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

RESETTLEMENT ACTION PLAN (RAP)
FINAL REPORT

PART 1: ETHIOPIA
JANUARY 2012

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<tr>
<td>AC</td>
<td>Alternate Current</td>
</tr>
<tr>
<td>AfDB</td>
<td>African Development Bank</td>
</tr>
<tr>
<td>CBO</td>
<td>Community Based Organization</td>
</tr>
<tr>
<td>CIS</td>
<td>Corrugated Iron Sheet</td>
</tr>
<tr>
<td>CSA</td>
<td>Central Statistical Authority</td>
</tr>
<tr>
<td>EEPCO</td>
<td>Ethiopian Electric Power Corporation</td>
</tr>
<tr>
<td>EHS</td>
<td>Environmental Health Standard</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
</tr>
<tr>
<td>EPA</td>
<td>Environmental Protection Authority</td>
</tr>
<tr>
<td>ERA</td>
<td>Ethiopian Road Authority</td>
</tr>
<tr>
<td>ESIA</td>
<td>Environmental &amp; Social Impact Assessment</td>
</tr>
<tr>
<td>ESAP</td>
<td>Environmental &amp; Social Assessment Procedures</td>
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<tr>
<td>ESMU</td>
<td>Environment &amp; Social Management Unit</td>
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<tr>
<td>FDRE</td>
<td>Federal Democratic Republic of Ethiopia</td>
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<tr>
<td>FHH</td>
<td>Female Headed Households</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<tr>
<td>GPS</td>
<td>Global Positioning System</td>
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<tr>
<td>HH</td>
<td>Household Head</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>Human Immuno Virus / Acquired Immuno Deficiency</td>
</tr>
<tr>
<td>HVAC</td>
<td>High Voltage Alternate Current</td>
</tr>
<tr>
<td>HDVC</td>
<td>High Voltage Direct Current</td>
</tr>
<tr>
<td>IFC</td>
<td>International Finance Corporation</td>
</tr>
<tr>
<td>ILCA</td>
<td>International Livestock Center Africa</td>
</tr>
<tr>
<td>JPCU</td>
<td>Joint Project Coordination Unit</td>
</tr>
<tr>
<td>JSC</td>
<td>Joint Steering Committee</td>
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<tr>
<td>KETRACO</td>
<td>Kenya Electricity Transmission Company</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>--------------</td>
<td>-------------</td>
</tr>
<tr>
<td>kV</td>
<td>kilo Volt</td>
</tr>
<tr>
<td>LS</td>
<td>Lump Sum</td>
</tr>
<tr>
<td>km</td>
<td>Kilo meter</td>
</tr>
<tr>
<td>m</td>
<td>meter</td>
</tr>
<tr>
<td>MoFED</td>
<td>Ministry of Finance &amp; Economic Development</td>
</tr>
<tr>
<td>MoWE</td>
<td>Ministry of Water &amp; Energy</td>
</tr>
<tr>
<td>NBI</td>
<td>Nile Basin Initiative</td>
</tr>
<tr>
<td>NGO</td>
<td>Non Governmental Organization</td>
</tr>
<tr>
<td>OH</td>
<td>Over Head</td>
</tr>
<tr>
<td>PAP</td>
<td>Project Affected Persons</td>
</tr>
<tr>
<td>PIC</td>
<td>Public Information Center</td>
</tr>
<tr>
<td>PIU</td>
<td>Project Implementation Unit</td>
</tr>
<tr>
<td>RAP</td>
<td>Resettlement Action Plan</td>
</tr>
<tr>
<td>ROW</td>
<td>Right of Way</td>
</tr>
<tr>
<td>SNNPRS</td>
<td>South Nations and Nationalities People's Regional State</td>
</tr>
<tr>
<td>STD</td>
<td>Sexually Transmitted Diseases</td>
</tr>
<tr>
<td>TV</td>
<td>Television</td>
</tr>
<tr>
<td>WB</td>
<td>World Bank</td>
</tr>
<tr>
<td>USD</td>
<td>United States Dollar</td>
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E. EXECUTIVE SUMMARY ............................................................................................................. E-1
E. 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 construction of the Ethiopia-Kenya transmission lines and other similar development projects require land acquisition to implement the projects and this in turn involves involuntary resettlement of those persons/people residing along the project construction works. Hence, adverse impacts, such as involuntary resettlement could be mitigated by preparing Resettlement Action Plans.

This Resettlement Action Plan (RAP) is prepared to address the impacts that will be created during the construction of the Ethiopia-Kenya power interconnection project. The Ethiopia-Kenya power interconnection project starts from Sodo substation in Southern Ethiopia which is located some 382 km from Addis Ababa. The total length of the project is 1066 km and of which 433 km is located inside Ethiopia.

This RAP is a revision of the 2009 RAP which was carried out by Fichtner. The revision has not observed any significant changes in land use and other socio economic developments in the project area except in some specific locations, which are very minimal and limited.

The transmission line inside Ethiopia traverses through nine woredas (or districts) located in two Regional states, namely Southern Nations, Nationalities’ and People’s Regional State (SNNPRS) and Oromia. In Ethiopia, the routes of the transmission line could be divided into two main sections. The first section which is located from km 00 to km 204 crosses a number of rural villages having highly cultivated farmlands and densely populated areas. The second section which starts from km 204 to km 433 up to the Kenyan border has less cultivated fields and low population density.

The major infrastructure to be constructed for the power interconnection project are mainly conventional lattice self supported steel towers and a substation in Wolyta Sodo area. The construction of the transmission line will dispossess assets and properties, such as, farmlands, trees and houses that are located within the 65 meters of Right of Way. However, the right of way does not fully avoid the use of land for cultivation and grazing. The only exceptions will be plantations/trees that are more than 8 meters of height and housing structures.

The main objective of preparing this RAP is to ensure that people living in the project area are not impoverished due to the implementation of the project. The implementation of the project has to be carried out without making much negative impacts on the livelihood of the population and the environment. Appropriate mitigation and compensation measures have to be taken to ensure that the impacts from the construction of the transmission line are minimal. The RAP establishes the basis for the design of relocation and resettlement of the project affected persons.

In general the preparation of this RAP is based on a development approach. It is prepared to avoid the impoverishment of Project Affected Persons (PAPs) due to development projects; it is gender sensitive, takes care of vulnerable groups, puts emphasis on community participation, and considers providing support to host communities.

The RAP document is prepared on the basis of data and information collected through household census survey of the Project Affected Persons (PAP) and survey of the affected farmlands, housing structures and other assets is carried out to provide adequate information and to take appropriate mitigation and compensation measures.
According to the household census survey, inside Ethiopia, the project will affect 1165 households having a population or family size of 5743. Most of the impacts are mainly on farmlands and trees. In addition to farmland and trees, housing structures will also be affected by the construction of the transmission line. A total size of 321 hectares of farmland is estimated to be affected due to the construction of the project. In addition to the farmland, an estimated 20 hectares of communal grazing or land that belongs to government will be affected due to the construction of a substation in Sodo area.

The expropriation and appropriation of land causes economic loss, social and psychological disruption for the project affected persons. The social and psychological impacts and associated costs are more complex, and they are often devastating.

Apart from the farmlands, 256 housing structures will be affected, and of which, 149 are constructed with wood and mud and covered with Corrugated Iron Sheet (CIS) and 107 are thatched roof (Tukul). The total area of CIS houses is 6441m².

The impact also will be on 18 different public and community assets and facilities, such as, Church buildings, Fences, Graveyard and trees. The engineering design survey has made maximum efforts not to cross populated areas in particular urban centers and villages that have high concentration to minimize the impact on farmland and housing.

Since the project is a linear one it is only some portion of farmlands that are located within the right of way that will be lost in most cases. In such cases there is no need for resettlement of PAPs outside of their locality. As per the household survey, the size of land that most PAPs will be losing does not exceed 10% of their current farmland size. This means that a PAP who may be losing less than 10% of his farmland to the transmission line could be able to survive and continue his livelihood in the remaining plot.

Similarly, houses that will be affected could either be partial or full depending on the proximity of the house from the right of way. In most cases, if a person's house is affected by the project, he/she could be able to reconstruct or build in the remaining plot of land by moving to the back side. If some of the PAPs do not have sufficient land to reconstruct they could be relocated within the same kebele or nearby kebeles without having affected much of their relationship & ties with their extended family & social network.

The RAP is in line with the policies, legal and institutional framework of the Federal Democratic Republic of Ethiopia (FDRE) and the financing institutions of this project the African Development Bank and World Bank policies & guidelines on involuntary resettlement. There are also some gaps between the Ethiopian law and financing institutions law and in such situations, it the most stringent one that applies.

In order to ensure the participation of the public and different stakeholders, public consultations are carried out in almost all the major locations crossed by the transmission line & where there are project affected persons. The participants of the public consultation included PAPs, Kebele administration representatives, Agricultural Development Agents, School teachers, Health professionals and others. At woreda level meetings were held with woreda Administrators and responsible sector office heads & experts.

Public consultation was carried out with Project Affected Persons and other members of the community during planning and data collection stages. The public consultation was carried out with the objective of providing information on the implementation of the project and its impacts, and also to solicit the views of PAPs and other members of the community about the project. Public consultations were carried out in 18 rural kebeles that are located in the project woredas. The participants of the public consultation meetings were 698 in number, and of which, 35% are women.

In addition to kebele level public consultation meetings, there were meetings and discussions were held with woreda authorities; the woreda level meetings included 83
woreda cabinet members (and of which 9 are women) drawn from the nine woredas crossed by the interconnection project and also with the experts and professionals from pertinent sector offices.

A cut-off date has been established and agreed during the public consultation with PAPs, communities, Woreda authorities and resettlement committees. August 21, 2011 is now revised cut-off date, which is established following the final inventory of assets and properties located within the Right of Way. The established cut-off date is expected to prevent encroachment into the ROW and thereby posing a risk to the project implementation.

The project does not require full resettlement option as per the AfDB and World Bank Policy because the number of PAPs (or households) in one location does not reach 200. Since the project is linear one there will not be major impact in clusters. However, there will be definitely some households that need to be relocated and re-established, and hence, PAPs will receive full resettlement packages.

Since the project is for two countries, namely Ethiopia and Kenya; it receives the 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 and that will be responsible for the negotiation of key and important agreements, such as, power purchase.

The joint ministerial commission has also established a Joint Project Coordination Unit (JPCU), which has the responsibility for the coordination and implementation of the project activities, for procurement services; oversee construction supervision and progress of the project.

The day to day activity of the RAP is administered and run by the Project Implementation Unit (PIU) which is established under the Joint Project Coordination Unit.

The PIU works closely with woreda level committees that are established as per the law of Ethiopia, namely, Resettlement, Property Valuation and Grievance redress committees. Each committee consists of at least five persons. Two PAPs are represented in the grievance redress committees.

Compensation payment is estimated for lost assets and properties on affected crops, houses and lost income as per the Ethiopian laws. No cost estimate is made for land since land in Ethiopia belongs to the public and that it could not be sold or mortgaged. The estimated compensation cost includes costs for compensation of crops for ten years, compensation for trees, and houses. The estimated compensation cost for the RAP is presented by section in table E1 below. As seen from the table, the total cost for the RAP will be Birr 180,016,366 (or 10,305,553 USD).

This RAP will be disclosed both in African Development Bank (AfDB) public information center and Bank’s web site for public review and comments; and that of World Bank’s Info shop. In Ethiopia, it will also be posted in accessible public locations to the displaced population, Non Governmental Organizations (NGOs) and the community in each of the woredas and kebeles crossed by the transmission line. It will be written in local languages and in the Federal Government’s working language as well. It will be published both in Amharic and English langue Newspapers that are published by the Federal Government. It will also be posted in Ethiopian Electric Power Corporation (EEPCO’s) web site.

A monitoring and evaluation system is developed to assess the implementation of the RAP and to ensure that it is carried out as per the plan and as per the requirements of FDRE laws, policies and guidelines. It will go through an internal and external monitoring and evaluation process.
### Table E1: Compensation Payment Estimate for Affected Asset by Section

<table>
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<tr>
<th>Segment</th>
<th>Woreda</th>
<th>Crop</th>
<th>Timber Trees</th>
<th>Perennial &amp; Cash Crops</th>
<th>Granary</th>
<th>Fence</th>
<th>Grave Yard</th>
<th>House</th>
<th>Total Cost (ETB)</th>
<th>Total Cost (USD)</th>
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<tr>
<td>Section 1</td>
<td>Sodo</td>
<td>1,725,070</td>
<td>2,328,906</td>
<td>25,943,319</td>
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<td></td>
<td>6,780,375</td>
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<td>36,777,670</td>
<td>2,105,443</td>
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<td>Section 2</td>
<td>Humbo</td>
<td>1,496,110</td>
<td>2,177,050</td>
<td>28,605,435</td>
<td>20,292</td>
<td>79,184</td>
<td>7,943,377</td>
<td></td>
<td>40,321,448</td>
<td>2,308,317</td>
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<td>Section 3</td>
<td>Mirab Abaya</td>
<td>12,830,519</td>
<td>321,790</td>
<td>13,059,100</td>
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<td>58,500</td>
<td>3,148,865</td>
<td>29,418,774</td>
<td>1,684,162</td>
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<td>Section 4</td>
<td>Arba Minch</td>
<td>49,327,999</td>
<td>41,475</td>
<td>7,997,900</td>
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<td>57,367,374</td>
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<td>Section 5</td>
<td>Derashie</td>
<td>9,980,860</td>
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<td>24,636</td>
<td>10,005,496</td>
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<td>Section 6</td>
<td>Konso</td>
<td>4,084,670</td>
<td>42,000</td>
<td>1,200</td>
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<td>153,777</td>
<td>4,281,647</td>
<td>245,115</td>
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<td>Section 7</td>
<td>Yabelo</td>
<td>252,470</td>
<td>990</td>
<td></td>
<td></td>
<td>1,072,657</td>
<td></td>
<td></td>
<td>1,326,117</td>
<td>75,917</td>
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<td>Section 8</td>
<td>Dire</td>
<td>469,840</td>
<td></td>
<td></td>
<td></td>
<td>48,000</td>
<td></td>
<td>517,840</td>
<td>29,645</td>
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<td><strong>Total</strong></td>
<td></td>
<td>80,167,538</td>
<td>4,912,211</td>
<td>75,605,754</td>
<td>1,200</td>
<td>20,292</td>
<td>137,684</td>
<td>19,171,687</td>
<td>180,016,366</td>
<td>10,305,553</td>
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1 INTRODUCTION.........................................................................................................................1-1
1 INTRODUCTION

This RAP is a review of the 2009 RAP document that was prepared by Fichtner. The review is mainly related with updating new developments and socio economic data, conducting meeting and consultation with stakeholders and PAPs, revising costs for affected assets and properties, and establishing new cut-off date. Because of the time gap since the first RAP some changes were observed while reviewing the household census conducted in 2008. Some of the new developments identified during this review included changes in the ownership of properties and assets in some locations and new constructions that were carried out in some localities. There have also been alignment changes that are made by the design consultant in some sections of the transmission line route.

In accordance to the changes and new developments identified in the project area, it was found necessary to revise the household census, conduct public consultations with PAPs, meeting and consultation with stakeholders in all the woredas and kebeles traversed by the transmission line, and establish three different committees at woreda level that are responsible for the implementation of the RAP.

The Ethiopia Kenya power interconnection project is a construction of new transmission line project with self supporting steel lattice towers with concrete foundations. 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 Alternate Current (HVAC) having 500 kV double circuit line with 2x500MW line commutated bidirectional bipole at Wolyta Sodo in Ethiopia and Longoto 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 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 Preparation of the RAP included revising the socio economic survey (or household census), conducting public and stakeholder consultation, reviewing legal and policy documents, estimating compensation payment, valuation of assets, establishing various committees at woreda level with the responsibility of implementing this RAP, and also preparing cost and budget for the implementation of the RAP.

The methodology carried out include, household survey, review of various documents and reports, Focus Group Discussion with PAPs and communities, Key informants interview, Conducting consultation meetings, observation and collecting prices for affected assets and properties.

According to the socioeconomic and census survey, 1165 household heads with total family size of 5743 will be affected. The affected PAPs will lose assets and properties, such as, farmlands, housing structures, graveyards, grazing lands, community forest reserves, Government nursery sites for trees, etc.

Following the revision of the RAP a new cut-off date is now set and the new cut-off date is now August 21, 2011.

The construction of the transmission line will cause clearance of Right of Way (ROW) for the construction of towers, access road construction, and construction of material storage, two campsites, and building of a substation in Wolyta Sodo area.

The total size of farmland that will be lost is an estimated 321 hectares and in addition to the loss of farmland, 20 hectares of communal grazing land will be used to the construction of a substation. In addition to farmland, PAPs will lose 256 different types of houses that are
constructed with wood and mud and covered with Corrugated Iron Sheet (CIS) or with thatched grass (Tukul).

Similarly, 18 different public and community assets and facilities, such as, Church buildings, Fences, Graveyard and trees, nursery sites and forest reserves will also be affected.

The expropriation and appropriation of land for the construction of the transmission line, the demolition of residential houses and loss of houses used for businesses causes economic losses, social and psychological disruption for PAPs.

Public consultation is carried out in almost all locations crossed by the transmission line with the objective of soliciting the views of Project Affected Persons (PAPs) & stakeholders. The views and concerns of PAPs are taken into consideration in the preparation of this RAP document.

This RAP is prepared in line with the policies, legal and institutional framework of the Federal Democratic Republic of Ethiopia (FDRE); the African Development Bank and World Bank policies & guidelines on involuntary resettlement.

The RAP establishes the basis of resettlement packages of the affected population and sets compensation estimates for affected properties and assets. Compensation estimates for PAPs is prepared at full replacement cost. A budget is prepared for RAP, which includes income restoration, rehabilitation measures, and project management activities and contingencies.

The revised RAP has shown significant increment in its budget and cost in comparison to 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 which was merged into single tree type is now disaggregated into different tree types, the cost estimates for all trees and root crops was estimated on the basis of their current size and age.

Besides this, new cost categories (items) which are found to be critical for the realization of the RAP and that were left out during the previous report are now included under rehabilitation/resettlement measures and also under project management cost.

The budget is divided into three main sections; the first section is for direct compensation payment which comprises about 78% of the total budget, the second section is for rehabilitation measures and the third is for project management and administration. Contingency is also included for unforeseen situation in future. The total estimated cost for this RAP is Birr 237,592,397 (or 13,601,657 USD the exchange rate 1USD = 17.4679 Birr for the month of November 2011).

The RAP will need to be revised during its implementation phase, as the impacts of the project develop and become more precise and also there will definitely be changes in prices and this requires revision of costs for compensation payment.

The report is divided into two main parts; Part one discusses the details of the resettlement plan, and Part two contains the annex sections.

The contents/chapters of the RAP is prepared as per AfDBs outline of a typical resettlement plan.

A. Executive summary
B. Introduction
C. Description of the project, project area and area of influence
D. Potential Impacts
E. Organizational responsibility
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I. Legal framework including mechanisms for conflicts resolution and appeals
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M. Valuation and compensation for losses
N. Identification of alternatives sites and selection of resettlement site(s), site preparation, and relocation
O. Shelter, infrastructure, and social services
P. Environmental protection
Q. Implementation schedules
R. Costs and Budget
S. Monitoring and evaluation
T. Conclusion & Recommendation

The Appendix section contains inventory of affected properties and assets; minutes of public consultation and photographs, and FDRE proclamations.
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2. DESCRIPTION OF THE PROJECT, PROJECT AREA AND AREA OF INFLUENCE

2.1 Description of the project

The Ethiopia-Kenya Power System Transmission Line 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 Ethio-kenya interconnection project is planned to provide reliable power supply to Kenya by taking it from Ethiopia's Gilgel Gibe hydropower scheme. The transmission line to be constructed is a High Voltage Alternate Current (HVAC) 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 in to 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 Ethio-Kenya power interconnection project is a new transmission line with self supporting steel lattice towers with concrete foundations. According to the 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 Alternate Current (HVAC) having 500 kV double circuit line with 2x500MW line commutated bidirectional bipole at Wolyta Sodo in Ethiopia and Longoto 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 land area required for the different types of towers include, 300m² permanent land take per suspension towers and 600m² temporary additions for the construction. Similarly, the tension towers require a permanent land take of 500m² per tower and 1000m² 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 rout 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 30 meters from the main roads axis to either side, traverse railways by crossing angle of ≥ 15°, keep clearance from airstrips of 5 km and/or vertical approach angle of ≤ 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, eg, 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.

Following the construction of the transmission lines there will be a number of people that will be displaced living along the route of the transmission line. The RAP establishes the basis for the design of relocation and resettlement of the project affected persons. In this RAP, a survey of household census of Projected Affected Persons (PAP), affected farmland and other assets have been collected to provide adequate information and take the appropriate mitigation and compensation measures.

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,
- 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 ≤ 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,

- **Tower erection**: This follows tower foundation excavation/construction and uses the same area used by civil works.
- **Construction of material storage and camp areas**: Approximately 6 material storage and camp areas will be required, each approximately 5ha in area.
- **Access for stringing of conductors**: is along the line corridor.
- **Access road construction**: Access to tower sites will be via the line corridor whenever possible to reduce the number of temporary access roads required during construction.
- **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 respectively 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 States; namely, Oromia and Southern Nations and 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 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 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 of 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 Waraza Lasho in Sodo Zuria woreda. The plot which is selected for the construction of the substation is a communal grazing land used by several kebles (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.

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 and Nationalities 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 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 Enset\(^1\), 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 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 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**

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

Source: CSA: Annual Statistical Abstract, July 2010

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\(^1\) 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

The project generally will have potential environmental and social impacts both positive and negative during its construction and operation phase. The potential negative impacts due to the construction of the transmission line will be mainly due to land acquisition on agricultural land, loss of houses, impact on income & livelihood, on business enterprises, on community assets and on the health situation of the community.

Some of the construction activities of the transmission line that contribute to potential negative impacts include; Construction of foundation works for towers, Construction of access roads and Construction of storage facilities.

The potential negative impacts due to the above construction works include,
- Visual impacts of the landscape
- Electrostatic effects of the electric field under high voltage installation
- Influence of the magnetic field surrounding the high voltage installations
- Influence due to the manifestations of the corona phenomenon on high voltage installations, i.e., audible noises, radio and TV interference
- Soil compaction, air pollution, driving across fields
- Utilization of chemical products (paints, solvents, grease, etc)
- Disposal of waste and surplus materials from construction sites

The above negative impacts could be minimized by taking appropriate mitigation measures such as,
- Avoiding traversing or close by passing of urban areas, densely populated areas, settlements, schools, public buildings and market places
- Avoiding traversing or close bypassing of shrine, historical places, national parks and protected areas
- Restriction for the use of heavy machinery and vehicles designated to work areas
- Implementation of soil protection measures in areas sensitive to erosion, and
- Rehabilitation of the construction area after the construction works are finalized
- Stop spillage and leakage, avoid dispersion of hazardous liquids, dispose the contaminated soil at an adequate landfill or waste treatment facility, and rehabilitate the affected site

The potential negative impacts could be minimized by taking appropriate mitigation and compensation measures and also reinforcement measures will also be taken to strengthen the positive impacts.

3.1 Impact on Agricultural land

The major potential impact of the transmission line on the socio-economic environment and on the livelihood of the communities is due to land acquisition. The land required for the transmission line will affect farming land which is used to grow crops (annual and perennial) and trees. Land required for the construction of the transmission line are mainly of two types; namely land which is required permanently for the construction works, and land required for temporary works (storage & access road constructions). Land which is permanently required is for the construction of a substation and towers for the transmission lines. The temporary land requirement is mainly for the construction of access roads and stores.
**Access of road construction**: The project area does not have sufficient access road suitable for easy vehicle movement and to transport materials and equipment required for the construction of towers and storage facilities and also for future maintenance works. Hence, construction of access roads will be highly vital for the implementation of the project activities.

According to the design consultants' recommendation, 4 meter wide path temporary access from existing village road or field track and 2 meter wide path temporary from tower to tower along line axis or with ROW corridor (0.5 meter to 1 meter wide in extensive cultivation) is required. Additional access road is also required depending on the distance between existing roads/tracks to the tower location; some of the temporary access path may become permanent access path outside the ROW corridor for maintenance purpose.

The construction of access roads will have impact on farmlands, perennial crops and trees that are located within the right of way; and its impact could even go beyond the right of way corridor.

**Construction of Tower foundation**: The land area required for the construction of towers is mainly of two types, the first one being for the construction of suspension towers and second one being for tension towers. Each suspension tower requires 300m$^2$ permanent land take and 600m$^2$ additional land for temporary works. Each tension tower requires 500m$^2$ permanent and 1000m$^2$ temporary lands for construction purposes.

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

**Construction of Substation**: In Ethiopia, the interconnection project shall construct one substation located at in Wolyta Sodo area. The area identified for the construction of the substation is mainly used as a community grazing land by the villagers in the area. The construction of the substation will force the community to look for another grazing area.

The expropriation and appropriation of land causes economic loss, social and psychological disruption for the project affected persons. The social and psychological impacts and associated costs are more complex, and they are often devastating.

The infrastructure to be constructed for the power interconnection projects are mainly conventional lattice self supported steel tower and a substation. Hence, land acquisition is unlikely to pose major problem to the proposed project. 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 meters of height and housing structures.

Land requirement for the ROW clearance and construction of towers, and access road construction will dispossess strips of land from the households that are affected by the construction of the transmission line.

Land will be permanently & temporarily required for the construction of the transmission line and a substation. The permanent dispossession of land will 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).
Taking into account the nature of the project, the extent of land expropriation it 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. Strips of farmland along the route will be permanently and temporarily affected. Therefore, to compensate the forgone benefit from agricultural land cash compensation is considered in this RAP.

The basis for the valuation of compensation is based on the different types of crops grown in the area and according to its current market prices. Therefore, in order to estimate compensation for the loss of crops the valuation for compensation is calculated for crops that are commonly planted and grow in the project area.

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.

There are also different types of timber trees (some indigenous trees) that will be affected due to ROW widening. Among the different trees that will be affected in the project area the major tree type will be eucalyptus which is having different sizes and ages. The total estimated numbers of different sizes of timber trees that will be affected by the construction of the transmission line and located within the ROW are about 169,976.

Some of the affected households could be able to continue their livelihood in the remaining plot of land; however they need to be compensated for permanently losing their crops, trees, and some other assets as per the law.

### 3.2 Impact on Housing

The impact of the project on housing and farmland does not initiate or require resettlement or relocation of project affected persons. Since the project is a linear one the impact is mainly concentrated within the 65 meters width of the Right of Way. In some locations of 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 or may not have enough plot size to build new houses.

Households who may lose their houses due to the construction of the project could be able to construct new houses if provided compensation for the affected house in the remaining plot of land without any need to be resettled or relocated.

Households who may lose their houses will be provided plot for construction during the implementation of the project. In the meetings held with woreda administrations understanding has been reached that the woreda will provide plots for constructing of houses for those PAPs losing their houses.

### 3.3 Impact on incomes and Livelihood

Incomes and livelihood the population in the woredas traversed by the transmission line and that of the PAPs is dependent on land and farming activities. There is no other major economic activity in the project area apart from farming and small scale trading. The non-farm economic activities include small scale trade activities that are mainly observed in the urban centres and rural trade centres. The urban centres in the project area serve as political and administrative centres; and centres for transaction of agricultural produces and for the purchase of consumables as well. Since economic activities in the area have not well developed and hence, there is limited market integration and business opportunities have not yet fully developed.
Household income level of local populations and also that of the PAPs is also very small. As per interview conducted with the affected population, the majority of the interviewees were not able to estimate their daily or monthly income levels. However, similar studies from different parts of the country show that the average monthly income for households estimated to vary from 500 Birr to 750 Birr. It is difficult to accept this as reliable data and information since no expenditure and income level has been studied carefully.

Farm households that will be losing strip of farmland (which is mainly not more than 10% of their present land size) either permanently or temporarily for the construction of the transmission line will definitely have reduced income due to the land loss. However, the income loss will not create major impact on households or will not fully destabilise the livelihood of the affected households.

3.4 Impact on Female Headed Households

Among the PAPs, Female Headed Households (FHH) shall require special support and attention because of their social position. Since most of the affected FHH are single mothers and widows who make their living by renting and share cropping their land, in small businesses and also from the support they receive from family members. This puts them in a situation where they face difficulties in earning their income and in managing their life.

At the time of implementing the resettlement action plan and compensation payment, special attention and support will be given to female headed households. The support will be made in rebuilding their houses, transferring and transporting their household items and materials to the newly constructed residential houses or for those houses used for business purpose.

FHH will also be given special support because they lack resources, educational qualifications, skills, or work experience compared to men.

3.5 Impacts on Business Enterprises

In the project area, there is no major business enterprise that will be affected by the transmission line project. The project area is mainly rural and dependent on agricultural production. It is only in the urban centers that small scale businesses enterprises that are located.

In the project area, the only impact which is observed on business enterprises is the one that is observed in an irrigated farm enterprise which grows cotton and fruits. The enterprise will be losing some 16.47 hectares of land. Apart from the above cotton farm no other business enterprise is observed all along the route.

3.6 Spread of STD and HIV/AIDS

The HIV/AIDS pandemic is spreading worldwide and heating hard poor countries mainly. Sub Saharan Africa, with only 10% of the world population is having 80% of the world HIV infection and AIDS cases. Among the Sub Saharan African countries, Ethiopia stands fifth in HIV/AIDS infection.

The movement of people from place to place, either voluntarily or involuntarily contributes to the spread of HIV/AIDS. HIV/AIDS now is no more health or clinical problem only; it has now become a major social and economic problem of a country.

In Ethiopia, the HIV/AIDS pandemic, in recent years, has emerged as a major health hazard, 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 huge resource needed to combat HIV/AIDS, the Ethiopian Government issued a policy, which calls for an integrated effort of multi-sectoral 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 be having high potential (due to their mobility) for the spread of communicable diseases, such as Sexually Transmitted Diseases (STD) and HIV/AIDS. The spread of the disease could either be from the construction workforce or the local population.

This is partly true because construction workers are mostly young and sexually active group of the population and are mobile, and have more income than the local population to spend. This will attract sex workers and bar owners to come to the nearby towns to camp sites and start such businesses.

Hence, the increase in the number of sex workers and alcoholism are believed to contribute to the spread STD and HIV/AIDS.

Hence, proposed mitigation measures include;

- Prepare awareness creation plan to address the problem and spread of STD and HIV/AIDS among project workers and local communities
- Provide education for local communities regarding the spread of HIV/AIDS and STDs in public places, schools, and through community clubs and groups
- Work closely local health service giving institutions to control the spread of STD 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

A total of 18 public and community institutions will lose different types of assets and property due to the construction works. Public properties to be affected include three tree nurseries and two forest reserve areas which are under the management of woreda Agriculture and Rural Development offices. In addition to the above assets and property, a fence belonging to an Abattoir, a Graveyard in Mirab Abaya and four Protestant Churches will 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

One of the potential health impacts is the spread of malaria among construction workers. Malaria is among the top ten diseases in some locations of the direct zone of influence, and that will pose health risk to the construction workers and local communities. It mainly spreads during the peak agricultural season, between the months of June to September making negative impact on the construction work force and also on the local agricultural production by attacking the labour force.

Proposed mitigation measures include

- 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 the socio economic environment. 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.

The proposed mitigation measures are that the proposed ROW is considered to be sufficient to mitigate any perceived health effects from the transmission line. The strength of electric and magnetic fields decreases with distance from the transmission line and the conductors.

The construction and operation works shall 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 shall 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.
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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 the negotiation of key and important agreements, such as, power purchase.

The day to day activity of the joint project is administered and run 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.

JPCU is designated with the responsibility of day to day coordination and implementation 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 RAP operate both at Federal and Regional Government level.

In the implementation of this RAP, 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 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. 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. However, the unit needs to strengthen its organizational capacity. EEPCO management also has to commit itself to strengthen and provide support for the unit.

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 RAP

<table>
<thead>
<tr>
<th>No</th>
<th>Organizations Responsible</th>
<th>Responsibility in the RAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ministry of Water &amp; Energy</td>
<td>Represent Ethiopia at the Ministerial Commission; Provide overall policy guidelines and coordination at Ministerial level and also provide adequate governance and management</td>
</tr>
<tr>
<td>2</td>
<td>Ministry of Finance and Economic Development</td>
<td>Participate in the Ministerial Commission Approval and signing of credit with AfDB and other donors. Release and approval of fund for compensation</td>
</tr>
<tr>
<td>3</td>
<td>Ministry of Federal Affairs</td>
<td>Follow up &amp; ensure that the provisions are provided to PAPs as per the proclamation 455/2005 Prepare national valuation formula for the determination of compensation</td>
</tr>
<tr>
<td>4</td>
<td>Ethiopian Electric Power Corporation</td>
<td>Overall Management and Budget Allocation for the project implementation; Coordinate with Federal and Regional Authorities in the planning and implementation of the project</td>
</tr>
<tr>
<td>5</td>
<td>Environmental Protection Agency</td>
<td>Appraisal &amp; monitoring of the RAP</td>
</tr>
<tr>
<td>6</td>
<td>Ethio-Kenya Joint Project Coordination Unit (JPCU)</td>
<td>JPCU will have the overall responsibility for the coordination and implementation of the RAP.</td>
</tr>
<tr>
<td>7</td>
<td>Project Implementation Unit (PIU)</td>
<td>Coordinate and establish Resettlement and valuation committees at woreda level; The PIU will have the direct responsibility for the implementation of this Resettlement Action Plan; 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</td>
</tr>
<tr>
<td>8</td>
<td>EEPCO's Environmental and Social Management Unit</td>
<td>Monitor and Evaluate the implementation of the RAP Provide technical support for the project office in training, and related activities etc.</td>
</tr>
</tbody>
</table>
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 today activities of the woreda.

In this RAP, 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 this RAP.

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

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

Representatives of PAP: In each of the woredas, PAPs will elect two of their representatives who will represent them in the grievance redress committees established at woreda level. It is through the grievance redress committee that PAPs will make their complaints and grievances in the areas they may have a problem.

Local NGOs: Local NGOs operating in the project area could be involved in the monitoring and evaluation of the project implementation activities. However, local NGOs need to build their capacity and skill to be engaged in the monitoring and evaluation of the RAP.

4.4 Coordination between different agencies and jurisdiction

EEPCO in consultation with the Ministries of Water & Energy (MoWE) and Ministry of 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 MoWE & MoFED.

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 RAP.

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 RAP by establishing Resettlement and valuation committees, by providing land for relocation, coordinating compensation payments, addressing grievances and related issues.
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FIGURE 5-3: PARTICIPANTS OF PUBLIC CONSULTATION IN KONSO WOREDA

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5 COMMUNITY PARTICIPATION

Community Participation & Public consultation is an essential component in the preparation of RAP. The primary purpose of community participation & public consultation is to protect the interest of affected persons/communities, especially the poor and vulnerable groups. Public consultation also gives opportunity for the affected people to influence the project to reduce adverse impacts, maximize additional benefits, and ensure that they receive appropriate compensation. In the project area, public consultation was carried out more than three times at different periods.

Community participation and public consultation was conducted in a form of formal meetings & public gatherings, focused group discussions and also through informal meetings held with different sections of the community. The public consultation conducted in 2011 was mainly to disseminate information to the public and stakeholders and to provide more information about the project; and to collect and gather the views and opinions of PAPs and stakeholders.

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 community Participation & Public consultation meetings 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 during reviewing of affected properties and assets from July - August 2011, and the third was in December 2011 for establishing the various committees at woreda level.

The different group of people that participated in the public and stakeholder consultation meetings that were held at kebele level includes;

- Project Affected Persons (PAP),
- Elders and informal leaders,
- Woreda Administrators,
- Office heads and experts from Woreda Sector Offices,
- Kebele Administrators,
- Female Headed Households,
- Religious leaders, School Teachers, Health Workers and Agricultural Development Agents working at kebele level.

During the public consultation process, maximum effort was made not to leave out the poor, women, and vulnerable groups from attending the consultation meeting. These members of the community have not only come to attend the meetings but they have also been able to present their views and concerns.
All public consultations that were held with PAPs, community members and other groups were carried out inside their village and conducted in local languages so that participants could be able to understand the issues raised and also they could present their views freely and confidently. On average each of the public consultation meetings were held for 2-3 hours.

Public and stakeholder consultations were also held with organizations that can influence the implementation of the project in each key stage of the construction of the transmission line. The organizations that have sent their representatives to the stakeholder consultations include, Woreda administration offices, Agriculture & Rural Development Office, Environment protection Office, Water Office, Finance & Economic Development office.

Public consultation was carried out with 698 PAPs drawn from 18 rural kebeles and out of the above total participants, 35% are women. The following table presents the number of participants of public consultation by woreda and Kebele.

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

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

The discussion points & issues of the public consultations; and concerns that were raised by the participants during the various public consultations have focused on the following major points:

- 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.

The public consultation has contributed to increase the awareness and understanding of the public about the project, and on how to address the potential impacts and what will be the roles and responsibility of the local authorities and affected population. During the public consultation issues related to compensation, relocation, grievance redress mechanisms, establishment of valuation and compensation committee and a number of other issues were discussed and understanding reached.

Each of the public consultations that were held with PAPs and communities in the presence of kebele administrations have recorded minutes of meeting that is signed by the participants and stamped by kebele Administration offices. The above minutes of public consultations are carried out in Amharic and are attached in the appendix. Similarly, photographs of the participants of public consultation that were also taken are presented in the report.

The next sections summarize the salient features and issues that were reached consensus during the public consultations carried out with PAPs and other community members; and that of the meetings held with woreda authorities.

5.1 Summary of public consultations with PAPs & Communities

The followings are summary of issues discussed with PAPs and communities during public consultations and consensus reached.

- Although aware of some the inconveniences that will be created due to the construction works the transmission line, the community residing along the route have no strong objection or opposition for the construction of the transmission line.
- The public have requested the woreda to 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.
- The community & PAPs are willing to cooperate with the property valuation committee and the Resettlement / Implementation committee.
- PAPs would like compensation payment for their affected properties to be made at a full replacement cost and with all fairness.
- PAPs have requested the woreda administration to facilitate land for land replacement for those households who will be losing their farmland
- PAPs whose houses will be affected by the project have requested for the provision of a plot for housing construction within the same village or nearby.
- PAPs have requested the woreda and PIU or whoever is responsible to notify them in advance the plan for the project implementation and to be given enough time for preparation if relocated.
- Since most of the villages crossed by the transmission line do not have any power supply, PAPs 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. They consider that the provision of power supply as one form of compensation.
PAPs have requested what will be the size of the plant / trees allowed to grow within the right of way limit? And if they could be able to farm small sized crops inside the ROW limit.

The compensation cost / estimate should be able to provide us with sufficient benefit and income in the future.

The public have demanded for 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.

Likewise, PAPs in Mirab Abaya have also demanded 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.

The public have also made a strong recommendation that the construction of the transmission line should start after they have harvested their crops and when the fields are free from planted crops. The harvest season for perennial crops in most places is from December - January.

The public have also agreed not to make any new constructions inside the right of way after the agreed cut-off date, which is August 21, 2011. The established cut-off date is expected to prevent encroachment into the ROW and thereby going a risk to the project implementation.

PAPs requested to be given priority for employment opportunity during the construction works of the transmission line.

5.2 Summary of meetings held with Woreda Authorities

Consultation and meetings were held in all nine woredas with concerned woreda authorities and experts from sector offices and woreda level associations. There have been more than five times meetings with each of the woredas and during these consultations and meetings held with woreda level offices, all 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, there were meetings and discussions were 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 interconnection project and also included experts and professionals from pertinent sector offices. The following table presents the number of participants of woreda level meetings by sex and location.

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

<table>
<thead>
<tr>
<th>No.</th>
<th>Woreda</th>
<th>Number of participants by sex</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sodo Zuria</td>
<td></td>
<td>12</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>2</td>
<td>Humbo</td>
<td></td>
<td>9</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Mirab Abaya</td>
<td></td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Arba Minch Zuria</td>
<td></td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>Derashie</td>
<td></td>
<td>9</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Konso</td>
<td></td>
<td>9</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Teltele</td>
<td></td>
<td>13</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Yabelo</td>
<td></td>
<td>9</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>9</td>
<td>Dirie</td>
<td></td>
<td>5</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>83</strong></td>
<td><strong>9</strong></td>
<td><strong>92</strong></td>
</tr>
</tbody>
</table>
In December 2011, meeting for the establishment of the various committees was also held at each woreda. The participants of the December meeting were 41 and of which 2 are women.

The following are the main issues that were raised during the consultations that was held with woreda authorities.

- All the woredas crossed by the transmission line have agreed to facilitate the smooth implementation of the construction works and provide other routine administrative supports if need be.
- Have agreed to facilitate the employment of unskilled labour force from the locality during the construction works.
- Have 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 constructions inside the right of way after the agreed cut-off date, which is August 21, 2011.
- Provide special support to vulnerable groups and for female headed households if affected by the construction of the transmission line.
- Maintain peace 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 this RAP.

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

   During the meeting held with Yabelo woreda, participants of the meeting have 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 even one of the above properties and assets that are mentioned above by Yabelo woreda are located within the Right of Way.

   Another round of meeting was held with each woreda administration in December 2011 following the comments received on the draft RAP by different actors. The December meeting with woreda administrations have reached agreement on the following main issues.

2. **Establishment of different committees**

   As per FDRE law, woreda administrations are responsible to establish different committees that are required for the implementation of RAP. Hence, in line with the proclamation, and on the basis of the comments forwarded by the different actors, the woredas have established three different committees, namely, 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. **Compensation for loss of communal grazing land in Sodo Zuria woreda**

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 Waraza Lasho kebele by constructing some sort of social services giving 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. **Getting signature of PAPs for loss of Assets**

It was suggested that PAPs losing their assets and properties are 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.

All the woredas traversed by the project in principle agree with the above procedure and approve that it protects the project from opportunistic claims in the future. However, the woredas have the found that it is not appropriate time to have the signature of PAPs prior to the delineation of the final ROW in each kebele. Asking PAPs at this juncture to have them put their signature on the current inventory of their properties and assets conducted by the consultant (or in the absence of the final measurement of their assets and properties) will create unnecessary haggling with the woreda and kebele authorities.

The confirmation required by PAPs in putting their signature for the land take or for their affected properties and assets by the transmission line could only be done 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 compensation estimates. And hence, 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**

As agreed in the previous meetings held in August 2011, woredas are willing to provide land for land replacement for those PAPs losing more than 10% of their farmland. But this could be done once the final list of PAPs is completed before the construction work commences and those losing more than 10% of their land are made known.

Following the final list of PAPs, 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 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 the appendix.

In summary, all woreda administrations that are crossed by the transmission line are fully supportive of the project and have raised issues to be incorporated in the RAP. They have also committed to provide specific support for the implementation of the project. The following are major points consensus has been reached.
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

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Figure 5-5: Participants of public consultation in Sodo & Humbo Woredas
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6 INTEGRATION WITH HOST COMMUNITIES

If PAPs are to be resettled and relocated to a new location outside of their locality their integration with host communities have to be well planned and managed. Both PAPs and host communities should be offered support after relocation for transitional period.

Host communities be consulted and provided information about the project and also offered opportunities to participate in planning, implementation and monitoring of the resettlement project. Conflict resolution mechanisms and arrangements are made in case of conflicts between relocated population and host communities.

In the preparation of this RAP there is no requirement for resettling of PAPs outside of their present area or locality as such. Since the project is a linear one those PAPs who may lose their houses could move to back side of their existing plot & be able to construct new houses. Those farmers who may also lose strip of farmland could also make their living on the remaining plot of land since the size of the affected land will not make significant impact on their livelihood.

Hence, in such situation, there is no need of resettlement for most PAPs outside of their locality. There will only be relocation of small number of PAPs within their locality and to nearby areas without losing their socio-economic ties and family network.

Since the project does not require full resettlement of PAPs there is no need of integration with host population. Integration with host communities applies in those places where households are resettled to different localities outside of their present area.

Resettlement planning should be based on a development approach which would involve offering the displaced persons and host communities several development options consisting of activities to reconstruct the production foundation of the resettled and making them self-sustaining producers and wage earners.”
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7 SOCIO ECONOMIC STUDIES

The chapter on socio economic studies discusses mainly the socio economic characteristics of the PAPs and partly about the project area.

7.1 Social and cultural characteristics

The socio cultural background & characteristics of the population living in the project area belong to the Omotic and Cushitic language group. 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 systems share similar attributes and ultimately are complimentary in function. Members of each age-set share a series of basic and collective military, economic, political and ritual duties.

Farming is the major economic activity that employs large number of the population in the project area. In six of the woredas that are located in the SNNPRS the major activity is small scale farming and in particular crop farming and livestock keeping.

Agriculture, and crop farming in particular, is characterized by small-scale household farming, and it is 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 livelihoods of the population in the other three woredas (Teltele, Yabelo and Dire) located in Oromia region are 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 the town sections, the major economic activity for urban residents are small scale trading, such as, shop keeping, grinding mills, tea shops, hotel and restaurant.

7.2 Land Tenure System

In Ethiopia land belongs to the public as per the Constitution, and hence, land could not either 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 sections of the project area, farmers are provided with plot of land to farm for an indefinite period. The law does not make any limit on the rural land use right for peasant farmers, semi pastoralists and pastoralists. If the government wants the land for public use farmers will be compensated for the property and crop on the land. However, in pastoral areas land is mainly considered as a communal property and each member of the community could be able to graze his livestock in places where there is sufficient grazing land.

In practice agricultural land can be transferred to immediate family members, mainly to children and very close relatives. Children who lost 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 a person who is member of a peasant farmer, semi pastoralist and pastoralist family. 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 7-1 Certificate of land entitlement having the name & photograph of the husband & Wife**

The law also gives the right for women to have access to rural land if they want to be engaged in agricultural activities. In Ethiopia, women now have equal land use right with that of men. As per the constitution, women have equal rights with men with respect to use, transfer, administration and control of land. A land that belongs to household is registered under the name of the wife and the husband. The holding entitlement now belongs to both.

Holders of rural land are given holding certificate by the woreda land administration office. In some of the project woredas, a number of farmers have already received holding certificate.

The proclamation on rural land use allows farmers to rent their land for limited period depending on the type of agricultural activity. Apart from renting or contracting out there is no existing provision for land transaction.

Land is a major source of income and food production for the population living in the project area. In rural areas, a person who does not have land or non farming activity will face difficulties to survive. Land is highly scarce and fragmented in two of the woredas, namely 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 and also building houses & 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 also not much different. The average land holding size is below 1 hectare and those households who own more than one hectare of farmland are few in number.
The major impact of the transmission line in Ethiopia will be on farmlands and income of households who are fully dependent on farming activities. The impact on agricultural land is a very critical one in those areas where there is very high shortage of land and also population pressure is high.

Thousands of households living in the project area face problems of food shortage partly due to scarcity of farmland, high population pressure and also due to land degradation. In some localities of Wolyta and Humbo woredas; poor households and in particular children suffer from food shortage & malnutrition.

The different types of agricultural crops that are cultivated in the project area could be divided into three major categories; namely, Food crops (Cereals, Pulses and Root crops), Cash crops (Coffee, Spices and the like); and Perennial crops (Fruit trees).

### Table 7-1: Category of Agricultural Crops Affected by the Project

<table>
<thead>
<tr>
<th>Root crops</th>
<th>Food Crops</th>
<th>Cash crops</th>
<th>Perennial crops (Fruit Trees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enset¹</td>
<td>Cassava, Irish Potato, Sweet potato, Yam, Godere, and others</td>
<td>Maize, Teff, Sorghum, Horse Bean, Haricot Bean</td>
<td>Coffee, Chat, Hops, Cotton, Pepper, Sugar Cane</td>
</tr>
</tbody>
</table>

In addition to the food and cash crops; there are also various types of trees (fruit bearing and non fruit bearing trees) planted in the area that will be affected by the construction of transmission line.

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

### 7.3 Household Survey of PAPs

A socio economic (household) survey was carried out in all the eight woredas traversed by the transmission line with the objective of identifying the socio economic activities and impacts that will occur due to the construction of the project. The socio economic studies included a household survey, specifically for those households who reside within the 65 meters of ROW and whose properties and assets are to be affected by the construction works of the transmission line. The household survey of PAPs and inventory of affected assets and properties was initially carried out from June 2008 - August 2008 and a revision was also carried out from July 2011- August 2011.

In the household survey, data and information was collected about the Socio economic background of PAPs and also list of all affected assets and properties collected and recorded. Similarly, unit costs and productivity for agricultural crops and also cost estimates for houses and related building structure are also done.

**Socio Economic Background of PAPs:** The data on socio economic background included the following; Name of PAP, Sex, Age, Occupation, Vulnerability, and Family Size; Location (woreda and kebele); and other related information.

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¹ Enset is commonly known as false banana. It is a staple food in most parts of SNNPRS.
The survey has also enumerated different assets and properties to be affected by the project and owned by each PAP. It has enumerated & inventorized affected properties for each PAP, assets, land, trees; and also the production, productivity of crops and their prices. The inventory of assets and properties is carried out by identifying the magnitude of the expected loss, whether it is total or partial, and the extent of economic and physical displacement it brings on the household.

Each affected asset and property is registered and recorded including its occupier’s (owner’s name) for easy reference by using Global Positioning System (GPS). The details of the household survey and list of affected assets and properties by woreda along its estimated costs is presented in the inventory sheet, Appendix one.

The inventory of property and assets was carried out for the following main assets and properties.

a) **Agricultural land**: Measuring the size of affected agricultural land, identifying and registering the different types of crops that grow in the land, average yield per hectare, average price per kg,

b) **Building and other structures**: Measuring the 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.

c) **Identification buildings/houses by purpose**: Residential, business, community or public use, church, mosque, and etc.

d) **Identification of vulnerable groups**: Those PAPs who are vulnerable will also be identified. These include the landless, elderly, female headed households, children, ethnic minorities, etc.

e) **Identification of public utilities**: Water supply system (underground pipes and distribution points), reservoirs and dams, Electric poles, Telecommunication poles and underground cables, and etc.

f) **Identification of Trees**: Collecting data on the size or number of trees by type, age and use, number & type of trees (fruit and non fruit),

g) **Identification of other assets**: grazing land, community forest area, and etc.

According to the findings from household survey, the total number of Project Affected Persons (PAP) or the number of household heads that will be affected by the interconnection project in Ethiopia are estimated to be about 1165 (1092 are male headed households and 73 female headed households) and the total family size is 5743 with an average family size of 4.92. Almost all the affected households are farmers whose livelihood is dependent on subsistence farming. There are also very few household members who have employed jobs either in the public or private sector.

The household heads that will be affected due to the construction works of the transmission line project will lose assets & properties, such as, housing structures, farmland, and perennial crops that are located within the ROW. The PAPs will receive compensation payment for lost assets and properties at full replacement cost; and some PAPs losing housing structures will be relocated to nearby areas without losing their socio economic ties.

However, the project does not require full resettlement option as per the African Development Bank or World Bank Policy because the number of PAPs (or households) in one specific location or cluster do not reach 200. Since the project is linear one there will not be major impact in clusters. But there will definitely be some households that need to be relocated and re established.
The household survey has identified that the impact will be high in the first section of the route and low in the second section. The first section is highly cultivated area with dense population living in one square km of land. The second section is characterized by low level of cultivation and mainly occupied by agro-pastoralists and pastoralist communities who are dependent on their livestock.

The total size of household heads that will be affected by the project construction works are about 1165 and of which about 6.27% are female headed households. Among the total households 97% are located in SNNPRS and 3% in Oromia Regional state. Almost all the affected households are small holding farmers except very small number who are dependent on non agricultural activities. The average household size is about 4.92 family members.

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

**Table 7-2: Number of PAPs by woreda and Sex**

<table>
<thead>
<tr>
<th>No</th>
<th>Woreda</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sodo Zuria</td>
<td>148</td>
<td>19</td>
<td>167</td>
</tr>
<tr>
<td>2</td>
<td>Humbo</td>
<td>154</td>
<td>23</td>
<td>177</td>
</tr>
<tr>
<td>3</td>
<td>Mirab Abaya</td>
<td>211</td>
<td>13</td>
<td>224</td>
</tr>
<tr>
<td>4</td>
<td>Arba Minch Zuria</td>
<td>232</td>
<td>15</td>
<td>247</td>
</tr>
<tr>
<td>5</td>
<td>Derashie</td>
<td>159</td>
<td>-</td>
<td>159</td>
</tr>
<tr>
<td>6</td>
<td>Konso</td>
<td>156</td>
<td>-</td>
<td>156</td>
</tr>
<tr>
<td>7</td>
<td>Telfele</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>Yabelo</td>
<td>14</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>9</td>
<td>Dirie</td>
<td>18</td>
<td>-</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1092</strong></td>
<td><strong>73</strong></td>
<td><strong>1165</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Consultants’ HH survey

**Family Size:** The total family size PAPs in the project area is 5743 people and of which, female are 48% and male 52% and having an average family size of 4.92 persons.

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

**Table 7-3: Family size of affected HH by Woreda**

<table>
<thead>
<tr>
<th>No</th>
<th>Woreda</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sodo Zuria</td>
<td>545</td>
<td>514</td>
<td>1059</td>
</tr>
<tr>
<td>2</td>
<td>Humbo</td>
<td>470</td>
<td>466</td>
<td>936</td>
</tr>
<tr>
<td>3</td>
<td>Mirab Abaya</td>
<td>720</td>
<td>602</td>
<td>1322</td>
</tr>
<tr>
<td>4</td>
<td>Arba Minch Zuria</td>
<td>466</td>
<td>373</td>
<td>839</td>
</tr>
<tr>
<td>5</td>
<td>Derashie</td>
<td>335</td>
<td>365</td>
<td>700</td>
</tr>
<tr>
<td>6</td>
<td>Konso</td>
<td>343</td>
<td>326</td>
<td>669</td>
</tr>
<tr>
<td>7</td>
<td>Yabelo</td>
<td>38</td>
<td>40</td>
<td>78</td>
</tr>
<tr>
<td>8</td>
<td>Dirie</td>
<td>72</td>
<td>68</td>
<td>140</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2989</strong></td>
<td><strong>2754</strong></td>
<td><strong>5743</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Consultants’ HH survey

### 7.4 Livelihood characteristics of households

The livelihood for most of the households in six of the woredas located in the in the first section of the project area is based mainly on crop farming and livestock keeping. Farming and particularly crop farming is the major source income of livelihood for more than 90% of PAPs. Apart from farming there are very little PAPs who have other source of income.
Households farm different types of crops such as, cereal crops, root crops, fruits and vegetables, and cash crops, such as, coffee. In addition to food and cash crops they also grow eucalyptus & other tree types for use as additional income source. Eucalyptus tree is mainly used as one source of cash because it has high demand for construction of houses both in the urban and rural areas.

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

Among the surveyed households heads only 41 have nonfarm activities, as their primary occupation and among family members 77 have employed jobs. The literacy level of the households is slightly more than half, only 53% of the surveyed HH are literate, that can read and write and compute the basic maths.

The table below shows the details of household characteristics by woreda.

Table 7-4: Characteristics of Households

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

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. It is usually conceived in more dynamic terms as plans or actions required re-establishing income streams overtime.

In income restoration, issues such as, source of livelihood (monetary and non monetary), availability of land for replacement, existing skills of PAPs, employment opportunities and income restoration options will be provided.

For PAPs who have lost their assets, income restoration plans or programmes may require support and services in the long and short term basis.

The short term support plans may 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.
7.5 Income of Livelihoods

Income of livelihoods in the project areas traversed by the transmission line is too low and does not allow households to meet their basic needs. Different studies carried out in the past show that the households in areas such as Wolya Sodo live below the poverty line. As per interview conducted with some of the affected population, the average monthly income for households varies from 500 Birr to 750 Birr. It is difficult to accept this as fully reliable data and information since no expenditure and income level has been studied carefully.

Since almost all PAPs are small scale farmers who make their living through traditional method of farming it is difficult to determine their income. Households mainly use bulk of their production for household consumption. This means that there is very little produce which could be marketed. Some households also do not have the capacity to produce enough to feed their family members.

The low level of income of households is mainly associated with the high population pressure, fragmented land holding size, low level of agricultural productivity, low prices of agricultural products, high costs of inputs and also limited non farm activities. The population in some woredas, such as Sodo, Humbo and Konso are also highly dependent on relief food assistance made through international donors.

7.6 Vulnerable groups

The construction of the transmission line will put some difficulties and pressure on vulnerable groups living inside the right of way. The household survey has identified different groups of vulnerable people, which includes Female headed households, Child headed households, Elderly persons above the age of 60, the sick and infirm, and persons with disability.

As per the household survey, the numbers of the vulnerable groups' who will be requiring special attention, support and care during the implementation of the project activities reach 214. Among the identified vulnerable groups, the elderly are the majority followed by female headed and child headed households. It is common that with change in time the number of vulnerable groups may increase or decrease.

Out of the total number of vulnerable PAPs, about 63% are old aged, 34.5% are female headed households and 2.33% are child headed households. These groups of people need special attention and care during the implementation phase of the project. The resettlement / implementation committee and the PIU are expected to provide all the necessary support and care and give priority to the group in the resettlement options.

Figure 7-2 FHH with children & grand children in Wolyta
The following table shows the number of vulnerable groups by woreda.

<table>
<thead>
<tr>
<th>Woreda</th>
<th>No. of Vulnerable Households (HH)</th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HH above 60 years of age</td>
<td>Female Headed households</td>
<td>Child headed HH</td>
<td></td>
</tr>
<tr>
<td>Sodo</td>
<td>13</td>
<td>19</td>
<td></td>
<td>42</td>
</tr>
<tr>
<td>Humbo</td>
<td>14</td>
<td>23</td>
<td>2</td>
<td>39</td>
</tr>
<tr>
<td>Mirab Abaya</td>
<td>33</td>
<td>13</td>
<td>2</td>
<td>38</td>
</tr>
<tr>
<td>Arba Minch</td>
<td>28</td>
<td>15</td>
<td></td>
<td>43</td>
</tr>
<tr>
<td>Derashie</td>
<td>14</td>
<td>-</td>
<td>-</td>
<td>14</td>
</tr>
<tr>
<td>Konso</td>
<td>17</td>
<td>-</td>
<td>1</td>
<td>18</td>
</tr>
<tr>
<td>Yabelo</td>
<td>8</td>
<td>3</td>
<td>-</td>
<td>11</td>
</tr>
<tr>
<td>Dire</td>
<td>8</td>
<td>1</td>
<td>-</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>135</td>
<td>74</td>
<td>5</td>
<td>214</td>
</tr>
</tbody>
</table>

The above vulnerable groups require special support during the implementation of the RAP depending on the impact type. They will be given priority in all the resettlement measures, such as, allocation of better or similar type of farmland for those losing farmland, support in constructing houses for those losing their houses and also similar other related support mechanisms, assistance in building or constructing houses if their houses are demolished and relocated, support in transport and provision of moving allowances, and giving priority in allocation of land and the land to be allocated is within the same vicinity of their existing villages.

All the resettlement committees established at woreda level have agreed and committed to provide special support to vulnerable groups.

### 7.7 Public Utilities and Community Institutions Affected

A total of 18 public enterprises, religious and community institutions will lose different types of assets and properties due to the construction works. The public institutions, whose assets and 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 force the woreda offices to reduce the amount of seedlings it grows and its plantation size as well.

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. A total of 4271 trees will be affected from the forest reserves.

Other public institutions that will be affected by the construction works include a Community skill training center, Abattoir and a School. The assets and properties that belong to these institutions that will be affected include timber trees, farmland (crops) and fence.

The community and religious assets and institutions to be affected include communal grave yard in Mirab Abya, timber trees and farm land that belong to protestant churches in Humbo and Sodo. In addition to the above assets the church buildings will also be affected in Yabelo and Sodo area. In Sodo one honey producers’ cooperative also will lose its shade for bee hives constructed with corrugated iron sheet.
The affected public and community assets will be compensated as per the law. The affected churches, graveyards and similar other community structures will be provided plots for construction and burial sites.

**Figure 7-3 Affected protestant church in Yabelo**

![Image of affected protestant church in Yabelo]

### 7.8 Impact on Housing

The impact on housing could be considered minimal in comparison to the number of villages and settlements, and the long distance of the route that is crossed by the transmission line.

A total of 256 different types of houses will be affected due the construction works of 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%. All the above houses are located within the 60 metres of ROW. Most of these affected houses are mainly of three types; the first type of house is the one that is constructed from wood and mud and covered with corrugated iron sheet, the second type of affected houses are huts (Tukul) constructed with wood and mud and covered with thatched grass and the third type of houses area similar to Tukul but are covered with both soil and thatched grass. These types of houses are mainly could be found in pastoral areas of Yabelo and Dire woredas.

<table>
<thead>
<tr>
<th>Woreda</th>
<th>No. of Tukul</th>
<th>No. of CIS roof houses</th>
<th>Area in m² of CIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodo</td>
<td>10</td>
<td>30</td>
<td>1396</td>
</tr>
<tr>
<td>Humbo</td>
<td>25</td>
<td>76</td>
<td>3004</td>
</tr>
<tr>
<td>Mirab Abaya</td>
<td>39</td>
<td>34</td>
<td>1540</td>
</tr>
<tr>
<td>Derashie</td>
<td>-</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>Konso</td>
<td>17</td>
<td>-</td>
<td>28</td>
</tr>
<tr>
<td>Yabelo</td>
<td>12</td>
<td>8</td>
<td>458</td>
</tr>
<tr>
<td>Dire</td>
<td>4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>107</strong></td>
<td><strong>149</strong></td>
<td><strong>6441</strong></td>
</tr>
</tbody>
</table>
In the project area and in particular in Sodo and Humbo woredas shortage of land for both farming and construction of houses is very critical. In these woredas, to find a plot of land either for farming or housing construction will not be easy. PAPs whose houses are located within the ROW will find it difficult to construct new houses mainly because of lack of plots for construction of houses.

Some of the affected houses that do not have sufficient land for construction of new houses will be provided land for construction of houses within their existing villages without losing their socio-economic ties and family network. The woreda administrations and kebele offices have committed to provide plots for the replacement of the affected houses within the same village or in the nearby villages. According to the woreda officials the plots to be identified for PAPs could either be a plot that is already found under the management of the woreda and kebele officials or a plot which has already been taken from deceased persons.

The total 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>
<thead>
<tr>
<th>Woreda</th>
<th>Cost in Birr for CIS roof</th>
<th>Cost for Tukul</th>
<th>Total estimated Cost (CIS &amp; Tukul)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodo</td>
<td>6,681,375</td>
<td>99,000</td>
<td>6,780,375</td>
</tr>
<tr>
<td>Humbo</td>
<td>7,838,669</td>
<td>125,000</td>
<td>7,963,669</td>
</tr>
<tr>
<td>Mirab Abaya</td>
<td>2,290,865</td>
<td>858,000</td>
<td>3,148,865</td>
</tr>
<tr>
<td>Derashie</td>
<td>24,636</td>
<td>-</td>
<td>24,636</td>
</tr>
<tr>
<td>Konso</td>
<td>154,977</td>
<td>111,027</td>
<td>266,004</td>
</tr>
<tr>
<td>Yabelo</td>
<td>694,180</td>
<td>378,477</td>
<td>1,072,657</td>
</tr>
<tr>
<td>Dire</td>
<td>-</td>
<td>48,000</td>
<td>48,000</td>
</tr>
<tr>
<td>Total</td>
<td>17,571,775</td>
<td>1,568,066</td>
<td>19,154,841</td>
</tr>
</tbody>
</table>
7.9 Affected Timber Trees

Different types of timber trees (some indigenous) will be affected due to the construction of the transmission line. The different types of trees to be affected include Eucalyptus, Zigiba, Wanza (Cordia Africana), and some other trees. Among the different types of trees affected; Eucalyptus tree is the largest and constitute 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 & fences both in rural and urban areas.

A total of 169,751 different types of trees will be affected by the project and the total estimated cost for the above affected timber trees will be 5,566,763 Birr. In addition to the compensation payment for the trees, PAPs will also be allowed to cut and take the trees.

The size of affected trees per HH is varied. Almost all PAPs will lose less than 50 trees each, except very few PAPs who will lose more than 50 trees.

Figure 7-6: Affected Eucalyptus trees

![Affected Community forest](image)

![PAP in front of his affected eucalyptus trees](image)

7.10 Loss of Land in Urban Areas

In Urban areas, the survey work for the selection of the route for transmission line has deliberately avoided and has by passed urban sections as not to cause relocation of houses and disturb the existing socio economic facilities. All the major towns and villages that are located along the transmission line will not cause significant disruption due to the construction works.

7.11 Permanent loss of farmland & grazing land

Land is required at different locations in rural areas and dispossesses a considerable portion of crop, grazing and tree plantations. The impact is limited to the dispossessions of strip 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 goes for the construction of a substation in Wolyta Sodo area. The communal grazing land is a public land which is used as grazing 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. The smallest affected farmland size per HH is 10m² and the largest 1.95 ha. The majority of PAPs will lose less than 1000m² of farmland.

The major impact of the project on farmland will be loss of cereal crops, perennial trees, cash crop and root crops. The permanent loss of farmland and crops is mainly occurs because of the construction of different types of towers and access roads for the transmission line.

The total 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 7-8: Affected farmland size and cost estimate for cereal crops by woreda

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

7.12 Loss of Perennial, Cash and Root Crops

The impact of the transmission line is not limited on cereal crops alone. It also causes major loss on perennial, root and cash crops in the project area. A total of 40,862 perennial, cash and root crops will be lost and its estimated compensation cost will be 40,729,916 Birr. The following table summarizes the number of trees lost for each crop types and associated compensation estimate.

Table 7-9: Number of Affected Crops by types and Compensation Estimate

<table>
<thead>
<tr>
<th>No.</th>
<th>Type of Tree</th>
<th>No. of Trees</th>
<th>Compensation Estimate in Birr</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Perennial Crops (Fruit trees)</td>
<td>7681</td>
<td>30,028,427</td>
</tr>
<tr>
<td>2</td>
<td>Cash crops</td>
<td>13,438</td>
<td>36,583,466</td>
</tr>
<tr>
<td>3</td>
<td>Root Crops</td>
<td>19,743</td>
<td>10,698,489</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>40,862</strong></td>
<td><strong>40,729,916</strong></td>
</tr>
</tbody>
</table>

² It mainly includes Coffee, Chat, Cotton, Sugar cane and Hops.
³ Root crops include, Enset, Yam, Godere, Casava, Boyena, etc
7.13 Impact on Squatters

AfDB and World Bank’s policy recognizes that those persons without legal status or squatters are also entitled for compensation payment. According to AfDB policy persons without legal status are considered among the disadvantaged group that require special support and assistance. One of the issues that need to be considered is that squatters also will be provided with compensation payment and other supports. It should be noted that even squatters have construction costs relative to design, materials employed, workmanship and final finish.

In the project area there are not squatters identified during the census that was carried out in 2008 and also during the revision of this RAP carried out July-August 2011. However, encroachers and squatters who arrive after the cut-off date, which is August 21, 20011 will not be eligible for compensation or resettlement.
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8 LEGAL FRAMEWORK INCLUDING MECHANISM FOR CONFLICTS RESOLUTION & APPEALS

The section discusses the legal framework for land acquisition, expropriation and compensation payment; and also the conflict resolution mechanism for Ethiopia.

8.1 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”. 
8.1.1 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).

Any expropriated property; in addition to the amount of compensation payment it will also receive a provision for cost of removal, transportation and erection. 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.
8.1.2 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 can’t provide evidence of possession for the land they have been cultivating or have built houses.

8.1.3 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”.

8.2 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.
8.3 World Bank Policy & Regulations on Involuntary Resettlement

This RAP 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.

8.4 Gaps between Ethiopian Legislation, AfDB and WB Policies

The preparation and content of this RAP 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 provide any assistance or clarify for those tenants renting houses from individuals or government (or kebele) houses, 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 and inflation costs.

The following table summarizes the gaps between the Ethiopian Law, AfDB and World Bank Policies on Involuntary Resettlement.
Table 8-1: Gaps between Ethiopian Law and Bank Policies

<table>
<thead>
<tr>
<th>Types of Affected persons</th>
<th>FDRE Law</th>
<th>World Bank OP 4.12 &amp; AfDB Policy</th>
<th>Comparison/Gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Property &amp; Land Rights</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land Owners</td>
<td>Overall, “Landholder” means an “individual, government, or private organization or any...other...organ which has legal personality and has lawful possession over the land to be expropriated and owns property situated thereon” <em>(Proclamation No. 455/2005 Article 2(3)).</em></td>
<td>Through census and socio-economic surveys of the affected population, identify, assess, and address the potential economic and social impacts of the project that are caused by involuntary taking of land (e.g., relocation or loss of shelter, loss of assets or access to assets, loss of income sources or means of livelihood, whether or not the affected person must move to another location) or involuntary restriction of access to legally designated parks and protected areas. Land-for-land exchange is the preferred option; compensation is to be based on replacement cost. As per AfDB’s policy only displaced population having formal legal rights to land or assets and those who can prove entitlement under the country's customary laws are considered and will be fully compensated for loss of land or other assets. However, a third category of displaced persons who have no recognizable legal right or claim to the land they are occupying in the project area will be entitled to resettlement assistance in lieu of compensation for land.</td>
<td>The Constitution provides for land-based resettlement. Although its provisions could be interpreted as implying a preference for land based strategies for displaced persons whose livelihoods are land-based, there is no specific legislative or regulatory provision made for this preference.</td>
</tr>
<tr>
<td>Land Tenants/Squatters</td>
<td>There is no time limit on use-rights or usufruct, subject to a proof of permanent physical property, ability to farm continuously and meet administrative dues.</td>
<td>For those without formal legal rights to lands or claims to such land that could be recognized under the laws of the country, the government should provide resettlement assistance in lieu of compensation for land, to help improve or at least restore</td>
<td>While in principle no distinction or discrimination is made on the basis of gender, age, or ethnic origin, there is no equivalence on the specific requirement of non-discrimination or the</td>
</tr>
</tbody>
</table>
### Types of Affected persons

<table>
<thead>
<tr>
<th>Types of Affected persons</th>
<th>FDRE Law</th>
<th>World Bank OP 4.12 &amp; AfDB Policy</th>
<th>Comparison/Gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td>and obligations (1995 Constitution Article 40(3)). Furthermore, Proclamation No. 89/1997 confirms and details the Constitutional principle that holding rights on land can be assigned to peasants and nomads, and that these are to be secured from eviction and displacement. FDRE Constitution Articles 40(4) and 40(5) provide for free land without payment for farmers and pastoralists. Lastly, Proclamation No. 80/1993 allows companies to attain access to land through auction, allocation, or lottery, similar to individuals.</td>
<td>those affected persons’ livelihoods. Under AfDB’s policy (with no contradiction to the borrower’s legislation), land, housing, and infrastructure will be provided to the adversely affected population, including indigenous groups, ethnic, religious and linguistic minorities, and pastoralists who may have usufruct rights to the land or other resources taken for the project.</td>
<td>requirement that particular attention be paid to the needs of vulnerable groups among the displaced.</td>
<td></td>
</tr>
</tbody>
</table>

### B. Resettlement & Compensation Measures & Processes

<p>| Timing of compensation payments | There are no relevant constitutional or legislative provisions that specify the timing of completion of resettlement and compensation. | Implement all relevant resettlement plans before project completion and provide resettlement entitlements before displacement or restriction of access. For projects involving restrictions of access, impose the restrictions in accordance with the timetable in the plan of actions. | There is no equivalence on implementing all relevant resettlement plans before project completion or on providing resettlement entitlements before displacement or restriction of access. Even if these requirements are met, they would be applicable only to communities with proprietary rights or interests in affected lands. |
| Calculation of compensation and valuation | Assets will be broken down into components to assess | Bank policy requires: (a) prompt compensation at full replacement cost for loss of assets attributable to the | There are no equivalent provisions on relocation assistance, transitional support, or the provision of |</p>
<table>
<thead>
<tr>
<th>Types of Affected persons</th>
<th>FDRE Law</th>
<th>World Bank OP 4.12 &amp; AfDB Policy</th>
<th>Comparison/Gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Components for building costs include cost per square meter. Crops are subdivided into crops and perennial crops, and calculated based on yield per square meter of land multiplied by price per kilogram.</td>
<td>project; (b) if there is relocation, assistance during relocation, and residential housing, or housing sites, or agricultural sites of equivalent productive potential, as required; (c) transitional support and development assistance, such as land preparation, credit facilities, training or job opportunities as required, in addition to compensation measures; (d) cash compensation for land when the impact of land acquisition on livelihoods is minor; and (e) provision of civic infrastructure and community services as required.</td>
<td>civic infrastructures.</td>
</tr>
<tr>
<td>Completion of resettlement and compensation</td>
<td>There are no relevant constitutional or legislative provisions that specifically state that resettlement and compensation needs to be completed.</td>
<td>Implement all relevant resettlement plans before project completion and provide resettlement entitlements before displacement or restriction of access. For projects involving restrictions of access, impose the restrictions in accordance with the timetable in the plan of actions.</td>
<td>There is no equivalence between Ethiopian law and Bank policies on implementing relevant resettlement plans before project completion or on providing resettlement entitlements before displacement or restriction of access. Even if these requirements are met, they would be applicable only to communities with proprietary rights or interests in affected lands.</td>
</tr>
<tr>
<td>Measures for livelihood restoration and assistance</td>
<td>There are no specific laws or regulations specifying support for livelihood restoration and transition and moving allowances</td>
<td>Livelihoods and living standards are to be restored in real terms to pre-displacement levels or better</td>
<td>Ethiopian policy and legislation would need to be aligned with the Banks policy to effectively guarantee rights of all affected persons of involuntary resettlement</td>
</tr>
<tr>
<td>Public consultation and disclosure procedures</td>
<td>Consult project-affected persons, host communities and local NGOs, as appropriate. Provide them opportunities to participate in the planning, implementation, and monitoring of the resettlement program, especially</td>
<td>Despite the differences identified, the practice has been that where a mitigation plan affects local communities, proceedings are conducted in the local</td>
<td></td>
</tr>
<tr>
<td>Types of Affected persons</td>
<td>FDRE Law</td>
<td>World Bank OP 4.12 &amp; AfDB Policy</td>
<td>Comparison/Gaps</td>
</tr>
<tr>
<td>---------------------------</td>
<td>----------</td>
<td>----------------------------------</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>in the process of developing and implementing the procedures for determining eligibility for compensation benefits and development assistance (as documented in a resettlement plan), and for establishing appropriate and accessible grievance mechanisms.</td>
<td>significant considering the composition of those most likely to be excluded under Ethiopian legislative and constitutional protection for involuntary resettlement (i.e., squatters).</td>
</tr>
</tbody>
</table>

**C. Dispute Resolution**

- **Grievance redress**
  - **Proclamation No.135/2007** states that grievance redress tribunals (or committees) are established. 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 (FDRE Proclamation N0.455/2005).
  - **Establish appropriate and accessible grievance mechanisms**
  - **There are no similar juridical procedures explicitly applied in non-urban or rural settings.**
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9 INSTITUTIONAL FRAMEWORK

9.1 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.

9.2 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 this RAP 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.

9.3 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 RAP 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.

9.4 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 RAP. 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.

9.5 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 this RAP, 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 Ethio-Kenya 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
• Reallocation 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 9-1: Members of the Resettlement Committee by Institution

<table>
<thead>
<tr>
<th>No.</th>
<th>List of Members</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Woreda Administrator</td>
<td>Chairperson</td>
</tr>
<tr>
<td>2</td>
<td>Woreda Agriculture &amp; Rural Development Office</td>
<td>Deputy Chairperson</td>
</tr>
<tr>
<td>3</td>
<td>Woreda Justice Office</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Woreda Mobilization Office</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Woreda Finance &amp; Economic Development Office</td>
<td></td>
</tr>
</tbody>
</table>

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.

9.6 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 9-2: List of Valuation Committees Members by Institution

<table>
<thead>
<tr>
<th>No.</th>
<th>List of Members</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Woreda Agriculture &amp; Rural Development Office Head</td>
<td>Chair Person</td>
</tr>
<tr>
<td>2</td>
<td>Natural Resource Expert/Forester</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Crop Expert /Agronomist/</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Municipality Town Planner or Civil Engineer</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Representative of PIU</td>
<td></td>
</tr>
</tbody>
</table>

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.
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10  ELIGIBILITY

10.1 Eligibility criteria

The eligibility criteria will identify PAPs that are eligible for relocation/resettlement and be able to receive compensation. PAPs eligible for relocation/resettlement and able to receive compensation as per AfDB policy on involuntary resettlement and World Bank’s OP/BP 4.12; criteria which are adopted for this RAP include,

- 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;
- PAPs that will lose Houses, Fences, Grain store and Cattle barn affected by the construction works of the tower;
- Those PAPs whose crops and trees and other properties affected by the transmission line;
- Those people 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).

Female heads of household who will be eligible for compensation may need special attention for the same benefits as their male counterparts. It is true that FHH may need special attention since they lack resources, educational qualifications, skills, or work experience compared to men. The resettlement process must provide opportunities for women’s participation.

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 is identified and preferred by the households.

It is also evident that all affected parties or PAPs may not be eligible for resettlement and there may be encroachers to the ROW or some new inflow of people into the ROW seeking eligibility for compensation. Hence, those persons who encroach on the area after a ‘cut-off date’ will be subject to expropriation and will not be entitled for compensation. During Public consultations with PAPs and local communities, and also meetings held with local officials, it was confirmed that local authorities agreed to ensure that no person will be allowed to encroach to the ROW after the cut-off date, which was June to August 2008. The previous cut-off date has been revised with in this revised RAP and a new cut of date is made, which is August 21, 2011.

AfDB policy states that; *At the minimum, under the Bank’s policy (with no contradiction to the borrower’s legislation), land, housing, and infrastructure should be provided to the adversely affected population, including indigenous minorities, and pastoralists who may have usufruct rights to the land or other resources taken for the project. The cut-off date must clearly be communicated to the project affected population. Persons who encroach on the project area after the cut-off date are not entitled to any form of resettlement assistance.*

Similarly, World Bank’s policy on involuntary resettlement (OP 4.12) states; *the cut-off date is the date the census begins. The cut-off date could also be the date the project area was delineated, prior to the census, provided that there has been an effective public dissemination of information on the area delineated, and systematic and continuous dissemination subsequent to the delineation to prevent further population influx.*
However, during implementation of this RAP each affected Household head or individual person or party that claim entitlement have to prove their legal rights over the immovable 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 entitlements 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 can identify alternative income restoration options in close consultation with the squatters themselves. Squatters who occupy right of way can be provided with housing or income-earning opportunities elsewhere. Since the rationale is to protect vulnerable groups.

The Ethio-Kenya power interconnection project has committed itself to take into account AfDB and World Bank requirements for determining compensation. Thus, the eligibility criteria contained in AfDB and WB OP 4.12 will be followed when determining eligible persons for compensation.

The criteria for eligibility for displaced persons contained in OP 4.12 are:

- Those who have formal legal 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- provided that such claims are recognized under the laws of the country or become recognized through a process identified in the resettlement plan and
- Those who have no recognizable legal right or claim to the land they are occupying

The eligibility criteria set by the World Bank is basically in line with the national legal requirements. In regard to legal rights over land, the 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.

10.2 Delivery of Entitlements

PAPs will be entitled to various types of compensation and resettlement assistance that will help in the restoration of their livelihoods, at least, to the pre-project standards.

Persons affected by land acquisition, and relocation and/or rehabilitation of structures/assets, are entitled to a combination of compensation measures and resettlement assistance, depending on the nature of ownership rights of lost assets and scope of the impact, including social and economic vulnerability of the affected persons. In general terms, the affected persons in the Project will be entitled to various types of compensation and
resettlement assistance that will help in the restoration of their livelihoods, at least, to the pre-project standards.

PAPs residing in urban areas will be provided with financial compensation for affected houses, plots to construct their houses, and short term provisions such as, credit facilities and training opportunities.

PAPs residing in rural areas whose farmland is affected will be provided with land for land, access to credit facilities and to those PAPs where the preferred option is not land based they will be provided training on income generating activities and job creation.

Some of the benefits and entitlements that will be provided to PAPs under a resettlement / rehabilitation program include:

- Financial compensation for loss of housing
- 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, training or job opportunity

It is also evident that all affected parties or PAPs may not be eligible for resettlement and there may be encroachers to the ROW or some new inflow of people into the ROW seeking eligibility for compensation. Hence, those persons who encroach on the area after a cut-off date will be subject to expropriation and will not be entitled for compensation. During Public consultations with PAPs and local communities, and also meetings held with local officials, it was confirmed that local authorities agreed to ensure that no person will be allowed to encroach to the ROW after the cut-off date, which was June to August 2008. The previous cut-off date has been revised with in this RAP and a new cut of date is made, which is August 21, 2011.

The cut-off date is presumably after the period a census is made to determine eligible persons at the initial stage the compensation committee undertakes this activity. Such persons will not be eligible to compensation or any other form of resettlement assistance.

Experiences from similar other projects show that there might be some encroachers to the ROW or some new inflow of people into the ROW seeking eligibility for compensation after the cut-off date. Hence, those persons who encroach on the area after a cut-off date will be subject to expropriation and will not be entitled for compensation.

10.3 Entitlement Matrix

Entitlement matrix proposes eligibility and payments for all kinds of losses (e.g., land, housing, businesses, and temporary loss of income, displacement, and moving costs). It sets standards for compensation.

Hence, based on analysis of the impact of the project and the criteria for eligibility, the following entitlement matrix is developed on categories of PAPs according to losses and their entitlement benefits.
## Table 10-1: Entitlement Matrix

<table>
<thead>
<tr>
<th>Type of loss</th>
<th>Application</th>
<th>Definition of entitled person</th>
<th>Compensation policy</th>
<th>Implementation issues</th>
</tr>
</thead>
</table>
| Permanent loss of arable land         | Arable land located along the transmission line | Farmers who have usufruct right to cultivate the land & physical present in the project area | -Land for land replacement  
-If land is not available in close proximity provide full compensation | -Identify arable land close to the affected community  
-List down affected and entitled households  
-Compensate for lost crop as per the law |
| Temporary loss of arable land         | Arable land located along the transmission line | Farmers who have usufruct right to cultivate the land | -Provide full compensation | -List down affected and entitled households  
-Rehabilitate land used temporarily at the end of the construction period  
-Compensate for crop loss from the temporarily occupied land |
| Loss of residential area/house/       | Housing structures located in the site  | A person who owns housing infrastructure  
-A person with no formal legal rights or claim structures | -Full compensation payment to cover the loss of housing structure without taking into consideration depreciation  
-Relocate housing structure to a site which is acceptable to PAPs | -A list of available structure in each affected community  
-Compensations provided  
-If agreement has been reached on mode of compensation settlement, provide evidence. |
| Loss of Rented Houses                 | Housing structures located in along the ROW | Tenants who have rented houses either from a kebele administration or from individual landlords. | Comparable or better dwelling house from the urban Kebele administration for renters (tenants) at same rental costs and displacement compensation equivalent to the three months rent. | -Tenants (renters) will be compensated for the inconvenience but compensation will be paid to the urban Kebele or municipal administrations. |
| Loss of commercial and business activities | Loss of commercial and business activities | Owner of the commercial and business activities who over operates the business at the site of the infrastructures | Full compensation payment to the owner  
-Relocate business or commercial activity to site acceptable to the affected persons | -A list of available commercial institutions in each affected community  
-Compensation provided  
-If agreement has been reached on mode of compensation settlement, provide evidence |
| Loss of Trees and other plant         | Trees and other plant                  | Land owner, concession holder,  
-concession holder, | Full compensation payment based on | -Make inventory of trees |
<table>
<thead>
<tr>
<th>Type of loss</th>
<th>Application</th>
<th>Definition of entitled person</th>
<th>Compensation policy</th>
<th>Implementation issues</th>
</tr>
</thead>
</table>
| trees       | species located on the land for the structure for the infrastructure, and the infrastructure easement areas | squatters, communities who utilize the land where trees and other plant species are located | type, age and diameter of trees | - Determine individual need or compensation volumes  
- An assessment for maintaining that kind of vegetation  
- If agreement has been reached on mode of compensation settlement, provide evidence |
| Loss of livelihood for Vulnerable households | For loss of farmland, trees, houses (own or rented) | - Vulnerable households who lose live farmland and houses  
- FHH will be given special attention and support for the same benefits as their male counterparts | - Give special support and assistance  
- Kebele Administration will be responsible to construct new houses for vulnerable households and provide all the other services to the vulnerable households | |
| Loss of land or house | Source of income & livelihood | - PAPs without formal rights for land (squatters & encroachers) | Provide equivalent land | They may not have other sources of income or livelihood |
| Loss of land | Loss of income and traditional rights | Those persons who do not physically reside in the project area but have traditional rights to the land | Provide equivalent land | Income could be reduced due to the loss of land |
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11 VALUATION & COMPENSATION FOR LOSSES

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Table 11-3: UNIT COST FOR DIFFERENT TYPES OF FENCES BY WOREDA

Table 11-4: FORMULA FOR CALCULATING COMPENSATION FOR CROPS, UNRIPE AND RIPE PERENNIAL CROPS

Table 11-5: CATEGORY & TYPES OF LOSSES FROM LAND

Table 11-6: AVERAGE PRODUCTIVITY & PRICE FOR CEREAL CROPS BY WOREDA
11 VALUATION & COMPENSATION FOR LOSSES

11.1 Compensation Procedures & Approach

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 are adopted in the process setting procedures for compensation payment.

The project affected populations even if they are not displaced from their current location, they will be made to live in economically unviable situations because of loss of land, crop, assets and housing structures. Hence, in such situations PAPs will be offered full resettlement package. According to WB policy, "if the residual of the asset being taken is not economically viable, compensation and other resettlement assistance are provided as if the entire asset had been taken"

Infrastructures and Services affected by the construction works of the project need to be replaced or restored to its original level or in an improved manner. These include roads, water points, irrigation canals, and other community and public assets and infrastructures.

The compensation procedures and approach in this RAP will adopt the following three steps.

1) **Establishment of Property valuation committees**: Woreda level Property valuation committee is established at each of the project woredas composed of professionals such as, Agronomist, Forester and Civil Engineer. The property valuation committees will provide PAPs with details of compensation estimates, measurement of all affected assets and properties that PAPs will be losing. The compensation estimate and valuation will be reviewed by the resettlement/compensation committee prior to effecting compensation payment.

2) **Assessment of properties & assets**: 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) **Establishing unit rates**: Unit rates are established for each of the expropriated assets and properties by the project. The unit rate is established for each of the affected properties and assets expropriated due to the construction works of the transmission line on the basis of current market value.

This RAP 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 RAP 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 policy; the Bank policy will prevail as the final and this RAP will be an international credit agreement between the Government of Ethiopia and the Bank.

In this RAP, review of the 2008-09 household census survey of PAPs and inventory of affected assets and properties is carried out for each woreda from July - August 2011. The revised household survey has established a new cut-off date. Hence, as per the revised survey, August 21, 2011 is considered as a new cut-off date of this RAP.

The compensation procedure and approach is determined on the willingness and readiness of owners’ of a resource (affected assets and properties) to give up their rights.
Final review of those properties and assets to be affected will be undertaken by the valuation and compensation committees that are established at each woreda/district level during the commencement of the construction works. The valuation committee, in close consultation with PAPs and the resettlement committee will review and establish a new 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 the resettlement committee and by Ethio-Kenya 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.

Compensation payment addresses the following four questions.

- what to compensate for (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 are based on among other things on 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 are entitled to transitional income support.

Compensation for temporary impacts is calculated on the basis of the following 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).

In addition, PAPs are 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, it is the average cost which is 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 are 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.

11.2 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 re-establishment 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, issues 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 will be provided.

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 basis.

The short term strategy is 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 could be planned and implemented on the need and interest of PAPs. During implementation of the RAP social development plans, such as skill training associated with credit services could be provided to PAPs in order to establish themselves. PIU needs to work closely with micro finance institutions and micro enterprise development organizations; and NGOs working in such activities. The proposed training should be organized not far away from the locality of PAPs and also should not exceed more than 3 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 has to be monitored regularly.

PAPs whose farmlands located within the ROW and permanently and temporarily lost for the construction works of the transmission line will receive monetary compensation at full replacement cost.

PAPs losing perennial crops will also receive monetary compensation, however, the foregone benefits and loss of income from the trees need to be determined and calculated accordingly. It has to be recognized that perennial crops, such as fruit trees provide regular income and are major sources of household income in the project area.

11.3 Methodology in valuing losses

There are three commonly known methods of valuing assets and properties, namely, income based approach, replacement cost at market data and comparable sales approach. However, in this RAP, the methodology for valuing assets will be based on at Full Replacement Cost. Full Replacement Cost is one method of valuation of property that determines the amount of replacement through compensation.

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 or improper on-site management. These costs are taken as a minimum estimate of
the value of measures that will reduce the damage or improve on-site management practices and thereby prevent damage.

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.”

In Places where markets are not well organized or thin, replacement of assets may be scarce, or loss of human or social capital might also be debilitating there is a need to establish supplemental income strategies.

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 11-1: Replacement cost by type of impact**

<table>
<thead>
<tr>
<th>No.</th>
<th>Agricultural Land</th>
<th>For Public Infrastructure</th>
<th>For Houses</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>It is the pre-project or pre-displacement, whichever is higher</td>
<td>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</td>
<td>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</td>
</tr>
<tr>
<td>II.</td>
<td>Market value of land of equal productive potential or use located in the vicinity of the affected land</td>
<td>The cost of any registration and transfer taxes</td>
<td>The cost of transporting building materials to the construction site</td>
</tr>
<tr>
<td>III.</td>
<td>The cost of land preparation to levels similar to those of the affected land</td>
<td>The cost of transporting building materials to the construction site</td>
<td>The cost of any labour and contractors' fees</td>
</tr>
<tr>
<td>IV.</td>
<td>The cost of any registration and transfer taxes</td>
<td>The cost of any labour and contractors' fees</td>
<td>The cost of any registration and transfer taxes</td>
</tr>
</tbody>
</table>
11.4 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 resettlement/compensation committee will prepare the unit rates for the affected assets to be determined on the basis of market value.

11.4.1 Valuation for Loss of Houses & Fences

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

a) Construction cost: Current construction cost estimate on the basis of the local market;

b) Depreciation: 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;

c) Establishing unit rate: The unit rate (or bill of quantity) is estimated on the basis of the type of the affected houses. The cost of each house to be replaced is estimated on the basis of specification and bill of quantities prepared by the municipalities from each woreda 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.

d) Estimating the disturbance allowance: The disturbance allowance is to cover the loss of established businesses, and include social disruptions and inconveniences. Disturbance allowance is 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 this RAP 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.
Compensation estimates for the different types of houses such as, CIS roof house, thatched roof (Tukul) & for Fences is estimated on the basis of unit rates prepared by the municipalities from each woreda at current market price. The compensation estimate for houses is prepared at a replacement value.

The unit cost (meter square) in Birr for wood and mud house with corrugated iron sheet cover and the total cost for a Tukul or Thatched roof house by woreda is presented as follows.

Table 11-2: Unit cost in Birr for different types of houses by meter square & Cost for Tukul by woreda

<table>
<thead>
<tr>
<th>Woreda</th>
<th>CIS roof with Mud and wood wall in m²</th>
<th>CIS roof with Hollow Block wall in m²</th>
<th>CIS roof+ wooden wall in m²</th>
<th>CIS roof+ mud &amp; wood cement plastered in m²</th>
<th>CIS roof and CIS wall 6 m²</th>
<th>Grass roof+ Stone masonry wall 4 m²</th>
<th>Tukul 9 m²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodo Zuria</td>
<td>4,500</td>
<td>7,200</td>
<td>4,000</td>
<td>8,900</td>
<td>6,400</td>
<td>5,000</td>
<td>4,200</td>
</tr>
<tr>
<td>Humbo</td>
<td>2,638</td>
<td>9,012</td>
<td>3,080</td>
<td>10,818</td>
<td>1,762</td>
<td>1,810</td>
<td>1,113</td>
</tr>
<tr>
<td>Mirab Abaya</td>
<td>1,400</td>
<td>1,400</td>
<td>264</td>
<td>10,416</td>
<td>193</td>
<td>3,019</td>
<td>1,012</td>
</tr>
<tr>
<td>Arba Minch Zuria</td>
<td>750</td>
<td>2,500</td>
<td>980</td>
<td></td>
<td></td>
<td></td>
<td>19,808</td>
</tr>
<tr>
<td>Dirashe</td>
<td>851</td>
<td>3,623</td>
<td>1,642</td>
<td>4,156</td>
<td>511</td>
<td>753</td>
<td>514</td>
</tr>
<tr>
<td>Konso</td>
<td>1,410</td>
<td>1,792</td>
<td>1,520</td>
<td>1,838</td>
<td>511</td>
<td>900</td>
<td>6,531</td>
</tr>
<tr>
<td>Yabelo</td>
<td>850</td>
<td>1,900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4,000</td>
</tr>
<tr>
<td>Dire</td>
<td>1,500</td>
<td>3,800</td>
<td>1,150</td>
<td>3,000</td>
<td>850</td>
<td>2,800</td>
<td>12,000</td>
</tr>
</tbody>
</table>

Source: Woreda Offices, 2011

Similarly, the unit cost in Birr for six different types of fences prepared for each woreda is presented as follows.

Table 11-3: Unit cost for different types of fences by woreda

<table>
<thead>
<tr>
<th>Woreda</th>
<th>Stone masonry in m²/Birr</th>
<th>Hallow Block fence in m²/Birr</th>
<th>Corrugated Iron Sheet fence in meter</th>
<th>Bamboo fence in meter/Birr</th>
<th>Barbed Wire fence in meter/Birr</th>
<th>Wooden fence in meter/Birr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodo Zuria</td>
<td>6,000</td>
<td>4,100</td>
<td>4,000</td>
<td>3,200</td>
<td>4,500</td>
<td>3,500</td>
</tr>
<tr>
<td>Humbo</td>
<td>1,985</td>
<td>1,284</td>
<td>472</td>
<td>720</td>
<td>178</td>
<td>153</td>
</tr>
<tr>
<td>Mirab Abaya</td>
<td>2,500</td>
<td>1,050</td>
<td>353</td>
<td>2,500</td>
<td>1,000</td>
<td>35</td>
</tr>
<tr>
<td>Arba Minch Zuria</td>
<td>2,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dirashe</td>
<td>1,160</td>
<td>942</td>
<td>334</td>
<td>210</td>
<td>138</td>
<td>85</td>
</tr>
<tr>
<td>Konso</td>
<td>1,250</td>
<td>1,200</td>
<td>218</td>
<td>180</td>
<td>430</td>
<td>113</td>
</tr>
<tr>
<td>Yabelo</td>
<td>600</td>
<td>550</td>
<td></td>
<td></td>
<td>90</td>
<td>35</td>
</tr>
<tr>
<td>Dire</td>
<td>2,500</td>
<td>3,000</td>
<td>350</td>
<td>270</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Woreda Offices, 2011

The detail price list which is prepared by each woreda and in Amharic both for houses and fences is attached in the Appendix.

11.4.2 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 can’t 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 crops and annual crops from lost agricultural land will be revised by the valuation committee and submitted for approval to the Resettlement / Implementation committee & PIU by adopting the methodology presented for crops as per proclamation 135/2007. The revision of the unit rates by the valuation committee will be done during the implementation of this RAP and prior to the commencement of construction works. The following table presents the formula for calculating compensation rates.

Table 11-4: Formula for calculating compensation for crops, unripe and ripe perennial crops

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of the crops per kg</td>
<td>Current price of the produce</td>
<td>Cost incurred to grow an individual plant</td>
<td></td>
</tr>
<tr>
<td>The total area of the land in m²</td>
<td>Annual yield in kg</td>
<td>No. of plants (legs)</td>
<td></td>
</tr>
<tr>
<td>The amount of crops to be obtained per m²</td>
<td>Cost of permanent improvement on land</td>
<td>Cost of permanent improvement on land</td>
<td></td>
</tr>
<tr>
<td>Cost of permanent improvement of land</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Displacement compensation: 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.

Category & Types of Losses from Land: The categories of losses from land are divided into four and the types of losses include farm, income from farms and housing plots. The following table presents the category of losses and types of losses.

Table 11-5: Category & Types of Losses from Land

<table>
<thead>
<tr>
<th>No.</th>
<th>Category of Losses</th>
<th>Type of Losses</th>
</tr>
</thead>
</table>
| A   | Permanent and Temporary loss of land | • Farmland  
• Housing plot and compound  
• Residential & Business premises (house) |
| B   | 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 |
| C   | 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.

The following table presents the average productivity per hectare and price for cereal crops by woreda.

<table>
<thead>
<tr>
<th>No.</th>
<th>Woreda</th>
<th>Crop type</th>
<th>Average Yield/ha</th>
<th>Average price per quintal/Birr</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sodo Zuria</td>
<td>Teff</td>
<td>14</td>
<td>676</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maize</td>
<td>39</td>
<td>282</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Godere</td>
<td>250</td>
<td>111</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adenguare</td>
<td>14</td>
<td>371</td>
</tr>
<tr>
<td>2</td>
<td>Humbo</td>
<td>Maize</td>
<td>31.6</td>
<td>356</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teff</td>
<td>8.3</td>
<td>752</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Beans</td>
<td>11</td>
<td>573</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Casava</td>
<td>300</td>
<td>400</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Boye</td>
<td>150</td>
<td>276</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adenguare</td>
<td>8.6</td>
<td>426</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Godere</td>
<td>243</td>
<td>326</td>
</tr>
<tr>
<td>3</td>
<td>Mirab Abaya</td>
<td>Banana</td>
<td>62</td>
<td>1008</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maize</td>
<td>60</td>
<td>630</td>
</tr>
<tr>
<td>4</td>
<td>Arba Minch</td>
<td>Banana</td>
<td>135</td>
<td>960</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maize</td>
<td>45</td>
<td>630</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teff</td>
<td>16</td>
<td>1050</td>
</tr>
<tr>
<td>5</td>
<td>Derashie</td>
<td>Maize</td>
<td>47</td>
<td>342</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sorghum</td>
<td>35</td>
<td>434</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teff</td>
<td>13</td>
<td>694</td>
</tr>
<tr>
<td>6</td>
<td>Konso</td>
<td>Maize</td>
<td>12.8</td>
<td>385</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sorghum</td>
<td>8.4</td>
<td>380</td>
</tr>
<tr>
<td>7</td>
<td>Yabelo</td>
<td>Maize</td>
<td>11</td>
<td>425</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wheat</td>
<td>7.3</td>
<td>574</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Beans</td>
<td>9.2</td>
<td>566</td>
</tr>
<tr>
<td>8</td>
<td>Dirie</td>
<td>Wheat</td>
<td>11</td>
<td>515</td>
</tr>
</tbody>
</table>

Source: Woreda Agriculture Offices, 2011

The compensation payment for crops is calculated according to the five year average crop budget, gross income and the proportion of income equivalent to land loss.

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.

11.4.3 Valuation for Temporary Dispossession of Agricultural Land

The valuation methodology for the amount of crop loss from temporarily affected agricultural land is identified as follows:

- 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.

11.4.4 Valuation for psychological and emotional disturbance

The loss of land and relocation, income from businesses, and loss of attachment from clan and social groups, community members also leads to psychological and emotional disturbances. Disturbance allowances will be provided accompanying of loss of house, farmland, income from land and other businesses.

When a household loses either land or house involuntary the psychological and emotional disturbance cannot be easily compensated with cash alone. Since it is very deep and will have psychological impact that could not be resolved within a short period.

The valuation to compensate for disruption, psychological and emotional disturbances could not be quantified easily. Hence arbitrary amount could be set depending on the impact and specific group.

11.4.5 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 a new site not far from the existing location. The relocation requires costs and also requires religious services to be carried out. Hence, compensation payment will be made for the relocation of the cemetery including religious and cultural services to be carried out.

11.4.6 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 if occupied for a certain period.

The grazing land which is located in Waraza Lasho kebele of Sodo Zuria woreda and planned for the construction of the Substation belongs to a number of kebeles. And hence, making compensation payment for the above grazing land either for a group of people or for residents of a single kebele does not seem to be appropriate. Hence, what is proposed as a compensatory measure by the Woreda Administration and the Resettlement Committee for
the loss of the grazing land is to construct a social service giving institution that serves all the kebeles located adjacent to the grazing land. The type of (proposed) social service to be constructed has to be negotiated and agreed with the community.

11.4.7 Valuation for Public Utility Lines

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.
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12. GRIEVANCE REDRESS MECHANISMS.................................................................12-1

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12. GRIEVANCE REDRESS MECHANISMS

A grievance redress mechanism and procedures is setup at each woreda level to provide opportunity for PAPs to settle their complaints and grievances amicably. The established grievances redress procedures and mechanism ensures that PAPs are provided with the appropriate compensation payment and that all administrative measures are in line with the law. It also allows 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 arbitral tribunal. In line with FDRE Council of Ministers’ Regulation No.135/2007 that grievance redress tribunals (or committees) are established at each woreda level in December 2011. The main responsibility of the committee is to address grievances that are raised during the property valuation and implementation of this RAP. The committee is composed from woreda Government offices, the PIU and representatives of PAPs. The representation in the committee makes PAPs to have trust and build confidence in the system.

The grievance redress committee reports its plan and activities to the Resettlement/Implementation committee. The following list presents members of the committee.

Table 12-1: Members of the committee

<table>
<thead>
<tr>
<th>No.</th>
<th>List of member organizations</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Woreda Administrator</td>
<td>Chair Person</td>
</tr>
<tr>
<td>2</td>
<td>Woreda Justice Office</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Woreda Complaint (or grievance) committee</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Representatives of PAPs</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Representatives of PAPs</td>
<td></td>
</tr>
</tbody>
</table>

The duties and responsibilities of the Grievance redress committee includes;

- To assist PAPs in providing appropriate response to their complaints by referring to the legal procedures
- To communicate with property valuation committee and the project office on issues related compensation payment and valuation of properties and assets
- To ensure that the procedures followed by the property valuation committee are done according to the government regulations and guidelines.

The procedures to be followed and adopted by the grievance redress or arbitral tribunal members should be;

- Transparent and simple to understand or uniform process for registering complaints
- Provide PAPs with free access to the procedures
- The procedure should be able to be activated rapidly or a time bound system of adjudication
- The response time between activating the procedure and reaching a resolution should be as short as possible
- Monitoring system that will inform project management about the frequency and nature of grievances

According to FRDE law, if a PAP is dissatisfied with the amount of compensation payment or other related measures he will be advised to take the case to arbitral tribunal. For PAPs taking their cases or complaint to arbitral committee will give them the opportunity to have positive discussions with the committee in the presence of their representatives, local administration representative or any influential person in the locality.
In case a dispute is not resolved by arbitral 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. However, the preferred option of dispute settlement ought to be 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.
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13 IDENTIFICATION OF ALTERNATIVE SITES & SELECTION OF RESETTLEMENT SITES...........................................13-1
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13 IDENTIFICATION OF ALTERNATIVE SITES & SELECTION OF RESettlement SITES

The Government of Ethiopia’s legislation for the expropriation of land for use by projects and also the commonly adopted guidelines and practices by the Regional Governments and Woreda authorities proposes provision of land for land replacement if unused or free government land is available in the project area. Similarly, AfDB and WB involuntary resettlement policies preferred form of compensation for involuntarily acquired land is provision of replacement of land for land.

In the absence of land for land replacement, and in particular for PAPs losing their large portion of farm land and considered as a major sources of their livelihood and income the preferred option will be relocation and resettlement. However, it is envisaged that the project impacts will be mitigated without making any resettlement for PAPs outside of their present localities. Since the project is a linear one the impact the project on land will have in each affected person will be mainly by taking strip of land. Hence, there will not be a requirement for PAPs to be resettled outside of their locality. However, there will be some PAPs that will be losing most portions of their farmland and income sources and may need to be relocated.

In those woredas where there will be major impact on land (Sodo and Humbo), the woreda authorities have committed in writing to provide replacement land within their existing villages for PAPs.

So far there has not been any identification of resettlement/relocation sites for the project by woreda authorities since it is not assumed that there will not be PAPs who will require resettlement outside of their locality as an option.
14 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 (a house in resettlement areas should include beds rooms, toilet and shower facilities, kitchen, septic tank and garbage pits) 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.
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15 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.

15.1 Pre-Construction phase

a) Engineering Design: Based on the recommendations/requirements presented in this 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) Preparation of Tender Documents: 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) Implementation of RAP and Compensation for PAPs: 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 this 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.

15.2 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 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 STD 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>
<thead>
<tr>
<th>Extent of impact on soil</th>
<th>● = Low Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extent of impact on groundwater resources</td>
<td>● = Low Negative</td>
</tr>
<tr>
<td>Extent of impact on surface water</td>
<td>● = Low Negative</td>
</tr>
<tr>
<td>Extent of impact on air quality</td>
<td>● = Low Negative</td>
</tr>
<tr>
<td>Extent of impact of noise</td>
<td>● = Low Negative</td>
</tr>
<tr>
<td>Extent of impact on vegetation</td>
<td>● = Low Negative</td>
</tr>
<tr>
<td>Extent of impact on fauna &amp; habitats</td>
<td>● = Low Negative</td>
</tr>
<tr>
<td>Extent of impact on landscape</td>
<td>● = Low Negative</td>
</tr>
<tr>
<td>Extent of impact on local communities</td>
<td>▲ = locally positive</td>
</tr>
<tr>
<td>Extent of impact on local communities</td>
<td>●●● = high negative</td>
</tr>
<tr>
<td>Extent of impact on enterprises</td>
<td>▲ = locally positive</td>
</tr>
<tr>
<td>Extent of impact on enterprises</td>
<td>●●● = high negative</td>
</tr>
<tr>
<td>Extent of impact on historical/ cultural sites</td>
<td>Ø = nil</td>
</tr>
<tr>
<td>Extent of impact on protected Areas (ETH)</td>
<td>Ø = nil</td>
</tr>
</tbody>
</table>
15.3 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 EEPCO's Environmental and Social Management unit will have overall advisory role during this phase.

<table>
<thead>
<tr>
<th>Extent of impact</th>
<th>Level of Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extent of impact of electric &amp; magnetic fields</td>
<td>Low Negative</td>
</tr>
<tr>
<td>Extent of impact on soil</td>
<td>Low Negative</td>
</tr>
<tr>
<td>Extent of impact on ground &amp; surface water</td>
<td>nil</td>
</tr>
<tr>
<td>Extent of impact on air</td>
<td>nil</td>
</tr>
<tr>
<td>Extent of impact of noise</td>
<td>nil</td>
</tr>
<tr>
<td>Extent of impact on flora/ vegetation</td>
<td>Low Negative</td>
</tr>
<tr>
<td>Extent of impact on habitats</td>
<td>nil</td>
</tr>
<tr>
<td>Extent of impact on fauna</td>
<td>Low Negative</td>
</tr>
<tr>
<td>Extent of impact on landscape</td>
<td>Low Negative</td>
</tr>
<tr>
<td>Extent of impact on local communities</td>
<td>Low Negative</td>
</tr>
<tr>
<td>Extent of impact caused by land development</td>
<td>Low Negative</td>
</tr>
<tr>
<td>Extent of impact on historical/ cultural sites</td>
<td>nil</td>
</tr>
<tr>
<td>Extent of impact on protected Areas (ETH)</td>
<td>nil</td>
</tr>
</tbody>
</table>

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 an as low as reasonable possible level and the Project is likely to be environmental feasible.
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16 IMPLEMENTATION SCHEDULE

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

During the implementation period of this RAP, 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 RAP. In the process of the implementation of this RAP, 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 require 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.

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. 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 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 RAP 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.
Committee Strengthening Phase: EEPCO through the PIU will request the Woredas traversed by the transmission line to re-activate all the established committees for this RAP (the Resettlement / Implementation committee, Property valuation and Grievance redress committee) to become operational and each committee to develop its working document/guideline. The notification will contain that each committee clearly puts the time frame given to undertake the task.

Awareness Creation Phase: At this phase, the Resettlement / Implementation committee members will prepare clear working guidelines and procedures and give guidance to the other two committees also. 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.

Compensation Payment Phase: 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 through one of the following institutions; Commercial Banks, Micro Finance Institutions or Post Offices. In some of the places where Banks or Micro Finance Institutions are located in distant areas, PAPs will be receiving compensation payment in front of representatives of PAPs and the resettlement committee.

Reporting Phase: Each Woreda level committee will produce a report regarding their accomplishments for the implementation of the resettlement/relocation process and submit the report to PIU and to their respective woreda administration office.

Table 16-1: Proposed Time Schedule for Implementation of RAP on Quarterly Basis

<table>
<thead>
<tr>
<th>Activities</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quarter</td>
<td>Quarter</td>
<td>Quarter</td>
</tr>
<tr>
<td>Disclosure of RAP</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Re-evaluation of assets and properties</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re activating all the three Committees established at each woreda level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property valuation committee reviews the list of PAPs by woreda</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property valuation committee reviews impacts and costs per woreda</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Resettlement / Implementation committee conducts education and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>awareness creation about RAP procedures and compensation payment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PIU carry out Stakeholder Consultation on the implementation of the RAP</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 16.1 Public Disclosure

As per AfDB and WB guidelines, the resettlement plan will also be disclosed in a form, manner and language comprehensible to them and at a place accessible to the displaced population and other stakeholders for review and comments on entitlement measures. The purpose of the disclosure is to receive comments and suggestions from PAPs and incorporate appropriate suggestions.

The Public disclosure of RAP will be made in Amharic and Oromiffa, Wolyta, Gamo, Derashie and Konso languages. This could be done; by publishing it in official News papers of both the Federal Government and also in the Regional Governments Newspapers, depositing / posting it in a range of publicly accessible places; such as, Woreda offices, Municipalities and Kebele administration office. Once it is disclosed, the public have to be notified through administrative, community and clan structures about the availability of the RAP documents and be requested to make their suggestions and comments.

Comments and critiques made on the draft RAP by PAPs and other stakeholders will be taken by PIU for consideration in any of the revised draft.

Disclosed in Ethiopia and make copies available at EEPCO and distribute copies to the Woredas located in the project area. FDRE will authorize AfDB to distribute this RAP electronically through its public information center (PIC). AfDB will disclose it in its web site for the public to review and comment in accordance to its disclosure policy and Environmental and Social Assessment Procedures (ESAP 2001). Similarly, the WB will also disclose it through its info shop. EEPCO will also post it in its websites and receive comments.
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17 COST AND BUDGET

17.1 RAP Budget

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

The total amount of estimated budget for this RAP is Birr 237,592,397 (or 13,601,657 USD the exchange rate 1USD = 17.4679 Birr for the month of November 2011).

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 property valuation committees and the resettlement & compensation committees will be responsible to effect the compensation payment on the basis of agreed valuation costs.

The revised RAP cost has shown significant increment in its budget and cost in comparison to 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 2009 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 RAP and that were missed out during the previous report are now included under rehabilitation/resettlement measures (income restoration, land preparation, extension services, etc) and also under project management cost (capacity building, monitoring & evaluation, for resettlement and valuation committee, etc). The inclusion of this newly included cost items has caused the budget to increase. These two major cost categories have 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 & 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 & 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.

17.2 Resettlement Cost items by category

The budget for this RAP is prepared to effect compensation payment and for the management of different resettlement activities on the basis of cost estimates made for each item. The total amount of budget for the RAP is Birr 237,592,397 (or 13,601,657 USD). Out of the above budget, 78% goes for compensation payment, 4.5% for rehabilitation measures and 7.5% for project management cost and 10% contingency.
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.

The budget and cost estimate is divided into three categories; namely, cost for compensation payment, rehabilitation measures and project management. The following sections details the cost estimates made for each item by category.

1. **Compensation payment**

   a) **Compensation for annual, perennial, cash and root crops**: The compensation estimate for annual crops (cereal, pulses and oil seeds); for perennial crops, cash and root crops are calculated on the basis of average production and productivity. The last five years average prices also collected for each crop type from the woreda’s crossed by the project. As per Ethiopia’s law, the compensation estimate is made at a replacement cost.

   b) **Compensation for Timber trees**: 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) **Compensation cost for Houses & Fences**: 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 from each woreda at current market price. The compensation estimate for houses is prepared at a replacement value and no depreciation is considered.

   d) **Compensation cost for graveyards**: This includes replacement cost for the graveyards and payment of compensation for conducting religious services and cultural ceremony.

   e) **Compensation for communal grazing land**: Since land belongs to the public in Ethiopia no compensation payment is made for loss of communal grazing land. Instead it is proposed that the project will compensate the community by constructing some social service giving institution such as, school, clinic, water points or similar facilities after having consulted the communities that are living in the area. Hence, a lump sum of Birr 3,000,000 is budgeted for the provision of social service facilities in the future.

   f) **HIV/AIDS Support Activities**: It includes activities such as, awareness creation among the community and construction workers about HIV/AIDS by adopting different techniques and methods. The cost estimate includes, cost for awareness creation, equipment, material and staffing (1 Medical Doctor, 1 Nurse, and 2 Social workers and animators) to be employed for the two construction camps established under the two contract lots. The estimated lump sum amount for both camps will be about 2,000,000 Birr during the construction phase and also for a short period during its operation phase.

   g) **Support for vulnerable groups**: 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) Income Restoration: 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) Transport & Moving allowances: The moving and transport cost depends on the proximity of the relocation site and related activities. On average it is estimated that Birr 500 will be provided for each PAP.

c) Land preparation costs: This includes costs for agricultural inputs, labour, investment, equipment, and etc. On average each PAP will be provided Birr 2,000.

d) Legal & Administrative costs: This includes legal fees, administrative costs, tax, land registration and related costs. On average, it is estimated that each PAP will receive Birr 500.

e) Agricultural extension services: The estimated cost for the extension service will be an average of Birr 2000 for each PAP.

f) Training costs on income generation: This is estimated to be Birr 2000 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) Cost for external evaluation: 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 250,000 is allocated for each phase.

c) Environmental & Social Management Costs & mitigation measures: A lump sum of Birr 5,000,000 is allocated.

d) Budget for valuation property committee: 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) Budget for Resettlement/implementation committee: 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) PIU Capacity building support: 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) Administrative costs: The administrative cost is estimated at a monthly cost of Birr 125,000 Birr for 36 months.
Table 17-1: Detail Budget for RAP in Birr

The following table summarizes the total amount of the fund (or compensation estimate) that is required for the implementation of this RAP by its cost item. The budget preparation is divided into three main categories. The first category deals with estimates of compensation payment for affected assets and properties; the second category is cost estimate for the rehabilitation support of PAPs and the third category is cost required for project management / administrative costs.

The cost presented below shows the total cost estimate by item and by multiplying each item with the average unit rate for the affected properties and assets without making distinctions between the different types of crops, housing structures or its sizes. The detail unit costs for each crop type and housing structures are presented in the inventory sheet that is presented in appendix one.

### A. Compensation payment

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Unit</th>
<th>Quantity</th>
<th>Average Unit Rate/ Birr</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Compensation costs for Annual crops</td>
<td>Ha</td>
<td>321</td>
<td>250,601</td>
<td>80,442,984</td>
</tr>
<tr>
<td>2</td>
<td>Compensation costs for Perennial crops</td>
<td>No.</td>
<td>7,681</td>
<td>3,910</td>
<td>30,028,427</td>
</tr>
<tr>
<td>3</td>
<td>Compensation costs for Cash Crops</td>
<td>No.</td>
<td>13,438</td>
<td>2,723</td>
<td>36,583,466</td>
</tr>
<tr>
<td>4</td>
<td>Compensation costs for Root crops</td>
<td>No.</td>
<td>19,743</td>
<td>542</td>
<td>10,698,489</td>
</tr>
<tr>
<td>5</td>
<td>Compensation costs for Timber trees</td>
<td>No.</td>
<td>169,751</td>
<td>33</td>
<td>5,566,763</td>
</tr>
<tr>
<td>6</td>
<td>Compensation cost for CIS roof house &amp; for Fence</td>
<td>No.</td>
<td>149</td>
<td>117,932</td>
<td>17,571,775</td>
</tr>
<tr>
<td>7</td>
<td>Compensation cost for Thatched roof (Tukul)</td>
<td>No.</td>
<td>107</td>
<td>14,795</td>
<td>1,583,066</td>
</tr>
<tr>
<td>8</td>
<td>Compensation cost for graveyards</td>
<td>No.</td>
<td>36</td>
<td>6,602</td>
<td>237,684</td>
</tr>
<tr>
<td>9</td>
<td>Provision of social service giving facilities for loss of communal grazing land</td>
<td>Ha</td>
<td>20</td>
<td>Lump sum</td>
<td>3,000,000</td>
</tr>
<tr>
<td>10</td>
<td>HIV/AIDS support activities</td>
<td>Month</td>
<td>36</td>
<td>55,556</td>
<td>2,000,000</td>
</tr>
<tr>
<td>11</td>
<td>Support for vulnerable groups</td>
<td>No.</td>
<td>214</td>
<td>5,000</td>
<td>1,070,000</td>
</tr>
</tbody>
</table>

Sub Total: 187,199,558

### B. Rehabilitation Measures

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Unit</th>
<th>Quantity</th>
<th>Unit Rate / Birr</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Income restoration</td>
<td>No.</td>
<td>1165</td>
<td>2,500</td>
<td>2,912,500</td>
</tr>
<tr>
<td>2</td>
<td>Transport &amp; Moving Allowances</td>
<td>No.</td>
<td>1165</td>
<td>500</td>
<td>582,500</td>
</tr>
<tr>
<td>3</td>
<td>Land preparation costs</td>
<td>No.</td>
<td>1165</td>
<td>2,000</td>
<td>2,330,000</td>
</tr>
<tr>
<td>4</td>
<td>Legal &amp; administrative costs</td>
<td>No.</td>
<td>1165</td>
<td>500</td>
<td>582,500</td>
</tr>
<tr>
<td>5</td>
<td>Agricultural Extension services</td>
<td>No.</td>
<td>1165</td>
<td>2,000</td>
<td>2,330,000</td>
</tr>
<tr>
<td>6</td>
<td>Training costs on Income generation</td>
<td>No.</td>
<td>1165</td>
<td>2,000</td>
<td>2,330,000</td>
</tr>
</tbody>
</table>

Sub Total: 11,067,500

### C. Project Management & Running Costs
<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Unit</th>
<th>Quantity</th>
<th>Unit Rate / Birr</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Costs for Internal Monitoring</td>
<td>Month</td>
<td>30</td>
<td>50,000</td>
<td>1,500,000</td>
</tr>
<tr>
<td>2</td>
<td>Costs for External Evaluation</td>
<td>Month</td>
<td>2</td>
<td>250,000</td>
<td>500,000</td>
</tr>
<tr>
<td>3</td>
<td>Environmental &amp; Social Management Costs, &amp; mitigation measures</td>
<td>Lump sum</td>
<td>-</td>
<td>-</td>
<td>5,000,000</td>
</tr>
<tr>
<td>4</td>
<td>Cost for Property Valuation committees</td>
<td>Month</td>
<td>6</td>
<td>157,500</td>
<td>945,000</td>
</tr>
<tr>
<td>5</td>
<td>Cost for Resettlement / implementation committees</td>
<td>Month</td>
<td>36</td>
<td>63,368</td>
<td>2,281,000</td>
</tr>
<tr>
<td>6</td>
<td>PIU Capacity building support</td>
<td>Month</td>
<td>36</td>
<td>83,333</td>
<td>3,000,000</td>
</tr>
<tr>
<td>7</td>
<td>Administrative support costs for PIU</td>
<td>Month</td>
<td>36</td>
<td>125,000</td>
<td>4,500,000</td>
</tr>
<tr>
<td></td>
<td><strong>Sub Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>17,726,000</strong></td>
</tr>
</tbody>
</table>

**D. Total Budget**

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Total (A+B+C)</td>
<td></td>
<td></td>
<td></td>
<td>215,993,088</td>
</tr>
<tr>
<td>2</td>
<td>Contingency 10%</td>
<td></td>
<td></td>
<td></td>
<td>21,599,309</td>
</tr>
<tr>
<td></td>
<td>Grand Total</td>
<td></td>
<td></td>
<td></td>
<td><strong>237,592,397</strong></td>
</tr>
</tbody>
</table>

**17.3 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 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.
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18 MONITORING AND EVALUATION

18.1 INTERNAL MONITORING

18.2 EXTERNAL MONITORING AND EVALUATION
18 MONITORING AND EVALUATION

Monitoring and Evaluation is an integral part of this RAP and will oversee re-establishing process of the Project Affected Person (PAP). It will be a compliance monitoring and this will assist to follow the type of measures incorporated in RAP documents, and the extent to which on these matters, as set out in the RAP, 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 RAP 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

RAP reports indicate the arrangements for monitoring of resettlement activities by the PIU, supplemented by independent monitors as considered appropriate by the donors, specifically by the African Development Bank 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 RAP 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 RAP in consultation with EEPCO’s Environmental and Social Management unit and the implementing committees established at each woreda level.

Performance Monitoring: 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.
**Impact Evaluation**: 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 indicators (quantitative and qualitative) that will be used to conduct evaluate the RAP activities will include:

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  
i) 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)  
l) 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.
18.1 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.

18.2 External Monitoring and Evaluation

The external monitoring and evaluation will be done in a predictable manner and period. The Federal EPA and the Regional EPAs will be responsible for the external monitoring of the RAP. Both the Federal and Regional EPA’s have significant role in the external monitoring and evaluation of the RAP.

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.
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19 CONCLUSION & RECOMMENDATION .................................................................19-1
19 CONCLUSION & RECOMMENDATION

The Ethio-kenya interconnection project will provide reliable power supply to Kenya by taking power from Ethiopia. Both the Government 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 Alternate Current (HVAC) having 500 kV double circuit line.

A review of the ESIA and RAP prepared in 2009 is now carried out for the preferred option A/C. During the review of the RAP, it was identified that there will be a total of 1165 PAPs having a family size of 5743 people to be affected all along the 433 km length of the transmission line in Ethiopia. This means that on average 2.69 PAPs per km will be affected.

In the project area, the largest number of concentration of PAPs is located between km 00-204. In this first section, there are a total of 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 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 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 RAP.

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 RAP.
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