



AFRICAN DEVELOPMENT
BANK GROUP

PROJECT: Mombasa-Nairobi-Addis Ababa
Road Corridor - Phase III

COUNTRY: Ethiopia & Kenya

ESIA SUMMARY

Date: July 2011

Appraisal Team	Team Leader:	Z. TESSEMA, Transportation Engineer, OITC.2
	Team Members:	N. KULEMEKA, Socio-Economist, ONEC.3 M. BENARD, Transport Economist, OITC.1 U.DURU, Environmental Specialist E. GARBADO, Infrastructure Specialist, ETFO G. MAKAJUMA, Infrastructure Specialist, KEFO F. ASAYE, Procurement Officer, ETFO D. MUKUTU, Finance & Management Officer, KEFO F. MKANDAWIRE, Regional Financial Mgt. Coord., KEFO
	Sector Manager:	A. OUMAROU, OITC.2
	Sector Director:	G. MBESHERUBUSA, OITC
	Regional Directors:	S. KAYIZZI-MUGERWA (OREB) G. NEGATU (OREA)
	Sector Managers:	L. BARROW (ETFO) J. MUTONGA (KEFO)

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (ESIA)

SUMMARY

Project Name : **Mombasa-Nairobi-Addis Ababa Road Corridor Phase II**
Countries : **Ethiopia and Kenya**
Project Number : **P-Z1-DBO-070**

1. Introduction and Background

The project road is an important section of the Trans-African Highway Cairo-Cape town. Within Ethiopia and Kenya, the road is a link on the main Addis Ababa – Nairobi - Mombasa corridor. The road crosses the Ethiopia – Kenya border at Moyale. The Ethiopian section of the road from Hawassa to Ageremariam is approximately 197 km long, while the Kenyan section from Turbi to Moyale is approximately 122 km in length. The construction and rehabilitation of these two missing links are part of the efforts by the governments of Ethiopia and Kenya to improve trade and regional economic integration between the two countries and socio-economically develop the sub-regions.

Given the magnitude of the envisaged road works, aspects of environmental impacts and the potential number of households to be displaced, the project has been classified as Category 1 in accordance with the ADB's Environmental and Social Assessment Procedures (ESAP, June 2001) and the respective laws and procedures of the respective countries. Based on the scoping studies, full Environmental and social impact assessments have been conducted. Their main objective is to ensure that negative environmental impacts of the project will be avoided or reduced to acceptable levels, and that positive impacts are enhanced so as to improve the overall environmental performance of the road project.

The background to this project is that the ESIA and RAP studies were done in 2009 in what constituted Phase II, and had covered the following road sections by country: Kenya: Merille River – Marsabit – Turbi – Moyale; and Ethiopia : Moyale – Mega - Yabelo – Ageremariam. In this phase (Phase II) the Summaries and feasibility studies had anticipated that the said road sections would be financed in full but klater was discovered that resources would not be sufficient hence only Merille – Marsabit – Turbi, leaving out Turbi – Moyale on the Kenyan side; and in Ethiopia only covered some sections of the Moyale – Ageremariam. The current Phase, (Phase III) is now covering all the remaining parts including the extension from Ageremariam to Hawassa on the Ethiopia side. Apparently Phase II resources ended up being sufficient to cover the Moyale – Ageremariam sections in Ethiopia.

The summary covers the following sections: Project Description and Justification; Policy, Legal and Administrative Framework; Description of Project Environment; Project Alternatives; Potential Impacts and Mitigation/Enhancement Measures; Environmental and Social Management; Monitoring Program; Public Consultations and Public Disclosure; Complementary Initiatives; Conclusion; References; Annex 1 (RAP Summary for Hawassa – Ageremariam Road Section); and Annex 2 (RAP Summary Turbi – Moyale Road Section).

2. Project Description and Justification

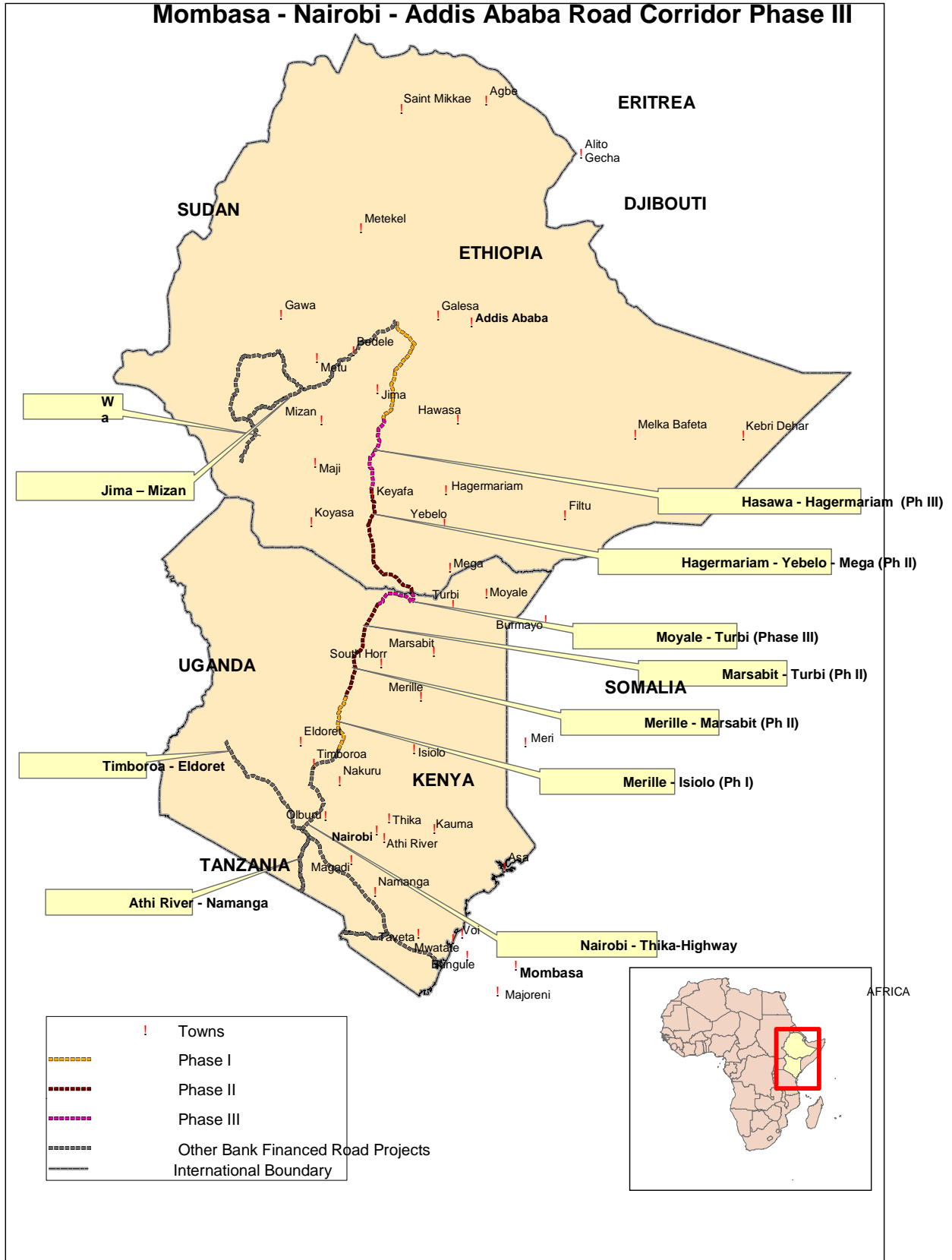
The proposed project intends to upgrade the Hawassa – Ageremariam and Turbi – Moyale Road sections to improved bitumen standard and bitumen, respectively.

On the Ethiopian side, the project road starts at Hawassa which is the Regional capital of SNNP (Southern Nations, Nationalities, and Peoples) Region. From Hawassa the road traverses towns of Aposto, Chuko, Dilla, Yirga Chefe, Fisseha and Genet before reaching Ageremariam town. The Hawassa – Ageremariam section of the road will be upgraded according to DS3 standard of the Ethiopian Roads Authority (ERA) Design Manual. It involves the widening of the existing road which has an average carriageway width of 5.5-m and 0.5-m shoulders on both sides, to a 7-m carriageway and 1.5-m shoulders on both sides in flat and rolling sections or 7-m carriageway and variable shoulders in mountainous/escarpment sections. Vertical and horizontal realignments will be necessary to fit DS3 standards, and drainage structures will be incorporated as necessary.

The Kenyan section of the road, i.e. the Turbi –Moyale Road (A2), passes through two major towns in two districts, namely Turbi and Moyale of Eastern Province. After leaving Turbi, the road traversing villages and trading centers of Walda, Sololo Town, Dambala Fachana, Qate, Funyata, Odda and Butiye before reaching Moyale. The width of the bitumen surfaced carriageway will be 7-m, with shoulders 2-m in width. The project road will follow the existing alignment, as closely as practicable. However, some minimal realignment is foreseen. Drainage structures will be newly constructed or rehabilitated, while junctions and accesses will be improved.

The current condition of the Hawassa - Ageremariam and Turbi – Moyale Road sections is very poor, and has hindered traffic hence trade between Ethiopia and Kenya as well as the socio-economic development within the regional area that it serves. Upgrading the road will have significant national and regional benefits. The implementation of the project, will greatly contribute to improving transport and communication infrastructure among the horn and eastern Africa Countries, removing physical barriers to cross-border trade, and expanding market size beyond national boundaries. For Ethiopia, the corridor will also constitute an economically viable alternative outlet to the sea through the port of Mombasa. At national levels, the project road connects the important coffee growing area of southern Ethiopia with the regional and national capitals of Hawassa and Addis Ababa respectively. In Kenya, the road will play a pivotal role in facilitating development of the Arid and Semi-Arid eastern region and integrate it with the rest of the country.

Mombasa - Nairobi - Addis Ababa Road Corridor Phase III



3. Policy, Legal and Administrative Framework

This section outlines the legal and regulatory framework, which have been prescribed for the development of the plant and ancillary facilities. The legal and regulatory framework provides the various legal aspects that must be adhered to at project design, implementation and later when it is decommissioned and during operation. The following are the applicable policies and regulations.

African Development Bank Policies and Procedures: Environmental Policy (2004), Policy on Poverty Reduction (2004), Policy on Population (2002), Gender Policy (2001), Policy on, Involuntary Resettlement (2003), Policy on Disclosure of information (2005), Policy on Good Governance, Policy on Public Consultation and Cooperation with Civil Society (2001), African Development Bank Environmental and Social Assessment Procedure (2001).

Environmental Policies and Regulations:

Ethiopia

- The Constitution of Ethiopia (August 1995) embodies the right of the Ethiopian people to development and to live in a clean and healthy environment.
- The Environmental Policy of Ethiopia (April 1997)
- Proclamation on Environmental Impact Assessment (EIA) and the
- Proclamation on Environmental Pollution Control (EPC), both of which came into effect in 2002. The EIA Proclamation makes an EIA mandatory for specified categories of activities undertaken either by the public or private sectors and is the legal tool for environmental planning, management and monitoring. The primary objective of the EPC Proclamation is to provide the basis from which the relevant ambient environmental standards applicable to Ethiopia can be developed, and to make the violation of these standards a punishable act. Other proclamations of relevance to the ESIA are those on
- Proclamation on Expropriation of Land Holdings and Payment of Compensation; Rural Land Administration and Land Use;
- Proclamation on Research and Conservation of Cultural Heritage;
- Proclamation on Development, Conservation and Utilisation of Wildlife; Forest Development, Utilisation and Conservation; and
- Proclamation on Water Resources Management;
- Proclamation on Public Health.
- The National Environmental Protection Authority's EIA Guidelines,
- Ethiopian Roads Authority's Environmental Procedures Manual, African Development Bank (AfDB) Group's Policy on the Environment (2004) and environmental institutions have been reviewed and incorporated into the EIA Report.

In terms of the institutional and administrative framework, the Environmental Protection Authority (EPA) was established in 2002 to provide for the protection and conservation of the broad environment, through the formulation of policies, strategies, laws and standards which foster social and economic development in an environmentally sustainable manner. The EPA is responsible for reviewing and approving all environmental and social impact assessments. It is

also in charge of formulating of relevant policy and legal instruments. The Environmental Protection Unit was created to ensure harmony with respect to the implementation of the environmental proclamations and other environmental protection requirements. The Regional Governments are responsible for planning, directing and developing social and economic programs, and protecting natural resources. The Regions have established sector bureaux, commissions and authorities through which their functions are administrated. Thus the Regional Environmental Agencies are responsible for the coordination, formulation and implementation of regional conservation strategies and for environmental monitoring, protection and regulation within the regions.

The Ethiopian Roads Authority (ERA) was established in 1951. ERA's Environmental Monitoring and Safety Branch (EMSB) is responsible for setting and implementing ERA's environmental guidelines. It advises, coordinates and supervises aspects relevant to environmental management in the road sector. The Right of Way Branch is under the Construction and Contract Administration Division, is responsible for making available the required land for road/highway construction and maintenance, the establishment of materials sources, and construction campsites, and for the implementation of resettlement action plans.

Kenya

Various sector specific legal instruments exist that cover environmental and social issues such as public health; soil erosion; protected areas; endangered species; water rights and water quality; air quality, noise and vibration; cultural, historical, scientific and archaeological sites; land use; resettlement; etc. However, the main piece of legislation governing environmental management in Kenya is the Environmental Management and Co-ordination Act (EMCA) of 1999. The main objective this Act is to provide for the establishment of an appropriate legal and institutional framework of the management of the environment in Kenya. EMCA provided for the establishment of a National Environment Management Authority (NEMA), which became operational in July 2002. NEMA has the statutory mandate to coordinate all environmental activities. The Act makes environmental impact assessment mandatory for activities specified in its Second Schedule, including the rehabilitation of major roads. The Environmental (Impact Assessment and Audit) Regulations, 2003, provide the basis for procedures for carrying out Environmental Impact Assessments (EIAs) and Environmental Audits. Several other regulations have been issued which have relevance to this ESIA, including the Environmental Management and Co-ordination (Waste Management) Regulations, 2006 and the Environmental Management and Coordination (Water Quality) Regulations, 2006.

Other legal instruments applicable to environmental and social management with respect to this road project include:

- Workmen's Injury Benefits, 2007;
- Occupational Safety and Health Act, 2007 (which incorporates Rules for Building Operations and Works of Engineering Construction; Health & Safety Committees; Noise Prevention and Control; Fire Risk Reduction)
- Water Act, 2002
- Traffic Act, Cap. 403.
- Public Health Act, Cap 242
- Wayleaves Act, Cap 292

- Land Acquisition Act, Cap 295
- Public Roads and Roads of Access Act, Cap 399
- Chief's Authority Act, Cap.128.
- Wildlife Conservation and Management Act (CAP 376) of 1976

The National Environment Management Authority has the overall responsibility for approval of environmental assessment studies, enforcement and compliance as well as monitoring. The Provincial and District Environment Officers represent NEMA at provincial and district levels, and are required to inspect and monitor all activities that may have environmental impacts, and to investigate any complaints and claims that the public may have with regard to environmental issues caused by any project or activity.

Within the road sector, the Environmental and Social Division in the Kenya National Highway Authority (KeNHA) oversees management of environment and the preparation / implementation of EIAs and RAPs for the road sector.

4. Description of the Project Environment

The topography along the road from Hawassa to Ageremariam is initially rolling terrain followed by a long relatively flat stretch up to Moyale. It is generally a flat and rolling terrain from Hawassa to Dilla; and rolling and hilly/mountainous from Dilla to Ageremariam. Soon after Moyale, as it enters Kenya, the land descends from the Ethiopian plateau to the low level plains of northern Kenya. Here the road follows generally flat terrain to Merille River, apart from a mountainous section to the north and south of Marsabit. The soils found along the project road range from sands, brownish to red silty clays, rocky stony lava soils, white and red sandy soils, and alluvial soils along the river beds. Many sections of the road are prone to soil erosion.

The project road is located in a number of climatic zones: from warm (10⁰C to 25⁰C) temperate around Hawassa, to semi-arid at Moyale, and semi-arid and arid beyond Moyale through Turbi, Marsabit up to Merille River, apart from the elevated areas of Mt. Marsabit which is described as semi-humid. Rainfall along the Hawassa – Ageremariam is relatively high ranging from 801 to 1800 mm, while the entire project area is bimodal, falling from March to May and September to December, and ranges from 300 mm in the arid parts to 1400 mm in the mountainous areas. The initial part of project area between Hawassa and Ageremariam has several perennial rivers. The general drainage pattern is towards the south east. As the project transcends further, the project road does not cross any major perennial rivers, except several seasonal streams.

The vegetation type varies considerably: in the lowlands the natural vegetation ranges from open grassland, Acacia woodland and bushland, giving way to deciduous woodland in some places, while natural tall forests and thick bush are found at higher elevations. Gazetted forests along the road are the Megeda Regional Priority Forest Area just south of Ageremariam, and Mount Marsabit Forest Reserve. The trees in the highlands within Ethiopia are mostly eucalyptus, *tid*, and other isolated trees of different species; and there are agro-forestry activities (that specifically characterizes Gedeo Zone), at several locations, for considerable stretches along the road between Hawassa and Ageremariam.

The entire project area is very rich in terms of wildlife and biodiversity. Along the Ethiopian section of the road, the wildlife species include: hyena, fox, leopard, monkey, baboon and

different species of wild cat. In Kenya, especially Phase II of the project, the road goes through three fauna sensitive areas, these being Marsabit National Reserve, Losai National Reserve and Dida Galgalu. Marsabit National Reserve hosts some rare and endangered species, and there is an established elephant migration corridor between Samburu Game Reserve, Meru National Park and Marsabit National Reserve. Mt. Marsabit Forest Reserve is a unique habitat for several endemic, rare, threatened or vulnerable plant species. The current phase of the project does not have any of the sensitive areas except for the area near Dida Galgalu which is internationally recognised Important Bird Areas (IBAs). Implementation of the project will not affect any of these areas as the IBA is over 60 km away.

The total population of the Ethiopian project woredas (districts) is estimated to be 1,349,627, while that in the project districts in Kenya is 354,467; with a family size of between 4 and 6.

The predominant occupation of the rural population in the vicinity of the road section is in agriculture, livestock husbandry. However, some subsistence farming is also practiced. In the urban centres, people are involved in small businesses and wage employment. Remittances are also an important source of income.

5. Project Alternatives

The road sections between Hawassa - Ageremariam and Turbi – Moyale are existing roads with very few suggestions for realignment. As the Project is rehabilitation of an existing road on the Ethiopia side, and upgrading on the Kenyan side, no other alternatives to the project road in its entirety have been considered as such. However, there are two bypasses requested by the communities and stakeholders. The proposed, and analyzed, are in Dilla town (Ethiopia) where three alternatives, including the existing road in the town, were compared and the alignment with the least overall impact was selected for implementation. Similarly, Ageremariam town authorities have requested for a bypass in order to reduce level of compensation and resettlement on the existing alignment. While the Dilla alignment calls for detailed assessment of environmental impacts, the Ageremariam is mainly a shift from one urban street to another without significant impacts on social and environment since the street already exists but with no impacts.

From a purely environmental stand point, the “no project” option is preferable to implementation of the project, since it would avoid causing of any of the adverse impacts associated with the road upgrading activities. However, the potential social and economic benefits to the local population as well as the region would be foregone. The project road is important on a local, national as well as international level, as it connects districts, towns and villages, and provides international connection from Ethiopia to Kenya through Moyale. Therefore in terms of social wellbeing and economic development, the benefits associated with the “with project” option outweigh the negative impacts arising from the project.

6. Potential Impacts and Mitigation/Enhancement Measures

The rehabilitation of the Hawassa – Ageremariam, and Turbi – Moyale Road sections is part of the Addis Ababa – Nairobi - Mombasa corridor of the Trans East African Highway. It will play a pivotal role in facilitating development of southern Ethiopia and northern Kenya as well as

providing a crucial link between the two countries which will enhance regional trade, and contribute to increased security and conflict resolution in the project area. The road will facilitate the tapping of the substantial resource potential of southern Ethiopia and northern Kenya. Hawassa and Ageremariam are major coffee producing areas, while the rest of the region is a key livestock-keeping zone and has potential for tourism. Northern Kenya has also been a major oil exploration zone. A large part of the project area is prone to drought and famine; the provision of relief food and other forms of humanitarian aid is therefore frequently necessary. The improved road is expected to enable rapid emergency response.

The upgraded road with its increased carriage width, improved geometry, smoothed surfaces and efficient drainage structures, will likely improve the drainage across and alongside the road, thus minimizing erosion and siltation problems during the operation phase. These measures will improve traffic conditions and reduce hazards for both motorised and non-motorised traffic. Vehicle operating costs will be reduced, and there will be savings in travel time. Access to social and economic amenities such as health facilities, schools and markets will be enhanced. Job opportunities will arise for workers to be recruited along the project road, both as skilled and unskilled labour. The workforce will create a demand for services, such as catering and hospitality, supply of provisions, and thereby encourage small scale and micro ventures. Thus the upgraded project road is expected to enhance the standard of living and socio-economic welfare of the people living within its zone of influence, as well as other road users from further afar.

However, the road rehabilitation project will also have adverse environmental and social impacts that are likely to result from construction activities and the road's subsequent operation if not appropriately mitigated. Soil erosion, compaction and pollution will result from land clearing and grubbing, extraction of construction materials, and compaction by heavy equipment, use of detours and access roads, and spillage of hazardous substances like fuel and oils.

Damage to natural vegetation and visual intrusion may be caused by clearance during widening of the road, construction of detour roads, exploitation of material sources and contractor's site establishments (campsites, aggregate production and asphalt mixing plants). These impacts will be minimized by limiting land clearing to the imperative area for the project, applying half-way construction method, adjusting the road construction for the dry season, lining the side and diversion drains, establishing vegetation or grasses on ground surfaces exposed to water or wind erosion, and restoring borrow pits, detours and access roads when construction is completed. Material sources and the contractor's site facilities will be systematically selected, to avoid forest areas and areas affected by temporary uses like borrow sites, campsites and access roads should be rehabilitated and replanted, and indiscriminate cutting of vegetation by the construction workforce prohibited.

Air quality may be affected by increased traffic due to the road condition and from vehicles used during construction. Adequate measures including regular and adequate maintenance of diesel powered equipment during construction will be implemented. It is also envisaged that regulations on vehicle fitness and use of over-age vehicles will be implemented in the two countries.

Impacts on water resources quality may also arise due to excavation, spillage of hazardous substances, and conflicts over water with existing users. Recommended mitigation measures

include carrying out cross-drainage works during the dry season, proper storage and handling of hazardous substances, and developing water supply sources for the construction works and the campsite requirements.

Impacts from dust and noise will arise due to earth moving activities, hauling of construction materials, and aggregate production. These can be reduced by restricting traffic speeds and regular watering of detours and other active construction sites (where water is available), regular and effective maintenance of construction equipment and vehicles, and locating contractor's site establishments away from sensitive receptors like settlements, water sources, schools, health centres and places of worship. Road workers will also be provided with appropriate protective clothing.

Wildlife may be impacted as a result of disturbance to habitats, disruption of wildlife movements across the road, and animal fatalities, mainly in relation to extraction and haulage of construction materials, execution of construction works, increasing of traffic volume and speed (during operation phase), and obstructions caused by the sections having high fill. The impacts will be addressed through avoidance of locating quarry and borrow sites and contractor's site facilities in wildlife conservation and fauna-sensitive areas. In addition, warning signs should be erected to create awareness among construction workers as well as road users.

Commercial ivory poaching of elephants remains a serious problem in northern Kenya due to its proximity to illegal ivory markets in Ethiopia and Somalia, and the large number of illegal firearms in the hands of local people. Formal structures for protection and management of wildlife by government institutions in this area are extremely limited due to lack of manpower and resources, and accessibility, but these institutions will have to be strengthened in order to contain the potential poaching problem. Enhanced accessibility provided by the road may assist in curbing poaching and enhancing security. It is also envisaged that the improved road network will facilitate security arrangements for these purposes.

The risk of traffic accidents involving pedestrians or roadside communities, and domestic animals will increase due to higher traffic volumes and speeds. These impacts can be mitigated by establishing traffic management plans that include erecting clearly visible warning signs, reducing traffic speed, installing speed bumps, sensitizing the drivers involved on the project to the need to employ safe driving practices, reducing dust levels, and raising the awareness amongst the roadside communities (including children) and road users through implementing a road safety campaign.

Road projects, especially highways of this nature, are associated with increasing the incidence of HIV/AIDS/STI along their routes. HIV/AIDS/STI campaigns will be implemented, targeted at the local communities, the workforce, and road users, to educate and raise awareness on the prevention of these infections.

Increased urbanization and higher immigration rates along the project road will lead to greater demand on infrastructure services and natural resources, such as water and firewood. Moreover, easy transportation of charcoal and firewood to bigger urban centres beyond the project area will present a serious threat to the forests and woodlands in the vicinity of the project road.

Land take, destruction of buildings, loss of trees and crops, and loss of livelihoods will occur as a result of this road project. Along the Hawassa - Ageremariam section of the project road in Ethiopia, the project road will have impact on agricultural land, permanent crops and trees. An estimated 42.97 hectares of farmland will be affected due to realignment and widening of the ROW, of which, 31,922 permanent trees (fruit, etc.) and 284,535 different types of cash and food crops, such as, coffee trees, chat and enset crops. A large size of eucalyptus trees (328,648) used for construction & fuel wood will also be affected. In the town sections and villages located along the project road about PAPs will lose residential houses and businesses to some extent. Similarly, public utilities such as, electricity poles, telephone poles and will also be affected. The housing structures to be affected are 1040 (311 thatched, 718 corrugated iron sheets roofing and 11 constructed from metal sheets); houses and fences for 5 fuel stations; farmland for perennial crops and trees for 285 PAPs. All these add up to 1330 affected persons. The public utilities to be affected also include: 2944 electricity poles & transformers and 61 telephone line poles & boxes. The total amount of compensation estimates for all affected properties is about Birr 117,650,232 (USD 6,961,552).

While on the Turbi – Moyale road section in Kenya, it is anticipated that a total of 1,153 properties in all categories will be adversely affected by improvement of the project road. Of this number of affected properties, there are 401 PAPs with structures/buildings who will be affected. Similarly, 326 PAPs with fences and 186 PAPs with trees and/or crops will be affected. Clearly, the foregoing numbers of PAPs are not indicative of total entities affected by the project road because of duplication across affected property categories, i.e., one PAP may have a structure, fence and/or tree or crop that will be affected by the project. Affected properties are more relevant in this case than the number of persons. The total amount of compensation estimates for all affected properties including public utilities is approximately Kshs 138,108,166 (USD 1,543,108).

Archaeological sites were not encountered will not be affected by the road project. However, a number of graves may need to be relocated.

7. Environmental and Social Management

The Environmental and Social Impact Assessment studies for both sections of the project road have included Environmental and Social Management Plans (ESMP) that comprise mitigation, monitoring and institutional actions to be taken during the detailed design, preparation for implementation (preparation of tender documentation), construction and operation stages of the project to eliminate, reduce or offset the adverse environmental impacts. The plans are integral to the project, and they aim to enforce adherence by the contractor during the construction phase and the public during the operational phase to the set minimum environmental standards; measure the attainment (success or failure) of the laid down mitigation measures to ameliorate foreseen impacts, and to spot unforeseen impacts and to suggest immediate mitigation measures.

During construction, incorporation and implementation of environmental mitigation measures into the road project will be the responsibility of the contractor, who will be supervised by, in the Ethiopian case, the Resident Engineer and the Environmental Inspector assigned by the EMST. In the Kenyan context, the contractor will be supervised by the Resident Engineer and the ESU in KeNHA.

After completion of works, the responsibility for environmental management along the project road will lie with the EMST on the Ethiopian side and the ESU along the Kenyan side.

For some of the proposed mitigation measures (such as road safety, HIV/AIDS prevention and awareness, impacts on wildlife and forests), local authorities and government organisations with specific mandates will be involved in supervision during and after construction, for example, the departments responsible for wildlife and forests, health authorities, traffic police, etc.

The estimated mitigation and management costs are given below:

Hawassa - Ageremariam Road

	Ethiopian Birr	US \$
Resettlement Plan (including cost of relocating infrastructure)	117,650,232	6,961,552
Environmental mitigation	10,705,000	633,432
Public health and safety awareness (included in Engineer's Estimate)		
HIV/AIDS Prevention Programme	1,200,000	71,006
Road Safety campaign	2,000,000	118,343
Environmentalist	338,000	20,000
Training of Environmental Management Expert	507,000	30,000
Routine environmental monitoring costs (including resettlement and compensation)	2,690,000	159,172
TOTAL	133,090,232	7,993,50
ENVIRONMENTAL AND SOCIAL MANAGEMENT COSTS		
RoE: 16.9 US\$ = 1 ETB		

Moyale – Turbi River Road

	Kenya Shillings	US \$
Resettlement Plan (excluding cost of relocating infrastructure)	86,849,987	962,235
Cost of relocation public infrastructure (power and telecommunication)	15,636,755	174,712
Environmental mitigation	23,100,000	258,101
Environmental monitoring	7,950,000	
Road safety campaign (included in Engineer's Estimate)		
HIV/AIDS Prevention Programme	12,521,424	139,904

TOTAL ENVIRONMENTAL AND
SOCIAL MANAGEMENT COSTS

138,108,166

1,543,108

RoE: 1 US\$ = 89.5 KShs

8. Monitoring Program

Environmental monitoring will be required both during the implementation and operation phases of the project to ensure the proper implementation of the EIA recommendations. Monitoring of environmental parameters will identify potential problems from the road development activities and will allow for prompt implementation of effective corrective measures.

The major issues that need to be monitored include, but not limited to, land acquisition and restoration after completion of works, location and operation of material sources and hauling condition, establishment and operation of contractor's site facilities, soil erosion and siltation, drainage, water pollution, and impacts on water supply of existing users/competition for water, waste management or disposal, effects on flora and fauna and road and traffic safety issues.

Details of the proposed environmental monitoring plans are presented in the ESIA reports. The plans include environmental issues and mitigation measures, indicators to be monitored, the responsibilities for monitoring, duration/frequency of monitoring and the estimated cost of monitoring activities. Some monitoring indicators are given below:

Monitoring Aspects / Impacts	Indicators
Soil erosion	Extent of sedimentation and debris in side drains and culverts
Drainage	Number of functioning drainage structures
Pollution of water sources	Water quality data
Air and noise pollution	Number of complaints received
Waste management	Amount of waste on site Number of waste disposal sites
Traffic safety	Number of fatal accidents
Vegetation / flora	Number of trees planted
Wildlife / fauna	Number of wildlife kills
Loss of property and livelihood means	Number of households resettled / compensated

Responsibilities for monitoring are spread between the contractor, the Resident Engineer, and ERA and KeNHA in Ethiopia and Kenya, respectively. The monitoring plans assume that resources will be made available to the various government institutions involved in order to carry out effective monitoring. If this may not be feasible in the short term, then alternatively, ERA or KeNHA as the case may be, may need to hire a multidisciplinary team of experts on a short-term basis.

9. Public Consultations and Public Disclosure

Ethiopia: Hawasa - Ageremariam Road Section

Consultations with major stakeholders were conducted at different places along the project road between October 2009 and February 2010 at places including: Hawasa Zuria Woreda, Dale Woreda, Aleta Chuko Woreda, Dilla town and Ageremariam town. The participants of the consultations were representatives from the respective administrations, relevant sector offices, chairpersons of different organizations and selected representatives of residents of the respective areas. Besides, non-government organizations (NGOs) in Aposto, Chuko and Dilla were also consulted. In addition, roadside discussions with traffic police and residents were also made. Issues raised by the communities for ERA's consideration included the following:

- To construct appropriate pedestrian walk way,
- To widen the ROW,
- To construct bus and taxi terminals,
- To erect appropriate traffic signs,
- To construct appropriate drainage system.

The major consensus reached during the discussions were: i) the acceptability of the project was found to be high; ii) communities rather expressed their worries on the possible delay of the project; and iii) they unveiled their willingness to fully cooperate in areas like removal of to-be-affected houses and other properties during project implementation; iv) communities see the project road as the only major outlet for export or domestic markets; v) upgrading of the road is important for the development of the agriculture sector/local economy and improvement of the socio-economic status of the local population; and vi) construction activities will cause a number of adverse impacts including deforestation and loss of rangelands, increased disturbance and killings of wildlife; increased accident risks to pedestrians and livestock; impediments to movements of livestock caused by sections in high fill; and annoyance caused by dust pollution.

The following are some of the issues where consensus has been reached during the public consultation and meeting held with administrative and technical experts.

- The woreda administration agrees to provide support and assistance for people who will lose their land (farmland or residential land) for the construction of the right of way, detour and for other construction purposes; although aware of some inconveniences the community welcome the construction of the project road.
- Special support and priority will be made by woreda administration offices and the community for female headed households if affected by the construction of the project road.
- Shall facilitate the smooth implementation of the construction works and provide other routine administrative supports if need be.
- Shall facilitate the employment of labour force from the locality.

While it was recommended that the road is upgraded following the existing route so that all the towns and villages along the existing road are connected, and so that destruction to existing buildings and business activities is minimised. However, improvements as per the required design standards are accepted which shall include, on request by-passes in Dilla and Ageremariam towns. These requests for new routes (in line with the master plans) are as the result of insufficient RoW width that will otherwise result in demolishing of numerous houses and other properties.

In all these, mitigation measures and/or compensation measures are being put in place to reduce the above indicated and other potential impacts of the road construction activities.

With regard to Public disclosure, ERA publicly discloses the ESIA and RAP in Amharic and local languages, in this case, Oromiffa, Sidama and Gedeo Languages and makes copies available and distribute with a letter accompanied to Regional and Woreda authorities. Modes of communication used vary but include the following:

- a) Publishing on ERA's website;
- b) Publishing in local newspapers;
- c) Announcing on local radio stations and
- d) Depositing/posting in a range of publicly accessible places such as, Woreda offices, Municipalities and Kebele Administration offices.
- e) Publishing on African Development Bank (ADB) website;

Kenya: Turbi - Moyale Road Section

During field investigations, meetings were held at Sololo, Logologo, Turbi, Moyale, Laisamis, Bubisa and Merille, where district officers, chiefs, other local government representatives, elders, and members of the communities (including women and youth) participated. Informal discussions were also held with road users and transport operators (truckers, public service vehicle operators, vehicle owners and bus inspectors). For the preparation of the Resettlement Plan, extensive consultations were held to brief the project affected persons on land acquisition requirements and procedures.

The stakeholders were concerned about:

- Receiving the compensation payments due to them. Therefore people preferred to be paid cash through a bank. The project affected people would open a bank account and money deposited rather than through individuals such as chiefs;
- Their entitlements not being recognized, since not everyone has a legal title to land and assets that would be affected;
- Incomplete land transfers, especially with regard to inherited land, and consequently difficulties that may be encountered in getting compensation and/or legal recognition as owners;
- Receiving fair and timely compensation for expropriated land and assets including mechanism for making expropriation payments;
- Valuation of different qualities of land/trees expropriated;
- The needs to establish a grievance redress mechanism. In this regard, grievance committees were agreed upon and tentative committees proposed;
- Needing more information on the land acquisition process;
- Land expropriation and compensation (private, common, pasture lands, crops and assets etc);
- Damage to infrastructure (markets, schools, water points etc);
- Impacts on livelihoods (i.e. animal husbandry; access to grazing lands);
- Employment opportunities;

- Inter-community relations; and
- Management and monitoring of the road works.

The issues raised during the consultations and the information provided were considered during the environmental and social impact analyses, and recommendations made to for the design, construction, and operation of the project, and the implementation of the resettlement plans.

10. Complementary Initiatives

Relocation/Compensation

A Resettlement Plan has been prepared for the Hawassa – Ageremariam Road, and a summary has been provided in the Annex 1. A total of 1330 persons will be affected, either through losing building structures, crops and/or trees. Some farmland and trees on public land will also be affected. The total cost for the implementation and monitoring of the resettlement plan, including relocation of infrastructure, is estimated at US\$ 6,961,552.

A Resettlement Plan has also been prepared for the Turbi - Moyale Road, and a summary is contained in the Annex 2. Along the Turbi - Moyale Road, 1,153 property and assets belonging to communities will be adversely affected by improvement of the project road. Of this number of affected properties, there are 401 PAPs with structures/buildings who will be affected. Similarly, 326 PAPs with fences and 186 PAPs with trees and/or crops will be affected. The foregoing numbers of PAPs are not indicative of total entities affected by the project road because of duplication across affected property categories, i.e., one PAP may have a structure, fence and/or tree or crop that will be affected by the project. Affected properties are more relevant in this case than the number of persons. The total cost of the RAP is estimated at US\$ 962,235 including relocation of public utilities, implementation, administration and monitoring costs.

Road Safety Awareness Campaign

Road safety was raised as a concern during the public consultations along the entire project road from Hawassa to Ageremariam and from Turbi to Moyale. In the ESIA Reports, a number of design considerations as well as Roads Safety Awareness campaigns have been proposed and are included in the Bills of Quantities (BoQ). For both the road sections, costs for the road safety awareness campaign have been included the Engineer's Estimate.

HIV/AIDS Awareness and Prevention

For both the Ethiopian and Kenyan sections of the project road, the contractor is required to carry out an HIV/AIDS/STI awareness raising campaigns, which will target both the workforce as well as the local communities. Costs of implementation for the HIV/AIDS awareness and prevention campaign have been included in the environmental mitigation and management costs in the ESIA Reports for both the Hawassa - Ageremariam Road and the Turbi – Moyale Road.

11. Conclusion

The Hawassa - Ageremariam and Turbi – Moyale roads rehabilitation and upgrading are interventions on existing alignments with minor improvements on spots that require same. However, this does not guarantee the situation that the road does not pose any detrimental environmental impact beside the positive contribution. The project will bring substantial regional benefits to southern Ethiopia and eastern Kenya, as the road provides a critical link in the Trans East African Highway, connecting land locked Ethiopia to the port of Mombasa. The improved road will enhance the development of the national and local economies in both countries, by promoting cross-border trade, creating market access for livestock,

improving security, enhancing tourism and enabling rapid emergency response.

The construction and operation of the project road will also have a number of negative environmental impacts. These include, among others, soil erosion, competition for and pollution of water sources, air and noise pollution, loss of natural vegetation, disturbance of wildlife and animal fatalities, and traffic safety problems to the local communities and their livestock. Means for mitigation have been proposed in all cases, and environmental and social management plans prepared. Furthermore, details of physical/engineering and bio-engineering mitigation measures have been quantified and included in the BoQ, and specified in the conditions of contract and the technical specifications respectively.

However, the most significant impact would be the need to acquire land for the widening of the carriageway and road reserve, and the associated destruction of buildings, structures, trees and crops. This has been addressed through Resettlement Action Plans for both the Ethiopian and Kenyan sections of the project road.

In the final analysis, therefore, although the road project will pose negative impacts on the environment, the magnitude is not high as it follows the existing alignment. That is, the project could be carried out with minimum effect on the environment provided that the proposed mitigation measures are implemented properly with adequate supervision and monitoring.

12. References and Contacts

References

- i) Integrated Environmental and Social Impact Assessment Guidelines (Appendix 7, Road and Railway); January 2004
- ii) Resettlement Action Plan and Land Acquisition, for Hawassa – Ageremariam Road Rehabilitation Project, SAI Consulting Engineers (India) and Highway Engineers and Consultants PLC (Ethiopia), February 2011.
- iii) Social and Environmental Impact Assessment Report, Merille River – Moyale Road; Egis BCEOM International; January 2009.
- iv) Update of the Resettlement Action Plan for Merille River -Moyale Road Project, Egis BCEOM International July 2011.

Contacts

Ethiopian Roads Authority
P. O. Box 1770,
Addis Ababa, Ethiopia
Tel: +25 11 530423 or 513227
Fax: +25 11 51 48 66

Ministry of Roads
Ngong Road
P.O. Box 30260
Nairobi, Kenya
Tel: +254 020 2723101 / 88
+254 020 2713135

The Kenya National Highway Authority
Blueshield Towers
Hospital Road, Upper Hill
P.O. Box 49712 -00100
Nairobi, Kenya.

Tel. +254 020 8013842
e-mail: info@kenha.co.ke
website : www.kenha.co.ke

**ESIA SUMMARY ANNEX
SUMMARY RESETTLEMENT PLAN
FOR COMPENSATION AND RESETTLEMENT**

Project Name : **Mombasa-Nairobi-Addis Ababa Road Corridor Phase III
Rehabilitation of Hawassa - Ageremariam**
Countries : **Ethiopia**
Project Number : **P-Z1-DBO-070**

Description of the Project and Project Area

The rehabilitation of Hawassa - Ageremariam Road is part of the Government of Ethiopia's efforts, as a member of COMESA, to improve the standard of the Trans East African Highway, which extends from Addis Ababa, through Ageremariam across the Kenya border at Moyale, to Marsabit, Merille River, Isiolo, Nairobi and finally the port of Mombasa on the Kenyan coast. The project road starts at the beginning of Hawassa town particularly at a bridge located at Tikur Wuha. Hawassa town is the capital for SNNPR and is located some 275 km south from Addis Ababa. The project road traverses a number of important towns namely, Hawassa, Aposto, Chuko, Dilla, Yirga Chefe, Fisseha Genet and finally terminating at the town of Ageremariam. The project road is located in two administrative regions, namely, SNNPR (southern Nationals, Nationalities and Peoples Region) and Oromia Region with more than 90% of the project road being located inside SNNPR. The road crosses 11 woredas in Sidama & Gedeo Administrative zones of SNNPR, and 2 woredas in Borana zone of Oromia Region. The project road predominantly passes over rolling terrain, after which it is mainly flat as it approaches the border. The current condition of the Hawassa - Ageremariam Road is very poor, and this has hindered socio-economic development within the regional area that it serves.

The upgrading of the Hawassa - Ageremariam Road involves the widening of the existing road which has an average carriageway width of 5.5 m and 0.5 m shoulders on both sides, to a 7m wearing course and 1.5m shoulders on both sides in flat and rolling sections or 7m wearing course and variable shoulders in mountainous/escarpment sections. Vertical and horizontal realignments will be necessary to fit DS3 standards, and drainage structures will be incorporated as necessary.

Potential Impacts

Upgrading the road will have significant beneficial national and regional impact. The project road connects the southern part of Ethiopia which is an important coffee growing area with the regional and national capitals, Hawassa and Addis Ababa, respectively. The road will facilitate development of southern Ethiopia and northern Kenya as well as provide a crucial link between the two countries, which in turn is expected to enhance regional trade, and contribute to increased security and conflict resolution in the project area. Currently Ethiopia relies upon the port of Djibouti for access to the sea. The road will, therefore, facilitate land-locked Ethiopia with an alternative access to the sea via the port of Mombasa in Kenya. Agriculture and livestock keeping are the major economic activities over much of the project area, and the road will open up access for marketing of produce and livestock. It is anticipated that the improved road will enable rapid emergency response to the drought-prone areas of southern Ethiopia.

Potential environmental impacts include soil erosion; deforestation; damage to natural vegetation; disturbance to habitats, disruption of wildlife movements; animal fatalities; poaching; visual intrusion; and air, dust and noise and water pollution. Social impacts include an increase in the number of traffic accidents, the spread of HIV/AIDS/STI, increased urbanization and subsequent pressure on natural resources, such as water and firewood.

The upgrading of the project road will have impact on agricultural land, permanent crops and trees. An estimated 42.97 hectares of farmland will be affected due to realignment and widening of the ROW, of which, 31,922 permanent trees (fruit, etc.) and 284,535 different types of cash and food crops, such as, coffee trees, chat and enset crops. A large size of eucalyptus trees (328,648) used for construction & fuel wood will also be affected. In the town sections and villages located along the project road about PAPs will lose residential houses and businesses to some extent. Similarly, public utilities such as, electricity poles, telephone poles and will also be affected. The housing structures to be affected are 1040 (311 thatched, 718 corrugated iron sheets roofing and 11 constructed from metal sheets); houses and fences for 5 fuel stations; farmland for perennial crops and trees for 285 PAPs. All these add up to 1330 affected persons. The public utilities to be affected also include: 2944 electricity poles & transformers and 61 telephone line poles & boxes. The total amount of compensation estimates for all affected properties is about Birr 117,650,232 (USD 6,961,552).

The project works will generally impact on households through land takes. While houses and structures will be affected, PAPs will step back within their compounds hence not move to new places in form of complete relocation or resettlement to new areas. Households will be dispossessed from their farmland permanently except those who may lose strip of farmland during implementation through construction of detours. Hence, there will not be households who may require resettlement to other parts as an option because of expropriation of their land or demolition of their house by the project road. PAPs whose houses will be demolished due the ROW will be relocated either in the remaining plot area they already have or in the nearby neighbourhood without disturbing their social network.

Organisational Responsibility and Implementation of RAP

The Ethiopian Roads Authority (ERA) will establish and facilitate a Resettlement Implementation Committee (RIC) in each Woreda that is affected by the project road. This committee will comprise representatives from the local administration (the Woreda Administrator will chair the committee), representatives from PAPs and other influential persons including NGOs and CBOs. The actual implementation of the RAP will be managed by ERA while the RIC will co-ordinate and handle any problems encountered during planning and the implementation of the RAP. Hence ERA will prepare an implementation schedule which will cover all resettlement activities from preparation through implementation. The RIC will report on the progress of the RAP to ERA and local authorities on a monthly basis. It will also assist in ERA in monitoring RAP activities. Day to day supervision and monitoring will be conducted by the road project Engineers. Periodic supervision and monitoring will be arranged by ERA and EPA and local NGOs, CBOs and FBOs on behalf of communities.

The ERA's Divisions and Branches, specifically the Environmental Monitoring and Safety Team (EMST), Environmental and Social Management Team, Contract Construction Implementation Division (CCID), and the ROW Branch, are well equipped to manage the RAP within its implementation timeframe. ERA will be responsible for the implementation of the compensation process and relocation of PAPs, after new sites are selected and prepared for resettlement. Zone, Wereda, Municipalities, urban and rural kebele administration officials of the project area shall be consulted.

Both SNNPR and Oromia Regional States will play important role in the implementation of this RAP in their respective regions. They will facilitate implementation by providing support and guidance to those woreda administrations traversed by the project road. Woreda administrations are legally responsible to allocate land for those PAPs who have lost their land for the construction

of the road and to closely monitor and oversee the implementation of this RAP as presented in the document.

Consultations with the Public and Local Authorities

Public consultations were held at different times from October 2009 - February 2010 with Zonal, woreda and kebele authorities; with PAPs, elders and women representatives, and sector office heads in each of the woreda towns and villages traversed by the project road. FDRE Constitution also reaffirms the participation of the public, in policies and projects that affect their livelihood, as per Article 43 No.2. Both the public and the stakeholders' consultation were held in all the towns and also in those kebeles (rural and urban) located along the project road. The consultations were conducted with different community groups residing in the project influence area. The consultations were held in the form of meetings and Focus Group Discussions (FGD). The different groups of public and private organizations, community groups and Project Affected Persons (PAP), and individuals who participated in the public and stakeholders consultations in the towns of Aposto, Yirgale, Chuko, Dilla, Ageremariam include

During the public consultations held in the above towns the issues discussed include, potential impacts, legal procedures and process for compensation payment, grievance redress mechanisms, involvement of PAPs in compensation committees, relocation of PAPs if any, Opinion and suggestions of participants and PAPs about the proposed by pass, design standards, ROW width, the role and responsibility of woreda authorities. The consultations revealed that the upgrading of the road is seen as facilitating public and goods transportation and access to livestock markets, thus promoting trade and driving economic and social development activities. However there was concern that of road rehabilitation along its existing route would cause destruction to existing buildings and business activities, an increase in road accidents and pressure to resources; and mitigation and compensation measures were therefore necessary.

Legal and Institutional Framework

The most important policy and legal instrument that governs issues pertaining to compensation and resettlement in Ethiopia is the Constitution of the Federal Democratic Republic of Ethiopia, which has provisions regarding land tenure, expropriation, compensation, public consultation, gender and environmental issues. Other relevant legal documents are:

- Proclamation on expropriation of land holdings and payment of compensation, No. 455/2005, deals with appropriation of land for development works carried out by the government and determination of compensation for a person whose land holding has been expropriated.
- Ethiopian Roads Authority's Resettlement Policy Framework provides ERA's guiding principles for resettlement, rehabilitation and compensation.
- Proclamation on Land use and the Right of Way, No.47/1975, article 7(72) states that Government shall pay fair compensation for property found in the ROW.
- Proclamation on the Environmental Protection Authority (EPA) Policy, No. 295/ 2002, which fosters social and economic development, enhances the welfare of humans and the safety of environment, and ensures effectiveness of the RP implementation process.
- FDRE Proclamation on Research and Conservation of Cultural Heritages (No. 209/2000) provides the legal basis for the Research and Conservation of Cultural Heritage in Ethiopia. The Authority for Research and Conservation of Cultural Heritage (ARCCH) is the main authorized body that is responsible to carry out research and conservation activities on cultural heritages.

ANNEX 1

Loss of land is the major impact observed in road projects, and in Ethiopia, no compensation is made for loss of land. As per the constitution of the Federal Democratic Republic of Ethiopia, land is a public property and that no individual person has the legal right to ownership. Since there is no private ownership of land in Ethiopia, and hence, rural or urban land could not be sold or mortgaged or transferred; citizens have only usufruct right only over land. A usufruct right gives the user of the land the right to use and the right to benefit from the fruits of her/his labour which may be crops, trees, etc. found on the land or any permanent works such as buildings etc.

Regarding expropriation of land for public use, the FDRE has issued two proclamations. The first one being Proclamation No. 455/2005, which deals about the expropriation of land holdings for public purposes and payment of compensation and second one is Council of Ministers regulation No.135/2007, which details and basis on the payment of compensation for property situated on land holdings expropriated for public purposes.

As for rural Land Administration, FDRE has issued proclamation (No. 456/2005) stating the right to hold and use of rural land, and rural land use restrictions. Farmers and pastoralists engaged in agriculture for living shall be given land free of charge. Young people above the age of 18 who want to engage in agriculture also have the right use rural land. It also recognizes that women have the right to get and use rural land. In relation to compensation either by the federal or regional governments, section two, article 7, no. 3 states that:

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

Regarding the preparation of RAP for road projects and its implementation Ethiopian Roads Authority (ERA) is responsible and has the mandate. In ERA, Environmental & Social Management Team (ESMT) and Right-of-Way (ROW) branches are directly responsible for the review, monitoring and implementation of Environmental and Social Impact Assessment (ESIA) and Resettlement Action Plan. ESMT is also in charge for the identification of adverse environmental and social impacts and its mitigation measures.

The ROW Branch is accountable for the implementation of the expropriation/compensation operations, registration of PAPs, establishment of compensation committees, assessment and establishment of compensation rates and payment of compensation.

The content of this RAP is within Ethiopia’s existing legal and administrative framework and African Development Bank (ADB) policy on Involuntary Resettlement. In case of conflicts or gaps between the Federal Democratic Republic of Ethiopia (FDRE) law and ADB Policy, Bank policy will prevail as the final and this RAP will be an international credit agreement between the Government of Ethiopia and ADB.

In addition to ERA, key institutions responsible for the implementation of the RAP at national level include the Ministry of Finance and Economic Development, the Ethiopian Environmental Protection Authority (EPA) and the Regional National State of Oromia, while at regional level the Resettlement and Food Security Office, Zonal administration, and ERA’s District and Zonal Road Authorities are important. At Woreda level, the Woreda Administrations and line departments, respective Municipalities, agricultural departments and Local and International NGOs will be involved in the RAP implementation process.

Entitlement

The compensation approach adopted in this RAP is as per FDRE proclamation 455/2005 and ADB policy on involuntary resettlement. Compensation for land structures, business, fixed improvements and other temporary impacts are based on among other things on market valuation, productivity valuation, negotiated settlements, material and labour valuation, disposition of salvage materials and other fees paid. If relocation of business becomes necessary, access to customers and suppliers should be assured. In addition, workers losing employment in the process of relocating should be entitled to transitional income support. The compensation approach will be determined on the willingness and readiness of owners of a resource to give up their rights.

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

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

In addition, PAPs will be entitled to transitional assistance which include moving expenses, temporary residence (if necessary), employment training and income support while awaiting employment and should have an option for full compensation if duration of impact is to exceed two years. In preparing the valuation average costs will have to be assumed. It should be noted that costs of construction vary from one locality to the other. ERA's RPF also recognizes that PAPs who do not have license or permit and even squatters will not be barred from compensation. It should be noted that lack of license or permit will not be a bar to compensation. Because, even squatters have construction costs relative to design, materials employed, workmanship and final finish.

Eligibility Criteria

ERA has clearly set the eligibility criteria for resettlement/relocation in its Resettlement Policy Framework, and also in its Environmental Procedures Manual. Eligibility criteria contained in both documents are in line with the Constitution of Ethiopia on Involuntary Resettlement and the African Development Bank's Involuntary Resettlement Policy (2003). Accordingly, PAPs that are eligible for relocation/resettlement and to receive compensation are:

- Those who have formal legal rights to land (including customary and traditional rights recognized by law of the country);
- Those who do not have formal legal rights to land at the time the census begins but have a claim to such lands or assets - provided that such claims are recognized under the laws of the country or become recognized through a process identified in the resettlement plan;
- Those who have no recognizable legal right or claim to the land they are occupying; and
- Communities who lose access to public services such as schools, health facilities, water sources, etc.

After consultations with local officials, the 'cut-off date' was set as being between February 1 – March 30, 2010, that is the date when the PAP census/household survey was completed.

Valuation of Assets and Losses

The valuation of affected assets and properties has been based on the replacement cost method. Compensation for forgone benefits from affected farmlands is estimated on the basis of the unit rates established in the RAP. The following considerations have been applied in assessing the amount of compensation for loss of houses and business:

- Compensation will be paid for property situated on the expropriated land and permanent improvements to the land;
- Compensation for permanent improvements to the land will be equal to the value of capital and labour expended on the land;
- The cost of removal, transportation and erection will be paid as compensation for a property that to be relocated and to continue its service as before;
- Compensation and entitlements provided to PAPs are adequate to at least maintain or improve their pre- project standard of living;
- Compensation for replacement of houses and buildings is calculated at the current construction cost, based on the floor area and type of construction material, without allowing for depreciation of the assets to be replaced;
- Compensation for public services will predominantly be by replacement of similar or better facility on alternative site (if need be an environmental assessment will have to be conducted);
- The compensation rates are determined based on information collected from municipalities and Woreda administrations;
- Urban landholders who will be completely displaced from their locations are entitled to a displacement compensation equivalent to estimated annual rent of the houses to be demolished.

The strategy adopted for the expropriation and compensation of the affected properties/ assets follows the Federal Government laws and regulation for valuation and compensation estimate. In addition to the FDRE laws and regulations, WB policies and Regional Government laws and other supplementary guidelines are considered to achieve replacement cost for the lost assets.

This RAP builds on FDRE Constitution and Proclamation 455/2005; and also on ADB policy on involuntary resettlement. The content of this RAP is within Ethiopia's existing legal and administrative framework and ADB's policy on involuntary resettlement. In case of conflicts or gaps between the Federal Democratic Republic of Ethiopia (FDRE) law and Bank Policy, Bank policy will prevail as the final and this RAP will be an international credit agreement between the Government of Ethiopia and the Bank.

Cost and Budget

An itemised cost and budget has been prepared to include compensation for land, houses, fences, trees, public utilities (electric and telephone poles, and water pipes), transitional allowances, costs for monitoring (internal and external) and training of the compensation/implementing committee, HIV/AIDS prevention and control activities during resettlement, and administrative costs. Thus the total cost for the implementation and monitoring of the RAP is estimated at US\$ 6,961,552 (excluding contingencies). RAP resources are part of the project cost and will be met by Government as counterpart funding towards the project.

The RAP specifies the mechanisms for transferring and channelling funds to responsible organizations and agencies, and for disbursement of compensation to the PAPs.

Grievance Redress Mechanism

Compensation payment will be made after the property valuation committee has made the final estimate of compensation payable for the affected properties at a full replacement cost and finally approved by ERA after a written consent in the presence of members of the property valuation committee. If a PAP is dissatisfied with the amount of compensation payment suggested by the property valuation committee, litigation is settled by regular courts. Grievances are first preferred to be settled amicably whenever possible. That is, positive discussions are made to convince the affected PAP in the presence of elders, local administration representative or any influential person in the locality. If the PAP is not convinced with what has been proposed, as stated above, he can take the case to the court. However, to avoid taking the case to court and to speedily and amicably settle the dispute arbitrational tribunal will be established by ERA. The Grievance Tribunal will comprise one representative from the Woreda administration, representative of the ROW Agent, one representative from the PAPs, and one elder from the PAP's community. Similar committees will be set up in host communities in case of large numbers resettling in particular areas. The tribunal will be established by members drawn from each Woreda, ROW agent and representatives of PAPs.

In case the dispute is not resolved, then if any of the Party disagrees, the aggrieved party has the right to appeal to the ordinary courts of law. According to FDRE Proclamation NO.455/2005, Article 11, sub article 1 states; an aggrieved PAP residing in rural area, *"In rural areas and in urban centre where an administrative organ to hear grievances related to urban landholding is not yet established, a complaint relating to the amount of compensation shall be submitted to the regular court having jurisdiction."* Similarly, a PAP from urban area *"may lodge his complaint to the administrative organ established by the urban administration to hear grievances related to urban landholdings"*

Monitoring and Evaluation

The Resettlement Implementation Committee comprising of Woreda administrator, PAP, one from women association, and influential person in the community including NGOs and CBOs will take on the responsibility for the coordination, management and monitoring of the practical day to day implementation of resettlement activities, including the disbursement of compensation. This Committee will report directly to the Woreda Administration offices, to Municipalities in town sections and to ERA. ERA's EMST will be in overall charge of planning, administering, and monitoring the entire resettlement process. Financial resources will also be made available by ERA.

Impact monitoring will be done through an external evaluation, which will assess the effectiveness of the RP and its implementation. The evaluation will assess the appropriateness of the relocation sites, the implementation schedule, the grievance mechanism and mechanisms for assisting vulnerable groups.

**ESIA SUMMARY ANNEX
SUMMARY RESETTLEMENT PLAN
FOR COMPENSATION AND RESETTLEMENT**

Project Name : **Mombasa-Nairobi-Addis Ababa Road Corridor Phase III
Construction of Turbi - Moyale Section**
Countries : **Kenya**
Project Number : **P-Z1-DBO-070**

Description of the Project and Project Area

The Construction of the Turbi - Moyale Road (A2) is part of the Government of Kenya's efforts, as a member of COMESA, to improve the standard of the Trans East African Highway, which extends from the port of Mombasa on the Kenyan coast through Nairobi, Isiolo, Merille River, Marsabit crossing the Ethiopia border at Moyale then Ageremariam, Hawassa to Addis Ababa. The road passes through two major towns in two districts, namely Marsabit and Moyale towns in Marsabit and Moyale Districts respectively, of the Eastern Region. While there are no further towns between Turbi and Moyale, there are a few villages, namely Walda, Sololo, Dambala Fachana, Qate, Funyata, Odda and Butiye before reaching Moyale. The road is approximately 122 km in length.

North of Turbi, the vegetation changes gradually from medium to dense bush. From an elevation of 615.7m at 9.5 km beyond Turbi, the road turns almost 90° for about 4 km after which it straightens for another 17 km, gently moving in a south-easterly direction. The road then runs nearly parallel for 50 km with the Ethiopian border at a distance varying between 6 km to 12 km. Sololo village is located about 39 km to the north of Turbi at a junction on the left-hand side of the road. From Moyale, the project road descends from the Ethiopian plateau to the low level plains of northern Kenya. Thereafter, the road follows generally flat terrain to Merille River, apart from a mountainous section to the north and south of Marsabit. The current condition of the Moyale – Merille River Road is very poor, and this has hindered socio-economic development in the project area.

The width of the bitumen surfaced carriageway will be 7 m, with shoulders 2 m in width. The project road will follow the existing alignment, as closely as practicable. However, some minimal realignment is foreseen. Drainage structures will be newly constructed or rehabilitated, while junctions and accesses will be improved.

Potential Impacts

Upgrading the road will have significant beneficial national and regional impact. The road will facilitate development of northern Kenya and southern Ethiopia, by providing a crucial link between the two countries, which in turn is expected to enhance regional trade, and contribute to increased security and conflict resolution in the area. Furthermore, the road is also expected to facilitate rapid emergency response to the drought-prone areas of northern Kenya. The road will provide land-locked Ethiopia with an alternative access to the sea via the port of Mombasa in Kenya.

The perceived project benefits include less costly and more efficient transport systems; improved marketing opportunities for agricultural products, livestock and non-farm items; enhanced communications throughout the two districts; and, better access to social services, i.e., health and

education. Given the isolation of northern Eastern Province, the project road will play a major role in making this portion of the country—an area greater than 50 percent of Kenya's land mass—accessible to the nation's economic opportunities. Furthermore, the road upgrading will facilitate the population's accessibility to essential infrastructure and services such as hospitals, schools, administrative headquarters and extension services. The project road will vastly improve the existing situation of economic, social, cultural and political isolation and security, all of which are faced by the people in this part of Kenya on a daily basis.

After the project road is upgraded, area residents looked forward to the arrival of more services—mobile networks, telephone landlines and post offices. More and better road signs were welcomed to guide future road users. Even fuel stations were anticipated new development to serve the increased number of road users.

Potential environmental impacts include soil erosion; deforestation; damage to natural vegetation; disturbance to habitats, disruption of wildlife movements; animal fatalities; poaching; visual intrusion; and air, dust and noise and water pollution. Social impacts include an increase in the number of traffic accidents, the spread of STI/HIV/AIDS, increased urbanization and subsequent pressure on natural resources, such as water and firewood, as well as conflicts over water resources. The general view of the participants was that the project's negative impacts can be minimized with appropriate mitigation measures.

The most significant social impact of the project will be due to land take, destruction of buildings, loss of trees and crops, and loss of livelihoods. It is estimated that a total of 1,153 properties in all categories will be adversely affected by improvement of the project road. Of this number of affected properties, there are 401 PAPs with structures/buildings who will be affected. Similarly, 326 PAPs with fences and 186 PAPs with trees and/or crops will be affected. In addition, especially at Moyale, the project will affect telecommunication and power infrastructure. Clearly, the foregoing numbers of PAPs are not indicative of total entities affected by the project road because of duplication across affected property categories, i.e., one PAP may have a structure, fence and/or tree or crop that will be affected by the project. Affected properties are more relevant in this case than the number of persons.

Organisational Responsibility and Implementation of RAP

The overall responsibility for RAP compensation and implementation, and monitoring lies with KeNHA which is charged with implementing the road project. In this regard, KeNHA, as the authority responsible for all national roads in Kenya, ensures coordination and collaboration with other stakeholders of the project; sources road-development funds; ascertains the extent of PAP compensation/resettlement; determines final road alignment; monitors construction progress; provides supervision support; coordinates between different stakeholders; and, guides resettlement.

Given that properties have been identified and valued in accordance with the mandates of the Ministry of Lands, Housing and Urban Development (MLHUD), KeNHA assumes the lead role for RAP implementation. Recognizing the need for timely compensation payments after acquisition notification of six (6) months to PAPs, KeNHA will retain the services of a consultant to act on its behalf, making payments to identified PAPs and arranging valuations and subsequent payments to previously unidentified PAPs. KeNHA's compensation agent will work with and through district compensation committees. The Valuation Department within MLHUD validates the compensation rates passed by District Land Boards; ascertains the values of structures to be compensated; and, advises the relevant Government authorities on matters of compensation from time to time. The

roles and responsibilities of local councils and traditional chiefs in resettlement planning and implementation include ascertaining ownership, mobilizing and sensitizing the general community; adjudicating ownership and boundaries disagreement; guiding the process of compensation; receiving compensation complaints on behalf of the RAP implementing authority; and, facilitating PAP integration in new resettlement areas.

KeNHA will also collaborate with chiefs and local councils to ensure that vulnerable households receive adequate assistance during the process. These include, but are not limited to households of the elderly, households headed by children (orphans), women and by persons with disabilities.

A Compensation Committee will be formed to participate in the planning and oversee the implementation of the RP at the local level. This committee will comprise members of the District Committees, as well as local chiefs, and representatives from the PAPs who may incorporate local NGOs and CBOs.

Consultations with the Public and Local Authorities

The resettlement planning guidelines followed by both GOK and AfDB require the project sponsor to ensure that public consultation is accessible to all potentially affected parties, from national to local levels. These consultation guidelines emphasized the involvement of local stakeholders—those people who are likely to experience the day-to-day impacts of a proposed project. On a practical level, the project sponsor made certain that all stakeholders have access to project information; project information was readily understood, avoiding technical terms whenever and locations for community consultations were accessible to all interested persons and parties; and vulnerable or minority groups were consulted. To achieve these objectives, initial fieldwork was conducted during September 2007 and June 2008 which laid the foundation for the preparation of the 2009 RAP for the entire stretch from Merille River to Moyale. During the RAP update, additional consultations were conducted in June 2011.

Consultations comprised two main components (i) Community meetings and (ii) interviews conducted at the village and household level on the basis of questionnaires. In addition, informal discussions were held with transport operators (truckers, matatu and vehicle owners and drivers, and bus inspectors). During these meetings, land acquisition issues were highlighted and the land acquisition requirements of the Merille River-Moyale road were emphasised and in particular the June 2011 affected Turbi – Moyale communities. Discussions also revolved around the affected communities and their fears about compensation, resettlement and the road project in general; methods of payment of compensation, and the need for fair and prompt compensation; problems relating to entitlements not being recognised for various reasons; vulnerable individuals and groups, including women, the disabled, the landless, orphans and other minorities, that require extra care and protection; cultural—for example, burial places—and communal properties; socially and culturally acceptable and feasible resettlement alternatives; and cultural/social groups who would prefer relocation to a common resettlement area. The need for more information on the land acquisition and resettlement process; and the need to establish a grievance committee were emphasised.

A sequence of meetings will continue mainly with those directly impacted by the road. Structured discussions will be held with local leaders, affected women and vulnerable persons during the implementation phase of the RAP.

Legal and Institutional Framework

The preparation of the RAP is consistent with the Kenyan laws on resettlement, the land acquisition framework as well as African Development Bank Involuntary Resettlement Policy (2003). The main piece of legislation regarding expropriation of land is provided in the new Constitution (2010) of Kenya which is very clear about compensation for involuntary acquisition by the state. Chapter Four, Part 2 in Rights and Fundamental Freedoms, Article 40, clarifies “protection of right to property” by stating:

(3) The State shall not deprive a person of property of any description, or of any interest in, or right over, property of any description, unless the deprivation (b) is for a public purpose or in the public interest and is carried out in accordance with the Constitution and any Act of Parliament that—

(i) requires prompt payment in full, of just compensation to the person; and
(ii) allows any person who has an interest in, or right over, that property right of access to a court of law.

(4) Provision may be made for compensation to be paid to occupants in good faith of land acquired under clause (3) who may not hold title to the land.

The GoK have codified the country's principles and procedures for compulsory acquisition of land for the public benefit in The Land Acquisition Act, Chapter 295. Adopted initially in 1968, the law has since undergone four revisions, the most recent in 2009 prior to passage of the 2010 Constitution.

The Registered Land Act Chapter 300 provides for absolute proprietorship over land (exclusive rights). Such land can be acquired by the State under the Land Acquisition Act in the project area. The Land Adjudication Act Chapter 95 provides for ascertainment of interests prior to land registrations under the Registered Land Act.

Land bordering the project road corridor is still classified as trust land, communally owned, and according to the Constitution “all trust land shall vest in the County Council within whose area of jurisdiction it is situated”. The land is primarily used for grazing and herds must be shifted as the grasses are depleted. Livestock-rearing is the major economic activity in the two affected districts, but persistent drought prevents livestock from being confined to a particular point.

In terms of compensation and resettlement, the overall responsibility lies with KeNHA. The Ministry of Lands and Settlements is a key player responsible for conducting the valuation of structures to be compensated and ascertaining the compensation rates passed by the District Lands Boards. The local councils and chiefs will be involved in ascertaining ownership, general community mobilization and sensitization, immediate adjudication over ownership and boundaries, and providing guidance for compensation process, receiving complaints on behalf of the compensating agency, and facilitating integration within the new relocation sites.

Grievance Redress Mechanism

Grievance committees will be established for the dual purposes of receiving complaints during implementation of compensation and resettlement, and scrutinizing the interests of the affected people. The local grievance committees will include members of the affected villages, village elders, PAP representatives, Chiefs, representative of District Lands Board and voluntary development organizations such as NGOs, CBOs, FBOs, if any, in the project area. Composition of local grievance committees within the project-affected areas was finalized in June 2008 and what remains is to re-activate them in line with the imminent implementation of the project.

Valuation of Assets and Losses

The full replacement cost approach has been adopted; the premise being that costs of replacing productive assets is based on damages caused by project operations. These costs are taken as the minimum estimate of the value of measures that will reduce the damage or improve on site management practices and thereby prevent damage. The approach involves direct replacement of expropriated assets and covers an amount that is sufficient for full asset replacement, moving expenses and other transactions.

For most of the project area, the land is unconsolidated or unadjudicated trust land making issuance of titles not possible. For urban centres like Moyale, the land consolidation and adjudication process is on-going, and so not all land parcels have been registered. Most of the buildings and structures along the road corridor, are constructed from locally available materials; wood, sticks, grass, iron sheets etc. The communities here value their culture and therefore most of their structures are traditional type. The majority of the affected structures are either 'manyattas' or buildings made of iron sheet walls and roof. Some semi-permanent and permanent buildings will also be affected. Most of the permanent and semi-permanent buildings are used as commercial units for local retail trade or as food kiosks. However, it was established that because of their cultural inclination, the resident communities valued and preferred their traditional hut or house types to houses constructed from more permanent contemporary materials.

Valuation has been carried out as follows:

- The chiefs and local people of the affected villages verified the ownership of properties and physical assets. Physical counting of properties like crops, trees, buildings and any other assets requiring compensation was done.
- Registration of properties likely to be affected including land sizes, buildings and any other assets was done using specially designed valuation forms.
- Values of improvements of permanent nature such as buildings and structural works, fences, etc. were estimated on the basis of current depreciated replacement costs of comparable structures.
- Buildings and other improvements (of a non-permanent nature) including huts, kiosks, graves as approved or indicated in the District Lands Board compensation rates were subjected to the relevant figures in the compensation rates.
- Perennial crops and trees were enumerated, categorized and valued in accordance with compensation rates provided by relevant District Lands Boards.
- For those owners with seasonal crops, unless abruptly removed, no compensation is payable for crops as it is assumed that they will be harvested within the period of notice to commence road construction activities.
- Other property values were computed through counting or measuring with tapes before they were registered. Local council officials especially the Chiefs of the affected village witnessed registration of properties.
- Marginal cases (improvements), i.e. other developments that may or may not be affected by the road construction works, were registered and assessed but are likely to be confirmed for compensation as the construction of the road proceeds.

Eligibility Criteria and Entitlement

Affected persons, irrespective of their status (whether they have titles, legal or non-legal rights) are eligible for some form of assistance if they occupied the land before the entitlement cut-off. The

ANNEX 2

entitlement cut-off refers to the time when the assessment of persons and their property in the project area is carried out. For purposes of the updated RAP for this project, the property inventories and valuations were conducted in November 2008 and June 2011. Hence, the cut-off date became 17 June 2011 when the final exercise was completed. Thereafter, new cases are not to be entertained. The key determinant for compensation is the pre-project census during which all residents were identified.

Predictably, involuntary resettlement disrupts and often impoverishes communities; therefore, dislocations should be minimized, *to the extent feasible*, by taking into account existing land uses and designing road alignments to avoid established uses. If displacements are unavoidable, project-affected people (PAP) must be:

- adequately compensated for their losses;
- relocated to settings equivalent or nearly equivalent to their acquired locations and circumstances;
- afforded the opportunities to participate in the benefits envisioned by the road-improvement project including preference of employment to PAPs able and willing to take advantage of; and,
- assisted in re-establishing and improving their livelihoods after resettlement.

Communities (districts, towns and villages) permanently losing land and /or access to assets and resources under customary rights or tenure rights in Kenya will be eligible for compensation. Within the project area, cases for community compensation (public services) include toilets, market places, schools, health centres and water supply. In cases of public services, the project sponsor in collaboration with the proprietor shall arrange for full replacement of the service at an alternative site. Depending on potential impact, an environmental assessment would have to be conducted on the identified site before implementation. Eligibility may be claimed collectively e.g. by village or by religious group. The following table categorises entitlements:

Asset Acquired	Entitled person	Type of Compensation
Agricultural land	Farmer/Title Holder, Tenants/lease holder	Cash Compensation
Commercial land	Title Holder/Business owner	Cash compensation or land for land
Residential Land	Title Holder/Lease Holder/ Owner	Cash Compensation
Building/Structures	Owner/Rental/Lease Holder Squatter/informal dwellers	Cash
Standing Crops	PAP(Whether owner, tenant, or squatter)	Cash
Trees	Title Holder	Cash
Temporary acquisition	PAP (Whether owner, tenant, or squatter)	Cash
Public Services (school, health center, water source, etc.)	Community	Replacement

Cost and Budget

A cost and budget has been prepared to include compensation for land, houses, fences, trees, relocation of infrastructure services, disturbance allowances, and costs for monitoring and administration. The total cost for the implementation and monitoring of the RAP is estimated at US\$ 1,543,108. This amount has been included as part of project cost and will be met through as counterpart contribution to the project by Government.

Monitoring and Evaluation

A plan has been developed for monitoring and evaluation of RAP implementation with indicators for measuring implementation performance, impacts and outcomes. The regular reports prepared by KeNHA to track RAP-implementation are to be reviewed by all stakeholders, at the national and local levels, and AfDB.

Monitoring of the compensation and resettlement processes are to be based on social indicators gleaned from the consultations held in preparation for the upgrading of the project road including organizational and social indicators for both RAP preparation and implementation. The monitoring will cover the review of survey results, formation of relevant committees (including the Grievance Committee) and adherence to compensation payment schedule.

To ensure that successful implementation of land acquisition and compensation for the affected communities is achieved, monitoring and evaluation is to be carried out in accordance with the provisions of the RAP. Internal monitoring and evaluation will be carried out by KeNHA, and external monitoring and evaluation will be carried out by an independent consultant. PAPs are to assume an active role in monitoring of the resettlement activities. Advance funding provisions for the foregoing monitoring and evaluation activities are to be put in place to avoid delays in project implementation. Monitoring and evaluation are key factors in implementing successful resettlement activities. The work of grievance committees and local councils will organize participatory representation in monitoring and evaluating the RAP within the affected communities, using indicators designed by the affected community and their leaders. The justification for the collaboration is that all interested stakeholders will participate in the monitoring and evaluation activities, thus ensuring the success of the project.
