

**PROJECT INFORMATION DOCUMENT (PID)  
APPRAISAL STAGE**

Report No.: AB6267

<b>Project Name</b>	Kenya Transport Sector Support Project
<b>Region</b>	AFRICA
<b>Sector</b>	Transport (Road and Aviation)
<b>Project ID</b>	P124109
<b>Borrower(s)</b>	Government of Kenya
<b>Implementing Agencies</b>	Kenya National Highways Authority, Kenya Airports Authority, Kenya Civil Aviation Authority, Ministry of Roads, Ministry of Transport
<b>Environment Category</b>	<input type="checkbox"/> A <input checked="" type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input type="checkbox"/>
<b>Date PID Prepared</b>	January 4, 2011
<b>Date of Appraisal Authorization</b>	February 1, 2011
<b>Date of Board Approval</b>	April 21, 2011

## 1. Country and Sector Background

### (a) Introduction and Context.

- (i) Kenya's long term development plan, Vision 2030, focuses on transforming the country from a low to a middle-income country by 2030. The economy is expected to grow at an average annual rate of over 10 percent during the period 2015-2030 to achieve this goal. The Government of Kenya (GOK) is currently implementing the first phase of the plan, covering the period 2008-2012 through its Medium Term Plan (MTP). Modern and efficient infrastructure facilities are required to support the expansion of the productive sectors of the economy. The Vision 2030 calls for the rehabilitation and upgrading of the road network, upgrading the railways, improving urban public transport and expanding access to electricity and clean and safe water.

### (b) Sectoral and Institutional Context

- (ii) The transport sector in Kenya has witnessed significant policy and institutional reforms over the last five years. The World Bank has played a key role by providing financial assistance and knowledge in the reform process. The outcome is that the roles of various transport sector institutions have been clarified, new policies enacted and new institutions established by separating policy formulation from execution of programs, and provision of oversight and regulatory functions among others.
- (iii) The bold reforms in the entire transport sector that the GOK has embraced recently, which were unacceptable for many years in the past have built the foundations for a strong and well managed sector, including policy and institutional reforms but requiring capacity building, and strengthened regulatory and oversight functions. Additional resources are required to support efforts in consolidating these gains and deepening the

reforms further, and also in the implementation of the resultant investment programs. Such support would be in line with Bank's commitment to promote reduction in the cost of doing business in Africa, facilitating the unblocking of the constraints to movements of the population out of poverty, and ensuring the benefits from growth are shared more equitably.

(iv) Kenya has developed the Roads Sector Investment Plan (RSIP) covering the period 2010-2024. According to the RSIP about USD6.7 billion is required for the next 5 years. The RSIP has been developed on the basis of economic justifications using the Highway Development and Management Model (HDM-4) and moderated to incorporate social and political considerations. Furthermore, road interventions in order of priority are for routine maintenance, periodic maintenance, rehabilitation, reconstruction, upgrading expansion and development. Also included are interventions to deal with road safety, provision of non-motorized facilities, bypasses, missing links in urban areas and bridges. The road sections selected for inclusion in the project are on the Tanzania-Kenya-Sudan and Northern Corridors, among the top priorities in RSIP. These corridors traverse the most productive and populate regions of Kenya and also serve the neighbouring countries. Improvement of these road corridors has been identified also as a high priority by the East Africa Community (EAC).

(v) The aviation industry has recorded major growth over the last 5 years. For instance, the total number of aircraft registered in Kenya increased from 877 in 2004 to 959 in 2009 while 2,908 personnel licenses (pilots) were issued in 2004 compared to 5,131 in 2009. In 2004 about 5.5 million passengers were handled at Kenyan airports. This figure rose to 6.9 million in 2009. In order to keep pace with this growth and increasing importance of aviation sector in the development of Kenya, the Kenya Civil Aviation Authority (KCAA) oversight and regulatory functions require strengthening. KCAA faces challenges of recruiting and retaining qualified flight safety operation staff. KCAA requires restructuring to address this challenge. Meanwhile the basic infrastructure at the major airports managed by Kenya Airports Authority (KAA) requires improvements. Improvements and expansion at Jomo Kenyatta International Airport is underway with the support through the partly IDA-financed Northern Corridor Transport Infrastructure Project (NCTIP). The runway at Moi International Airport Mombasa is in a poor state and requires rehabilitation. Rehabilitation of the runway will support the tourism industry which is the main economic activity in the Coastal region of Kenya.

(c) Relationship with the Country Partnership Strategy (CPS)

(vi) There is a strong relationship between the proposed project and both the long term development strategy for Kenya and the Country Partnership Strategy (CPS). GOK's priorities and long term development strategy is stipulated in its Vision 2030 blueprint. A critical thrust of Vision 2030 is to accelerate growth through increased investment in infrastructure. This is to support the main pillars of Vision 2010 including the economic pillar that aims at achieving economic growth of 10 percent per annum. Similarly, the Kenya CPS of March 2010 supports the implementation of the GOK's development strategy. It underscores the need for improvement of the core infrastructure. The CPS notes that an efficient transport interconnection through a network of roads, railways,

airports and ports is essential to support integration and economic growth of the region. It emphasises the rehabilitation of the road network; transforming airports and ports to create hubs for a modern economy.

## **2. Objectives**

- (i) The PDO is to: (a) increase efficiency of road transport along the Northern Corridor and the Tanzania-Kenya-Sudan road corridor to facilitate trade and regional integration (60 percent); (b) enhance aviation safety and security to comply with ICAO and US FAA Category 1 certification standards (20 percent); and (c) improve institutional arrangements and policy environment in the transport sector (20 percent).
- (ii) The PDO outcomes will be measured by: (a) a reduction in travel time (40%) on the selected road sections; (b) KCAA cleared for International Aviation Safety Assessment (IASA) Category 1 safety status for direct flights to/from US airports; and (c) a Regulatory mechanism for the construction industry operational.

## **3. Rationale for Bank Involvement**

- (i) Support the implementation of the long term transport and road sector investment plans that have been endorsed by the GOK and EAC for the improvement of transport services in Eastern Africa. Such support would be in line with Bank's commitment to promote reduction in the cost of doing business in Africa, facilitating the unblocking of the constraints to movements of the population out of poverty, and ensuring the benefits from growth are shared more equitably. The Road Sector Investment Plan (RSIP) has clear expenditure priorities including a clear list of priority roads for improvement. Supporting its implementation will avoid the previous incidences where funds were allocated (on the basis of political expediency) to lower priority roads while the strategic network was ignored. This will be a major shift in allocating resources in the road sub sector. It will also support the implementation of the Kenya Roads Act (2007).
- (ii) Build on the positive results of the World Bank support to date for the improvement of transport services and policy reforms in Kenya. The ongoing World Bank supported interventions through the NCTIP and the East African Trade and Transport Facilitation Project (EATTFP) support the improvement of the transport infrastructure, modernization of customs departments, and removal of bottlenecks to facilitate cross border trade, and promote policy and institutional reforms. Most of the policy and institutional reforms have entered the critical stage of implementation. It is therefore important for IDA to continue its support to consolidate the gains and deepen the reforms. The key reforms include new policy for road sub sector and creation of new institutions that require strengthening including, KeNHA, KURA, KeRRA, KMA and KCAA. Experience has shown that the mere creation of institutions, arising from reforms, without support in setting them up, building their capacity and equipping them appropriately to discharge their duties, is unlikely to yield the expected results, as they end up being ineffective. Therefore, it is important that the World Bank enhances its support through capacity building of these new institutions.

- (iii) Meanwhile, a large part of the Northern Corridor is now in good condition mainly through World Bank and European Union (EU) interventions with only a few sections remaining for improvement (this project will address two out of the four remaining sections). This has contributed in reducing travel time along the Northern Corridor by 5 hours between Mombasa and Timboroa, a distance of about 750 km. The proposed rehabilitation of the remaining road section will reduce further the travel time and costs. Similarly, the Kisumu-Kitale road section on the Tanzania-Kenya-Sudan road link which serves one of the densely populated parts of Kenya with the highest level of poverty is expected to reduce the travel time significantly, by 40 percent.
- (iv) The enhancement of aviation safety and security, and expansion of major airports under the NCTIP assistance has been critical to the rapidly growing aviation industry, and the attainment by KAA of the Transport Security Administration (TSA) of the US clearance for direct flights to/from US airports. The assistance provided so far has supported the growth of the Kenya flower and horticultural industry, tourism industry and the national airline, Kenya Airways, which has contributed to transforming JKIA into a hub serving the entire African continent. Support for KCAA to attain International Aviation Safety clearance will enhance these benefits. Furthermore, the expansion of Kisumu airport, originally envisaged under NCTIP to serve the domestic market, has now been transformed into an international airport. Some airlines have commenced operations from the airport to overseas destinations (Jetlink now operates flights from Kisumu to Mwanza, Tanzania), while others have shown interest to follow suit shortly. Follow up investments such as the rehabilitation of the runway at Moi International Airport in Mombasa, enhancement of aviation safety and security, and further technical assistance and capacity building, will augment further the benefits realized already.
- (v) Government commitment to the development and management of the road sector. The GOK selected a consultant through a competitive process to carry out the feasibility and detailed design and environmental and social impact assessments of the Kisumu-Kitale and Bachuma Gate-Maji ya Chumvi road sections utilizing its own internal resources. The feasibility studies were completed in 2009. Bidding documents were prepared and have been reviewed and cleared by the World Bank. KeNHA has invited bids for the Kisumu-Kitale (150 km) road section which has been split in three separate contracts. Bids are expected by February 16, 2011. Furthermore, GOK has prepared a 15-year Road Sector Investment Program (RSIP) consistent with the Kenya Roads Act 2007.
- (vi) The GOK has demonstrated further its commitment to the improvement of governance, accountability and transparency in the transport sector. For instance, (a) the draft RSIP has been discussed at a Stakeholders' meeting on November 8, 2010 and endorsed, subject to some amendments. The Minister of Roads intends to publish the final RSIP by the end of January 2011. The RSIP now forms the basis for support to the road sub-sector by the development partners; (b) agreement to establish the proposed NCA to regulate the conduct and development of contractors in Kenya, and create a legal framework for debarring contractors that engage in unethical practices and poor performance, which is critical for the development of the construction industry; and (c)

agreement to strengthen the ERB so that it will regulate the conduct of engineers. The process of establishing NCA and ERB is advanced. The GOK has published a draft Bill for discussion in Parliament on the establishment of NCA while Cabinet has approved the strengthening of ERB and the Bill is under preparation. These efforts by the GOK require further assistance from the World Bank.

- (vii) Support in the reduction of the high transport costs and lengthy travel times. The business community has raised concerns regarding the high transport costs as a major constraint to the growth of their businesses. Road transport remains the main transport mode in Kenya and therefore critical to the economic growth of the country. For instance, due to the poor road condition between Kisumu and Kitale, the travel time is about 5 hours over a distance of 150 km and average operating cost for a heavy truck is about USD2.0 per km. If the road were in good condition, the travel time would be reduced to about 2-3 hours and the operation cost to less than USD1.5 per km. Some parts of this region are food deficient, while a large part of the region has surplus food at reasonable prices. Therefore, World Bank assistance will support the creation of an efficient transport network needed for faster and less costly movement of people and goods along the Northern Corridor and the Tanzania-Kenya-Sudan road corridors.

#### **4. Description**

- (i) The project activities will focus on: (a) the deepening of policy and institutional reform in the transport sector; (b) enhancing the capacity of institutions providing oversight and regulatory functions to support the delivery of transport sector services; (c) supporting the implementation of governance, accountability and integrity measures in transport sector; and (d) financing infrastructure improvements necessary to support Kenya' long term development strategy.
- (ii) The proposed project components are as follows:

**Component A: Rehabilitation and improvement of roads (222 km), roadside facilities and road safety Interventions.** This component will comprise:

- (a) Rehabilitation of the Kisumu – Kakamega – Kitale section on the Tanzania-Kenya – Sudan road corridor (150 km) including widening of the road carriageway to 7 meters and 2x2 meters wide shoulders including climbing lanes in those sections of the road that have hilly terrain; construction of facilities for socio-economic enhancement and roadside amenities; and service roads and non-motorized traffic facilities at market centers to improve road safety;
- (b) Construction of a second carriageway on Athi River-Machakos Turnoff road section (22 km) on the Northern Corridor involving construction of the 7 meters wide road carriageway and 2x2 meters wide shoulders and service roads. This was originally to be done under NCTIP but was dropped due to inadequate funds. The construction of the other carriageway is on-going under the NCTIP;

- (c) Rehabilitation of the Maji ya Chumvi – Bachuma Gate road section (53 km) on the northern corridor involving reconstruction and widening of the existing road carriageway to 7 meters and 2x2 meters wide shoulders and service roads and non-motorized traffic facilities to improve road safety;
- (d) Construction of Four critical interchanges to improve road safety and flow of traffic at: Nakuru-Nyahururu turnoff; Nakuru-Njoro turnoff; Mau Summit-Kisumu turnoff and Ahero-Kisii Turnoff. The proposed interchanges are located on sections of the roads recently improved under NCTIP and provisions have been made under NCTIP to accommodate their construction; and
- (e) Provision of consultant services for supervision of works.

The rehabilitation works will include: (i) provision of roadside facilities including lorry and bus parking, seasonal markets, road user services, etc; (ii) enhancement of road safety through improvement of hazardous locations, traffic calming measures, pedestrian crossings, etc; (iii) provision of measures to address HIV-AIDS; and access roads to public facilities.

**Component B: Institutional strengthening and capacity building in the transport sector.**

This component will comprise three sub components:

**Sub Component B.1:** *Support to KeNHA, KURA and KeRRA.* This will involve:

- (a) Strengthening of KeNHA, KURA and KeRRA including technical assistance to enhance effective management information systems, financial planning, contract management and other related operational capacities to enhance delivery of services;
- (b) Training of manpower in the road sector particularly in areas related to management information systems and private sector participation in the delivery and management of services;
- (c) Construction of a single office block for the headquarters of KeNHA, KeRRA, KURA, ERB, KRB and NCA;
- (d) Carrying out of feasibility and detailed engineering designs and sector studies for the development and management of the road network, including: (a) Mombasa Western By-pass; (b) Alignment survey and preliminary design, feasibility studies, financing options and prioritization of converting the Northern Corridor Road into a multi-lane facility; (c) Nakuru-Loruk-Marich Pass; (d) Lake Victoria ring road; (e) Ahero-Kisii-Isebania; (f) Nakuru-Nyahururu-Nyeri; and (g) Kisian-Busia; and
- (e) Securing of road assets through land demarcation.

**Sub component B-2:** *Support to the KRB and MOR.* This will involve:

- (a) Study of the impact of the new constitution on the responsibilities and functioning of KeRRA and KURA and the role of KRB;

- (b) Support to enhance the operational capacities of NCA, ERB and KRB including provision of startup facilities;
- (c) Study of the residual role of MOR and provision of technical assistance to implement its new functions including strengthening Material Department, Mechanical Transport Department and Kenya Institute of Highways and Buildings Technology (KIHBT);
- (d) Inventory of unclassified roads and recommendations for their maintenance and management; and
- (e) Training of manpower in KRB and MOR.

**Subcomponent B-3: Support to the MOT.** This will involve:

- (a) Support the implementation of the new national transport sector policy including the establishment of the proposed National Road Safety Authority;
- (b) Technical assistance to support the strengthening of oversight functions in the maritime sub sector;
- (c) Strengthening of air accident investigation capacity including construction of a hangar at JKIA;
- (d) Development of navigation charts for the Kenyan Coastline and on Lake Victoria and enhancing search and rescue capability of KMA;
- (e) Transport sector studies including preparation of a strategy on addressing the urban transport challenges; and
- (f) Training of manpower in MOT.

**Component C: Support to the Kenya Airports Authority.** This component will comprise the following:

- (a) Reconstruction of the runway, Taxiways and Apron at Moi International Airport (Mombasa). The reconstruction involves generally milling the top 50 mm and laying a uniform 50 mm thick new asphalt concrete wearing course on the runway, apron and taxiways; and modernization of the airfield ground lighting systems;
- (b) Upgrade and modernization of power supply to Moi International Airport and connection to KCAA facilities and Equipment;
- (c) Baggage handling system at JKIA;
- (d) Capacity building and training of manpower in safety, security and airports management; and
- (e) Augmenting water supply to JKIA.

**Component D: Support to the Kenya Civil Aviation Authority.** This component will involve the following:

- (a) Provision of technical assistance for safety and security oversight;
- (b) Technical assistance to support the restructuring of KCAA;
- (c) Construction of an office block for KCAA headquarters at JKIA;
- (d) Upgrading the Information and Communications Technology (ICT) facilities;

- (e) Provision of equipment to upgrade and modernize air navigation systems; and
- (f) Training of manpower in safety, security and oversight in the civil aviation industry.

## 5. Financing

Source:	(\$m.)
Borrower/Recipient :	78.85
IBRD	-
IDA :	296.72
Others (specify)	89.90
	<b>465.47</b>

## 6. Implementation

- (i) There will be five implementing agencies namely KeNHA, MOR, MOT, KAA and KCAA. About 97 percent of the scope of the project will be implemented by parastatals namely, KeNHA, KAA, and KCAA, with independent Boards of Directors outside the central government, and the balance (3 percent) by MOR and MOT. The project will be mainstreamed within the operations of these institutions, and form an integral part of their investment program. All Project Implementing Teams will be comprised of regular staff of the implementing agencies.

## 7. Sustainability

- (i) The implementation of the project is likely to be carried out in a timely manner. The stakeholders have been involved upfront, and also the counterpart project team. The timely flow of counterpart funds will be critical, but so far all indications are that the GOK is committed to funding this project in a timely manner given its high priority and regional significance and also with the endorsement of the RSIP, which will be fully funded. The GOK has included the project in its fiscal budget and has invested a substantial amount of resources in carrying out the preparatory work including the feasibility studies, environmental and social assessments and detailed engineering designs for Bachuma Gate-Maji ya Chumvi, and Kisumu-Kakamega-Webuye- Kitale road sections.
- (ii) The benefits of the project are likely to be sustained in light of the recent reforms in the road sub sector which are showing encouraging results, particularly the focus KeNHA, KURA and KeRRA now places on the road categories under their purview. KeNHA is now responsible for a road network of 13,700 km (9 percent of the entire network) which includes those proposed under this project. Similarly, the KAA and the KCAA now retain passenger service and aviation user charges, which will allow them to continue to maintain the high standard of safety and security required for continuous growth in international air traffic.



- (iii) In addition, the activities of the project are mainstreamed within the operations of the respective organization and regular staff will be responsible for the day-to-day management of the project. The staff will also be trained under the project.

## **8. Lessons Learned from Past Operations in the Country/Sector**

- (i) Choice of project activities and design should reflect the intent, interests and priorities of the Government, potential beneficiaries and other stakeholders to ensure ownership. In case of NCTIP, the GOK established an Inter-ministerial Committee to steer the reform process, which worked well;
- (ii) Project preparation and implementation by entities responsible for roads and aviation industry has ensured the integration of project and follow-up activities within these organizations. Specifically, (i) Project Implementation Teams by all implementing entities must be set up at the project preparation stage; and (ii) the teams must have the right skills mix, adequate experience and qualifications, and clear terms of reference. This arrangement has enabled the smooth implementation of NCTIP, one of the biggest IDA-financed project in Kenya, with the total project cost of about USD1 billion including IDA contribution of USD460 million;
- (iii) Explicit provision for adequate (and assured) domestic funding for maintenance must be made for project-financed infrastructure to ensure sustainability after project completion;
- (iv) Experience in Kenya and elsewhere confirm that sustained project impact depends less on the physical works financed and more on well-managed, well-financed executing agencies. There must be an emphasis on capacity building of project agencies. New entities such as KCAA have managed to implement their components under NCTIP, without prior experience on managing World Bank-financed projects, mainly because of capacity building provided under the project;
- (v) Sustained sector dialogue is required in defining and implementing the necessary policy, institutional, procurement and financial reforms. Follow-up operations, appropriately timed, are required to bolster the gains from the policy and institutional reforms which may be initiated under previous operations and require completion or enhancement; and
- (vi) Project preparation effort and project design reflect deliberate and sustained dialogue between IDA and GOK. In addition, based on prior experience, the project, through the internalized Project Technical Teams (PTT) will emphasize upstream implementation of reporting, auditing and accountability measures to ensure early detection and remedy of implementation problems.

## 9. Safeguard Policies (including public consultation)

<b>Safeguard Policies Triggered by the Project</b>	<b>Yes</b>	<b>No</b>
<a href="#">Environmental Assessment (OP/BP 4.01)</a>	[x]	[ ]
Natural Habitats ( <a href="#">OP/BP 4.04</a> )	[ ]	[x]
Pest Management ( <a href="#">OP 4.09</a> )	[ ]	[x]
Indigenous Peoples ( <a href="#">OP/BP 4.10</a> )	[ ]	[x]
Physical Cultural Resources ( <a href="#">OP/BP 4.11</a> )	[ ]	[x]
Involuntary Resettlement ( <a href="#">OP/BP 4.12</a> )	[x]	[ ]
Forests ( <a href="#">OP/BP 4.36</a> )	[ ]	[x]
Safety of Dams ( <a href="#">OP/BP 4.37</a> )	[ ]	[x]
Projects on International Waterways ( <a href="#">OP/BP 7.50</a> )	[ ]	[x]
Projects in Disputed Areas ( <a href="#">OP/BP 7.60</a> )*	[ ]	[x]

## 10. List of Factual Technical Documents

1. Environmental Impact Assessment Reports on the rehabilitation of the following:

- (i) Kisumu-Kakamega Road Section
- (ii) Kakamega-Webuye Road Section
- (iii) Webuye-Kitale Road Section
- (iv) Bachuma Gate-Maji ya Chumvi Road Section
- (v) Athi River Machakos Turnoff Road Section
- (vi) Runway at Moi International Airport, Mombasa

## 11. Contact point

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\* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas

