

NILE EQUATORIAL LAKES SUBSIDIARY ACTION PROGRAM (NELSAP)

ENVIRONMENT AND SOCIAL IMPACT ASSESSMENT AND RESETTLEMENT ACTION PLAN OF 400 KV IRINGA – MBEYA TRANSMISSION LINE



Final RAP

Vol I

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LIST OF ABBREVIATIONS

CPR	Cultural Property Resources
DED	District Executive Director
DPLO	District Planning Officer
ESIA	Environmental and Social Impact Assessment
kV	Kilo Volt
LHS	Left Hand Side
MAFSC	Ministry of Agriculture, Food Security and Cooperatives
MKUKUTA	Mkakati wa Kukuza Uchumi na Kuondoa Umasikini Tanzania
MLHS	Ministry of Land and Human Settlement
NBI	Nile Basin Initiative
NELSAP	Nile Equatorial Lake Subsidiary Action Program
NHSDP	National Human Settlements Development Policy
OP	Operational Policy
OSHA	Occupational Safety and Health Authority
PAPs	Project Affected Persons
RAP	Resettlement Action Plan
RHS	Right Hand Side
ROW	Right of Way
STI	Sexually Transmitted Disease
Т	Tower
TANESCO	Tanzania Electric Supply Company
TL	Transmission Line
TRC	Technical Review Committee
TTCL	Tanzania Telecommunication Company
URT	United Republic of Tanzania
WB	The World Bank

EXECUTIVE SUMMARY

Project Description

The Government of Tanzania, through Tanzanian Electric Supply Company Limited (TANESCO) developed a power system master plan in 2008 which was updated in 2009 to guide the next 25 years of power system development in Tanzania. The master plan provided a detailed assessment of load demand projections, available options for meeting demand, and requirements for a new higher voltage backbone transmission system for the country. In 2009 TANESCO updated and finalized the master plan whereby the Generation and Transmission Projects for short to long term (2009 to 2033) were identified. As a result the Government of Tanzania, through the Nile Basin Initiative / Nile Equatorial Lakes Subsidiary Action Program (NBI/NELSAP), is currently carrying out a Feasibility Study, Conceptual Design and Preparation of Tender Documents as well as Environmental and Social Impact Assessment and Resettlement Action Plan for the Iringa to Mbeya, 292.2 km long transmission line. The proposed Iringa-Mbeya transmission line will link with a 400 kV Backbone Iringa to Shinyanga, which will facilitate the smooth power transfer to the northern part of the country and neighbouring countries such as Zambia in the south and Kenya and Uganda in the North. The proposed line passes through 54 villages and sub-villages across six districts.

Region	Districts	Villages		
	Iringa	Muwimbi, Ifunda, Ulete, Kibena, Isupilo, Ugwachanya, Ndolezi, Wenda, Tagamenda,	13	
		Ihemi, Majengo, Rungemba, Tanangozi,		
Iringa	Mufindi	Tambalangombe, Isalanavu, Ipilimo, Kitelewasi, Kiponda, Bumlayinga, Kisada,	10	
		Maduma, Kikombo, Majengo		
	Makete	Mfumbi, Ruaha	2	
	Mbarali	Igomelo, Soniyaga, Lugelele, Ihango, Isitu, Lyambogo, Iganjo, Manjenje, Matemela,	20	
		Itamboleo, Maduma, Mengele, Maendeleo, Mbuyuni, Itipingi, Uhamila, Isongwa,		
Mbeya		Mambi, Lunwa, Lusese		
•	Mbeya Rural	Iyawaya, Itewe, Isongwa, Luwango, Tembela, Ntangano	6	
	Mbeya Urban	Iganjo, Itanji, Ikhanga	3	
			54	

Objective and Scope of Resettlement Action Plan

An Environment and Social Impact Assessment (ESIA) was carried out on the four corridor alternatives at the Preliminary Stage. The aim of the ESIA was to assess the technical and economical viability as well as the environmental acceptability of the interconnection transmission line. The primary factors in the selection of the interconnection transmission line route were the avoidance of populated areas, environmentally sensitive areas as well as access and reliability. Also it helped to identify the final corridor alternative that witnessed least adverse impacts on the communities living along the route. Finally, Corridor No. 4 i.e. a 292 km long, 400 kV was selected by TANESCO as the most suitable option. In respect of impacts by the selected corridor, the ESIA listed the following adverse impacts: loss of land, and assets on land such as buildings, crops, trees and other community owned structures. In addition, during construction period as a result of activities such as: stubbing/excavation and erection of transmission towers and stringing of conductor wires, communities are likely to experience temporary disturbance to their routine activities, possibly in loss of income.

One of the main objectives of the Resettlement Action Plan (RAP) is to present appropriate mitigation measures that are commensurate to the extent of impact along with suitable implementation arrangements. The RAP has been prepared in compliance with the existing legal and regulatory framework of the Government of Tanzania and OP 4.12 on Involuntary Resettlement of the World Bank.

Approach and Methodology

The preparation of RAP included three key stages :

- i) Social impact assessment of the finalized option and preparation of RAP: This stage comprised of Surveys, direct observation, focus group discussions, key-informant interviews. Data from secondary sources were captured and analyzed to generate a macro-level socio-economic profile of Iringa-Mbeya region;
- ii) Survey stage: During this stage, the impact assessment instruments were finalized for undertaking the inventory of assets and control households, checklists for FGDs, and key points for discussions/interviews with relevant stakeholders e.g. district authorities and other relevant departments. For recording the affected assets and persons, the field survey teams followed the design survey team's markings on the ground at 350/500 meters interval. The stretch was marked with 'noticeable markers' to help the asset inventory team to follow the route of the centre-line of the proposed transmission line. The household survey teams followed these markers to accurately measure the plots, all the assets on the plot and record other details from the affected persons and other members of the affected households. For information dissemination and also for conducting consultations with PAPs and other stakeholders a two (2) member team of senior Consultation experts was assigned the tasks. This team met with village Chairpersons, leaders and held meetings with PAPs and communities inhabiting along the Project Corridor. They informed them of the project, its scope (wayleave), discussed impacts of the proposed Project and received their feedback. Village officials and key informants helped the team to identify the owners of affected plots and also helped to gather the PAPs whose assets would be affected;
- iii) *Report preparation stage:* This stage involved data entry, analysis of all field data, compilation of details from stakeholder meetings, and review of other literature for preparation of the RAP.

Demographic and Socio-economic Survey Findings

The findings from the socio-economic survey of households suggest that the literacy level is high among the surveyed communities; however, the educational attainment level is low. Only 13.6% were found to be illiterate. More than two-third of the surveyed persons have attained only primary education. Farming or cultivation was reported as the main or primary occupation by 84% of households. On the health front, multiple ailments such as HIV/Aids, Malaria, Tuberculosis, Yellow fever, Cholera and Others (fever, etc.) were reported as ailments faced by the PAPs in the last five years. Cholera was reported by 33%, followed by HIV (20.2%) and malaria (16.07%), among others. The survey results brought to the fore that the affected households have low level of income as 31.5% earn less than TSH 60,000 and another 38 % manage between 60,000 to 100,000 per month. Asset ownership among households was also recorded and the findings suggest that a large number of PAPs bicycle (39.5%) only 4.7 % own motorbike. 44.0 % have a radio.

Stakeholder Consultations

Consultations and FGDs were held with a range of stakeholders that included officials from district authorities of all six districts, communities living in the project impacted villages and sub-villages and women groups. Key concerns expressed by the officials included the following:

- i) Direct benefits to people were not very obvious with a transmission line project, but it was mentioned that when people get electricity they can engage themselves in different activities;
- ii) Electricity can facilitate environmental conservation as it shall reduce cutting of trees;
- iii) The project work must commence on the time; and
- iv) Compensation should be provided to each of the PAPs losing assets due to this Project by TANESCO.

The Project impacted communities across all the villages expressed support for this Project, but also wanted their key concerns to be addressed i.e. i) appropriate compensation to enables PAPs to get alternative land for agriculture or livestock keeping; ii) proper valuation of assets and timely payment; iii) more employment for local village community; iv) provision of safety education by TANESCO to commencement of construction. Main suggestions emerging from these consultations indicated that the villages should be electrified and the electricity should first be supplied in their respective village before other areas; ii) TANESCO has to set some amount of money for environmental conservation; iii) compensation should be at the market rate. The communities expressed their keenness as project would

enable to electrify or improve reliability of power. Availability of reliable power supply will promote investments; bring development in the form of new industry leading to enhanced employment opportunity for the local community.

FGDs with women and youth groups enabled participants to express their opinions and also make useful suggestions for consideration by TANESCO to mitigate the adverse impacts. Concerns expressed by females included: i) Loss of land means less food production; ii) likely increase in diseases like HIV; iii) compensation amount may not help to purchase of new lands as sometimes lands are very expensive; iv) require greater role in decision, particularly as village leaders were weak; v) provision of health education on HIV, etc. to community members and to ensure availability of condoms in shops/dispensary. Main suggestions included: i) transmission line should avoid passing close to the residential areas; ii) If possible, the compensation should be given i-kind rather than cash compensation; iii) project should consider employment for women without any discrimination. The concerns and suggestions from the consulted Youth groups included): i) loss of land shall affected income and family conflict likely to increase due to misuse of money and/or unequal distribution; ii) timely information should be provided to avoid confusion; iii) provision of six months grace period for those whose land is taken so that harvest can be completed and new land can be bought. Benefits perceived by these groups included: i) part-time jobs like driving heavy machines, digging holes for the poles during construction other operational activities during construction; ii) conducting some business like selling food, clothes and other consumables like drinks;; only area to be taken as per survey and other lands should not be disturbed.

Project Impacts

The findings of the survey on the positive and adverse impacts are presented below:

Positive Impacts: The surveyed communities expressed their hopes that there would be improved power supply in the region as well as in the rural areas. Further, during construction phases there would be short and long term opportunities and benefits such as unskilled and semi-skilled labor; and contractual opportunities in the provision of services such as hiring of vehicles, canteen services, watchmen, cleaners, etc.

Adverse impacts: Asset inventory survey helped to determine the quantum of adverse impacts. These are summarized below:

Impact on land due to the project	total 2448800)00 sq.mtrs o	r 6149.3 acre	S					
Impacted land by type in	Private Land				3815.0				
acres	Governmen	t land						268.7	
	Village land							1620.7	
	Game reserve				444.9				
No. of PAHs/PAPs	PAHs – 1015	and PAPs -	5188						
No. of trees or fruit crops	Bamboo	Banana	Orange	Guava	Avacado	Peaches	Mango	Total	
affected	3,852	799	620	250	91	33	1,117	6,762	
No. of residential and related structures impacted	21 structures across 11 villages; total area of 878.81 sq.mtrs of structures All the structures have thatched roof, bamboo walls/non-plastered bricks and mud floors.								
No. of affected Graves	16								
Common property affected	1 water storage tank with gates and semi-constructed cement walls at Nsoniyaga village								

Entitlements and Mitigation Measures

Entitlements shall be as per the legal framework of Tanzania and also as per the World Bank OP 4.12. Some of the key principles regarding compensation shall be as follows: i) Compensation will be paid for the building and crops which have been cultivated before the land is taken, by private company, organization, government, village i.e. compensation shall be paid prior to taking over of land; and ii) the amount of compensation will reflect the market price. Entitlements by type of losses are presented below:

Type of loss	Unit of Entitlement	Entitlement
Loss of land	PAP (Owners of land within way	 Compensation for land at market value Disturbance allowance at 5% of estimated land value
Loss of residential and other types of buildings	leave) - Owner	 Support measures for income restoration Compensation at replacement cost Accommodation allowance equivalent to 36 months rent for the displaced house. Transport allowance at cost to move 12 tons for 20 km. This is only relevant for those moving to sites outside their original plots (allowance not applicable for relocation of structures backward within the same plot). Project assistance with organizing and supervising construction of replacement houses and buildings if requested.
Loss of non- residential buildings Loss of standing crops and trees	-	 Compensation at replacement cost Disturbance allowance at 5% of estimated land value For standing crops at capitalized average annual value/ standard applicable rates as per districts depending on crop maturity
Loss of bare undeveloped land e.g. village land	Village/sub-village	 Compensation for land at market value Disturbance allowances at 5% of estimated land value may be considered.
Loss of graveyards on private land	PAP (Owners of land within way leave) Owner	 village councils shall allocate replacement burial plots. Cost of relocation of graveyards including cost of structure and ceremonies (average estimated to be around Tsh 100,000)
Loss of graveyards on village land	Village/sub-village	
Loss of common property such as wells,	Village/sub-village	Compensation by replacement of common property resource and if required improvements
Loss of buildings	Institutions/non individuals-	 Compensation at replacement cost Disturbance allowance at 5% of estimated land value
Loss due to unforeseen circumstances such as movement of machinery, construction resulting in damage to plot or crops, trees, structures etc.	PAPs or Non- PAPs (owners losing land or facing damage to crops due to construction)	 To be treated in the same principle as above Any loss of or damage to crop, trees, structures on unaffected parcel of the PAP or adjacent plot holders (Non-PAH), due to dust emanating from construction shall be reported to the Grievance committee – village land council and/or to other higher levels. that is operational. The Grievance Committee shall investigate the matter and make commensurate payment as per applicable rates for the damaged crop to the affected person, if the loss is assessed to be genuine.

Further,

- > Payment for compensation of land building and crops will be done through district offices
- Compensation will be made for the time within six months from the time valuation process is completed and its approval by Regional Commissioner
- If the compensation is not be paid, in that period of time, then the interest of 5% or equal to the interest paid by bank in the fixed accounts
- The contractor shall give preference to local labor, particularly to able-bodied persons including females from vulnerable households. Also during operation phase when employment opportunity exist for a few semi-skilled people such as watchmen and cleaners;

Income and Livelihood Restoration

The project shall compensate for lost assets besides payment of allowances as appropriate. Even though there shall be short-term temporary work opportunities arising during the construction phase of the project, there is a need for long-term income restoration measures too, particularly for those losing the productive assets. Successful income restoration will improve their livelihoods and the strategy shall include; i) avoiding the change in occupation and ii) if unavoidable, developing a land based/related occupation so that there change is less significant and resultant risk is better managed. Income restoration and livelihoods provisions have two dimensions and these are: i) judicious use of compensation and allowances amount received by PAP and ii) usage of balance landholdings (if available) or changing to a new

occupation related or unrelated to farming (if there is no balance landholding) by adopting some income and livelihood restoration package such as livestock development, Agroforestry/beekeeping i.e. commercial beeswax honey production and afforestation programs. Prior to selection of packages, an assessment of skills should be carried out. The educational level, existing and required skills besides aptitude and inclination need to be assessed to identify suitable income generation activities. TANESCO with support from Region and district administrations should implement these income restoration programs. They should in consultation and agreement with the district administration implement these programs. Cooperation of the district administration would be very essential to get the required support for accessing credit, dovetailing with existing government programs, getting land based income restoration strategy effectively implemented. Existing government programs can be dovetailed with or new land based programs can be developed. TANESCO shall contract an agency with solid experience and knowledge of developing and implementing income restoration programs.

Gender Mainstreaming

In a linear project such as the transmission line, there are definite, albeit limited opportunities for participation. Hence, the following actions should be taken mainstream gender aspects in the overall project: i) raise awareness levels of all relevant stakeholders through meetings, disclosure events in the region; ii) ensure their participation is sought during implementation and monitoring by including them during the valuation process, during meetings, redressal of grievances; iii) include gender issues into all relevant scope of work and contracts in RAP implementation; iv) actively include women in the consultation process; v) provide compensation amounts to households in a joint account with names of husband and wife; vi) ensure that women to have proportional representation to the grievance committees at every level, vii) monitor progress and evaluate outcomes using gender indicators; and viii) give preference in provision of work opportunities to able-bodied females by the Construction Contractor.

Implementing Institutions

Nile Basin Initiative (NBI) and TANESCO have been vested with the overall responsibility for coordination, planning and implementation of the project. The implementation of the RAP shall be responsibility of TANESCO. TANESCO shall form a PIU to implement the RAP and also other activities listed in the EMP. The PIU shall: i) disseminate and provide information on the design, environment and resettlement action plans of the project; ii) be focal points for project implementation; iii) liaise with district administrations and with village communities regarding preparation of valuation document; iv) provide trainings, disseminate information relating to accidents, safety measures and also HIV/Aids; and v) prepare internal monitoring reports for TANESCO management and NBI/NELSAP. The PIU shall be supported by other agencies/departments such as District Administrations (in valuation and land acquisition exercise); Media Centre of TANESCO for information dissemination and NGOs for Income restoration and HIV/Aids awareness.

Disclosure and Communication Strategy

Timely and accurate information dissemination requires a set of proactive measures be taken to instill confidence amongst PAPs. The objectives of the communication strategy shall be: i) to create a common understanding of the current project; ii) to address and alleviate the impacts caused by taking of land; iii) to create awareness, empower and build capacity; iv) to sensitize the staff involved, as well as other relevant officials of the need to regularize interactions with village communities and thereby allay apprehensions and correct misconceptions, if any; v) to orient the vulnerable groups and women to participate in the meetings conducted and to support them. In order to achieve the objective, the following action plan is proposed: i) use of *Barazas* (customary but informal avenues) for holding of meetings; ii) installation of Notice boards at key locations in the affected villages as they represent information that is definite and also permanently available to PAPs; iii) provision of separate space at TANESCO's Head and Regional Offices for disclosure of project documents; iv) designate one persons as Public Information Officer (PIO) who shall be responsible to provide information on the project. In addition, the Media Centre of TANESCO shall prepare appropriate publicity material for usage by Regional TANESCO offices, District administration for

dissemination amongst affected villages that lie en-route, in order to help educate the communities regarding likely accidents and safety measures.

Monitoring and Evaluation

Key Monitoring indicators shall be on the following parameters: a) Physical, b) Financial (compensation/establishment); c) Resettlement and rehabilitation; d) Social (Education and Health); e) Processes; f) Institutional. External M&E shall be carried out on a quarterly basis, beginning Quarter 1 and an evaluation exercise shall be carried out after completion of RAP implementation to ascertain whether the RAP objectives have been achieved and evaluate the outcomes.

Implementation Schedule

RAP implementation shall be for a period of one (1) year. Key activities in the implementation schedule shall include: *Public disclosure-cum-Launch Workshop of* final RAP; *Setting up or operationalize of Grievance Committees at village, ward and district level; Determination of number of* PAHs by phase of construction shall be undertaken by TANESCO in accordance, process applicable entitlements for the affected households for every year; *Opening of Bank accounts for PAPs preferably joint accounts; Training Programmes for* grievance committees on compensation payments, non-acceptance of squatters and/or encroachments (structures, crops, trees, CPRs) within the wayleave etc.; *Preparation of PAP database to help monitor and evaluate RAP implementation; carry out Village level meetings; Notification of entitlements; Payment of compensation and handing over of the property such as land, structures and compensation will be made in the presence of the affected party and the village compensation committee.*

No construction would commence until compensation of these items and payment of other allowances, as applicable has been made. For income restoration and HIV/AIDS, the implementing agency shall contract an experienced agency to provide support on implementation of income restoration measures and also to spread awareness on HIV/AIDS and other STIs. *Provision of temporary work with contractor and other services:* Contractor shall be required to give preference to all 'able-bodied' men and women for local labor and other associated services, in particular from vulnerable households.

Monitoring

TANESCO will commence internal monitoring of RAP implementation soon after the RAP is approved and implementation activities commence. Monthly reports need to be prepared containing the progress on all activities based on information obtained from i) District Administration, TANESCO's Regional offices and ii) from the Contractor's progress reports. The eexternal monitoring shall be carried out to assess the progress and evaluate process followed with respect to RAP, beginning Quarter 1 (in Month 4). The final evaluation shall be carried out a couple of months after completion of all activities listed under the RAP implementation.

Grievance Redressal

Disputes or grievances may arise as a result of resettlement-related/land compensation issues, such as error in the identification and/or measurement of affected property and people within the wayleave; disagreement around the ownership of property/assets (such as inheritance related disputes); disputes arising over improvements to structures post valuation but prior to compensation payments; disagreement on property valuation with respect to market price; and problems relating to the time and manner of compensation payment. A grievance redressal mechanism, independent of the implementing agencies is therefore essential to allow affected individuals to voice concerns and seek redressal before approaching the judicial system. Civil Procedure Code, 1966 (referred in Land Acquisition Act, 1967) and Land Disputes Act 2002 provide the basis for redressal of grievances Hence the tiers would include village land council – first level, a Ward level Committee with Ward Executive Officer as the chairperson – second level and District level RAP committee – third level. Finally the grievances shall be heard and redressed at the High Court, or else at Court of Appeal of Tanzania.

Budget Estimates

Items considered for estimation of budget include the following: a) Compensation for private and village land; Structures; fruit crops; graveyards requiring relocation; common property such as 'Lambo'; b) Allowances (Disturbance at 5%, Accommodation (36 months), Transportation); c) Cost of Valuation by Government valuer; d) cost of hiring agency for External M&E agency; e) cost of contracting a NGO for HIV/Aids and Income Restoration; f) Cost of Publicity material; g) Cost of Disclosure Workshops (2 – one each in Iringa and Mbeya); h) Cost of Training for District Committees; i) Cost of preventive measures (condom distribution); j) Field Administration (2%); and k) contingency amount to meet unforeseen expenditure (5%). The total budget for RAP implementation is estimated to be **Tshs 3,683,308,278**.

1.1 Overview

The Government of Tanzania, through Tanzanian Electric Supply Company Limited (TANESCO) developed a power system master plan in 2008 which was updated in 2009 to guide the next 25 years of power system development in Tanzania. The master plan provided a detailed assessment of load demand projections, available options for meeting demand, and requirements for a new higher voltage backbone transmission system for the country. In 2009 TANESCO updated and finalized the master plan whereby the Generation and Transmission Projects for short to long term (2009 to 2033) were identified. As a result the Government of Tanzania, through the Nile Basin Initiative / Nile Equatorial Lakes Subsidiary Action Program (NBI/NELSAP), is currently carrying out a Feasibility Study, Conceptual Design and Preparation of Tender Documents as well as Environmental and Social Impact Assessment and Resettlement Action Plan for the Iringa to Mbeya, 292.2 km long transmission line. The proposed Iringa-Mbeya transmission line will link with a 400 kV Backbone Iringa to Shinyanga, which will facilitate the smooth power transfer to the northern part of the country and neighbouring countries such as Zambia in the south and Kenya and Uganda in the North.

According to the Design of the transmission line prepared by the Design Consultant, the proposed transmission line shall commence from Tagamenda substation in Iringa Region and terminate at the proposed substation at Uyole (Igangjo village) in Mbeya. It shall have 730 towers with a span of 400 meters across the 292 km stretch. It shall traverse through 54 villages in six districts that lie en-route, namely Iringa, Makete, and Mufindi districts in Iringa region, and Mbeya rural, Mbarali and Mbeya urban districts in Mbeya region (See **Table 1.1** for details).

Region	Districts	Names of villages along Proposed Transmission Corridor	Number
	Iringa	Muwimbi, Ifunda, Ulete, Kibena, Isupilo, Ugwachanya, Ndolezi, Wenda,	13
		Tagamenda, Ihemi, Majengo, Rungemba, Tanangozi,	
Iringa	Mufindi	Tambalangombe, Isalanavu, Ipilimo, Kitelewasi, Kiponda, Bumlayinga, Kisada,	10
-		Maduma, Kikombo, Majengo	
	Makete	Mfumbi, Ruaha	2
	Mbarali	Igomelo, Soniyaga, Lugelele, Ihango, Isitu, Lyambogo, Iganjo, Manjenje,	20
		Matemela, Itamboleo, Maduma, Mengele, Maendeleo, Mbuyuni, Itipingi, Uhamila,	
Mbeya		Isongwa, Mambi, Lunwa, Lusese	
	Mbeya Rural	Iyawaya, Itewe, Isongwa, Luwango, Tembela, Ntangano	6
	Mbeya urban	Iganjo, Itanji, Ikhanga	3
		TOTAL	54

1.2 Objectives and Scope of the ESIA and RAP

The objective of the ESIA study on the four (4) corridor alternatives was to identify probable Environmental and Social impacts likely due to the project. It aimed to determine measures to, avoid or minimize, mitigate adverse social and environment impacts. Based on resultant assessment, the most feasible option with respect to technical considerations and minimum impacts on assets was chosen. Based on the final transmission line route of the selected route as provided by the Design Consultant, the ESIA and RAP Consultant prepared the RAP based on the fact the 400 kV transmission line shall require a "90 meters wide corridor". Wherever, the proposed line will run 'closely' along the existing 220 kV line, 400 kV line will use the existing wayleave and thereby minimize the land take. Hence the requirement for additional land

will be 70 meters in those stretches. The main objective of the RAP is to present the adverse impacts due to the proposed Project and propose a set of mitigation measures that are commensurate to the extent of impacts. Further, it aims to ensure the following:

- Where it is not feasible to avoid resettlement, resettlement activities are conceived and executed as sustainable development programmes, providing sufficient mitigation measures.
- Affected people are 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.
- Affected people are meaningfully consulted and have opportunities to participate in planning and implementing resettlement programmes.

The RAP carries forward the findings of the ESIA study. Besides listing the non-tangible impacts, it quantifies the tangible impacts and enlists the affected persons/households along with their impacted properties. The scope of the RAP includes:

- > extent of impacts, based upon the census/survey of population affected by the project;
- > assessment of the potential socio-economic impacts;
- review criteria to determine eligibility and other entitlements or forms of assistance for the selected option;
- valuation based on entitlements applicable and determination of an appropriate compensation package providing the full compensation budget;
- determination of other measures necessary to assist affected people to improve or restore living standards in line with the ESMP;
- review existing grievance mechanisms to help formulate clear procedures for settlement of disputes including taking into account traditional dispute settlement mechanisms and judicial recourse;
- review existing and recommend on potential institutional arrangements for coordination and implementation of the RAP including the costs of implementation;
- design a monitoring and evaluation (M&E) framework to enable assessment of achievement/progress of RAP implementation based on indicators; and
- > present a detailed schedule of implementation activities.

1.3 Constraints to the study

Major constraint observed during the household survey of the households was that, on occasions, despite prior intimation, some PAPs and/or a few village Chairpersons were unavailable for identification of plots or household level enumeration, resulting in delays.

The preparation of RAP comprised three key stages -i) Social impact assessment of the four corridor alternatives and preparation of a Preliminary RAP; ii) Household survey and consultations with various stakeholders; and iii) preparation of RAP report. These stages are described below:

2.1 Stage I – SIA and Preliminary RAP preparation

The SIA was carried out as part of the overall ESIA. Field surveys for ESIA were carried between February and March 2012 following a reconnaissance survey (December 2011 - January 2012). The methodology comprised data from primary and secondary sources. Primary data collection based on a questionnaire developed for the purpose, and supplemented by a template for rapid impact assessment. Socio-economic data was collected through primary survey of communities supplemented by FGDs, key-informant interviews. FGDs with small groups were carried out to elicit project related expectations of the communities. Discussions were also held with the key informants like village Chief, enabled to generate information on cultural habits, heritage sites, etc. Data from secondary sources such as government publications helped to generate a macro-level socio-economic Questionnaire, checklists for Focus Group Discussions (FGDs); and key points for discussions/interviews with relevant stakeholders – district authorities and other relevant departments, were developed for use in the next stage. The Questionnaires and Checklist for FGDs are presented in the **Appendix G**.

2.2 Stage II – Household level Survey and Consultations

This stage commenced with: i) obtaining the draft feasibility report prepared by AECOM/SOGREAH from TANESCO for details of the final route; and ii) incorporation of all comments on the ESIA report towards RAP preparation. Further, to enable identification of villages (and sub-villages) the finalized transmission route alignment was superimposed over Google earth maps. Messrs. TANESCO provided an "Introductory Letter" stating the purpose of the survey and to solicit cooperation for survey and consultations from all relevant stakeholders. Prior to start of survey, the letter was submitted to all District Authorities in Iringa and Mbeya Regions (See Vol. II, Appendix H for copy of letter).

A two member team of senior Consultation experts met with village Chairpersons, leaders and held meetings with communities. They appraised the communities of the project, its scope (wayleave corridor of 90/70 meters), features, its importance with respect to power supply in the region and also made aware of the benefits and losses. Further they attempted to elicit their concerns, anxieties with respect to the project, the power supply situation in their areas, and finally solicit their cooperation and support and household enumeration teams that would follow.

The design survey team – **Messrs. AECOM/SOGREAH** commenced the route survey by establishing control points at the starting point i.e. at Tagamenda substation (0+000 km) and other locations, where required, by using a hand-held GPS. They subsequently made chainage markings at 350/500 meters interval. These marks were made permanent by inserting a solid iron rod into the ground and cementing it, while the 350/500 meter stretch was made identifiable with installing 'noticeable markers (multi-colored ribbons) to indicate the centre-line of the proposed transmission line. The design survey team was followed by household enumerators' team that comprised of four (4) groups of survey investigators and coordinators. These survey investigators were provided with rigorous training on the questionnaires prior to their deployment in the field. Once these design survey team marked the centre-line of the ground, the enumeration teams contacted the village members (Chairperson, leader, etc.) and notified them of the survey. These village officials helped the team to identify and gather the owners of affected plots and

describe the type of use of each plot. The household survey teams accurately measured the plot of land, and other assets on plot, with the help of measurement devices such as an Odometer supplemented by measuring tapes. On most occasions the plot owners too came along to help identify the plots and its boundaries. They diligently recorded the affected plot measurements on site and other details from the affected persons i.e. plot owners, if available or other senior members in the household.





Photo 2.1 – Chainage markings en-route (L) and Data collection in progress at Rungemba village (R)

Source: SMEC survey, 2012

The field supervisors checked the filed questionnaire at the end of every day for any errors/omissions, in order to carry out corrections, prior to data entry.

2.3 Stage III – Analysis and Reports

The data collected through questionnaires was systematically entered into SPSS (Version 16) program, validated, processed and analyzed. All information and details gathered through structured interviews, consultations, FGDs was recorded appropriately. Where required, these observations were supplemented by desk research. All the data and information were collated to prepare a structured RAP.

2.4 Structure of the RAP

The structure of the RAP is given in Table 2.1 below:

	Table 2.1 – Structure of the RAP					
Chapters	Chapters Title of Chapter Brief Description of Contents					
1	Project Description	Overview, Brief profile of TANESCO, Project description i.e. location, objectives and scope of RAP,				
2	Approach and Methodology	Stage-wise description of methodology adopted to prepare the RAP				
3	Profile of Project Area and Impacted Population	Profiles of the Regions (Iringa and Mbeya) and district profiles of the six districts (Iringa, Makete, Mufindi, Mbeya rural, Mbarali, Mbeya urban) w.r.t. to ethnicity, gender and minority vulnerable groups, land area and uses, rights and tenure system, forests, economic profile, agriculture, livestock industry, forestry, fishing, hunting, trading and wage and self-employment, income and expenditure Socio-economic details of the affected households				
4	Community Consultations	Details on consultations with different stakeholders – district officials, communities, women and youth groups				
5	Assessment of Project Impacts	Analysis of Alternative for routes of transmission Corridor from the ESIA study. Assessment of adverse/ positive Impacts on persons/land/private properties/common property resource; cropping pattern/standing crops, other assets such as graveyards, etc.				
6	Policy, Legal and Regulatory	Applicability and relevance of acts, policies and guidelines of Government of				

	Table 2.1 – Structure of the RAP					
Chapters	Title of Chapter	Brief Description of Contents				
	Framework	Tanzania; Comparison of the WB policy Vs. Tanzania framework;				
7	Mitigation measures and	Details on proposed implementing institutions by TANESCO; mechanisms for				
	Processes	implementation				
8	Income restoration	Income and livelihood restoration strategy, potential in the region/districts and				
		implementation				
9	Gender Mainstreaming	Suggested measures and actions to mainstream gender concerns in project				
		implementation				
10	Institutional Framework	TANESCO's implementation framework; responsibility of implementation				
		agency by activity				
11	Budget Estimates	Rates for estimation of compensation, compensation amounts and estimates				
		for implementation of other activities listed in the RAP				
12	Implementation Schedule	Schedule of activities for implementation of RAP				
13	Participation and Consultation	Participation and Consultative process to be followed by agencies during				
	Strategy	implementation				
14	Monitoring and Evaluation	Mechanisms for M&E in RAP implementation and indicators				
15	Grievance Redressal	Administrative and judicial options for redressal of grievances				

Other relevant information such as route alignment maps, list of stakeholders met, questionnaires formats, are presented in **Volume II, Appendices.**

3.1 **Profile of the Project Regions and Districts**

The proposed transmission line shall pass through two project regions – Iringa and Mbeya and the six districts Iringa, Makete, Mufindi, Mbeya rural, Mbarali and Mbeya city. The sections below present a brief profile of the two regions and the six districts.

3.2 Profile of Iringa and Mbeya Regions

Iringa is one of Tanzania's 26 administrative regions, with it headquarter in Iringa City. The total area is 58,936 square kilometers (22,755 sq mi), of which land area is 56,864 km sq (21,955 mi sq) and water area is 2,070 km² (800 mi sq). The Iringa region has a population of 1,495,333, according to a 2002 census. [1]. Iringa Region is home to Ruaha National Park, Tanzania's second largest park, which has an abundance of wildlife. The region is divided into seven districts: Iringa Rural and Iringa Urban, Kilolo, Ludewa (8,397 square kilometers), Makete (4,128 square kilometers), Mufindi (7,123 square kilometers), and Njombe (10,242 square kilometers).

Mbeya is one of Tanzania's 26 administrative regions, with its headquarter in Mbeya City. It is bordered to the northwest by Tabora Region, to the northeast by Singida Region, to the East by Iringa Region, to the South by Zambia and Malawi and to the West by Rukwa Region. Mbeya Region is occupied by several different ethnic groups including the Nyakyusa, Ndali, Nyiha, Nyamwanga, Safwa, Malila, Vwanji (or Wanji), Bungu, Sangu, Wanda and Sichela. According to the 2002 Tanzania National Census, the population of the Mbeya Region was 2,070,046 persons. The Mbeya Region is administratively divided into 8 districts: Chunya, Mbarali, Mbozi, Rungwe, Kyela (which includes the Ikama administrative ward), Ileje, Mbeya Urban and Mbeya Rural.

	Table 3.1 – Population Characteristics in Districts along the Transmission line/corridor						
Region	District	Male	Female	Total	Number of	Average	Population
					households	Household size	Projections (2012)
Iringa	Iringa	119,082	125,951	245,033	56,682	4.3	274,000
	Mufindi	133,150	148,921	282,071	66,058	4.2	310,000
	Makete	48,377	57,398	105,775	27,762	3.8	107,000
Mbeya	Mbeya rural	118,597	135,472	254,069	-	-	-
	Mbarali	114,738	119,363	234,101	64,986	-	309,945
	Mbeya City	126,679	139,743	266,422	-	-	414,198
	Source: The 2002 Population and Housing Census, Government of Tanzania.						

Demographic Profile: Projected (2012) population data for districts along the transmission corridor are illustrated in **Table 3.1** below.

The rate of population growth varies from one locality to another in all villages along the corridor. Semi-Urban centers tend to grow faster in total population and population density compared to rural localities. In Iringa region, Mufindi is the leading district in terms of density growth from 19 people per sq. km. in 1967 to 50 people per sq. km. in 2012 (Iringa Regional Socio Economic Profile, 2007). This is followed by Njombe and then Iringa district. High population density and growth in Mufindi district could be attributed to immigration in villages around Tea estates and others search of jobs i.e. Unilever Tea Company. Forestry activities in both Iringa District and Mufindi also attract many people. In general good soils, reliable rainfall and income generating activities like forestry in Iringa district and flower production in Njombe, has led to greater population pressure on land as farmers tend to settle permanently in these areas for subsistence and cash crop farming. Mbarali District also attracts many groups for rice production activities. The population density in Mbeya District is 105 people per sq.km, which is considerably greater than the National average of 39 and the average for Mbeya region 34 per square km respectively according the 2002 census. The availability of good infrastructure, labor supply, land, reliable water, reliable electricity, the construction of airport and good governance, has created favorable environment for promoted agricultural production as well as initiation of different investments in the district.

Ethnicity: The dominant ethnic group along the transmission line/corridor in Iringa Region is the Hehe mostly found in Iringa district, Iringa Urban and Mufindi districts. The Bena are most numerous in Njombe while Kinga are in Makete. Some records showed that the Hehe accounted for 43 per cent of all ethnic groups in Iringa region followed by the Bena with 37 per cent. The Kinga and the Pangwa make up 11 per cent and 3 per cent respectively. Another 6 per cent is made up of many small groups including Kisi, Manda and other tribal groups who come into the project area searching for green pastures in tea and timber industries as well as employment in government sectors.

The main Ethnic groups found in Mbeya Region are the Nyakyusa, Safwa and Malila in Mbeya District. Mbarali district is occupied by the Sangu, Hehe, Kinga, Bena and Nyakyusa while Mbeya City is occupied by all the above tribes as well as the Wanji, Ndali, Nyika, Sukuma. Others mainly residing in Mbeya District and Mbarali districts include the Maasai, Sukuma, Barbeig and Gogo who are specifically identified as nomadic and predominantly agro-pastoralists.

Gender and Minority Vulnerable Groups: The project will affect men and women, ethnic groups and social classes unequally. Groups that use land to make their living or fulfill their household duties, e.g. for charcoal making, grazing, collecting fuel wood, growing vegetables etc may experience limited impacts on these activities. Historically, it has been men from the more settled and powerful groups that have had greatest access to the benefits and increased income from productive areas. Men controlled the means and instruments of production except for hand hoes and small domestic animals (chicken, ducks and rabbits). At present, at least women from all classes including resource-weak households and womenheaded households are benefitting through equal participation with men in production activities. However, in rural households, women are still responsible for food crop production and weeding the fields, while men harvest and market these crops. This implies that income from agriculture is mainly controlled by men. Gender imbalances are rooted and sustained by traditional and cultural values. With regards to food processing and technology operations of crops, both genders are deployed. Women participation in decision making has been enhanced as both men and women can now compete for chairmanships in village governments. Minority groups or tribal minorities and vulnerable groups in this case are pastoralists who are usually regarded as having no land rights and therefore excluded from decision making on project issues.

Land Area and Land Uses: In general, medium and high elevation area land use includes: open to closed grassland, open to very open trees, rain fed herbaceous crops (large to medium continuous fields), rain fed shrub crops, tree crops, irrigated crops, forest plantations, sparse vegetation, tree and shrubs savannah. Land use found in both low, medium and high altitude areas include: swamps and urban areas. Land use in low altitude areas include: aquatic agriculture, aquatic areas (fresh water, permanent and temporarily flooded), and open grasslands with sparse trees and shrubs. The table below shows the land area and uses in the project area.

In all districts, total land area is divided into arable land ideal for agricultural production, forests, water bodies as well as flat land and grasslands. In most cases land in villages belong to individuals and villages. Due to population pressure, many district councils do not own land to offer to investors, but investors can buy land from individual people or village governments for the purpose of establishing investment ventures such as processing industries, storage, grading, packaging, cultivation of cash crops and handling facilities.

		Table 3.2 –	Land area (in ha) by	land use by	district		
Region	District	Total land area	Arable land	Forests	Water bodies, flat land, grasslands		
Iringa	Iringa	19,897,500	480,000	114,000	678,500		
	Mufindi	6,177,000	300,000	80,000	946,000		
	Makete	3,178,000	110,000	56,315	950,000		
Mbeya	Mbeya	2,432	189,818ha	47,354	6,028		
	Mbarali	1,600,000	196,000	17, 200	259,000		
	Mbeya City	21,400	8980	-	-		
	Source: Iringa Region Social Economic Profile 2007; Mufindi and Mbarali Social Economic Profiles, 2010 and 2009; Mbeya City and						
Mbeya Di	strict Profiles 20	011, Government of Tanza	nia publication.				

Land Rights and Tenure System: Some villages along the transmission corridor are surveyed. In all villages land is in owned by individuals, villages, or institutions like schools and churches. Mosques are found along the villages adjacent to the main road to Mbeya and in suburban areas. Land is mainly inherited through a customary land tenure system and is sometimes associated with a particular family (genealogy). In some cases land can be borrowed or given. There is no land scarcity in the area.

However, a number of statutes deal with land tenure in Tanzania. The Land Act classifies land into general land which is land governed by the Land Act, 1999; reserved lands, which are lands designated for various purposes and governed by different Acts; and village land governed mainly by the Village Land Act, 1999. Compensation for the compulsory acquisition of land is also provided for by the Land Acquisition Act, 1967.

Forests: Iringa region has a forest cover totaling 2,473,570 hectares. The forest covers about 46 per cent of the region. This cover includes natural forested grasslands. Apart from natural forests the region also has possibly the most extensive area of tree plantations in Tanzania. The total area covered by forest plantation as of 2005 was 179,345 hectares. Forest reserves cover an area of about 483,647 hectares. These are owned by the central, local and village governments. However, encroachment and illegal harvesting are problems which threaten the sustainability of these areas. There are a number of NGOs and CBOs in Iringa region that participated directly or indirectly on environmental conservation through different approaches including promotion of tree planting, tree seedling nurseries establishment and environmental conservation. **Table 3.3** below indicates forest cover in the project area.

			- Forest cover (in ha) of Iringa and		
Region	District	Land area	Natural forest Reserved area	Forest Plantation area	Forest area on public
					land
Iringa	Iringa	1,989,750	140,429	5,671	114,000
	Mufindi	617,700	96,177	102,368	80,000
	Makete	317,800	49,424	10,219	56,315
Mbeya	Mbeya	243,200	-	-	47,354
-	Mbarali	178,600	38,400	-	-
	Mbeya	-	-	-	400,000
	City				(Seedlings planted)
Source: Ir	inga Region S	ocial Economic	Profile 2007; Mufindi and Mbarali So	cial Economic Profiles. 2010	and 2009: Mbeva City and

Economic Profile: It was observed that many villagers have low incomes as they produce very little for subsistence only and not for commercial purposes. In areas where income generating activities have been initiated there is substantial improvement. This opportunity for improvement is depicted in the **Table 3.4** below as arable land under crop production in the region is below 50%.

Agriculture: Agriculture is the leading sector in Tanzania's economy since it provides about 80 per cent of employment, 50 per cent of the nation's income and 66 per cent of all foreign exchange earnings (Medium Term Plan for Growth and Poverty Reduction 2004/05 – 2006/07 Vol. I). Agriculture is a significant source of food and supplementary income for households in all districts of Iringa and Mbeya regions. About 90 per

cent of the populations in both regions earn their living from agriculture and livestock production. The sector has ensured food security and managed to produce surpluses of maize, the major food crop grown in both regions. Endowed with fertile soils, good weather and sufficient rainfall, the areas are ideal for cultivation of both food and cash crops. Hand hoes is still traditionally used to prepare 85% of the cultivated land in rural areas. The use of tractors for land preparation is minimal due to the high costs of hiring a tractor. Tea, which is one of the major exports outside Iringa region, is the main cash crop, while wheat and maize are the main food crops. Cultivation of flowers and dairy farming are also undertaken, primarily in Njombe and Mufindi districts. Coffee is the major export from Mbeya, while Mbarali is known for its rice paddy production and Makete for its round potatoes. In all rural areas agriculture is practiced through small scale farming involving the cultivation of a few crops on small space available for each household. Other crops grown include pyrethrum, coffee, tobacco, sunflower, beams, millet sorghum, cabbage, sweet and Irish potato, pea's tomatoes, paddy, groundnuts, wheat and fruits.

	Tab	le 3.4 – Area under	Major Food and Cash Crops Cultiv	ation in hecta	res
Region	District	Total Land area	Total Land area Arable Land Suitable for		% of Arable Land Under
			Agricultural Production	utilized	Crop Production
Iringa	Iringa	1,989,750	480,000	161,488	33.6%
	Mufindi	617,700	300,000	112,781	37.6%
	Makete	317,800	110,000	41,611	38%
Mbeya	Mbarali	1,600,000	196,000	157,800	80.5%
	Mbeya City	21,400	8,980	8,887	99%
	Mbeya District	243,200	216,400	98,710	46%
			7; Mufindi and Mbarali Social Econon	nic Profiles, 201	0 and 2009; Mbeya City and
Mbeya Di	strict Profiles 2011,	Government of Tanzar	nia publication		

Livestock Industry Resources: Animal husbandry is practised by people in Towns, sub urban towns and villages. Cattle are kept in small numbers using both zero and extensive grazing methods. Although village governments have grazing land, some farmers practice zero grazing. However, in some areas there is a problem supplying/accessing drinking water for livestock during dry seasons. A major problem with crop farming and animal husbandry is the absence of qualified extension officers in all villages. Agricultural and livestock extension officers are normally posted at division and ward levels and go to villages when requested by individual farmers. See **Table 3.5**

Table 3	3.5 – Estimated Live	stock Population	Distribution by Typ	pe and by District	in Iringa and Mbe	ya Regions	
Region	District	Cattle	Goats	Sheep	Pigs	Donkeys	
Iringa	Iringa	186,686	128,012	35,851	12,100	3,550	
	Makete	30,717	25,095	14,499	4,852	244	
	Mufindi	113,200	18,100	9,200	24,151	-	
Mbeya	Mbeya City	9,070	5,940	670	9,844	125	
	Mbarali	138,102	52,842	52,842	15,848	2,774	
	Mbeya	74,102	29,556	5,718	20,616	1,690	
Source: Iringa	Source: Iringa Region Social Economic Profile 2007; Mufindi and Mbarali Social Economic Profiles, 2010 and 2009; Mbeya City and						
Mbeya District	Profiles 2011, Gover	mment of Tanzania p	ublication, Governm	nent of Tanzania pu	blication.		

Forestry: The forest reserves are owned by the central government, local government and private individuals. These forests are distributed all over. Districts have a forestation strategy that seeks to increase the number of trees depending on the availability of good soil that can support tree plantations. Each area has its own nurseries which are used to supply tree seedlings to individuals. Forestry is a sector that supplies herbs, honey, poles and firewood.

Fishing: Fishing in both Iringa and Mbeya regions takes place mainly in Lake Nyasa of Ludewa district, in Mtera Dam reservoir of Iringa District, Lake Ngwazi in Mufindi and Itombololo Dam reservoir. Some fishing activities take place also in both Great Ruaha River and Little Ruaha River. Fishing in Lake Nyasa is the most important, contributing some 95 per cent of regional fish catches, followed by fishing in Mtera Dam reservoir. Fishing provides employment to many people living near or along fishing resources areas in the

regions. Fishing in the regions is entirely artisanal. Generally, the volume of fish caught by fishermen meets the region's consumption demand and the surplus finds a market in neighboring regions of Morogoro, Dodoma, and Ruvuma and as far as Dar es Salaam. By 2009, Mbarali district had 389 fishermen.

Hunting: Hunting of wild animals and rodents is carried out mainly as a means of preventing farm produce destruction by animals, but the hunted animals are also consumed, serving as useful supplements to the normally protein-limited diets of the majority of the population in the area.

Trading: Trading in suburban and urban areas along the transmission corridor is common as communities in rural areas tend to get travel to these areas to purchase necessities. At village level, trading is minimal, seasonal and small scale. Farmers sell their agricultural produce to the cooperative societies. A few villagers are involved in retail businesses mainly selling basic necessities, and bringing in goods not available in their areas. Trading in timber is common in Iringa, Mufindi and Njombe districts and there is pit sawing in nearly every village.

Wage and Self Employment: All household members along the transmission corridor participate in farming activities, respecting customary division of work between adult and young, and between male and female. Hired labour is also common in peak seasons. Labour can be hired for slashing and digging. Traditional labour groups i.e. "migowe" in Njombe district are commonly used. Some people own small shops and kiosks, especially in suburban areas. These small shops are very common and are the main shopping centres along the transmission corridor. Some villages in Mbeya operate open markets, but these are less common in Iringa region. There are butchers in villages but animals are slaughtered and meat sold at people's homes.

Formal employment for the economically active population in different parts of the districts in the two regions is a major problem. There are concerns about job quality, especially for the urban youth. A high proportion of them remain unemployed, and new jobs created for young people outside agriculture are poorly paid or unpaid. With rapid rural-urban migration, the formal urban economy is unable to absorb the burgeoning urban workforce. Consequently, these new immigrants are employed in the urban informal economy or remain unemployed (Decent Work Country Profile, Tanzania Mainland, 2010).

Incomes & Expenditures: In all rural communities along the transmission corridor ownership of properties is gender biased. While men own farms and valuable animals, women own utensils and small animals. This makes a big difference in levels of income between men and women. One can tell from the prices of goods sold that their incomes are low. Fertilizers are used to increase production in the nutrient-depleted soils. Those who do not use fertilizers produce small amounts of food and cash crops. In many areas people depend on cash income from tea produced from small private plots or labouring at tea estates. The most viable areas for investment in the region are agriculture and agro processing of cash crops, food and horticulture crops.

Energy: More than 95% of the rural population in all districts depends on firewood as their main source of energy supply for domestic use. Charcoal and kerosene are mainly used in towns. Numerous individuals in villages and sub-villages sell charcoal and firewood for income generation. Charcoal is obtained from both planted and indigenous trees. The collection of fuel-wood is mainly done by women. Excessive use of charcoal and firewood has lead to deforestation and land degradation in all districts.

Towns depend heavily on electricity and refined petroleum products such as petrol, diesel and lubricating oil. Petrol filling stations distribute refined petroleum products. Iringa and Mbeya regions are connected to the National Transmission Grid. TANESCO is the only entity that establishes controls, distributes electricity and sets tariffs for the whole country.

Infrastructure Facilities: There are roads of different types connecting different areas within districts. Regional roads refer to those which connect the district with the outside world. These are in good shape, although they still need some maintenance. Gravel and earth surface district roads connect divisions and wards. There are also village feeder roads which connect villages within districts and regional roads. Virtually all feeder roads are earth tracks or gravel roads in poor condition requiring rehabilitation or spot improvements. The bulk of the road network requires rehabilitation. Road coverage in the transmission line/corridor is shown on **Table 3.6** below.

		Table 3.6 – Typ	e of Road in kilometers				
Region	District	Trunk and	District and village	Tarmac	Gravel	Earth	
		Regional					
Iringa	Iringa District	-	-	70.0	423.0	577.6	
	Mufindi	-	-	95.0	369.0	491.1	
	Makete	-	-	10.0	337.6	426.4	
Mbeya	Mbarali	-	-	-	115.35	159.65	
	Mbeya City	-	-	24	61.72	305.91	
	Mbeya District	376.2	503.8	-	-	-	
	Source Iringa Region Social Economic Profile 2007; Mufindi and Mbarali Social Economic Profiles, 2010 and 2009; Mbeya						
City and Mbeya	a District Profiles 20	11, Government of Tanz	ania publication.:				

Telecommunications: Telecommunication Networks are available in all districts and Mbeya City includes land line telephones operated by Tanzania Telecommunications Company Ltd, and mobile phone services provided by Airtel, Zantel, Tigo and Vodacom. Radio calls are run by Tanzania Postal Services Company Ltd and are mainly found in remote and bordering areas. Fax services, postal services and telephone services are also available.

Water Supply and Water Distribution System: Due to increased economic activities and delivery of social services, all of which utilize water in one way or another, delivery/supply of water has become a burden which the government cannot meet alone without the participation of the private sector. It is the government's policy to involve the beneficiaries in all water projects in both urban and rural water supply. The water sector contribution to GDP has remained at 0.2 per cent for some years, a proportion which is insignificant considering the importance of the sector to the economy. Water sources existing throughout rural and district areas are usually unsafe and unreliable. Rural water is always collected from wells, boreholes and rivers (usually polluted by upstream uses). In cities like Mbeya City, water is managed by the Mbeya Urban Water Authority which provides 29,000 M3 of water equivalent to 85% per cent of the total demand.

According to the Public Services Reform Program (PSRP) less than 29% of the rural and peri-urban population has access to clean water and adequate sanitation services. Access to safe water in urban areas declined from 85% to 65% between 1985 and 1995 and in rural areas from 48% to 40% from 1999 to 2004 (URT, 2005b).

Health Service and Sanitation: Tanzania Mainland's health care delivery revolves around primary health care. It is a self-help service in which clients contribute. It addresses 90 per cent of society's health problems. It is accessible in that services are within reach. No one is excluded as even the poorest of the poor have been provided with mechanisms for inclusion. It is hierarchal with the dispensary as the immediate grassroots (local) facility with health centres as an intermediate level facility and hospital serving as the highest level (in terms of services and facilities offered) health care provider.

During year 2007, there were 5,965 cases of morbidity from curable diseases in Iringa region. The most prevalent diseases were dysentery (84.7%) followed by typhoid (8.3%) and relapsing fever (5.2%). The districts where these disease were most prevalent were Kilolo with 55.3 per cent of all regional cases followed by Iringa Rural with 26.6 per cent and thirdly by Makete with 14.1per cent. At present the major

killer diseases include HIV/ AIDS, pneumonia, malaria, tuberculosis and diarrhoea. Common causes of morbidity in Mbeya region include malaria, pneumonia, diarrhoea, skin infections, intestinal worms, urinary tract infection, ear infection and HIV/AIDS. The major problems faced by the health sector are a shortage of qualified medical personnel and an insufficient supply of drug and medical equipment from the Government Medical Store Department.

HIV/AIDS: In both regions there are reported cases of HIV/AIDS. According to HIV/AIDS data in Iringa region there was a 13 per cent increase in the number of new AIDS cases between the years 1990 and 2003. Between 1995 and 2005, there was a 27 per cent increase in the number of new AIDS cases. Mbeya District council is reported to have experienced a decrease of HIV/AID cases from 13.5% in 2002 to 7.9% in 2007/2008. The percentage increase / decrease figures are all estimated on the samples drawn from reported blood donors of the respective areas1. The regional case rate per 100,000 people was 249 in 1995 and 273 in 2005 in Iringa.

Education Services: Between 1995 and 2003, Iringa region increased its number of primary schools by 11% from 705 schools to 781 schools and participation of the private sector in owning and running schools increased from negligible to a modest 2%. The year 2005 saw the number go up by a further 48 schools (6% increase) to reach 829, with the private sector participation remaining at 2 per cent. During the same period, there was also an increase in the number of secondary schools. The region had 43 such schools in 1995 and by the year 2003 these had increased by 58 per cent to 68 schools. These increases were distributed across all districts.

At present Mbeya City has 82 Primary schools of which 74 are owned by the City and 8 are privately owned. City schools have 66,440 pupils (32,733 boys and 33,707 girls), while the private schools have a total number of 3,290 pupils (1,671 boys and 1,619 girls). All schools have pre-primary classrooms with a total of 5,341 pupils (2,707 boys and 2,634 girls). Three are special schools with 178 disabled pupils. Secondary schools in the city include 51 Secondary Schools of which, 21 are privately owned and 30 are Government schools. There are other institutions of higher learning ranging from colleges, technical schools and universities. By 2011, Mbeya District Council had 156 primary schools with 69,919 students (34,099 boys and 35,820 girls). In 2008 there were 39 secondary schools of which 23 were Government and 16 were private schools.

3.3 Socio-economic Profile of the Impacted Population

Socio-economic survey of the affected households was carried out. Details of the affected households are presented in **Tables 3.7 to 3.21.** Further the survey was administered on 165 (16%) control households with similar occupation, literacy and economic levels. Details of the survey are presented in Appendix

Table 3.7 – Landholding size by District (%)							
District	less than 1 acre	1-5 acre	Above 5 acre	Total			
Iringa Rural	27.4	59.8	12.8	100			
Makete	57.6	33.3	9.1	100			
Mufindi	5.3	43.6	51.1	100			
Mbarali	21.1	48.9	30.0	100			
Mbeya Rural	71.1	27.3	1.6	100			
Mbeya urban	77.8	20	2.2	100			
Average	43	39	18	100			

Landholding size: 43% of the households indicated landholding of less than 1 acre, 39% indicated landholding between 1 and 5 acres, while 18% indicated landholding more than 5 acre.

¹ Regional Socio-economic Profiles, 2007, Govt. of Tanzania publication.

Average Household Size: The average household size varied by from one district to another. Makete district recorded only 4.0 persons per household whereas Mufindi and Iringa rural districts were among the highest with 6.5 persons per household. (See Table 3.8)

Table 3.8 – Averag	Table 3.8 – Average Size of Household by district				
District	Average Household Size				
Iringa Rural	6.5				
Mufindi	6.3				
Makete	4.0				
Mbarali	5.2				
Mbeya Rural	5.3				
Mbeya Urban	4.7				
	Source: SMEC Survey 2012				

Number of Project Affected Households: The project shall impact a **total of 1015 households.** As can be seen from **Table 3.9**, Iringa Rural (270), Mufindi (250) and Mbarali (251) followed by Mbeya Rural (177) have the highest number of PAHs amongst the six project districts. Makete (40) and Mbeya city (27) are the least impacted due to shorter length of line passing through them. In case of Mbeya city, the line terminates at Uyole- outskirts of Mbeya city.

	Table 3.9 – Project Affected Households			
District	No. of households			
Iringa Rural	270			
Makete	40			
Mufindi	250			
Mbarali	251			
Mbeya Rural	177			
Mbeya Urban	27			
Total	1015			
	Source: SMEC Survey 2012			

PAPs segregated by Gender: Iringa Rural (1708 nos.) and Mufindi (1384 nos.) have the maximum number of PAPs. It is followed by Mbarali district with the 1074 nos. of PAPs. Mbeya City (87 nos.) has the least number of PAPs. (See **Tables 3.9 and 3.10** for break up)

	Table 3.9 – Project Affect	ed Persons segregated by sex (in	nos,)
District	Male	Female	Total
Iringa Rural	851	857	1708
Makete	91	85	176
Mufindi	708	676	1384
Mbarali	543	531	1074
Mbeya Rural	383	376	759
Mbeya Urban	37	50	87
Total	2613	2575	5188
			Source: SMEC Survey 2012

There are nearly as many male PAPs as there are female PAPs. 50.37% of the PAPs are male, while the rest (49.63%) are females. However, in case of Iringa rural (50.18%), Mbarali (51.71) and Mbeya city (57.47%) the % age of female PAPs is higher.

Table 3.10 – Project Affected Persons segregated by sex in %						
District	Male	Female	Total			
Iringa Rural	49.82	50.18	100.00			
Makete	51.70	48.30	100.00			
Mufindi	51.16	48.84	100.00			
Mbarali	48.29	51.71	100.00			
Mbeya Rural	50.46	49.54	100.00			
Mbeya Urban	42.53	57.47	100.00			

Total %	50.37	49.63	100.00
			Source: SMEC Aug-Sept. 2012

Vulnerability status of PAPs: Orphans (276), Elderly headed households (147) and women headed households (90) constitute most of the vulnerable households. One of the reasons for high number of women headed households is that, Polygamy is traditionally accepted in all villages in the project area. It gives men the power to marry as many as four wives or more. In villages in Iringa and Mufindi districts, these men would leave their wives in villages and go to work in Tea estate and factories based in Mufindi. They would then meet new partners who might be People Living with HIV and AIDS (PLWHAs). The scenario is similar in Mbarali and Mbeya districts where these men go to Mbeya City for earning livelihoods and end up being infected. As each wife owns a house, when these men die, each wife takes care of her family separately, thus increasing the number of households headed by women².

	Table 3.11 – Household heads by vulnerability by type								
District	Orphans	Women headed households	Elderly headed households	Widow/unmarried	Physically challenged	Other	Total		
Iringa Rural	122	30	64	38	21		275		
Makete	1	1	7	5	1		15		
Mufindi	90	29	30	7	8		164		
Mbarali	40	15	21	16	12	4	108		
Mbeya Rural	17	12	22	17	5	4	77		
Mbeya Urban	6	3	3	2	3		17		
Total	276	90	147	85	50	8	656		
					Source:	SMEC Aug-	Sept. 2012		

Literacy levels: Literacy level of PAPs can be considered as high amongst the surveyed households, with only 13.6% being illiterate, while 69.5% of PAPs are educated upto primary levels. Only 0.6% of PAPs reported to be graduates. Please see Table 3.12 for details.

	Table 3.12 – Educational levels of PAPs							
District	Illiterate	Primary	Secondary	Graduate	Technical	Vocational	Others	
Iringa Rural	10	70	12				8	
Makete	14.4	75.7	9.9					
Mufindi	7	61	13	1			18	
Mbarali	16.2	66	14			1.8	2	
Mbeya Rural	14.1	75.3	6.2	.4			4	
Mbeya Urban	20	69	8	2			1	
Total	13.6	69.5	10.5	0.6		0.3	5.5	
						Source: SMEC	Survey 2012	

Occupational Pattern: 84% of household heads reported to be engaged in farming i.e. agriculture or cultivation on own land, agricultural labor as their main occupation. Landless labor, were fewer (3.8%) but these also include households who carry out such activities during non-farm season. Only 1% reported of government service. A lot of female headed households reported maid servant (0.8%) as their primary occupation. See Table 3.13

Table 3.13 – Households by Type of Occupation (%)							
District						Others	
		labor		service	service	servant	
Iringa Rural	75						25

² Before death, all wives households' would be counted as one unit and headed by one man as one household.

						Source: SMEC	Survey 2012
Total	84	3.8	3.2	1	0.5	0.8	6.7
Mbeya Urban	100						
Mbeya Rural	87	1	1	1			10
Mbarali	85	4	3	3	3	2	
Mufindi	80	5	5	2		3	5
Makete	77	13	10				

Income status: Monthly income of PAHs, varied across districts. While 31.5% of the PAHs reported income under Tsh 60000/month, only 7.6% reported incomes above Tsh 400000. The rest of the PAHs (60.9%) reported income between Tsh 60000 and Tsh 400000. While all districts had PAHs who reported incomes in excess of Tsh 400000, only Iringa rural (10.2), Makete (12.8%) and Mbeya City (10.0%) recorded of more than 10% of such PAHs (See Table 3.14).

	Table 3.14 – Monthly Income of PAHs (%)						
District	Less than 60000	60000 to 100000 tsh	100000 to 400000	Above 400000			
	tsh		tsh				
Iringa Rural	28.1	31.3	30.5	10.2			
Makete	38.5	23.1	25.6	12.8			
Mufindi	31.2	36.7	27.4	4.7			
Mbarali	27.1	45.4	18.4	9.2			
Mbeya Rural	42.9	45.0	8.6	3.6			
Mbeya Urban	30.0	40.0	20.0	10.0			
Total	31.5	38.0	22.9	7.6			
Source: SMEC Survey 2012							

Source of Water. Households were asked to state their main source of water. 98.3% of the households in Mbeya City reported pipe water as the main source of water. While in Makete district, 88.3% of the households reported of other sources such as streams as the main source of water. 2.9% of the households in Iringa Rural indicated borewell as the source of water, while Mbeya rural recorded 22.9% for dugwells.

Table 3.15 – Source of Water indicated by Households (%)								
District	Borewell	Dugwell	Pipe water	Other sources (river, stream)				
Iringa Rural	32.9	14.4	25.5	27.2				
Makete	3.9	3.4	4.4	88.3				
Mufindi	27.6	28.8	19	24.6				
Mbarali	20.8	29.7	27.8	21.7				
Mbeya Rural	13.9	22.9	20.2	43				
Mbeya Urban	0.9	0.8	98.3	0				
	Source: SMEC Survey 2012							

Access to Health Care: Households reported on access with respect to access to dispensary, pharmacy (medicine shops) and hospitals and other informal sources such as home remedies/ informal practitioners. Mufindi PAPs reported to have the maximum access to dispensaries, where as 47.1% of PAPs reported access to pharmacy. Other informal sources such as informal practitioners were recorded at 38.6% in Mbeya Rural. As can be seen from **Table 3.16** below, majority of households in Makete (91.5%) reported of informal practitioners, while expectedly in Mbeya urban, 66.5% households reported of access to hospital for medical care.

Table 3.16 – Access to health care (%)							
District	Dispensary	Pharmacy	Hospital	Other informal sources			
Iringa Rural	36.1	10.5	16.6	36.8			
Makete	7.8	0.7		91.5			
Mufindi	38.1	15.7	2	44.2			
Mbarali	8.3	47.1	37.7	6.9			

Mbeya Rural	7.2	17	37.2	38.6
Mbeya Urban	2.5	9.2	66.5	21.8
				Source: SMEC Survey 2012

Occurrence of diseases: Most of surveyed households reported of more than one ailment/disease that occurred in the family in the last five years. Cholera (33%) was the most frequently reported ailment in Irringa Rural, while HIV/Aids was reported more from Mbrali(53.7%), while more than one third reported of Malaria from Irringa Rural and Mufindi. Mbrali PAPs in Mbrali reported maximum percentage of T.B. Please Table 3.17.

Table 3.17 – Occurrence of diseases in households (%)								
District	HIV/AIDS	Malaria	T.B.	Yellow Fever	Cholera	Others		
Iringa Rural	24.4	35.1	15.4	11.1	70.0	53.7		
Makete		6.5	1.3					
Mufindi	11.0	33.8	8.7	5.6		12.2		
Mbarali	53.7	10.7	68.5	52.8	20.0	22.0		
Mbeya Rural	6.1	10.7	4.0	22.2	10.0	12.2		
Mbeya Urban	4.9	3.2	2.0	8.3				
	Source: SMEC Survey 2012							

Sources of Energy used for cooking: Firewood is the major fuel used for cooking purposes in 82% of PAHs, while Charcoal (11%) and kerosini (4%) are reportedly as well. Gas and others were reported only in Mbeya urban.

Т	Table 3.18 – Sources of energy used for cooking							
District	Charcoal	Gas	Kerosini	Firewood	Others			
Iringa Rural	15	2	5	78	0			
Makete	5			95	0			
Mufindi	6		2	92	0			
Mbarali	17	14	3	63	3			
Mbeya Rural	12	0	8	80	0			
Mbeya Urban	12		8	80	0			
				Sou	rce: SMEC Survey 2012			

Assets owned by affected households: Besides immovable assets, households were surveyed for their movable assets such as ownership of bicycle, car, fridge, radio, computer, etc. On an average, bicycle (39.5%) and Radio (44.0%) were among the highest, followed by T.V. (6.3%), Motorcycle (4.7%). Details of ownership are presented in **Table 3.19** below:

	Table 3.19 – Ownership of other movable assets of PAP (%)								
Name of village	Bicycle	Motorcycle	Car	ΤV	Fridge	Bajaj	Radio	Computer	Others
Iringa Rural	39.6	8.3	1.9	4.7	1.1	0.6	40.6	0.9	2.3
Makete	43.1	6.2	0	12.3	0	4.6	33.8	0	0
Mufindi	43.0	5.0	1.2	1.2	0.0	0.0	49.3	0	0.3
Mbarali	42.2	5.4	1.5	3.5	2.3	0.0	43.5	0.8	0.8
Mbeya Rural	32.9	3.3	1.3	3.3	0.7	0.0	55.9	2.6	0.0
Mbeya Urban	35.9	0.0	2.6	12.8	2.6	0.0	41.0	5.1	0.0
Average %	39.5	4.7	1.4	6.3	1.1	0.9	44.0	1.6	0.6
	Source: SMEC survey 2012								

The above description suggests that the Project area is predominantly agricultural and that the income of PAPs is on the lower side. The PAPs have lower level of educational attainment and high level of diseases

like Cholera, Malaria, HIV/AIDS and TB. The occurrence of diseases also reflects on the poor sanitation and hygiene condition in the Project area requiring more health care infrastructure facilities.

CHAPTER 4 – STAKEHOLDER CONSULTATIONS

Tanzanian legal framework requires that before commencing the valuation of people's properties, meetings are to be organized in order to create awareness amongst people. These meetings are to be directed by the District Councilor, members of parliament, investment representatives or those making the compensation payments. Public consultation with project stakeholders is the prerequisite to achieve successful and effective resettlement program The aim of the consultations is to inform the stakeholders along the transmission line corridor about the proposed project and solicit public views and concerns on the project, explore ways of avoiding or minimizing all concerns and reach a consensus by incorporating them in the planning stage. It provides some of the details that planners cannot foresee. Besides information provided during such consultations help allay fears and misinformation.

Consultations and FGD were held with a range of stakeholders that included district authorities of all six districts that lie en-route, communities including PAPs of affected villages and sub-villages. Consultations with officials were carried out to convey details on the proposed project, the difficulties faced in selection of the most appropriate alignment, criterion adopted therein and the alternative routes explored. See **Appendix G** for list of officials met. Consultations with Village communities were carried out and covered a host of issues, such as current land use, health, types of crops cultivated, likely employment opportunities, etc. and also to assess the extent of impact perceived, identify vulnerabilities and understand their perceptions. FGDs with women and youth groups were held to understand their perceptions and their access to amenities, and on-going development programs in the impacted village or in its vicinity too were collected. The chapter presents the summary of consultations held with these three groups.

4.1 Consultations with Region and District Authorities

Sections below present a summary of discussions held with the district authorities.

Aspects covered: The team consulted District Executive Directors and department heads of the six districts to inform them about the selected route for the 400kV transmission line. The consultant team provided description of the selected route and the villages that are likely to be affected. Details on the wayleave were conveyed i.e. requirement of a corridor of 90 meters; 70 meters along the existing 220 kV line. Benefits such as: improved reliability of electricity for business and domestic purposes; stimulating investments leading to establishment of small industries and development of non-farm activities; creation of employment for the local community during and after construction. District Executive Director and other officials were asked to provide their opinion, suggestions regarding the project. These are summarized below:

Concerns expressed: district officials acknowledging the positive benefits such as electricity can facilitate environmental conservation and reduce cutting of trees. They expressed the following concerns:

- Ioss of land for agriculture activities and grazing land and buildings. E.g. agricultural land in Matanana, Bumilayinga, Kisada, Kikombo and Maduma villages; pasture land in Ugute, Isalavanu, Ipilimo, Ihowanza; village land used for bee keeping in Kitelewasi, Maduma, Kikombo villages;
- > reduction of natural trees through bush clearing and loss of exotic species such as *Miombo* woodland;
- delay in commencement of project can lead to conflict among villagers; forced to migrate to unproductive land; and it is sometimes a disadvantage to the district;
- > The project may distort the natural ecosystem as tree clearance may accelerate soil erosion;
- TANESCO to ensure compensation payment, as in the previous case of the 220 kV line (Iringa Mbeya), only a few were paid;
- Care to be exercised during evaluation of community assets to avoid unnecessary conflicts during compensation period; and
- Assets owned by local community (individual assets) should be in a written form and everyone should have their own copy and signed.

Suggestions: The following suggestions were given for consideration:

- ensure transparency in process of valuation of individual and community assets followed by timely payment of compensation at market value; and
- strictly adhere to safety measures, besides the necessary awareness creation amongst communities with respect to accidents and prevention measures

Support expressed: The district officials expressed their support for the project and willingness to facilitate RAP implementation through technical support in property valuation and land acquisition.

4.2 Consultations with village communities

Village consultation meetings were conducted in all 54 main and sub-villages. Details of the consultations are summarized below:

Project Information: Consultations in each of the project villages commenced by stating the objective i.e. informing respective village communities about the project; compensation process for PAPs who will lose land, houses, crops and other properties as well as to elicit their views, concerns and opinions. Communities were informed that TANESCO shall be acquiring a wayleave i.e. a corridor of 90 meters for the proposed 400 kV line (and 70 meters if the proposed line is very close to the existing 220 kV line). Also the subsequent distribution of power shall enable electrification, start-up of small scale industries and finally during and post construction, provide temporary work opportunities for the communities. Also the communities were informed of the household enumeration survey and their cooperation was solicited as it would help to ensure identification is accurate and no plot is missed.

Concerns expressed by communities: Concerns of the communities are summarized below:

- > In villages with existing 220kV transmission line, some persons had not been compensation.
- Compensation should consider enabling PAPs to get alternative land for agriculture or livestock keeping (e.g. Tambalang'ombe and Ihowanza in Mufindi district)
- Proper valuation of properties and timely payment;
- More employment should be given more to local workers and outsiders should be avoided as it will also help to minimize HIV transmission risks;
- Communities across the entire route mentioned that the 400kV line is likely to be very dangerous for the people in the villages. It was therefore recommended that

Suggestions from the communities: The following suggestions were made by the communities for consideration by TANESCO during implementation of the project.

- electricity should first be supplied in the affected villages before passing to other places;
- the project should fund the mother-to-child center that shall provide education and reproductive health services during and after the project construction;
- must employ village youth during construction;
- > TANESCO has to set some amount of money for environmental conservation; and
- compensation has to be done based on current life situation i.e. considering market value of commodities/assets;
- TANESCO should provide safety education to the community prior to commencement of construction and also it should carry out construction activities in a safe manner.



Photo 4.1 – Village Consultative meeting at Makandami (Mbarali district (L) and Ndolezi village in Mufindi district (R)

Support for the project: Communities expressed their keenness of such a project as availability of reliable power supply will promote more investments, bring development in the form of new industry resulting in enhanced employment opportunity to the local community.

		Table 4.1 – Summary	of Consultations	
lssues discussed	Benefits perceived by the community	apprehension raised by the community	Suggestions from community	Response by Consultants
Loss of land	Compensation	Compensation amount may be less compared to the market value	Affected people should be involved in the whole process	Consultant informed participants of the meeting that for all land which will be taken for the
Compensation	PAPs will be allowed to choose cash or in kind	Delays	Time from valuation to the payment should sort to avoid inflation which will	project will be compensated. according to the market price of land in the specific location or district so that affected persons
Loss of buildings				will be able to buy the same size of land. In additional to land, all properties found in the farm such as perennial crops, buildings and trees will be compensated.
400 kV line			TANESCO should provide safety education to the community	Consultant informed the participants that the 90 meters corridor had considered safety measures and that is why nobody will be allowed to use the land within the corridor.
Alternate land for PAPs for agriculture or livestock keeping			Compensation should consider enabling PAPs to get alternative land for agriculture or livestock keeping (e.g. Tambalang'ombe and lhowanza villages in Mufindi district)	The issue shall be brought to the notice of TANESCO and where possible to find alternate land for livestock, it shall be arranged
Support for mother and child centre (Kikombo)			TANESCO should support	Matter shall be brought to TANESCO's notice for appropriate action
Funds for environmental			TANESCO should provide	Measures with appropriate funds shall be incorporated into the

	Table 4.1 – Summary	of Consultations				
conservation Mabadaga, Ipitingi in Mbarali		Environment plans				
Access roads	Roads to district headquarters' is not passable during rainy season because of seasonal rivers.	It was mentioned that the road which will be used by TANESCO during construction is likey to provide solution to the access problems.				
.	Source: SMEC, Aug-Sept, 2012					

4.3 Focus Group Discussions

FGD is a technique applied in participatory approach to allow disadvantaged groups such as women, youth, elderly air their opinions, concerns on issues affecting their lives. The consultant team requested separate meetings with women, youth and other vulnerable persons. The team explained the proposed project, compensation process for the affected persons, benefits, safety issues, etc. Participants shared their views on the proposed project, suggestions, etc. A summary of the discussions is presented below:

With females

Concerns expressed: Some of the key concerns expressed were as follows:

- Loss of land would lower food production;
- > Diseases like HIV may increase due to influx of people;
- > Environmental damage may increase with clearing of trees;
- > Buying new lands with compensation amount would be difficult as land sometimes are very expensive;
- > Amenities will become distant for children, if relocated elsewhere;
- resettling will be a problem as land is not available;
- compensation paid to the man only can lead to conflict and separation;
- > need greater role in decision as present village leaders are weak; and

Suggestions given:

- lines should avoid passing close to residential areas;
- if house is impacted, TANESCO should provide replacement house or involve the whole family in compensation payment;
- > consider provision of employment as women do the same work as men, i.e. no discrimination;
- provision of health education (on HIV/Aids) prior to project commencement is essential; availability of condoms in the shops and dispensary should be ensured.



Photo 4.2 – Focus group discussions with women

With youth groups: Discussions with youth groups is summarized below:

Benefits perceived

- drivers can get part-time jobs; driving heavy machines; digging holes for towers and other operational activities during construction;
- > can conduct some business like selling food clothes and other consumables like drinks; and

Concerns expressed

- > losing part of land shall affect family income as it will take time to settle farms until harvesting time;
- > the whole process of shifting (including graves) will lead to loss of family ties and customary lands; and
- > family conflict could increase due to bad use of money paid and unequal distribution

Suggestions given

- > provision of timely information during whole process in order to avoid confusion and disturbances;
- > provision of six months grace period until they harvest and get new land;
- > provision of works opportunities to local youths and not outsiders shall enable to enhance incomes;
- payment of compensation should be affected persons and village leaders should not be involved; also it should focus on youth as they: i) do not own much resource; ii) life is not yet stable;
- > area other than surveyed should not be taken and construction work should be carried out within; and
- > before cutting, trees should be planted to conserve the environment.

Minutes of meetings, signature of participants and photographs of all consultations are presented in Volume II – Appendices.

The chapter deals with the selection of optimum route for transmission line following social impact assessment of the four possible route alignments. Further, it presents the assessment of impacts of the project on households and their assets that shall fall within the selected Corridor Alternative.

5.1 Positive Impacts

The 292 km, 400 kV Transmission line is a major infrastructural development project for Tanzania. It is expected to electrify and improve the overall power supply in the regions of Iringa and Mbeya. Subsequent distribution of power shall enable to electrify areas in the region and thereby boost agriculture and allied activities, besides leading to growth of non-agricultural activities i.e. industry and help generate new employment. During construction phase, the project shall generate temporary work opportunities for local communities living along the corridor.

5.2 Minimization of Adverse Impacts by Analysis of Alternatives

Minimization of impacts was carried out through two approaches. Firstly, the design consultants – Messrs. AECOM/SOGREAH proposed four (4) Corridor Alternatives. The line routes and environmental considerations accounted for in the study were initially based on desk-based studies of maps followed by subsequent field surveys of the line corridor alternatives. The interconnection study addressed legislation requirements in addition to physical, biological and human considerations. It aimed to assess the technical and economical viability as well as the environmental acceptability of the interconnection transmission line. The primary factors in the selection of the interconnection transmission line route were the avoidance of populated areas, in particular structures, environmentally sensitive areas as well as access and reliability³. The ESIA consultants assessed the impact for each of these four options in order to enable selection of the most feasible option. Secondly, the proposed transmission line shall reduce the land take by utilizing part of the existing 60 m wayleave of the existing 220kV transmission line when running parallel and close⁴. Hence, using the common wayleave will considerably reduce the overall ROW corridor width to 130 meters (60 + 70) and thereby minimize impact. **Table 5.1** presents comparison of the four route corridor alternatives during the ESIA stage.

Table 5.1 – Analysis of Alternatives based on assessment of impacts						
Criteria	Corridor Alternative 1	Corridor Alternative 2	Corridor Alternative 3	Corridor Alternative 4		
Length of the line (in Km)	287.3	323.4	336.8	292		
Potentially impacted features	The route passes along the Rift valley adjacent to the banks of Ndembera and Ruaha rivers. The areas between Nyololo, Malangali and Uhenza have almost flat terrain and are dissected by small seasonal rivers. If allowed to pass outside of Rujewa Township to Mlowo, it will traverse vast areas of wetlands along 1100-1200 masl in the valleys of	100 Km on Mufindi	The route crosses the harsh terrain at Mufindi scarp and descends to the low lying areas at Mgololo along the Lidete river passing in 900 m- 1400 masl before reaching Makambako at about 1600 masl. From Makambako the corridor will lie almost parallel and cross the Tanzania- Zambia Highway (TAZAM) several times	The route has the topographic features similar to those of option 1 up to Rujewa before crossing to the South West to join the existing TL (option 3) at Mbuyuni / Madabaga		

³ Source: Draft Preliminary Design Report, April 2012

⁴ There are stretches when the proposed line is parallel but not close enough to have a common wayleave with the existing 220 kV line

Table 5.1 – Analysis of Alternatives based on assessment of impacts						
Criteria	Corridor Alternative 1	Corridor Alternative 2	Corridor Alternative 3	Corridor Alternative 4		
	Mbarali and Kimani rivers which form the low lands of the Rift valley.		at Igandu and Igawa villages. It will also follow contours for TAZARA and the TAZAM highway which is a bit above the flood line for the Mbarali wetlands. In addition, it will be located at the bottom of Kipengere and Poroto Mountains between Igawa and Inyala maintaining an altitude of about 1100- 1300 masl.			
No. of villages impacted	16 villages in Iringa region and 13 villages in Mbeya region.	34 villages in Iringa region and 20 villages in Mbeya region.	32 villages in Iringa region and 23 villages in Mbeya region.	36 villages of which 15 villages are in Iringa region and 21 villages are in Mbeya region.		
No. of PAPs affected	369 PAPs	742 PAPs	770 PAPs	359 PAPs		
Impact on land (in acres)	5406 acres of land of which 4524.15 acres are agricultural lands.	3878 acres of land of which 2245 acres are agricultural lands, 407 acres are grasslands.	5,156 acres of land of which 2869.5 acres is agricultural land, while 793 acres of land is grassland.	2700 acres of land of which 1411.9 acres of agricultural land, and grassland is 238.5 acres.		
Loss of plantation land (in acres)	471	1225	1493.5	1050		
Loss of income/growth,	As majority of the population in the region is agrarian, there is possibility of a loss of income from agricultural activities. In urban areas of Iringa businesses employing these individuals due to power availability, secondary and tertiary sector employment will flourish and create more opportunities for employment.	As majority of the population in the region is agrarian, there is possibility of a loss of income from agricultural activities by the PAPs	there is high possibility of loss of income from agricultural activities of the PAPs	The population, in general, is agrarian in the region and thus there is possibility of loss of income from agricultural activities		
No. of residential structures	155	323	264	112*		
No. of CPRs/ graveyards	16	17	17.	16.		

	Table 5.1 – Analys	is of Alternatives based or	n assessment of impacts			
Criteria	Corridor Alternative 1	Corridor Alternative 2	Corridor Alternative 3	Corridor Alternative 4		
Spread of HIV/Aids	possibility of an increased prevalence of HIV/AIDS can be assumed as Iringa region, has many urban areas where solitary male economic migrants from rural areas reside and a commercial sex industry exists, compounding the possible spread of STIs	the possibility of an increased prevalence of HIV/AIDS can be assumed as Iringa region, through which the major length of the corridor passes, has a high prevalence of the disease. But, since this option goes through rural rather than urban areas in the region, a lower prevalence of HIV/AIDS is assumed compared to Option 1	prevalence of HIV/AIDS can be assumed to be low since most of the area falls under rural region.	the possibility of increased prevalence of HIV/AIDS can be assumed as Iringa region, through which the major length of the corridor passes, has high prevalence of the disease. But, since this transmission corridor under Option 4 traverses primarily rural areas, a lower prevalence of HIV/AIDS is assumed compared to option 1.		
Impact of females	42% households are women headed indicating that the responsibilities of both earning an income for the family and carrying out domestic chores fall on WHH resulting in decision making power too being vested with women in these households. Yet the condition of women is generally not very promising in the project region in terms of access to education, available health facilities, etc.	Same as option 1	Same as option 1	Same as option 1		
*Impacts against C below	orridor Alternative 4 were only an	estimate based on a rapid surv	-			
	Source: Preliminary ESIA/RAP Study Report, May 2012					

Corridor Alternative 4 is a combination of Corridors Alternatives 1 and 3. The first part of Corridor Alternative 4 follows the same path as Corridor Alternative 1 until angle A41 which is located near the village of Rujewa. It then diverges from Corridor Alternative 1 and joins Corridor Alternative 3 at angle C57, just before the village of Mabadaga. It then maintains a direct route to the proposed Mbeya substation (at Uyole). Although it does not have the shortest distance, it is only 4.7 km longer than Corridor Alternative 1. The Alternative also has the least amount of angle points which is due to its more direct path. The environmental impacts and problematic zones posed by Corridor Alternative 4 are also reduced. By connecting Corridor Alternative 1 to Corridor Alternative 3, the sensitive Kimani region is avoided and accessibility is increased due to the presence of the existing transmission line and route A104. The line route for Corridor Alternative 4 is located mostly on flat terrain except towards the end of the corridor where it is slightly hilly due to the Chimala escarpment to the south. Corridor Alternative 4 also passes through the less populated areas⁵. Finally, Corridor Alternative 4 – 292 km long, 400 kV was selected by TANESCO as the most suitable Alternative in the Revised Draft Preliminary Study Report with Kisada Substation. The Corridor Alternative was the preferred alternative as it incorporates the favorable aspects of Corridor Alternatives 1 and 3 and it maintains a direct route to the proposed Mbeya substation. ⁶

⁵ Source: Draft Preliminary Design Report, AECOM/SOGREAH, April 2012

⁶ Source: Email dated May 31, 2012, the PSC, Nile Basin Initiative (NBI) agreed to consider the option 4 with KISADA substation and recommended SMEC Consultant to go ahead with the study.

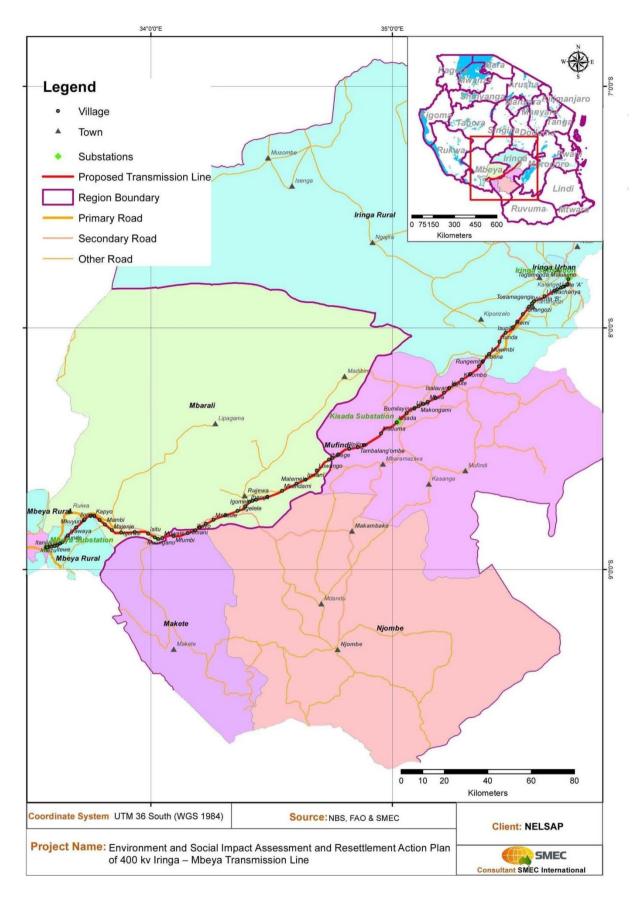


Figure 5.1 – Final Route alignment of the 400 kV Iringa to Mbeya Transmission line

5.3 Land use along the Project Corridor

Section wise land use in the project corridor is presented below:

Iringa – Kisada Section

- > Periurban settlement at Tagamenda on the suburbs of Iringa town near substation.
- Line passes inside villages but away from village settlements/nucleus such as Tanangozi, Ihemi, Bumilayinga and Ihowanza. Cultivation of food crops and tree/fruit crops that includes peaches and plums. Tree plots especially around Ulete/Muwindi, Ifunda, Kibena, Isolavanu and Mlula.
- > Intensive and valley bottom or "vinyungu" in the valley of Ndembera river.
- > Large scale farming for flowers and maize at Ihemi, Ifunda and Muwiundi/Kibena.
- > Private ownership of Natural Forest for carbon sequestration at Muwindi/Ulete
- > Cultivation of maize, bamboo trees, onions, tomatoes and beans.
- > Livestock grazing in Malangali and Ihowanza area.
- Scattered cultivation, Bushed grasslands and *Miombo* woodland around Malangali, Bumilayinga and Ihowanza.

Kisada-Mbeya Section

- > Peri urban settlement around Rujewa Township,
- > Up-coming urban centres are Chimala, Igurusi and Uyole.
- > Scattered cultivation and shrubs and woodlands between Kisada in Mufindi and Muwindi in Mbarali .
- > Valley grasslands in Igomelo, Lugelele and Lunwa.
- Acacia and woodlands in Msesule Madabaga, Mbuyuni, Chimala, Isitu, Itamboleo and Mengele villages. In Mfumbi/Kimani village the line is passing inside on the edge Mbanga Kipengere Game Reserve
- > Cultivation of rice, maize, onions and beans.
- The line passes nearby to village settlements such as of Igawa, Lugelele, Mabuyuni, Mabadaga, Mfumbi, Chimala, Igurusi, Mambi and Imezu. Others are: Kapyo, Iyawaya, Idunda, Itewe and Itanji.
- Mixed cropping, planted tree crops, fruit trees of peaches and Avocado.
- Horticultural and rain fed crops around from lyawaya to Uyole.
- Mixture of agriculture/ tree crops, shifting cultivation on Imezu Uyole slopes

5.4 Project induced impacts

The proposed line traverses along the existing 220 kV line for approximately 70 km of its entire length. For this length of 70 km, it can avail of some part of the existing 220 kV wayleave. The finalized route description is presented below:

Line segment	Total length	Distance from main road to new line > 500m		New line no existing 2	No. of Towers	
	Km	Km	%	Km	%	
Iringa (Tagamenda sub- station)- Kisada Sub-station	105.8	103.2	97.5	90.6	85.6	265
Kisada- Uyole Sub-station	186.2	182.2	97.9	96.7	51.9	465
	292.0					730

The typical impacts resulting from Transmission projects that normally consist of several component are as follows:

Stage Project Infrastructure Likely impacts

	Way Leave Corridors	The Way leave corridor for a transmission includes land, set aside for the
Preconstruction	,	transmission line and associated facilities, to facilitate maintenance, and to avoid
FIECONSTRUCTION		risks of fires and other accidents. It provides a safety margin between the high-
		voltage lines and surrounding structures. Acquisition of land shall lead to loss of
	Transmission Towers	cultivable land and other assets on land – private and commonly owned. The line of towers will in some cases be a large and dominant feature in the
	and Conductors	landscape. Their function is to keep the high-voltage conductors (power lines)
		separated from their surroundings and from each other. Dependent on the design,
		height and placement in relation to the land form and vegetation the line might be
		perceived as a visual intrusion in the landscape scenery. The towers and the
		cables also constitute an obstacle for birds and flying animals. The no. of towers to
		be installed is likely to be 730 nos. ⁷ with a span of 400 meter
Construction	Conductors	These are the cables that transport the electrical power from a power station to the
		consumers. At high voltage levels a slight noise and sparkling from the conductors
	Access Roads	(corona noise) can be heard.
	Access Roads	Some permanent and semi-permanent road reaches will have to be constructed to transport equipment and work force. In some cases only short diversions from
		existing roads will suffice, while in other cases a road will be made in the corridor
		itself. Vegetation clearing and/or re-contouring of land may be required for
		construction of access road. Clearing of vegetation may be required to create
		access and could lead to potential impact on vegetation and soil stability.
	Construction camps,	Construction camps and storage depots will be established at intervals in the
	Storage depots	corridor for storage of materials, maintenance of equipment and vehicles,
		accommodation and supply services for non-local workers, etc.

The Census/Socio-economic survey enabled to quantify the project impacts on households and their assets. Impacts at the pre-construction stage were recorded to be mainly on the following:

- a) Land
 - Cultivable farm land and plantations
 - > Waste land within Village land
 - ➢ Government land
 - > Land within the Mbanga game reserve
- b) Structures such as residential structures, maize containers/stores, toilets, cattle houses
- c) *Graveyards* within the village: most of the graveyards were found to be within the plot of the owner.
- d) Common properties such as Lambo (1 no.) or water storage tank

Further based on the survey, it is recorded that the line does not impact any school or hospital, church etc.

Results of the household level survey are presented in Tables 5.2 to 5.9.

Impact on land: Project shall impact 2,44,880,000 sq.mtrs or 6149.3 acres of land

Table 5.2 – Impact on land by ownership				
Type of land	In sq.mtrs	In acres		
Private Land	15435581	3815.0		
Government land	1087200	268.7		
Village land	6557219	1620.7		
Mbanga game reserve	1800000	444.9		
Total	24880000	6149.3		
	S	ource: SMEC Aug-Sept. 2012		

15435581 sq.mtrs. (or 3815 acres) of private farm land/plantation land shall be impacted by the project. The break-up is presented in **Table 5.3**

Table 5.3 – Cultivable land area coming in the proposed transmission line by district				
District	Square meter			

⁷ Source: Full final feasibility report, AECOM/SOGREAH, Aug. 2012

	Source: SMEC, Aug-Sept, 2012
Total	3815.01
Mbeya Urban	17.94
Mbeya Rural	120.62
Mbarali	1236.58
Mufindi	1361.66
Makete	323.36
Iringa Rural	754.85

Extent of loss of private land: 96 plots were found to be affected more than 90%, while 128 plots were found to be affected in the range of 40 - 50%. Further 430 plots were found to be affected in the range of 50 to 90% (See **Table 5.4**).

Table 5.4 – Extent of loss of Affected Land (in sq. m.)										
Districts	<10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100
Iringa Rural	5	25	23	22	27	26	26	22	30	51
Makete	1	7	2	2	4	2	2	8	3	2
Mufindi	2	12	14	25	40	22	22	48	26	15
Mbarali	2	11	16	16	30	41	41	23	29	9
Mbeya Rural	2	26	24	13	27	19	19	9	7	19
Mbeya Urban	0	0	0	0	0	0	0	1	0	0
Total	12	81	79	78	128	110	110	111	95	96
Source: SMEC Aug-Sept. 2012										

Type of land: Some parcels of land are irrigated by their proximity to water sources – rivers (Ruaha), streams; by usage of motorized pumps that bring water, small canals in agricultural schemes (e.g. Lusese village). Only 8.9% of the total land is irrigated land, while 84.57% of the land affected is unirrigated land, and 6.53% is waste land.

Table 5.5 – Impact on private land by classification of land (%)					
District	Irrigated	Un-irrigated	Waste land		
Iringa Rural	8.2	89.3	2.5		
Makete	0	85	15		
Mufindi	10	85.6	4.4		
Mbarali	23.2	76.3	0.5		
Mbeya Rural	12	87	1		
Mbeya Urban	0	84.2	15.8		
Average	8.90	84.57	6.53		
Source: SMEC Aug-Sept. 2012					

Impact on structures: As per the survey, 21 structures across 11 villages were recorded as being affected A few of these impacted residential structures are used by farmers during farming season and are not their permanent residential structures. Kiponda (6) and Uhamila (4) villages had the most structures affected. 12 PAPs are more than 90% affected and would require to shift to other plots nearby. Total area affected is 878.81 sq.mtrs. All the structures have thatched roof, bamboo walls/non-plastered bricks and mud floors.

Table 5.6 – Number of Affected Structures by village				
Name of Village	Number of structures			
Uhamila	4			
Majenje	1			
Каруо	1			
Bumlayinga	1			
Kiponda	6			
Maduma	2			
Kibena	1			
Tambalang'ombe	1			
Tagamenda	2			

Ndolezi	1
Mfumbi	1
Total	21
	Source: SMEC Aug-Sept 2012

Ownership of structures: 91.9% of the PAHs own structures on a customary right basis, while 5.6% were found to be with title-deeds. 2.1% were non-titleholders who had been occupying without any formal right.

Table 5.7 – Ownership structure (%)						
District	Title deed	Customary right	Tenant	Non-title holder		
Iringa Rural	6.7	86.7	0	6.6		
Makete	2.5	97.5	0	0		
Mufindi	2.8	96	0.4	0.8		
Mbarali	10.9	87.9	1.2	0		
Mbeya Rural	0	100	0	0		
Mbeya Urban	6.7	93.3	0	0		
Average	5.6	91.9	0.4	2.1		
Source: SMEC, Aug-Sept, 2012						



Photo 5.1 – Types of structures impacted

Source: SMEC, Aug-Sept. 2012

Impacts on trees by type: As the survey was carried out during a dry season, very few perennial crops were to be seen. In areas, particularly under agriculture schemes such as Lusese, Majenje (Mbarali) crops fruit crops such as Banana, Orange, Avacado and Guava were recorded. **Table 5.8** gives details on the number of Trees affected by type.

Table 5.8 – Impact on Trees by type							
District*	Bamboo	Banana	Orange	Guava	Avacado	Peaches	Mango
Iringa Rural	2,961	27	88	113	3	8	947
Mufindi	754	34	167	105	7	7	94
Mbarali	134	733	363	30	80	16	74
Mbeya Rural	2	5	2	2	1	2	2
Mbeya City	1						
Total	3,852	799	620	250	91	33	1,117
Source: SMEC, Aug-Sept, 2012							

*No trees were found to be impacted at Makete



Photo 5.2 – Orange plantations and Banana plantations at Lusese village

Source: SMEC, Aug-Sept, 2012

Impact on graveyards: 16 graves with each measuring not more than 2 x 2 meters were recorded during survey.

Table 5.9 – Impact on Graves		
District	Number of Affected Graves	
Iringa Rural	7	
Mufindi	0	
Makete	0	
Mbarali	0	
Mbeya Rural	3	
Mbeya Urban	6	
Total	16	
Source: SMEC. Aug-Sept. 2012		



Photo 5.3 – Graveyards at Iganjo village (L) and at Kiponda village (R)

Source: SMEC, Aug-Sept, 2012

Impact on common property resources: One water structure Lambo (or water tank with gates and cemented wall) at Nsoniyaga village (Mbarali district) was recorded during survey. It was under construction with a size of 7 acres.

CHAPTER 6 – POLICY, LEGAL AND REGULATORY FRAMEWORK

6.1 Policy, Legal and Regulatory Framework

The Chapter presents a review of legal and regulatory framework applicable to the project. Key policies, acts, their provisions and their relevance to the project are presented. Further a summarised comparison between the World Bank OP 4.12 on Involuntary Resettlement and Tanzanian legislations is provided. The following key legislations and Operational Policies of the World Bank are applicable to the project.

Government of United Republic of Tanzania

- ➢ National Land Policy, 1997
- > National Human Settlements Development Policy, 2000
- > Agriculture And Livestock Policy, 1997
- National Gender Policy (1999)
- > National Policy On HIV/Aids, 2001
- ➤ Land Act, 1999
- Land Acquisition Act, 1967
- Village Land Act No. 5, 1999
- Land Regulation, 2001
- Land Disputes Courts Act No. 2, 2002

The World Bank

- OP 4.12 Involuntary Resettlement, 2001
- > OP/BP 4.11 Physical Cultural Resources (July 2006)
- > OP 17.50 Disclosure

Table 6.1 below presents a brief description of these acts, policies and regulations and their relevance to the project.

	Table 6.1 – Applicable Policies/Acts/Ordinances			
Policy/Act	Brief Description	Applicability to the project		
National Land Policy, 1997	The main objective of the National Land Policy (URT, 1997) is to address the various and ever- changing land use needs. The Policy aims " to promote and ensure a secure land tenure system, to encourage the optimal use of land resources and to facilitate broad-based social and economic development without endangering the ecological balance of the environment (ibid: 5). Specific objectives are outlined in the Land Policy; however, the following are directly related to the proposed development.	 The proposed development may lead to the following: i) more land being taken up for the right of way by TANESCO to build the towers and the transmission line. ii) more people along the right of way will lose land for farming, grazing, settlement and cultural functions (e.g. burials or sacrificial functions). Consequently, there will be competition for prime land as more people are displaced from their existing lands to give way for the development. This will compound land tenure and land use matters in the villages along the right of way and increase cost of land in the same areas. 		
National Human Settlements Development Policy, 2000	Overall objective of the National Human Settlements Development Policy (NHSDP) is to promote the development of sustainable human settlement and to facilitate the provision of adequate and affordable shelter to all people, including the poor. The policy outlines a number of objectives including environmental protection within human settlements and protection of natural ecosystems against pollution, degradation and destruction.	This policy requires the developer to deliberately undertake adequate measures to safeguard settlements, control of soil erosion and sedimentation and avoid displacements of households		
Agriculture And Livestock Policy, 1997	The Agriculture and Livestock Policy of 1997 addresses changes that affect the agricultural sector in Tanzania and specifically address restrictions to agricultural practices stemming from the national land use Policy of 1995. The Agriculture and Livestock policy, 1997 also addresses the needs of women in agriculture and the needs for agricultural practices to evolve to ensure protection of the environment. The Policy promotes good husbandry and increased agriculture production	Some of the areas in the proposed right of way are utilized for crop production and changes in land use may reduce crop production and possibly impact on food security. This preliminary ESIA addresses the issue of land use changes and its implication on agriculture, especially where there will be a need to acquire land that is also used in agricultural production for annual crops. In principle, the land TANESCO puts under the way leave for power transmission becomes wholly owned and managed by TANESCO exclusively for energy uses. No farming, settlement or any other use is permitted on such land. However, in practice cultivation of seasonal crops below the power line is common and TANESCO has not taken a firm stand against such practice. Therefore, the net effect of power lines in agricultural production can be assumed to be minimal if farming will be left to continue under the lines.		
National Gender Policy (1999)	Main objective of this policy is to provide guidelines to ensure gender sensitive plans, programs and strategies in all sectors and institutions. The policy gives emphasis on gender equality with its aims at establishing strategies on poverty eradication through ensuring that both women and men get access to existing resources for their development. It values the role played by women in bringing about development in the society.	The energy sector is also highly committed to gender mainstreaming at all levels, through provision of equal opportunities to both men and women in construction works and related activities. The policy requires the project management to ensure that gender issues are given emphasis. It also requires that women and men are given equal employment opportunities in the project, whenever possible.		
National Policy On HIV/AIDS 2001	The Policy identifies HIV/AIDS as a global disaster, hence requiring concerted and unprecedented initiative at national and global levels. It recognizes HIV/AIDS as an impediment to development in all	Relevant considering the high prevalence of HIV/AIDS in the project		

	Table 6.1 – Applicable Policies/Acts/Ordinances			
Policy/Act	Brief Description	Applicability to the project		
	sectors, in terms of social and economic development with serious and direct implication on social services and welfare. Thus, the policy recognizes the linkage between poverty and HIV/AIDS, as the poor section of the society are the most vulnerable. The policy has also set a number of strategic objectives to deal with specific HIV/AIDS problems such as prevention of transmission of HIV/AIDS, HIV Testing and care for people living with HIV/AIDS.	regions particularly Iringa		
Land Act, 1999	 The Land Act of 1999 provides for the basic law in relation to land other than the village or reserved lands, the management of land, settlement of disputes and related matters. The Act lays down fundamental principles for occupying and using the land. Among them, is the principle that any land user shall ensure that land is used productively and that any such use complies with the principles of sustainable development. In addition, and in relation to the proposed power transmission line, the Land Act (Section 151) states that the Minister " may create rights of way which shall be known as public rights of way it to serve for the that purpose for the proposed development. In addition, it defines that a "way leave" may be any public right of way created for the benefit of the Government, a local authority, a public authority, or any corporate body to enable all such organizations, authorities and bodies to carry out their functions within the designated area. Furthermore, the Act states that: i) "a public right of way shall attach to and run with the servient land in respect of which it has been created and shall be binding on all occupiers from time to time of the servient land, any manner they are occupying the land, whether under a right of occupancy or a derivative right thereof, or under customary law or as a successor in title to any such occupier or as a trespasser"; ii) "a way leave shall authorize persons in the employment of or who are acting as agents of or contractors for any of the organizations, authorities and bodies enter on the servient land for the purpose of these commissioner. In the servient land and to pass along that way leave in connection with purposes of those organization, authorities or bodies." iii) except where the Commissioner is proposing of his own motion to create a way level, an application from any ministry or department of Government, or local authority or public authority or corporate body shall be made to the Commissioner. <	. Since some of the areas where the right of way may pass fall under public lands, this Act is relevant to the proposed development. TANESCO shall apply for the Way Leave and must pay compensation to affected persons according to national and international standards.		
Land Acquisition Act, 1967	The Land Acquisition Act (Act No. 47 of 1967), repealed and replaced the Land Acquisition Ordinance, to provide for compulsory acquisition of land for public purposes and in connection with housing schemes. The Act is however relevant also in cases that are not related to housing schemes. For example, Part II of the Act refers to issues related to compensation and procedures that have to be	The provisions of this Act and subsequent land laws must be adhere especially with regard to fair and prompt compensation. TANESCO must therefore ensure compliance with the laws in order to reduce conflicts		

	Table 6.1 – Applicable Policies/Acts/Ordinances			
Policy/Act	Brief Description	Applicability to the project		
	followed when land is acquired. These procedures are also outlined in the Regulation for the Land Act and include issues of fair and prompt compensation to affected persons. The proposed development will acquire land from the villagers for the purpose of development.	between local people and the local authorities.		
Village Land Act No. 5, 1999	The Village Land Act No. 5 of 1999 (URT, 1999) governs village land and all matters related to land tenure under the Village Councils. Most of the land that will be involved in the power transmission line may be on village land, except for new areas where the way leave may be in forest reserves or social infrastructures belonging to specific institutions. Section 8 (1), (2) and (3) of the Village Land Act empowers the Village Council to manage all village lands in accordance with the principles of a trustee with the villagers being the beneficiaries.	Although the Village Land Act recognizes the role of the Village Councils in management of village land, most of the land in the villages is under individuals through the customary land rights. The right of the individuals to the land must be recognized and respected and development should not take more than the land it needs for that particular development.		
Land Regulation, 2001	 Regulation 4 and 10 of Land (Compensation Claims) Regulation (L.N. No. 79) of 2001 stipulates that, compensation shall take the following forms among others: i) monetary compensation; ii) pot to plot compensation iii) replacement of building The alignment and location of sites should avoid hazard lands 	The basis for the value of any land shall be the market value of such land. The assessment of the value of land and any improvements needs to be done by a Qualified Valuer and verified by the Chief Valuer of the Government. The implementation of this regulation lies with the Ministry of Lands, Housing and Human Settlement Development.		
Land Disputes Courts Act No. 2, 2002	 Every dispute or complaint concerning land shall be instituted in the Court having jurisdiction to determine land dispute in the given area (Section 3). The Courts of jurisdiction include- i) the Village Land Council ii) the Ward Tribunal iii) district Land and Housing Tribunal iv) the High Court (Land Division) v) the Court of Appeal of Tanzania. The Act gives the Village Land Councils powers to resolve land disputes involving village lands (Section 7). If the Council fails to resolve the dispute, the matter may be referred to the Ward Tribunal as established by the Land Act (1999) and the Village Land Act. If any dispute will arise because of this project, the provision of this Act shall be observed. 	Land under the power lines is under the custodian of TANESCO and any land use other than what is designated is illegal. Local people are complaining about the taking of land and therefore villagers must be handled carefully to avoid exacerbating land use conflicts elsewhere or within the same villages.		
OP 4.12 Involuntary Resettlement, 2001	 The World Bank's involuntary resettlement safeguarding regulations and requirements are triggered when a project leads to the involuntary taking of land resulting in: 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 persons must move to another location; the involuntary restriction of access to legally designated parks and protected areas resulting in 	As there shall involuntary loss of land and other assets requiring fair process of consultation, opportunities for participation in implementation and monitoring Category (a) and category (b) persons should be compensated for the land they lose, as well as provided with other agreed-upon assistance. Category (c) persons should be provided with resettlement assistance in lieu of compensation for the land they occupy as well as other assistance as		

	Table 6.1 – Applicable Policies/Acts/Ordinances			
Policy/Act	Brief Description	Applicability to the project		
	 adverse impacts on the livelihoods of the displaced persons. The overall objectives of Operational Policy 4.12 (the Bank's policy on involuntary resettlement as defined above) are: to avoid or minimise involuntary resettlement, by exploring "all viable alternative project designs; where population displacement is unavoidable, to conceive and execute resettlement activities as sustainable development programs; that displaced persons should be meaningfully consulted and should have opportunities to participate in planning and implementing resettlement programs; and to assist displaced persons 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. OP 4.12 requires that displaced persons are provided prompt and effective compensation at full replacement cost for losses of assets attributable directly to the project; provided assistance (such as moving allowances) during relocation; and provided with residential housing or housing sites. The policy also requires that taking of land and related assets may take place only after compensation has been paid and, where applicable, resettlement sites and moving allowances have been provided. OP 4.12 identifies three categories of affected persons: a) those who have formal legal rights to land, including customary and traditional rights recognised under the laws of the country; b) those who do not have formal legal rights to land, but have a claim to such land or assets provided that such claims are recognised under the laws of the country or become recognised through a process identified in the resettlement plan." This is further explained: "Such claims could be derived from continued possession of public lands without government action for eviction (that is, with implicit leave of the government); and c) th	necessary, if they have occupied the area prior to an agreed cut-off date for entitlements. The policy regulation is that all three categories should be provided with compensation for loss of assets other than land.		
OP/BP 4.11 Physical Cultural Resources (July 2006)	Cultural property is defined to include both remains left by previous human inhabitants and unique natural environmental features such as canyons and waterfalls. The Bank does not support projects that will significantly damage non-replicable cultural property and assists only those projects that are sited or designed so as to prevent such damage.	This safeguard Policy is not relevant as the Isimila archaeology site near Iringa lies outside the proposed project corridor		
OP 17.50 Disclosure	This Policy details the Banks requirements for making operational information available to the public. The Bank reaffirms its recognition and endorsement of the fundamental importance of transparency and accountability to the development process. In addition, timely dissemination of information to local groups affected by the projects and programs supported by the Bank, including nongovernmental organizations, is essential for the effective implementation and sustainability of projects.	This is relevant for disclosure of information and participation by local persons for effective RAP implementation		

6.2 Comparison of the policy framework

Table 6.2 presents a comparison of the legal framework of government of Tanzania with World Bank's OP 4.12 on Involuntary Resettlement.

	Table 6.2 – Comparison of policy framework			
Issues	WB OP 4.12	Tanzanian legal framework	Comparison remarks	
Eligibility	 Bank OP recognizes ownership of three groups: i) Those having formal rights (including customary and traditional rights) ii) Not having formal legal rights to land at the time of census/asset vinventory but subsequence are recognized under the laws of the country or become recognized iii) Those who have no recognizable legal right or claim to the land they are occupying 	Formal ownership where plots have been surveyed particularly in urban and some rural areas as well as customary ownership rights are prevalent. Both are recognized under Tanzanian law.	Non-titleholders such as encroacher or squatters are not recognized in Tanzania legal framework	
Prior intimation and consultation	World Bank OP 4.12 requires that displaced persons should be meaningfully consulted and they should have opportunities to participate in the planning and implementing resettlement programs. Further it requires that displaced persons are consulted on offered choices among, and provided with technically and economically feasibility alternatives	Tanzanian legal framework requires that before commencing the valuation of people's properties, meetings are to be organized in order to create awareness amongst people. These meetings are to be directed by the District Councilor, members of parliament, investment representatives or those making the compensation payments.	Key aspects of the WB OP 4.12 such as prior intimation and awareness creation are similar to the what is followed in practice in Tanzania prior to acquisition of assets	
Compensation and Valuation and Amount of Displacement Compensation	World Bank OP 4.12 Article 6(a) requires that displaced persons are provided with prompt and effective compensation at full replacement cost for losses of assets attributable directly to the project.	 The amount of compensation for crops, land, structures, CPRs will reflect the market price disturbance allowance (@5% of total compensation value of land, crops, trees, and other structures) is provided over and above the compensation amount Loss of business profit allowance: It is an average of the rent per month for the business house multiplied by 36 months. 	 Market price and replacement cost are determined by the same principles of discussion with communities and also in cases where there is absence of i) competitive markets and ii) similar sale transactions for land compensation in kind is not provided for in Tanzania but may be practiced depending on the context. Payment of amount towards loss of business in case of impact on commercial business is similar to transition allowance required in the Bank OP, though Bank's OP requires it to be given in all cases where there is a need for economic rehabilitation 	
Support for impacts requiring relocation	If physical relocation is an impact, displaced persons must be provided with assistance during relocation and residential housing, housing sites and/or agricultural	 Accommodation allowance for rental housing for a period of 36 months, transportation allowance for 12 tons of material across 20 	Tanzania provides support in cash for accommodation and also for transportation, rather than in kind. Transportation is not permitted	

Table 6.2 – Comparison of policy framework				
Issues	WB OP 4.12	Tanzanian legal framework	Comparison remarks	
Notification Period/Timing of Displacement	sites to at least equivalent standards as the previous site. Replacement cost does not take depreciation into account. In terms of valuing assets, if the residual of the asset being taken is not economically viable, compensation and assistance must be provided as if the entire asset had been taken. Article 10 of World Bank OP/4.12 requires that the resettlement activities linked to the implementation of the project construction to ensure that displacement or restriction of access does not occur before necessary measures for resettlement are in place. In particular, taking of land and related assets may take place only after compensation has been paid, and, where applicable resettlement sites and moving allowances have	 Prior notification shall be provided that indicates the period (not less than six weeks) by when the land should be vacated 	No difference	
	been provided to displaced persons			

6.3 Applicable Entitlements for mitigation of adverse impacts

Table 6.3 below presents a description of applicable by type of loss and unit of entitlement.

	Table 6.3 – Entitlement Matrix			
Type of loss	Unit of Entitlement	Entitlement		
Loss of land	PAP (Owners of land within way leave)	 Compensation for land at market value Disturbance allowance at 5% of estimated land value Support measures for income restoration 		
Loss of residential and other types of buildings	Owner	 Compensation at replacement cost Accommodation allowance equivalent to 36 months rent for the displaced house. Transportation allowance at cost to move 12 tons for 20 km. This is only relevant for those moving to sites outside their original plots (allowance not applicable for relocation of structures backward within the same plot). Project assistance with organizing and supervising construction of replacement houses and buildings if requested. 		
Loss of non- residential buildings		 Compensation at replacement cost Disturbance allowance at 5% of estimated land value 		
Loss of standing crops and trees		 For standing crops at capitalized average annual value/ standard applicable rates as per districts depending on crop maturity 		
Loss of bare undeveloped land e.g. village land		 Compensation for land at market value Disturbance allowances at 5% of estimated land value may be considered. 		
Loss of graveyards on private land Loss of graveyards on village land	Individual Village/sub- village	 village councils shall allocate replacement burial plots. cost of relocation of graveyards including cost of structure and ceremonies (on average estimated to be around Tsh 100,000). 		

Loss of common property such as wells,	Village/sub- village	Compensation by replacement of common property resource and if required improvements
Loss of buildings	Institutions/non individuals-	 Compensation at replacement cost Disturbance allowance at 5% of estimated land value
Loss due to unforeseen circumstances such as movement of machinery, construction resulting in damage to plot or crops, trees, structures etc.	PAPs or Non- PAPs (owners losing land or facing damage to crops due to construction)	 To be treated in the same principle as above Any loss of or damage to crop, trees, structures on unaffected parcel of the PAP or adjacent plot holders (Non-PAH), due to dust emanating from construction shall be reported to the Grievance committee – village land council and/or to other higher levels. The Grievance Committee shall investigate the matter and make commensurate payment as per applicable rates for the damaged crop to the affected person, if the loss is assessed to be genuine.
Source: Department of Evaluation ⁸ , Ministry of Land and Human Settlements, Government of Tanzania and WB OP 4.12		

⁸ Source: Guideline for compensation estimation and its mode of payment, December 2009 by Department of Evaluation

7.1 Preferences regarding mitigation measures

Re-establishing livelihoods of PAPs who lose all their land will be a challenge. Preferences and options for rehabilitation could match with or vary from current profession/existing skills. A preference survey of each affected household with respect to preferences for mode of payment, need for relocation felt, preference of area to relocate to, etc., was carried out. Result of the survey is presented in **Tables 7.1 to 7.4** below:

Preference for mode of payment: 98.1% of the households preferred cash as the mode of payment rather than kind and the balance PAPs preferred kind.

Table 7.1 – Preference for mode of Payment (%)			
District	Cash	Kind	
Iringa Rural	96.2	3.8	
Makete	100	0	
Mufindi	98.6	0	
Mbarali	89.9	1.1	
Mbeya Rural	100	0	
Mbeya Urban	100	0	
Total	98.1	1.9	
Source: SMEC Aug-Sept, 2012			

Need to relocate due to acquisition: 63.1% in total felt the need to relocate i.e. to other areas within the same plot or to other plots in the area. The highest percentage of such households was recorded in Iringa rural (70.3%) and in Mbeya city (66.7%) and Mufindi districts (71.8%)

Table 7.2 – Need to relocate due to acquisition of land (%)			
District	Yes	No	
Iringa Rural	70.3	29.7	
Makete	33.3	66.7	
Mufindi	71.8	28.2	
Mbarali	54.3	45.7	
Mbeya Rural	41.8	58.2	
Mbeya Urban	66.7	33.3	
Total	63.1	36.9	
Source: SMEC Aug-Sept, 2012			

Preference of area to resettle: Nearly 80% of all persons affected wanted to resettle in within the same village, if required to relocate from their existing plot.

Table 7.3 – Preference of area to resettle						
District	Within same village	In nearby village	Within same district	Urban centers/town	Others	Total
Iringa Rural	78.6	10.7	3.7	6	0.9	100
Makete	82.6	4.3	4.3	8.7	0	100
Mufindi	85.3	10.9	1.6	1.6	0.8	100
Mbarali	82.4	11.8	5.1	0.7	0	100
Mbeya Rural	97.1	0	0	2.9	0	100
Mbeya Urban	88.2	5.9	0	5.9	0	100
Source: SMEC A						

Assistances expected: Communities expected shifting allowance, allowance during the transition period, besides training and other work opportunities. Many PAPs also expected support in terms of agricultural knowhow and money/credit facilities.

Table 7.4 – Assistances expected							
Name of District	Shifting allowance	Transitional allowance	Training	Temporary Work opportunities	Agricultural know how and extension services	Money or credit facilities	Others
Iringa Rural	34.8	11.3	1.9	4.9	19.6	23	0.8
Makete	0	0	0	0	38.5	50	0
Mufindi	27	5.4	0.8	0.4	16.4	10.9	0
Mbarali	31.4	3.3	2.2	8.2	25.1	3.3	0.5
Mbeya Rural	23	4.1	1.4	2.7	3.7	38.9	1.4
Mbeya Urban	33.3	14.8	3.7	0	0	7.4	0
Source: SMEC Aug- Sept, 2012							

7.2 Determination of Entitlements

The Director of District Council in cooperation with land officer will deal with:

- (a) The issues of changing people's ownership for the concerned area where the project is conducted;
- (b) To prepare form No. 69, and distribute to every person and this form is signed by the land officer who provide evaluation number to witness people's claims that the government is supposed to compensate; and
- (c) Taking photos for the compensated people for commemoration/ reference of compensation number

Evaluation team must have the following officers

- > Evaluator
- ► Land surveyor by using GPS
- The owner of the land
- Village/ward/sub ward leader

Investigation and measurements the VAL forms filled and signed by every person

- (a) An evaluator will calculate the compensation by using Valuation form 2 by following the standards which have been announced and referenced from VAL Form 1
- (b) An evaluator will calculate various allowances as follows:
- Disturbance allowance: It is an average of 5% of the value of land and buildings and plants;
- Residential allowance: It is an average of monthly rent of the house multiplied by 36 months. It is paid to the householder whose house is finished and not for unfinished house;
- Loss of business profit allowance: It is an average of the rent per month for the business house multiplied by 36 months. If the business will be done by the householder the number of business balance sheet should be inspected by the registered Inspector and board of Inspection; and
- Transport allowance: Costs towards transportation of 12.0 tons of load of different items (like beds, chairs, etc.) for distance of 20 km

Valuer will prepare a compensation table which will have two parts:

- Statement which will have the reference number and name of the responsible person to be compensated and the total amount to be compensated
- > The second part will contain value of each property such as land, building, crops together with the appropriate fund and the photograph of the respective person

Prior to RAP implementation, a Government Valuer will carry out inspection of all affected properties likely to be impacted by the 90/70 meter corridor of the selected transmission line route. During the inspection, the valuer will check the claims from each affected households presented in their completed and submitted Land form No. 15. Compensation details for each identified property will be provided in individual compensation schedules which will be signed by District valuer, Authorized Land Officer of the region, District Commissioner, government valuer, Ward Executive officer, Paying officer and Regional Commissioner. The Chief Government Valuer will approve the valuation report before being submitted to the Commissioner for Lands in Dar-es-Salaam for wayleave application. Further,

- i. Payment for compensation of land building and crops will be done through district offices
- ii. Compensation will be paid for the building and crops which have been cultivated before the land is taken, by private company, organization, government, village;
- iii. The amount of compensation will reflect the market price; and
- iv. Compensation will be made in the period not more six months since the valuation process and valuation table approved by the Regional Commissioner

If the compensation is not be paid, in that period of time, then the interest of 5% or equal to the interest paid by bank in the fixed accounts.

7.3 Compensation for the Loss of Residential and Productive Land

Persons affected will receive compensation for the loss of land. Due to the linear nature of the displacement most of the relocated households will be able to relocate in close proximity of their original land holdings. Village administrations shall make land available along and therefore relocation of those affected shall be close to their original habitations. Disturbance allowance is payable regardless of whether they have to relocate to a new area or whether they remain on the unaffected portion of their land. It is 5% of the total value of land, buildings and crops on the land. However, Transportation allowance is payable for transportation of 12.0 tons of load of different items (like beds, chairs, etc.) across a distance of 20 km

7.4 Compensation for the Loss of Houses and Other Structures

Structures within wayleave are entitled to compensation. In the absence of an active and competitive housing market, it is often accepted to use "replacement cost methods" adjusted by standard depreciation factors in order to arrive to value that may be compared or close to a market value. Further households losing their residential premises are entitled to an "Accommodation allowance" to cover the cost of renting another premise for up to 36 months (approximately Tsh 10000/month in rural areas).

7.5 Compensation for the Loss of Standing Crops

Standing crops and trees in within wayleave are entitled to compensation. Compensation is granted to those having annual and perennial crops, including fruit trees. To assess the value of standing crops a market value approach is proposed in the legislation. List of prices from the year 2010, shall be used for computation of the loss depending upon the maturity levels of the crops. The Government Valuers offices should update these rates at the time the actual valuation of assets.

7.6 Removal and relocation of Graves

Households have graves of relatives within their own plots or in a common graveyard. In the project area, the typical cost of grave removal and relocation is estimated to be around Tsh 100,000. The village councils are responsible to allocate alternate burial plots.

7.7 Persons affected by Unforeseen Construction Damages and Losses

Some households may suffer damage to their property by construction, and it may lead to additional compensation not foreseen during RAP preparation. This could include damage to buildings, walls, fences,

hedges, gardens, trees and crops. These shall be brought to the notice of the grievance committee for redressal and compensation as applicable.

7.8 Measures for mitigation of spread of HIV/AIDS

HIV/Aids is a global concern, and has high prevalence in Tanzania. The possibility of increased prevalence of HIV/Aids can be assumed as the Iringa region, and where solitary male migration from rural areas in search of livelihood occur and availability of commercial sex industries add to the possibility of spread of the diseases. There is a need of create awareness about the spread of HIV/Aids particularly amongst affected villages. Key measures awareness creation, supply of condoms especially at construction sites and adjoining village communities could be carried out at the project level. These have to be undertaken by District Administrations with support from contracted NGOs and TANESCO. The strategy in conjunction with existing government programs shall be as follows:

- Strengthen the role of public, faith groups, People living with HIV/Aids (PLWHAs), CBOs to ensure that all stake holders are actively involved in HIV/Aids work and to provide a framework for coordination and collaboration.
- Encourage and promote the spirit of community participation in HIV/Aids activities in strategic planning and implementation. It also includes ward level and village level strategic planning for prevention of transmission of HIV/Aids and STIs.

Specific actions are as follows:

- Work closely with NGOs and Faith Groups in the fight against drug substance abuse that increases the risk of HIV transmission;
- Provide appropriate effective treatment for opportunistic infections at all levels of the health care system;
- Implement programs that will inform the community about HIV/Aids and the real life challenges in its prevention and care;
- Support procurement and distribution of good quality condoms and ensure their availability and encourage its usage to reduce HIV infection;
- > Assist voluntary HIV testing, pre-and-post test counseling.

7.9 Other support provisions

- 1. Laws emphasize that compensation should be paid once to the people and these people immediately are advised to build new houses or buying, as otherwise they will be tempted to use the money for the following things:
 - i) satisfying family needs; and
 - ii) employing the lawyers, advocate, evaluator or a popular person to fight against the government for the aim of increasing the amount of compensation

By doing that the budget to buy or build a house will be reduced and thus the compensated person will be complaining⁹. Hence, the District authorities shall also counsel the PAPs on the judicious spending of such amounts.

- 2. As the construction period shall bring new development and business opportunities, the scope of work of the contractor should include:
 - a. giving of preference to local labour, particularly to able-bodied persons including females from vulnerable households. Also during operation phase local community should be provided with employment opportunities that exist for a few semi-skilled people such as watchmen and cleaners;
 - b. instructions to undertake works for the replacement infrastructure with minimal inconvenience to neighbourhood residents;

⁹ Source: Guidelines for compensation, estimation and its mode of payment

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- c. Development of Environment, Health and Safety plan and its appropriate dissemination to all employees and other contracted labour. Certain key points to be included in this plan are listed below::
 - i. To work within a demarcated zone and thereby not collect wood or other materials from the outside the zone;
 - ii. If as result of movement of equipment or machinery, adjacent plots are likely to be impacted, then the Contractor should notify the village Chairperson of the same in a timely manner;
 - iii. Indicate construction zone clearly to the community and fence off using appropriate warning notices;
 - iv. Fence off tower locations, once installed at cattle grazing /corridor areas, If required;
 - v. To ensure minimal disruption to existing water resources and existing access roads/pathways'
 - vi. To adopt all protective measures to ensure the construction does not damage or obstruct any graveyards, burial grounds churches, mosques and other areas of cultural heritage and importance; in case of a chance find during tower excavation, stubbing, then to report the same to the village administration i.e. Village Chairperson and to TANESCO immediately.
 - vii. To ensure that provision access routes are provided for humans and cattle to pass, if severance of existing access is unavoidable; and
 - viii. To ensure personnel protective equipment, as necessary are provided to workers at all times and safety requirements are adhered to
- 3. Periodic monitoring of noise and dust levels need to be carried as per **Environment Management Plan (EMP)** which would be included in the scope of the work of Contractor. Other measures covered under the EMP:
 - i. Permanent loss of vegetation should be compensated by adequate planting activities in the neighbourhood. These could be undertaken by PAPs from the same villages and would thereby provide a chance to supplement their incomes;
 - j. After initial clear, further clearing and pruning in the phase of operation should be done manually instead of using heavy machinery;
 - k. Land taken on a temporary basis for construction camps, storage depots should be restored to the original shape or as agreed to initially with the concerned PAP;
- 4. Electrification of rural areas though a long term measure but shall be the most beneficial for villages along the project corridor.

7.10 PAP Database

TANESCO shall develop a simple Microsoft - Excel based PAP database that consolidates information on the census/socio-economic surveys carried out for both PAHs and Control households. Further, user friendly formats for data-entry, editing for report generation as necessary for RAP implementation and monitoring shall be developed. All data regarding PAPs obtained on the basis of census/socio-economic surveys and subsequently updated by the government valuer, such as quantum of land lost, trees, structures and other assets (along with photographs) shall be maintained in user-friendly PAP database. Besides other information on each PAP such as income levels by source, occupation, etc. shall be recorded for the purpose of internal monitoring, and external monitoring and evaluation. It shall be used to generate reports for Regional TANESCO offices, and for monitoring by NELSAP and TANESCO management.

7.11 Training Programs

Training programs shall be developed for and administered to the officials responsible for various tasks by TANESCO with support from District Administrations. These will be specifically targeted at district officials dealing with the compensation, and representatives from village, ward and district grievance redressal

committees at all levels. The training programmes shall be a continuous process of orientation trainings and refresher trainings as required. Further trainings shall be given to officials of the grievance committees on compensation payments, types of grievances likely to arise, and procedures for their redressal. TANESCO shall be involved to prepare suitable materials, brochures, maps, etc.

Key topics of the Training Programs by committee are presented below:

District Compensation Committee:

- Details of the compensation entitlements i.e. different rates applied for trees (eucalyptus, natural trees, indigenous trees);
- Issuance of notification for taking of land;
- > Taking over of land after ensuring all compensated assets are duly collected by the land holder;
- Provision of compensation payments in event of damage to crops due to: i) dust and ii) access by Contractor for construction; and
- Special emphasis shall laid upon the non-acceptance of squatters and/or encroachments (structures, crops, trees) within the wayleave that has been already acquired by TANESCO.

Grievance committee

- > wrongly recorded personal or community details;
- > wrongly recorded assets including land details and/or affected acreage;
- > change of recipient due to recent death or disability
- recent change of asset ownership
- wrong computation of compensation
- names missed out of register
- provision of compensation payments in event of damage to crops/trees due to i) dust and ii) access by Contractor for construction;
- proactively disclose information about the process, as well as success in grievance resolution, measured by numbers of satisfactorily resolved complaints, reduction of recurring complaints, decreases in new complaints
- ensure constant consultation with project affected persons on ways to improve on the mechanisms and processes therein
- > procedures to handle grievances, approach to investigating issues, usage of grievance formats;
- usage of traditional methods of grievance resolution at village level; and
- > prepare a short brochure on the steps in resolving conflicts/disputes

Further information dissemination on types of likely accidents and safety measures shall be disseminated with suitable publicity material prepared by TANESCO Media Centre (for details refer to **Chapter 12** on Participation and Consultation Strategy) with respect to the following:

- > Sources of accidents occurring in electricity transmission lines
- > Type of accidents occurring in transmission lines
- How to avoid accidents occurring in transmission lines

8.1 Income Restoration Strategy

The project shall compensate for lost assets besides payment of allowances as appropriate. Even though there shall be short-term temporary work opportunities arising during construction phase of the project, there is a need for long-term income restoration measures too. Short-term work opportunities would include:

- local labour requirement for carrying equipment, assembling tower components, construction of access roads, construction camps, etc.;
- > semi-skilled persons as drivers, watchmen and cleaners; and
- all goods and services such as canteen;

Income restoration in long term needs careful planning and committed implementation. Two principles guide the income restoration strategy:

- firstly, avoiding the change in occupation and
- secondly, if unavoidable, then developing a land based/related occupation so that there change is less significant and resultant risk is better managed.

Income and livelihood restoration has two dimensions and these are:

- a) judicious use of compensation and allowances amount received by PAP: Utilization of compensation amounts should be carefully monitored following the disbursement of compensation. While some PAPs may have bank accounts, many other may not have. Hence, in all such cases, the PAPs should be advised specifically by the District Compensation committees to invest i) in time deposit schemes; ii) buy another economic income generating asset and iii) rebuild house/structure without delay.
- b) Usage of balance landholdings (if available) or changing to a new occupation related or unrelated to farming (if there is no balance landholding) by adopting some income restoration package that is either
 - Land based; or
 - Non-Land based.

8.2 Income and Livelihood Restoration Activities

Different restoration packages will be required for each PAP depending on the magnitude of the loss, their levels of vulnerability, their preferences associated to their family characteristics and other circumstances. Further, these are also to be in line with the potential offered by every affected district. Based on a review of the plans and profiles of the affected districts, the available development potential is listed below:

Livestock development (Mbarali and Iringa): The region's climate and environmental conditions are favourable for keeping both indigenous and exotic cattle. Potential for the indigenous cattle to produce reasonably good quality meat is abundant. Similarly exotic cattle development potential will depend on the services offered for promoting dairy cattle through cross breeding. It is in this connection that a more serious investment is needed for quality improvement. Available village grazing land can be enhanced and used for this purpose. Credit facilities to enable households acquire dairy cattle for enhancing milk production hence incomes are required. Credit is also needed to acquire improved animal stocks and the training in the proper upkeep of those animals.

Forestry (Mbarali and Iringa): Rapid increase in population has increased the pressure on the woodlands outside and inside forest reserves particularly for fuelwood as a source of energy for cooking, lighting and other activities as well as for tobacco processing. In addition to afforestation efforts agro forestry and improved land practices offer important opportunities for improving land productivity while maintaining environmental stability.

Agroforestry/Beekeeping (Mbeya and Iringa): Sustainable agro-forestry is an area Iringa region can take advantage. It includes the promotion of commercial beeswax honey production and afforestation programs. Mbeya region too is endowed with miombo woodlands which makes the best environment for high quality hone and bee wax production. It is possible because of the ecological conditions and due to the fact that there is little or no chemical use in these woodlands. Commercial and small-scale production of honey and beeswax production can be increased with improved technology. In addition further establishment of beekeeping groups on a sound cooperative basis will make easy the provision of extension services and financial assistance.

Agriculture sector: As Mbarali district is one of the main paddy producers and is among the focussed district in the country for development of irrigation agriculture. Some land based income restoration support measures for PAPs with balance lands shall be as follows:

- Provision of seedlings and seeds;
- provision of technical assistance i.e. training on livestock and crop production for at least 1 year period to help PAPs rehabilitate their lives
- practical training courses on improved agricultural techniques, including crop varieties, fertilization, small scale irrigation, animal traction and related and use of related equipment and post-harvest grain conservation;
- training and extension services could be delivered by an experienced organization (technical institute) with a permanent presence in the area; and
- > women should be targeted as a specific group of interest with specific engagement methodologies
- Opportunities presented particularly in light of loss of farm land are establishment of farm input shops that will sell all types of agricultural inputs including agricultural machinery.

Natural Resources: The following opportunities exist in districts such as Mbarali: i) seasonal fishing practices on paddy farms; ii) establishing fishponds; iii) establishment of canning and processing industries for natural fruit such as Amarula, Makasu, Mibuyu; iv) forest extracts (herbs); and v) tree nurseries for ornamental fruits, soil conservation and water preservation, etc.

8.3 Implementation of Income Restoration Activities

Key aspects for implementation of Income Restoration are presented below:

Assessment of skills of PAPs: Prior to selection of packages, an assessment of skills should be carried out. The educational level, existing and required skills besides aptitude and inclination of PAPs, need to be assessed to identify suitable income generation activities.

Assessment of skill level of PAP by requirements of the activity							
Existing Required							
Trained	has traditional knowledge and some/lot of experience	Untrained	Informal	Formal	Total		

Implementation of Income and Livelihood Restoration measures: TANESCO with support from Region and district administrations should implement these income restoration programs. They should in consultation and agreement with the district administration implement these programs. Cooperation of the district

administration would be very essential to get the required support for accessing credit, dovetailing with existing government programs, getting land based income restoration strategy effectively implemented. Existing government programs can be dovetailed with or new land based programs can be developed. TANESCO should contract an agency with solid experience and knowledge of developing and implementing income restoration programs. A list of NGOs that work on income generation/restoration schemes and also carry awareness creation programs on HIV/Aids and other STIs is given below:

Iringa region	Mbeya Region
AMREF- African Medical and Research Foundation	PSI
TAHEA	T-MARC
MARIA STOPERS	AMREF - African Medical and Research Foundation
INGONET	UMATI
TAYODEA	
ALPHA DANCING GROUP	
TUWALEE	
TAWARC	
CUAMM	
UMATI	
RESTLESS (SPW)	
PEPFAR	

See Annexure D for TORs for an agency to provide income restoration support in RAP implementation¹⁰.

Access to Credit: Savings and Credit Associations (SACAS and SACCOs) especially for economic undertakings are catalyst in the region. Therefore intensive awareness and sensitization campaign are needed to give impetus to the formation of such groups all over the rural country side. Resources are required to fund such campaigns and to support such groups with credit facilities. The majority of population especially rural people are not credit worthy, however if these people are well organized in economic groups, can be eligible for credit.

¹⁰ combined TORs for HIV/Aids and other STIs are presented

In general, the female-headed households will experience greater impacts than the male-headed households, owing to the fact that they need to earn livelihood for the family in addition to attending to the usual household chores. In order to address impacts identified, measures would be taken to proactively mainstream gender at the implementation, monitoring and evaluation stages. Gender specific actions are presented below:

9.1 Gender-specific Actions

In a transmission line project wherein construction activities are undertaken in sequence for short periods at every location, there are definite albeit limited opportunities for participation. The following actions should be taken to enhance their role:

- raise awareness levels of all relevant stakeholders and engage in advocacy right from the RAP launchdisclosure workshop;
- > ensure that their participation is sought during implementation and monitoring by including them in evaluation committee; follow up village level meetings/ consultations;
- > actively include women in the consultation process during consultations or preferably hold separate consultations with them;
- > actively include women during the valuation process undertaken by the government valuer;
- provision of support through Women Development Funds schemes that are available (e.g. Makete district);
- > ensure proportional representation for women in grievance committee at every level;
- > give preference in temporary work opportunities to able bodied females
- > include gender issues into all relevant scope of work and contracts in RAP implementation;
- carry out gender- sensitive monitoring and evaluation, using gender indicators (see Appendix C for list of monitoring indicators); and

CHAPTER 10 – INSTITUTIONAL FRAMEWORK

10.1 Main Implementing Agency – TANESCO

Nile Basin Initiative (NBI) together with TANESCO has been vested with the overall responsibility for the coordination, planning and implementation of the project. TANESCO shall form a PIU to implement the RAP and also other activities listed in the EMP (Refer to ESMP). It shall:

- > provide information on the project with respect to design, environment and resettlement action plans.
- > be the focal points for implementation of the project.
- > liaise with the district administrations and village communities for preparation of valuation document,
- > provide trainings;
- disseminate information relating to accidents and safety/prevention measures and also material relating to HIV/Aids; and
- > prepare internal monitoring reports for TANESCO management and also for NBI/NELSAP.

The PIU shall be supported by other agencies such as District Administrations, Media Centre of TANESCO, Agency for spreading awareness on HIV/Aids and also for Income Restoration component of RAP. Roles and tasks for each of these are presented below.

10.2 District Administrations

TANESCO shall request district administrations to carry out survey and valuation of assets. The process shall form the basis for updation of RAP and its finalization by TANESCO. The district administration(s) shall prepare a cost estimate for the survey and valuation and it shall include the following:

- ➤ the cost i.e. per diem of valuer and assistants for support,
- measuring tapes,
- cameras for photograph of PAPs and structures,
- ➤ stationery,
- vehicle and fuel
- cost of approval fees 1% of the total estimate.

Upon receiving approval and funds from TANESCO, the district administrations shall deploy the valuers in the field for preparation of the final valuation document to be followed by submission of the document to Chief Government Valuer, Dar-es-Salaam for his final approval. Further, the district administration shall be responsible for the following activities:

- > counselling of PAPs on opening of bank accounts, besides informing of the procedures involved.
- issuance of Notification of acquisition;
- payment of compensation;
- > taking of land and its handover to TANESCO/Contractor of commencement of construction

10.3 Media Centre of TANESCO

Media Centre of TANESCO shall be responsible to disseminate information on TANESCO's activities. It shall support the PIU, prepare all relevant brochures to disseminate information on the project to the stakeholders. It shall have a key role in planning and organizing the RAP launch workshop.

10.4 Monitoring and Evaluation Agency

TANESCO is recommended to contract an Agency to carry out External Monitoring and Evaluation of the RAP implementation. The agency shall prepare reports for usage by TANESCO management and NBI/NELSAP.

10.5 Agency for HIV/Aids and Income Restoration

Agency shall contracted by TANESCO for carrying out specific activities relating to awareness creation on HIV/Aids and STIs. In addition, agency shall be contracted for carrying out income restoration activities for those PAPs, particularly those PAPs who have little or no balance assets left

10.6 Grievance Committees

These committees though not part of implementation, shall be key to the smooth implementation of the RAP by ensuring that all grievances are well heard/recorded and redressed in a stipulated period of time.

Key implementation activities with agencies primarily responsible and other agencies that are likely to be involved are presented in **Table 10.1** below:

	Table 10.1 – Implementation Activities along with responsibility of agencies involved					
S.No.	Activity	Agency with primary responsibility	Other agencies involved, if any			
1	Public Disclosure/ Launch workshop	TANESCO, Region Administrations	NELSAP/WB			
2	Determination of PAHs by quarter	TANESCO, Civil Works contractor				
3	Opening of Bank accounts for PAHs	Land Officer (District Administrations)	TANESCO, Regional Administrations			
4	Training Programme	PIU, TANESCO	District Administrations			
5	Preparation of entitlements /valuation document	Government valuer, District Administrations	Chief Government Valuer, Dar-es- salaam, TANESCO			
6	Preparation of simple PAP database	TANESCO				
7	Village level meetings	District administration, village administration, Media Centre, TANESCO				
8	Development of special assistance plans for vulnerable households	TANESCO				
9	Notification of acquisition/expropriation	District Administration	TANESCO			
10	Payment of compensation	District Land Officer	TANESCO			
11	Handover of land for construction	District Administration	TANESCO			
12	Provision of temporary works to local population	Civil works contractor, TANESCO	Village Administrations			
13	Awareness relating to HIV/AIDS	District Authorities, NGOs	Media Centre, TANESCO			
14	Income Restoration activities	NGOs	TANESCO, District Administrations			
15	Internal Monitoring	TANESCO	Regional Administrations, District Administrations			
16	External Monitoring & Evaluation	Specialized agency	TANESCO to contract			
17	Dissemination of information regarding likely accidents and safety measures	Regional Offices of TANESCO	Media Centre, TANESCO			
18	Redressal of Grievances	Village level committees, Ward Executive Officer, District Executive Director	Media Centre, TANESCO			
			Source: SMEC, October 2012			

11.1 Compensation Rates

The chapter presents the rates applied and budget estimate for RAP implementation. The rates used for computation of the budget were collected from different sources.

Compensation for land: Market rates of land were obtained from a certified valuer for farm land across the villages in the project district. Given below are the maximum, minimum and average land rates across the villages by district:

	Rates of land in different districts by region (Tshs / acre)						
Region	District	Max	Min	Average			
	Iringa Rural	1,500,000.00	1,000,000.00	250,000.00			
Iringa	Makete	800,000.00	500,000.00	150,000.00			
_	Mufindi	800,000.00	650,000.00	75,000.00			
	Mbarali	2,500,000.00	800,000.00	850,000.00			
Mbeya	Mbeya Rural	2,500,000.00	1,000,000.00	750,000.00			
-	Mbeya Urban	3,000,000.00	1,000,000.00	750,000.00			
Source: Certified Valuer, 2012							

Compensation for structures: Rates for structures were obtained from Valuer, Mbeya Municipality.

Cost of construction per sq.mtr by type of structure				
Type of structure	Rate in Tsh/sq.mtr			
Mud brick walls not plastered	70000			
Burnt bricks not plastered	1,00,000 to 1,50,000			
Burnt bricks and plastered	2,50,000 to 3,50,000			
Sand cement blocks	3,50,000 to 4,50,000			
	Source: Mbeva City Municipality. 2012			

Compensation for fruit crops: Rates for the affected fruit crops were obtained from different district offices. (See **Appendix A**)

Compensation for graveyards: Based on market survey, the rate for relocation of graveyards has been estimated to be Tsh 100,000.

Cost of allowances¹¹: As per guidelines and standard valuation documents for similar projects, estimates are:

Disturbance:	5% of the value of land + building + crops
Transportation:	Tsh 120000
Accommodation	Tsh 10000 x 36 months = 3,60,000

Training/Capacity Building activities: Capacity building activities shall be carried out for officials for committees for compensation, grievance redressal. A maximum of 8 members shall participate in trainings at least twice across the 1 year RAP implementation period.

Committee	No. of members	per diem + transportation	no. of trainings	Amounts
Compensation Committee	8	50000	2	800000
Grievance committee (compensation)	8	50000	2	800000

¹¹ as per standard valuation documents

The total cost is Tsh 1,600,000.

Cost of publicity material: Media Centre, TANESCO shall prepare publicity material i.e. one page flyers, newspaper notifications.

Item	Cost in Tsh
One page flyer (3000 nos)	Tsh 2,400,000 @ Tsh 800/page
Cost of quarter page of advertisement in national and regional	Tsh 2400000 @ 240,000 per advt. (1/8th page or 26 cm x 8
newspapers	cm)
	Source: Newspapers sites

Cost of Disclosure workshop: Cost of disclosure workshops (2) is estimated as a lumspum amount of Tsh 2,000,000.

Cost of Government valuer: The Cost of government valuer shall include the following items: Per diem for government valuer, Camera, Fuel and vehicle, Assistants, measuring tapes, report preparation costs/stationery, cameras, and approval fees 1% of the total estimate.

Item	Unit	Rate per unit	Quantity	No. of days/no. of km	Amount
per diem of government valuer (no. of days inclusive of coverage and vvaluation report preparation	person	60000	1	75	4500000
per diem of assistants	persons	30000	2	60	3600000
Fuel	Tsh/km	2300	200	1	460000
Measuring tapes	Nos.	100000	2	LUMPSUM	200000
Camera/Batteries	Nos.	300000	1	LUMPSUM	300000
Report Preparation/Stationery	Nos.	100000	6	LUMPSUM	1200000
Total					

*The above is only a rough estimate at an estimated coverage of 5km per day

Further, the cost of approval fee (1%) can be determined upon completion of valuation process

Cost of External Monitoring and Evaluation: External monitoring and evaluation shall be conducted at the end of every quarter and an evaluation shall be carried out a few months after the end of RAP implementation. The duration of the every quarterly exercise shall be for a maximum of 4 weeks and will include: field visits for about 2 weeks to select villages affected, preparation for visit and field visit reports, etc., 2 weeks. A representative sample of those households affected in each phase shall be drawn for the purposes of the study. Indicative cost per audit is provided below:

Item	Rate	No. of months/ days	Amount
Community Consultation Expert with minimum of ten years of experience, with good communication and rapport building skills	8000000	4 months	32000000
Sociologist with minimum of ten years of experience with specific experience of working in rural areas with communities	8000000	4 months	32000000
Vehicle and Fuel (for approx. 2000 km travel within 60 days)	LUMPSUM	60 days	1200000
Data collectors (3)	45000	120 days	5400000
Miscellaneous (Stationery, report production)			200000
Total for One year		70800000	

Hence cost of evaluation for monitoring (3 quarters) and one evaluation is estimated to be Tsh 70,800,000

Cost of Agency for HIV/Aids and Income Restoration: Cost of an agency to be engaged for a period of 1 year with intermittent inputs of key experts is given below

Item	Rate	No. of months/ days	Amount
Income Restoration Expert with degree in social sciences minimum of ten years of experience, with experience in developing and implementing income restoration schemes and solid knowledge of existing government schemes and enrollment requirements;	8000000	4 months across one year	32000000
Sociologist (preferably female) with minimum of ten years of experience with specific experience of working on HIV/Aids	8000000	4 months across one year	3200000
Vehicle and Fuel	LUMPSUM		1200000
Miscellaneous (Stationery, report production)			200000
Total	65400000		

Cost of Field Administration and Contingency: Cost of field administration is estimated as 2% of the total RAP cost. Another 5% is contingency amount to cover for any unforeseen expenditure.

11.2 Budget and Costs

The total budget for RAP implementation is estimated to be **Tshs 3,683,308,278**. The break up is presented in Table 11.1.

ltem	Item Unit Quantity Rate (in Tsh)			Total
Compensation for land				
cultivable land	e land 3815.022 As above			1833988767
Village land/grazing land	acre	1620	As above	121500000
	1955488767			
Compensation for Fruit Crops	T			
Bamboo	-	3852	200000	770400000
Banana	-	799	28600	22851400
Orange	-	620	36400	22568000
Guava	Nos.	250	15600	3900000
Avacado	_	91	60000	5460000
Peaches		33	41600	1372800
Mango		1117	83200	92934400
	Sub-Total			919486600
Compensation for Structures				
Residential	Sq.mtr	878.81	100000	87881000
	Sub-Total			87881000
0				
Compensation for Other CPRs				
Water tank structure at Nsoniyaga (incomplete)	Sq.mtr	500	350000	175000000
Graveyard relocation	Nos.	16	100000	1600000
	176600000			
Additional Allowanana				
Additional Allowances				

	Table 11.1 – Budg	et Estimate for RAP	Implementation	
Item	Unit	Quantity	Rate (in Tsh)	Total
Disturbance allowance @5%	Based on value of	-	, ,	142067818
of the value of land and crops	land, crops and			
and buildings	buildings			
Accommodation allowance	No. of PAPs	12	360000	4320000
and other charges				
Transportation allowance	No. of PAPs	12	120000	1440000
	Sub-Total			147827818
Cost of Valuation by governmen	ntvəluor			
Cost of valuation including	No. of days	75	See break up above	10260000
camera report preparation	No. of days	10		10200000
stationery, measuring taps,				
per diem of valuer, fuel for				
vehicle and assistants				
	Sub-Total			10260000
Cost of External M&E agency				
Cost of hiring M&E Agency	LUMPSUM per year		See break up above	70800000
	Sub-Total	T		70800000
Cost of agency for IR and HIV/#	Aids awaronoss			
Cost of Agency for Income	LUMPSUM per year		See break up above	65400000
Restoration and HIV/Aids	LUMPSUM per year		See bleak up above	0040000
	Sub-Total			65400000
Cost of Publicity material	ſ	1		
Preparation of publicity,				4800000
newspaper advts./ distribution	Sub-Total			4800000
	Sub-Tolai			400000
Cost of Disclosure Workshops	-			
Disclosure workshops at	Nos.	2	LUMPSUM	2,000,000
Iringa and Mbeya				
	Sub-Total	1		2,000,000
Cost of Training for District Con	mittooo			
Cost of Training for District Con	Nos.		LUMPSUM	1,600,000
Committees	1105.		LOIMFSOIM	1,000,000
	Sub-Total			1,600,000
0 ((D))				
Cost of Preventive measures		1		000.000
Cost of condom distribution & Cholera pills	Nos.		LUMPSUM	200,000
	Sub-Total	1	<u> </u>	200,000
TOTAL (All items above)				3,442,344,185
Field Administration				
Field Administration		20/ of budget		60040000 74
Cost of Field Administration	LUMPSUM Sub-Total	2% of budget		<u>68846883.71</u> 68846883.71
Contingency	Sub-Tolai			00040003.71
Contingency amount to meet	LUMPSUM	5% of total		172117209.3
unforeseen expenditure		5% of total budget		172117209.3
p	Sub-Total			172,117,209.00
	Grand Tota	l		3,683,308,278 Source: SMEC, October 2012

The RAP implementation schedule is proposed for a period of one (1) year. The Chapter presents the activities that are to be carried for RAP implementation.

12.1 Implementation Activities

Prior to commencement of implementation activities and upon request by TANESCO, the government valuer shall carry out a survey of the assets that shall be impacted and prepare entitlements according to the policy framework. TANESCO shall update and thereby present the final RAP document for approval by NELSAP and World Bank.

The following implementation activities shall be undertaken:

- 1) Public disclosure-cum-Launch Workshop: Upon approval of the final RAP, the executive summary and full document of the RAP shall be translated into the local language Swahili. TANESCO main implementing agency would disclose the document in its website, while the World Bank shall disclose the same at its Infoshop. Executive summary and full report would be placed at suitable locations in the region headquarters both at Iringa and Mbeya. Two (2) Disclosure workshops will be conducted to launch the RAP implementation with participation of representatives of the affected people (e.g. village chairpersons, village officer) and other stakeholders from the districts e.g. Land officer, government valuer, etc.
- 2) **Setting up of Grievance Committees:** TANESCO shall ensure that grievance committees at Village, Ward and District level are set up or operationalized.
- 3) Determination of PAPs and processing of entitlements: Based on the stretches identified for commencement of works, number of PAHs affected in each quarter shall be identified and in accordance applicable entitlements for the affected households for every year shall be processed.
- 4) **Opening of Bank accounts for PAPs:** As the compensation amounts vary significantly, regional and district administrations shall be counsel all PAPs, and particularly those whose payment amounts are above the agreed threshold regarding opening of Bank accounts. The counselling shall provide all information on documents required and provide other support as necessary to open these accounts.
- 5) **Training Programme:** Capacity building needs identified during the initial phase need to be addressed. The training programmes shall be a continuous process of orientation trainings and refresher trainings as required.
- 6) Preparation of RAP database: A simple excel based RAP database should be prepared and maintained at the TANESCO and also at Regional levels. The database shall enable to generate reports as required by TANESCO regarding the implementation progress besides for reports as required by donors NELSAP.
- 7) **Village level meetings** Meetings at villages by the District Committee shall be organized to inform PAPs of the following:
 - > Date of providing entitlement certificates; and
 - > providing other information and clarifications as requested

- 8) Notification of entitlements: District Compensation committees would issue notification of expropriation indicating the time when the land has to be vacated and amount to compensation to be paid. For PAPs who are illiterate, the committees shall provide assistance to ensure dissemination of information vide village level meetings.
- 9) **Payment of compensation:** All handing over of the property such as land, structures and compensation will be made in the presence of the affected party and compensation committee. No construction would commence until compensation of these items and payment of other allowances, as applicable has been made.
- 10) Agency for Income Restoration and HIV/Aids awareness: Contracting of agency for Income Restoration and HIV/Aids awareness and commencement of activities including counselling of PAPs, selection of schemes in line with existing government programs and other activities for awareness creation regarding HIV/Aids and other STIs.
- 11) *Handover of land for construction:* Once all property on the stated land is vacated as per notification period of six weeks, the land shall be handed over to the Contractor for construction purposes.
- 12) **Provision of temporary work with contractor and other services:** Contractor shall be required to give preference to all 'able-bodied' men and women for local labor and other associated services, in particular from vulnerable households.
- 13) *Internal Monitoring:* TANESCO will commence internal monitoring of RAP implementation soon after the RAP is approved and implementation activities commence. It shall record:
 - progress made and record project inputs and the number of persons affected and compensated; and
 - measure physical and financial progress of implementation against targets set, using input and output indicators.
- 14) **External M&E:** External M&E shall be made at every quarter and an evaluation shall be carried out after RAP implementation to assess progress and ascertain outcomes with respect to RAP objectives.

	Table 12.1 – RAP Implementation Schedule												
S.No.	Activities	1	2	3	4	5	6	7	8	9	10	11	12
1	RAP Launch/ Disclosure												
2	Determination of PAHs for every quarter												
3	Counselling to PAPs on opening of Bank accounts, informing of necessary documentation	_											
4	Training Programmes for officials of Committees for Compensation Grievance Committee Wayleave												

Table 12.1 – RAP Implementation Schedule													
S.No.	Activities	1	2	3	4	5	6	7	8	9	10	11	12
	regulations												
7	Village level												
	meetings to inform												
	PAHs on:												
	 issuance of 												
	expropriation												
	orders												
	 compensation 												
	entitlements												
9	Issuance of												
	Expropriation Order												
10	Payment of												
	Compensation and												
	all allowances												
11	Contracting of												
	agency and												
	commencement of												
	Income Restoration												
	schemes and												
	awareness creation												
	on HIV/Aids and												
	other STIs												
12	Handover of land for												
	civil construction												
13	Provision of												
	temporary labor									L		⊥	
	works on a											- T	
	preferential basis to												
	local population and												
	vulnerable												
14	households Grievance												
14	Committees						-						
15	Internal Monitoring					ſ	1		l	l		I	
15	External M&E					<u> </u>						I	
10			L		1				l			/IEC, Sep	4 2042

12.2 Green Light Conditions

Green light conditions or specific RAP activities that need to be completed before commencement of physical works would be:

- > Issuance of notification for acquisition and entitlements; and
- > Payment of compensation for all affected assets to PAPs and applicable allowances, except for trainings under income restoration schemes, etc.

CHAPTER 13 – PARTICIPATION AND CONSULTATION STRATEGY

Public consultation and the disclosure of information vide an appropriate communication strategy are vital components for the success of any development project. Comprehensive public consultation i.e. both in content and frequency of meetings would be undertaken to elicit the desired level of cooperation from the communities and RAP implementation is satisfactory to them.

13.1 Disclosure of RAP

Once the updated final RAP is approved by NELSAP, the Executive Summary and Full RAP document shall be translated into the local language – Swahili. TANESCO – main implementing agency would disclose the document on its website. Executive summary and full report shall be placed at suitable locations in the region headquarters – both at Iringa and Mbeya and also at TANESCO's Regional Offices. Simultaneously TANESCO shall inform the World Bank of: i) its date of disclosure of the RAP; and ii) provide a no-objection for disclosure of the RAP at World Bank's Infoshop.

Before commencing Project implementation a project launch and RAP disclosure workshop will be conducted at both these locations to launch the RAP implementation with participation of representatives of the affected people (e.g. village chairpersons, village officer) and other stakeholders from the districts (e.g. Land officer, government valuer, representative of the Contractor, etc.). The main objectives of the workshop will be:

- to provide information on the project such as the proposed construction schedule, arrangements for valuation and compensation payments;
- > to provide information on compensation payable and processes involved therein.
- > consult and create awareness amongst local community members about income restoration options;
- to solicit help from local government officials and other bodies, and encourage their participation in RAP implementation.

13.2 Existing channels of Communication

Current communication and information dissemination mechanisms mostly comprise *barazas* which are meeting places that exist at the village level to gather and discuss relevant issues. Hence these need to be supplemented with other mechanisms so that communities do not experience prolonged periods without any information on the project.

13.3 Communication Strategy and Plan

Timely and accurate information dissemination requires that the project authorities undertake proactive measures to instill confidence amongst PAPs. Therefore the communication strategy requires direct interaction with PAHs, and the whole community. An appropriate communication strategy shall require critical elements:

- > have an enabling and supportive environment within the existing institutional setup; and
- take support from existing avenues such as *barazas* to inform, coordinate, disseminate information and facilitate activities and help build rapport;
- finally, be prepared for a long period to reduce their fears, anxieties particularly with respect to compensation and other safety issues wherein information disseminated is supported by prompt responses and commensurate actions.

The overall goal of the communication strategy is to rightly inform the communities, correct prevalent misperceptions and create an atmosphere of trust and cooperation. Specifically the objectives of the communication strategy shall be as follows:

- a) to create a common understanding of the objectives of current project
- b) to create a sense of appreciation of the efforts to address and alleviate the impacts caused by taking of land for the transmission line;
- c) to create awareness empower and build capacity;
- d) to sensitize the staff involved in the project as well as other relevant officials of the need to regularize interactions with village communities to allay apprehensions and correct mis-conceptions:
- e) to orient the vulnerable groups and women to participate in the meetings conducted and to support them.

The foremost requirement of the communication strategy is to disclose the details on project activities and entitlement provisions as applicable to PAHs. The following action plan is proposed:

- a) Use of *Barazas* for holding of meetings: These customary but informal avenues can be utilized by TANESCO and district administrations to disseminate information and discuss issues relevant to project and PAPs. Regular meetings (more frequently initially) shall be a key confidence building feature. As it is expected that PAPs will have more questions and concerns to express, there shall be a need to carry out meetings on not just a periodic basis but also as deemed necessary by officials and requested for PAPs/PAHs. Such meetings should be attended by key officials from the District administration, involve members of the village administration and affected PAPs. Further as a matter of practice the discussion points from such meetings, outcomes and the list of participants should be diligently recorded and the same should be pasted on the notice boards. Further care should be taken to ensure maximum participation of PAPs by holding meetings at mutually agreed date and time. Organizing and holding of separate meetings with vulnerable groups female headed households, is a pre-requisite.
- b) Installation of Notice boards at key locations in all the affected villages: Notice boards represent information that is definite and is also permanently available to PAPs. It should include description of the project along with a sketch indicating the route and direction of the line bordered by adjacent village/sub-villages; contact details of key officials at the District administration offices and TANESCO Regional Offices for further information and assistance.
- c) Provision of separate space: It is recommended that TANESCO's H.O. and Regional Offices provide separate space for the disclosure of all project documents including RAP. These space/area should contain all project related documents:
 - information (in digital and non-digital form), Project reports, and line route over village maps;
 - database of affected households, consisting primarily of non-confidential information collected from surveys; and
 - information pertaining to the compensation and allowance payment process; entitlement notifications.
- d) Designate an officer specific for the purpose: TANESCO's regional offices should designate a person as the Public Information Officer (PIO) who shall be responsible to provide information on the project to all concerned. He / she should be involved right from the stage of RAP approval.
- e) Media Centre of TANESCO: The department shall prepare appropriate publicity material for usage by Regional TANESCO offices, District and village administration to disseminate information amongst affected villages. It shall further educate communities regarding likely accidents and safety prevention measures (See Box 1 and Appendix E).

Box 1 – Information relating to accident and safety messages for extra high voltage transmission lines

Transmission lines are extra high voltage lines transmitting electricity from generating station to consumers via grid substations. In TANESCO, transmission lines are of 66,000 Voltage (66 kV), 132,000 voltage (132 kV) and 220,000 Voltage (220 kV) lines.

Sources of accidents occurring in electricity transmission lines

- > Carrying out activities under the lines. E.g. farming, cattle grazing, playing, etc.
- > Building closer or under the lines
- > Vandalism. E.g. of members of transmitting steel towers, conductors (cables)
- Bush fires

Type of accidents occurring in transmission lines

- > Electrocution of people and other living creatures
- ➤ Fires
- > Hit by falling steel towers, conductors, etc
- Social and economic accidents. E.g. blackouts, loss of revenue to Tanesco and the nation

How to avoid accidents occurring in transmission lines

- > Do not do any activity under transmission lines. You are endangering your life.
- > Do not build closer or under transmission lines
- > Stop vandalism of electrical equipment in transmission lines.
- > Do not set bush fires.
- Objects touched by a fallen wire e.g. fences, buildings or even surrounding ground must be considered energized and should not be touched.
- Stay away from towers and lines during extreme windstorms, heavy rains, thunderstorms or other extreme conditions.

Source: www.tanesco.go.tz

One of the objectives of the resettlement program is to ensure that the affected individuals and families regain and preferably improve upon their living standards. Resettlement induced by linear development projects is often on the critical path as they are often required to be carried out in sequential manner. If not implemented adequately, it can cause severe delays in the project leading to time and cost overruns. The objective of monitoring and evaluation is to concurrently monitor these different activities by stage and compare it with the baseline information as per the census survey and check on progress with respect to targets set. Monitoring involves periodic checking to ascertain whether the activities are being carried out in accordance with the approved RAP and in particular with the timelines set. In contrast, evaluation is an assessment in keeping with overall project and RAP objectives and to ascertain whether the activities have achieved their intended objectives.

14.1 Internal Monitoring

Resettlement monitoring includes the collection, analysis, reporting and use of information about the progress of resettlement, based on the RAP. Progress is usually measured and reported against timebound targets. Quantitative indicators provide an efficient tool for monitoring many aspects of project performance. It focuses on physical and financial targets and delivery of entitlements to people affected and usually is conducted internally by the executing agency; sometimes within assistance from the external monitoring specialists. In the case of socioeconomic impacts, however, supplementary qualitative assessment is necessary. TANESCO will carry out internal monitoring through its' PIU. It is proposed that for this project, both internal monitoring – by TANESCO and external evaluation – by an experienced agency, be carried out. Key Monitoring indicators shall include the following parameters:

- > Physical
- Financial (compensation/establishment)
- Resettlement and rehabilitation
- Social (Education and Health)
- Processes
- Institutional

Monthly reports about activity progress will be prepared based on information obtained from i) District Administration through Regional Administration/TANESCO's Regional offices and ii) from the Contractor's progress reports. A quarterly report will be generated including information on all project/output indicators, photographs, along with a detailed analysis of achieved results, constraints observed and experience gained. Information compiled bi-annually shall be presented to the World Bank office and during missions, when undertaken (Templates for reporting are provided in **Appendix C**). Internal monthly monitoring reports will be compiled by the TANESCO, while formal monitoring reports will be prepared on a Quarterly basis for distribution to relevant stakeholders.

14.2 External Monitoring and Evaluation

Resettlement evaluation helps to assesses whether the resettlement objectives were appropriate and whether they were met specifically, livelihoods and living standards have been restored or enhanced. Evaluation differs from monitoring because of its broader scope, its less frequent timing, its involvement of independent specialists. Evaluation assesses resettlement efficiency, effectiveness, impact and sustainability, drawing lessons as a guide to current and/or future resettlement planning. Further, undertaking External Monitoring and Evaluation shall help to assess resettlement implementation and impacts, verify internal monitoring and reporting, evaluate qualitative aspects of the resettlement program, and suggest adjustments to the delivery mechanisms and procedures, as required.

Monitoring shall be carried out beginning Quarter 1 (i.e. Month 4 and subsequently at end of every quarter and evaluation shall be carried out once i.e. a few months after the end of RAP implementation to assess the outcomes, if satisfactory in achievement of objectives. Both positive and negative impact will be measured in both quantitative and qualitative way. The key tasks shall be to:

- verify internal reports by carrying out periodic site visits and holding interactions with PAH/PAPs on issuance of entitlement certificates, delivery of compensation to PAPs, including the levels and timing of the compensation;
- assess suitability of provisions for relocation of PAH/PAPs, preparation and adequacy of resettlement sites; construction of houses;
- check measures proposed and implemented for income generation or livelihood restorations measures for those affected of both landless and those with balance landholdings
- check on provision of special assistance for vulnerable groups; repair, relocation, or replacement of infrastructure; enterprises, compensation, and adequacy of the compensation; provision of trainings and other allowances;
- carry out random survey and consultations with a sample of PAPs in open-ended discussions, to assess their knowledge of the project progress, timing of submergence of the area, etc.
- > check type of grievance issues and the functioning of grievance redress mechanisms
- carry out a random surveying standards of living of DPs (and people in an unaffected control group, where feasible) before and after implementation of resettlement, to assess the effects of the resettlement on their standards of living; and
- > advise TANESCO regarding possible improvements in the implementation of the RAP.

Also in order to enable a comparison and thereby to ascertain the achievement of R&R program in a more accurate manner, i.e. these results should be compared with those of non-affected or Control households. The evaluation of the impact should be based on sample of affected households drawn from the total affected households. These shall be representative of the type of impacts recorded by group and drawn from each impacted village. These shall be as follows:

- those affected households who have lost all their cultivable landholding;
- > those affected households who have lost their homestead and cultivable land and structures;
- those vulnerable households who have some parcels of their cultivable land;
- > those who have to change their occupation from land to non-land based activities;
- those who have relocated (or did not relocate) to another area from their present area i.e. to center/town, command area, another village and also village; and
- those who are not affected by the project

The evaluation report should draw upon interactions with communities, village administration from the implementing agencies – Village, District and regional Administration and TANESCO. Also the agency should draw reports from the RAP database and other sources as necessary, etc. Six broad indicators for Evaluation are as given below in **Table 14.1**.

	Table 14.1 – Broad indicators for assessing quality of life								
S.No.	Impact evaluation indicators	Pre-project baseline values	Annual evaluation	End of project evaluation					
1	Annual income								
2	Occupation								
3	Landholding								
4	Material assets								
5	Access to basic services								
6	House type								
	•	·		Source: SMEC, Sept. 2012					

See **Appendix D** for TORs for External Monitoring and Evaluation.

CHAPTER 15 – GREIVANCE REDRESSAL MECHANISMS

15.1 Grievance Redressal

Disputes or grievances may arise as a result of resettlement-related/compensation issues, such as:

- > error in the identification and/or measurement of affected property and people within the wayleave;
- > disagreement around the ownership of property/assets (such as inheritance related disputes);
- > disputes arising over improvements to structures post valuation but prior to compensation payments;
- > disagreement on property valuation with respect to market price; and
- > problems relating to the time and manner of compensation payment

A grievance redressal mechanism independent of implementing agencies is therefore essential to allow affected individuals to voice concerns and seek redressal. The Land Act (Section 156) only provides for grievances related to land acquisition and compensation issues related to creation of a wayleave to be brought to the High Court of Tanzania. It is usually too expensive and impractical for most persons and in particular PAPs. Any dispute that may arise should be best redressed through project management, local civil administration, other civil administration or other channels of mediation acceptable to all parties. Such channels of mediation may involve customary and traditional institutions of dispute resolution. Also addressing of complaints at the level they occur and not let them escalate in nature, is often the most effective way. The PIU officer in charge of grievances should make every effort to resolve grievances at the community level Therefore it is recommended that claims and complaints regarding compensation and resettlement issues are brought to attention of the local leadership. They will then forward grievances concerning the non-fulfillment of entitlement contracts, levels of compensation or seizure of land and asset without compensation to the corresponding Ward Executive Officer or eventually directly to the District Executive Director for redressal. This would ensure that recourse to the legal system as being the last resort.

Civil Procedure Code 1966 and Land disputes Act 2002 provide the basis for redressal of grievances. A three tier grievance redressal mechanism is proposed followed by the last resort to the courts i.e. judicial system. These mechanisms for redressal of grievances are given below:

15.2 Tier I – Village land council

Land Disputes Court Act provides for establishment of a Village Land Council. Composition of the Council shall be of seven members including three women with each member being nominated by the Village Council and approved by the Village Assembly. The functions of the Council as per the act are to:

- i) Receiving complaints from parties in respect of land;
- ii) Convening meetings for hearing of disputes from parties; and
- iii) Mediating between and assist parties to arrive at a mutually acceptable settlement of the disputes on any matter concerning land within its area of jurisdiction.

The council can therefore be the first level to report a grievance, particularly as there is a degree of familiarity in people with such forums. Procedures for grievances will be explained clearly at *barazas*. These avenues can be utilized to formally or informally address grievance resolution for:

- > wrongly recorded personal or community details;
- > wrongly recorded assets including land details and/or affected acreage;
- > Change of recipient due to recent death or disability
- Recent change of asset ownership

- > Wrong computation of compensation
- Names missed out of register

PAPs should be informed and advised to lodge their complaints, if any to this committee. Illiterate PAPs shall be assisted to lodge their complaints in writing. The village committees should assess the grievance and state the course of action within three days to the complainant PAP. The redressing the grievance could require measurement equipment; survey personnel; time to check other records or other adjacent plot owner; availability of committee members as they could be busy with other works or addressing other complaints, and thereby take time. Hence, a period of 7 working days shall be adequate for appropriate redressal. If the complainant PAP is not satisfied with the settlement proposed, the case should be taken to the next stage.

15.3 Tier II – Ward Level Committee

At this stage a Ward Executive Officer shall preside over a Ward-Level Committee. The committee shall comprise of at least three representatives from PAPs, one local leader of affected community and the PIU officer in charge of grievances. TANESCO shall be responsible to setting such a committee at each of the affected wards. Grievances shall be heard and redressed appropriately within a period of 15 days.

15.4 Tier III – Office of the District Executive Director

A District Resettlement Action Plan Committee shall be constituted with representation from PAPs, affected communities (local leaders) and the PIU officer in charge of grievances and chaired by the District Executive Director. TANESCO shall be responsible to set such a committee at each of the affected districts. Grievances shall be heard and redressed appropriately within a period of 15 days. At this stage,

Follow up activities on grievance mechanisms are as follows:

- Proactively disclose information about the process, as well as success in grievance resolution, measured by numbers of satisfactorily resolved complaints, reduction of recurring complaints, decreases in new complaints
- Ensure constant consultation with project affected persons on ways to improve on the mechanisms and processes therein
- Prepare a short brochure on the steps in resolving conflicts/disputes

At this stage, PAPs who were not satisfied with the outcomes from these three stages shall be oriented by the office regarding the procedures applicable under appropriate courts of law.

15.5 Tier IV – Judicial System /Courts

Details of jurisdiction of High Court followed by Court of Appeal of Tanzania are presented below:

High Court (Land Division) has jurisdiction on matters including

- (a) in proceedings for the recovery of possession of immovable property in which the value of the property exceeds fifty million shillings;
- (b) in other proceedings where the subject matter capable of being estimated at a money value in which the value of the subject matter exceeds forty million shillings;
- (c) Land Acquisition Act (Cap 118)* in respect of proceedings involving the Government. Appeals of matters originating from the Ward Tribunal

Further, persons aggrieved with the decision of District Land and Housing Tribunal in the exercise of its appellate or revisional jurisdiction, may within sixty days after the decision date appeal to the High Court (Land Division).

- Every appeal to the High Court (Land Division) shall be by way of petition and shall be filed in the District Land and Housing Tribunal from the decision, or order of which the appeal is brought;
- Upon receipt of a petition under this section, the District Land and Housing. Tribunal shall within fourteen days dispatch the petition together with the record of the proceedings in the Ward Tribunal and the District Land and Housing Tribunal to the High Court (Land Division)

Any person who is aggrieved by the decision of the High Court (Land Division) in the exercise of its original, revisional or appellate jurisdiction, may with the leave from the High Court (Land Division) appeal to the Court of Appeal of Tanzania in accordance with the Appellate Jurisdiction Act.

Under Civil Procedure Code, 1966 where any land is acquired under this Act and there is a dispute or disagreement relating to any of the following matters

- the amount of compensation
- ➤ the right to acquire the land
- > the identity of persons entitled to compensation
- > the application of section 12 to the land
- > any right, privilege or liability conferred or imposed by this Act
- > the apportionment of compensation between the persons entitled to the same

and such dispute or disagreement is not settled by the parties concerned within six weeks from the date of the publication of notice that the land is required for a public purpose, the Minister or any person holding or claiming any interest in the land may institute a suit in the Court for the determination of the dispute. (2) Every suit instituted under subsection (1) shall be governed in so far as the same may be applicable.

In assessing compensation for any land acquired under the provisions of this Act, the Minister or the Court, as the case may be, shall, subject to section 12

- a) take into account the value of such land at the time of the publication of notice under section 8 without regard to any improvement or work made or constructed thereon thereafter or to be made or constructed in the implementation of the purpose for which it is acquired;
- b) when part only of the land belonging to any person is acquired, take into account any probable enhancement of the value of the residue of the land by reason of the proximity of any improvements or works made or constructed or to be made or constructed on the part acquired;
- c) take into account the damage, if any, sustained by the person having an estate or interest in the land by reason of the severance of such land from any other land or lands belonging to the same person or other injurious effect upon such other land or lands;
- d) not take into account any probable enhancement in the value of the land in future;
- e) not take into account the value of the land where a grant of public land has been made under the provisions of subsection (2) of section 11;
- f) assess such compensation in accordance with such principles, 'in addition to and not inconsistent with the principles specified in this section, as may be prescribed

Also if there has been possession of any land before the compensation has been paid to the person or persons entitled to the same, or before compensation awarded by a decree of the Court in respect of such land has been paid into the Court, Minister, in addition to compensation, shall pay interest of 6% per centum per annum from the date when possession is taken until such compensation is paid to such person or persons entitled to the same or is paid into the Court.

The decision of the Court or, where an appeal has been made, of the Court of Appeal for East Africa in respect of the subject matter of any proceedings under section 13 shall be final and conclusive as respects all the parties to the proceedings. The amount payable shall be paid into the Court (except where the Court otherwise directs) and not out of Court save in accordance with the directions of the Court.

In case of dispute over title/ownership, the owner (s) in possession (or in receipt of rents) immediately prior to acquisition shall be deemed to the owner of land unless the contrary is shown to the satisfaction of the Court and such owners shall be deemed entitled to the compensation.