

Project Name Eritrea-Road Sector Development Program...
Phase 1 (APL)

Region Africa Regional Office

Sector Highways

Project ID ERPE50357

Borrower(s) GOVERNMENT OF THE STATE OF ERITREA

Implementing Agency
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Environment Category A

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1. Country and Sector Background

At Independence in 1993, Eritrea inherited a road network that had been devastated by 30 years of civil war, little investment and neglected maintenance. The network was both limited in coverage and inadequate in condition so that much of the country had effectively no access to motorized transport. This is increasingly recognized as a major constraint to economic and social development. The road network is estimated at about 6,990 km, comprising 660 km paved, 800 km gravel and about 5,530 km of unsurfaced rural roads and tracks. This represents a road density of 0.6 km per km² and 2.0 km per 1000 population. Only about 10-25% may be classified as being in fair or good condition, with the rest in poor condition. The Government of the State of Eritrea (GSE) has made major efforts to remedy some of the most obvious shortcomings in the road network since independence, and much has been achieved. For example, improvement works on the key road from Asmara to Massawa were completed under the IDA-financed Recovery and Rehabilitation Project. In addition, GSE is improving key links to otherwise isolated agricultural potential areas in the western parts of the country. However, much remains to be accomplished and the provision of a road network able to support Eritrea's economic and social development is seen as a high priority. The Bank has carried out continuous sector discussions and consultations with sector agencies during the implementation of the ongoing IDA-financed Road Sector Engineering Project (Cr. 2945-ER). The main sector issues that have emerged include the need to address the following: (i) the limitations in existing institutional capacity for managing the country's road network, including local and community roads; (ii) defining clearly the roles of the public sector, and enhancing the limited capacity and increasing the involvement of the private domestic construction industry in the construction and maintenance of roads; (iii) the paucity of data and the

need to build up national economic and multi-sector data for planning and managing the network; (iv) ensuring sustainable road maintenance and financing of road programs; (v) increasing the effectiveness of environmental and social impact management and monitoring; (vi) maintaining the predominance of road transport and its linkage to other transport modes; and (viii) the need to address poverty reduction and other social objectives, including minimizing the incidence of HIV/AIDS.

2. Objectives

The objective of the Phase 1 project is to widen sector and institutional reforms including road safety improvements, and to upgrade the condition and capacity of selected priority main roads between major urban areas, commercial and agricultural centers and markets. The project would support the Government's proposed Ten-Year Road Sector Development Program (RSDP).

3. Rationale for Bank's Involvement

Bank involvement and experience with developing road management and maintenance systems in Uganda, Ethiopia, Ghana, and Latin America will be beneficial to efforts aimed at developing similar systems in Eritrea. It will also help ensure institutional and financial sustainability of roads management by helping to define and implement efficient, effective and sustainable policy frameworks, institutional arrangements, and financial management systems and financing mechanisms. Bank involvement is also critical in coordinating donor assistance and ensuring a coherent approach to the sector. By requesting Bank's assistance in developing the strategic plan and program, Government has expressed its desire for the Bank to play lead role in the roads sector. The Bank will also help Eritrea to incorporate new concerns in its transport sector, particularly regarding gender and AIDS issues. The Bank has gained considerable experience in including gender issues in roads upgrading and maintenance programs. The Bank's focus on AIDS prevention is relatively new, but the Bank has implemented an AIDS awareness component in its Transport Rehabilitation Project in Uganda and also in Mozambique. In addition, the Bank has launched a special program for Africa which together with other donors including the UN, is synthesizing the issues and proposing relevant solutions addressing the HIV/AIDS epidemic problem.

4. Description

Previous IDA missions have discussed with GSE a possible proposed project concept aimed at providing a comprehensive framework for a phased IDA support to the Road Sector, including the use of the Adaptable Program Loan (APL) instrument. IDA's support for a Phase I project under an APL will draw from the list of priority road improvements for which feasibility will be confirmed during preparation of the Road Sector Strategic Plan and related feasibility studies being financed under a Project Preparation Facility (PPF) advance; and also from the preparatory studies being carried out under the Road Sector Engineering Project. Possible Phase 1 components so far discussed include:

- (a) Technical advisory services for engineering and financial management support to the Infrastructure Department in the Ministry of Public Works (MOPW-ID)
- (b) Rehabilitation and upgrading of selected priority roads
- (c) Construction supervision of road and bridge works
- (d) Strengthening the Central Materials Laboratory for quality control

- (e) Road Safety:
 - (i) Black spots improvements
 - (ii) Technical advisory services for design and construction supervision
 - (iii) Road safety equipment
- (f) Feasibility studies, detailed engineering designs and EIAs of priority roads

5. Financing

	Total (US\$m)
Government	20.00
IDA	100.00
Total Project Cost	120.00

6. Implementation

1. Institutional Arrangements and Responsibilities As part of its strategy to improve the country's infrastructure, GSE has established, under the Ministry of Public Works (MOPW), a new Infrastructure Department (ID) responsible for the formulation of sector policy and strategies, standards, regulation and monitoring of infrastructure operations. The ID is the designated implementation agency for the preparation of the proposed RSDP and its implementation thereafter. Under the Road Sector Engineering Project, the ID is compiling standards, road design manuals, draft bidding documents, and technical specifications for use on future road and bridge contracts. Transport Regulation and Road Safety. The Ministry of Transport and Communications (MOTC) continues to exercise overall responsibilities for transport policy affecting all modes, as well as telecommunications. It maintains functions relating to the formulation and enforcement of transport regulations, as well as road safety and axle load control. Regional Rural Road Network Responsibilities. Government also prepared a framework agreement in 1996, which separates the responsibilities for management of various sections of the road network. Regional rural roads are proposed to be administered by regional administrations and communities under the leadership of the Ministry of Local Government, while the main classified roads network remains under MOPW. These arrangements are to be further clarified under the PPF studies in process. Sector policy will be under the overall responsibility of the ID and the MOPW, and will be coordinated with the MOTC, the Ministry of Local Government (MOLG) and Eritrea Community Development Fund (ECDF) management, Ministry of Health, Regional Administration, as well as with the Ministries of Finance and Agriculture, and the Department of the Environment, as appropriate.

2. Procurement and Supervision MOPW-ID is fully in charge of all the RSDP related procurement and supervision. Facing a shortage of key personnel, the ID is employing selected consultants for project management and contract administration under IDA-financed Human Resource Development Project. Standard bid documents have been prepared under the Road Sector Engineering Project that satisfy IDA and other donor procurement requirements. The RSDP would include regional and community roads maintenance and rehabilitation works, and therefore it is envisaged that regional and local authorities would be trained and supported to administer a number of small-sized contracts. Thus, the RSDP would also include a strategy to efficiently build up sustainable capacity at the regional level for the management of rural roads maintenance and rehabilitation works. Civil works under the project will be awarded to qualified contractors through international or national

competitive bidding as appropriate in accordance with IDA Guidelines for Procurement under IBRD Loans and IDA Credits, January 1995, Revised January and August 1996, September 1997 and January 1999. All associated supervision, as well as technical advisory consultant services will be awarded to qualifying consulting firms through selection from shortlist (international and national reputable and qualified firms) in accordance with IDA Guidelines for the Selection and Employment of Consultants by World Bank Borrowers, January 1997, Revised September 1997, and January 1999. Maintenance will be carried out under the management of the Road Transport Construction Department for main roads, and Regional Administrations and communities for regional rural roads, and increasingly by private contractors as defined under the RSDP. 3. Donor coordination Donor coordination mechanisms and institutional arrangements for its implementation under the RSDP will be agreed with GSE and interested donors during project preparation and appraisal. 4. Financial Management and Auditing A Finance and Administration Unit (FAU) is to be set up within the institutional framework of the MOPW-ID with the initial group of consultants (one financial management and one MIS expert) contracted under the PPF. The FAU will be responsible for ensuring that acceptable financial management and reporting procedures are in place for the RSDP Phase I Project. In addition, under the PPF, MOPW-ID is procuring the services of an independent accounting firm to assist the FAU to (i) design/develop a comprehensive financial management system for the project, commensurate with the size and scope of the project and compatible with the MOPW-ID and the Government's systems; and (ii) to subsequently develop and install software for computerization of the financial management system. The financial management system would be an integrated one for the whole program/project. A common set of policies and procedures would apply to the entire program/project, and a consolidated set of financial reports for the program/project would be prepared from the financial management system. 5. Monitoring and Evaluation (i) A monitoring and evaluation system will be developed under the Project; (ii) semi-annual progress reports will be prepared on the basis of a project implementation plan; and (iii) a completion report would be submitted by the Government to IDA within six months of Credit closing. Annual reviews of project implementation will be carried out before the beginning of each fiscal year to facilitate annual program budgeting. A mid-term review would be carried out 30 months after Credit effectiveness. 6. Implementation Period The project will be implemented over five years. Achievement of Phase 1 implementation thresholds and Phase 2 triggers would allow the implementation of follow-on phases/activities to be scheduled under the proposed Program.

7. Sustainability

The critical factor required for sustainability of Program and Project benefits would be continued Government commitment at the highest level to sector and institutional reform. By involving, right from the start of project preparation, key stakeholders, including direct beneficiaries, lawmakers and the civil society, the framework would be set for the sustained mobilization of Government support. Another key element for sustainability is that producers and road users, through improved accessibility and infrastructure condition and capacity would quickly realize benefits from any reforms instituted. To this end, MOPW-ID and any enhancement of its capacity provided under the Program would be required to contribute to ensuring the successful and timely

implementation of the proposed project. In addition, Government should provide the financial requirements for road rehabilitation and maintenance to be projected under the RSDP and from recommendations arising from the associated Road User charges study. Government should be prepared to evaluate alternative financing, including private sector participation, in light of likely expansion of investment in the road sector from implementing the RSDP which is to be prepared. Sustained peace with Ethiopia would be essential for maintaining certain sections of the road network, as well as for effective project implementation.

8. Lessons learned from past operations in the country/sector

(1) The following lessons have emerged from recently completed and ongoing Bank related sector operations in Eritrea: (i) Recovery and

Rehabilitation Program (\$119.8 million, including IDA credit of \$25.9 million, FY93). The key lesson learnt is that community participation is essential in the definition of priorities, and in the implementation of rural road projects. Consequently any investments affecting rural communities will incorporate consultations with the affected populations. (ii) Rural Roads Improvements - Eritrea Community

Development Fund (ECDF - US\$41 million, including \$17.5 million from IDA FY97) provided initial IDA support for regional and community rural roads. The project has so far confirmed the importance of technical assistance provided by central agencies such as the ECDF management group in the MOLG, and the MOPW-ID in the definition of standards, approval of designs, and the procurement of contracts for rehabilitation of existing rural roads. Priority needed to be given to maintenance of community roads so steps were taken early under a framework agreement in 1995 to clarify responsibilities for rural roads and main roads. And steps, to be defined under the sector strategic studies, are to be taken to finalize and implement the framework institutional arrangements between the Ministry of Local Government, the regional administration offices and local communities. The need for building capacity at the community level for ensuring maintenance has also been highlighted. (iii) Road Sector

Engineering Project (RSEP) (\$6.3 million, FY97) includes (a) feasibility study and detailed design of the Keren-Tessenei and Barentu-Mendefera roads to Western Eritrea; (b) National Bridge Inventory and study for the preparation of a prioritized remedial and rehabilitation program of bridge works; and (c) technical assistance and capacity building for RTCD in contract administration capability, procurement and stores management, and training of mechanics and mechanics' trainers. Outputs listed in (a) and (b) above, as well as the procurement and equipment repair and management systems and the various contract documents from (c), provide the basis for enhancing existing institutional capacity for implementing the road sector programs. However, GSE has indicated that a road sector strategy plan is essential as a basis for quantifying the extent of further institutional development needed to support the road sector development program. The comprehensive assessment of institutional framework and physical infrastructure needs under the proposed RSDP is essential in order to ensure the successful and monitorable implementation of the priorities identified. It also allows the total financing needs (capital and recurrent) to be identified early and included in the program in order to allow for the gradual build up of the program scope and implementation progress.(2) Lessons from Sector Investment Programs (SIPs) in other countries. Several lessons have been learned from the road SIPs which have been implemented in other East African countries. These include:

(i) the importance of having in place good policy and institutional frameworks which contribute to the effectiveness and sustainability of investments and avoidance of implementation problems later; (ii) ensuring that road designs are updated before bidding, particularly if there have been long delays between design and actual construction (which should in any case be avoided); (iii) the importance of close scrutiny and expediting of the bid process to ensure selection of the best contractors and to avoid cost increases from price escalation; (iv) the need for building up sufficient capacity for adequate supervision and monitoring by the implementing agency of contractors and consultants representing the client on site (supervising Engineer) to avoid their making unilateral changes to their own advantage; (v) the need for ownership and accountability and avoidance of overlapping responsibility; and (vi) the need for effective donor coordination to avoid problems in implementation. These important lessons would be reviewed with the Borrower prior to appraisal to ensure that action is taken or provisions made, possibly outlined in a Letter of Sector Policy and a Project Implementation Plan, in order to improve upon the areas of poor performance identified in other road SIPs. The project will assist with implementing new policies and effective and sustainable institutional arrangements, particularly those focused on poverty reduction, and AIDS prevention. It will also help build capacity through training and technical assistance and careful supervision and monitoring. The phased approach of the APL will ensure that policy and institutional reforms are implemented at a pace to ensure the capability for undertaking major investments in works.

9. Program of Targeted Intervention (PTI) N

10. Environment Aspects (including any public consultation)

Issues : Environmental and social impacts related to new road construction, rehabilitation and maintenance could include: soil erosion, silting, and compaction, various types of pollution, changes in the soil water balance, pollution from dust, loss of habitat or fragmentation resulting from work site construction, deforestation, and total or partial alteration to landscape. The potential impacts on social environment could include:- dislocation of social and cultural values due to the influx of migrant labor, as well as changes in daily living patterns (economic and cultural practices) among inhabitants living near road works;- land tenure conflicts and involuntary resettlement resulting from land acquisition;- Induced development (unplanned development of settlements), due to the establishment of workers and contractors camps;- Damage to cultural property - built heritage or archeological findings and sites;- Dislocation of production systems among pastoral groups (cattle grazing people);- Loss of market places due to enforced right of way widths.- Encroachment of the new road by street markets in towns and villages; - Unprecedented changes in the road safety including increased number of accidents with livestock;- various illnesses caused by air and water pollution, injury accidents, spread of HIV/AIDS due to the influx of migrant labor, especially through the extensive network of truck/bus rest stops and terminals. Road specific environmental impact assessments will be prepared with road feasibility studies. Given the nature and scope of the proposed Program, it was concluded that adequate capacity for overall road sector environmental management would be supported. For this purpose, the MOPW-ID will need to recruit a qualified environmental specialist/social

scientist. An external social assessment would include the identification of those social groups that are at particular risk to HIV/AIDS infection, including truckers, construction workers, bus drivers, frequently traveling staff, communities on major transport corridors and those in the vicinity of major transport nodes. The definition of the response of this roads project to the prevention of the further spread of the epidemic would include, (a) reducing the risk of HIV/AIDS for transportation workers, partners and affected communities, (b) increasing the reach of HIV/AIDS prevention efforts to highly mobile population by providing a platform for communications, (c) monitoring and assessing impacts on the transportation sector and planning for the future, and (d) seek support from other key stakeholders.

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Note: This is information on an evolving project. Certain components may not be necessarily included in the final project.

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