

THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA



REPUBLIC OF KENYA



ETHIOPIAN ELECTRIC POWER CORPORATION (EEPCo)



KENYA ELECTRICITY
TRANSMISSION COMPANY LIMITED

RP1286 v2

ETHIOPIA-KENYA POWER SYSTEMS INTERCONNECTION PROJECT
REVISION OF ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT AND RESETTLEMENT
ACTION PLAN STUDIES

RESETTLEMENT POLICY FRAMEWORK

DRAFT REPORT



PART 1: ETHIOPIA

JANUARY 2012



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ABBREVIATIONS & ACRONYMS

AC Alternate Current

AfDB African Development Bank
CBO Community Based Organization

CIS Corrugated Iron Sheet
CSA Central Statistical Authority

EEPCO Ethiopian Electric Power Corporation
EHS Environmental Health Standard
EIA Environmental Impact Assessment
EPA Environmental Protection Authority

ERA Ethiopian Road Authority

ESIA Environmental & Social Impact Assessment
ESAP Environmental & Social Assessment Procedures

ESMU Environment & Social Management Unit FDRE Federal Democratic Republic of Ethiopia

FHH Female Headed Households
GDP Gross Domestic Product
GPS Global Positioning System

HH Household Head

HIV/AIDS Human Immuno Virus / Acquired Immuno Deficiency

HVAC High Voltage Alternate Current
HDVC High Voltage Direct Current
IFC International Finance Corporation
ILCA International Livestock Center Africa
JPCU Joint Project Coordination Unit

JSC Joint Steering Committee

KETRACO Kenya Electricity Transmission Company

kV kilo Volt
LS Lump Sum
km Kilo meter
m meter

MoFED Ministry of Finance & Economic Development

MoWE Ministry of Water & Energy

NBI Nile Basin Initiative

NGO Non Governmental Organization

OH Over Head

PAP Project Affected Persons
PIC Public Information Center
PIU Project Implementation Unit
RAP Resettlement Action Plan

ROW Right of Way

SNNPRS South Nations and Nationalities People's Regional State

STIs Sexually Transmitted Infections

TV Television WB World Bank

USD United States Dollar

EXECUTIVE SUMMARY

The Ethiopia-Kenya Power System Transmission Line was launched following the Memorandum of Understanding signed by a Joint Ministerial Commission in 2006 between the Federal Democratic Republic of Ethiopia (FDRE) and the Government of the Republic of Kenya to cooperate in power generation, transmission, rural electrification and customer's services with particular emphasis on interconnecting and exchange of power between Ethiopia and Kenya power systems.

The Ethiopia Kenya Power Interconnection Project will support the construction of a new transmission line with self supporting steel lattice towers with concrete foundations. The total length of the transmission line is 1066 km of which 433 km lies within Ethiopia and the remaining 632 km inside Kenya. The transmission line to be constructed is a High Voltage Direct Current (HVDC) having 500 kV double circuit line with a 2,000 MW line commutated bidirectional bi-pole at Wolyta Sodo in Ethiopia and Suswa in Kenya.

The proposed transmission line route will be constructed on approximately 1060 towers of which 995 will be suspension towers and 65 will be tension towers. The distance between each suspension towers will be 2.45 tower/km and that of the tension (angle point) tower an average distance of per 7 km.

Construction of the transmission line will require clearance of the Right of Way (ROW) for the construction of the towers, access roads, material storage, two campsites and building of a substation in the Wolyta Sodo area. Permanent land acquisition will result from land required for footing areas for the towers. Temporary land acquisition will be required for the erection of the towers and stringing of conductors.

The sitting of the transmission line corridor has been determined, however, the precise routing of the ROW has not yet been finalized. The final alignment will need to take into consideration measures to minimize impacts on land and structures. In view of which a Resettlement Policy Framework (RPF) has been prepared to clarify land acquisition and resettlement principles together with organizational arrangements under the Project. The RPF was prepared consistent with the World Bank's Operational Policy 4.12 on Involuntary Resettlement, the policies and guidelines of the African Development Bank (AfDB), and the legal and institutional framework of the Federal Republic of Ethiopia (FDRE) as a guide to the preparation of a specific Resettlement Action Plan when the routing of the ROW has been finalized. The key objective of the RPF is to ensure that all affected people will be compensated for their losses at replacement cost and provided with rehabilitation measures to assist them to improve, or at least maintain their pre-project standard of living and income earning capacity.

Preparation of the RPF included a detailed review of the socioeconomic data from an earlier household survey of the eight woredas traversed by the transmission line which was carried out from June-August 2008. This survey was intended to support the development of a RAP prepared in 2009 by the Fitchner consulting firm. The 2009 RAP was never implemented. Because of the delay in the project's implementation, from July-August 2011, a similar socioeconomic survey was carried out of households in the same eight woredas who reside within the 65 meters of the ROW and whose properties and assets are likely to be affected by the construction of the transmission line. The key objective of the second survey was to preliminarily identify if there were significant changes

in the area through the influx of new people into the area or changes in the number or ownership of properties and assets.

On the basis of the second socioeconomic survey, current estimates indicate that the number of PAPs is approximately 5,743 (1,165 households), who will either loose housing structures within the ROW, farmland, trees or perennial crops. It is also estimated that the Project will affect 256 housing structures and small number of public and community facilities such as church buildings, fences, graveyards and trees, nursery sites and forest reserves. About 321 hectares of farmland is expected to be affected as is 20 hectares of communal grazing land which will be needed for the construction of a substation in the Wolyta Soda area. In carrying out the recent socioeconomic survey consultations were carried out in most areas where the transmission line is planned to be constructed and the views and concerns of the people likely to be directly affected by the construction of the transmission line were taken into consideration in the preparation of the RPF.

Since the project is linear in nature and impacts largely concentrated within the 65 meter width of the ROW, only small strips or portions of land will be affected by land acquisition. No major resettlement or relocation is anticipated since most houses and structures will be shifted or "stepping back" from the alignment within the existing way leave. However, in some locations in the Wolyta and Humbo woredas, there could be a need to build new housing structures in the remaining plot of land or may not have enough plot size to build new houses. The RPF defines measures in the form of replacement land or compensation for houses or assets to mitigate these impacts.

The preparation of this RPF is based on a development approach. It is prepared to avoid the impoverishment of PAPs due to development projects; it is gender sensitive, address the needs of vulnerable groups, puts emphasis on community participation.

Community participation and stakeholder consultation was an essential component in the preparation of the RPF. Stakeholder consultation provides an opportunity for people who may be affected by the project to the design of the project, reduce adverse impacts and provide insights on developing appropriate measures for compensation. Consultation was carried out in 5 different woredas who will be affected by the project. The views and concerns of people, including the most vulnerable, expressed during these consultative meetings were taken into consideration in the preparation of the RPF.

Once the precise tower and substation locations have been finalized, RAPs will be prepared by the Ethiopian Electric Power Corporation (EEPCO) in accordance to the principles and provisions of the RPF and submitted to the World Bank for approval before initiating the land acquisition process for tower foundations and substation construction.

The RAPs will include: (i) baseline census, socioeconomic survey information and identification of a cut-off date for eligibility to assistance under the project; (iii) policy entitlements related to any additional impacts indentified through the census or survey; (iv) description of resettlement and programs for improvement or restoration of livelihoods and standards of living; (v) implementation schedule for resettlement activities; and (vi) detailed cost estimates.

The RAPs will be completed no later than two months prior to the estimated date of commencement of site construction works. The RAPs will be submitted to the World Bank for review no later than

one month prior to the actual initiation of site construction works under the Project. Resettlement and assistance activities will commence after the co-financiers have reviewed and endorsed the RAPs.

The project receives overall guidance of strategic and policy issues from the Joint Ministerial Commission. Below the Joint Ministerial Commission, there is the Joint Steering Committee (JSC) that comprises of high level Government officials from both countries that will be responsible for the oversight of the project. The day to day activity of the joint project is administered by a Joint Project Coordination Unit (JPCU).

Preliminary compensation estimates have been made for lost assets and properties on affected crops, houses and lost income. No cost estimate has been made for land since land in Ethiopia belongs to the public and that it cannot not be sold or mortgaged. The preliminary estimated cost includes costs for compensation of crops, compensation for trees, houses, and also administrative, monitoring and income restoration and contingency costs. The total estimated cost for the RAPs to be prepared in accordance with the provisions of the RPF will be 268,514,294 Birr (or 15,371,870 USD) and of which about 72% goes for compensation payment.

This RPF and associated RAPs when prepared will be disclosed on the World Bank's web site for public review and comments. They will also be posted in EEPCO's website. The Executive Summaries and sections on (i) Eligibility; and (ii) Valuation and Compensation for Losses will be translated into Amharic languages and be made available to PAPs at the woreda offices.

1. INTRODUCTION

1.1 Project Background

The Ethiopia Kenya Power Interconnection Project will support the construction of a new transmission line with self supporting steel lattice towers with concrete foundations. The total length of the transmission line is 1066 km of which 433 km lies within Ethiopia and the remaining 632 km inside Kenya. The transmission line to be constructed is a High Voltage Direct Current (HVDC) having 500 kV double circuit line with a 2,000 MW line commutated bidirectional bi-pole at Wolyta Sodo in Ethiopia and Suswa in Kenya.

According to the technical consultant line route report, the Ethiopian part of the proposed transmission line route will be constructed on approximately 1060 towers of which 995 will be suspension towers and 65 will be tension towers. The distance between each suspension towers will be 2.45 tower/km and that of the tension (angle point) tower an average distance of per 7 km.

Construction of the transmission line will require clearance of the Right of Way (ROW) for the construction of the towers, access roads, material storage, two campsites and building of a substation in the Wolyta Sodo area. Permanent land acquisition will result from land required for footing areas for the towers. Temporary land acquisition will be required for the erection of the towers and stringing of conductors.

The sitting of the transmission line corridor has been determined, however, the precise routing of the ROW has not yet been finalized. The final alignment will need to take into consideration measures to minimize impacts on land and structures. In view of which a Resettlement Policy Framework (RPF) has been prepared to clarify land acquisition and resettlement principles together with organizational arrangements under the Project. The RPF was prepared consistent with the World Bank's Operational Policy 4.12 on Involuntary Resettlement, the policies and guidelines of the African Development Bank (AfDB), and the legal and institutional framework of the Federal Republic of Ethiopia (FDRE) as a guide to the preparation of a specific Resettlement Action Plan when the routing of the ROW has been finalized. The key objective of the RPF is to ensure that all affected people will be compensated for their losses at replacement cost and provided with rehabilitation measures to assist them to improve, or at least maintain their pre-project standard of living and income earning capacity.

Preparation of the RPF included a detailed review of the socioeconomic data from an earlier household survey of the eight woredas traversed by the transmission line which was carried out from June-August 2008. This survey was intended to support the development of a RAP prepared in 2009 by the Fitchner consulting firm. The 2009 RAP was never finalized/implemented. From July-August 2011, a similar socioeconomic survey was carried out of households in the same eight woredas who reside within the 65 meters of the ROW and whose properties and assets are likely to be affected by the construction of the transmission line. The key objective of the second survey was to preliminarily identify if there were significant changes in the area through the influx of new people into the area or changes in the number or ownership of properties and assets.

On the basis of the second socioeconomic survey, current estimates indicate that the number of PAPs is approximately 5,743 (1,165 households), who will either loose housing structures within the ROW, farmland, trees or perennial crops. It is also estimated that the Project will affect 256 housing structures and small number of public and community facilities such as church buildings, fences, graveyards and trees, nursery sites and forest reserves. About 321 hectares of farmland is expected

to be affected as is 20 hectares of communal grazing land which will need be needed for the construction of a substation in the Wolyta Soda area. In carrying out the recent socioeconomic survey consultations were carried out in most areas where the transmission line is planned to be constructed and the views and concerns of the people likely to be directly affected by the construction of the transmission line were taken into consideration in the preparation of the RPF.

1.2 Key Terms

Project Affected People (PAPs)

People identified by the socioeconomic survey and census as those who would experience direct economic and social impacts of the project by the involuntary taking of land, resulting in: (i) relocation or loss or shelter: (ii) loss of assets or access to assets; and (iii) lose of income sources or means of livelihood, whether or not they must move to another location. The RPF defines PAPs as the following:

- Those who have formal legal right to land (including customary and traditional rights recognized by law of the country);
- Those who do not have formal legal rights to land at the time the census begins but have a claim to such lands or assets and recognized through a process identified in the resettlement action plan
- Those who have no recognizable legal right or claim to the land they are occupying
- Those who lose their assets or access to assets such as houses, fences, grain store, cattle crops and trees.
- Those who may not be physically residing at the project site or persons who may not have any assets or direct sources of livelihood derived from the project site, but who have spiritual and/or ancestral ties with the land (e.g. graveyards, sacred forests, places of worships).

Compensation

Payment in cash or in kind for an asset or resource that is acquired by the project. Compensation can take the form of actual replacement of expropriated assets or compensation at replacement cost and alternative rehabilitation measures.

Cut-off date

Date of commencement of the census of people affected the project. People occupying the area after the cut-off date are not eligible for compensation and/or resettlement assistance. Fixed assets, such as built structures, crops, fruit trees established after the completion of the census will not be compensated.

Replacement Cost

The rate of compensation for lost assets must be calculated at full replacement cost. It is based on the market value of the assets plus transaction costs. With regard to land and structures, replace cost is defined as follows:

- Agricultural land pre-project or pre-displacement, whichever is higher, market value of land of equal productive use or potential located in the vicinity of the affected land, plus the cost of any registration and transfer taxes.
- Land in urban areas pre-displacement market value of land of equal size and use, with similar or improved public infrastructure facilities and services, preferably located in the vicinity of the affected land, plus the cost of any registration and transfer taxes.
- Houses and structures the cost of purchasing or building a new structure, with an area and quality similar or better than those of the affected structure, or of repairing a partially affected structure, including labor and contractors' fees plus the cost of any registration and transfer taxes.
- Crops and trees and other Perennials:
 - Compensation for annual crops shall be calculated by multiplying the amount of yield that would have been collected from the land at maturity by the current market price of the crops.
 - -Compensation for trees is determined on the basis of the level of growth of the trees and the current local price per square meter or per unit
 - -The amount of compensation for unripe perennial crops shall be determined by calculating the estimated cost for growing the plant.
 - -Compensation for burial ground: The amount of compensation for a burial ground shall be determined on the basis of the estimated costs to be incurred for removing the grave stones, preparing other burial ground, transferring and relocating the corpse and for conducting religious and cultural ceremonies in relation thereto.

People without Legal Title

People without legal title or claims, such as squatters and encroachers, who have made a personal investment in structures or agricultural crops, are entitled to compensation at replacement cost. People lacking legal title to land can be offered resettlement assistance.

Vulnerable Groups

People who by the virtue of gender, ethnicity, age, physical or mental disability or social status may be more adversely affected by resettlement than others, and who may have be limited in their ability to claim or take advantage of resettlement assistance and related development benefits.

1.3 Principles and Objectives

The principles outlined in the World Bank's Operational Policy 4.12, the policies of the African Development Bank and the policies and legislation of the Ethiopia have been adopted in preparing the RPF. The following principles and objectives will be applied to the Project to mitigate direct economic and social impacts from the expropriation of land:

- 1. Acquisition of land and other assets, and resettlement of people will be avoided or minimized as much as feasible.
- 2. All project affected people, residing, working, doing business or cultivating land in the ROW of the transmission line and surrounding areas of tower foundations, are entitled to be provided with rehabilitation measures sufficient to assist them to improve or at least restore their pre-project living standards, income earning capacity and production levels. Lack of legal rights to the assets lost should not bar affected people from entitlement to such rehabilitation measures.
- 3. Compensation at replacement cost, without deduction for depreciation or salvage of materials, or for any other purpose, for land, structures or other fixed assets lost because of the Project.
- 4. Replacement of residential and agricultural land will be as close as possible to the land that was lost, and acceptable to the PAPs.
- 5. Compensation and resettlement activities to be completed prior to the commencement of civil works.
- 6. The previous level of community services and facilities will be maintained or improved.
- 7. Detailed cost estimates and appropriate financial resources for resettlement and rehabilitation activities will be defined and made available as required.
- 8. Institutional arrangements will ensure effective preparation, consultation and implementation of the RAPs.
- 9. Timely and effective supervision, monitoring and evaluation of the implementation of the RAPs will be carried out.

1.4 Resettlement Action Plan (RAP)

Once the precise tower and substation locations have been finalized RAPs will be prepared by the Ethiopian Electric Power Corporation (EEPCO) in accordance to the principles and provisions of the RPF and submitted to the World Bank for approval before initiating the land acquisition process for tower foundations and substation constructions.

The RAPs will include: (i) baseline census, socioeconomic survey information and identification of a cut-off date for eligibility to assistance under the project; (iii) policy entitlements related to any additional impacts indentified through the census or survey; (iv) description of resettlement and programs for improvement or restoration of livelihoods and standards of living; (v) implementation schedule for resettlement activities; and (vi) detailed cost estimates.

The RAPs will be completed no later than two months prior to the estimated date of commencement of works. The RAPs will be submitted to the World Bank for review no later than one month prior to the actual initiation of site construction works under the Project. Resettlement and assistance activities will commence only after the co-financiers have reviewed and endorsed the RAPs .

The report is divided into two main parts; Part one discusses the details of the RPF, and Part two contains the supporting annexes:

- A. Executive summary
- B. Introduction
- C. Description of the project, project area and area of influence
- D. Potential Impacts

- E. Organizational responsibility
- F. Community participation
- G. Integration with host communities
- H. Socio economic studies
- I. Legal framework including mechanisms for conflicts resolution and appeals
- J. Institutional framework
- K. Eligibility
- L. Valuation and compensation for losses
- M. Identification of alternative sites and selection of resettlement site(s), site preparation, and relocation
- N. Shelter, infrastructure, and social services
- O. Environmental protection
- P. Implementation schedules
- Q. Costs and Budget
- R. Monitoring and evaluation
- S. Conclusion & Recommendation

The annexes contain preliminary data on affected properties and assets as well as minutes of public consultation and photographs.

2. DESCRIPTION OF THE PROJECT, PROJECT AREA AND AREA OF INFLUENCE

2.1 Description of the project

The Ethiopia-Kenya Power System Interconnection Project was launched following the memorandum of understanding signed between the Federal Democratic Republic of Ethiopia (FDRE) and the Government of the Republic of Kenya to cooperate in power generation, transmission with particular emphasis on interconnecting and exchange of power between Ethiopia and Kenya power systems.

The project is planned to provide reliable power supply to Kenya by taking it from Ethiopia's power grid. The transmission line to be constructed is a High Voltage Direct Current (HVDC) having 500 kV double circuit line.

The ESIA has studied four alternative routes for the construction of the transmission line. Among the four alternative routes, the Sodo – Arba Minch – Derashie – Konso – Yabelo - Megado route or known as option A/C has been identified as the preferred route from environmental, social and technical point of view. The Route line enters into the Kenyan territory at a coordinate point of 421519 (E) and 397867 (N).

Ethiopia having a number of newly constructed hydro power dams, wind and geothermal has a capacity to generate electricity about 2000Mega Watt and some of these it has already started exporting to the republic of Djibouti; and it has already reached an understanding and made an agreement to export to the neighbouring countries like the Sudan, and Kenya. Ethiopia in the long term envisages exporting its electricity to the other East & Central African countries.

The project is a new transmission line with self supporting steel lattice towers with concrete foundations. According to the conceptual technical design, the total length of the transmission line is 1066 km and of which 433 km lies within Ethiopia and the remaining 632 km inside Kenya. The transmission line to be constructed is a High Voltage Direct Current (HVDC) having 500 kV double circuit line with 2,000 MW line commutated bidirectional bipole at Wolyta Sodo in Ethiopia and Suswa in Kenya.

According to the technical consultant report, the Ethiopian part of the proposed transmission line route will be constructed on approximately 1060 towers and of which 995 will be suspension towers and 65 tension towers. The distance between each suspension towers will be 2.45 towers/km and that of the tension (angle point) tower on an average distance of per 7 km.

The approximate land area required for the different types of towers includes, 300m^2 permanent land take per suspension towers and 600m^2 temporary additions for the construction. Similarly, the tension towers require a permanent land take of 500m^2 per tower and 1000m^2 temporary land take per tower.

Access to towers requires 4 meters wide temporary path from existing village or field track and 2 meters wide temporary path from tower to tower along line axis or with ROW corridor (0.5 meters - 1meter wide in extensively cultivated areas). Depending on the distance between the existing roads, some of the temporary access path may become permanent access outside the ROW corridor for maintenance purpose.

The Right of Way or the space occupied as transmission line corridor by the HVAC 500 kV double circuit line is 50 meters wide along the line route and 65 meters wide adjacent to settlements. The ROW does not fully restrict or avoid the use for some agricultural activities. It allows some trees with

the heights lower than 4 meter to be planted inside a 20 meter line corridor and trees lower than 8 meter are permitted in the rest of line corridor. Unlike trees, houses or building structures are not totally allowed inside the ROW.

The environmental corridor, as per the technical design is restricted by 2 kV/m maximum electric field is included in the line corridors resulted in case of maximum swing deviations of the lower line phases.

The transmission line will keep clearance of 30meters from the main roads axis to either side, traverse railways by crossing angle of $\geq 15^{\circ}$, keep clearance from airstrips of 5 km and/or vertical approach angle of $\leq 20\%$, avoids mountainous areas, erosion prone zones, swampy areas and soil aggressive to concrete foundation and also avoiding tall obstacles within 50 to 60 m wide line corridor or close vicinity, e.g., antennas and TV stations.

The space between two transmission lines may vary between 400 meters to 500 meters depending on the natural terrain and landscape.

The construction of the transmission line will cause the following activities which will have impact on the local community.

- ROW clearance for the construction of towers,
- Constructing access road, material storage and camp sites, and
- Building of a substation in Wolyta Sodo area.

The construction of the transmission line will be divided into two contract lots, which is subject to the financiers of the project. The first contract lot will be from km00-km202 and the second lot from km202-km 433.

2.2 Transmission Line Tower Geometry

The following figure shows the tower geometry of the transmission line. The height of the tower is 37.25 meter above the ground and the tower width is 14.5m. Construction of houses (structure) shall be either 25 m or 32.5 m away from the center of the tower depending on the settlement pattern.

All vegetation above 4 meter and located within 10m range from the center will be cleared. Trees that are 8 meter tall and located in the next 10m will also be cleared and the maximum permitted height of trees outside the 25meters from the centerline is \leq 25 meters.

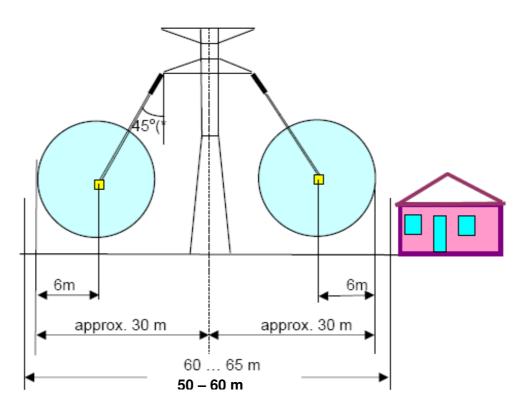
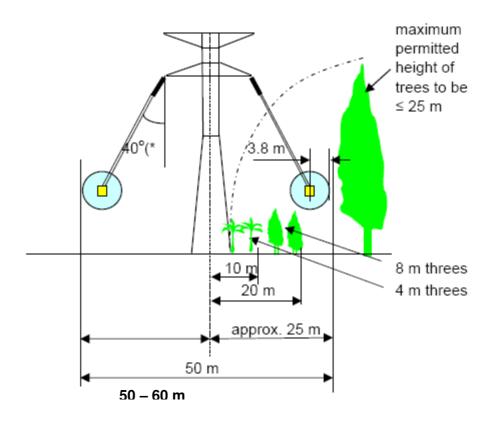


Figure 2-1: HVDC 500 kV Bipolar Line Corridor adjacent to settlements

Figure 2-2: Line Corridor for Non Populated Areas & height of trees allowed



2.3 Ancillary Facilities and Services

The following ancillary facilities and services as identified by the technical consultant and required during construction and post-construction include,

- 1. <u>Tower erection</u>: This follows tower foundation excavation/construction and uses the same area used by civil works.
- 2. <u>Construction of material storage and camp areas</u>: Approximately 6 material storage and camp areas will be required, each approximately 5ha in area.
- 3. Access for stringing of conductors is along the line corridor.
- 4. <u>Access road construction</u>: Access to tower sites will be via the line corridor whenever possible to reduce the number of temporary access roads required during construction.
- 5. A number of permanent access roads will be required for maintenance purposes along the transmission line route.

2.4 Operation and maintenance Activities

Maintenance shall be carried out twice a year, but this will depend on the site conditions. The width of the areas to be cleared or cut down vegetation depends on the height of the vegetation. Future maintenance measures shall ensure that appropriate clearances between towers, conductors, vegetation and other objects are maintained according to the required safety distances.

Construction of roads shall remain as access to the ROW and to the towers, only in absence of public roads.

2.5 Project Location

The project area (traversed by the transmission line) geographically is located in the Southern part of Ethiopia, in two Regional Sates: Oromia and Southern Nations, Nationalities and Peoples' Regional States (SNNPRS). It starts from the outskirts of Sodo town in Sodo Zuria woreda in SNNPRS and terminates in Dirie woreda of Oromia region along the border between Ethiopia and Kenya.

The approved line route inside Ethiopia traverses Woredas, such as, Wolyta Sodo, Humbo, Mirab Abaya, Arba Minch, Konso, Yabello and Dire until it reaches the border with Kenya at a location with a GPS coordinate of E 421519, N 397867. The first section of the transmission line, which is from km 00 to km 204 it is located in SNNPRS and the second section is located in Oromia region.

The project area starts from Sodo area, topographically located 2000 meters above sea level (masl) and moving into southern direction along the two rift valley lakes, namely Abaya and Chamo behind the town of Arba Minch. From there it continues through hilly and mountainous areas and steep slopes, and suddenly drops to Konso area which is a gentle slope and continues towards Yabelo woreda which has an altitude of 1300 masl and rises again to 1500 masl in Dirie woreda and after 20 km it sharply drops to 800 masl towards the border of Kenya.

As per the EIA, land that will be likely affected in the project area is categorized by the existing land use type as presented below.

- 50% covered with Bush land, which is about 644 ha
- 37% covered with Grassland, which is about 476.6 ha
- 11% used as farming and pasture land, 141.7 ha and
- 2% bare land or 25.8 ha

The transmission line corridor inside Ethiopia is divided into two distinct sections on the basis of the socio economic activities and environment of the areas. The first section of the route is located from

km 00 to km 204 (or from Sodo substation to Konso woreda) comprises about 53% of the total km distance and has about 40 of the tension (or angle) towers, out of the total 65 angle towers. The second section is from Km 204 to km 433 and crosses lowland areas that are less inhabited and cultivated. It mainly passes through bushy and forest areas except for some sparsely populated areas around Yabelo and Dirie woredas.

The transmission line project traverses mainly through rural sections and without crossing a single urban center. In some locations it passes very close to urban centers but does not pass through any of the towns that are located close to the project. Most of the rural villages crossed by the project are areas that are intensively cultivated farmlands, mainly crop producers who are dependent on rain fed agriculture and use traditional methods of cultivation. In this first section of the route inside Ethiopia, there is very little land which is not cultivated.

The rural villages crossed along the first section of the transmission route in Ethiopia have dense population with very low land holding size. In most places the settlement is located not far from the farm fields. For instance, the average landholding size for more than half of the farm households is below 0.5 hectares in Sodo and Humbo woredas.

The second section of the route for the transmission line traverses from km 204 to km 433 (or from bend 41 to 65) covers very wide uninhabited area with very low cultivation and thinly distributed population. It is mainly covered with natural vegetation and with small number of farmland and the rest of the section used by pastoralist nomadic communities depending on the vegetation type & availability of water. In this section, the transmission line partly traverses through bush areas and natural vegetation. Agro climatically, most of the section is located in mid land and low land areas except for some specific locations.

The project also includes a construction of a substation in Ethiopia, specifically in a place known as Warza Lasho in Sodo Zuria woreda. The plot which is selected for the construction of the substation is a communal grazing land used by several kebeles (which is government land by law).

According to the technical consultant, there are two types of Right of Way (ROW) having 65 and 50 metres width and determined on the basis of socio economic conditions or settlement pattern of the line route. The 65 metres ROW width is set for those areas which are densely populated and having built up areas (or is located adjacent to settlements), while the 50 meters ROW is for low density areas and for places that have less built up areas.

The sitting of the transmission line corridor has been determined, however, the precise routing of the ROW and location of the footing areas for the towers have not yet been finalized. The final alignment will take into consideration measures to minimize impacts on land and structures.

2.6 Demography & Population profile

In Ethiopia, the project is located in the southern part of the country and traverses through eight woredas (districts) and 34 rural kebeles located in two Regional States, namely in South Nations, Nationalities and People's Regional State (SNNPRS) and in Oromia Region.

Both SNNPRS and Oromia are the two largest regional states in the country in terms of population and land sizes. SNNPRS and Oromia have a population of 15,995,819 and 29,737,371, respectively.

The mainstay of the population in both regions is dependent on small scale agriculture, agro pastoralism and pastoralism. Agriculture is predominately carried out by small holder farmers whose technology is highly traditional that uses oxen ploughshare and hoe cultivation. The land size of the farmers is very small and highly fragmented. Apart from agriculture, industrial growth and other economic activities are also found at a very low level and are concentrated in major cities.

The woredas to be traversed by the transmission line are predominately rural and dependent on agricultural production. The livelihood of the population in the project area is mainly dependent on subsistence agriculture and livestock keeping. Farming is practiced by using traditional methods of oxen plough and hoe cultivation. The project area traversed by the transmission line, has very limited economic activity outside of farming and livestock keeping. Farming households have very small and fragmented land size. The average holding size in most woredas is below 0.5 hectare.

The major food crops grown include Maize, Sorghum, and root crops such as Enset¹, Potato, Boyna and Godere or Yam and the major perennial crops include Orange, Avocado, Mango and Banana. Farmers in Mirab Abaya and Arba Minch Zuria woredas crossed by the transmission line mainly grow Banana and Mango because of its high market value. Farmers in Mirab Abaya and Arba Minch Zuria woredas will lose large size of Banana plantations due to the impact by the transmission line. Banana in the area is good source of cash income and is planted by using irrigation schemes. Banana from the area is exported daily to Addis Ababa and other major cities. Other high value crops planted in the project area include Cotton, Coffee and Chat.

The population density in the woredas to be traversed by the transmission line varies from 430 persons per square km in Sodo zuria woreda to 7.5 & 8 persons per square km in Teltele and Dire woredas respectively.

The total population in the project area traversed by the transmission line is estimated to be 955,581. The above population is predominantly rural and makes its living from agricultural activities and lacks basic services and infrastructures. The distribution of social services is incomparable to the needs and requirements of the population. The following table shows the distribution of the population by woreda.

Table 2-1: Population distribution by woreda

Regional State	Administrative	Woreda / District	Area in Km ²	Population
	Zones			density
SNNPRS	Wolyta	Sodo Zuria	404.35	430.7
		Humbo (Tebela)	859.20	155.0
	Gamo Gofa	Mirab Abya	630.70	126.3
		Arba Minch	967.69	182.1
		Zuria		
	Segen	Dershie	1487.38	102.0
		Konso	2273.79	109.9
Oromia	Borana	Teltele	10145.85	7.5
		Yabelo	5543.53	20.2
		Dire	10317.18	8.0

Source: CSA: Annual Statistical Abstract, July 2010

¹ Enset is literally it is known as false banana. It is drought resistance crop and its root is edible after having gone through some processing.

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3. POTENTIAL IMPACTS

Construction of the transmission line is expected to have both positive and adverse impacts. Key adverse impacts will be associated with change in land use and land acquisition, especially from loss of productive agricultural land currently used for growing perennial crops. The transmission line is also expected to affect houses, and a small number of public and community facilities. Positive direct social benefits are likely to be more prominent during the construction phase from employment opportunities on the project and off-farm income generation. Indirect social benefits resulting from an additional secure source of power continue over the long-term. Current estimates indicate that about 750 jobs would be created, both skilled and unskilled in the project area. Some of the jobs would be targeted to women. Other social benefits are likely to accrue particularly to communities along the transmission line. In particular, the interconnector will provide telecommunications services using OPGW in towns along the transmission routes for the development of ICT hubs and will provide telecommunication channel for schools and other public facilities.

3.1 Impact on Agricultural land

The transmission line will require the clearance of the ROW for construction of access roads, towers, camp sites and storage facilities and building of a substation in the Wolyta Sodo area. Establishment of the ROW will result in permanent land acquisition and impose restriction on land use, for example height restrictions may be imposed on crops grown under the transmission lines. Existing structures, including houses will not be permitted to remain underneath the transmission line or need to be relocated since land will be needed for the footing areas of the towers. Temporary land acquisition will be required for erection of the towers and stringing of conductors. Even when land is temporarily taken by project works, people are likely to lose income for standing crops and productive trees on this land.

Access Roads. To ensure easier movement of trucks and vehicles transporting equipment and materials required for the construction of towers and storage facilities and also for future maintenance works access roads need to be developed. The design consultants have recommended the development of a, 4 meter wide path temporary access from an existing village road or field track and a 2 meter wide temporary path from tower to tower along the line axis or with ROW corridor (0.5 meter to 1 meter wide in extensive cultivation). An additional access road is also required depending on the distance between existing roads/tracks to the tower location; some of the temporary access paths may become permanent outside the ROW corridor for maintenance purpose.

The construction of access roads will result in land acquisition and affect farmlands, perennial crops and trees that are located within the right of way. It is possible that the construction of these roads may have impacts beyond the right of way corridor.

Tower Foundations. Land will also be required for the construction of towers. Each suspension tower requires 300 m² permanent land take and 600 m² additional land for temporary works. Each tension tower requires 500 m² permanent and 1000 m² temporary lands for construction purposes.

Camps and Storage Facilities. Two temporary camp sites and two storage facilities will be constructed in two different locations at an interval of 250 km length. Both the camp and storage facilities will require about $10,000 \text{ m}^2$ of land each and total of $20,000 \text{ m}^2$ for the two.

Substation. In Ethiopia, the project will require the construction of one substation in the Wolyta Sodo area. The area identified for the construction of the substation is mainly used for community

grazing by the villagers in the area. Construction of the substation will require the community to find an alternative grazing site.

Infrastructure for the project is mainly conventional lattice self supported steel tower and a substation. Land acquisition is unlikely to pose a major problem. The right of way does not fully avoid the use of land for cultivation and grazing. The only exceptions will be plantations more than 8 metres of height and housing structures.

Land permanently required for the transmission line will likely affect:

- Agricultural land
- Perennial crops (or fruit trees)
- Different types of timber trees
- Nursery sites for trees
- Public & community assets/utilities
- Houses/buildings, fence, and
- Other structures (e.g. burial grounds, granary, etc).

The major impact of the project will be loss of farmland used to grow cereal crops and perennial crops. A total of 321 hectare of farmland will be permanently affected by the construction works of the transmission line. Preliminary findings indicate that there are also different types of timber trees (some indigenous trees) that will be affected due to ROW widening. The eucalyptus is the major species of tree to be most adversely affected. Current estimates of total numbers of timber trees that will be affected by the construction of the transmission line which are located within the ROW is about 169,976. Some of the affected households maybe able to continue their livelihood in the remaining plot of land not affected by the works, however they need to be compensated for permanently losing their crops, trees, and other assets. The RPF outlines mitigation measures for loss of crops, trees and assets. Valuation of compensation will be based for crops and trees commonly planted in the project area in accordance with their current market value.

Given that social impacts will take place within the 65 meters width of the ROW, the extent of land expropriation is limited to strips of farmland along the route which will be permanently and temporarily affected. People losing part of their land will be able to continue farming in those areas where works are not planned and once these activities are over they will be able to continue farming in the ROW and transmission line corridor. Detailed consideration has been taken in the RPF to provide appropriate mitigation measures for loss of productive agricultural land, crops and trees.

3.2 Impact on Housing

Since the project is a linear in nature and impacts largely concentrated within the 65 meters width of the ROW only strips or small portions of land will be affected. No major resettlement or relocation is anticipated since most houses and structures will be shifted or "stepping back" from the alignment within the existing farm leave. However, in some locations in the Wolyta and Humbo woredas, there could be a need to relocate few households who may not have sufficient land to build new housing structures in the remaining plot of land. The RPF defines measures in the form of replacement land or compensation for houses or assets to mitigate these impacts.

3.3 Impact on Incomes and Livelihood

Other than subsistence farming there appears to be no other major economic activity in the project area other than small scale trading. Small scale trading activities take place largely in urban areas and rural trade centers. The urban centers serve as political and administrative centers; and centers for transaction of agricultural produces and for the purchase of consumables as well. Since economic activities in the area have not well developed there is limited market integration and business opportunities have not yet fully developed. Since economic activities in the area are not developed, there is limited market integration and business opportunities for people whose main source of limited livelihood is from subsistence farming.

Households losing a strip of their land either permanently or temporarily for the construction of the transmission line will be potentially affected by a small reduction in their incomes. While it is not anticipated that the loss of this small loss of income will have a major adverse impact on the overall livelihood of these households, the RPF defines the appropriate entitlements to compensate eligible households for loss of any income due to project activities.

3.4 Impact on Female Headed Households

Among the affected population, there appear to be a sizeable number of female headed households. Typically female headed households are among the most vulnerable of the affected population because they lack resources, education or work experience as compared to men. Most single mothers and widows in the project area make their living by renting and share cropping their land, from small businesses and maybe receiving some form of financial support from family members. The RPF lays out several measures to address the specific needs of female headed households and other vulnerable groups such as assistance and support to rebuild their houses, transferring and transporting their household items and materials to their newly constructed residential houses or for those used for business purposes.

3.5 Impacts on Business Enterprises

Given that the project area is mainly rural and dependent on agricultural production, no major impacts are anticipated on businesses expect on an irrigated farm enterprise which grows cotton and fruits. It is estimated that the enterprise will be losing some 16.47 hectares of land.

3.6 Spread of STIs and HIV/AIDS

In Ethiopia, the HIV/AIDS pandemic, in recent years, has emerged as a major health issue, affecting mainly the age group of 15 to 49 years. In 2005, distribution HIV/AIDs shows 3% for the country, of which, 3% among men and 4% among women. The urban and rural distribution also shows 10.5% in urban areas and 1.9% in rural areas.

As per the 2005 report of the Federal HIV/AIDS Prevention and Control Office, there are 1,320,000 persons living with HIV/AIDS in Ethiopia. Among the above number, 634,000 live in rural areas and the remaining 686,000 live in urban areas.

In Oromia and SNNPRS, the two regional states that are crossed by the Ethio-Kenya interconnector project the rate of HIV/AIDS distribution in 2005 is estimated to be 1.4% and 1.5% respectively. Specific data is not available for each of the woredas crossed by the project.

Having understood the magnitude of the problem as well as the large resources needed to combat HIV/AIDS, the Ethiopian Government issued a policy, which calls for an integrated effort of multisectoral response to control the epidemic. The Federal Democratic Republic of Ethiopia published a Policy on HIV/AIDS in 1998. The Ethiopian Government's HIV/AIDS policy urges communities at large,

including government ministries, local governments and the civil society to assume responsibility for carrying out HIV/AIDS awareness and prevention campaigns.

The general objective of the policy is "to provide an enabling environment for the prevention and control of HIV/AIDS in the country".

Construction and other similar type of works are considered to have high potential (due to their mobility) for the spread of communicable diseases, such as Sexually Transmitted Infections (STIs) and HIV/AIDS. The spread of the disease could either be from the construction workforce or the local population.

To mitigate impacts from STIs and HIV/AIDS the following measures are proposed:

- Prepare awareness creation plan to address the problem and spread of STIs and HIV/AIDS among project workers and local communities
- Provide education for local communities regarding the spread of HIV/AIDs and STIs in public places, schools, and through community clubs and groups
- Work closely with local health service giving institutions to control the spread of STIs and HIV/AIDS
- PAPs who are HIV/AIDs positive if relocated will be provided with special support and care because of the nature of their illness
- Free distribution of condoms both male and female type
- Produce leaflets and road side posters about HIV/AIDs

3.7 Impact on Public Utilities and Community Assets

Preliminary estimates indicate that a total of 18 public and community institutions will be affected by the construction of the transmission line. Likely public properties affected include three tree nurseries and two forest reserve areas which are under the management of woreda Agriculture and Rural Development offices. In addition a fence belonging to an Abattoir, a Graveyard in Mirab Abaya and four Protestant Churches may also lose houses having a total of size of 327m², of which three are located in Humbo woreda and one in Yabelo woreda. The affected churches do not signify historical importance and are of very recently constructed churches from wood and mud & covered with corrugated Iron sheet roof.

3.8 Impact on Health

Malaria is major disease in some areas of the project that may pose a health risk to the construction workers and local communities. It is most prevalent during the peak agricultural season, between the months of June to September. To mitigate impacts on the construction work force as well as local communities, the following measures are proposed:

- Distribution of mosquito nets to construction workers and local communities in the direct zone of influence of the project road corridor in close collaboration with local health facilities
- Filling up quarry sites and borrow pits immediately after the completion of the construction works. Quarry and borrow pits if not filled up will become breeding places for mosquitoes.

3.9 Electric and Magnetic Fields

Electric fields: Electric fields near the ground and those at the surface of the live conductors can impact people living and working in their vicinity. The ground-level fields may induce currents in and voltages on conductive objects. Very high electric fields may occasionally lead to unpleasant shocks and other effects. The conductor surface fields, which are hundreds of times larger than the ground-level fields, may lead to radio and television interference, audible noise production.

Magnetic Fields: In the vicinity of an overhead line, the strength of the magnetic field near ground level depends mainly on the distance from the line and on the currents flowing in the phase conductors, which, unlike voltage, may fluctuate considerably during the day and with the season depending on the demand for energy. The field also depends on the heights, phasing and arrangement of the conductors. In addition, there may be significant contributions to the field from currents such as those flowing in any neutral conductor, or induced in the shield or earth wire of the line, in the ground nearby, or in communication circuits, pipelines and other metallic structures which may run parallel to the line. The important factors in predicting the magnetic field are thus the location and magnitude of the various currents and the need to describe them statistically because they are continually changing. The variation of the field along the line is broadly similar to that of the electric field.

To mitigate these impacts construction and operation works will be carried out in compliance with the International Finance Corporation's (IFC) Environment Health Standard (EHS) Guidelines (General and for Electric Power Transmission and Distribution). The affected communities/people will be informed during the construction phase about risks e.g. climbing on towers, vandalism and illegal abstraction, and land use such as tree nurseries or agricultural activities, as well as construction of buildings will only be allowed as long as the safety distances are adhered under all circumstances.

4. ORGANIZATIONAL RESPONSIBILITY

The Government of Ethiopia and Kenya following the memorandum of understanding they have signed in 2006 have established a Joint Ministerial Commission to oversee the overall coordination of the joint project. The Joint Ministerial Commission is responsible to provide overall guidance and directives on strategic and policy issues. Below the Joint Ministerial Commission, there is the Joint Steering Committee (JSC) that comprises of high level Government officials from both countries and that will be responsible for overseeing the project.

The day to day activity of the joint project is administered by a Joint Project Coordination Unit (JPCU). The proposed structure of the JPCU shows the unit having a Joint Project Coordinator, staff appointed from both countries and a team of supervision consultants.

The JPCU is designated with the responsibility of day to day coordination of the project activities, for procurement of services; oversee construction supervision and progress of the project. However, the institutional capacity of JPCU needs to be strengthened and requires having clearly defined organizational mandate, responsibility and authority.

In Ethiopia, organizations and institutions that are responsible for resettlement measures and provision of services of the RPF operate both at Federal and Regional Government level.

For the implementation of the RPF, EEPCO has the overall responsibility in Ethiopia; it is also responsible to coordinate the different stakeholders that are working both at Federal and Regional level in regard to the implementation of the project activities.

4.1 Organizations at Federal Government Level

Organizations that operate at the Federal Government level and have some role to play in the planning and implementation of the project include the Ministry of Water & Energy, the Ministry of Finance and Economic Development (MoFED) and Ethiopian Electric Power Corporation (EEPCO), which is the implementing agency. The Ministry of water & Energy and Ministry of Finance and Economic Development provide the overall policy guidelines and coordination at Ministerial level and also provide adequate governance and management; and budget release for timely operation.

EEPCO, which is the client of the project in Ethiopia, has extensive experience in the preparation and implementation for a number of RAPs that were prepared for transmission line projects, construction of substations and hydropower dams. The Environmental & Social Management Unit in EEPCO is responsible for the monitoring & evaluation of Environmental and Social Impact Assessment (ESIA), RPF and RAP documents prepared for power projects and its implementation. The Environmental and Social Management Unit needs to be staffed with appropriately qualified environmental and social professionals.

The following table shows the different organizations operating at Federal level that will have the role and responsibility in the planning & implementation of the interconnection project.

Table 4-1: List of institutions/stakeholders at Federal Government Level that will have Role during Planning & Implementation of the RPF

No	Organizations Responsible	Responsibility	
1	Ministry of Water & Energy	Represent Ethiopia at the Ministerial Commission; Provide overall policy guidelines and coordination at Ministerial level and also provide adequate governance and management	
2	Ministry of Finance and Economic Development	Participate in the Ministerial Commission Approval and signing of credit with project financiers.	
		Release and approval of fund for compensation	
3	Ministry of Federal Affairs	Follow up & ensure that the provisions are provided to PAPs as per the proclamation 455/2005	
		Prepare national valuation formula for the determination of compensation	
4	Ethiopian Electric Power Corporation	Overall Management and Budget Allocation for the project implementation;	
		Coordinate with Federal and Regional Authorities in the planning and implementation of the project	
5	Environmental Protection Authority	Appraisal & monitoring of the RAPS prepared in accordance to the provisions detailed in the RPF	
6	Ethio-Kenya Joint Project Coordination Unit (JPCU)	JPCU will have the overall responsibility for the coordination and implementation of the RAPs prepared in accordance to the provisions detailed in the RPF.	
7	Project Implementation Unit (PIU)	Coordinate and establish Resettlement and valuation committees at woreda level;	
		The PIU will have the direct responsibility for the implementation of the Resettlement Action Plans; Income restoration of PAPs; Organize skill development training and Provide social development Plan,	
		Effect compensation payment for PAPs;	
		Provide support for Vulnerable groups;	
		Monitor the restoration of services/utilities affected by the construction works, such as, water supply, etc	
		Monitor and Evaluate the implementation of the RAPS prepared in accordance to the provisions of the RPF.	
		Provide technical support for the project office in training, and related activities etc.	

4.2 Regional Government Level

The project is located within Oromia & SNNPRS Regional States. In accordance with the principles of decentralization set out in the Ethiopian constitution, Regional states shall establish their own independent Regional Bureaus and agencies.

Administratively, below the regional states there are Zonal Administrations, and below the zone there is the woreda, and below the woreda it is the kebele administration, which is the lowest level of state organ.

According to the Constitution of FDRE, Regional States have the duties and responsibilities for planning, directing and developing social and economic programs, as well as the administration, development and protection of resources of their respective regions. This is also true for woreda (or district) administrations. Each woreda administration is governed by its own elected council. The woreda council is more or less similar to that of the Federal & Regional Parliament in its structure; and appoints the executive committee which is responsible to run the day to day activities of the woreda.

For the implementation of the RPF and associated RAPS, the woreda administration will be the main contact and has a major role and responsibility in the planning & implementation of the resettlement activities. It is also responsible in the facilitating the relocation of PAPs and to work closely with the PIU for the implementation of the RAPS prepared in accordance of the provisions of this RPF.

The Regional Environmental Bureaus or Agencies are responsible for environmental monitoring, protection and regulation within their respective jurisdictions. These are expected to reflect the environmental management requirements at local level.

At woreda level, Agriculture & rural development offices, municipalities and Kebele administrations play significant roles.

Table 4-2: List of organizations at Regional Government Level

No	Organizations involved	Responsibility
1	SNNPRS and Oromia	Facilitate the construction of the transmission line by informing the
	Regional Governments	zonal and Woreda authorities to provide the necessary support and
		cooperation for its smooth implementation
2	SNNPRS and Oromia EPA	Monitor that appropriate mitigation measures are adopted
		concerning the adverse environmental and social impacts created by
		the construction works.
3	Woreda Administration	Coordinate the Valuation process, establish Resettlement and
	Offices	Property valuation committees and facilitate compensation for PAPs,
		and facilitate land for land compensation, facilitate the relocation
		sites and the restoration of services, maintain data of properties
		removed from expropriated land.
4	Municipalities	Identify land for the relocation of PAPs and provide support in
		restoration; and provide special attention and support for vulnerable
		groups, maintain data of properties removed from expropriated land
5	Woreda Agriculture and	Coordination and support of PAPs and provide agricultural data and
Rural Development Offices co		cost estimates for crops
6 Kebele Administrations Provide advice on the		Provide advice on the fairness in relocation process and valuation of
		compensation and coordinate on the support to be made for
		vulnerable groups

4.3 Representatives of PAPs and NGOs

In addition to Government institutions, Representatives of PAPs and Local NGOs operating at woreda level will have important role to play in the planning and implementation of the project.

<u>Representatives of PAPs</u>: PAPs will elect their representatives who will represent them in meetings and discussions to be held with the woreda administration, valuation committee, resettlement/implementation committee and with the PIU.

<u>Local NGOs</u>: Local NGOs operating in the project area or in the woreda will have the responsibility to monitor the planning & implementation of RAPS. However, there are not any local NGOS that operate in the project area and have specific experience and knowledge about RAPS.

4.4 Coordination between different agencies and jurisdiction

EEPCO in consultation with the Ministries of Water & Energy (MWE) and Finance and Economic Development (MoFED) shall carry out the coordination work among the different actors at Federal level; and the jurisdiction between the different donor agencies shall be mainly the responsibility of MoFED & MWE.

The JPCU will have a major role in the coordination of the project planning, procurement and implementation. The PIU will be responsible for the implementation and supervision of this RAPS.

At Regional Government level, the Regional EPA and other agencies will mainly play a monitoring role while the woreda administration will play key role in the facilitation and implementation of the RAPS by establishing Resettlement and valuation committees, by providing land for relocation, coordinating compensation payments, addressing grievances and related issues.

5. COMMUNITY PARTICIPATION

Community participation and stakeholder consultation was an essential component in the preparation of the RPF. Stakeholder consultation provides an opportunity for people who may be affected by the project to provide input to the design of the project, reduce adverse impacts and provide insights on developing appropriate measures for compensation. Consultation was carried out in 5 different woredas who will be affected by the project. The views and concerns of people, including the most vulnerable, expressed during these consultative meetings were taken into consideration in the preparation of the RPF.

The stakeholder consultations conducted in 2011 were largely to disseminate information to the public and stakeholders about the proposed project, to understand the views and opinions of stakeholders especially people who maybe directly affected by the project. Consultations took the form formal meetings, focused group discussions and informal meetings with members of the affected population.

In Ethiopia, as per the Constitution Federal Democratic Republic of Ethiopia's (FDRE), community participation and public consultation is a requirement whenever development projects are planned and implemented. The Constitution Federal Democratic Republic of Ethiopia's (FDRE) reaffirms the participation of the public, in policies and projects that affect their livelihood. Article 43 No.2 of the Constitution states that:

"Nationals have the right to participate in national development and, in particular, to be consulted with respect to policies and projects affecting their community".

The objective of public consultation is to inform the public on the potential impacts of the project and seek their participation and contribution during the construction of the transmission line. It also helps to identify the potential social impacts (positive and negative); and how the implementation of the proposed mitigation measures for the negative impacts should be carried out and also on the proposed reinforcement measures for the positive impacts.

A number of communities Consultations were carried out in almost all the kebeles that are crossed by the transmission line. The first round of public consultation was carried out during the planning phase in June 2011, the second one was carried out from July - August 2011 as part of the socioeconomic survey, and the most recent in December 2011 for establishing the various committees at woreda level.

People who participated in the stakeholder consultation meetings that were held at kebele level included:

- Project affected persons (PAPs)
- Elders and informal leaders
- Woreda administrators
- Office heads and experts from Woreda sector offices
- Kebele administrators
- Women heading households
- Religious leaders, school teachers, health workers and agricultural development agents working at kebele level.

During these consultations effort was made to include the poor, women, and vulnerable groups in the meeting. These members of the community not only came to the meetings but were able to present their views and concerns.

Consultative meetings held with people likely to be directly affected by the project, community members and other stakeholders inside their village were conducted in local languages so that participants could understand the issues and also they could present their views and concerns freely. Consultations were also carried out with organizations that can influence the implementation of the project in each key stage of the construction of the transmission line. The organizations which sent their representatives to the stakeholder consultations include, Woreda administration offices, Agriculture & Rural Development Office, Environment protection Office, Water Office, Finance & Economic Development office.

Consultations were carried out with 698 people who are likely to be affected by the project, drawn from 18 rural kebeles. About 35% of the participants in these meetings were women. Table 5.1 summarizes the number of participants of public consultation by woreda and Kebele.

Table 5-1: Number of participants of public consultation by woreda and Kebele

Woreda List of kebeles		Number of participants by sex		
		Male	Female	Total
Sodo Zuria	1. Waja Kero	33	15	48
	2. Wafa Gendabar	34	14	48
	3. Humbo Larena	31	22	53
Humbo	1. Shochora	12	4	16
	Agodama			
	2. Koysah Agodama	25	11	36
Mirab Abaya	1. Mole	15	14	29
	2. Omo Lante	33	23	56
	3. Kola Mulato	19	5	24
	4. Wanke Wajefo	19	13	32
	5. Delbo	22	12	34
	6. Ankober	55	50	105
Arba Minch Zuria	1. Chano Dorga	59	8	67
	2. Shala Mela	31	10	41
	3. Zyese Alego	17	11	28
	4. Lante	16	9	25
Konso	1. Fachucha	13	9	22
	2. Dukat	16	5	21
	3. Bayida	13	-	13
Total		463	235	698

Consultations focused on the following:

- On the nature of potential social impacts of the transmission line, and its impacts on social, cultural and economic ties and networks during and after construction works; on the loss of productive resources.
- Identification of major social impact issues, such as involuntary resettlement, community severance and vulnerable groups that are at particular risk of project impacts; and compensation for affected properties and assets.
- Data and information on the current usage and ownership of land in existing width of the ROW, fixed and movable structures, trees, wells and other assets, areas of significant squatting and/ or encroachment.

Soliciting the views of local population as how to pragmatically provide for their needs
within the basic format of the project, and what beneficial impact they expect from the
transmission line.

Each of the public consultations that were held with people in the project area took place in the presence of kebele administrations. Minutes of the meetings were signed by the participants and stamped by kebele Administration offices. Specific details of the public consultations carried out in Amharic and are attached in Annex xx. Photographs of the participants attending the consultation meeting are also presented in the report.

5.1 Summary of public consultations with PAPs & Communities

The following summarizes the views of people and communities in the project area about the transmission line:

- No strong objection or opposition to the construction of the transmission line.
- Woreda's should appoint persons with integrity, appropriate skill, and experience & also who have good knowledge of the area to work as property valuation & Resettlement / Implementation committee members.
- People are willing to cooperate with the property valuation committee and the Resettlement / Implementation committee.
- Compensation for affected properties be made at a full replacement cost.
- Woreda administrations should facilitate land for land replacement for those households who will be losing their farmland
- Those whose houses will be affected by the project have requested for the provision of a
 plot for housing construction within the same village or as close as possible to their current
 location.
- Woreda and PIU notify people in advance of the plan for the project implementation and to be given enough time for preparation if required to relocate.
- Villages crossed by the transmission line do not have any power supply. People affected by
 the project and other members of the community have made a strong request for the
 provision of power when the construction of the interconnection project becomes
 operational. Provision of power supply should be a form of compensation.
- The size of the plant / trees allowed to grow within the right of way limit should be defined, as should the possibility for project affected people to farm small sized crops inside the ROW.
- Compensation amounts should be able to provide sufficient benefit and income in the future.
- Appropriate valuation and compensation payment for the relocation of individual (or private) graveyards or tombstones that are located in their backyard and in front of their houses (in Wolyta Sodo and Humbo areas) and affected by the construction works of the transmission line.
- People in Mirab Abaya want to be allocated with appropriate burial sites and be compensated for those public burial grounds that will be affected and located close to the church.
- Construction of the transmission line should start after crops have been harvested and when the fields are free from planted crops. The harvest season for perennial crops in most locations is from December January.
- No new construction inside the right of way after the agreed cut-off date.

Priority for employment opportunity during the construction works of the transmission line.

5.2 Summary of meetings held with Woreda Authorities

Meetings were held in all nine woredas with concerned woreda authorities and experts from sector offices and woreda level associations. There have been several meetings with each of the woredas and during these meetings held with woreda level offices, all woreda officials have agreed to provide support and assistance for people who will be affected by the project and will be losing their properties and assets, farmland, residence and business due to the construction works.

In addition to kebele level consultation meetings, meetings were also held with woreda authorities; the woreda level meetings included 92 woreda cabinet members (and of which 9 are women) drawn from the nine woredas crossed by the transmission line and also included experts and professionals from relevant sector offices. Table 5.2 presents the number of participants of woreda level meetings by sex and location.

Table 5-2: Number of participants of woreda meetings by sex

No.	Woreda	Number of participants by sex			
		Male	Female	Total	
1	Sodo Zuria	12	1	13	
2	Humbo	9		9	
3	Mirab Abaya	5		5	
4	Arba Minch Zuria	3	4	7	
5	Derashie	9		9	
6	Konso	9		9	
7	Teltele	13	2	1	
8	Yabelo	9	2	11	
9	Dirie	5	1	6	
	Total	83	9	92	

The most recent consultations in December 2011, for establishment of the various committees to provide oversight on project activities were held at each woreda. Of the 41 participants attending this meeting 2 were women. The following summarizes key points from the discussion with the woreda officials:

- All the woredas crossed by the transmission line agreed to facilitate the smooth implementation of the construction works and provide other routine administrative support.
- Agreed to facilitate the employment of local unskilled labour force during the construction of the transmission line.
- Agreed to facilitate the provision of land for the construction of camp sites and for material storage.
- Willing to cooperate in the provision of land for construction of houses for those persons who will be relocated due to the construction of the transmission line.
- Agreed to facilitate and provide houses for rent for those tenants that have been displaced from their previous rented houses due the project.

- Follow & monitor that the community residing along the route does not carry out any new construction inside the right of way after the agreed cut-off date.
- Provide special support to vulnerable groups and for female headed households.
- Maintain security and provide support for the contractor during construction works.

In addition to the above issues, the woredas have also made the following specific requests and suggestions to be included in the RPF:

1. Care for community assets and ritual sites in Yabelo woreda

During the meeting held with Yabelo woreda, participants of the meeting strongly suggested that the project should take care for indigenous trees, for the Borena water supply network system which is located in Derato kebele, for the water tanker located at Gegana mountain area and also for the Geda ritual site located at Aribora kebele at the time of the construction of the transmission line. However, not one of the above properties and assets that are mentioned by Yabelo woreda officials are located within the Right of Way.

2. Establishment of different committees

As per FDRE law, woreda administrations are responsible to establish different committees that are required for the implementation of RPF and associated RAPS. Woredas have established three different committees, Resettlement, Property valuation and Grievance redress at each woreda level.

In addition, to the establishment of the above committees, understanding and agreement has also been reached on the following issues that were commented by the different actors.

3. <u>Compensation for loss of communal grazing land in Sodo Zuria woreda</u>

Sodo Zuria woreda have made a specific suggestion that the Ethiopia - Kenya interconnection project has to compensate the community for the loss of the grazing land in Warza Lasho kebele by providing some sort of social services and facilities, such as, school, clinic, drinking water supply, access road or other similar amenities after having consulted with the public. Since there is no specific compensation mechanism for communal land such type of activities will minimize the complaints and dissatisfaction of the community for the loss of the communal grazing land.

4. Compensation for loss of assets

It was suggested that PAPs losing their assets and properties should be required to confirm the measurement of the land that will be taken for the transmission line ROW, the size of their homes & types of assets that will be lost by putting their signature on the inventory sheet to avoid opportunistic claims in the future.

While all the woredas traversed by the project in principle agree with the above procedure and understand that it protects the project from opportunistic claims in the future, they feel that it is not an appropriate time prior to the delineation of the final ROW in each kebele. To ask PAPs at this juncture to put their signature on the current inventory (based on the result of the socioeconomic survey conducted in July 2011) of their properties and assets. They feel that in the absence of the final measurement of their assets and properties this will result in unnecessary haggling with the woreda and kebele authorities.

The conformation required by PAPs in putting their signature for the land take or for their affected properties and assets by the transmission line can only take place once the final design is completed and final measurement of affected properties and assets is done either by EEPCO or the Contractor. It is after this process that agreement and understanding could be reached with PAPs on valuation for compensation of their assets. It is only at this stage that it is possible to get the confirmation of PAPs and make them sign either for land take or affected assets and properties.

5. Provision of land for land replacement

The woredas are willing to provide land for land replacement for those people losing more than 10% of their farmland. This will be done once the final list of PAPs is completed before the construction work commences and for those losing more than 10% of their land are made known.

Following the census of the project affected people and their assets, the woredas will able to identify available land plots which are either kept under the Woreda or Kebele management (plots from deceased persons or others), and located within the same vicinity or nearby will to be distributed for PAPs.

In general, in all the locations where public consultations are held, participants of the consultation meetings were highly supportive and positive about the construction of the transmission line and willing to cooperate as far as their rights are respected and taken care as per the law. All the Amharic minutes, both for PAPs and woredas are attached in Appendix xx.

Figure 5-1: Participants of public consultation at different kebeles in Mirab Abaya woreda



Figure 5-2: Informal meeting with a group of women & men in Borana





Figure 5-3: Participants of public consultation in Konso Woreda





Figure 5-4: Participants of public consultation in different kebeles Arbaminch Zuria woreda





Figure 5-5: Participants of public consultation in Sodo & Humbo Woredas



6. SOCIO ECONOMIC STUDIES

A household survey of the 8 woredas traversed by the transmission line was initially out in June-August 2008. From July-August 2011, another socioeconomic survey was carried out of households in the same 8 woredas who reside within the 65 meters of the ROW and whose properties and assets are likely to be affected by the construction of the transmission line. The findings from these two studies underpinned the preparation of the RPF by defining of the scope and magnitude of likely social impacts and the development of appropriate mitigation measures in accordance with the World Bank's policy on Involuntary Resettlement, the policies of the AfDB as well as Government of Ethiopia. The key findings from these surveys are detailed in this section.

6.1 Social and Cultural Characteristics

The population living in the project area belongs to the Omotic and Cushitic language groups. The ethnic composition of the population in the project area includes, Wolyta, Gamo, Derashie, Konso and Oromo (Borana). Oromos are the largest ethnic group in Ethiopia; speak the language of Oromiffa which belongs to the Cushitic sub family. The Wolyta, Gamo, Derashie and Konso have their own distinct language and culture and belong to the Omotic sub family.

The Borana which are one of the major Oromo group and located in the project area have a distinct tradition, economic, social and political system known as Gada (a generation system) and also an age -set system known as Hariya. Both of these systems share similar attributes and are complimentary in function. Members of each age-set share a series of basic and collective military, economic, political and ritual duties.

In six of the woredas that are located in the project area the major activity is small scale farming and in particular crop farming and livestock keeping. Agriculture and crop farming in the ROW is characterized by small-scale household farming, and practiced with traditional methods of hoe cultivation, oxen ploughshare. Agriculture is mainly rain fed except very little small scale irrigation that is used to grow banana plantations in Mirab Abaya and Arba Minch areas.

The population of the other three woredas (Teltele, Yabelo and Dire) located in Oromia region is predominantly pastoral and agro-pastoralists. The agro-pastoralists are partly dependent on crop farming and livestock keeping. The pastoralist communities move from place to place in search of water and grazing land mainly within the boundary of the administrative zone.

In urban areas which are likely to be affected by the transmission line, the major economic activity is small scale trading, such as, shop keeping, grinding mills, tea shops, hotel and restaurant.

6.2 Land Tenure System

According to the Constitution land belongs to the public. Land cannot be sold or exchanged. Article 40, No.2 of FDRE Constitution, states that "Land is a common property of the Ethiopian Nations, Nationalities and Peoples of Ethiopia and shall not be subject to sale or to other means of exchange.

In the rural areas expected to be affected by the project, farmers are provided with plot of land to farm for an indefinite period. The law does not impose a limit on rural land use for peasant farmers, semi pastoralists and pastoralists. If the government wants the land for public use farmers will be compensated for the property and the crops grown on the land. However, in pastoral areas land is mainly considered communal property and each member of the community can graze livestock in areas where there is sufficient grazing land.

Agricultural land can be transferred to immediate family members, mainly to children and very close relatives. Children who lose their parents shall have the right to use rural land through legal guardians until they attain 18 years of age.

The proclamation on rural land administration and land use (Proclamation 456/2005) gives the right to use rural land to peasant farmers, semi pastoralists and pastoralist families. As per the law, a person who wants to make his living through agriculture will have access to rural land from his parents by donation, inheritance or from the competent authority.

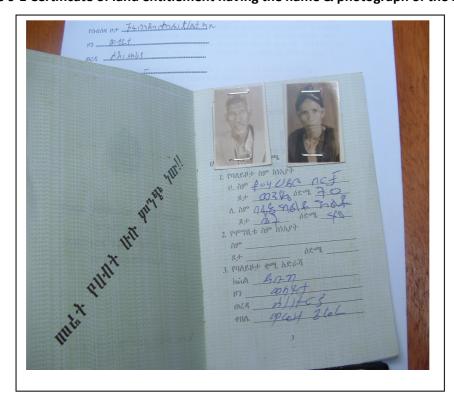


Figure 6-1 Certificate of land entitlement having the name & photograph of the husband & wife

The law also gives women rights to access rural land to engage in agricultural activities. According to the Constitution, men and women have equal rights with respect to use, transfer, administration and control of land. Land that belongs to a household is registered under the name of the wife and the husband. The holding entitlement belongs to both. Holders of rural land are given a holding certificate by the woreda land administration office. In some of the woredas in the project area, a number of farmers have already received holding certificate.

The proclamation on rural land use allows farmers to rent their land for limited periods depending on the type of agricultural activity. Other than renting or contracting land there is no other existing provision for land transactions.

Land is a major source of income and food production for the population living in the project area. Land is highly scarce and fragmented in two of the woredas, Sodo Zuria and Humbo. The average landholding size in Sodo Zuria and Humbo woredas is below 0.5 hectares and this fragmented plot is used for farming as well as building houses and other structures. In Wolyta Sodo Zone the majority of farming households own less than 0.1 hectare of land. In the other four woredas, the holding size is about the same. The average land holding size is below 1 hectare. Few households own more than one hectare of farmland.

Construction of the transmission line is expected to have a major impact on agricultural land and on the income of households who are fully dependent on farming activities. In areas where there is a shortage of land with high population densities, the loss of even small parcels of productive agricultural land can have significant adverse impacts on livelihoods. It is estimated that thousands of households living in the project area face problems of food shortage partly due to scarcity of farmland, high population pressures and land degradation. In some localities within the Wolyta and Humbo woredas poorer households, particularly children in these households suffer from malnutrition.

Food crops (cereals, pulses and root crops), cash crops (coffee and spices) and perennial crops (fruit and non-fruit bearing trees) are the predominant crops cultivated in the project area. Table 7.1 details the variety of crops likely to be affected in the 8 woredas by construction activities associated with the project.

Table 6-1: Agricultural Crops Affected by the Project

Food Crops			Cash crops	Perennial crops	
Root crops	Cereals	Pulses		(Fruit Trees)	
Enset ² Cassava, Irish	Maize,	Horse Bean,	Coffee, Chat,	Avocado, Mango,	
Potato, Sweet potato,	Teff,	Haricot	Hops, Cotton,	Banana, Papaya,	
Yam, Godere, and	Sorghum	Bean	Pepper,	Lemon and others	
others			Sugar Cane		

In the second section of the route traversed by the transmission line (km 240 to 433) farming does not appear to be a major activity since the majority of the households are dependent on nomadic pastoralism and also there is very little land which is suitable for farming activities.

6.3 Socioeconomic Surveys

The RPF was prepared on the basis of a detailed review of the socioeconomic data from a household survey of the eight woredas traversed by the transmission line which was carried out from June-August 2008. This survey was intended to support the development of a RAP prepared in 2009 by the Fitchner consulting firm. However, the 2009 RAP was never implemented. From July-August 2011, a similar socioeconomic survey was carried out of households in the same eight woredas who reside in the 65 meters of the ROW and whose properties and assets are likely to be affected by the construction of the transmission line. A key objective of the second and most recent survey was to identify if there were changes in the project area through the influx of new people coming into the area or changes in the number and ownership of properties and assets. Data was collected by woreda and kebele on the current socioeconomic situation of people likely to be affected by the project, including names, sex, age, occupation, vulnerability indicators, and size of households. A preliminary list of all their affected assets and land was prepared. Preliminary data sets on, unit costs and productivity of agricultural crops and cost estimates for houses and related building structure were also developed. Findings from both of these socioeconomic surveys underpinned the preparation of the RPF by defining the scope and magnitude of likely social impacts and the development to appropriate measure to mitigate these impacts.

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² Enset is commonly known as false banana. It is a staple food in most parts of SNNPRS.

The 2011 socioeconomic survey identified a preliminary enumeration of different assets and properties likely to be affected by the project. An initial inventory of affected properties, assets, land, the value of crops and trees was prepared. This initial inventory of assets and properties aimed to identifying the magnitude of the potential losses of land and livelihood whether total or partial, and the potential extent of economic and physical displacement.

A Global Positioning System was used to record each potentially affected asset and property was registered and recorded by owner's name. Annex 1 presents the details of the socioeconomic survey and an initial list of affected assets and properties by woreda along with estimated costs.

Preliminary data was collected on the following assets likely to be affected by the project:

- a) <u>Agricultural land</u>: size of affected agricultural land, identification and documentation of the different types of crops grown as well as the average yield per hectare, average price per kg.
- b) <u>Building structures</u>: size of the different types of houses (tukul, mud houses with corrugated iron sheet roof, and houses with stone masonry), fences by type, grain storage, etc. Buildings and houses were also identified on the basis of their function such including those used as housing and for businesses, community or public use, churches and mosques.
- c) <u>Public utilities</u>: water supply system (underground pipes and distribution points), reservoirs and dams, electric poles, telecommunication poles and underground cables.
- d) <u>Trees:</u> size and number of trees by type, age and use, number & type of trees (fruit and non fruit).
- e) Other assets: grazing land and community forest areas.

On the basis of the second socioeconomic survey, current estimates indicate that the number of PAPs is approximately, 5743 (1165 households), who will either loose housing structures within the ROW, farmland, trees or perennial crops. It is also estimated that the project will affect 256 housing structures and a small number of public and community facilities such as church buildings, fences, graveyards and trees, nursery sites and forest reserves. The survey indicated that impacts will be more significant in the first section of the route and lower in the second section. The first section is highly cultivated area and densely populated per one square km of land. The second section is characterized by lower levels of cultivation and has a population of mainly agro-pastoralists and pastoralist communities. Both socioeconomic studies carried out for the project in 2008 and 2011 do not indicate the presence of any squatters or encroachers in the project area.

About 6.7% of the affected households likely to be affected are headed by females. Approximately, 97% of affected households are located in SNNPRS and about 3% in Oromia. Nearly all the affected households practice subsistence farming except a very small number who are dependent on non agricultural activities.

The following table presents the preliminary distribution & number of household heads or PAPs by woreda & sex.

Table 6-2: Number of PAPs by woreda and sex

No	Woreda	No. of P	APs by Sex	Total
		Male	Female	
1	Sodo Zuria	148	19	167
2	Humbo	154	23	177
3	Mirab Abaya	211	13	224
4	Arba Minch Zuria	232	15	247
5	Derashie	159	-	159
6	Konso	156	-	156
7	Teltele	-	-	-
8	Yabelo	14	3	17
9	Dirie	18	-	18
	Total	1092	73	1165

Source: Consultants' HH survey

<u>Family Size</u>: Current estimates indicate that number of project affected people is 5743 or 1165 household. About 48% of this population are female and 52% are male. The average household consists of 4.92 persons.

The following table presents the family size by woreda and sex.

Table 6-3: Family size of affected HH by Woreda

No	Woreda	Male	Female	Total
1	Sodo Zuria	545	514	1059
2	Humbo	470	466	936
3	Mirab Abaya	720	602	1322
4	Arba Minch Zuria	466	373	839
5	Derashie	335	365	700
6	Konso	343	326	669
7	Yabelo	38	40	78
8	Dirie	72	68	140
	Total	2,989	2,754	5,743

Source: Consultants' HH survey

6.4 Livelihood Characteristics

Other than subsistence farming there appears to be other major livelihood activity in the project area, about 90 %. The livelihood for most of the households in six of the woredas located in the first section of the project area comes from farming and livestock.

Farming activities focus on growing cereal crops, root crops, fruits and vegetables, and cash crops, such as, coffee. Eucalyptus and other trees also provided additional incomes. The eucalyptus trees in particular a good source of cash because it is in high demand for the construction of houses both in the urban and rural areas.

The population in the other three woredas that are located in Oromia region, Teltele, Yabelo and Dire is predominantly pastoralists and agro-pastoralists. The agro-pastoralists are partly dependent on crop farming and livestock. The nomadic pastoralist communities move from area to area in search of water and grazing land.

Among the people surveyed for this preliminary analysis, about 41% list nonfarm activities, as their primary occupation. About 77 people have employed jobs. Only 53% of the people are located in the project area.

The table 6-4 details of household characteristics by woreda.

Table 6-4: Characteristics of Households

Household heads	Household heads earning income from non farm activities & family members having employment & lite						
Region	Woreda / District	Household heads having non farm activities as primary occupation	Other members of the household having employed jobs	Literate Household Heads /PAPs			
SNNPRS	Sodo Zuria	9	11	110			
SNNPRS	Humbo	21	36	111			
SNNPRS	Mirab Abaya	3	30	119			
SNNPRS	Arba Minch Zuria	5	7	155			
SNNPRS	Derashie	5	0	49			
SNNPRS	Konso	1	0	41			
Oromia	Yabelo	5	0	12			
Oromia	Dire	1	4	6			
	Total	41	77	603			

6.5 Incomes

Incomes in the areas traversed by the transmission line are low and cannot meet the basic needs of most households. A number of studies have indicated that the households in areas such as Wolyta Sodo live below the poverty line. Interviews with some of the people who could be affected the project indicate that the average self-reported monthly income for households ranges about 500 Birr to 750 Birr. Given that nearly all people likely to be affected by the project are small scale farmers who make their living through traditional methods of farming it is difficult to determine their income. The bulk of their production for their farm based production is used for household consumption. There is very little produce which can be marketed. In fact, some households cannot produce enough to feed their family members.

The low levels of household income is attributable to the size of, fragmented land holdings, low levels of agricultural productivity, low prices of agricultural products, limited non-farm activities and increasing population densities. People in some woredas, such as Sodo, Humbo and Konso are also highly dependent on relief food assistance provided by international donors.

6.6 Vulnerable groups

The 2011 preliminary socioeconomic survey carried out for the project indentified a number of vulnerable groups including female headed households, child headed households, elderly persons above the age of 60, the sick and infirm, persons with disability and the poorest living inside the ROW. Current estimates place the size of the vulnerable population at about 214, out of which about 63% are elderly, 34.5% are female headed households and 2.33% are child headed households. Specific attention will be paid to these special needs of this group of people.



Figure 6-2 FHH with children & grand children in Wolyta

The following table shows the number of vulnerable groups by woreda.

Table 6-5: Number of vulnerable groups by woreda

Woreda	No. of Vul			
	HH above 60	Female	Child headed	Total
	years of age	Headed	НН	
		households		
Sodo	13	19		42
Humbo	14	23	2	39
Mirab Abaya	33	13	2	38
Arba MInch	28	15		43
Derashie	14	-	-	14
Konso	17	-	1	18
Yabelo	8	3	-	11
Dire	8	1	-	9
Total	135	74	5	214

6.7 Public Utilities and Community Institutions

According to current estimates about 18 public enterprises, religious and community institutions will be affected by the project. Properties that will be affected include two tree nurseries and also some portion of the forest reserves. Both the nurseries and forest reserves belong to Humbo & Sodo Zurai woreda Agriculture and Rural Development offices. The forest reserves are mainly planted with Eucalyptus trees.

The nursery sites mainly grow tree and coffee seedlings for distribution to farmers and for plantation on community forest areas. They are located around km 7.32 and at km 20.71. The impact on the nursery sites in the future will require woreda offices to reduce the amount of seedlings grown and plantation sizes. In addition to the nursery sites, there are also two Government and one community forest reserves located in Sodo Zuria woreda that will be partially affected by the transmission line. Initial estimates indicate that a total of 4271 trees will be affected from the forest reserves.

A Community skill training center, abattoir and a school will also be affected by the project by loss of timber trees, farmlands (crops) and fence.

The community and religious assets and institutions likely to be affected include a communal grave yard in Mirab Abya, timber trees and farm land that belong to protestant churches in Humbo and Sodo. The church buildings will also be affected in Yabelo and Sodo area. In Sodo one honey producers' cooperative will lose its shade for bee hives constructed with corrugated iron sheet.





6.8 Housing

Preliminary estimates are that a total of 256 different types of houses will be affected by the project, of which, 149 or 58% percent are houses that are constructed with wood and mud and covered with corrugated iron sheet (CIS) and 107 or 42% are tukuls. All the above houses are located within the 60 metres of ROW. Three types of housing structures are likely to be most affected. Ones constructed from wood and mud and covered with corrugated iron sheets, huts (Tukul) constructed with wood and mud and covered with thatched grass and houses covered with both soil and thatched grass, which are typically found in pastoral areas of Yabelo and Dire woredas.

Table 6-6: Number of Affected Houses by Type, Size (m2) and Woreda

Woreda	No. of Tukul	o. of Tukul No. of CIS roof	
		houses	CIS
Sodo	10	30	1396
Humbo	25	76	3004
Mirab Abaya	39	34	1540
Derashie	-	1	15
Konso	17	-	28
Yabelo	12	8	458
Dire	4	-	-
Total	107	149	6441

Since the project is linear in nature and impacts largely concentrated within the 65 meter width of the ROW only strips or small portions of land will be required affected by the project. No major resettlement or relocation is anticipated since most houses and structures will be shifted or "stepping" back from the alignment of the way leave. However, in some locations in the Sodo and Humbo woredas there is a shortage of land for farming and construction of houses. Finding a plot of land for farming or housing in these areas may be difficult.

Present estimated costs of the houses will be Birr 19,493,734 and of which the largest amount of the estimated cost or 92% is allocated for houses constructed with wood and mud and covered with CIS roofs.

The table below shows the cost estimate for the affected houses by woreda.

Table 6-7: Estimated replacement cost for affected houses by type

Woreda	Cost in Birr	Cost for	Total estimated
	for CIS roof	Tukul	Cost
			(CIS & Tukul)
Sodo	6,681,375	99,000	6,780,375
Humbo	7,838,669	125,000	7,963,669
Mirab Abaya	2,290,865	858,000	3,148,865
Derashie	24,636	-	24,636
Konso	154,977	111,027	266,004
Yabelo	694,180	378,477	1,072,657
Dire	-	48000	48,000
Total	17,571,775	1,568,066	19,154,841



Figure 6-4: Sample Affected house



Figure 6-5 Sample Affected house

6.9 Timber Trees

Different types of timber trees (some indigenous) will be affected due to the construction of the transmission line. Key types of trees affected include Eucalyptus, Zigiba, Wanza (Cordia Africana). The tree most affected is the Eucalyptus tree which constitutes more than 60% of the affected tree types. Eucalyptus is widely planted in the high land and mid land areas and is a very good source of cash income for farmers because of its high demand for construction of houses and fences both in rural and urban areas.

Current estimates indicate that a total of 169,751 different types of trees will be affected by the project and the total estimated cost for these trees will be 5,566,763 Birr. In addition the owner of trees may, in lieu of compensation, cut and collect the trees within the period fixed pursuant to Article 4 of the proclamation. It appears that nearly all PAPs will lose about 50 or less.

Figure 6-6: Affected Eucalyptus trees



Affected Community forest



PAP in front of his affected eucalyptus trees

6.10 Loss of Land in Urban Areas

In urban areas, the survey work for the selection of the route for transmission line has deliberately avoided populated areas and has bypassed urban sections so that houses will not need to be relocated and existing facilities not affected. All the major towns and villages that are located along the transmission line will not suffer significant disruption due to the construction works.

6.11 Land Acquisition

Establishment of the ROW will result in permanent land acquisition and impose restriction on land use. However, this impact is limited to small strips of farmland from households that are located along the route of the transmission line. A total of an estimated 341 hectare of land will be permanently affected by the construction of the transmission line, of which 321 hectare is farmland and 20 hectares communal grazing land. The 20 hectares of communal grazing land is needed for the construction of a substation in Wolyta Sodo area. The communal grazing land is public land which is used as a grazing area by residents of more than one kebele. The average loss of farmland per HH for

all woredas is estimated 2755m² or 0.2755ha. The affected farmland varies from one woreda to the other. Current estimates indicate that the smallest affected farmland size per HH is 10 m² and the largest 1.95 ha. The majority of PAPs will lose less than 1,000m² of farmland.

A major estimated compensation cost for loss of cereal crop from farmland will be Birr 80,442,984. The table below shows the size of farmland to be affected by the project at each woreda and the cost estimate for compensation of cereal crops.

Table 6-8: Affected farmland size and cost estimate for cereal crops by woreda

Woreda	Area in	Compensation
	Hectare	Estimate (in Birr)
Sodo Zuria	18.33	1,843,531
Humbo	16.49	1,677,375
Mirab Abaya	56.82	12,830,519
Arba Minch Zuria	95.17	49,327,999
Derashie	64.3	9,956,580
Konso	60.18	4,084,670
yabelo	3.15	252,470
Dire	6.71	469,840
Total	321.21	80,442,984

6.12 Loss of Perennial, Cash and Root Crops

A major impact from the acquisition of land will be on the production of perennial, root and cash crops in the project area. Current estimates indicate that a total of 40,862 perennial, cash and root crops will be lost. Compensation for the loss of crops is estimated 40,729,916 Birr. The following table summarizes the number of trees lost for each crop types and associated compensation estimate.

Table 6-9: Number of Affected Crops by types and Compensation Estimate

No.	Type of Tree	No. of	Compensation
		Trees	Estimate in Birr
1	Perennial Crops (Fruit trees)	7681	30,028,427
2	Cash crops ³	13,438	36, 583,466
3	Root Crops ⁴	19,743	10,698,489
	Total	40,862	40,729, 916

³ It mainly includes Coffee, Chat, Cotton, Sugar cane and Hops.

⁴ Root crops include, Enset, Yam, Godere, Casava, Boyena, etc

Figure 6-7: Affected Coffee



Figure 6-8: Affected Chat



Affected Chat & Enset Plant

7. LEGAL FRAMEWORK INCLUDING MECHANISM FOR CONFLICTS RESOLUTION & APPEALS

This section discusses the legal frame work for land acquisition, expropriation and compensation payment; and also the conflict resolution mechanism for Ethiopia.

7.1 Constitution of Federal Democratic Republic of Ethiopia

The Constitution of Federal Democratic Republic of Ethiopia is the legal basis for land acquisition and resettlement. FDRE Constitution lays down the basis for the property to be compensated in case of expropriation as a result of State programs or projects in both rural and urban areas.

In Ethiopia, rural or urban land could not be sold or mortgaged, citizens have only usufructuary right over land. A usufructuary right gives the user of the land, the right to use the land and the right to benefit from the fruits of her/his labor which may be crops, trees, etc. found on the land or any permanent works such as buildings etc.

Persons who have lost their land as a result of acquisition of such land for the purpose of public projects are entitled to be compensated to a similar land plus the related costs arising from relocation; assets such as buildings, crops or fruit trees that are part of the land etc.

According to the Constitution of Federal Democratic Republic of Ethiopia (FDRE) article 40.3, land is a public property that no individual person has the legal right of ownership. There is no private ownership of land in Ethiopia, as per FDRE constitution Article 40 (the Right to property) No.2, "Land is a common property of the Ethiopian Nations, Nationalities and Peoples of Ethiopia and shall not be subject to sale or to other means of exchange". Hence, Article 40 No.7 FDRE Constitution states the right of citizens to develop the land and to have immovable property and make permanent improvements.

"Every Ethiopian shall have the full right to the immovable property he builds and to the permanent improvements he brings about on the land by his labour or capital. This right shall include the right to alienate, to bequeath, and, where the right use expires, to remove his property, transfer his title, or claim compensation for it. Particulars shall be determined by law".

Article 40, No. 8 of the Constitution, states that if the land that is used by an individual is expropriated for public use, the person is entitled for compensation.

"... the Government has the right to expropriate private property for public purposes subject to payment in advance of compensation commensurate to the value of property".

Regarding displacement of the public due to development projects, the FDRE Constitution of Article 44 (Environmental Rights) No.2 states that:

"All persons who have been displaced or whose livelihoods have been adversely affected as a result of state programs have the right to commensurate monetary or alternative means of compensation, including relocation with adequate state assistance".

7.1.1 FDRE Legislation on Expropriation of Land Holdings

The Government of FDRE has issued legislation in July 2005 for the expropriation of landholdings, which is known as "Expropriation of Land Holdings for Public Purposes and Payment of Compensation (Proclamation No. 455/2005)." The objectives of the proclamation are to minimize and mitigate the impacts due to the expropriation of landholdings for public purposes.

The proclamation clarifies and defines who has the power to expropriate landholdings either in urban or rural sections of the country. As per the proclamation, the power of expropriation of landholdings mainly rests on Woreda or urban administration authorities. Article 3 No.1 of the proclamation states that: "A Woreda or an urban administration shall, upon payment in advance of compensation in accordance with this proclamation, have the power to expropriate rural or urban landholdings for public purpose where it believes that it should be used for a better development project to be carried out by public entities, private investors, cooperative societies or other organs, or where such expropriation has been decided by the appropriate higher regional or federal government organ for the same purpose."

A land holder whose land has been expropriated for public use by the concerned government authorities is entitled for compensation for his property situated on the land and for the permanent improvements he made on the land.

The amount compensation to be paid for the property situated on the expropriated land will be determined or calculated on the basis of full replacement cost. For houses in urban areas, the amount of compensation will not be less than the current market value of construction.

Woreda or urban administration has to notify in writing to the entity (which is either an individual or an organization) to be expropriated indicating the time not less than 90 days when the land has to be vacated and the amount of compensation to be paid.

A rural land holder, where his land does not have any crop or other property on the expropriated land should hand over within 30 days.

The proclamation also clarifies how utility lines that are owned and provided by Federal or Regional government offices, or by a public enterprise should be treated and compensated. Utility lines could only be removed from expropriated land by payment of compensation. The project owner has the responsibility to inform the utility provider in writing by indicating the exact location of the lines that will be removed.

The utility provider is responsible in determining the amount compensation which is required for replacing the lines within 30 days of notice; and the body which requested the removal of utility line has also to pay compensation within 30 days from the date of the receipt of the valuation.

Any expropriated property; in addition to the amount of compensation payment it will also receive a provision for cost of removal, transportation and erection.

Concerning displacement compensation for rural land holdings; A rural landholder whose land holding has been permanently expropriated shall, also be paid displacement compensation equivalent to ten times the average annual income he secured during the five years preceding the expropriation of the land (Part 3, article 8).

The above proclamation also states that the valuation of property shall be determined on the basis of valuation formula to be adopted at national level by the Ministry of Federal Affairs. However, until such time valuation of properties will be carried out by property valuation committees to be established both in rural and urban areas as stated in article 10 of the proclamation.

7.1.2 FDRE Council of Ministers Regulation No. 135/2007

FDRE Council of ministers issued a regulation on July 2007, regarding the payment of compensation for property situated on land holdings expropriated for public purposes. The regulation provides the basis for compensation of affected properties and to assist the displaced or affected persons to restore their livelihood.

The regulation sets the methods for the assessment of compensation, provision of land for land replacement and payment of displacement compensation.

The methodology followed by the regulation for the assessment of compensation establishes the basis and formula for compensation that will be made for the different types of assets and categorizes into ten parts.

- a. Compensation for buildings
- b. Compensation for fences
- c. Compensation for crops
- d. Compensation for perennial crops
- e. Compensation for trees
- f. Compensation for protected Grass
- g. Compensation for permanent improvement on rural land
- h. Compensation for relocated property
- i. Compensation to mining license
- j. Compensation to burial ground

The regulation recognizes that land replacement should be made for urban and rural lands. In rural areas if land replacement is not possible for permanently affected land, PAPs will be compensated for the affected perennial crops ten times of the annual production. For temporary impact the amount of compensation will be calculated by the number of years the land is occupied by the project.

In both permanent and temporary loses of land, the council of Ministers' regulation fails to asses and provide compensation for income restoration. It also does not recognize squatters or those persons who cannot provide evidence of possession for the land they have been cultivating or have built houses.

7.1.3 Rural Land Administration and Land use proclamation

FDRE has also issued a proclamation on rural land administration and land use (proclamation 456/2005). The proclamation mainly states the right to hold and use of rural land, and rural land use restrictions.

Rural land users have the right to rent or contract their land either for farmers or investors and the contract duration depends on whom it is rented out. Hence, no formal land transaction exists by law except giving out in a form contract or lease for certain period. The maximum period to rent out is up to 25 years for investors who grow perennial crops. To ensure land use rights the government has started issuing out of land entitlement certificates for each rural land owner.

In relation to compensation payment to be made for a holder in relation public works either by the Federal or Regional governments, section two, article 7, no. 3 states that:

"Holder of rural land who is evicted for purpose of public use shall be given compensation proportional to the development he has made on the land and the property acquired or shall be given substitute land thereon. Where the rural land holder is evicted by the federal government, the rate of compensation would be determined based on the federal land administration law. Where the rural

land holder is evicted by their regional governments, the rate of compensation would be determined based on the rural land administration laws of regions".

7.2 African Development Bank Policy & Guidelines on Involuntary Resettlement

The policy goals of the African Development Bank (AfDB) on involuntary resettlement are to ensure that PAPs are treated equitably and that they share the benefits of the project.

The guiding principles of the AfDB policy state that compensation for project affected persons has to be made at the full replacement cost. Compensation for loss of lands and other assets should be paid prior to projects implementation with the view to improve the former living standards, income earning capacity and production levels of the affected population. The improvement of these living standards should also apply to host communities.

The policy also states that compensation will be made at full replacement cost for loss of lands and other assets and that it should be paid prior to the commencement of the implementation of the project. This will help the affected population to improve their living standard, income earning capacity

The policy also recognizes that squatters and displaced person without having recognized legal right to be compensated and to be entitled for resettlement assistance in lieu compensation for land.

Particular attention should be given for disadvantaged groups among those displaced, especially those below the poverty line.

The following are the basis of the objectives of AfDB policy.

- To avoid resettlement where feasible, or minimize resettlement impacts where population displacement is unavoidable, exploring all viable project designs.
- Ensure that displaced persons received resettlement assistance, preferably under the project, so that their standards of living, income earning capacity, and production levels are improved.
- Provide explicit guidance to Bank staff and to the borrowers on the conditions that need to be met regarding involuntary resettlement issues in the Bank operations in order to mitigate the negative impacts of displacement and resettlement and establish sustainable economy and society.

Set up mechanism for monitoring the performance of involuntary resettlement programs in Bank operations and remedying problems as they arise so as to safeguard against ill prepare and poorly implemented resettlement plans.

7.3 World Bank Policy & Regulations on Involuntary Resettlement

This RPF also builds on World Bank's policy on involuntary resettlement (OP/BP 4.12). The Bank's policy addresses the need for the treatment of project impacts, which cannot be avoided. The policy objectives of OP 4.12 are either to avoid or minimize involuntary resettlement; if carried out to execute as sustainable development programme and to provide assistance to displaced persons so that they could be able to restore or improve their livelihood. The policy also sets eligibility criteria, resettlement instruments and monitoring, and other provisions.

The policy also sets eligibility criteria, resettlement instruments and monitoring, and other provisions.

The objectives of the policy include;

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

7.4 Gaps between Ethiopian Legislation, AfDB and WB Policies

The preparation and content of this RPF is within Ethiopia's existing legal and administrative framework and that of the AfDB and World Bank's policy on involuntary resettlement. The Ethiopian law and regulations and requirements for resettlement and rehabilitation are not fully compatible and it has some gaps with that of AfDB and WB.

The Ethiopian law does not accommodate squatters and illegal settlers, does not have clear provision for income restoration and transitional assistance. It also does not have any provision to assist the vulnerable and disadvantaged groups.

The Ethiopian law also does not make clear provisions for relocation & related costs and it also does not mention about provision of social infrastructures and facilities for resettled/relocated persons in their new location. The law also does not provide any assistance for those tenants renting houses from individuals or government if displaced.

Regarding compensation payment and valuation, Ethiopian law calculates the last five years average price which in most cases does not show the price fluctuations which is not realistic with existing situation.

The Ethiopian law does not clarify or specify how and why public consultation should be carried out. Bank policy states and gives high importance to public consultations and considers their views and opinion to influence the implementation of the project.

In case of conflicts or gaps between the Federal Democratic Republic of Ethiopia (FDRE) law and AfDB and World Bank Policies, AfDB & WB policies will prevail as the final and this RPF will be an international credit agreement between the Government of Ethiopia and AfDB.

7.5 Gender Issues & AfDB Gender Policy

Examining of gender differences and issues is essential factor for effective resettlement planning and implementation. This requires Gender Analysis which involves in a close look and understanding of the target population. Gender analysis enables the collection and interpretation of information on gender matters and in particular that of women.

AfDB has put in place Gender policy in 2001 to ensure gender mainstreaming in all its activities and lending policies. The policy recognizes gender mainstreaming as a development goal rather than on women as a target group. The achievement of this goal requires the Bank to examine all of its policies, programmes and projects for their actual and potential impacts on women and men.

AfDB's policy sets the guideline that gender sensitive planning is a requirement starting from project design, implementation, monitoring and follow-up instruments.

Ethiopia has issued Women's policy and also Gender Action plan to improve the lives and condition of women. Women in the project area face multi-dimensional, social, economic and political constraints as most of the project area is predominantly located in rural area. Most of the problems seem to emanate from the social, cultural and religious setting of the area. However, the poor economic development of the area plays a role in worsening the situation of women directly or indirectly. Women in project area suffer from the following major problems:

- Discriminatory culture, norms and value systems of the society.
- Harmful traditional practices which includes: Female Genital Mutilation, polygamy and the like
- Women carry out excessive workloads for longer hours.
- Women have very low social status and poor access to and benefit from basic social services.
- Male dominate resource rights and decision making power.

The magnitude of women's poverty situation in the project area is manifested through lack of access to resources; low educational level and high level of illiteracy among women, and lack of decision making power are some.

As in most parts of the country; women in the project area face disproportionate workload as compared to men. Women accomplish both productive and reproductive role. Women play significant role in productive activities mainly in agricultural activities (crop production and Livestock rearing) and to some level in rural trade business.

Women have limited access and control over resources. Legally women are entitled for land ownership. But from the actual practice men still have control over land other economic resources.

Women's role and responsibilities is limited to household chores and do not occupy important roles in social, religious and political positions.

At the time of implementing this RPF and associated RAPS, special attention, support and care will be given to Female Headed Households (FHH) recorded in the RAPs since they may face several problems and difficulties that would either hinder or affect their rights. The support will be in rebuilding their houses, transporting properties and materials, utensils to relocation sites and newly constructed residential houses.

Even though it may be difficult to quantify the support provided in monetary terms, these supports are to be considered as one form of social compensation for Female Headed Households.

At the time of cash compensation, Female Headed Households will be treated equally like that of their male counterparts. In general, there might be a need to safeguard the need and interest of women, and in particular that of female headed households in resettlement measures. Some of the issues that need to be looked into the safeguard of women's interests include;

- Identification of the socioeconomic conditions, needs, and priorities of women; and that of FHH in particular
- Entitlement criteria recognize Female Headed Households both for land and compensation payment

- Entitlements ensure that women are not disadvantaged by the process of land acquisition and resettlement
- Ensuring that land titles at the relocation sites or any grants included are in the name of both spouses
- Hiring of female staff to assist women in all kinds of relocation/resettlement activities, including planning and implementation of income restoration programs
- Providing and organizing training on employment creation activities to FHH.

8. INSTITUTIONAL FRAMEWORK

8.1 Ethiopian Electric Power Corporation

The Ethiopian Electric Power Corporation (EEPCO) is a public enterprise established more than 50 years ago and has recently been re-established in February 2010 by the council of ministers regulation no. 170/2009 under the supervision of the Ministry of Mines and Energy.

Some of the major responsibilities of EEPCO include the operation of generation, transmission, distribution and sell of electrical energy; construction of electricity generation, transmission, and distribution; administer the operation of national grid; lease transmission lines to foreign countries; negotiate and interconnect its power transmission lines with neighboring countries or regional and international power pool systems for purposes of export or when necessary purchase of electricity at price to be set through inter governmental agreement.

EEPCO has extensive experience in the preparation and implementation of a number of RAPs that have been implemented under its power projects. In EEPCO, the Environmental & Social Management Unit is responsible for the monitoring & evaluation of Environmental and Social Impact Assessment (ESIA) and RAP documents prepared for power projects and its implementation.

8.2 Environmental & Social Management unit of EEPCO

EEPCO's Environmental and Social Management Unit (ESMU) which is under the Corporate Planning Department has the overall responsibility of coordination of RAP and ESIA for Power projects; and its monitoring & evaluation. The unit also has participated in the preparation of ESIA and RAP for some specific power projects.

In the Ethiopia Kenya Power interconnection project, ESMU will have the role and responsibility to monitor and evaluate the study and the implementation of the RAPS and ESIA. It will also provide training & capacity building support for PIU's Environmental and Social experts.

Moreover, EEPCO's Environmental & Social Management Unit needs to strengthen its organizational capacity and able to influence the management regarding environmental & social issues. EEPCO's management also needs to provide the unit with appropriate support so that it becomes technically effective and efficient and could be able to address the various environmental and social requirements of the different projects that are implemented by EEPCO and the requirements of the financing institutions as well.

8.3 Ethio-Kenya Joint Project Coordination Unit (JPCU)

The Government of Ethiopia and Kenya following the memorandum of understanding they have signed in 2006 have established a ministerial commission to oversee the overall coordination of the joint project. The joint ministerial commission has also established Joint Project Coordination Unit (JPCU).

JPCU has the responsibility for the day to day coordination and implementation of the project activities, for procurement services, oversee construction supervision and progress of the project. However, the institutional capacity of JPCU needs to be strengthened and requires having clearly defined organizational mandate, responsibility and authority.

In Ethiopia, organizations and institutions that are responsible for resettlement measures and provision of services of the RPF operate both at Federal and Regional Government level.

Since EEPCO has the overall responsibility in Ethiopia, it is also responsible to coordinate the different stakeholders working both at Federal and Regional level.

8.4 Project Implementation Unit (PIU)

The Project implementation Unit (PIU) which is established under the Joint Project Coordination Unit is the main responsible body for the coordination, facilitation and implementation of this RPF. PIU is also responsible to monitor the restoration of services/utilities affected by the construction works.

Since the PIU is a newly established organization, its institutional capacity needs to be clearly defined and strengthened in every aspect. The PIU needs to have a number of experts to carry out its activities, and among the different experts it requires include a Sociologist and Environmentalist who have the relevant experiences and knowledge about RAP & EIA.

The Project implementation Unit (PIU) is responsible for the coordination and implementation of the following major activities;

- Coordinate and establish Resettlement and valuation committees at woreda level;
- Establish income restoration of PAPs, organize skill development training for PAPs and provide social development Plan,
- Effect compensation payment for PAPs;
- Provide support for Vulnerable groups;
- Monitor the restoration of services/utilities affected by the construction works, such as, water supply, etc
- Monitor the restoration of services/utilities affected by the construction works.

The PIU works closely with woreda level Resettlement committees, Property valuation committees and Grievance redress committees. It is the responsibility of the PIU to provide all necessary technical support to the committees and facilitate budget and resource allocation required by each woreda level committee.

8.5 Resettlement / Implementation Committee

Woreda level Resettlement / Implementation Committees are established in each of the woreda's crossed by the project in December 2011. The committee has responsibility of planning, coordinating and monitoring of compensation payments and relocation activities.

The woreda level Resettlement/implementation committee will have the mandate and authority to ensure the proper implementation of the RAPS, assess the timely payment of compensation to the PAPs and provision of other support mechanisms. The committee will report directly to the Woreda Administration offices and to the Ethiopia-Kenya Power System Interconnector project implementation unit.

Duties and Responsibilities of the Committee

• Guide and monitor the implementation of relocation

- Coordinate activities between the various organizations involved in relocation
- Ensure that appropriate compensation procedures are adopted and followed
- Reallocate land to permanently affected households
- Coordinating and supervising the activities of the valuation and that of the grievance committees, follow up the compensation payment, relocation activities, etc
- Approve the guidelines for property valuation and grievance redress committees,
- Oversee Project's requirements related to the social environment
- Clarifying policies and operational guidelines about compensation
- Provide support and assistance to vulnerable groups

The composition of members for the Resettlement / Implementation committee for each of the woreda's crossed by the project is shown as follows.

Table 8-1: Members of the Resettlement Committee by Institution

No.	List of Members	Responsibility
1	Woreda Administrator	Chairperson
2	Woreda Agriculture & Rural Development Office	Deputy Chairperson
3	Woreda Justice Office	Member
4	Woreda Mobilization Office	u u
5	Woreda Finance & Economic Development Office	"

Each woreda Resettlement committee is expected to prepare its detail schedule and activity plan in consultation with the PIU. Since the task and responsibility of the resettlement/implementation committee is challenging, it requires dedication and extra effort. The PIU will be responsible to provide the committee with all the necessary materials, equipment and allowance for field works.

8.6 Property Valuation Committee

Property Valuation committees are established in each of the woreda's crossed by the interconnection project. The property valuation committee has the responsibility of preparing valuation and cost estimates for affected properties and assets as per FDRE proclamation 135/2007, list down all PAPs, registration of assets and properties; and shall establish unit rates, taking into account, Proclamation 455/2005 and councils of Ministers regulation 135/2007.

This committee is mainly composed of professionals that are drawn from different Government offices to carry out valuation of affected properties and assets. Members of the committee include different professionals such as, Agricultural experts for valuing crops and trees; and a Civil Engineer for the valuation of houses. The involvement of different experts as committee members will assist and speed up the day-to-day task in the valuation of the affected assets.

The valuation committee will have the following major duties and Responsibilities.

- Establish standards for unit rates of affected assets and properties
- Revalidate inventories of PAPs and affected assets
- Establish valuation ahead of time effect the compensation payment resettlement/ relocation activities.
- To make each PAP verify and sign on the list of their affected assets and properties.

The table below present's members of the property valuation committees established in each of the woreda's crossed by the project.

Table 8-2: List of Valuation Committees Members by Institution

No.	List of Members	Responsibility
1	Woreda Agriculture & Rural Development Office Head	Chair Person
2	Natural Resource Expert/Forester	
3	Crop Expert /Agronomist/	
4	Municipality Town Planner or Civil Engineer	
5	Representative of PIU	

The property valuation committee reports to the Woreda resettlement / implementation committee.

In addition to the above two committees, a third committee which is known as grievance redress committee which has representatives of PAPs as members of the committee is also established at each woreda level. The details of the grievance redress committee are presented on grievance redress mechanism chapter.

9. ELIGIBILITY

9.1 Eligibility Criteria

Displaced or project affected people eligible for compensation and/or assistance shall meet the following criteria:

- Those who have formal legal right to land (including customary and traditional rights recognized by law of the country);
- Those who do not have formal legal rights to land at the time the census begins but have a claim to such lands or assets and recognized through a process identified in the resettlement plan
- Those who have no recognizable legal right or claim to the land they are occupying
- Those who lose their assets or access to assets such as houses, fences, grain store, cattle crops and trees.
- Those who may not be physically residing at the project site or persons who may not have any assets or direct sources of livelihood derived from the project site, but who have spiritual and/or ancestral ties with the land (e.g. graveyards, sacred forests, places of worships).

The eligibility criteria set by the World Bank in OP 4.12 is basically in line with the national legal requirements. Eligibility with respect to land rights can be easily determined in most cases because land is owned by the Government in both rural and urban areas and there are authorities such as municipalities, woredas and Kebele administrations who allocate the land or give legal recognition to such land to the person using such land affected by expropriation.

Legal documents such as certificates of registration may be difficult to obtain in rural areas but in cases of urban areas where municipalities exist there affected persons may have such legal documents. In practice, however, such legal documents may be difficult to find even in urban areas and most residents may claim such rights due to many years of possession or occupation of the land which in most cases is recognized by the urban authorities. Moreover, the Civil Code also recognizes that a possessor of an immovable shall become an owner of such an immovable if he/she has paid taxes for fifteen consecutive years (Art. 1168). With the exception of the land which is owned by the Government, this would apply to buildings, residential houses etc.

People without legal title or claims, such as squatters and encroachers, who have made a personal investment in structures or agricultural crops, are entitled to compensation at replacement cost. People lacking legal title to land can be offered resettlement assistance.

The cut-off- date is the date of completion of the census and assets inventory of person affected by the project. Persons occupying the project area after the cut-off-date are not eligible for compensation and/or assistance. Similarly, fixes assets such as (built structures, crops, fruit trees) established after the cut-off date will not be compensated.

Women typically compromise a disproportionately large number of poor. Women's access, especially those women heading households, to resources, opportunities, and public services necessary to improve their standard of living is usually more limited than that of men. In addition people who by the virtue of gender, ethnicity, age, physical or mental disability or social status may be more adversely affected by resettlement than others, and who may have be limited in their ability to claim or take advantage of resettlement assistance and related development benefits. Rehabilitation measures specifically targeted to these groups have been developed.

Relocated Households who will be losing access to their existing natural resources, such as, indigenous trees, forest areas, water ways and grazing land will be provided with replacements in kind, which have been identified in consultation with the affected households. Each affected household or individual person or party that claim entitlement have to prove their legal rights over the immovable asset to be expropriated in order to qualify as a legitimate owner to receive compensation.

Squatters (in urban or rural areas) and encroachers (into community and state forest areas) may be relatively recent arrivals on unused land. If such people arrived before the cut-off-date they are eligible for compensation for any structures, crops or land improvements that they will lose. The government should pay the equivalent amount of relocation/rehabilitation assistance. For squatters who do not depend on agricultural activities, Woreda officials will identify alternative income restoration options in close consultation with the squatters. Squatters who occupy right of way can be provided with housing or income-earning opportunities elsewhere.

9.2 Entitlement Policy

People will be entitled to compensation for lost assets calculated at full replacement cost. It will be based on the market value of the assets plus transaction costs. With regard to land and structures, replace cost is defined as follows:

- Agricultural land pre-project or pre-displacement, whichever is higher, market value of land of equal productive use or potential located in the vicinity of the affected land, plus the cost of any registration and transfer taxes.
- Land in urban areas pre-displacement market value of land of equal size and use, with similar or improved public infrastructure facilities and services, preferably located in the vicinity of the affected land, plus the cost of any registration and transfer taxes.
- Houses and structures the cost of purchasing or building a new structure, with an area and quality similar or better than those of the affected structure, or of repairing a partially affected structure, including labor and contractors' fees plus the cost of any registration and transfer taxes.
- Crops and trees and other Perennials compensation for annual crops is equivalent to the
 production over the last five years multiplied by the market price for the agricultural
 product. Compensation for trees is determined on the basis of the type, age and productive
 value of the tree.
- Other assets based on replacement cost or cost of the mitigation measure for example, compensation for removal of graves includes all expenditures for exhumation, removal and reconstruction to its original state.

Other entitlements that will be provided to PAPs include:

- Provision of housing for tenants
- Provision of social services, such as, educational and health facilities for relocated houses in places where they will be relocated
- Provision of transport facilities during relocation and resettlement
- Provision of temporary accommodation for relocated /resettled PAPs until they could be able to have their own housing or accommodation
- Short term support for the relocated households, which includes credit facilities,

Based on analysis of the impacts from the socioeconomic studies, and the criteria for eligibility, the following entitlement matrix has been prepared. The entitlement matrix reflects categories of PAPs according to their losses and entitlements.

Table 9-1: Entitlement Matrix

Type of loss	Application	Definition of entitled person	Compensation policy	Implementation issues
Agricultural Land	Arable land located along the transmission line	Land owner	Pre-project or pre-displacement, whichever is higher, market value of land of equal productive use or potential location in the vicinity of the affected land, plus the cost of any registration and transfer taxes.	Identify arable land close to the affected community
Temporary acquisition of land in ROW	All PAPs who have trees, crops, other assets in the ROW	Land owner	Compensation for annual crops equivalent to the production over the last 5 years multiplied by the market price for the crop. Compensation for trees determined on the basis of the type, age and productive value of the tree.	-Full compensation at least 1 month before land clearanceRehabilitate land used temporarily at the end of the construction period
Loss of houses/ structures	Housing/ structures located in the site	House and structure owner	Cost of purchasing or building a new structure, with an area and quality similar or better than those of the affected structure, or repairing a partially affected structure, including labor and contractors' fees plus the cost of any registration and transfer taxes.	-A list of available structure in each affected community
Loss of Rented Houses	Housing structures located in along the ROW	Tenant who has rented a house from a kebele administration or from individual landlords.	Comparable or better dwelling house from the urban kebele administration for renter (tenants) at same rental costs and displacement compensation equivalent to the six months rent.	-
Loss of commercia I and business structures and/or	Loss of commercial and business activities	Business owner	Alternative business site of equal size and accessibility to customers or cash compensation for lost business structure reflecting full replacement cost of the structure without depreciation.	-A list of available commercial institutions in each affected community -Compensation

Type of loss	Application	Definition of entitled person	Compensation policy	Implementation issues
activities				provided
Loss of income from wage earning and loss of business income or profit	For loss of farmland, trees, houses (own or rented)	Affected person, affected business	Cash compensation equivalent to 6 months income if loss is permanent. If temporary then for the period of interruption.	
Loss of structures, crops (people without legal title)		Squatter	Compensation at replacement value for structures or crops. Resettlement assistance.	They may not have other sources of income or livelihood
Community and cultural sites	Grazing land Places of worship, other assets Graveyards	Communities	Replacement land of equal quality. Construction of replacement properties at replacement value All expenditures for exhumation, removal and reconstruction to its original state.	

10. VALUATION & COMPENSATION FOR LOSSES

10.1 Compensation Policies and Procedures

The strategy adopted for compensation of the affected properties/assets follows the Federal Government and Regional Government laws and regulations. In addition to the FDRE & Regional Governments laws and regulations, AfDB & WB policies and other supplementary guidelines.

The compensation policies and procedures in the RPF will consist of the following three steps.

- 1) Establishment of property valuation committees: Property valuation committees will be established composed of professionals working within each woreda. The property valuation committee for rural and urban areas will be different. The property valuation committees will provide PAPs with adequate compensation for the assets they will be losing; proper valuation will be undertaken by the valuation committee & reviewed by the resettlement/compensation committee.
- 2) <u>Assessment of properties & assets</u>: All properties & assets affected by the project will be assessed at a full replacement cost, which is based on the present value of replacement.
- 3) <u>Establishing unit rates</u>: Unit rates will be established for each of the expropriated assets and properties by the project. The unit rates will be established for each of the affected properties and assets that are expropriated due to the construction works of the transmission line on the basis of the current market value.

This RPF builds on FDRE Constitution and Proclamation No.455/2005, and also on AfDB & World Bank's policy on involuntary resettlement (OP/BP 4.12). The content of this RPF is within Ethiopia's existing legal and administrative framework and AfDB & World Bank policy on involuntary resettlement. In case of conflicts or gaps between the Federal Democratic Republic of Ethiopia (FDRE) law and AfDB & WB Policies, Bank policy will prevail as the final and this RPF will be an international credit agreement between the Government of Ethiopia and the Bank.

A household census survey of PAPs and inventory of affected assets and properties was carried out in 2008. This was supplemented by another survey carried out in August 2011, along with review of the 2008 survey for each woreda.

The compensation procedure and approach will be determined on the willingness and readiness of owners of a resource to give up their rights. Final review of the properties to be affected will be undertaken by the valuation and compensation committee established at each woreda/district level. The valuation committee, in close consultation with PAPs and woreda administration office will review and establish a unit rate for the affected assets to be determined on the basis of market value.

Compensation payment to PAPs will be effected after the property valuation committee makes the final estimate of compensation payable for the affected properties at a full replacement cost and finally approved by Ethiopia-Kenya project JPCU and PIU.

Payment to affected properties and assets will be effected before the commencement of the construction works. The payment procedures and mechanisms to be adopted will be simple and easily understandable to PAPs also.

The compensation payment will address the following four questions.

 what to compensate (e.g. land, structures, businesses, fixed improvements or temporary impacts, lost income);

- how to compensate;
- when to compensate; and
- amount to be compensated.

Compensation for land structures, business, fixed improvements and other temporary impacts will be based on the market valuation, production & productivity valuation, negotiated settlements, material and labour valuation, disposition of salvage materials and other fees paid.

If relocation of business becomes necessary, access to customers and suppliers should be assured. In addition, workers losing employment in the process of relocating should be entitled to transitional income support. The compensation approach will be determined on the willingness and readiness of owners of a resource to give up their rights.

Compensation for temporary impacts will be calculated on the basis of the criterion/principles;

- Compensation equivalent to lost income required for the duration of impact,
- Compensation equivalent to lost income required for loss of access, and
- Physical restoration of assets (or access).

PAPs are also entitled to transitional assistance which include moving expenses, temporary residence (if necessary), employment training and income support while awaiting employment and should have an option for full replacement cost if duration of impact is to exceed two years. In preparing the valuation average costs will have to be assumed. It should be noted that costs of construction vary from one locality to the other.

PAPs that do not have license or legal permit and even squatters will be eligible for compensation payment. According to AfDB & WB policies that lack of license or permit will not be a bar to compensation. Because, even squatters have construction costs relative to design, materials employed, workmanship and final finish.

10.2 Income Restoration

PAPs require income restoration because of loss of their income basis due to the expropriation of their farm land, income loss from food crops, fruit and non fruit bearing trees, and from cash crops, such as coffee, chat; and others.

Income restoration refers to reestablishment of income levels for the PAPs prevalent at the time of displacement. Income restoration is an important component for the resettlement of PAPs who have lost their productive base, businesses, jobs, or other income sources, regardless of whether they have also lost their houses.

In income restoration, measures such as, source of livelihood (monetary and non monetary), availability of land for replacement, existing skills of PAPs, employment opportunities and other income restoration options have been defined.

The strategy for PAPs who have lost their assets and properties, income restoration plans or programmes may require support and services in the long and short term.

The short term strategy will be to provide support plans which will include compensation payment made for lost assets and properties before relocation, allowances for transportation and moving

agricultural extension and other related supports until the income level of PAPs is restored. This short term support also involves provision of employment opportunities at project construction site.

Long-term income strategy for income restoration involves land and non-land-based economic activities that will provide a sustained source of income over a longer period of time and to enable income restoration, or better still, improvements in PAPs standard of living.

Some PAPs may also need to receive skill training, employment opportunities to restore their livelihood. Tailor made skill training programmes are planned and will be implemented based on the need and interest of PAPs. During implementation of the RPF measures such as skill training associated with credit services should be provided to PAPs as a form for economic rehabilitation. The PIU needs to work closely with micro finance institutions, micro enterprise development organizations and NGOs working on such activities. The proposed training should be organized not far away from the locality of PAPs and also should not exceed more than 3-4 months and it also needs to be completed before the relocation of PAPs.

The changes brought to the livelihood of PAPs after the training and employment opportunities and other supports provided to them by the project office will be monitored regularly.

10.3 Methodology in Valuing Losses

There are three commonly known methods of valuing assets and properties: the income based approach, replacement cost a market data or comparable sales approach. However, in this RPF the methodology for valuing assets will be based on at full replacement cost.

The concept of full replacement cost is based on the premise that the costs of replacing productive assets that have been damaged because of construction of the transmission line activities are taken as a minimum estimate of the value of measures that mitigate the loss or damage. Replacement cost is based on the market of the assets plus transactions costs. It has been discussed in detail in earlier sections of this RPF.

The replacement cost approach involves;

- direct replacement of expropriated assets and covers an amount that is sufficient for asset replacement,
- net depreciation,
- moving expenses and
- other transaction costs.

AfDB's policy on involuntary resettlement defines replacement cost "Displaced persons should be compensated for their losses at "full replacement" cost prior to their actual move or before taking of land and related assets or commencement of project activities, whichever occurs first" It also states that it has to consider socio economic factors that will affect productivity and social integration.

Similarly, World Bank's OP 4.12 defines replacement cost, "method of valuation of assets that helps determine the amount sufficient to replace lost assets and cover transition costs. In applying this method of valuation, depreciation of structures and assets should not be taken into account."

With regard to land and structures, replacement cost is defined as shown in the following table for the different land use type, such as, agriculture, urban and rural land.

Replacement Costs for Farmland, Houses & Public Infrastructures

Table 10-1: Replacement cost by type of impact

No.	Agricultural Land	For Public Infrastructure	For Houses
I.	It is the pre-project or pre-displacement, whichever is higher	It is the pre-project or pre- displacement, whichever is higher with similar or improved public infrastructure facilities and services and located in the vicinity of the affected area	It is the market cost of the materials to build a replacement structure (house) with an area and quality similar to or better than the affected house, or to repair a partially affected house
II.	Market value of land of equal productive potential or use located in the vicinity of the affected land	The cost of any registration and transfer taxes	The cost of transporting building materials to the construction site
III.	The cost of land preparation to levels similar to those of the affected land	The cost of transporting building materials to the construction site	The cost of any labour and contractors' fees
IV.	The cost of any registration and transfer taxes	The cost of any labour and contractors' fees	The cost of any registration and transfer taxes

10.4 Basis for Valuation

The basis for valuation is FDRE's Proclamation 455/2005 and AfDB &WB policy on involuntary resettlement. Valuation of affected assets and properties will be carried out by experienced and skilled valuators. Proclamation 455/2005, states that "The valuation of property situated on land to be expropriated shall be carried out by certified private or public institutions or individual consultants on the basis of valuation formula adopted at the national level."

In order to provide PAPs with adequate compensation for assets & properties they will be losing, proper valuation will be undertaken by the valuation committee & reviewed by the resettlement/compensation committee. The valuation committee, in close consultation with PAPs and in collaboration with woreda administration will prepare the unit rates for the affected assets to be determined on the basis of market value.

Valuation for Loss of Houses & Fences

In determining replacement cost for loss of houses, the following points will be considered;

- Current construction cost and no allowance for deprecation is considered;
- Depreciation of the asset and the value of salvage materials are not taken into account, nor is the value of benefits to be derived from the project deducted from the valuation of an affected asset;

- The unit rate (or bill of quantity) is estimated on the basis of the type of the affected houses. The cost of each house that would be replaced is estimated on the basis of specification and bill of quantities prepared by the municipalities of each town and verified by the valuation committee and PAPs; Irrespective of the location of the area, the unit costs for the similar types of houses are taken to be identical.
- Estimate the disturbance allowance. The disturbance allowance is considered to cover the loss of
 established businesses, and include social disruptions and inconveniencies. Disturbance
 allowance will be used by PAPs to cover expenses associated with relocation including access to
 social and public services.

The compensation payment for houses, fences and other structures affected by the project as described above shall take place at full replacement cost.

The project affected households and institutions that would be relocated from their current location will receive compensation equivalent to the location advantage they might lose due to the project.

The formula adopted from proclamation 135/2007 for the RAPs is as follows;

- Cost of construction (current value)
- Cost of permanent improvement on land
- Amount of refundable money for the remaining term of lease contract

PAPs losing part of their housing plot that is located either in rural or urban areas will be allowed to retain the remaining portion of the plot to construct new houses and as long as it is located outside of the ROW.

Valuation for Permanent Loss of Agricultural Land / Crop Loss

The principle for permanent loss of agricultural land /crop loss/ is that it should be compensated with land for land compensation (or land for land replacement) in those areas where land is available for replacement. In the extent at which the agricultural land lost cannot be replaced, the principles for monetary compensation will apply.

Cash compensation is paid for loss of crops and trees found on permanently lost agricultural land and acquired for the construction of the transmission line. To compensate the forgone benefit and income from agricultural land, cash compensation is the only option.

The unit rates for loss of perennial trees and crops from lost agricultural land will be prepared by the valuation committees and submitted for approval to the Resettlement/ implementation committees by adopting the following methodology.

Table 10-2: Formula for calculating compensation for crops, unripe and ripe perennial crops

1. Cereal & related crops	2. Ripe perennial crops	3.Unripe perennial crops
The total area of the land in m ²	Annual yield in kg	No. of plants (legs)
Value of the crops per kg	Current price of the produce	Cost incurred to grow an individual plat
The amount of crops to be obtained per m ²	Cost of permanent improvement on land	Cost of permanent improvement on land
Cost of permanent improvement of land		

A PAP whose agricultural land is expropriated for the transmission line will be compensated as per proclamation No. 455/2005, which provides displacement compensation for rural landholders whose lands expropriated permanently that amounts ten times the average annual income secured during the five years preceding the expropriation.

Table 10-3: Types of Losses from Agricultural Land

No.	Category of Losses	Type of Losses
A	Permanent and Temporary loss of land	Farmland
		Housing plot and compound
		Business premises (house)
	Income sources and Livelihood	Income from standing crops
		Income from share cropping
		Income from affected business
		Income from perennial crops
		Income from cash & root crops
		Income from timber trees
С	Public and Community Assets	Loss of farmland, Forest reserve, Tree nurseries
		 School & Church properties such as, tree plantation, fence, farmland
		Cemeteries, burial places (tombstones)
D	Environment related	Environmental impacts that will result due to construction activities / works

FDRE Proclamation 455/2005, Article 8 (displacement Compensation) No. 1 states that; "A rural landholder whose landholding has been permanently expropriated shall, in addition to the compensation payable under article 7 of this proclamation, be paid displacement compensation which shall be equivalent to ten times the average annual income he secured during the five years preceding the expropriation of the land"

The principle of compensation also follows that of income restoration of PAPs. Agricultural land valuation will consider the five year average annual income from the land and calculate the ten-year gross income. According to FDRE proclamation 455/2005, compensation for lost income is based on the average annual income secured during the five years preceding the expropriation of the land.

According to the five year average crop budget and gross income is calculated and the proportion of income equivalent to land loss is determined.

In the case of fruit trees, the calculation will take into account the annual produce value of one season and by a major interruption of the income series after a tree has reached its economic limit of life and a new tree planted instead will have reached its fruit bearing age.

Non fruit bearing trees (or timber trees) will be compensated at a market value and PAPs will also be allowed to cut and take the trees for their own use.

Valuation for Temporary Dispossession of Agricultural Land

The valuation methodology for the amount of crop loss from temporarily affected agricultural land will be identified;

- Average price per crop type (five year average price for total loss)
- Land type (irrigated and non irrigated) and size for each type of crop
- Average production per hectare
- Number of farming season (or production season)

The average net income earned from one hectare of land will be calculated according to a farm budget by using local market prices. Taking into account the nature of the project, the extent of land expropriation is unlikely that there will be anything other than a low level of (partial) impact as far as agricultural landholders and the overall project are concerned.

Valuation Compensation for Burial Grounds and Tombstones

In Mirab Abaya one communal grave yard located next to a church compound will be affected. The tombstones that will be affected from the above graveyard reach 30 in number. Similarly, Humbo woreda four graveyards that are located in the backyards of individual households will be affected.

The dead bodies from the affected graveyards have to be relocated to new locations not far from the existing locations. The relocation requires costs and also religious services to be carried out. Hence, compensation payment will be made for the relocation and religious and cultural services to be carried out. Compensation for removal of graves includes all expenditures for exhumation, removal and reconstruction to its original state.

Valuation for Grazing Land

There are commonly two types of grazing land ownership in most parts of Ethiopia and in the project area; namely, communal and private. The common type of grazing land observed in the project area is mainly communal one which is under the ownership of the government.

As per the current practice and experience in the country, there has never been any compensation for grazing land since land ownership belongs to Government and the public. Although land could not be compensated in Ethiopia, however, there is a need to reinstate communal grazing land if affected by the construction works to allow for the livelihood of the communities to be maintained at the end of the construction of the transmission line.

Next to crop farming, livestock production is the second major source of household income in the project area and hence, there is a clear need to reinstate communal grazing lands to its original condition or provide land of equivalent value.

Valuation for Public Utility

Public utilities that will be affected due to the construction of the transmission line project include school buildings, tree nursery sites and forest reserves.

Relocation of the affected public properties is normally carried out by the service providers upon payment of relocation cost and needs to be completed prior to commencement of the works.

Compensation procedures will be established by the valuation committees established at each woreda level. All compensation payments will be effected ahead of the construction works.

10.5 Grievance Redress Mechanisms

The PIU and the Resettlement /Implementation committees will establish grievance redress procedures in accordance to those outlined in the RPF, as a mechanism for PAPs to ensure that they will be provided with the appropriate compensation payment and that all administrative measures are in line with the law.

The grievance redress procedures will provide opportunity for PAPs to settle their complaints and grievances amicably. The procedure to be adopted will allow PAPs not to lose time and resources from going through lengthy administrative and legal procedures.

Grievances are first preferred to be settled amicably whenever possible through arbitrational tribunal, which shall be established by woreda authorities in rural and urban areas separately. The procedures to be followed by the arbitrational tribunal members to address grievances redresses are:

- Be transparent and simple to understand
- Provide PAPs with free access to the procedures
- The procedure should be able to be activated rapidly
- Representatives of PAPs should be part of the committee during deciding how to respond to the grievances
- The response time between activating the procedure and reaching a resolution should be as short as possible

According to FRDE law, if a PAP is dissatisfied with the amount of compensation payment or other related measures they will be advised to take the case to community arbitrational tribunal. For PAPs taking their cases or grievances to arbitrational committee will give them the opportunity to have positive discussions with the compensation committee in the presence of elders, local administration representative or any influential person in the locality.

In case a dispute is not resolved by arbitrational tribunal, then if any of the Party disagrees, the aggrieved party has the right to appeal to the ordinary courts of law according to FDRE Proclamation NO.455/2005.

The preferred option of dispute settlement is the option of settling the dispute amicably because recourse to courts may take a very long time even years before a final decision is made and therefore, should not be the preferred option for both parties concerned.

A party dissatisfied by the decision of the administrative organ and the court may appeal to the regular appellate court or municipal appellate court within 30 days from the date of decision. The decision of the court will be final.

11. SHELTER INFRASTRUCTURE AND SOCIAL SERVICES

Shelter infrastructure and social service should be provided for PAPs whenever they are resettled or relocated outside of their present location. It is common that resettlement locations in most cases lack adequate housing infrastructure and social services, such as, schools, health clinic, provision of regular drinking water supply, market areas, road and other amenities. It is the responsibility of the project to provide the above services and facilities on timely basis and to the required standard.

Since the project does not require resettlement or relocation of PAPs outside of their villages or kebeles there is not any plan which is prepared to provide or finance housing, infrastructure & social services.

With the provision of compensation payment at full replacement cost and including transport and transient costs it is believed that the affected households will be able to construct new houses of their own design and interest.

Regarding the provision of social services, the PIU in collaboration with the woreda resettlement / implementation committee will be responsible to coordinate and provide as required.

12. ENVIRONMENTAL PROTECTION

In the project area, land that will be affected is categorized by the existing land use type as presented below.

- 50% covered with Bush land, which is about 644 ha
- 37% covered with Grassland, which is about 476.6 ha
- 11% used as farming and pasture land, 141.7 ha and
- 2% bare land or 25.8 ha

The intensity of impacts will be mainly at the construction sites within the ROW and at the substation construction site, as majority of construction activities will take place at those sites. Impacts will also occur in the rest of ROW, but in a less intensity.

Pertaining to the intensity of impacts, the focus of the construction activities will be mainly due to the ROW clearance, especially

- clearance of the construction sites and removal of hindering vegetation,
- the resulting impacts on soil, vegetation and fauna,
- loss of (agricultural used) land,
- dismantling of the accommodations inside the ROW, and
- the resulting impacts on households.

No migratory bird routes were encountered during the field investigations and interviews with local experts. Important Bird Areas and other protected areas are avoided in Ethiopia. The Project routing passes through a landscape that is already partly affected by pastoralism and farming activities.

It is expected that fauna will be disturbed due to the Project's activities due to noise and traffic caused by construction activities and the loss of vegetation and land, or habitats respectively. Negative effects on wildlife caused by poaching are not expected, because hunting, poaching and active wildlife disturbance (e.g. by tracking), acquisition and consumption of wild meat/bush meat will be prohibited.

Possible negative effects of the Project on fauna and vegetation shall be mitigated to an acceptable limit due to:

- the timely limited extent of the construction activities,
- execution of the construction works according to international best practice, which includes the compliance with national regulations and the relevant IFC EHS guidelines,
- implementation of mitigation measures as proposed in the ESMP,
- rehabilitation of the construction sites, and
- compensation for removed vegetation, which includes compensation for disturbance of effected fauna

The Environmental management plan specifies mitigation and monitoring measures & actions with time frames, specific responsibilities assigned and defines the follow-up actions. Mitigation measures for the negative impacts have to be carried out at different stages of the road construction & operation phases.

During the construction stage EEPCO's the ESMU and PIU have to make periodic inspection and performance evaluation of the works during the construction period to monitor the proper implementation of the proposed mitigation measures.

Mitigation measures proposed for the socio-economic issues like compensation to loss of properties, lost/degraded plots of land should be handled by a committee, composing of representatives of all stakeholders, local government administrative organs, NGOs, and the affected persons and PIU.

12.1 Pre-Construction phase

- a) <u>Engineering Design</u>: Based on the recommendations/requirements presented in the ESIA the engineering design needs to consider the following aspects:
 - minimize the disruption or relocation of large number of households by the project;
 - implement appropriate/suitable and cost effective mitigation measures to minimize the adverse social impacts;
- b) <u>Preparation of Tender Documents</u>: To ensure the proper implementation of environmental and social avoidance/mitigation measures as well as all safety/health issues, sufficiently detailed environmental and social articles and clauses have to be formulated and become an integral part of the works contract, thus providing a contractual basis for an effective supervision and control of the proposed measures.
- c) <u>Implementation of RAP and Compensation for PAPs</u>: During the construction phase, a prior notice, not less than six months will be given to local authorities and Project Affected Persons if they are going to be relocated and be compensated for loss of their assets.

Compensation is carried out according to the RAP. The responsible bodies shall include Resettlement / Implementation committee, Woreda Administration Offices, and the PIU.

The JPCU and PIU will be responsible to conduct the final valuation of compensation of all affected properties. The Resettlement / Implementation committee to be established at woreda level will finalize/approve the relocation, compensation amount(s) to be paid for each PAP as presented in the RAP document.

12.2 Construction Phase

Most of the project environmental management activities will be carried out during the construction phase, since this is when most impacts can be expected to arise. Management will largely be concerned with controlling impacts which may result from the actions of the Contractor, through enforcement of the construction contract clauses related to protection of the environment as a whole and of the components within it. In this respect, it is important to recognize that successful mitigation of construction impacts can only be achieved if the environmental protection measures, as set out in the construction contract, are properly enforced.

Overall primary responsibility for construction supervision and contract management, and, therefore, for environmental management during construction, will lie with the Engineer. However, certain powers and authority relating to day-to-day supervision will be delegated by the Engineer to the Resident Engineer. The Resident Engineer will have executive responsibility for ensuring that all site environmental management and monitoring aspects are dealt with promptly and properly. The environmentalist assigned as a site supervision staff will be responsible for environmental management and monitoring, and their role in the management chain is crucial if effective impact control is to be achieved.

It is recommended that a Sociologist and Environmental Specialist be appointed as a member of the construction supervision team. The Environmental Specialist would be responsible for reviewing and commenting on environmental aspects of work plans prepared by the contractor during the

mobilization period, while the Sociologist will be responsible for supervising the implementation of the RAP and HIV/AIDS and other related social issues.

Regarding HIV/AIDS activities in particular, the Contractor, shall sub contract HIV/AIDS activities to local NGOs in consultation with PIU. Since this is an activity beyond the scope and experience of construction works it would be appropriate to sub contract. The PIU Environmental & Social Unit is required to make periodic monitoring of the performances and give advice on issues requiring rectifications as the construction progresses.

PIU staff shall supervise all issues contained in the Environmental and Social management Plan;

- Compensation payment for lost properties,
- Rehabilitation of PAPs,
- Implementation of mitigation measures for the negative impacts;
- Safety and health requirements;
- HIV/AIDS and STIs control measures;
- Temporary land requirements and reinstatement;
- Reinstatement / re-cultivation of abandoned road sections after the construction of a respective section of improved / realigned road is completed for compensation of crops and other assets located on permanently dispossessed land (replacement of land) as determined during the Implementation Preparation Phase;
- Implementation of reinforcement measures for the positive impacts;
- Implementation of pre-operation requirements.

The contractor's obligations shall include the assignment of at least two of his senior staff as Environmental Officer and Safety/Health Officer, well experienced in their respective assignments. Contractor's staffs are also recommended to attend training and briefing on the negative social impacts and on its mitigation and avoidance measures.

Table 12-1 Impacts during Construction

Extent of impact on soil	●= Low Negative
Extent of impact on groundwater resources	●= Low Negative
Extent of impact on surface water	●= Low Negative
Extent of impact on air quality	●= Low Negative
Extent of impact of noise	●= Low Negative
Extent of impact on vegetation	●= Low Negative
Extent of impact on fauna & habitats	●= Low Negative
Extent of impact on landscape	●= Low Negative
Extent of impact on local communities	▲ = locally positive
Extent of impact on local communities	●●●= high negative
Extent of impact on enterprises	▲ = locally positive
Extent of impact on enterprises	●●= high negative
Extent of impact on historical/ cultural sites	Ø= nil
Extent of impact on protected Areas (ETH)	Ø= nil

12.3 Operation phase

Following the operation of the project, awareness and education activities should be provided on safety and other negative social impacts. PIU in consultation with local authorities will be responsible for the introduction and implementation of the awareness and educational activities.

Once the operation phase has begun the PIU and EEPCOs Environmental and Social Management unit will have overall advisory role during this phase.

Table 12-2 Impacts during Operation

Extent of impact of electric & magnetic fields	●= Low Negative
Extent of impact on soil	●= Low Negative
Extent of impact on ground & surface water	Ø= nil
Extent of impact on air	Ø= nil
Extent of impact of noise	Ø= nil
Extent of impact on flora/ vegetation	●= Low Negative
Extent of impact on habitats	Ø= nil
Extent of impact on fauna	●= Low Negative
Extent of impact on landscape	●= Low Negative
Extent of impact on local communities	●= Low Negative
Extent of impact caused by land development	●= Low Negative
Extent of impact on historical/ cultural sites	Ø= nil
Extent of impact on protected Areas (ETH)	Ø= nil

The overview on the impacts during operation phase is showing that all impacts can be reduced to an acceptable level, if the proposed mitigation measures are implemented and if the IFC's General EHS and the IFC's EHS for Electric Power Transmission and Distribution are applied.

Once the construction sites are rehabilitated, the area permanently occupied by the Project, is expected to be relatively small in comparison with the large extent of the Project and other large infrastructure projects.

It is understood that the best opportunities for the reduction of impacts can mainly be made during the next phase of the Project, prior to construction and operation, while planning the detailed design and the final routing. Considering the proposed mitigation measures, the Project's impacts could be reduced to as low as reasonable possible level and the Project is likely to be environmental feasible.

13. IMPLEMENTATION SCHEDULE

The implementation schedule discusses the major activities to be carried out in the implementation of the RPF and identifies organizations responsible for its implementation. The implementation of the RPF and the RAPS prepared in accordance with the RPF will be carried out and be completed before construction works of the transmission line commences. It is estimated that the implementation of the actual required RAP activities will be completed within a period of two years and maximum of three years.

During the implementation period of this RPF, EEPCO through Project implementation Unit (PIU) and its Environmental & Social Management Unit will provide adequate governance and management and financial support for timely operation.

The Project implementation Unit (PIU) will be the main responsible body for the coordination, facilitation and implementation of this RPF. In the process of the implementation of this RPF and the RAPS prepared in accordance with the RPF, there will be a number of crucial and important activities to be performed to make the physical relocation of the people under this project possible. The implementation of the activities will be undertaken either through the direct involvement of the Woreda administration offices and the Resettlement / implementation committee.

Since implementation of the planned activities requires clear understanding of the specific activities of the RAP, different guidelines of the Government and donors, there is a need to familiarize and create awareness of the Resettlement / implementation committee. The awareness creation and familiarization to the Resettlement/implementation committee will be done through a workshop (2-3 days) organized by the Project Coordination Unit. The workshop will focus on how the committee members are expected to carry out their duties diligently and properly. The committee will also be provided with all the necessary materials, equipment and financial resources. Members of the committee will be provided with daily allowances at EEPCO's standards or with a slightly higher amount so that they could carry out their responsibility on timely and enthusiastically.

A number of different professionals such as, agriculture experts and surveyors will be involved in the measuring the size of land and property. The involvement of the different experts will assist and speed up in the day-to-day task of the valuation of the affected assets.

Assuming that there will not be any budget constraints, the tentative time schedule within which the compensation payment will take place is proposed to be 6 -12 weeks. All the compensation payments, relocation of PAPs could be completed ahead of the civil works if it is implemented as per the plan shown in the RAP. The proposed time schedule is presented in the table below.

From the point of view of giving high priority to the project, woreda officials have confirmed that implementation of the RAPS will be effectively and efficiently undertaken within reasonable time.

The implementation of the resettlement/relocation process will pass through the following four different stages / phases. The plan would include target dates for the achievement of expected benefits to the resettled/relocated or re-housed PAPs. The schedule will also indicate how the resettlement/relocation activities are linked to the implementation of the overall project.

<u>Committee Strengthening Phase</u>: EEPCO through the PIU will request the Woredas traversed by the transmission line to re-activate the Property valuation and the Resettlement /Implementation committees to become operational and develop working document/guideline. The notification will contain the recommended list of institutions that will be involved in the committee and will clearly put the time frame given to undertake the task.

<u>Awareness Creation Phase</u>: At this phase, the Resettlement / Implementation committee members will prepare clear working guidelines and procedures. It will also elaborate the public and PAPs the criteria's for resettlement/relocation, procedures and mechanisms that are related with compensation payment for affected properties and assets.

<u>Compensation Payment Phase</u>: The compensation payment phase is a stage whereby the compensation payment will be effected to PAPs. Compensation payment will be made to the proper owners of the assets. The payment will be effected directly to PAPs in front of representatives of PAPs or transferred through commercial banks or Micro Finance Institutions or Post Offices.

Reporting Phase: Each Woreda administration offices and the Resettlement/ Implementation committees will produce a report regarding their accomplishments for the implementation of the resettlement/relocation process and submit the report to PIU and copy to the Regional states.

Table 13-1: Proposed Time Schedule for Implementation of RAP on Quarterly Basis

Activities		20	12			20	13			20	14	
	Quarter		Quarter			Quarter						
	1	2	3	4	1	2	3	4	1	2	3	4
Disclosure of RAP												
Re -valuation of assets and properties												
Re activating Resettlement / Implementation Committees by woreda												
Review list of PAPs by woreda												
Review of impacts and costs per woreda												
Education and awareness Creation about RAP procedures and compensation payment												
Stakeholder Consultation												
Compensation for crop & Permanent Tree												
Skill training for identified PAPs & re-establish them												
Grievance redress measures												
Monitoring and Evaluation												
Reporting phase												

13.1 Public Disclosure

This RPF and associated RAPs when prepared will be disclosed on the World Bank's web site for public review and comments. They will also be posted in EEPCO's website. The Executive Summaries and sections on (i) Eligibility; and (ii) Valuation and Compensation for Losses will be translated into the local languages and be made available to PAPs at the woreda offices. Comments and critiques made on the draft RPF and RAPs by PAPs and other stakeholders will be taken by PIU for consideration in any of the revised draft.

14. COST AND BUDGET

14.1 RAP Budget

An itemized budget is required for the implementation of resettlement activities including compensation. The RPF specifies the mechanisms for transferring and channeling funds to responsible organizations and agencies, for disbursement to PAPs.

Based on the socioeconomic studies the preliminary estimate of the budget needed to implement the RPF is about Birr 268,514,294 (or 15,371,870 USD) and of which about 72% is for the compensation payment of crops.

Financial resources to carry out compensation payment, income restoration, rehabilitation and administration costs for PAPs will be made available by the Ministry of Finance & Economic Development of the Federal Democratic Republic of Ethiopia through EEPCO to the PIU.

The PIU in consultation with woreda level valuation committees and the resettlement & compensation committees will be responsible to effect the compensation payment on the basis of agreed valuation costs.

The current estimated budget and cost is higher than that which was presented in the 2009 report. The reason for the increment of the budget is related to a number of different factors. The first being of price escalation for almost every item because of high inflation rate, secondly, during the 2008 survey, the cost for timber trees and perennial crops was merged into single tree type is now disaggregated into different tree types (perennial timber and cash crops), the cost estimates for all trees and root crops was estimated on the basis of their present size and age. However, now almost after three years all trees and root crops have grown and increased in size and furthermore, the perennial and cash crops which were small in size have now started to bear fruit which necessitate and demand for the revision of its cost.

Besides this, new cost categories (items) which are found to be critical for the realization of the RPF were not included in the previous report. These are rehabilitation/resettlement measures (income restoration, land preparation, extension services, etc). They are also accounted under project management cost (capacity building, monitoring & evaluation, for resettlement and valuation committee, etc). The inclusion of this newly included cost items has significantly contributed to the increase in the budget.

The cost and budget to be prepared will include compensation for loss of houses, crops (perennial, root and cash crops), and timber trees; for rehabilitation / resettlement measures (income restoration, skill training, transportation costs, etc); project management administration (monitoring and evaluation, capacity building, etc) and also for contingencies.

The cost and budget to be prepared will include compensation for loss of houses, crops (perennial, root and cash crops), and timber trees; for rehabilitation / resettlement measures (income restoration, skill training, transportation costs, etc); project management and administration (monitoring and evaluation, capacity building, etc) and also for contingencies.

The cost categories and items which are likely to be required in a resettlement plan are set out below.

14.2 Resettlement Cost items by category

The budget for this RPF is prepared to effect compensation payment and for the management of different resettlement activities on the basis of cost estimates made for each item.

Current estimates for compensation, which include direct cost for PAPs and administrative costs, are approximately Birr 268, 514,294 (or 15,371,870 USD).

The PIU will be responsible to disburse, administer and oversee the overall budget. At woreda level, the woreda resettlement/implementation committee in collaboration with PIU will be responsible for compensation payment and relocation activities.

1. Compensation payment

- a) <u>Compensation for Crops:</u> The compensation estimate for annual crops (in particular for cereal, pulses and oil seeds), perennial, cash and root crops is calculated on the basis of average production and productivity, and market prices collected from each woreda for the last five years. As per Ethiopia's law, the compensation estimate is made at a replacement cost.
- b) <u>Compensation for Timber trees:</u> The compensation estimate for timber trees is calculated on the basis of tree size and age. The cost for each tree type is calculated on the existing market price collected for each woreda.
- c) <u>Compensation cost for Houses & Fence</u>s: Compensation estimates for the different types of houses such as, CIS roof house, thatched roof (Tukul) & for Fences is estimated on the basis of bill of quantities which is prepared by the municipalities at current market price. The compensation estimate for houses is prepared at a replacement value and no depreciation is considered.
- d) <u>Compensation cost for graveyards</u>: This includes replacement cost for the graveyards and payment of compensation for conducting religious services and cultural ceremony.
- e) Compensation cost for communal grazing land: The compensation estimate is for communal grazing land which is located in Wolyta Sodo area and will be used as substation. The area to be used as substation is a communal grazing land which is estimated to be about 20 hectares. Currently, the grazing land is being grazed daily by over 1000 animals. In future, when the above grazing land is going to be used for the construction of the substation the livestock that already had access to will find it difficult to continue grazing easily.

On average, each animal consumes about 20 Birr grass. This means that every day the above number of livestock graze that costs about 20,000 Birr and this make it its annual estimate about 7,300,000.

- f) <u>HIV/AIDS Support Activities</u>: It includes activities such as, awareness creation among the community and construction workers on the issue by adopting different techniques and methods. The cost estimate includes cost for awareness creation, equipment, material and staffing to be employed for the two construction camps. There will be two campsites & under two lots. The estimated lump sum amount for each camp will be about 2,000,000 Birr during the construction phase and also for a short period during its operation phase.
- g) <u>Support for vulnerable groups</u>: There are 214 vulnerable groups that require special assistance and support during the project implementation. It is planned that each vulnerable person will be provided either in cash, material or in a form of capacity building training. An estimated amount of Birr 5000 is allocated for each vulnerable group.

2. Rehabilitation Support

- a) <u>Income Restoration</u>: Income restoration is planned to provide PAPs with loss of income, subsistence allowance for the down time of agricultural activities and businesses for at least three months. It is estimated that on average, Birr 2500 will be provided for each PAP.
- b) <u>Transport & Moving allowances</u>: The moving and transport cost depends on the proximity of the relocation site and related activities. On average it is estimated that Birr 2000 will be provided for each PAP.
- c) <u>Land preparation costs</u>: This includes costs for agricultural inputs, labour, investment, equipment, and etc. On average each PAP will be provided Birr 5,000.
- d) <u>Legal & Administrative costs</u>: This includes legal fees, administrative costs, tax, land registration and related costs. On average, it is estimated that each PAP will receive Birr 2000.
- e) <u>Agricultural extension services</u>: The estimated cost for the extension service will be an average of Birr 5000 for each PAP.
- f) <u>Training costs on income generation:</u> This is estimated to be Birr 6500 for each PAP for three months period.

3. Project Management & Running costs

- a) Costs for Internal Monitoring: The internal monitoring will be carried out on monthly bases for two years during construction phase and for one year during the operation phase. The cost includes salary and allowances for a Sociologist and an Environmentalist, vehicle rent, fuel cost, administrative costs and office rent for 30 months. A monthly cost of Birr 50,000 is allocated for this activity.
- b) <u>Cost for external evaluation</u>: Evaluation of the project will be carried out by experienced consultants employed in country or internationally. At least two evaluations (mid-term and post) will be carried out. An estimated 500,000 is allocated for each phase.
- c) <u>Environmental & Social Management Costs & mitigation measures</u>: A lump sum of Birr 10,000 is allocated.
- d) <u>Budget for valuation property committee</u>: This includes allowances for 5 persons for six months, material cost, fuel and vehicle cost, office equipment. A total of 945,000Birr is budgeted for valuation of assets and properties.
- e) <u>Budget for Resettlement/implementation committee</u>: It includes budget for 5 persons for 36 months. It is budgeted for daily allowances, material cost, fuel and vehicle costs, Secretarial services, and Office equipment and communication costs. A monthly budget of Birr 63,368 is allocated.
- f) <u>PIU Capacity building support</u>: This includes capacity building activities for PIU such as, human resource development and training, Office rent, vehicle rent, fuel cost, office equipment and material, allowances, and communication costs. A monthly budget of Birr 83,368 is allocated.
- g) <u>Administrative costs:</u> The administrative cost is estimated at a monthly cost of Birr 125,000 Birr for 36 months

Table 144-1: Current Estimated Budget for RPF in Birr

The following table summarizes the total amount of the fund (or compensation estimate) that is required for the implementation of this RPF and the RAPS that will need to be prepared in accordance to the provisions on the RPF, by its cost item. The budget is divided into three main categories. The first section deals with compensation payment, the second section with rehabilitation support and the third section about project management / administrative costs.

A. Compensation payment

No.	Description	Unit	Quantity	Unit Rate / Birr	Total Cost
1	Compensation costs for Annual crops	На	321	250,601	80,442,984
2	Compensation costs for Perennial crops	No.	7,681	3,910	30,028,427
3	Compensation costs for Cash Crops	No.	13,438	2,723	36,583,466
4	Compensation costs for Root crops	No.	19,743	542	10,698,489
5	Compensation costs for Timber trees	No.	169,751	33	5,566,763
6	Compensation cost for CIS roof house & for Fence	No.	149	117,932	17,571,775
7	Compensation cost for Thatched roof (Tukul)	No.	107	14,795	1, 583,066
8	Compensation cost for graveyards	No.	36	6,602	237,684
9	Compensation cost for communal grazing land	На	20	-	7,300,000
10	HIV/AIDS support activities	Month	40	75,000	3,000,000
11	Support for vulnerable groups	No.	214	5,000	1,070,000
	Sub	Total			194,082,654

B. Rehabilitation Measures

No.	Description	Unit	Quantity	Unit Rate /	Total Cost
				Birr	
1	Income restoration	No.	1165	2,500	2,912,500
2	Transport & Moving Allowances	No.	1165	2,000	2,330,000
3	Land preparation costs	No.	1165	5,000	11,650,000
4	Legal & administrative costs	No.	1165	2,000	2,330,000
5	Agricultural Extension services	No.	1165	5,000	5,825,000
6	Training costs on Income generation	No.	1165	6,500	7,572,500
	Sub	26,795,000			

C. Project Management & Running Costs

No.	Description	Unit	Quantity	Unit Rate / Birr	Total Cost
1	Costs for Internal Monitoring	Month	30	50,000	1,500,000
2	Costs for External Evaluation	Month	2	500,000	1,000,000
3	Environmental & Social Management Costs, & mitigation measures	LS	-	-	10,000,000
4	Cost for Property Valuation committees	Month	6	157,500	945,000
5	Cost for Resettlement / implementation committees	Month	36	63,368	2,281,000
6	PIU Capacity building support	Month	36	83,333	3,000,000
7	Administrative support costs for PIU	Month	36	125,000	4,500,000
	S		23,226,250		

D. Tota	l Budget		

1	Total (A+B+C)	244,103,904
2	Contingency 10%	24,410,390
	Grand Total	268,514,294

14.3 Sources of Fund

The source of fund for the resettlement activities will be provided mainly by EEPCO; however, some costs may be shared between the EEPCO and African Development Bank, which is co-financing the project.

Once the budget is approved and released, the Project Implementation Unit (PIU) will be responsible for the disbursement of the budget allocated to compensate project affected persons, cover costs for public utilities, for relocation activities and other costs as stipulated in the budget.

The PIU will be responsible for the implementation of the resettlement in cooperation and collaboration with woreda level authorities and resettlement/implementation committees established at each of the woredas crossed by the transmission line.

15. MONITORING AND EVALUATION

Monitoring and Evaluation is an integral part of this RPF and the RAPS to be prepared in accordance with this RPF. Compliance monitoring will assist to follow the type of measures incorporated in RPF, and the extent to which on these matters, as set out in the RPF, are complied with. It is the objective of EEPCO to use lessons from the monitoring and evaluation results to enhance the preparation and implementation of future resettlement action plans.

The monitoring and evaluation process will assess the implementation of the RAPS to be prepared in accordance with this RPF and ensure that it is carried out as per the plan and as per the requirements of FDRE laws, policies and guidelines.

The basic monitoring principles will describe:

- The internal monitoring process;
- Key monitoring indicators (provide a list of monitoring indicators, which will be used for internal monitoring);
- Institutional arrangements (including financial);
- Frequency of reporting and content for internal monitoring, process for integrating feedback from internal monitoring into implementation;
- Financial arrangements for external monitoring and evaluation, including process for awarding and maintenance of contracts for the duration of resettlement;
- Methodology for external monitoring;
- Key indicators for external monitoring, focusing on outputs and impacts;
- Frequency of reporting and content for external monitoring and process for integrating feedback from external monitoring into implementation.
- Analysis of the environmental and social performance

The arrangements for monitoring of resettlement activities by the PIU, will be supplemented by independent monitors as considered appropriate by the donors, specifically by the African Development Bank (AfDB) for this particular project. This is to ensure complete and objective information; performance monitoring indicators to measure inputs, outputs, and outcomes for the resettlement activities; involvement of the PAPs in the monitoring process; evaluation of the impact of resettlement for a reasonable period after all resettlement and related development activities have been completed; using the results of resettlement monitoring to guide subsequent implementation.

For the monitoring and evaluation of the RAPS to be prepared in accordance with the provisions of this RPF activities, the Implementing Committee or Resettlement committee will take a prime responsibility at the project area level. The committee through Woreda administration office, which is the coordinator for the implementing committee will follow and clarify the implementation processes, and whenever found to be necessary will arrange the ground for consultation with Project Affected Persons (PAP).

JPCU and PIU will be responsible to monitor and evaluate the RAPs in consultation with EEPCO's Environmental and Social Management unit and the implementing committees established at each woreda level.

<u>Performance Monitoring</u>: To ensure the complete and objective information; performance monitoring indicators will be used to measure inputs, outputs and outcomes for resettlement activities. It also checks the involvement of the PAPs in the monitoring process.

<u>Impact Evaluation</u>: Impact Evaluation is used to evaluate the impact of resettlement for a reasonable period after all resettlement and related development activities have been completed. It uses the results of resettlement monitoring to guide its subsequent implementation.

The following indicators in this RPF (quantitative and qualitative) will be used to evaluate the RAP activities:

- a) Number of PAPs and amount of compensation payment received
- b) Measures adopted for the restoration and restitution of PAPs
- c) Public infrastructures and social services re established
- d) The fairness of valuation procedures and compensation payment
- e) Participation of PAPs in following up of the procedures of compensation payment
- f) Trust and confidence built by PAPs on the valuation method and resettlement measures
- g) The procedures for the establishment of resettlement/ implementation committee and valuation committee
- h) The procedures and appropriateness of the grievance redress mechanism & number of grievances filed
- Support & assistance provided to vulnerable groups (type and quality of supportive measures)
- j) The procedures and mechanisms adopted for assisting Female Headed Households (type and quality of supportive measures)
- k) The procedures and mechanisms adopted for assisting HIV/AIDS positive households (type and quality of supportive measures)
- 1) The procedures and mechanisms adopted for assisting poor Households
- m) The appropriateness of the relocation sites (suitability of the location for settlement, farming, distance from social services, market centres, etc)
- n) The appropriateness of the implementation time schedule: Is it agricultural slack period? Does it interfere with cultural and religious seasons?
- o) Number of PAPs who received agricultural extension support (quality and type of the service)
- p) Number of PAPs who received training on income generating activities (quality and type of the service)
- q) The acceptability of income generating schemes and its feasibility
- r) Availability of credit facilities & number of PAPs who received credit facilities (sufficiency of allocated amount and loan repayment schedule and mechanisms for revolving)

The Resettlement/Implementation committee in consultation with the Woreda administration offices will produce a report regarding their accomplishments and submit to PIU, SNNPRS and the Oromia Regional States. The report will inform the client about the accomplished compensation process and make that the site is ready for the construction works.

15.1 Internal Monitoring

Internal monitoring will be conducted by the PIU, following the plan described and the JPCU & PIU management team will make the necessary follow-up to ensure that proper monitoring is being undertaken. Since the magnitude and complexity of the operations is not quite large, PIU will conduct the monitoring by assigning its staff on the project site. The resettlement / implementation committees' at each woreda level will also conduct its own monitoring of the RAP or in collaboration with the PIU.

JPCU through the PIU will assign a qualified Sociologist/Social scientist to conduct individual evaluations of PAPs re-establishment socio-economic progress. This service aims at evaluating, and reporting on, the level of living conditions and social services of the PAPs, both before and after the re-establishment. The evaluation will be done on quarterly and annual basis for two consecutive years. The monitoring and evaluation results will be based on a number of key indices for selected households, in combination with the special observation by the social scientist.

The monitoring report by PIU staff will be submitted to local authorities (Woreda and Municipality). A copy of this will be submitted to EPA and the JPCU and EEPCOs management. It will also be enclosed in the construction progress reports submitted by supervising engineers. Only in this way can RAP implementation be monitored and problems identified.

15.2 External Monitoring and Evaluation

The Federal EPA and the Regional EPAs will be responsible for the external monitoring of the RAPS to be prepared in accordance with the provisions of this RPF. Both the Federal and Regional EPA's have significant role in the external monitoring and evaluation of the RAPS.

The objective of the external monitoring and evaluation, which is also a post resettlement assessment will be done by an independent consultant (or an NGO) commissioned by EEPCO, to ensure that the project affected persons have secured and able to maintain at least their livelihood prior to the construction of the project.

Hence, at the end of all expropriation/compensation operations a household survey will be carried out to evaluate the impacts of the resettlement and other implemented social mitigation measures. During the survey, Woreda and Kebele level administrations will be consulted to provide their assessments of the impacts of the mitigation measures applied.

After completion of the resettlement operations, it is expected that livelihood of PAPs should be better than prior to the resettlement. Therefore, resettlement operations need to be monitored as regard performance and compliance with the set goals.

The evaluation report will be used as a planning instrument to correct pending issues and suggest a post-project monitoring period in the aim to ensure that PAPs have not been subject to impoverishment induced by the project.

16. CONCLUSION & RECOMMENDATION

The Ethio-Kenya power system interconnection project will provide reliable power supply to Kenya by taking power from Ethiopia. Both the Governments of Ethiopia and Kenya have agreed to work jointly for the realization of the project and to speed up the construction of the transmission line. The transmission line to be constructed is a High Voltage Direct Current (HVDC) having 500 kV double circuit line.

Preparation of the RPF included a detailed review of the socioeconomic data from an earlier household survey of the eight woredas traversed by the transmission line which was carried out from June-August 2008. This survey was intended to support the development of a RAP prepared in 2009 by the Fitchner consulting firm. The 2009 RAP was never finalized/implemented. From July-August 2011, a similar socioeconomic survey was carried out of households in the same eight woredas who reside within the 65 meters of the ROW and whose properties and assets are likely to be affected by the construction of the transmission line. On the basis of the second socioeconomic survey, current estimates indicate that the number of PAPs is approximately 5,743 (1,165 households), who will either loose housing structures within the ROW, farmland, trees or perennial crops. It is also estimated that the Project will affect 256 housing structures and small number of public and community facilities such as church buildings, fences, graveyards and trees, nursery sites and forest reserves. About 321 hectares of farmland is expected to be affected as is 20 hectares of communal grazing land which will be needed for the construction of a substation in the Wolyta Soda area.

Preliminary estimates indicate that on average 2.69 PAPs will be affected per km of the transmission line. The largest number of concentration of PAPs is located between km 00-204. In this first section, there are approximately 1130 PAPs, which means on average 5.53 PAPs per km and of which 70% are located in the first 120km. Similarly, in the first 120 km the number of PAPs per km is 6.8. The number of PAPs in each section presents the impact level that the project will have on the asset and properties of PAPs located in that section.

Because of the linear nature of the project, there will not be any involuntary resettlement of PAPs outside of their present villages to new locations. In most locations the transmission line project will only affect strip of farmland, different types of trees and housing structures. The affected houses will be relocated to new locations within the same village and the PAPs without losing much of their social and economic ties. Some PAPs who will permanently lose portion of their land could be able to continue their livelihood in the remaining plot of land; however they need to be compensated for losing their assets and properties at full replacement value.

PAPs will be compensated as per the Ethiopian law, AfDB and WB involuntary resettlement policy and guidelines. All PAPs will be provided with full resettlement package even if the impact on their assets and properties is partial.

Since the first section of the project area is densely populated and intensively cultivated, efforts should be made during the technical design phase to reduce and minimize the disruption or relocation of large number of households by the project;

In order to minimize the adverse social impacts, such as relocation of PAPs appropriate/suitable and cost effective mitigation measures will be used as presented in the ESIA and this RPF.

It is recommended that during tender document preparation it is necessary to ensure the proper implementation of environmental and social avoidance/mitigation measures as well as all safety/health issues, sufficiently detailed environmental and social articles and clauses have to be

formulated and become an integral part of the works contract, thus providing a contractual basis for an effective supervision and control of the proposed measures.

Based on the currently available information it is preliminarily concluded that the Project would have impacts on the affected people due to the loss of land and the associated resettlement/relocation activities and loss of income/source of livelihood. Furthermore a large area of vegetation will be affected including wildlife contained in it.

Therefore, it is strongly recommended that livelihood safeguard project be developed for income generation for the relocated people and replanting of local trees for the lost vegetation in suitable location.

As the implementation of land for land compensation could be difficult to realize due to sparse availability of suitable land, all efforts should be made to reduce the area affected by the construction works (e.g., reducing the sizes of camp and storage sites).

During the construction phase, a prior notice, not less than six months will be given to local authorities and Project Affected Persons and be compensated for loss of their farmland, assets and properties as presented in this RPF.

REFERENCES

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APPENDICES

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