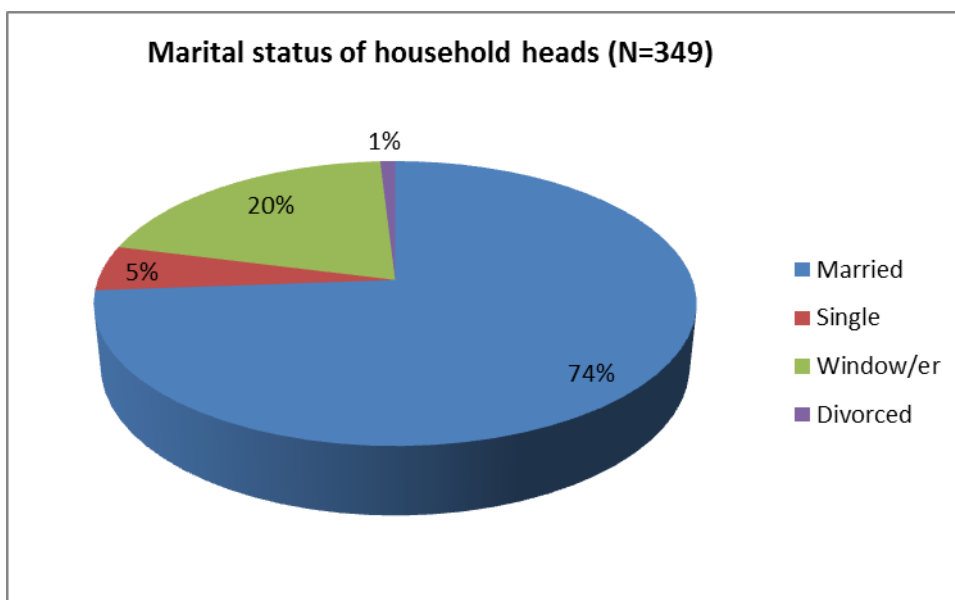
### **1.19.2.1 Disadvantaged Persons**

According to the consulted communities vulnerability in Marsabit and Samburu Counties included persons affected by drought and in Nakuru and Nyandarua Counties it included households without land and livestock, squatters and internally displaced persons (IDPs).. The perception of vulnerability differed between the primarily agricultural counties of Nyandarua and Nakuru and in the primarily pastoral counties of Marsabit and Samburu. Marsabit.

## **1.20 Character of Households**

### **1.20.1 Household Heads**

The average age of household heads within the RoW is 54 years. The youngest household head was 20 years old while the oldest was 90 years old. Fig. 6.2 shows the marital status of household heads (HH). Most of the household heads (74%) were married while 20% were widow/er. Among the households surveyed, 65% were male headed while 35% were female headed.



**Fig. 6.2 - Marital Status of Household Heads**

### 1.20.1 Main Occupation of Household Heads

Error! Reference source not found. below shows the main occupation for the household heads in the RoW was farming comprising 61.7%. 13% are in politics while 8% of household heads were civil servants, 3.9% were pastoralists, 3.1% workpersons/craftpersons and 7% were business persons.

**Table 6.3: Occupation of Household Heads**

Occupation	COUNTY		Total	Percentage
	Nyandarua	Nakuru		
Farmer	164	74	238	61.7
Pastoralist	8	7	15	3.9
Business	8	19	27	7.0
Civil Servant	16	15	31	8.0
Work person	5	7	12	3.1
Surveyor	10	3	13	0.8
Politician	35	15	50	13.0
Grand Total	246	140	386	

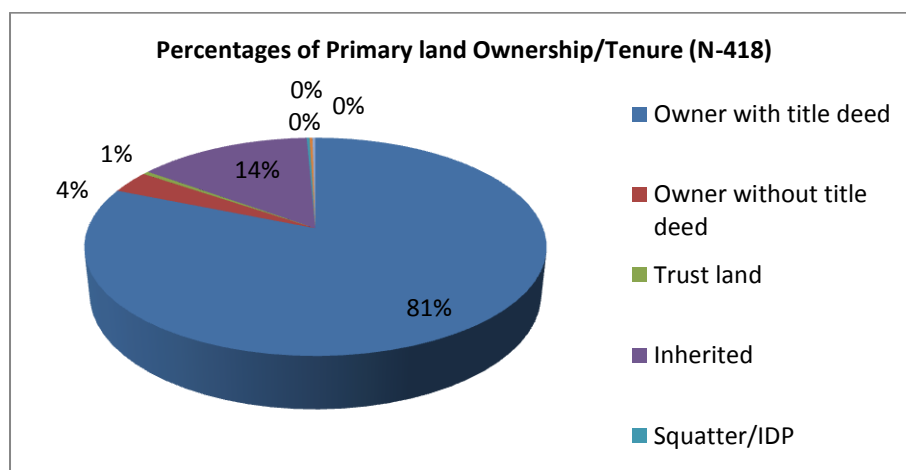
### 1.20.2 Household composition and sizes

The average household size in the area is 5 members of whom the majority are less than 24 years old and 2.7 above 55 years old. This leaves only 2.3 members (18.3%) in the productive bracket of 25 - 54 years old. Table 6.5 describes the composition of the household in the project-affected area.

**Table 6.3 – Composition of Households**

Age Group	N	Male	Female	Total (M+F)	Males per HH	Females per HH	Average HH size
0 - 4 years	135	145	180	325	1.1	1.3	2.4
5 - 14 years	197	279	258	537	1.4	1.3	2.7
15 - 24 years	180	239	199	438	1.3	1.1	2.4
25 - 54 years	241	279	280	559	1.2	1.2	2.3
55 - 64 years	74	41	71	112	0.6	1.0	1.5
65 years and over	82	50	51	101	0.6	0.6	1.2
<b>Total</b>		<b>1,033</b>	<b>1,039</b>	<b>2,072</b>			

### 1.21 Land Ownership

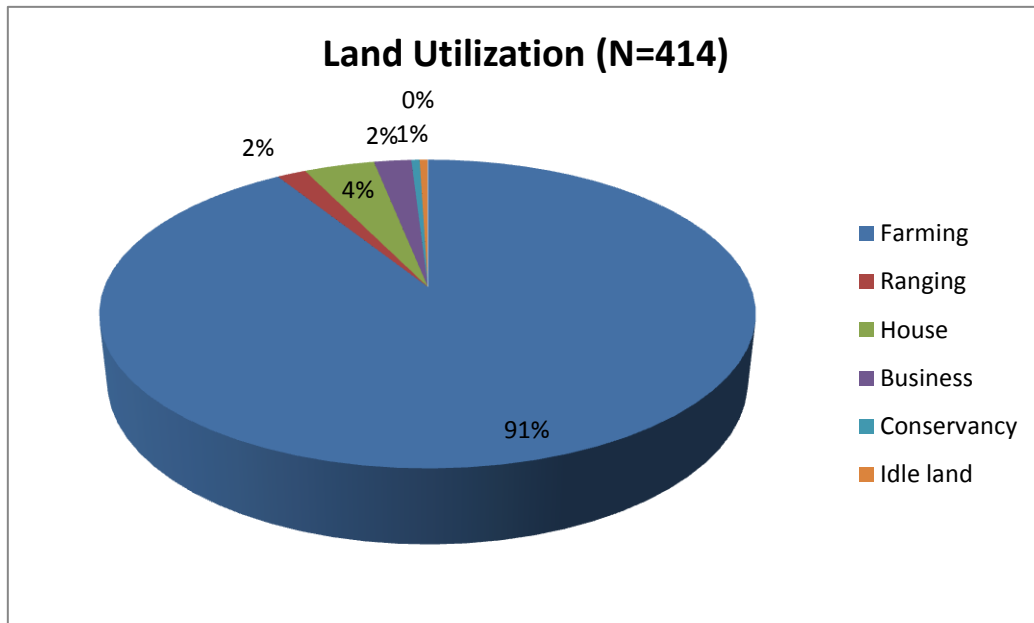


**Fig. 6.2 – Comparison of Land Ownership**

Fig 6.2 above illustrates land ownership by households. Majority of the land in the affected area has title deeds, which means that compensation issues will be relatively easy to handle.

### 1.22

### 1.23 Land Utilization



**Fig. 6.3 – Comparison of Land Utilization**

From Figure 6.3 above, most of the land is under farming activities (91%). Other land uses in the area include residential (4%), business (2%). Very little land is used for conservancy while unutilized is negligible.

Most of the farming households are in Nyandarua and Nakuru Counties. Conservancy land parcels are mainly found in Laikipia Isiolo, Samburu and Marsabit Counties with one located in Marsabit, one in Samburu County. Nyandarua and Nakuru have a more diversified land-use compared to the other counties.

Nakuru and Nyandarua Counties will be most affected by the proposed transmission line. Of the affected land in those counties, over 44% is under farming activities.

**Table 6.5 - Primary Land Use by County**

PRIMARY USE	COUNTY				Total
	Marsabit	Samburu	Nyandarua	Nakuru	
Farming			224	152	376
Grazing			2	5	7
House			7	10	17
Business			4	5	9
Conservancy	1	2			3
Idle land			1	1	2
<b>Total</b>	<b>1</b>	<b>2</b>	<b>238</b>	<b>173</b>	<b>414</b>

**Fig. 6.5: Primary Land Use**

72% of 386 households kept livestock. In total there were approximately 156 sheep grazing entirely or partially within the RoW, 228 cattle, 60 goats and 71 poultry as shown in Table 6.6 below. Others are pigs, donkeys and rabbit. Free-ranging and those in fenced land were almost in equal proportions.

**Table 6.6 – Livestock Kept in the Project-Affected Area**

TYPE OF ANIMALS	TYPE OF GRAZING		Total
	Free Ranging	Fenced Land	
Cattle	97	131	228
Goat	33	27	60
Sheep	64	92	156
Poultry	51	20	71
Pigs	5	3	8
Donkey	13	17	30
Rabbit	3	5	8
<b>Total</b>	<b>266</b>	<b>295</b>	<b>561</b>

## 1.24 Income and Livelihood

### 1.24.1 Household Earnings

Majority of households in Nyandarua and Nakuru Counties had revenues above KShs. 1,562 per month mark of poverty level as per the Economic Survey. Households in Samburu and Marsabit had the lowest earnings. The average income by county on Table 6.7 was found to be generally higher than the national poverty level.

**Table 6.7 - Average Household Earnings (KShs/Month)**

County	Number of Households (n)	Average Household Earnings (KShs/Month)
Marsabit	1	10,000
Samburu	2	2,350
Nyandarua	167	22,455
Nakuru	105	27,253
<b>Total</b>	<b>275</b>	<b>22,566</b>

## 1.25 Vocations and Business Enterprises

### 1.25.1 Availability of Qualified Workers

From community consultations, available work force and service providers are shown in Table 6.8. Generally masonry, truck drivers and security personnel are the most available vocations in the project area. This potential workforce will be beneficial to the project as they will be available for hire during the project and thereby reduce the cost of transporting such crafts-people long distances.

**Table 6.8 – Number of Skilled Workers by County**

TRADE	Marsabit	Laikipia	Nyandarua	Nakuru	Total
Mason	1,585	705	4,932	9,336	<b>16,558</b>
Truck driver	1,233	705	1,938	7,927	<b>11,803</b>
Security	9,336	7,398	2,642	7,751	<b>27,127</b>
Timber logger	705	3,699	1,409	3,875	<b>9,688</b>



<b>TRADE</b>	<b>Marsabit</b>	<b>Laikipia</b>	<b>Nyandarua</b>	<b>Nakuru</b>	<b>Total</b>
Carpenter	1,585	1,409	1,585	1,762	<b>6,341</b>
Painter	1,409	1,409	1,585	1,585	<b>5,988</b>
Mechanic	352	352	881	881	<b>2,466</b>
Welder	176	705	1,057	881	<b>2,819</b>
Electrician	176	352	881	528	<b>1,937</b>
Heavy machinery operator	352	352	176	352	<b>1,232</b>
Blacksmith	528	176	528	176	<b>1,408</b>
<b>Total</b>	<b>17,437</b>	<b>17,262</b>	<b>17,614</b>	<b>35,054</b>	<b>87,367</b>

## 1.26 Provision of Services

From community consultations it was observed that Marsabit, Nakuru, Nyandarua have more service providers compared to Kajiado and Samburu. There are few heavy machinery, mechanical, mobile banking and financial services in all counties. There is no mobile banking services in Marsabit while there is only one financial provide the area. There were no community consultations in Laikipia and Isiolo.

**Table 6.9 - Providing Services**

<b>Service</b>	<b>Marsabit</b>	<b>Samburu</b>	<b>Nyandarua</b>	<b>Nakuru</b>	<b>Total</b>
<b>Transportation</b>	4	1	3	4	<b>12</b>
<b>Timber loggers</b>	4	1	3	4	<b>12</b>
<b>Canteens/restaurants</b>	4	1	3	4	<b>12</b>
<b>Materials</b>	4	1	3	4	<b>12</b>
<b>Hotel/lodges</b>	4	1	3	3	<b>11</b>
<b>Petroleum products</b>	3	1	3	4	<b>11</b>
<b>Financial services</b>	1	1	2	3	<b>7</b>
<b>Mobile banking</b>	0	1	3	3	<b>7</b>
<b>Mechanical</b>	1	0	1	4	<b>6</b>
<b>Heavy machinery</b>	1	0	0	0	<b>1</b>
<b>Total</b>	<b>26</b>	<b>8</b>	<b>24</b>	<b>33</b>	<b>91</b>

## 1.27 Health and HIV/AIDS

Response to the question was not answered. The following information was obtained from secondary data:

**Table 6.12 – HIV Prevalence by County**

<b>County</b>	<b>HIV/AIDS Prevalence</b>
Marsabit	Not surveyed
Samburu	Not surveyed
Isiolo	15%
Laikipia	10%
Nyandarua	5%
Nakuru	12%

Source: District Development Plan, –2008-2012 for Isiolo, Laikipia, Nyandarua and Nakuru Districts

## **CONSULTATION AND PARTICIPATION**

### **1.28 Community Participation and Public Consultation**

Consultations and dialogue with stakeholders including PAPs is very critical for successful resettlement and/or compensation of the affected. The process of consultations will continue until implementation of the RAP is completed. In the process of preparing this RAP, the Consultant undertook extensive consultations with the PAPs to update existing information. During these consultations the communities were encouraged to (i) be open and make known their concerns and claims; (ii) be free to access the formally established grievance process for lodging Complaints; and (iii) allow and give the necessary assistance to the M&E team. In finalization and preparation of the payment schedules and actual payment, KETRACO personnel will continue to conduct a series of consultations and counselling of the PAPs and affected communities.

A total of 11 community consultation meetings were held in the affected area. A diversity of community stakeholders including Government administrators (chiefs, village headmen, etc), village elders, farmers, teachers, men and women were consulted in pre-arranged public meetings held in public institutions such as schools, markets and/or identified homesteads along the proposed line route. The stakeholders were mobilized by chiefs, teachers and school management committee members. Teachers sent pupils to inform their parents of the planned meetings. Chiefs deployed their assistants and village headmen to make announcements and post notices at market centres informing the public about planned meetings. The objectives of the consultation meetings were:

- To enlist the support and cooperation of Government officials, politicians and other stakeholders
- Create awareness of the proposed project especially to those who may be directly affected and those living near the proposed RoW
- To obtain stakeholders' responses, feedback and concerns on the project
- To obtain socio- economic and environmental information on the community

First, the agenda of the meeting was set and agreed on between the project team and community members. The meeting then proceeded; communities were informed about the proposed project through illustrated presentations. They were informed about the purpose of the meeting. The presentations highlighted the project background, objectives, expected upcoming activities, social economic information, environmental information and availability of skilled and unskilled labour including potential for business. After the presentations the community was given opportunity to give their views, comments and queries. Questions were answered, clarifications offered and their recommendations received. At the end of the meeting, minutes of the discussions were read out to the participants for approval as a true representation of what was discussed. Thereafter a community leader (in most cases the chief or head teacher) signed the minutes as confirmation of a true reflection of what was discussed. A photograph of the meeting was taken with the consent of the members.

During household and public consultations issues of concern on the project, its implementation and implications were discussed at length. Generally the public did not express any resistance on the project. In some cases, interviews with actual land owners did not materialize as they did not reside on their land and it was not possible to reach them before the end of the surveys but in all cases, the local chief was available to provide details on the PAPs' household character and land ownership. The meetings discussed possibilities of affected community and public assets, businesses and squatters relocating to different sites. Although no problems were expected in acceptance of relocated facilities by host communities, resettlement of squatters needed careful consideration. The communities were assured that the project will ensure that most of the

unskilled jobs are offered to communities living in the project area. In addition, rural electrification programs should be extended to the affected communities so that they can benefit from electricity. There was general concern on delays normally experienced by in compensation as well as undervaluing of structures, land and crops. Such delays and undervaluing has the potential of creating grievances that may eventually lead to compulsory acquisition of land.

Consultations were also made with Conservancy and Group Ranch Managers, members and owners of eco-tourism hotels. Names of all participants including their telephone contacts were recorded (see Appendix 4 to this report).



**Fig. 7.1 - Some of the Affected Structures**

## **1.29 Locations of Public Consultation**

Community consultations were conducted at the following locations along the proposed RoW:

1. Suswa
2. Longonot
3. Karati
4. Kamahia
5. Ndemi
6. Warukira
7. Wamba
8. Merille
9. Logologo
10. Bubisa
11. Turbi

The following NGOs were consulted:

1. The Catholic Church - Laisamis
2. Concern Worldwide – Marsabit
3. World Vision – Laisamis
4. National Tax Payers Association – Nyahururu Regional Office

Concerns of all the communities consulted were generally similar in terms of the extent of effect to their livelihoods, forms of compensation (whether cash or in kind), which among them would receive compensation and whether communities in areas traversed by the power line will benefit from rural electrification. In Marsabit the NGOs proposed technical and financial assistance to develop wind power which is abundant in the area to electrify small isolated villages, markets and

schools. They were also concerned on how local people would benefit in terms of employment opportunities during the construction of the proposed transmission line. The list of NGOs, CBOs and GoK groups consulted is included in Appendix 3 to this report

### 1.29.1 Community Facilities

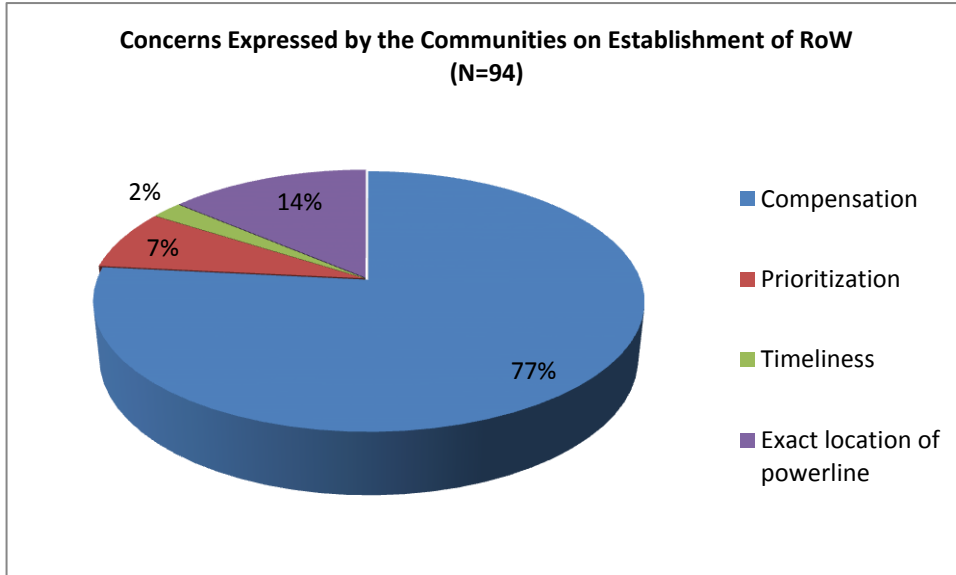
Most the settlements have an administration facility such as trading center and primary school. Dispensaries were found to be common but very few healthy centers were encountered. Only one hospital was recorded in the area. Overall power connectivity to the community facilities is 19%. A detailed report is shown in Table 7.1 below. It is clear from the table that the level of electrification of community facilities is low. It is the goals of the GoK under the MDGs and the Vision 2030 to increase the level of electrification and communication facilities including internet, mobile phone and television coverage, hence a need to utilize this project to increase the level of electrification.

**Table 7.1 - Infrastructural Facilities in the Project Area**

Type of Facility	Description	Total No. of Facilities	Number of Facilities Connected to Electricity Grid	Percentage of Facilities Connected to Electricity Grid
Administration Building	Administration Building	14	4	29
<b>Administration building Total</b>		<b>14</b>	<b>4</b>	<b>29</b>
Cult/Sacred Site	Church	198	24	12
	Mosque	5	0	0
<b>Cult/Sacred Site Total</b>		<b>203</b>	<b>24</b>	<b>12</b>
Health Centre/Hospital	Dispensary	13	2	18
	Hospital	1	1	100
<b>Healthy Centre/Hospital Total</b>		<b>14</b>	<b>3</b>	<b>21</b>
Heritage/Cultural Site	Dabela	2	0	0
	Moran Site	1	0	0
	Samburu Cultural Centre	1	0	0
<b>Heritage/Cultural site Total</b>		<b>4</b>	<b>0</b>	<b>0</b>
School	College/Tertiary	1	0	0
	Primary	48	11	23
	Secondary	14	9	64
<b>School Total</b>		<b>63</b>	<b>20</b>	<b>32</b>
Trading Centre	Trading Centre	36	12	33
<b>Trading Centre Total</b>		<b>36</b>	<b>12</b>	<b>33</b>
<b>Grand Total</b>		<b>334</b>	<b>63</b>	<b>19</b>

### 1.29.2 Concerns About the RoW

Among the 386 respondents consulted, 94 responded on the question about impacts of establishing the wayleaves. 58% of the respondents expressed no concern with establishment of the RoW. Issues about compensation were raised by 77% of the respondents. Other concerns expressed by the communities are highlighted in Fig. 6.2. These include prioritization, timeliness and exact location of the RoW.



**Fig. 7.2 - Concerns Expressed by Communities about Establishment of the RoW**

*Compensation* – farmers were concerned about modalities of compensating them for their land and property affected during construction.

*Prioritization* – respondents felt that they should benefit from the benefits accruing from the power line e.g. electrification of their premises, clearing of access passages in their localities, etc.

*Timeliness* – some respondent were concerned about when the project will commence. They preferred to hold on to their properties until the project commenced so as to achieve maximum use of their assets even after being compensated.

*Exact location of power line* – some respondent felt that since the RoW is 65 m wide, if they knew the exact location of the power line they would plan its utilization so as to minimize losses and maximize benefits.

## PROJECT IMPACTS

### 1.30 Impact on Households

#### 1.30.1 General

The impact of the project on households will vary as some households will no longer be able to utilize the area in the wayleave for certain farming activities such as growing trees and fruits over 4.5 m tall. Some households will only be affected during construction and afterwards they will be able to continue utilizing the portion of land in the area as before e.g. for crop farming and animal grazing. For households on whose land towers foundations will be constructed, the affected portions of land will remain unutilized for the entire period of existence of the transmission line. Other households will suffer loss of secondary assets such as water tanks, gates, animal sheds, lavatories, fences, etc. while others will lose their dwellings, businesses or loss of income. Extreme cases of impact will be where entire parcels will be affected and thereby forcing PAPs to relocate completely. This scenario will affect mainly very small residential plots.

Social effect of resettlement of PAPs will include disruption of education for school-going children or relocation of employment opportunities for employed persons. It may not be easy to quantify these and other similar impacts but affected households shall be compensated for disruption of their living conditions.

Each of the above impacts on households has been separately addressed in this report and mitigation measures recommended.

#### 1.30.2 Impact on Disadvantaged PAPs

After review of the RoW to avoid Matthews Range and key community assets, disadvantaged persons to be given special consideration in the resettlement only include aged household heads above 65 years of age (94 in number) and women-headed households (42 in number).

#### 1.30.3 Impact on Land

Table 8.1 below shows that 0.03 km<sup>2</sup> out of 39.39 km<sup>2</sup> total land area affected by the project will be totally vacated. 0.5 km<sup>2</sup> will be partially vacated (movement within PAPs' land) and 38.8 km<sup>2</sup> will only be compensated (no movement) without structures' compensation.

**Table 8.1 Affected Land**

**Land to be Totally Vacated - by County**

	Affected Land (m <sup>2</sup> )
NAKURU	23,984
NYANDARUA	6,175
LAIKIPIA	0
ISIOLO	0
SAMBURU	0
MARSABIT	0
<b>TOTAL</b>	<b>30,159</b>

### Relocation of Structures within PAPs' Land - by County

County	Affected Land (m <sup>2</sup> )
NAKURU	221,275
NYANDARUA	271,050
LAIKIPIA	0
ISIOLO	0
SAMBURU	0
MARSABIT	0
<b>TOTAL</b>	<b>492,325</b>

### Affected Land without Structures - by County

County	Affected Land (m <sup>2</sup> )
NAKURU	23,066,926
NYANDARUA	10,600,525
LAIKIPIA	32,175
ISIOLO	697,645
SAMBURU	1,114,750
MARSABIT	3,290,495
<b>TOTAL</b>	<b>38,802,516</b>

## 1.30.4 Impact on Physical Assets

### 1.30.4.1 Primary Structures Owned by Households

Table 8.2 below shows that the total number of primary structures affected is 79 out of which 9 will entail total relocation and 70 partial relocation (relocation within own land). The 9 totally relocating PAPs own small peri-urban plots that are meant for residential purposes. 4 out of 9 totally relocating PAPs have residential houses on the land plots while the other 5 are planted with crops.

**Table 8.2 – Affected Household Primary Structures**

#### Total Relocation by County

County	Quantity
NAKURU	7
NYANDARUA	2
LAIKIPIA	0
ISIOLO	0
SAMBURU	0
MARSABIT	0
<b>TOTAL</b>	<b>9</b>

### Partial Relocation

County	Quantity
NAKURU	34
NYANDARUA	36
LAIKIPIA	0
ISIOLO	0
SAMBURU	0
MARSABIT	0
<b>TOTAL</b>	<b>70</b>

### 1.30.5 Secondary Structures Owned by Households

**Table 8.3 – Affected Secondary Structures**

#### Total Relocation

County	Quantity
NAKURU	14
NYANDARUA	2
LAIKIPIA	0
ISIOLO	0
SAMBURU	0
MARSABIT	0
<b>TOTAL</b>	<b>16</b>

#### Partial Relocation

County	Quantity
NAKURU	72
NYANDARUA	78
LAIKIPIA	0
ISIOLO	0
SAMBURU	0
MARSABIT	0
<b>TOTAL</b>	<b>150</b>

Please refer to Table 8.3 above. A total of 166 secondary structures are affected, 16 of which belong to PAPs who will totally relocate and 150 belonging to partially relocating PAPs.

### 1.30.6 Impact on Income and Livelihood

As shown in Tables 8.1 and 8.2, most of the affected households derive their livelihood from farming which includes growing of annual and perennial crops, livestock and some of them operate businesses for a living which include shops and workshops. The impact of the project to these households will be displacement. This means that the affected households will have to move and restart elsewhere. The livelihood activities for resettled families will need time to re-establish to their current position. Compensation for the affected households should enable them to fully resettle in new locations and rebuild their farming or businesses to the level that is more



or less per with their current status. Compensation for loss on business within the wayleave will be half of six months proven turnover. Compensation for loss on rent income will be six months proven income.

### **1.31 Impact on Enterprises**

There are diverse business enterprises within the proposed RoW but most of them are not directly affected by the project. The most affected is household small-scale farming which includes growing of crops, woodlots and livestock rearing. These will be specifically considered for compensation. Other enterprises affected by the project are retail shops mainly owned by households. These too will be specifically compensated for. Large enterprises affected include large-scale ranching and wildlife conservancies. Both of these have leased large tracts of land from County Councils and since the main impact to them will be disturbance during construction and O&M of the proposed transmission line, the enterprises will be compensated under wayleaves legal framework i.e. affected land only depending on their lease terms.

Compensation on affected businesses within the wayleave will be half of six months proven lost turnover and rented premises will be compensated at the rate of six months proven lost rent income. Further, tenants shall be paid disturbance assistance.

### **1.32 Impact on the Community/Public Properties**

During consultations, the communities gave recommendation on the type of compensation they expected to receive. Since most of the structures are located on small urban plots, all of them will have to be relocated.

After rerouting the proposed RoW in order to avoid Matthews Range and community structures, only six shops are now affected by the project. These shops are stand-alone and not in trading centres in compliance with KETRACO's Resettlement Policy Framework 2011.

### **1.33 Integration with Host Population**

Nine households to be totally relocated will be resettled elsewhere. As described under 8.1.4.1 above, the affected land comprises peri-urban residential plots and therefore the affected PAPs will easily be able to buy similar plots in the neighbourhood as these types of plots are readily in abundance. Integration with other communities will therefore need to be incorporated within their resettlement package. The most preferred mode of compensation would have been land for land but the Government bureaucracy would be cumbersome in procurement of small pieces of land and therefore the most efficient method of resettlement in this case would be in the form of cash.

Since public and squatter relocations are expected, there will be no need for integration plan for this category with host communities. The six shops, however, will relocate within the owners' land and no integration plan will be necessary.

## **MITIGATION AND COMPENSATION PROCEDURE**

### **1.34 Principles and Procedures**

Under Article 61(1) of the Constitution of Kenya, 2010 it is state that all land in Kenya belongs to the people of Kenya collectively as a nation, as communities and as individuals. Under Article 62 of the Constitution; land in Kenya is classified as public, community or private. The Constitution spells out conditions for ownership of land by the state, community and individuals (citizens and non-citizens). Article 60(1)g, states about encouragement of communities to settle land disputes through recognized local community initiatives consistent with the Constitution. 62(1)c, states that private land can be transferred to the State by way of sale, reversion or surrender and under 62(1)h, all roads and thoroughfares provided for by an Act of Parliament. The Constitution classifies community land under 63(2)d(i) land lawfully held, managed or used by specific communities as community forests, grazing areas or shrines; and (ii) ancestral lands and lands traditionally occupied by hunter-gatherer communities. Article 63(2)d(4) Community land shall not be disposed of or otherwise used except in terms of legislation specifying the nature and extent of the rights of members of each community individually and collectively

All land in urban areas of Kenya and much of the land in rural areas have registered title deeds. Title to land is either freehold, leasehold or any other tenure declared under the Act of Parliament (Constitution 64(a, b & C). The development and use of freehold title is controlled by land planning regulations which are administered by both the Central Government and the County Government in which the land is situated.

Expropriation is provided for in the Constitution under Article 62(1)c. The Constitution only provides general guidelines on land ownership. Detailed procedures for acquisition are elaborated under the Land Titles Act, Cap 282. Section 54 of the Energy Act, 2006 provides for compulsory acquisition of land for purposes of constructing electricity infrastructure. This provision is necessary to ensure a final fall-back position in the event of protracted legal tussles with property owners which will potentially jeopardize the project. The Land Acquisition Act, Cap 295 provides for the compulsory acquisition of private land and property held under Registered Lands Act, Cap 300 and the Land Titles Act, Cap 281. Under such circumstances WB OP/BP 4.12 Guidelines and associated Annex will be evoked. Public land administered under the Government Lands Act, Cap 280 but used for private development in leases can also be compulsorily acquired under the Land Acquisition Act. Article 12 of the Act allows the Commissioner of Lands to award land of equivalent value as compensation.

Preparation of the RAP has taken into consideration all the relevant laws and by-laws in Kenya and is consistent with safeguard policies of the International Financial Institutions such as African Development Bank (AfDB) and the World Bank.

#### **1.34.1 Project Cut-off Date**

KETRACO's Resettlement Policy Framework describes the cut-off date as the date of completion of the socio-economic survey/census and asset inventory of PAPs. Persons (encroachers) entering and/or occupying land in the project area after this date and not included in the inventory of PAPs will not be considered eligible for compensation or resettlement assistance. Similarly, fixed assets such as structures, crops/tress established after the cut-off date will not be compensated. Notification of the cut-off date is carried out by issuing letters to the administrative authorities and to PAPs.

The notice of the cut-off date will be posted both in the local media and at appropriate locations within the footprint of the project. In accordance with the above good practices and the

community engagement plan this notice must be published informing communities and PAPs of the cut-off date for compensation eligibility. Establishing this cut-off date is essential in the process, as new inhabitants coming to the project affected areas after the cut-off date will not be considered for compensation. The eligibility cut-off date should be set immediately following the socio-economic survey (which is contemporaneous with valuation of assets).

According to KETRACO's Resettlement Policy Framework, the Project Cut-off Date will be the date of this report, i.e. 31<sup>st</sup> October 2011.

### **1.35 Organizational Structure for the Implementation of RAP**

As the project sponsor in Kenya, KETRACO will be responsible for coordinating all issues relating to compensation and resettlement. Policy and strategic decisions in compensation and resettlement of the project affected persons (PAPs) lies with the following Kenya Government Ministries:

- Ministry of Finance
- Ministry of energy
- Ministry of Environment and Mineral Resources
- Ministry of Lands (Physical Planning Department)
- Ministry of Roads and Public Works
- Ministry of Agriculture
- Ministry of Local Government
- Ministry of State for Provincial Administration

After assessing and determining the characteristics of all project affected persons (PAPs), valuation of assets to be compensated and tallying of complete list of eligible PAPs will be the responsibility of KETRACO. The enormous experience acquired during RAP implementation of the World Bank financed Energy Sector Recovery Project, the multi-donor financed Mombasa-Nairobi transmission line and other on-going projects will be put to use in the implementation of this RAP.

The implementation times will be pegged to the following process:

- (i) County Resettlement Action Plan Committees (CRAPCs) are constituted
- (ii) Project Implementation Unit (PIU) is constituted
- (iii) PIU signs off the RAP. This marks acceptance of the terms of the RAP
- (iv) KETRACO draws up offer documentation for PAPs
- (v) The PAPs review the offers made and enter into agreements with KETRACO through their respective CRAPCs
- (vi) The PAPs identify alternative sites and move to them or move to new locations within their land
- (vii) Monitoring of the "willing buyer - willing seller" affected people commences
- (viii) Monitoring of grievances commences

The implementation of the RAPs shall require close collaboration among all the stakeholders. A properly constituted structure for administration of its implementation is imperative. The roles and responsibilities of the various stakeholders in the implementation and administration of the RAP are elaborated in this RAP Report. The report has further clarified the role of PAPs and their responsibility in the entire process. Since KETRACO will take responsibility of executing the RAP. The structure of KETRACO Project Implementation Unit (PIU) will as a minimum consist of a legal advisor, land surveyor, transmission line expert, socio-economist, wayleaves officer,

environmental expert, accountant, community liaison officer, database management officer, and a registered valuer.

The responsibility of PIU will include but not necessarily be limited to the following:

- (i) Oversee the implementation of the RAP;
- (ii) Ensure initial baseline data is collected for the purpose of monitoring and evaluation reports as per the indicators provided by the RAP;
- (iii) Oversee the formation of County Resettlement Action Plan Committees (CRAPCs);
- (iv) Ensure maximum participation of the PAPs in the planning of their own resettlement and post resettlement conditions;
- (v) Carry out counselling of PAPs and communities, training them on proper financial management and social integration. At this stage those PAPs and communities that require legal representation will be advised and given such representation;
- (vi) Ensure detailed valuation of the structures in order to determine case-by-case value of each component of the project and agree upon the compensation budget;
- (vii) KETRACO and respective CRAPCs conduct financial management training and counselling for PAPs;
- (viii) Accept financial responsibility for payment or compensation and other designated related costs;
- (ix) Pay the PAPs compensation in the amounts agreed; and
- (x) Ensure monitoring and evaluation of the PAPs and undertaking of appropriate remedial action to deal with grievances and ensure that income restoration are satisfactorily implemented.

Under the guidance and coordination of PIU, the CRAPCs will be formed to eventually act as a voice of the PAPs. Each of the committees shall as a minimum comprise the following:

1. Regional Commissioner (County Government Administrator) as shall be constituted under the Constitution of Kenya, 2010 to succeed the District Commissioner (DC) who will be the chairperson to the CRAPC;
2. 4 representatives of the County PAPs – Community-Based Organization (CBO), PAP – Self-Help Groups (SHG) and PAP Area Forum (AF) elected directly by PAPs;
3. 2 representatives of NGOs;
4. Successors of the current District Officers (DOs) in-charge the affected administrative divisions in formative stage under the Constitution of Kenya, 2010;
5. Successors of chiefs in-charge of the affected administrative locations in formative stage under the Constitution of Kenya, 2010;
6. County Legal Counsel
7. County Government Surveyor;
8. County Lands Officer;
9. County Physical Planning Officer;
10. County Agriculture Officer;
11. County Veterinary Officer;
12. County Forest Officer;
13. County Environment Officer;
14. County Government Accountant;
15. County Senior Superintendent to Police successor in formative stage under the Constitution of Kenya 2010;
16. County Social Services Officer;
17. KETRACO Wayleaves Officer;

18. KETRACO valuer; and
19. KETRACO lawyer.

The CRAPCs will be responsible for (i) public awareness (concerns, interests and grievances); (ii) compensation (rates, resettlement process), (iii) monitoring and evaluation, (iv) logistics, and (v) employment, training and counselling. KETRACO through its Wayleaves Officer shall prepare a wayleaves agreement detailing the specific affected plots, the proposed route and all the compensation cost (calculated by the PIU) for all PAPs. The agreement will also contain all the public safety requirements that the PAPs are expected to adhere to. Landowners will be requested to give consent if satisfied with the agreement. Compensation will be separately made to the PAPs currently using the land and the registered owners. The PIU will monitor all payments.

### **1.36 Grievance Redress Mechanism**

Procedures for grievances will be clearly explained to PAPs during chiefs' *barazas*. Minor grievances will be heard and determined by the CRAPC. Such grievances include but not necessarily limited to the following:

- Wrongly recorded personal or community details
- Wrongly recorded assets including land details and/or affected land area
- Change of recipient due to recent death or disability
- Recent change of asset ownership
- Incorrect computation of compensation
- Name missed out of register

Grievances shall be lodged with the CRAPC and registered in the Grievance Register with. Details entered in the register shall include: Name of complainant, reason for complaint, other parties involved in the complaint and reasons for their involvement and legal representatives of all the parties if available. Grievances will be recorded in a schedule under broad classification prepared by the CRAPC. The schedule will also form the grievance database. At the monthly CRAPC meetings, the grievance database and register shall be discussed and the dispute resolution method proposed. Some of the dispute resolution procedures adopted by the CRAPC may include:

- Summary resolution by a CRAPC official
- Refer the grievance to the CRAPC Grievance Resolution Committee (CGRC)
- Refer the grievance to higher authorities

The CGRC shall be chaired by a legal expert and its proceedings shall be open. The CGRC shall not have the powers of a court of law but its ruling shall be binding to all the parties. Grievances that are beyond the scope of the CGRC will be handed-over to PIU as the higher authority for determination. Any grievance that cannot be determined by PIU will be handed-over to the Land Compensation tribunal of the National Land Commission for determination. If still unresolved the grievances shall be referred to a High Court of Kenya for determination. The PAP may appeal against the ruling of any of the grievance resolution levels to the higher level. The ruling of the Land Compensation Tribunal will be appealed to the High Court of Kenya and if still unresolved, appeal to the Supreme Court. Such grievances include but are not necessarily limited to:

- Refusal to assent to the wayleaves notice
- Appeal against the whole process
- Where the legal land or business owner is not positively identified
- Where there is conflict in legal ownership to land or business

Other types of grievances including fraud, war-like activities, etc. will be referred to the police.

### 1.37 Valuation of Assets and Losses

Legally acceptable valuation procedures that are adaptable to the Government of Kenya, AfDB and the World Bank (WB) shall be applied for purposes of fairness and consistency. These will include computation of replacement cost, compensation for lost earnings, disturbance allowance and other compensation as specified under the Laws of Kenya and the relevant safeguard policies of AfDB and the WB. Valuation of lost assets will be made at their replacement cost. The approach involves direct replacement of expropriated assets and covers an amount that is sufficient for asset replacement without depreciation, movement expenses and other transaction cost. Table 9.1 below summarizes the valuation processes to be followed.

**Table 9.1: Valuation Process Relevant to RAP**

<b>Asset</b>	<b>Process</b>
Land with Structures	<p><b>Steps:</b></p> <ul style="list-style-type: none"> <li>f) A detailed inventory of all persons, possessions, assets and stock requiring resettlement will be made</li> <li>g) Accurate and real valuation of dwelling will be taken</li> <li>h) Determine compensation packages according to valuations will be carried out</li> <li>i) Allow a reasonable time period prior to moving, for salvage of building materials. PAP's shall salvage any material without the same being deducted from their compensation entitlements</li> <li>j) Provide temporary housing/shelter if necessary</li> </ul> <p><b>Recommendations:</b></p> <ul style="list-style-type: none"> <li>e) KETRACO will pay compensation for the lost housing structures</li> <li>f) KETRACO will provide transport for the occupants and their belongings to their new place of residence</li> <li>g) The owner will be entitled to remove any materials he/she wishes to salvage within one month of vacating the old dwelling</li> <li>h) KETRACO will provide transport for these materials, other than masonry, to the new residential site</li> </ul>
Land without structures	<ul style="list-style-type: none"> <li>c) <b>Inventory:</b> As part of the RAP phase, KETRACO will acquire names and contact details of all persons affected by the project</li> <li>d) <b>Compensation:</b> The RAP data sheet prepared will spell out how each person is affected and indicates how much compensation will be paid for crops and trees lost</li> </ul>
Business loses and employment earnings within the wayleave.	Where business profits within the wayleave are affected, compensation will be paid in accordance with documented valuation & audited results of the business' monthly income
Crops/Fruits/Trees on PAP plantation	c) <b>Tree/seasonal crops:</b> Harvesting of the crops will be given a first priority but where harvesting is not possible, counting of the affected crops will be done by a registered valuer and KETRACO agent in the presence of the owner. Computation of the costs will be done according to market rates and payments thereafter made either at KETRACO offices, or through the local chief's office

Asset	Process
	d) <b>Annual crops:</b> Crops will be harvested by the owner and therefore no compensation will be paid for crops. Where crops cannot be harvested, KETRACO will pay compensation at the market rate

### 1.38 Compensation and Entitlements

Consistent with WB OP/BP 4.12 and associated Annex and the relevant AfDB Policy on Involuntary Resettlement, affected persons, irrespective of their legal status are eligible for some form of compensation if they occupied the land before the entitlement cut-off date. The key determinant for compensation is on the basis of a pre-project census during which all residents were identified. Replacement costs have been categorized separately from houses, structures, crops and trees. Resettlement will not necessarily require (except by choice of the PAP) relocation to another village or area. In most cases the PAPs will chose to step back within their land. The totally relocating PAPs shall be allocated alternative sites and/or given materials to replace their structures affected by the project or paid for such replacements in cash. The PAPs will be informed of the different options available during the disclosure process. The vulnerable PAPs will receive special assistance in establishing their replacement land and structures.

Compensation and entitlements will be triggered by particular and specific impacts resulting from the project. Using a holistic approach, these general impacts emanating from the project shall include losses at household and community level (public assets, commercial assets, and communal assets). Losses will mainly fall into the following categories:

- Loss of land
- Loss of assets (structures and agricultural land)
- Loss of livelihood
- Loss due to severance

*Category 1 Structures:* Those who will lose all structures such as residential, kiosks, stalls, etc and have relevant licenses; those who will lose some part of their structures such as residential, kiosks, stalls, etc and have relevant licenses; those who will lose all structures such as residential, and have not acquired relevant license; and those who will lose some part of their structures such as residential, kiosks, stalls, etc and have no relevant licenses e.g. Temporary Occupation License.

*Category 2 Agricultural Land:* Those who will lose all land and have titles; those who will lose partial land and have titles; those who will lose all land and have no titles; those who will lose partial land and have no titles; those who will lose all trees; those who will lose part of their trees; those who will lose all field crops; and those who will lose part of their field crops.

*Entitlement Matrix:* The Kenyan law recognizes compensation for loss of property including houses, crops and trees due to implementation of development projects. The law recommends a fair compensation for loss of property. The government has established a compensation principle, and that is, compensation for loss of property is paid at market value. Property loss falls under four categories namely property owners, business tenants, residential tenant, encroachers (using land) and squatters.

### 1.38.1 Categories of PAPs and Their Entitlements

Tables 9.2 below presents detailed and summarized information on entitlements and compensation.

**Table 9.2 - Compensation Entitlement**

		<b>Compensation for loss or damage</b>	<b>Moving (Disturbance) Allowance</b>	<b>Other Assistance</b>
<b>Household &amp; communities Private property</b>	<b>Land</b>	Cash compensation on negotiated market rate after signing wayleaves agreement. Land shall be compensated at the rate of 30 – 70% of its market value depending on the impact. For small plots, compensation shall be at 100% of market value.		Where a household falls under vulnerable groups category, lump sum cash assistance equivalent to 15% of total land value
	<b>Structure - residential or business within the wayleave</b>	Compensation at 100% of market value of replacement cost	Disturbance allowance of demolition and reconstruction lump sum cash payment equivalent to 15% of total affected asset value	Where a household falls under vulnerable groups category, further lump sum cash assistance equivalent to 15% of total affected asset value
	<b>Other Assets</b>	Compensation for damaged crops, trees, etc. at market value using KPLC rates		Where a household falls under vulnerable groups category, lump sum cash assistance equivalent to 15% of total affected asset value
<b>Squatters structure owners</b>	<b>Land</b>	Cash compensation on negotiated market rate of the affected land. Land shall be compensated at the rate of 30 – 70% of its market value depending on the impact.		Where a household falls under vulnerable groups category, lump sum cash assistance equivalent to 15% of total land value



		<b>Compensation for loss or damage</b>	<b>Moving (Disturbance) Allowance</b>	<b>Other Assistance</b>
	<b>Structures - residential or business within the wayleave</b>	Compensation at market value of replacement cost	Disturbance allowance of demolition and reconstruction lump sum cash payment equivalent to 15% of total affected asset value	Where a household falls under vulnerable groups category, further lump sum cash assistance equivalent to 15% of total affected asset value
	<b>Other Assets</b>	Compensation for damaged crops, trees, etc at market value using KPLC rates		Where a household falls under vulnerable groups category, lump sum cash assistance equivalent to 15% of total affected asset value
<b>Encroachers</b>	<b>Structures - residential or business within the wayleave</b>	Compensation at market value of replacement cost. Land shall be compensated at the rate of 30 – 70% of its market value depending on the impact.	Disturbance allowance of demolition and reconstruction lump sum cash payment equivalent to 15% of total affected asset value. Loss of earnings shall be compensated at the rate of half of six months proven turnover For rental property compensation shall be at six months proven loss of income	Where a household falls under vulnerable groups category, further lump sum cash assistance equivalent to 15% of total affected asset value
	<b>Other Assets</b>	Compensation for damaged crops, trees, etc. at market value using KPLC rates		Where a household falls under vulnerable groups category, lump sum cash assistance equivalent to 15% of total affected asset value

### 1.38.2 Compensation for Land

**Table 9.3 Household and Community Land Only**

**TOTAL RELOCATION COMPENSATION**

<b>COUNTY</b>	<b>Land(m<sup>2</sup>)</b>	<b>Amount in KShs.</b>
NAKURU	23,984	1,242,371
NYANDARUA	6,175	427,928
LAIKIPIA	0	
ISIOLO	0	
SAMBURU	0	
MARSABIT	0	
<b>TOTAL</b>	<b>30,159</b>	<b>1,670,299</b>

**Table 9.4 PARTIAL RELOCATION COMPENSATION**

<b>COUNTY</b>	<b>Land(m<sup>2</sup>)</b>	<b>Amount in KShs.</b>
NAKURU	221275	5,807,888
NYANDARUA	271050	9,343,620
LAIKIPIA	0	
ISIOLO	0	
SAMBURU	0	
MARSABIT	0	
<b>TOTAL</b>	<b>492325</b>	<b>15,151,508</b>

**Table 9.5 COMPESATION FOR LAND WITHOUT RELOCATION**

<b>COUNTY</b>	<b>Land(m<sup>2</sup>)</b>	<b>Amount in KShs.</b>
NAKURU	23,066,926	509,217,624
NYANDARUA	10,600,525	327,466,071
LAIKIPIA	32175	714,285
ISIOLO	697645	10,464,675
SAMBURU	1114750	16,721,250
MARSABIT	3290495	49,357,425
<b>TOTAL</b>	<b>38,802,516</b>	<b>913,941,330</b>

**GRAND TOTAL FOR LAND COMPENSATION IN KShs. 930,763,137**

According to KETRACO Resettlement Policy Framework, RoW land meant for transmission line wayleaves is compensated at market price at 30 – 70% depending on the degree of inconvenience and 100% for small plots. PAPs who do not have to relocate will get 30% compensation for their land. PAPs who have to relocate within their piece of land will get 70% of the value of their land, with separate compensation at market rates for replacement of assets on the land. The PAPs will receive 100% of the value of their land when they have to relocate elsewhere; in addition, they will receive separate compensation for loss of structures and/or income (for business premises within the wayleave). Computation in the above tables was done for the entire 65 m wide RoW. Those to be compensated include private land owners, owners of ranches and the county councils. Compensation to wildlife conservancies and ranchers shall depend on their lease agreements with the county councils who own the land under trust,

otherwise compensation shall be made to the affected county councils. Since the level of inconvenience is low, the rate of compensation has been computed at 30% of market rate for this type of land use. There are nine affected plots which are all residential in which the owners shall vacate and these have been budgeted for compensation at 100% of the market price but they will continue using the pieces of land in ventures that will not affect the operations of the proposed transmission line.

### 1.38.3 Compensation for Household Structures

**Table 9.6 TOTAL RELOCATION COMPENSATION**

COUNTY	Number of Primary Structures	Amount in KShs.	Number of Secondary Structures	Amount in KShs.
NAKURU	7	2,249,400	14	138,575
NYANDARUA	2	855,600	2	29,150
LAIKIPIA	0		0	
ISIOLO	0		0	
SAMBURU	0		0	
MARSABIT	0		0	
<b>TOTAL</b>	<b>9</b>	<b>3,105,000</b>	<b>16</b>	<b>167,725</b>
<b>SUB-TOTAL</b>		<b>3,272,725</b>		

**Table 9.7 PARTIAL RELOCATION COMPENSATION**

COUNTY	Number of Primary Structures	KShs.	Number of secondary Structures	KShs.
NAKURU	34	8,109,950	72	917,655
NYANDARUA	36	6,525,150	78	805,225
LAIKIPIA	0		0	
ISIOLO	0		0	
SAMBURU	0		0	
MARSABIT	0		0	
<b>TOTAL</b>	<b>70</b>	<b>14,635,100</b>	<b>150</b>	<b>1,722,880</b>
<b>SUB-TOTAL</b>		<b>16,357,980</b>		

**GRAND TOTAL – KShs. 19,630,705**

Compensation for structures has been computed using KPLC rates review dated 26<sup>th</sup> April 2011. Computation for primary structures include 15% disturbance. For the disadvantaged households, a further 15% has been added as special compensation.

### 1.38.4 Compensation for Crops and Trees

#### 1.38.4.1 Crops

CROPS COMPENSATION FOR TOTALLY RELOCATING PAPs – KShs. 111,050

CROPS COMPENSATION FOR PARTIALLY RELOCATING PAPs – KShs. 1,332,983

CROPS COMPENSATION FOR NON-RELOCATING PAPs – KShs. 8,506,413

**GRAND-TOTAL FOR CROP COMOPENSATION – KShs. 9,950,446**

Compensation for crops has been computed using KPLC rates review dated 26<sup>th</sup> April 2011. Only the crops damaged during construction will be compensated. This quantity has, therefore, been computed at 10% of estimated total crop yield value.

#### **1.38.4.2 Trees Shorter than 4.5 m**

COMPENSATION FOR TOTALLY RELOCATING PAPs – KShs. 0

COMPENSATION FOR PARTIALLY RELOCATING PAPs – KShs. 46,940

COMPENSATION FOR NON-RELOCATING PAPs – KShs. 49,940

**GRAND-TOTAL FOR TREES < 4.5 m HIGH TREES COMOPENSATION – KShs. 96,880**

#### **1.38.4.3 Trees Taller than 4.5 m**

COMPENSATION FOR TOTALLY RELOCATING PAPs – KShs. 656,930

COMPENSATION FOR PARTIALLY RELOCATING PAPs – KShs. 4,349,850

COMPENSATION FOR NON-RELOCATING PAPs – KShs. 29,356,720

**GRAND-TOTAL FOR TREES > 4.5 m HIGH TREES COMOPENSATION – KShs. 34,363,500**

Compensation for trees has been computed using KPLC rates review dated 26<sup>th</sup> April 2011.

#### **1.38.5 Compensation for Community Assets**

With the rerouting of the proposed transmission line RoW to avoid community structures, only two clusters with a total of six shops are now affected.

Compensation for affected shops – KShs. 1,725,000

Compensation for loss of business – KShs. 1,500,000

**Total Compensation for Community Assets – KShs. 3,225,000**

Compensation for community structures has been computed using KPLC rates review dated 26<sup>th</sup> April 2011.

### 1.39 Costs and Budget

<b>DESCRIPTION</b>	<b>Budget</b>
Land	930,763,137.00
Compensation for Household Structures	19,630,705.00
Compensation for Crops	9,950,446.00
Compensation for Trees, Less than 4.5 m Tall	96,880.00
Compensation for Trees, More than 4.5 m Tall	34,363,500.00
Compensation for Community Assets	3,225,000.00
<b>Sub-Total</b>	<b>998,029,668.00</b>
Estimated expenses of KETRACO, KPLC, MoE, ERC and Other Government Ministries	20,000,000.00
Estimated expenses of Marsabit County CRAPC	10,000,000.00
Estimated expenses of Samburu County CRAPC	10,000,000.00
Estimated expenses of Isiolo County CRAPC	2,000,000.00
Estimated expenses of Laikipia County CRAPC	2,000,000.00
Estimated expenses of Nyandarua County CRAPC	20,000,000.00
Estimated expenses of Nakuru County CRAPC	20,000,000.00
Financial Management Training & Counselling for PAPs	5,000,000.00
<b>Sub-Total</b>	<b>89,000,000.00</b>
<b>Total</b>	<b>1,087,029,668.00</b>
Add 10% Miscellaneous Expenses	108,702,967.00
<b>Grand Total</b>	<b>1,195,732,635.00</b>

From the above table, the budget for resettlement and compensation of the affected persons, communities, public and institution land and assets is about **1,195,732,635.00** which is equivalent to US\$ **14,067,442.76** at exchange rate of Kshs. 85 to the dollar. This sum will also cover the cost of the RAP administration by all the concerned organizations.

## **MONITORING AND EVALUATION**

The purpose of monitoring and evaluation is to report on the effectiveness of the implementation of the RAP, covering physical resettlement, disbursement of compensation and effectiveness of public consultation, amongst others. The Ministry of Energy will ensure that all aspects of RAP have been adequately and expeditiously executed according to the implementation plan. The monitoring will cover the review of survey results, formation of relevant committees (including the Grievance Committee), the identification of alternative land for resettlement and farming, adherence to compensation payment schedule, movement and support of project affected persons including the vulnerable households. A review of regular progress reports produced by KETRACO will be carried out by all stake holders both at national and local levels including the AfDB and the WB.

### **1.40 Internal Monitoring and Evaluation**

The responsibility of internal monitoring for performance of the resettlement and compensation through PIU will be the responsibility of KETRACO. The monitoring will be a systematic evaluation of the activities of the operation in relation to the specified criteria of the condition of approval. The objectives of internal monitoring and supervision will be (i) 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, WB and AfDB Policies and guidelines; (ii) to oversee that the RAPs are implemented as designed and approved; (iii) to verify that funds for implementation of the RAP are provided for by the project authorities in a timely manner and in amounts sufficient for their purposes, and that such funds are utilized in accordance with the provisions of the RAP.

The main internal indicators that will be monitored regularly include: (a) that KETRACO's entitlements are in accordance with the approved policy and that the assessment of compensation is carried out in accordance with agreed procedures; (b) payment of compensation to the PAPs under the various categories is made in accordance with the level of compensation described in the RAPs; (c) public information and public consultation and grievance procedures are followed as described in the RAPs; (d) relocation and payment of subsistence and shifting allowances are made in a timely manner; and (e) restoration of affected public facilities and infrastructure are completed prior to construction.

### **1.41 External Monitoring and Evaluation**

KETRACO will engage an independent monitoring unit (IMU) to be established for purposes of external monitoring and evaluating implementation of compensation and resettlement activities. In establishing the IMU effort should be made to draw on personnel with resettlement and social development experience. 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 RAPs. The IMU will also be involved in the complaints and grievance procedures to ensure concerns raised by PAPs are addressed.

The RAP will be implemented mainly by KETRACO. The M&E will be carried out by the PIU and CRAPCs. The PIU will be responsible for the overall M&E while the CRAPCs will monitor and evaluate respective communities where they will have been formed. Hence the PIU will carry out the following (i) review the results of the internal monitoring and review overall compliance with the RAPs; (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; and (v) provide a forum for skills-sharing and to develop institutional capacity. Further external monitoring of RAP will be provided by the WB and AfDB who will monitor the entire process through regular reports and supervision missions.

## **RECOMMENDATIONS AND CONCLUSION**

- (i) A cut-off date to be determined as per KETRACO Resettlement Policy Framework.
- (ii) All the PAPs and communities consulted requested for compensation. It is therefore recommended that all the PAPs and communities be compensated for loss of land and assets as provided for in this RAP.
- (iii) County RAP Committees to be formed prior to commencing on the compensation. Internal and external monitoring and evaluation committees are formed.
- (iv) Grievance redress and monitoring register be set-up and the process be publicized in the affected areas.
- (v) Prior to compensation, detailed valuation of affected assets in the presence of the PAPs and community representatives; undertaken and up-to-date value of the affected assets negotiated with the PAPs and communities for payment.
- (vi) Prior to compensation and resettlement, the PAPs and affected communities be given free counselling, training on financial management and offered legal assistance where required.
- (vii) The vulnerable PAPs be identified and documented for special assistance as laid out in this RAP.
- (viii) Special community rural electrification programmes be identified and extended to the communities as social responsibility.
- (ix) During construction of the proposed transmission line, local communities be given first priority in the employment of skilled and unskilled labour.
- (x) During the construction phase, due diligence be undertaken in Laikipia, Isiolo, Samburu and Marsabit Counties that respects cultural properties and practices of the local communities. The results of the due diligence will be used in scheduling of the work and compensating vulnerable persons under this RAP.
- (xi) Public registers of the resettlement process be kept throughout the entire resettlement period.



## **REFERENCES**

1. KETRACO Resettlement Policy Framework, KETRACO 2011
2. Resettlement Policy Framework for KPLC Projects, KPLC 2011
3. Kenya Electricity Expansion Project, Draft Indigenous People Planning Framework (IPPF), GoK 2010
4. District Development Plan 2003 – 2008, GoK

## APPENDICES

## **1.42 APPENDIX 1 – RESPONSE TO STAKEHOLDERS’ QUERIES**

## 1.43 APPENDIX 2 – MAIN SPREADSHEET

**1.44**

## **APPENDIX 3 - MINUTES OF COMMUNITY CONSULTATIONS**

**1.45 APPENDIX 4 – STAKEHOLDERS’ CONFERENCE ATTENDANCE LIST**