

AFRICAN DEVELOPMENT FUND

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ORIGINAL : FRENCH



REPUBLIC OF CAMEROON

NUMBA – BACHUO AKAGBE ROAD DEVELOPMENT PROJECT

APPRAISAL REPORT

INFRASTRUCTURE DEPARTMENT

OINF
JULY 2006

TABLE OF CONTENTS

	Pages
PROJECT INFORMATION SHEET, EQUIVALENTS, ACRONYMS AND ABBREVIATIONS, LIST OF ANNEXES AND TABLES, BASIC DATA, PROJECT MATRIX, EXECUTIVE SUMMARY	i to viii
1 ORIGIN AND BACKGROUND OF PROJECT.....	1
2 THE TRANSPORT SECTOR.....	2
2.1 General	2
2.2 Sector Overview	2
2.3 Transport Policy, Planning and Coordination	4
3 THE ROAD SUB-SECTOR.....	5
3.1 The Road Network	5
3.2 Vehicle Fleet and Traffic	6
3.3 Road Transport Industry	7
3.4 Road Construction Industry	7
3.5 Administration of Road Network and Staff Training.....	8
3.6 Road Maintenance	10
3.7 Financing of Road Investments and Maintenance	11
4 THE PROJECT	13
4.1 Project Design and Rationale.....	13
4.2 Project Area and Beneficiaries	15
4.3 Strategic Context	20
4.4 Project Objectives.....	20
4.5 Project Description	20
4.6 Environmental Impacts.....	22
4.7 Estimated Cost of Project	25
4.8 Sources of Finance and Expenditure Schedule.....	27
5 PROJECT IMPLEMENTATION.....	29
5.1 Executing Agency	29
5.2 Institutional Arrangements	29
5.3 Implementation and Supervision Schedules	29
5.4 Procurement of Goods, Works and Services.....	31
5.5 Disbursement Arrangements.....	35
5.6 Monitoring and Evaluation	36
5.7 Accounting and Financial Audit Reports.....	36
5.8 Aid Coordination.....	36
6 PROJECT SUSTAINABILITY AND RISKS.....	36
6.1 Recurrent Costs	36
6.2 Project Sustainability.....	37
6.3 Major Risks and Mitigative Measures	40
7 PROJECT BENEFITS.....	39
7.1 Economic Analysis	41
7.2 Social Impact Analysis	42
7.3 Sensitivity Analysis	44
8 CONCLUSIONS AND RECOMMENDATIONS	44
8.1 Conclusions	44
8.2 Recommendations	45

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PROJECT INFORMATION SHEET

Date: April 2006

The information given hereunder is intended to provide some guidance to prospective suppliers, contractors, consultants and all persons interested in the procurement of goods and services for projects approved by the Boards of Directors of the Bank Group. More detailed information and guidance should be obtained from the Executing Agency of the Borrower.

1. COUNTRY : Cameroon
2. NAME OF PROJECT : Numba - Bachuo Akagbé Road Development Project
3. LOCATION : Momo and Manyu Divisions
4. BORROWER : Republic of Cameroon
5. EXECUTING AGENCY : Ministry of Public Works (MINTP) / Department of Road Investments and Maintenance / ADB Project Implementation Monitoring Units, Yaounde, Cameroon, Tel: (237) 222-15-90 or 222-14-08 /222 22 94; Fax: (237) 222-16-09/222 22 94; email : csepr.bad@yahoo.fr
6. PROJECT DESCRIPTION

The Components of the project are as follows:

A - ROAD DEVELOPMENT

- A.1 - Development and tarring of the Numba - Bachuo Akagbé section (50 km)
- A.2 - Environmental impact mitigation measures
- A.3 - Sensitization on STI-HIV/AIDS, malaria and road safety, etc
- A.4 - Works inspection and supervision

B - ANCILLARY WORKS

- B.1. Development of feeder roads and rehabilitation of social amenities
- B.2. Development of boreholes
- B.3. Construction of market sheds
- B.4. Provision of equipment for processing farm produce and intermediate means of transport
- B.5. Development of rest areas for drivers and parking of vehicles
- B.6. Sensitization and training of women's groups in the management of machines and equipment for the processing of farm produce
- B.7. Works inspection and supervision

C - INSTITUTIONAL SUPPORT AND PROJECT MANAGEMENT

- C.1 - Operating costs of ADB Projects Monitoring Unit (CSEP-BAD)
- C.2 - Equipment for CSEP-BAD
- C.3 - Monitoring-Evaluation of project impact
- C.4 - Accounting and financial auditing.

7. TOTAL COST
 Project Cost : UA 53.80 million
 i) Foreign Exchange : UA 41.84 million
 ii) Local Currency : UA 11.96 million
8. ADF LOAN
 • ADF Loan : UA 44.70 million
9. OTHER SOURCES OF FINANCE
 • Beneficiaries : UA 0.15 million
 • Government : UA 8.95 million
10. DATE OF APPROVAL OF LOAN : October 2006
11. ESTIMATED START UP DATE AND DURATION OF PROJECT : February 2007/53 months
12. PROCUREMENT OF WORKS, GOODS AND SERVICES
- PROCUREMENT OF GOODS AND WORKS : Procurement of works financed by the ADF (development of road and ancillary infrastructure) in a single tranche will be by international competitive bidding. The bidding documents will be based on ADF standard documents or documents accepted by ADF. Procurement of minor farm produce processing equipment and intermediate means of transport will be by national competitive bidding. Compensation of communities concerned by the project will be fully financed by the Government based on relevant national procedures.
 - CONSULTANCY SERVICES REQUIRED AND SELECTION : Consultancy services for works inspection and supervision, accounting and financial auditing, sensitization and environmental monitoring will be based on a shortlist. For the monitoring-evaluation and environmental monitoring, consultancy services will be by direct negotiations.
13. ENVIRONMENTAL CATEGORY OF PROJECT : I

CURRENCY EQUIVALENTS

(April 2006)

UA 1	=	CFA F 780.845
UA1	=	US\$ 1.45250

FISCAL YEAR

1 January - 31 December

WEIGHTS AND MEASURES

1 kilogramme (kg)	=	2.205 lbs
1 metre (m)	=	3.29 feet (ft)
1 kilometre (km)	=	0.621 mile
1 square kilometre (km ²)	=	0.3861 sq mile
1 hectare (ha)	=	2.471 acres

ACRONYMS AND ABBREVIATIONS

AADT	=	Annual Average Daily Traffic
ADB	=	African Development Bank
ADF	=	African Development Fund
AFD	=	<i>Agence Française de Développement</i> (French Development Agency)
ASECNA	=	Agency for the Security of Aerial Navigation in Africa
ASYCUDA	=	Automated System for Customs Data
BTP	=	Public Buildings and Works
CEMAC	=	Central African Economic and Monetary Community
CSEP/BAD	=	ADB Road Projects Monitoring Unit
DIER	=	Department of Road Investments and Maintenance
ECCAS	=	Economic Community of Central African States
EDF	=	European Development Fund
EU	=	European Union
CFAF	=	Franc de la Communauté Financière d'Afrique (African Financial Community)
FD	=	Final Design
GIC	=	Community Interest Group
GTZ	=	Deutsche Gesellschaft für Technische Zusammenarbeit
GUCE	=	External Trade Single Window
HDM	=	Highway Design and Maintenance Standards Model
HIPC	=	Heavily-Indebted Poor Countries
ICB	=	International Competitive Bidding
ICTARN	=	Instructions for Technical Design and Development of National Roads
IDA	=	International Development Association
IEC	=	Information/Education/Communication
IERR	=	Internal Economic Rate of Return
IRI	=	International Roughness Index
KFW	=	Kreditanstalt Für Wiederaufbau
LABOGENIE	=	National Civil Engineering Laboratory
MATGENIE	=	National Civil Engineering Equipment Pool
MINEDUB	=	Ministry of Basic Education
MINEP	=	Ministry of the Environment and Protection of Nature
MINPLAPDAT	=	Ministry of Planning, Development Programming and Territorial Development
MINPROFF	=	Ministry for the Promotion of Women and Family
MINSANTE	=	Ministry of Health
MINTP	=	Ministry of Public Works
MoU	=	Memorandum of Understanding
NCB	=	National Competitive Bidding
NGO	=	Non-Governmental Organization
PA	=	Project Area
PDR	=	Road Master Plan
PERFED	=	EDF Road Maintenance Programme

PRSP	=	Poverty Reduction Strategy Paper
TSP	=	Transport Sector Project
RBCSP	=	Result-Based Country Strategy Paper
RF	=	Road Fund
RN	=	National Road
SME	=	Small and Medium Scale Enterprise
TIPAC	=	Inter-State Transit of Central Africa Countries
TK	=	Tonne per Kilometre
UA	=	Unit of Account
Veh/d	=	Vehicles per Day
VOC	=	Vehicle Operating Cost
WB	=	World Bank

LIST OF ANNEXES

No.	<u>TITLE</u>	No. of <u>Pages</u>
1.	Map of Project Area	1
2.	Organization Chart of Project Executing Agency	1
3.	Provisional List of Goods and Services of the Project 1	
4.	Indicative List and Cost Estimates of Ancillary Works	1
5.	Project Implementation Schedule	1
6.	Summary of Economic Analysis	1
7.	Bank Commitments in Cameroon	1
8.	List of Project Implementation Documents	1
9.	Project Processing Schedule	1
10.	Estimated Cost of Road Works Component by Major Item	1

LIST OF TABLES

No.	<u>TITLE</u>	<u>Page</u>
	Tabl 4.1 : Summary of Project Cost Estimates by Component	26
	Table 4.2: Summary of Project Cost Estimates by Expenditure Category	27
	Table 4.3: Sources of Finance of Project.....	28
	Table 4.4: Sources of Finance by Expenditure Category	28
	Table 4.5 : Expenditure Schedule by Component	29
	Table 4.6 : Expenditure Schedule by Source of Finance.....	29
	Table 4.7 : Expenditure Schedule by Expenditure Category	30
	Table 5.1 : Implementation Schedule	32
	Table 5.2 : Provisional Supervision Schedule	33
	Table 5.3 : Procurement of Works and Services	34

CAMEROON**Bachuo Akagbe-Batibo Road Development Project (Numba –Bachuo Akagbé Road Section)****Project Logical Framework**

Start up Date November 2007
 Completion Date December 2010
 Design Team Messrs.: B. TRAORE, M. MBODJ, L. JOOTTUN, OCIN and J. MURARA, ONSD.1

HIERARCHY OF OBJECTIVES	EXPECTED RESULTS by sector and by corresponding theme	SCOPE	PERFORMANCE INDICATORS Source and Method	OBJECTIVES INDICATORS AND SCHEDULE	ASSUMPTIONS/ RISKS
<u>SECTORAL GOAL</u> 1.1. Quantitatively and qualitatively strengthen the transport infrastructure, particularly the classified road network to meet the needs of the country and its strategic place in the Central African Region.	1.1. Roads of the classified road network developed and/or rehabilitated.	1.1 National Territory.	1.1. Rate of roads of the classified road network paved and in good condition 1.2. Amount of the RF budget 1.3. Source: MINTP, RF and PDR 1.4. Methods: statistics compiled by the DIER and the RF	1.1. Proportion of paved roads in the national network, and those in good condition increase from 23% and 12% in 2005 to 34% and 80% respectively in 2015 1.2. The budget of the RF increases from CFAF 34 billion in 2005 to CFAF 82 billion in 2015.	1.1. Consolidation of achievements of TSP 1.2. Pursuit of reform of the RF
<u>PROJECT OBJECTIVES</u> 1. Improve the level of service of the Bachuo Akagbe-Numba Road through the construction of a permanent link between these two localities. 2. Contribute to improving the living and working conditions of communities in the area by providing socioeconomic amenities and constructing feeder linking and collection roads	1. Improvement of the level of development of roads in the project area thereby facilitating regional integration 2. Accessibility of the communities to basic socioeconomic infrastructure and level of processing agricultural outputs improved.	Manyu and Momo Divisions	1. Length of undeveloped and poor roads in Cameroon forming part of the Lagos-Mobassa Trans-African Highway 2. School attendance rates; additional number of persons having access to drinking water; number of health facilities in the PA; increase of the processing of agricultural produce in the PA, <u>Sources:</u> MINTP, MINSANTE, MINPROFF <u>Methods:</u> statistics compiled, surveys on road	1. The length of undeveloped and poor roads in Cameroon forming part of the Lagos-Mombassa Trans-African Highway declines from 150 km in 2006 to 100 km in 2011, 2. Net enrolment rate along the road rises from 90 in 2006 to 95 in 2011; the number of pupils per teacher drops from 40 in 2006 to 30 in 2011, 15000 persons in the villages of Bokwa and Nchemba II have access to drinking water in 2011; the rate of morbidity due to water-borne diseases decreases from 40% in 2006 to 30% in 2011; palm oil and gari outputs increase by 100% in the PA in 2011, time required to manufacture a litre of oil reduces from 30 minutes in 2006 to 2 minutes in 2011. <u>Sources:</u> MINTP, MINSANTE, MINPROFF <u>Methods:</u> Statistics compiled, surveys on the highway.	1. The 2 nd -generation Road Fund is fully operational 2. The GICs of villages properly manage the socioeconomic amenities provided to them.
<u>ACTIVITIES AND INPUTS</u> 4.1 Development of the road (UA 48.70 M) 4.2 Development or rehabilitation of socioeconomic infrastructure (UA 4.20 M) 4.3 Project Management (UA 0.90 M)	1. A new paved two-lane road developed between Numba and Bachuo Akagbé, including environmental protection works 2. Feeder roads improved to link villages to the main road 3. Socioeconomic infrastructure rehabilitated or reconstructed in some riparian villages 4. Minor equipment for the processing of farm produce and intermediate means of transport provided to women's groups 5. Implementation of the project is facilitated; the communities of the PA and users of the road are sensitized on HIV/AIDS, malaria, road safety, environmental protection, risks related to early pregnancies and community interest groups trained in the management of equipment for processing of farm produce, etc.	Area linked to the Numba - Bachuo Akagbé highway	1. Length of developed road 2. Length of feeder roads developed 3. Number of socioeconomic amenities developed or rehabilitated 4. Number of equipment items for processing farm produce or means of transport provided to women 5. Number of socioeconomic surveys on the highway; number of equipment items supplied to the CSEP for monitoring the project; number of persons sensitized on HIV/AIDS, malaria, road safety, environmental protection, early pregnancy-related risks; number of GICs trained in management; number of audit reports produced, etc.	1. 50 Km of road developed between Bachuo Akagbe and Numba; 2. 135 km of rural roads developed; 3. 4 boreholes drilled at Bokwa, Nchemba II, Nfeitock II and Numba; 1,000 desks with benches provided to schools in the PA; 20 classrooms in Bokwa, Etuku and, Nchemba, 2 teachers' offices constructed at Bokwa and Etuku; 3 youth centres constructed at Etuku, Nfeitock and Bachuo Akagbe; 1 women's centre constructed at Kendem; 14 market sheds built in Bachuo Akagbe, Etuku, Numba and Bokwa; etc 4. 22 oil presses, 105 push carts and 37 cassava mills provided to Kendem, Bokwa, Etuku, Nchemba II, Nfeitock II, Numba and Bachuo Akagbe; 5. 3 socioeconomic monitoring evaluation surveys on the Bachuo Akagbe-Numba road; 1 vehicle and 2 computer equipment provided to the CSEP for the monitoring of the project; 100,000 persons sensitized on HIV/AIDS, etc; 50 women's GIC trained in the management of equipment for processing farm produce; 4 audit reports produced; 1 project officer appointed.	

EXECUTIVE SUMMARY

1. Project Origin and Background

Since 1984, the Government of Cameroon envisaged the development of sections of roads in Cameroon forming part of the Lagos-Mombassa Trans-African Highway. To that end, technical and economic feasibility studies of the road were undertaken in 1984. The project was abandoned in 1986 due to the economic crisis affecting the country. In 1995, the studies were updated as part of the road programme financed by the ADB. Following a request by the Government in July 2001, a mission was fielded in Cameroon in December 2004 to prepare the project after the Government had undertaken to update the existing studies with its own resources. This mission recommended the conduct of complementary studies, including the updating of the economic study, finalization of detailed designs and an in-depth environmental and social impact assessment (ESIA) and updated cost of the project. The studies were completed in February 2006. The Government had earlier resubmitted its financing request in June 2002. The present report is based on the findings of the February 2006 studies and data gathered during the project appraisal mission in April 2006. The financing proposal of this project by the ADF is in line with the Bank's strategy in Cameroon developed in the RBCSP 2005-2009 as well as the Poverty Reduction Strategy Paper (PRSP) of the country that give priority to the transport sector for its role in providing access to rural areas, as well as enhancing the integration of sub-regional economies.

2 Purpose of Loan

The ADF loan, amounting to UA 44.70 million and representing 83.09% of the project cost, net of taxes, will be used to finance 100% of the foreign exchange cost and 23.93% of the local currency cost of the project.

3 Sector Goal and Project Objectives

3.1 The project will contribute to the quantitative and qualitative improvement of the transport infrastructure of Cameroon, particularly its classified road network in order to meet the country's needs and assure its strategic position in the Central African Sub-region.

3.2 The specific objectives of the project are to: (i) improve the level of service of the Numba - Bachuo Akagbé road, through the development of a permanent link between the two localities, and (ii) improve the level of service of socioeconomic amenities, as well as the state of feeder roads to help improve the living and working conditions of the populations.

4 Brief Description of Project Outputs

To achieve these objectives, the project will consist of the following components:

- A - **Road development** comprising: (i) the development and surfacing of the Bachuo Akagbé-Numba road over 50 km with a 7m-wide carriageway and two 1.5 m-wide shoulders; (ii) actions and measures to mitigate the negative environmental impact; (iii) sensitization on environmental protection, road safety, prevention of AIDS, sexually-transmitted diseases and malaria; and (iv) works inspection and supervision.

B - Ancillary works comprising: (i) the development of about 135 km of feeder roads linked to the main road; (ii) the development of markets; (iii) the construction of a women's centre, the rehabilitation and reconstruction of classrooms, the construction of youth centres; (iv) the drilling of water boreholes; (v) supply of women's groups in riparian villages with minor equipment for processing farm produce and intermediate means of transport; (vi) training and sensitization of women's groups on the use of equipment for processing farm produce, management of the said equipment, risks related to early pregnancies, etc.; and (vii) inspection and supervision of ancillary works.

C - Project management comprising: (i) support to the Road Projects Monitoring Unit (CSEP-BAD); (ii) consultancy services for monitoring-evaluation of socioeconomic and environmental impacts of the project; and (iii) consultancy services for accounting and financial auditing of the project.

5 Project Cost

The estimated cost of the project, exclusive of customs duties and taxes, is UA 53.80 million, made up of UA 41.84 million in foreign exchange and UA 11.96 million in local currency. The base cost of road works, including hydraulic structures, is CFAF 30.84 billion, representing a unit cost of CFAF 617 million per km due to: (i) the high rainfall in the area which does not allow for construction works except for one-quarter of the year; (ii) the need to undertake drainage followed by substantial embankments and several structures to protect the carriageway from water, the costs of which represent 64% of the estimated cost of the works; and (iii) the need for synthetic materials (unwoven textile) and filter courses. This unit cost is close to the updated one of a similar project financed by the Bank, whose works are ongoing (Melong-Dschang road development project).

6 Sources of Finance

6.1 The project will be financed by ADF, the beneficiary communities and the Government. The ADF loan will be used to finance part of: (i) the works and inspection of development works on the 50 km Numba-Bachuo Akagbé road and mitigation measures for negative environmental impacts, (ii) ancillary works and their supervision; and (iii) sensitization campaign on road safety, malaria, HIV-AIDS, environmental protection and training of women's groups. The ADF loan, amounting to UA 44.70 million and representing 83.09% of the total cost of the project, exclusive of tax, will be used to finance 100% of the foreign exchange cost of the project and 23.93% of the local currency cost.

6.2 Participation of the beneficiary communities in the financing of the project (UA 0.15 million, that is CFAF 114 million) will be in the form of construction of shelters for the minor equipment for processing farm produce, and procurement of spare parts essential for commencement of operation of the said equipment. The Government's contribution (UA 8.95 million, equivalent to CFAF 6,989 million) will be used to finance: (i) part of the cost of works and control of development works of 50 km of the Numba-Bachuo Akagbé road, and mitigation of the negative environmental impacts, (ii) part of the cost of ancillary works and their monitoring, (iii) part of the cost of sensitization on road safety, malaria, HIV-AIDS, environmental protection, etc., and (iv) the entire operating costs of the CSEP and cost of compensation of communities affected by the project.

7 Project Implementation

7.1 The project will be implemented from February 2007 to July 2011, covering a period of about 53 months. The Ministry of Public Works (MINTP) will be the delegated project owner. The CSEP-BAD, which exists at the DIER for the monitoring of projects financed by the Bank, will specifically monitor the implementation of the project. The performance of this Unit was assessed, and generally deemed to be satisfactory. However, there is room for improvement, especially in the preparation of periodic reports. Experience acquired by the CSEP will consequently be fully used for the implementation of the present project.

7.2 The Environmental Protection and Road Network Division of the MINTP will lend its support to all the environmental aspects of the project. Furthermore, the Ministries in charge of Basic Education, Women and Family Promotion, Energy, Water and Environment concerned by the ancillary works should each designate a counterpart of the CSEP to coordinate activities related to their respective sectors. The DIER could appoint a trainee engineer to the monitoring mission for maximum periods of 6 months.

8 Conclusions and Recommendations

8.1 Conclusions

The implementation of the Numba-Bachuo Akagbé road project and construction of the ancillary infrastructure will contribute to opening up a large number of villages located in the South-West and North-West Provinces of the country, and improve the living conditions of communities in the project area. The project will thus contribute to reducing poverty in its area of influence. The project has undergone adequate technical studies and the negative impact on the environment assessed. The cost of mitigation of the latter has been incorporated into the overall project cost. The project is economically viable, and will generate an economic rate of return of 15.62%, which is higher than the opportunity cost of the capital estimated at 12% in Cameroon. Lastly, formulation of the project drew on lessons learnt from our interventions in Cameroon as well as those of other donors, notably with regard to procurement, mobilization of counterpart funding, sustainability of investments, monitoring of project implementation, and provision of socioeconomic amenities for the benefit of local communities.

8.2 Recommendation

In view of the foregoing, it is recommended that an ADF loan not exceeding UA 44.70 million be awarded to the Republic of Cameroon. This loan will be used to implement the project as described in this report. It will be subject to the conditions specified in the Loan Agreement.

1 PROJECT ORIGIN AND BACKGROUND

1.1 Cameroon represents an important economic pole, and plays a strategic role within the Economic and Monetary Community of Central Africa (CEMAC). Its central position between Nigeria, Chad, the CAR, Gabon, Congo and Equatorial Guinea makes it a transit zone to the landlocked countries, and more generally to the rest of the sub-region. This strategic situation led the Government to design in 1994, with the support of donors, a Transport Sector Project (TSP) geared mainly towards the construction of regional highways, the opening up of the hinterland, and improvement of the level of service of transport infrastructure on the whole. TSP activities included the construction of a permanent link between Cameroon and Nigeria via Bamenda-Batibo-Numba-Bachuo Akagbé-Mamfé-Ekok for which the preliminary studies had been undertaken in 1984. These road sections form part of the Lagos-Mombassa Trans-African Highway.

1.2 In view of the substantial financing to be mobilized for the development of the Bamenda-Ekok link, the Government and the Bank agreed to undertake the construction section by section. Thus, as part of the road programme (implemented from 1991 to 2002), the Bank financed the development of the Bamenda-Batibo and Bachuo Akagbe-Mamfé roads, as well as the updating in 1995 of engineering, economic and environmental studies of the other sections of the Bamenda-Ekok road. The road programme was incorporated into the TSP that covered the 1994-2003 period.

1.3 In 2001, the Government submitted a request to the Bank for the financing of development works on the Batibo-Bachuo Akagbé and Mamfé-Ekok road sections. In 2004, it also submitted a request to Arab donors for the financing of the Batibo-Bachuo Akagbe section. The Mamfé-Ekok road is included in the Bank's 2006-2007 pipeline projects under the multinational project with Nigeria (Mamfé-Ekok-Ikom Abakaliki-Enugu) that is under preparation.

1.4 Concerning the Batibo-Bachuo Akagbe road, the Government undertook the updating of the engineering and economic studies that were completed in February 2006. Similarly, the complementary Environmental and Social Impact Assessments (ESIA) have been finalized, and their summary published on the Bank's Website on 2 June 2006; the project was classified in Category 1 at the environmental level. To avoid postponing start-up of works on the Batibo-Bachuo Akagbe road development project, the Government requested the Bank to pursue development using a sequential approach. In view of this, the Batibo-Bachuo Akagbe road was divided into two sections (the 20 km long Batibo-Numba section and the 50 km long Numba-Bachuo Akagbé section).

1.5 The present report is based on the findings of these studies and information gathered during the project appraisal mission conducted in April 2006. The environmental evaluation helped to define mitigation measures against any negative effects on the environment.

1.6 The proposal for the financing of this project by ADF is in line with the Bank's intervention strategy in Cameroon and the Government's priorities outlined in the Poverty Reduction Strategy Paper (PRSP) which gives priority to the transport sector, in particular, in view of its role in opening up and developing rural areas, as well as enhancing the integration of sub-regional economies. Indeed, the 2004-2015 PRSP of the Government includes, in the

area of transport infrastructure, the construction of regional roads within CEMAC, as well as with ECOWAS. The Bamenda-Mamfé-Ekok road forms part of this link with ECOWAS. Similarly, the second pillar of the Bank's 2005-2009 RBCSP for Cameroon entails the strengthening of infrastructure, notably the development of the Batibo-Bachuo Akagbe and Mamfé-Ekok road sections. In addition, the project enjoyed the support of other donors represented in Cameroon.

2 THE TRANSPORT SECTOR

2.1 General

2.1.1 Since the resumption of economic growth in 1995, the transport sector has been contributing an estimated 6% of GDP and 4% of external trade. In addition, this sector, dominated by the informal sector, absorbs a significant portion of the investment budget ranging from 27% to 34% depending on the year. The sector is made up of the road, railway, river-maritime and air sub-sectors, and hinges on the two major poles represented by Douala and Yaounde, namely the economic capital and political capital of the country respectively. The country's major port, which is located in Douala, constitutes a key element in the country's economy in view of its dual role as the domestic entry point and international transit towards landlocked countries such as Chad and the Central African Republic, and neighbouring coastal countries, namely Nigeria, Equatorial Guinea and Gabon.

2.1.2 The main handicap of the transport sector is insufficient funding both internally and externally for the rehabilitation of degraded infrastructure and the renewal of rolling stock and handling equipment. At the technical and institutional levels, weaknesses have been noted in activities relating to the planning and programming of investments. These weaknesses are due to the fact that the human resources do not match the various missions of the sector, as well as the fact that users and economic operators do not receive adequate training and information.

2.2 Sector Overview

The Transport Sector

2.2.1 Road transport constitutes the main mode of transportation of goods and persons. It handles nearly 90% of domestic demand for transportation of travellers and nearly 75% of the transportation of goods. Transportation in urban and peri-urban areas in Douala and Yaounde is provided by the informal sectors, mainly small operators driving taxis and mini buses. In terms of traffic, road transport recorded strong growth in recent years of about 9% for paved roads and 6% for unpaved roads. It comprises a road network that is unevenly distributed depending on the regions. The Batibo-Numba-Bachuo Akagbé road is one of the routes that open up the North-West and South-West Provinces, and promote regional integration by linking Cameroon to Nigeria. Traffic on this road is still low in view of its lack of development that hampers economic activity, notably agriculture, by creating difficulties in the evacuation of produce.

Railway Transport

2.2.2 The Cameroonian railway network covers a distance of 1,160 km between Douala and Ngaoundéré, Ngoumou, Mbalmayo, Douala and Nkongsamba, Mbanga, Kumba. Passenger transport essentially operates on the Yaounde-Ngaoundéré and Yaounde-Douala lines. For the transportation of goods, the main exchange platforms for road transport are the Bélabo timber yard and the container terminals of Douala and Ngaoundéré. Since 1999, this network has been handling traffic of about 1.8 to 1.9 million tonnes per year of goods, mainly comprising timber (0.4 million tonnes), hydrocarbons (0.4 million tonne), timber (0.2 million tonne), cotton (0.13 million tonne) and aluminium industry (0.08 million tonne). Passenger traffic is about 1.10 million travellers per annum on the entire network. The Cameroonian railway network underwent realignment and modernization of equipment in the 1980s. However, the track infrastructure is currently in poor condition, and this constitutes a setback for significant growth in traffic. Railway has an equipment pool of 40 line locomotives, 20 shunting locomotives and a traffic capacity of 2,500,000 tonnes. Since 1998, the railway service has been transferred to a Franco-South African consortium that has constituted a new entity called Camrail (Cameroon Rail).

Air Transport

2.2.3 For its domestic and international air transport activities, Cameroon has 15 operational public airports 3 of which are international, namely Douala, Yaounde and Garoua. The level of service of the Douala and Yaounde airports is on the whole satisfactory, that of the other airports, however, appears to be average or poor. In 2004, the passenger traffic in the country's airports stood at 609,599 persons, distributed between international traffic (478,542), and domestic traffic (131,057). Flight movements consisted of 29,255 arrivals and departures of which 16,726 were international and 12,529 domestic. Freight, which stood at 16,414 tonnes, comprised 15,208 tonnes for international traffic and 1,206 tonnes for domestic traffic. About thirty cross-Atlantic and sub-regional airlines serve the airports of Douala and/or Yaounde, particularly Air France, KLM, Swiss Airlines, SN Brussels Airlines, British Airways, Air Ivoire, Kenya Airways, Ethiopian Airlines, Camair, Air Tumai of Chad, Air Gabon, etc.).

2.2.4 The management of the airport infrastructure has been transferred to "Airports of Cameroon" (ADC), a private management company. The Aeronautical Authority was created by Decree No. 98/029 of 22/12/1998 in replacement of the National Directorate of Civil Aviation. The Agency for the Security of Aerial Navigation in Africa (ASECNA) is responsible for air navigation control. The revitalization of domestic air transport is also underway, in order to improve its performance. One of the key reforms of the TSP that was not fully implemented concerns the restructuring or privatization of the national airline "Cameroon Airlines". However, in view of the situation of virtual bankruptcy of the airline (nearly CFAF 80 billion in debt, unsuitable fleet, etc.), the Government has already undertaken the liquidation-transfer of the airline, which is expected to be completed by the end of 2006 with the designation of a buyer.

2.2.5 The Yamoussoukro Decision, taken in 1999, to liberalize the African skyways led to the emergence, in Central Africa in August 2002, of several airlines whose survival remains doubtful, particularly following the liquidation of Air Afrique, and updating of the air safety inadequacies Under NEPAD, the COSCAP Project, approved by ADF in 2005, financed by other donors (EU and AFD) and coordinated by ICAO, will support Central

African States to build their capacities in air safety supervision. Hence, a Regional Agency for Civil Aviation Safety, comprising the CEMAC States and Sao Tomé & Príncipe with its headquarters in Ndjamena, will be created. The World Bank is providing support for the improvement of security at the Douala Airport.

River and Sea Transport

2.2.6 Cameroon has 4 ports, including a major sea port in the Wouri estuary, Douala, which is linked to the rest of the country by the RN5 road towards the West and the RN3 towards Yaounde, two secondary sea ports at Kribi and Limbé, and a river port on the Benoué in Garoua. These ports are autonomous entities placed under the coordination of a National Ports Authority (ANP). The Douala Estuary Port, which handles an annual traffic of about 6 million tonnes, polarizes over 95% of the national port traffic, as well as plays a significant role in terms of sub-regional integration. The Port of Kribi, which is the arrival point of the Chad/Cameroon pipeline, currently has an estimated annual traffic of about 82,000 tonnes, essentially made up of timber. The shipyard financed by the Bank is under construction in Limbé, where the site has deep waters suitable for the repair of oil platforms. The Port of Garoua has not been in operation for several years.

2.2.7 Under the TSP, the restructuring of the ports sub-sector led to the setting up of the National Ports Authority (APN), a public establishment that defines the country's port management policy. It is to be noted that the quality of port services is relatively satisfactory. However, the Port of Douala is affected by its often-limited operation, in view of its shallow access channel and chronic silting. Measures to improve performance are underway, notably reduction in berthing duration and costs, as well as the constant dredging of the port to increase the frequency of vessels and reduce waiting time.

2.2.8 Actions have already been taken to reduce berthing time, notably 17.3 days of berthing for imports at the Douala Port in 2005. The application of ISPS Code is underway, despite persisting difficulties, notably the impact on berthing costs. A feasibility study on the Douala Port Information System (SIP) is in progress. The programme for the computerization of the External Trade Single Window (GUCE) and the Douala Port platform is nearly operational. A customs scanner has been installed on the Douala platform. Migration towards the Automated System for Customs Data (ASYCUDA++) has been initiated at Douala, Ngaoundéré, Garoua and Kousséri platforms, as well as the interconnection of these platforms through a VSAT.

2.2.9 River transport is still marginal. It operates mainly on the Bénoué River, the main waterway that is navigable during the high rainy season between the Port of Garoua in North and the Niger River. Its annual traffic is about 9,500 tonnes.

2.3 Transport Policy, Planning and Coordination

2.3.1 Since the beginning of the 1990s, the Government's policy in the area of transport has aimed at progressively eliminating the obstacles and dysfunctions of the sector, the adverse effects of which add to transport costs. To this end, the Government undertook to: (i) improve the state of the network after several years of lack of maintenance; (ii) put in place a regulatory environment suitable for the development of private investments in the sector and improvement of the economic effectiveness of operators; (iii) strengthen and improve the management and planning capacities of institutions operating in the sector; and (iv) improve the recovery of infrastructure costs, notably through tolls and road user fees.

2.3.2 Reforms envisaged between 1996 and 2003 under the Transport Sector Project (TSP) were fully or partially undertaken to improve the quality and level of service of the transport system. With the completion of the TSP at the end of 2003 and in the absence of a new strategy, a Memorandum of Agreement (MoU) was formulated in February 2004 in consultation with development partners, aimed at outlining the intentions, commitments and measures proposed by the Government to safeguard the achievements of the TSP, accelerate progress on some commitments made previously and improve the performance of the sector (with indicators for measuring progress). In light of the outcomes of the initial evaluation of the implementation of the MoU in February 2005, a review was carried out to reflect progress made, notably a review of the law on the protection of the road network broadening the resource base of the Road Fund and creating an investment window, as well as delays recorded in other areas. The Government made commitments, particularly to improve transparency in the management and mobilization of the Road Fund resources. The MoU serves as a reference framework for the coordination of donors interventions in the sector.

2.3.3 The planning, coordination and implementation of this policy are primarily the responsibility of the Ministry of Public Works (MINTP), in charge of the construction and maintenance of roads, and the Ministry of Transport (MINT), responsible for the coordinated development of modes of transport and the regulation of transport. Also, the Ministry of Planning, Development Programming and Territorial Development (MINPLAPDAT) is responsible for formulating general policies and medium- and long-term development strategies, and for monitoring their implementation as well as programming. MINEFI is in charge of mobilizing financial resources for the funding of public investments.

2.3.4 Constraints of the sector relate to a dire need for adequate transport infrastructure and the high cost of road transport. The additional cost of transportation of about 30% penalizes trade. The need to open up the country and promote regional integration between countries of the Economic and Monetary Community of Central Africa (CEMAC) led the Government to adopt a transport sector policy to enable the sector contribute to economic growth, poverty reduction and environmental protection. This policy, which has been in force since 1994, is specifically geared towards: (i) protection of the existing network and development of the priority network, notably, that of roads, so as to provide support to other sectors of the economy; (ii) reduction of transportation costs; and (iii) reform of enterprises of the sector, and private sector development.

3 THE ROAD SUB-SECTOR

3.1 The Road Network

3.1.1 The total length of the road network of Cameroon is estimated at 50,000 km. The road network of Cameroon has been classified since 1979 on the basis of Decree No. 79/093 of 12 March 1979 that defines, inter alia, the functions of the national, provincial and divisional classified roads, as well as rural roads. The national inter-city road network is divided into four categories, namely: (i) national roads (7,241 km) that essentially link the provincial capitals to the national capital, Yaounde, and the neighbouring countries; (ii) provincial roads (5,841 km) that link divisional chief towns within the province to the provincial capital; (iii) divisional roads (8,075 km) that link within a division, the districts to the chief town of the division; and (iv) rural roads whose network has an estimated length of 27,693 km including 12,843 km of the classified network; they serve the rural areas, plantations, local industrial areas and provide a link between the production zones, local markets and major marketing outlets.

3.1.2 Under the TSP, a priority network had been defined on which the Cameroonian Government has undertaken to concentrate resources allocated to the road sector. The development of the priority road network is given in the following table:

Table of the Priority Road Network of Cameroon (in km)

Regulatory Instruments	Paved Road	Earth Road	Rural Road	Total
TSP in 1992	4054	9704	10 952	24 710
Decision No. 3295/A/MINTP/CAB of 09/11/99	4047,8	9929	12 110	26 086,8
Decision No. 47/A/MINTP/CAB of 13 March 2003	4724,3	11 316,6	12 110	28 150,9

3.1.3 The state of roads in Cameroon established during the formulation of the Government's Building and Civil Works Strategy in 2005 is given in the table below.

Table: Road Statistics of Cameroon

Type of Infrastructure	Quantity	Proportion	State of Network		
			Good or Normal	Mediocre	Poor
Roads					
Paved	5 000 km	10%	26%	26%	48%
Earth (*PN and **NPN)	18 000 km	38%	11%	80%	9%
Rural Earth (PR and NPN)	27 000 km	52%	14%	10%	76%
Total	50 000 km	100%			
Structures					
Civil engineering structures	1196	98%	312	331	553
Ferries	29	2%	8	9	12
Total	1225	100%			

*Priority Network: **Non-Priority Network

Source: MINTP, Highways Department/PDR

3.1.4 Roads in a poor state increased in length over the last five years. More than three quarters of the paved network and the earth network require urgent maintenance. Furthermore, road density is about 3 km per 1,000 inhabitants and 100 km per 1000 km²; compared to an African average of 4.2 km per 100 km². Lastly, as part of the MoU signed by the Government and the donors represented by the European Union, the Government has undertaken to improve the state of part of the priority network between 2006 and 2010 as indicated in the table below.

Indicator	2006		2007		2008		2009		2010	
	km	% in Good State	km	% in Good State	km	% in Good State	km	% in Good State	km	% in Good State
Paved	4721	41%	4862	52%	5038	61%	5144	70%	5144	73%
Earth	11097	23%	10957	18%	10781	22%	10892	25%	10675	28%
Total	15818	29%	15819	28%	15819	34%	16036	39%	15819	43%

3.2 Vehicle Fleet and Traffic

Vehicle Fleet

3.2.1 Since the middle of the 1990s, the vehicle fleet has seen steady growth resulting from the implementation of trade liberalization policies and the massive importation of used vehicles that account for over half of imported vehicles. This fleet increased from 210,000

vehicles in 2000 to about 313,000 vehicles in 2005, representing an annual average increase of 8.30%. It is made up of 82% of light vehicles and 18% of heavy vehicles. The rate of motorization, which is one of the highest of the region, is about 14 per 1,000 inhabitants. The ageing of this fleet (60% is over 10 years old) has resulted in low output, a high need for spare parts and increased vehicle operating cost and the number of accidents.

Road Traffic

3.2.2 Traffic on the network is characterized by significant differences between geographical areas, nature of roads and routes. Traffic counts are carried out on the classified road network albeit in an irregular manner. The last traffic count results of 2005 indicate an annual average daily traffic (AADT) on the entire road network of between 70 and 5,000 vehicles/day. The highest traffic is found near Yaounde and Douala and on paved roads, with an AADT ranging between 400 and 5,000 vehicles/day. The lowest traffic is found on earth roads with less than 100 vehicles/day. On the paved sections of the Trans-African highway, traffic is about 1,400 vehicles/day on the Bafoussam-Yaounde road, reaching 2,700 vehicles/day on the Douala-Yaounde road.

3.2.3 In the area of road safety, out of 4-5,000 serious accidents identified annually, there are over 1,000 deaths and about 6,000 wounded. But the statistics should undoubtedly be improved in years to come in order to have more accurate knowledge of the level of road safety and a causality analysis (data on the state of the vehicle, driver's behaviour and state of the infrastructure).

3.3 Road Transport Industry

3.3.1 The road transport industry in Cameroon is an open market that attracts many small individual operators who possess only one to three vehicles, but accounts for 40% of the production of the sector. Cameroon also has structured large and medium-scale enterprises, having over 50 vehicles. These enterprises are mainly involved in the haulage of wood and specific products (containers, export products, petroleum products, etc.) based on long-term contracts with logging companies, forwarding agencies and industrialists, thus guaranteeing regular activity. Access to the profession is free and tariffs have been deregulated. To defend their interests and protect their profession, professional transport operators are grouped into local or national unions and regional transport operators' cooperatives. International transport with neighbouring countries (Chad and CAR) is governed by freight sharing agreements based on the 1/3 and 2/3 rule. Transport operators who handle transit transport use the rotation system organized by the Land Freight Management Office (BGFT) and the transport owners and drivers' unions. The number of companies officially registered as transport enterprises is about forty. This figure only covers the major transport enterprises operating mainly on the international route (Chad – Cameroon link).

3.3.2 Problems facing the road transport industry relate to: (i) the ageing fleet and its unsuitability for transport that creates artificial excess capacity in relation to overall freight demand reinforced by the transit traffic-sharing rule (so-called 1/3 and 2/3 rule); and (ii) low profit margins due to the lack of professionalization and multiple "invisible costs" that add to cost of transport, notably fees paid at the various checkpoints.

3.4 Road Construction Industry

3.4.1 The road construction industry of Cameroon provides a competitive market open to all firms and qualified engineering consulting firms or studies. The privatization in 1994 of the execution of road maintenance works and studies and control services has favoured the rapid growth of numerous enterprises and engineering firms in the road construction industrial sector.

3.4.2 For the execution of works, 10 large enterprises (with a turnover of over CFAF 30 billion / year) made up of 6 national enterprises and 4 international companies, and 70 SMEs have been operating regularly for several years. New and rehabilitation works are carried out exclusively by large enterprises, and one-quarter of maintenance works on the inter-city network are executed by large enterprises and three-quarters by SMEs.

3.4.3 Cameroonian SMEs are encountering financial difficulties in acquiring public works equipment, and often even to rent it. The recent restructuring plan of the Civil Engineering Equipment Pool (MATGENIE) has conferred on it the missions of procurement, maintenance, renewal, and rental of equipment needed for the construction and maintenance of the country's road network. Also, the Government is in the process of adopting a policy that encourages the creation of private structures for renting civil engineering machinery.

3.4.4 As regards engineering, there are nearly 30 engineering and design firms, 10 of which have general road competences with workforce exceeding 30 persons and a turnover ranging between CFAF 200 million and 3 billion, and 5 specialized firms (geo-technical laboratories and structures). Road studies, the quality control and supervision of works are carried out by either foreign or local firms (ten) whose number and qualifications have been improving. These local firms are capable of carrying out significant studies of average complexity and inspecting identical works, alone or in a group, notably with regard to earth roads.

3.5 Administration of Road Network and Staff Training

Administration of Road Network

3.5.1 In Cameroon, the technical departments of the Prime Minister's Office and seven ministries undertake road administration. The Public Procurement Regulatory Agency (ARMP), placed under the supervision of the Presidency of the Republic, was created on 23 February 2001 to replace the General Directorate of Major Works in order to oversee the regulation, monitoring and evaluation of the public procurement system. The Ministry of Transport (MINT) is responsible for coordinating road transport with the other modes of transport. The Ministry of Planning, Development Programming and Territorial Development (MINPLAPDAT) formulates the general framework for the strategic planning of the country's development, and ensures the consistency of sector development strategies within the overall development and poverty reduction framework. The Ministry of Public Works (MINTP) is in charge of the construction, maintenance and protection of the road network, including urban roads, in conjunction with the competent ministries and organizations.

3.5.2 The MINTP is also the supervisory authority of the National Public Works College (ENSTP), the National Civil Engineering Equipment Pool (MATGENIE) and the National Civil Engineering Laboratory (LABOGENIE). Apart from the General Secretariat, with regard to road activity, the MINTP is organized into four departments and two divisions: (i) a Road Investment and Maintenance Department (DIER) in charge of activities relating to road programming, construction, rehabilitation and maintenance; (ii) a General Affairs Department in charge of budget preparation and execution; (iii) a Rural Roads Department in charge of activities relating to the programming, construction, rehabilitation and maintenance of rural roads; (iv) a Department of Construction in charge, with regard to civil construction, of the formulation of technical standards, monitoring of the application of regulations, construction expertise, etc.; (v) a Division for the protection of the network and the road environment in charge of the management of the road network and environmental aspects related to the construction, rehabilitation and maintenance on this network, etc.; and (vi) a Studies, Standards and Planning Division in charge of long-term studies on road networks and civil constructions, economic studies, technological monitoring in the area of buildings and road works, etc. The DIER, which is responsible for the technical management of the classified road network, comprises 139 engineers and 27 technicians. An Inter-Ministerial Steering Committee for road toll operations (CISOP), placed under the responsibility of the MINTP, was put in place with the key mission of ensuring, in fixed or mobile toll stations, compliance by vehicles with total weight in excess of 35 tons.

3.5.3 The Ministry of Territorial Administration and Decentralization (MINATD) is responsible for supporting decentralized local authorities in the formulation of programmes, monitoring and financing of equipment or infrastructure projects. The Ministry of Urban Development and Housing (MINDUH) formulates and implements management strategies for urban infrastructure. The Ministry of Agriculture and Rural Development (MINADER) takes part in the planning of programmes for improving rural living conditions, notably rural roads. And the Ministry of Economy and Finance (MINEFI) is in charge of the formulation of financial and fiscal policy of the Government, notably, with regard to the investment public. It oversees the Road Fund, whose resources are mainly allocated to road maintenance. It is also responsible for the Technical Unit for the implementation of the Matrix of Measures (CTM) whose mission is to support and coordinate the implementation of the organizational, accounting and financial reforms of five ministries, including the MINTP.

Training

3.5.4 A training programme was financed by the European Union (EU), under the PERFED II (completed in 2003), Germany through the GTZ and the World Bank through the TSP (completed in 2003). This programme was based on the training policy of the MINTP, geared towards upgrading actors of the privatization of road maintenance, namely: workers of the MINTP, SMEs and consulting firms in charge of the control of maintenance works. A training plan was prepared on planning, technical and management aspects of road maintenance and environmental impact studies. It aimed at upgrading the professional staff of the MINTP and accompanying the private sector, SMEs and engineering firms in taking charge of all road maintenance works. Under the Ambam-Eking road development project, the ADF also financed a training programme in the area of environmental protection and maintenance of engineering structures involving 92 workers made up of 72 workers of the MINTP (environmental auditing of project, seminar on environmental impacts, pathology and database of paved roads and engineering structures), 15 staff members of MINFOF and 5 staff members of MINEP (environmental protection).

3.5.5 The National Public Works College (ENSTP) of Yaounde provides training to technicians and engineers in civil engineering and to two vocational training centres in Garoua and Akonolinga. As part of ongoing reforms, the ENSTP has put in place a continuing professional and advanced training centre to support the restructuring of the MINTP. The Public Works Trades Centres (CMTP) of Garoua and Akonolinga that train supervisory staff, skilled workers of the MINTP (site superintendents and foremen, equipment operators, etc.) have directed their services towards SMEs since the privatization of road maintenance. Lastly, since the 2005/2006 academic year, the University of Yaounde II has been training through its economic and demographic post-graduate school, graduates in Transport Economy and Trading Logistics. With 5 years of training after the BAC (GCE Advanced Level), a specialized diploma in higher studies (DESS) is issued.

3.5.6 Initial training of the country's transport sector administration technical staff was halted in 1997 and the ENSTP no longer trains civil works engineers or technicians for the MINTP due to suspension of recruitments in the said Ministry. Continuing professional training (for the MINTP and the private sector) is provided by the CSMES of the ENSTP of Yaounde, the CMTPs of Akonolinga and Garoua. Most of the staff of the MINTP have received continuing professional training under projects funded by various donors (PERFED I and PERFED II financed by the EU, TSP by the World Bank and the ADF). Over 720 workers of the Ministry (out of a total workforce of 2,700), all sectors inclusive, were trained from 2003 to 2006.

3.6 Road Maintenance

3.6.1 The MINTP undertakes the management of roads through the DIER, provincial delegations and territorial subdivisions. The DIER carries out the programming of road maintenance works, through its three sub-departments in charge of road maintenance, using a data bank for the planning and programming of road maintenance. The length of roads to be maintained in the year is defined taking into account the budget allocated. This programming is submitted to the Road Fund (RF) that ensures that roads earmarked belong to the priority network and that the works are eligible for financing. Eligible works concern routine and periodic maintenance with the exception of construction or rehabilitation works that are directly financed from the State budget or by donors. The DIER prepares bidding documents and the relevant contracts, approves tenders and supervisors' works. Maintenance works are carried out by SMEs, following competitive bidding and the responsibility for implementation is entrusted, following competitive bidding, to private consulting firms. With regard to the environment, the Division in charge oversees the mitigation of the negative impacts on the environment. In addition to financial auditing, technical auditing is carried out to ascertain the quality of the works.

3.6.2 In establishing the Road Fund, difficulties hampering road maintenance relating to insufficient funding and having as corollary a low level of implementation of works, were practically resolved. Three-year contracts signed with the engineering firms for reporting on the state of the network provide data for the annual planning of works. In view of this, competitive bids are conducted on schedule, ensuring the start-up of works in October-November at the beginning of the dry season and adequate execution performance. Thus, the 2004/2005 maintenance campaign absorbed over 90% of the Road Funds commitments and that of 2005/2006 has already taken up 26%. In terms of financial execution, payment statements are directly forwarded to the Road Fund by the consulting firms in charge of the implementation, for payment. Payments are made in less than 8 calendar days.

3.6.3 Apart from works site, equipment and management problems facing the SMEs were mitigated by the availability of rental equipment in the private sector (other than MATGENIE) or procured by SMEs themselves through the training given under the PERFED II and the GTZ projects. Similarly, such training enabled the Engineering Firms and the Administration to improve their performance.

3.6.4 However, the ER remains confronted with the problem of inadequate Road Fund (RF) resources to address the needs of the priority network. The Road Master Plan (PDR) study in 2005 projected maintenance deficits as indicated in the following table.

(CFAF billion)

	2006	2007	2008	2009	2010
Target	53.8	58.4	62.1	66.4	70.8
RF Resources	40.0	46.6	49.8	53.3	57.3
Deficit	13.8	11.8	12.3	13.1	13.5

3.6.5 This deficit, which is 26% of the 2006 requirements, is expected to decrease to 19% by 2010. In order to absorb the deficit, the Government has undertaken, under the MoU signed with the donors represented by the EU, to increase resources allocated to the Road Fund through: (i) an increase of the RUR in line with the projected increase in the share of the RUR on taxes on petroleum products (TSPP); (ii) improved recovery of tolls, axle fees and road fines under the Roads Revenue Protection Programme that covers all road toll operations, notably checkpoints, and collection and tracking of revenues; and (iii) establishment in 2006 of modalities for payment beginning 1 January 2007 of the road toll tariff depending on the degradation capacity of the road.

3.6.6 For feeder and rural road maintenance that accounts for nearly 42% of the priority network, the Government adopted a new participatory approach strategy in 2000 for the management and maintenance of the rural roads network. The approach aims at effective ownership of the definition and management of rural road network by the beneficiaries. Feeder roads to be selected under this strategy for financing by the local governments/beneficiaries should be directly or indirectly linked to the primary road network and based on recommendations made by the beneficiaries grouped into community interest associations. The associations, as well as the local authority, must undertake, through a partnership compact, to carry out manual routine and periodic maintenance and mechanized routine maintenance.

3.6.7 To test this new approach and pending the adoption of regulations on decentralization, pilot programmes were initiated some of which are currently being implemented with the RF, with the support of the EU (2052 km), the AFD (1400 km already completed), IDA (1500 km already completed), the IDB (500 km ongoing in the South-West) and the ADF (800 km to be completed in 2006) through the poverty reduction project and actions in favour of women in the Far North Province (PROPAFEN). However, these achievements fall short of the estimated needs and for the moment only minimally concern the South-West and North-West Provinces that constitute the project area. Indeed, the IDB and OPEC Funds are the only donors operating in the regions alongside the RF and HIPC Fund.

3.7 Financing of Road Investments and Maintenance

3.7.1 Programming of road investments in Cameroon is based on a rolling three-year programme approach. While the financing of investment and heavy periodic maintenance programmes is largely through external resources secured from donors, routine maintenance and light periodic maintenance are currently exclusively funded by internal resources through the RF.

3.7.2 Each year, the Government allocates on average 29% of its investment budget to the financing of road infrastructure. Furthermore, under the TSP, donors financed actions to accompany the Government's efforts in reforming the road sub-sector and ensuring an effective contribution by the latter to the country's socioeconomic development. These were: (i) the ADB with a total commitment of UA 95.40 million for the road programme (UA 63.5 million), 832 km of rural roads under the PREPAFEN (UA 8 million), the road development project in the West, South and Littoral Provinces (UA 15 million) and the Ambam-Eking road development project (road UA 8.90 million); (ii) the WB, with a total commitment of over CFAF 38 billion for the road rehabilitation and emergency maintenance programme of about 1000 km, including 600 km of earth roads and a rural roads component; (iii) the AFD for the rural roads maintenance programme over 1500 km, for the production of coffee and cocoa, the structures and rural roads of SODECOTON rehabilitation programme as well as the programme for opening up industrial areas; (iv) European Union for 2,400 km rural roads programme and technical assistance in the road sub-sector; (v) the KFW for the maintenance of paved roads: this donor also financed the rehabilitation of road structures; and (vi) Islamic Development Bank (IDB) for rural roads.

Financing of Road Investments

3.7.3 For the financing of heavy investments (new and rehabilitation works) and part of periodic maintenance, Cameroon resorts to its development partners. Thus, the majority of bilateral and multilateral financing institutions represented in Cameroon operate in the road sub-sector through the formulation of programmes and financing of projects and programmes. These donors are notably the European Union, the IDA, the Arab Fund, the IDB, the OPEC Fund, the Japanese Cooperation, KFW, the GTZ and the AFD and the ADF.

Financing of Road Maintenance

3.7.4 For the integral financing of routine maintenance expenditure, Cameroon has established, through Decree No. 98/162 of 26 August 1998, a 2nd generation Road Fund placed under the supervisory authority of the Ministry of Finance, but having the status of a

legal entity and with management autonomy. The resources of the RF are mainly made up (over 90%) of Road User Fees (RUR) directly added to fuel prices (at the rate of CFAF 60/L of gas oil and CFAF 40/L of petrol for the 2006 fiscal year). Despite the increase in the resources of the Road Fund from CFAF 15 billion in 1998/1999 to CFAF 35 billion in 2005, only 70% of road maintenance needs were covered. To remedy this, the Cameroonian Government has undertaken to increase the RF resources by CFAF 50 billion by the year 2008, by incorporating into it, inter alia, the tolls resources that are currently paid to the Treasury. The projected resources of the RF for 2006 are estimated at CFAF 40 billion.

3.7.5 However, the Government should take the necessary steps to improve the management of toll stations (34 toll stations under State control). A recent survey on the operation of these toll stations show that only 62% of what the users pay or should pay is received. The privatization of the management of these stations already envisaged as a solution should be accelerated. With the completion of the TSP in 2003 and the absence of a new intervention strategy in the sector, the Government and development partners, notably the European Union, formulated in May 2004 a Memorandum of Understanding (MoU) to define the commitments and measures to be taken by the Government to safeguard the achievements of the TSP1. To date, some actions of this MoU have been executed, notably: (i) formulation and validation, at the technical level, of the strategy for the building sector and public works and the Road Master Plan; (ii) signing of the order instituting the Road Revenue Protection Programme; (iii) signing of the order specifying the rules concerning the tax base, monitoring and recovery under the Road Revenue Protection Programme; and (iv) creation of the National Road Council. Plans are underway for the establishment of a Road Agency. In view of its mission as a single intervention framework for donors operating in the road sector, the MoU is reviewed periodically.

4 THE PROJECT

4.1 Design and Rationale

4.1.1 The Numba-Bachuo Akagbé road section is part of one of the two sections (Batibo-Bachuo Akagbé and Mamfé-Ekok in Western Cameroon) of the Lagos-Mombassa Trans-African Highway that have not yet been developed. It is part of the Bamenda-Batibo-Bachuo Akagbe-Mamfé-Ekok-Enugu road that links countries of the Economic and Monetary Community of Central Africa (CEMAC) to those of the Economic Community of West African States (ECOWAS). To this end, the construction of this section is in line with the New Partnership for Africa's Development (NEPAD). As specified in Chapter 1, the project is being progressively implemented section by section. Thus, the development of the Bamenda-Batibo and Bachuo Akagbe-Mamfé sections have already been implemented with the Bank's financing under the road programme completed in 2002. Similarly, the present Batibo-Bachuo Akagbe section has been subdivided into two parts, namely Batibo-Numba and Numba-Bachuo Akagbé. The ADF financing will relate to the Numba-Bachuo Akagbé section.

4.1.2 The Bank's financing focuses primarily on the Numba-Bachuo Akagbé section in view of the fact that it is mainly located in flood-prone plains and, consequently, is not motorable during a significant portion of the year, thus requiring significant funds for its maintenance. The entire Batibo-Numba section is located on a cliff over a rocky hardpan, and which good periodic maintenance will render reasonably motorable. Furthermore, the implementation of works on the plains preceding the cliff area could have positive impacts on

the unit cost of works on the cliff in view of the reduction of approach costs. Already, the Government plans to undertake periodic maintenance (using RF resources) on this cliff section pending the mobilization of financing for its development.

4.1.3 Technical, economic, environmental and social studies on the Batibo-Bachuo Akagbé road, conducted in 2002, were updated in February 2006. The technical design of the project adopted was based on the traffic flow, safety parameters for inter-State road transport and geometrical characteristics in line with design standards in force in Cameroon for the development of national roads. Thus, in the plains, the design speed is 80 km/h and in difficult areas, this is reduced to 60 km/h or even 40 km/h in the mountainous region. Axle load is 13 tonnes. Various technical solutions were studied, notably, with regard to the road layout. The existing layout is winding, and does not meet international standards.

4.1.4 For the cliff region, the optimum layout adapted is that which follows the existing road in view of the topographic constraints, but the works require the use of dynamite to remove boulders. In the plains, the layout adopted varies by an average of 20 m on 50% of the length of the road section. These rectifications, aimed at respecting minimal geometric standards, have helped to gain 10 km over the current layout. In order to ensure the water tightness of the road in this flood-prone plain and protect the pavement system, major drainage, earthworks and use of synthetic materials and filter courses will be used. Lastly, the existence of numerous water bodies of various sizes requires the construction of many crossing and drainage structures.

4.1.5 The various studies were supplemented with working sessions in December 2004 and April 2006 during the project preparation and appraisal missions, with women's associations, village groups and farmers, community interest groups (GIC), representatives of transport operators, NGOs, economic operators and local and decentralized authorities. Over 500 persons took part in the presentation/discussion meetings on the project site during the appraisal mission.

4.1.6 This participatory approach, which was used in the presence of representatives of various sector administrations, as well as the validation meetings organized by the mission with the sector ministries in Yaounde, helped take into account the key needs of the communities in the development plans of each sector. Thus, the impact of the paved road will be extended and strengthened through: (i) the development of feeder roads for the collection of farm produce and link to remote villages; (ii) procurement of intermediate means of transport to facilitate the haulage of foodstuffs to the marketing areas; (iii) closure and rehabilitation for reasons of road safety of socio-educational infrastructure located along the road and; (iv) development of boreholes and construction of market and socioeconomic amenities, as well as supply of farm produce processing equipment to women's groups to improve their living conditions and level of incomes. At the request of the communities, sensitization activities on environmental protection, road safety, prevention of STI/AIDS and malaria planned under the initial project design will be strengthened through sensitization campaigns on early marriages and pregnancies and the training of women's GICs in the management of equipment and amenities provided under the project.

4.1.7 The objectives of the project, as designed, are in line with the Bank's vision, correspond to the orientations of the RPCSP for Cameroon for the 2005-2009 period, and are in conformity with the Government's PRSP. Indeed, this is outlined in Pillar II of the RPCSP and Theme 4 of the PRSP relating to infrastructure development. As designed, the project contributes to poverty reduction, environmental protection and the improvement of the living conditions and environment of the people. It will also contribute significantly to the promotion of rural women. Meetings held by the project appraisal mission team with donors represented in Cameroon helped to coordinate the various interventions in the sector, as well as in the project area. The formulation of the project also drew on lessons learnt from the Bank's interventions in the country, as well as those of other donors, notably, with regard to the procurement and mobilization of counterpart funds, sustainability of investments, monitoring of project implementation and consideration of socioeconomic infrastructure to benefit the local communities.

4.2 Project Area and Beneficiaries

Demarcation and Characteristics of Area

4.2.1 The road under study forms part of the Lagos-Bamenda priority regional highway (transit route), a section of the Lagos-Mombassa Trans-African highway. The determination of the area of influence of the road is based on criteria relating to both local and transit service (Cameroon-Nigeria). The direct project areas (PA) are therefore in the North-West and South-West provinces. The wider project area (PA) associated with the indirect impacts of the project concerns Cameroon and Nigeria.

4.2.2 The project area therefore straddles the South-West Province and the North-West Province. It covers an area of 42,810 km², that is, nearly 9% of the area of Cameroon. It regroups two provinces, 9 departments and 34 districts. The climate of the PA is the equatorial type. It rains virtually throughout the year. Rainfall varies between 2,300 mm in the North towards Batibo and 3,400 mm in the South in Bachuo Akagbe. However, there is a minor dry season from December to February and a major rainy season from August to October.

4.2.3 The landscape of the PA varies from hilly to very hilly or mountainous areas in some places. Altitudes in the Batibo-Numba-Bachuo Akagbé area range between 100 and 150 m on the plains, and 500 and 1266 in the mountainous areas. The main components of this geographical area, located close to the project road, are the Nta Ali Hills in the South of Bachuo Akagbe with the highest point at 1,266 m and the Widikum Highlands at 1229 m, etc. The region has a highly dense water system. The road under study crosses 38 water bodies, that is a drainage network of one water body every 2.1 km, requiring the construction of many crossing structures.

Population and Poverty Profile in the Area

4.2.4 The PA has a few modern socioeconomic amenities (30 schools and 6 health centres, including a district hospital, markets and industries) located in urban centres that generate considerable traffic. The level of poverty in the project area is worrying.

4.2.5 In 2005, the PA had an estimated population of 3.478 million inhabitants, representing about 20% of that of the country, with an average density of 81.2 inhabitants/km², an annual average growth rate of 2.5%, and a female ratio of 54% on average. This situation masks wide disparities between the lower plain area with densities higher than 80 inhabitants per km² and the high altitude forest zones with densities below 20 inhabitants per km². The PA remains rural (85% of the population), with a few average-sized urban centres, often organized around regional administrative capitals such as Bamenda, Buea, Mamfé and Batibo which attract migrants from other divisions in view of the availability of basic social services and administrative and commercial activities that are highly developed there, particularly in Bamenda. On the whole, these centres suffer from inadequate supply of employment in relation to demand, insufficient community amenities and increased proportion of active youths and men. Despite this situation, the growing pauperization of rural areas compel the rural population to emigrate towards these centres in search of better living conditions and, where necessary, move on to the urban centres of Bamenda, Douala and Yaounde. This situation has led to a gradual feminization and ageing of the rural population, particularly in the North-West and South-West Provinces. The most vulnerable groups are: the rural population, peri-urban communities living in extreme poverty (about 30% of the population of the area), children below 15 years of age (46%), persons aged over 65 years (5%) and women 30% of whom live in polygamous households in the project area. It is worth noting that 22% of such women, with large families, are in situations of extreme vulnerability due to their weak access to paying employment. These population groups are sensitive to the effect of the degradation and cutting off of the Batibo-Bachuo-Akagbé road during the rainy season (8 months in the year). The advanced state of degradation of the road renders the region inaccessible and cut-off from the rest of the country for over 4 months in the year. The above-mentioned population groups constitute the target groups and main beneficiaries of the project activities.

4.2.6 Health data indicates an average service rate in the project area of 65,000 inhabitants/hospital and 13,500 inhabitants/health centre, with an average ratio of one doctor per 12,800 inhabitants (WHO: 1/10000), a nurse for 3,000 inhabitants and a bed for 680 inhabitants (in the two provinces). Analysis of the health map of the area shows a strong involvement of private enterprises and religious institutions in the promotion of health in the project area. Despite notable efforts made in the development of private medicine, access to health services is relatively low in view of the ageing of the health infrastructure, poor quality of services, lack of medical personnel and the rapid spread of AIDS (9% prevalence rate). According to data on consultations in health care establishments, malaria constitutes the major cause of morbidity in the area (33%), followed by respiratory infections (10%) and gastro-enteritis (7%). Information gathered locally indicates that water-borne diseases (typhoid, diarrhoeal infections) and malaria account for over 40% of admissions into the health establishments. The major causes of mortality are malaria (15%), anaemia among under-5-year olds (9%) and AIDS (9%). Despite a national prevalence rate of 8%, the spread of AIDS seems real in the region with 15% of positive tests among the young population aged between 15 and 24%. Under the health policy, at least ten health centres were constructed in the project area, but these are not operational in view of the lack of staff and equipment and medicines (no pharmacy in the project area). The health situation is particularly critical in the steep mountain portion on the Kendem and Widikum road and the neighbouring villages that are only accessible on foot for nearly 35,000 inhabitants. In view of the steep landscape, referral health establishments are located at over 50 km from the Widikum and Kendem centres and in this area, evacuation of the sick is difficult all the more

because the project road is not motorable for more than 4 months of the year. Information gathered among the communities indicates a high maternal mortality due to neonatal infections and obstetrical complications related to the lack of care for women in labour.

4.2.7 With regard to primary education in the project area, the ratio of teachers to pupils is 1 to 40 (the National Standard defined in the educational policy: 1/55). However, this ratio masks wide disparities in view of the insufficient number of classrooms, their dilapidated state and the lack of adequate equipment. Thus, in schools located along the road, the lack of classrooms has resulted in regrouping of pupils in the same classroom, average pupil numbers of 150 pupils for Classes 5 and 6. This has resulted in the congestion of classrooms and a high rate of absenteeism of pupils and teachers. The net enrolment rate of children between 6 and 12 is satisfactory. This is 87%, but decreases to 78% in rural areas, due to the degraded state of the infrastructure and lack of teachers who refuse to take up their appointments in areas that are remote or barely accessible. Disparities between the level of enrolment between boys and girls are high. According to the UNICEF MIC 2001 survey, children of the area work on average nearly 4 hours a day. In view of the steep landscape, children are placed in care centres since they are unable to go back to their homes in the evening as a result of the long distance. Generally, inadequate communication channels that prevent the deployment of staff, transport of equipment and supply of medicines hamper the social and human development of the zone. The inadequate and precarious state of school and health infrastructure and the poor condition of the road justify the priority given by the Government to improve the living conditions of the communities through the construction of this road.

4.2.8 The main constraints of the area are: internal and external isolation, rural exodus, the poor development of agricultural potential, the poor health, education and communication coverage rate, drinking water problems, etc. Constraints to be addressed to achieve the objectives of reduction of the incidence of poverty fixed by the Government include the lack of infrastructure, lack of access to basic social services, as well as painful nature of women's work).

Gender Situation

4.2.9 Women are very dynamic and, despite their multiple domestic tasks, produce the bulk of foodstuffs. Women are organized into nearly 120 associations, regrouped within 10 forums. They have managed to develop trade and local networks to help gain access to credit and for the promotion of their rights. They have constituted savings and credit cooperatives, and actively contributed to community solidarity systems through economic interest groups. While the traditional culture systems remain vibrant in the project area, polygamy is relatively undeveloped in relation to the rest of the country and access to property is promoted. However, working conditions in the foodstuff sector are harsh and the marketing of produce is highly problematic in the region. In terms of cash crops, the presence of women is particularly high in palm oil processing and marketing, which constitute their main source of incomes. However, this activity is carried out in highly rudimentary working conditions with a low level of productivity.

4.2.10 The main constraints facing women and, particularly in the PA, are lack of drinking water, insufficient socioeconomic infrastructure and health personnel, illiteracy, lack of intermediate means of transport, low access to equipment and technology, as well as the defective state and/or absence of earth roads to evacuate sick persons and farm produce.

Difficulties in marketing their production and problems related to the supply of drinking water constitute sources of concern that take up a significant portion of their time. During meetings held by the mission with a high participation of women, the beneficiaries expressed many grievances arising from insufficient income-generating activities, defective tools of production, notably for the processing of palm oil and the considerable demand on women for family expenditures (health, education and other social obligations).

4.2.11 The people requested support with regard to constraints and difficulties identified in the various areas of development in the zone. Since the project cannot address all the grievances formulated, it incorporated some relating to the rehabilitation/construction of social amenities (schools located not far from the road, market sheds, etc.), water supply (boreholes), sensitization on STI-AIDS/malaria/female genital mutilation/early marriages and pregnancies, and those concerning rural feeder roads as well as alleviation of domestic chores.

Production and Marketing

4.2.12 Agriculture is the main activity of the communities in the PA. It occupies 64% of men and 95% of women. It is of traditional type and primarily entails subsistence farming (maize, potatoes, coco-yam, cassava, plantain, bean, yam, market gardening crops and fruits). Crops are grown on small dispersed plots using rudimentary tools. These also include cash crops: arabica and robusta coffee (about 1500 tonnes per year), cocoa (about 200 tonnes per year) and especially oil palm. These account for the bulk of the incomes of the communities.

4.2.13 The economy of the project area is based on agriculture, stockbreeding, fishing, handicraft, trading and wood production. Food crop farming accounts for 12% of that of the country. In 2000/2001, the area contributed 12% of the national plantain production, 58% of palm oil, 22% of pepper, 62% of potatoes and 41% of tomatoes. Stockbreeding (cattle, sheep, goats, pigs and poultry) represents about 16% of that of the country. Aquaculture is very common, though of the artisanal type, in many ponds yielding an annual production of over 200 tonnes. As regards handicraft, the main activities involve carpentry, dyeing, basket weaving and woodcarving. The wood industry concerns primary processing mills. About 80% of food production in the North-West and South-West are marketed in Mamfé, Batibo and Kumba (part of which is then transported to Bamenda). The evacuation of the products is hampered by the advanced state of degradation of the Bachuo-Akagbé-Batibo road with a highly critical situation on the Kendem-Widikum section. This situation is aggravated by the hilly landscape and the high rainfall observed throughout the year. Implementation of the project will foster the evacuation of products from the zone all year round.

4.2.14 Oil palm cultivation is growing significantly thanks to the activities of PAMOL Company in Ndian and Manyu Divisions (on average 31,200 tonnes/year) and in Momo Division (an average 40,000 tonnes/year). According to the agricultural officials, palm oil production could increase substantially if access, processing and preservation were improved.

4.2.15 Food crop cultivation also occupies a pride of place in household food and trade. In highly populated areas, notably, in Widikum, Kendem and Bachuo Akagbé, cassava and leguminous crops are grown along the road. These alternate with fallow lands of 5 to 10 years. Also, each household has a backyard garden, where citrus, leguminous, medicinal or seasoning plants are grown.

4.2.16 Livestock potential is significant in the Momo, with an annual average production of 30,500 cattle, 8,600 sheep, 10,400 goats and 280 horses. Furthermore, livestock is solely of the traditional and family type. Indeed, biological diversity encourages the local communities to take fauna resources in the neighbouring forest reserves. Although limited, the small stocks of goats, sheep and pigs, as well as poultry, have maintained their religious and symbolic nature at the socio-cultural level. The area under study possesses considerable fishing potential in view of the density of the drainage system, relatively calm topography and the significant production of plant biomass. However, fishing remains artisanal, and is practised mainly by Nigerian fishermen.

4.2.17 The area has significant wood reserves. However, logging is artisanal as a result of the lack adequate access. It is for this reason that very few logging operators have applied for licences in the area. Only the CTR Company currently operates in the Bachuo Akagbe region. Several plants are used for medicinal purposes to treat the major diseases in the area.

4.2.18 The main industry is that of the processing of industrial palm oil by MOPCOOP (Manyu Oil Palm Cooperative) with its oil mill at Nchang, and MAPKIN (Manyu Palm Kernel Industry) for the processing of palm kernel at Mamfé. There are also many motorized or manual presses belonging to private local promoters and community groupings.

4.2.19 The PA is poor in essential minerals: some traces of lead, zinc, sapphire, lignite and salt, as well as sources of thermal water have been discovered in the sedimentary basin of the Gulf of Mamfé. A detailed inventory needs to be carried out. The lack of communication infrastructure does not enable the exploitation of construction materials (sand, laterite and clay).

4.2.20 As regards tourism, the PA has tourist potential that is inadequately harnessed in view of the difficult access to the area. The tourist potential includes the Korup National Park in the Manyu with the Ekon Falls, but also the cross-river banks at Mamfé, the Abi Falls on the Momo River and water bodies, cliffs and hills with highly scenic landscapes, etc.

4.2.21 But apart from cash crops, the bulk of the production is consumed locally or marketed through the daily and weekly rural markets, notably those of Batibo, Widikum and Bachuo Akagbe. Contacts between the various localities in the area are through feeder roads that are not motorable during a significant portion of the year. The provision of basic infrastructure, notably, roads and water supply facilities provided for in the PRSP will increase production activities by 25% and commercial activities by 20% in the PA.

Current Situation

4.2.22 The Numba-Bachuo Akagbé road is a 50-km long earth road with a width varying from 4 to 5 m and which is barely suitable for motor vehicles, especially in the rainy season. It was opened before the 1940s and constructed in an artisanal manner. Consequently, it did not have any embankment, and this led to its “sinusoidal” nature. The longitudinal and cross-sections are irregular and need to be remedied. The road is deformed and degraded in several areas due to the combined effects of the traffic and rains. It was not possible to inspect the connecting feeder roads since most of them are in a very poor state and are invaded by high grass. However, the Public Works Subdivision of Manyu in Mamfé has details on the technical characteristics of some of these earth roads. Also, the lack of adequate water supply points in the PA constitutes one of the major problems facing the communities.

4.2.23 The poor quality of the road, insufficient and dilapidated state of socioeconomic amenities along the road, as well as problems of road safety, constitute the major factors that affect the living conditions of the communities, in general, and the vulnerable groups, in particular.

4.3 Strategic Context

4.3.1 The Cameroonian Government's development priority aims to enhance the country's food security and reduce poverty. By improving the incomes of the rural populations, it is expected that economic development will be assured. In the Poverty Reduction Strategy Paper, in order to achieve the millennium goals, the Government aims to implement a programme of credible and well-targeted reforms that would pave the way for the use of HIPC resources to: (i) strengthen the provision of essential social services, notably, health and education; and (ii) rehabilitate communication infrastructure, particularly roads and earth roads. The proposed project will contribute to achieving the Government's objectives by providing support to the creation and rehabilitation of socioeconomic infrastructure, and by improving access and mobility in the project area. At the national level, the project will contribute to economic growth and poverty reduction, as well as environmental protection in accordance with the Government's outline law on environmental management.

4.3.2 As proposed, the project should contribute to achieving these objectives, as well as reducing poverty by: (i) decreasing the overall transport cost, (ii) improving the mobility of factors of production and establishing conditions that would foster increased output; and (iii) promoting regional integration. In this regard, the project is in conformity with the Bank's Strategic Plan, as well as Cameroon's PRSP. Indeed, it forms part of the Bank's intervention strategies in the country, notably, Pillar II of the RBCSP 2005-2009 of Cameroon. Similarly, it is in line with the major priorities of NEPAD aimed at generating economies of scale through major integrated projects.

4.4 Project Objectives

4.4.1 The sectoral objective is to contribute to the quantitative and qualitative improvement of the country's transport infrastructure, particularly the classified road network in order to meet the country's needs and assure its strategic position in the Central African sub-region.

4.4.2 The project objectives are as follows: (i) improve the level of service of the Numba-Bachuo Akagbé road by developing a permanent link between these two localities, and (ii) improving the level of service of socioeconomic infrastructure, as well as the state of feeder earth roads to help improve the living and working conditions of the populations.

4.5 Project Description

4.5.1 To achieve the above-mentioned objectives, the expected outputs of the project are as follows:

- i) Development of a new 50 km 2-lane paved road between Numba and Bachuo Akagbé, including environmental protection works;

- ii) A total length of 135 km of feeder earth roads to link villages to the main road;
- iii) Development of boreholes to enable access to drinking water by about 15,000 persons;
- iv) Socioeconomic amenities rehabilitated or reconstructed in some local villages;
- v) Minor equipment for processing farm produce and intermediate means of transport provided to women's groups
- vi) Nearly 100,000 persons sensitized on environmental protection and road safety, HIV / AIDS, malaria, strategies for developing and managing ancillary infrastructure put in place by the Government and the training of women's groups in the management and use of equipment for processing farm produce.

4.5.2 The project has three components, namely, the construction of the road, ancillary works, and project management. These are summarized below.

A - Road development comprising:

A.1 Development and surfacing of the Numba-Bachuo Akagbé road over 50 km with a 7-m wide double-layered carriageway and a single layer 1.5-m wide shoulders. The road is located in a tropical rainfall forest zone and runs over plains and mountains. The characteristics considered for the road, depending on whether the terrain is a flat or fairly to highly mountainous are as follows: a maximum longitudinal slope of 6% to 8% and a minimum vertical curve of 500 m to 120 m; design speeds of 80 to 40 km/hour. Depending on the bearing capacity of the ground (plains or mountains), the road foundation will consist of: (i) a 20-cm sand cement or gravel laterite sub-base; (ii) a 20 cm thick road base made up of chippings; and (iii) a surface course with a double-layered dressing. The works will comprise: (i) substantial cutting both in the mountainous areas (rocky cutting) and on the plains where there are 8 flood-prone zones requiring the draining of the ground to a depth of 1.5 to 2.5 m and the addition of synthetic materials (unwoven textile) and filter courses, (ii) existence of numerous engineering structures for crossing water bodies (4 bridges of more than 35 m long, 20 of more than 8 m long, 11 of 4 to 6 m), drainage structures for sanitation (75 box culverts of 2 to 4 m long, 214 pipe ducks, that is 4.1 per km, 132 km of ditches 85 km of which will entail masonry work), and (iii) supporting and protection structures against falling stones in the mountainous areas.

- A.2 Actions and measures to mitigate the negative impacts on the environment; these have been developed in the chapter on environmental impacts of the project, and will be included in the terms of reference, as well as works contract;
- A.3 Sensitization on environmental protection, road safety, prevention of AIDS, sexually-transmitted infections and malaria; these services will be provided by a specialized NGO. The sensitization activities are aimed at informing the communities in the PA on opportunities and risks that will result from the construction of the road. The themes will relate mainly to: (i) prevention of risks related to STI/AIDS and malaria; (ii) prevention of early marriages and attendant pregnancy-related risks; (iii) prevention of road accidents of which the main victims could be the inhabitants of areas along the road, mainly due to the particularly hilly landscape that does not allow for high traffic speed; and (iv) respect and protection of the environment;
- A.4 Works inspection and supervision: A consulting firm to be commissioned for the purpose will provide the works inspection and supervision services. The firm will use the services of a specialized and approved laboratory for geotechnical inspection services.

B - Ancillary works: (i) development of about 135 km of feeder roads linking the main road between the villages of Bokwa, Bator, Nchemba II and Numba that are far removed from localities along the road such as Kendem, Etuku, Nfeitock and Bachuo Akagbé; (ii) construction of 14 market sheds of an area of 120 m² each in the villages of Numba, Bokwa, Etuku and Bachuo Akagbe; (iii) renovation or reconstruction and equipment of 20 classrooms in Bokwa, Etuku and Nchemba, as well as 2 headmaster's offices at Bokawa and Etuku and the supply of 1,000 desks with benches to schools in the PA; (iv) construction and equipment of (1) women's centre at Kendem, which will be used as premises for the supervision and training of over 3,600 women grouped in over 120 economic interest associations and groups in the project area, (vi) construction of 3 youth centres at Etuku, Bachuo Akagbe and Nfeitock II for the youth associations of the said villages; (vii) supply of 105 intermediate means of transport, notably, pushcarts to women's groups for the haulage of harvest and farm produce to the markets; (viii) procurement of 22 oil presses and 37 cassava mills for associations, organized into forums that were created in the various villages for the benefit of the various programmes initiated by MINPROFF. Part of such equipment (3 oil presses and 10 pushcarts) will be supplied to the association of widows and part of the income generated will be used to pay the school fees of AIDS orphans living in the project area, (ix) drilling of 4 boreholes at Numba, Bokwa, Nchemba II and Nfeitock II for about 15,000 inhabitants; (x) training and sensitization of women's groups in the use and management of minor equipment for processing farm produce; and (xi) monitoring and supervision of ancillary works.

- C - Project management** comprising: (i) support to the Road Projects Monitoring Unit (CSEP-ADB); (ii) consultancy services for the monitoring-evaluation of the project impacts (socioeconomic and environmental); and (iii) consultancy services for auditing of project accounts.

4.6 Environmental Impacts

4.6.1 At the environmental level, the project is classified under Category 1 in view of its location in an area that is relatively sensitive to the environment, the nature of its development into a tarred road, its sub-regional impact, and the potential direct and indirect impacts. In line with the requirements of the Bank relating to environmental policy and those of Cameroon, an environmental and social impact assessment (ESIA) was conducted; a summary of the assessment was published on 2 June 2006 in the Public Information Centre (PIC) and posted on the Internet. The environmental and social impact assessment followed a participatory approach, and was in line with the regulations in force in Cameroon. The Ministry of Environment and Nature Protection (MINEP) issued the relevant Certificate of Conformity No. 003/CCE/MINEP/IG/CST on 18 May 2006.

Positive Impacts

4.6.2 The socioeconomic impacts of the road will be highly beneficial. The implementation of the project will contribute to improving road safety and the comfort of travellers, reducing transport costs and travel time between localities, increasing opportunities for temporary employment for the local community, revitalizing micro-enterprises such as workshops for the repair of vehicles, retail points for foodstuffs, restaurants, garages, and facilities for access to periodic foodstuff markets, as well as improving the health of local residents and access to the major employment poles or economic activities in the sub-region. On the whole, the project will contribute to reducing poverty and improving the living environment and conditions of the population. Women will benefit from the project most. Moreover, integration of the sub-region will be enhanced through the direct links between Cameroon and Nigeria, as well as other countries in the sub-region.

4.6.3 The project will include sensitization campaigns targeting school children, communities living along the roads, village chiefs, local and governmental authorities, economic groups and transport sector operators. Four annual sensitization campaigns will be organized throughout project implementation. These campaigns will use the school, press, media, radio and television as means of information, and will focus on problems of health, STI/AIDS, water-borne diseases, environmental protection and land management, problems caused by bush fires, destruction of forest resources, good farming practices, soil conservation, road safety, preservation of customs and traditions, cultural and morals values, civic education, early pregnancies, etc. Seminars will be organized by specialized NGOs. Ancillary works as described in the preceding chapters will be carried out to improve the living conditions and the environment of the local communities.

Negative Impacts

4.6.4 The land on the Numba-Bachuo Akagbé road crosses dense community forests, exploited by the local community for food and cash crops, food-gathering, supply of timber and fuel wood, fishing, hunting, etc. The project area and its environs do not have any natural reserves or protected areas.

4.6.5 The negative impacts concern: (i) risks of violation of private properties (crops, buildings and burial grounds, access to properties, etc.) or public property (markets, water or electricity distribution systems); (ii) disturbance of traffic during works that will hinder traffic flow, with temporary consequences on the transportation of goods and persons; (iii) higher risks of traffic accidents; momentary disruption of access to schools and religious amenities; (iv) higher risks of spread of sexually transmitted infections (STIs) and AIDS, in view of the presence of numerous project workers; and (v) possible violation of the traditional system of thought, customs and habits. During the road works, the site workers could adopt behaviours that might be at variance with local traditions and foster moral depravity (prostitution, crime, and drug abuse) and violation of honour (adultery) and the sovereignty of the native populations. Hunting, which is today a significant source of protein for the people in the region, may increase if appropriate measures are not taken. Furthermore, the improvement of the road could, in the long term, increase the population and therefore demand, as well as increase demand for the export of meat to other urban centres. For further details on the impacts and mitigation measures, please refer to the ESIA summary.

4.6.6 For the purpose of the road development, 54 dwellings will be expropriated. These are made in makeshift materials (mud houses and huts), belonging to 20 families made up of 100 persons. A grave, which is located near a house, will be also transferred. Trees and crops located on the right of way of the road will also be expropriated. A compensation and resettlement plan has been drawn up and published in the PIC. Payment of the compensations for expropriation constitutes is one of the conditions precedent to the first disbursement of the loan.

Mitigation Measures

4.6.7 To reduce the negative effects, mitigation, compensatory or improvement measures will be implemented, namely: (i) banning of transportation and selling of game meat by the construction workers; (ii) checking of vehicles and personnel of the contractor (penalization in the case of breach); (iii) limitation of provisional right of way to the right of way of the current earth road and the developed road and to the defined quarry sites; (iv) banning of supplementary deviations, tree felling, manoeuvring, traffic and creation of quarry sites outside the defined rights of way in the area of the Forestry Development Unit (UFA); (v) separate removal and storage of soils and their subsequent reuse on slopes to regenerate vegetation; (vi) marking by administration services of forests and salvage cutting of precious species prior to works; (vii) creation of fine particles and hydrocarbons decanters/separators downstream of areas for the washing and maintenance of machinery and vehicles; (viii) emptying and periodic cleansing of such structures; (ix) obligation to carry out all supply, maintenance and oil change operations for vehicles at the area on the work site earmarked for the purpose; (x) collection and disposal of used oil and waste by the contractor; (xi) installation of latrines and waste pits in the living areas; (xii) redevelopment of borrow pits through drainage, levelling and replanting where necessary; (xiii) regular watering of the carriageway, earth works areas and quarry ramps near dwelling places, in case of excessive emissions of dust (dry season); (xiv) temporary road signs, notably at night, for the works areas; (xv) identification and prior replacement of installations (networks, public taps, standpipes, generators) likely to be damaged; (xvi) supervision of the restoration of nearby access roads and goods affected by the works; periodic health monitoring of the workers;

(xvii) constant supply of condoms on the local markets and in the premises of the site workers; (xviii) encouragement to promote local employment during works and sub-letting to local contractors (winning of sand, minor structures; and (xix) obligation to carry out bush clearing and tree felling using labour intensive methods; sensitization prior to works, through information and sensitization meetings on project components among the primary beneficiaries, namely, the local residents and other actors.

4.6.8 To limit the long-term impacts, the following will also be carried out: (i) information and training activities highlighting the limitations of the UFA and related restrictions through information signs at the entrance and along the road; (ii) promotion of stockbreeding and fishing, as well as consumption of local meat from stockbreeding (sheep, goats, poultry or even game rearing) and fish products, to replace game meat; (iii) incentives for opening a slaughter house and/or a fishing shop, and creation of a professional fuel station to replace the informal and dispersed trading; (iv) limitation of speed and safety devices in dwelling areas and close to schools and markets; and (v) planning and conducting of a prevention and training campaign on road safety for pedestrians and drivers, including the preservation of road signs (fight against vandalism). All these measures will be described in detail in the Environmental and Social Management Plan (ESMP) and incorporated into the terms of reference of contractors for implementation and follow up.

4.6.9 The costs of the environmental protection measures, ancillary works and compensation included in the project cost are: (i) CFAF 52 million for the monitoring of the implementation of environmental measures; (ii) CFAF 250 million for the conservation of natural resources; (iii) CFAF 3,190 million for ancillary works and equipment to improve the living conditions and environment of the communities; and (iv) CFAF 400 million as compensation for the expropriation of properties. To this may be added, the rehabilitation of quarries and borrow pits or their development into water reservoirs for fauna and cattle, road signs, restoration of living areas and work sites, etc. are included in the cost of works. Compensation to be paid to communities affected by the road development will be a condition for the project loan.

4.6.10 Monitoring of the implementation of the environmental measures will be carried out by WWF NGO, in collaboration with the Environmental Division of MINTP. This organization has the technical and material capacity, and is highly active in the project area. It has already satisfactorily carried out similar services under projects financed by other donors (WB, EU, KFW, etc.). Its tasks will be to monitor the implementation of the ESMP, conduct specific environmental works, and search for solutions to specific environmental problems. Indicators on the monitoring of the biological and abiotic environment, as well as pollution indicators will be defined in detail by the WWF. Major objectively verifiable indicators to be used to monitor impacts will be: rate of regeneration of deforested spaces; success rate of grown species; number of tests and quality of water; expropriated families compensated (including time taken for compensation and adequacy of the compensation received in relation to the value of the property expropriated); prevalence rate of diseases caused by dust and gas emissions, number of cases of water-borne disease or STIs/AIDS and other infectious diseases recorded by the health centres from the start of the project and their treatment; number of accidents, number of reports of collision with wild animals, etc. Furthermore, the MEPN will monitor and supervise the implementation of the ESIA and the ESMP.

4.7 Estimated Cost of Project

4.7.1 The estimated cost of the project, exclusive of customs duties and taxes, is UA 53.80 million, made up of UA 41.84 million in foreign exchange and UA 11.96 million in local currency. Provision for physical contingencies is 8% of the base cost. Provision for price escalation is 7.39% of base cost plus physical contingencies.

4.7.2 The base cost of road works, including hydraulic structures, is CFAF 30.84 billion, representing a unit cost of about CFAF 617 million per km. This relatively high unit cost is due to: (i) the high rainfall in the area which does not allow for construction works except for one-quarter of the year; (ii) the need to undertake major drainage and embankment works, and construct several structures to protect the road from water, the costs of which represent 64% of the estimated cost of the works; and (iii) the need for synthetic materials (unwoven textile) and filter courses. This unit cost is close to the updated one of a similar project financed by the Bank, whose works were near completion during the appraisal mission of the current project. These are development works on the Melong-Dschang road, which is part of the road development project in the West, South and Littoral Provinces. A summary of the estimated cost by component is given in Table 4.1 below.

Table 4.1
Summary of Project Cost Estimates by Component

COMPONENT	CFAF Million			UA Million			FE in %
	FE	LC	Total	FE	LC	Total	
A - Road Development							
- Numba-Bachuo Akagbé Stretch Developments	24 670.62	6 167.66	30 838.28	31.59	7.90	39.49	80%
- Environmental mitigation including expropriations	200.00	450.00	650.00	0.26	0.58	0.83	31%
- Works inspection and supervision	1 007.62	251.91	1 259.53	1.29	0.32	1.61	80%
- Sensitization	32.00	8.00	40.00	0.04	0.01	0.05	80%
B - Ancillary Works							
- Earth road maintenance works	1 296.00	324.00	1 620.00	1.66	0.41	2.07	80%
- Development of boreholes	28.16	7.04	35.20	0.04	0.01	0.05	80%
- Rehabilitation of social infrastructure	406.01	130.79	536.80	0.52	0.17	0.69	76%
- Development of market sheds	230.78	77.22	308.00	0.30	0.10	0.39	75%
- Intermediate means of transport and minor processing equipment for farm produce		102.40	102.40		0.13	0.13	
- Inspection and supervision of ancillary works	145.73	36.43	182.17	0.19	0.05	0.23	80%
- Sensitization	32.00	8.00	40.00	0.04	0.01	0.05	80%
D - Project Management							
- Capacity building for project monitoring		456.42	456.42		0.58	0.58	
- Monitoring-Evaluation	72.00	18.00	90.00	0.09	0.02	0.12	80%
- Auditing	48.00	12.00	60.00	0.06	0.02	0.08	80%
BASE COST	28 168.94	8 049.86	36 218.80	36.07	10.31	46.38	78%
Physical Contingencies	2 253.52	643.99	2 897.50	2.89	0.82	3.71	78%
Price Escalation	2 249.21	642.76	2 891.97	2.88	0.82	3.70	78%
TOTAL COST	32 671.67	9 336.61	42 008.28	41.84	11.96	53.80	78%

4.7.3 A summary of project cost by expenditure category is given in Table 4.2 below.

Table 4.2
Summary of Project Cost Estimates by Expenditure Category

CATEGORY	CFAF Million			UA Million			% in FE
	FE	LC	Total	FE	LC	Total	
A – Goods							
- IMT and minor equipment for processing farm produce		102.40	102.40		0.13	0.13	
B – Works							
- Road development works	24 670.62	6 167.66	30 838.28	31.59	7.90	39.49	80%
- Environmental mitigation works including expropriations	200.00	450.00	650.00	0.26	0.58	0.83	31%
- Earth road works	1 296.00	324.00	1 620.00	1.66	0.41	2.07	80%
- Borehole works	28.16	7.04	35.20	0.04	0.01	0.05	80%
- Social amenities and market rehab. works	636.80	208.00	844.80	0.82	0.27	1.08	75%
C- Consultancy Services							
- Works inspection and supervision	1 153.36	288.34	1 441.70	1.48	0.37	1.85	80%
- Auditing	48.00	12.00	60.00	0.06	0.02	0.08	80%
- Sensitization	64.00	16.00	80.00	0.08	0.02	0.10	80%
- Monitoring-Evaluation	72.00	18.00	90.00	0.09	0.02	0.12	80%
D - Other s							
- Operating Cost		456.42	456.42		0.58	0.58	
BASE COST	28 168.94	8 049.86	36 218.80	36.07	10.31	46.38	78%
Physical Contingencies	2 253.52	643.99	2 897.50	2.89	0.82	3.71	78%
Price Escalation	2 249.21	642.76	2 891.97	2.88	0.82	3.70	78%
TOTAL COST	32 671.67	9 336.61	42 008.28	41.84	11.96	53.80	78%

4.8 Sources of Finance and Expenditure Schedule

4.8.1 The project will be financed by ADF, the beneficiary communities and the Government. The ADF loan will be used to finance part of: (i) the works and inspection of development works on the 50 km Numba-Bachuo Akagbé road and mitigation measures for negative environmental impacts, (ii) ancillary works and their supervision; and (iii) sensitization campaign on road safety, malaria, HIV-AIDS, environmental protection and training of women's groups. The ADF loan, amounting to UA 44.70 million and representing 83.09% of the total cost of the project, exclusive of tax, will be used to finance 100% of the foreign exchange cost of the project and 23.93% of the local currency cost.

4.8.2 Participation of the beneficiary communities in the financing of the project (UA 0.15 million, that is CFAF 114 million) will be in the form of construction of shelters for the minor equipment for processing farm produce, and procurement of spare parts for commencement of operation of the said equipment. This represents nearly 10% of the total amount of equipment. The beneficiary women of this equipment, who were consulted during the appraisal mission, accepted to provide this contribution to sustain the palm oil production activities, which constitute their main source of income. Furthermore, this community participation formula is widely developed in the area. Thus, since the reduction of operating expenditure in the social sectors, parents' associations directly contribute to the management of schools by paying the wages of temporary teachers who are recruited pending their permanent appointment. The Government's contribution (UA 8.95 million, equivalent to CFAF 6,989 million) will be used to finance: (i) part of the cost of works and inspection of development works of 50 km of the Numba-Bachuo Akagbé road, and the mitigation of the negative impacts on the environment, (ii) part of the cost of ancillary works and their

monitoring, (iii) part of the cost of sensitization on road safety, malaria, HIV-AIDS, environmental protection, etc., and (iv) the entire operating cost of CSEP and cost of compensation to communities affected by the project.

4.8.3 The financing plan by source and expenditure category is summarized in Tables 4.3 and 4.4 below:

Table 4.3
Source of Finance of the Project
(In Millions of UA)

Source	F.E.	Local Currency	Total	%
ADF	41.84	2.86	44.70	83.09%
Beneficiaries		0.15	0.15	0.27%
GOVT		8.95	8.95	16.64%
Total	41.84	11.96	53.80	100.00%

Table 4.4
Sources of Finance by Expenditure Category
(In Millions of UA)

Category	ADF			Beneficiaries			GOV			Total		
	F.E.	L.C.	Total	F.E.	L.C.	Total	F.E.	L.C.	Total	F.E.	L.C.	Total
A – Goods												
- IMT and minor farm produce processing equipment		0.10	0.10		0.01	0.01		0.02	0.02		0.13	0.13
B – Works												
- Road development works	31.59	2.10	33.70					5.80	5.80	31.59	7.90	39.49
- Env. mitigation works including expropriations	0.26	0.02	0.27					0.56	0.56	0.26	0.58	0.83
- Earth road works	1.66	0.11	1.77					0.30	0.30	1.66	0.41	2.07
- Borehole works	0.04	0.00	0.03		0.00	0.00		0.01	0.01	0.04	0.01	0.05
- Social and market infrastructure rehabilitation works	0.82	0.00	0.81		0.11	0.11		0.16	0.16	0.82	0.27	1.08
C- Consultancy Services												
- Works inspection and supervision	1.48	0.10	1.58					0.27	0.27	1.48	0.37	1.85
- Audit	0.06	0.02	0.08							0.06	0.02	0.08
- Sensitization	0.08	0.01	0.09					0.02	0.02	0.08	0.02	0.10
- Monitoring-Evaluation	0.09	0.02	0.12							0.09	0.02	0.12
D - Other												
- Operating Costs								0.58	0.58		0.58	0.58
BASE COST	36.07	2.47	38.54		0.13	0.13		7.72	7.72	36.07	10.31	46.38
Physical contingencies	2.89	0.20	3.08		0.01	0.01		0.62	0.62	2.89	0.82	3.71
Price escalation	2.88	0.20	3.08		0.01	0.01		0.62	0.62	2.88	0.82	3.70
TOTAL COST	41.84	2.86	44.70		0.15	0.15		8.95	8.95	41.84	11.96	53.80

4.8.4 The expenditure schedule by component of the project is summarized in Table 4.5 below:

Table 4.5
Expenditure Schedule by Component
(UA Million)

Component	2007	2008	2009	2010	2011	Total
A – Road Developments						
- Numba - Bachuo Akagbé Section Development	7.90	9.87	9.87	7.90	3.95	39.49
- Environmental mitigation including expropriations	0.58	0.08	0.08	0.06	0.03	0.83
- Works inspection and supervision	0.34	0.40	0.40	0.32	0.16	1.61
- Sensitization	0.02	0.02	0.01	0.01	0.00	0.05
B – Ancillary works						
- Earth road maintenance works	0.41	0.52	0.52	0.41	0.21	2.07
- Boreholes development	0.01	0.01	0.01	0.01	0.00	0.05
- Social amenities rehabilitation	0.14	0.17	0.17	0.14	0.07	0.69
- Market sheds development	0.08	0.10	0.10	0.08	0.04	0.39
- IMT and farm produce processing equipment		0.09	0.04		0.00	0.13
- Ancillary works inspection and supervision	0.05	0.06	0.06	0.05	0.02	0.23
- Sensitization	0.02	0.02	0.01	0.01		0.05
D – Project Management						
- Strengthening of project monitoring capacities	0.19	0.11	0.11	0.11	0.06	0.58
- Monitoring-Evaluation	0.02	0.05	0.03	0.02		0.12
- Audit		0.02	0.02	0.02	0.01	0.08
BASE COST	9.75	11.53	11.43	9.13	4.55	46.38
Physical contingencies	0.78	0.92	0.91	0.73	0.36	3.71
Price escalation	0.78	0.92	0.91	0.73	0.36	3.70
TOTAL COST	11.30	13.37	13.26	10.59	5.28	53.80
Total in %	21%	25%	25%	20%	10%	100%

4.8.5 The expenditure schedule by source of finance of the project is summarized in Table 4.6 hereinafter.

Table 4.6
Expenditure Schedule by Source of Finance
(UA)

Source	2007	2008	2009	2010	2011	Total
ADF	9.47	11.10	10.99	8.78	4.37	44.70
Beneficiaries	0.03	0.04	0.04	0.03	0.01	0.15
GOVT	1.81	2.23	2.23	1.79	0.89	8.95
Total	11.30	13.37	13.26	10.59	5.28	53.80
Total in %	21%	25%	25%	20%	10%	100%

4.8.6 The expenditure schedule by expenditure category of the project is given in Table 4.7 hereinafter.

Table 4.7
Expenditure Schedule by Expenditure Category
 (UA Million)

Category	2007	2008	2009	2010	2011	Total
A - Goods						
- IMT and minor farm produce processing equipment		0.09	0.04		0.00	0.13
Total A		0.09	0.04		0.00	0.13
B – Works						
- Road development works	7.90	9.87	9.87	7.90	3.95	39.49
- Environment mitigation works including expropriations	0.58	0.08	0.08	0.06	0.03	0.83
- Earth roads works	0.41	0.52	0.52	0.41	0.21	2.07
- Borehole works	0.01	0.01	0.01	0.01	0.00	0.05
- Social and market amenities rehabilitation works	0.22	0.27	0.27	0.22	0.11	1.08
Total B	9.12	10.75	10.75	8.60	4.30	43.53
C- Consultancy Services						
- Works Inspection and Supervision	0.39	0.46	0.46	0.37	0.18	1.85
- Audit		0.02	0.02	0.02	0.01	0.08
- Sensitization	0.04	0.04	0.01	0.01	0.00	0.10
- Monitoring-Evaluation	0.02	0.05	0.03	0.02		0.12
Total C	0.44	0.57	0.52	0.42	0.19	2.14
D - Other						
- Operating Costs	0.19	0.11	0.11	0.11	0.06	0.58
Total D	0.19	0.11	0.11	0.11	0.06	0.58
BASE COST	9.75	11.53	11.43	9.13	4.55	46.38
Physical contingencies	0.78	0.92	0.91	0.73	0.36	3.71
Price escalation	0.78	0.92	0.91	0.73	0.36	3.70
TOTAL COST	11.30	13.37	13.26	10.59	5.28	53.80
Total in %	21%	25%	25%	20%	10%	100%

5 PROJECT IMPLEMENTATION

5.1 Executing Agency

5.1.1 The executing agency and project owner is the Ministry of Public Works (MINTP). For the project monitoring, it will be supported by the ADB Road Project Monitoring Unit (CSEP-ADB), which exists since 1998 at the Department of Road Investments and Maintenance (DIER). The CSEP-BAD is currently made up of a coordinator, two civil engineers, an accountant, a secretary, a driver and a maintenance officer. It has a Procedures Manual that governs its operation. It is monitoring the implementation of two ongoing road projects financed by ADF. The two civil engineers are assigned to the two road projects as “project engineer”. The Unit regularly undergoes performance auditing and the staff, particularly the project engineers, are renewed partially or strengthened depending on the portfolio of projects, outcome of performance evaluation of the staff or mobility needs at the MINTP. The present project will draw on the experience of CSEP as well as existing material resources that will be strengthened through procurement, via the monitoring mission, of a vehicle and computer equipment (2 complete computers and a scanner).

5.1.2 For the monitoring of the project, an engineer will be appointed, following a call for candidacy at MINTP. He will work under the responsibility of CSEP Coordinator. The two engineers, who are currently in the Unit, will be able to participate in the competition. The Road Network and Environmental Protection Division of the MINTP will provide

support for all environmental aspects of the project. For the purpose of training, DIER could appoint a trainee engineer for maximum periods of 6 months for the monitoring mission. The appointment of a project engineer will be a loan condition.

5.2 Institutional Arrangements

5.2.1 The project comprises components relating to sectors managed by other Ministries such as those of Basic Education for the school infrastructure to be rehabilitated, the Promotion of Women and Family for the market socioeconomic infrastructure, transport equipment, farm produce processing equipment and women's centre, and the Ministry of Energy and Water for the boreholes. These Ministries will each appoint a correspondent officer to the Unit to coordinate activities relating to their respective sectors. The appointment of the project engineer and designation of the correspondent officers of the Unit in the other Ministries will constitute conditions precedent to the first disbursement of the loan. Their CVs should be submitted to the Bank for approval.

5.2.2 Consulting firms and/or qualified and experienced NGOs will be commissioned to carry out the works inspection and supervision, sensitization and monitoring-evaluation of socioeconomic and environmental impacts. The firm in charge of quality control of works will monitor, under the authority of the Unit Coordinator, the progress of works, technical quality control, inspection of works carried out and their billing, and prepare works progress reports.

5.3 Implementation and Supervision Schedules

5.3.1 The project will be implemented from January 2007 to July 2011, covering a period of about 54 months. The corresponding implementation schedule is as follows:

**Table 5.1
Implementation Schedule**

Activity	Responsibility/Actions	Date
<u>1- PRELIMINARY ACTIVITIES</u>		
Approval of loan	ADF	October-2006
Signing of loan	ADF	December-2006
Publication of General Information Notice	ADF/Government	December-2006
<u>2- SENSITIZATION</u>		
Approval of TORs, CDs and shortlists	CSEP-DIER/ADF	January-2007
Invitation to bid	CSEP-DIER	February-2007
Submission of bids	Consultant/CSEP-DIER	April-2007
Evaluation of bids and signing of contracts	CSEP-DR/ADF/Consultant	November-2007
Start of sensitization	Consultant/CSEP-DIER	December-2007
End of sensitization	Consultant/CSEP-DIER/ADF	December-2010
<u>2- MONITORING-EVALUATION AND ENVIRONMENTAL</u>		
Preparation and approval of TORs and contracts	CSEP-DIER/ADF	February-2007
Direct negotiation of contracts with PASA of the University of Dschang and WWF	Consultants/CSEP-DIER	March-2007
Approval and signing of contracts	CSEP-DIER/ADF/Consultants	June-2007
Start-up of services	Consultants/CSEP-DIER	July-2007
End of services	Consultants/CSEP-DIER/ADF	June-2011
<u>3- PROCUREMENT OF MINOR EQUIPMENT</u>		
Preparation and approval of DDs	CSEP-DIER/ADF	April-2007
Invitation to bid	CSEP-DIER	June-2007
Submission of bids	Suppliers/CSEP-DIER	August-2007
Evaluation of bids and signing of contracts	CSEP-DIER/ADF/Suppliers	October-2007
Start of services	Suppliers	November-2007
Delivery of IMTs and equipment	Suppliers/CSEP-DIER	June-2009
<u>4- ROADS AND ANCILLARY WORKS</u>		
Preparation and approval of DDs	CSEP-DIER/ADF	January-2007
Invitation to bid	CSEP-DIER/ADF	March-2007
Submission of bids	Contractors/CSEP-DIER	June-2007
Evaluation of bids and signing of contracts	CSEP-DIER/ADF	October-2007
Start of works	Contractors/CSEP-DIER	November-2007
End of works	CSEP-DIER/ADF	November-2010
<u>5-WORKS INSPECTION AND SUPERVISION</u>		
Publication of notices in UN DB	CSEP-DIER/ADF	January-2007
Approval of shortlist and CDs	CSEP-DIER/ADF	March-2007
Invitation to bid on basis of shortlist	CSEP-DIER/ADF	April-2007
Submission of bids	Consultant/CSEP/DIER	May-2007
Evaluation of bids and signing of contracts	CSEP-DIER/ADF	August-2007
Start of control services	Consultant/CSEP/DIER	October-2007
End of services	CSEP-DIER/ADF	December-2010
<u>6- PROJECT AUDITING</u>		
Establishment and approval of shortlist and DDs	CSEP-DIER/ADF	March-2007
Invitation to bid	CSEP-DIER/ADF	May-2007
Submission of bids	Consultant/CSEP/DIER	July-2007
Evaluation of bids and signing of contracts	CSEP-DIER/ADF	October-2007
Start of services	Consultant/CSEP/DIER	January-2009
End of services	CSEP-DIER/ADF	June-2011
<u>7- MONITORING OF PROJECT IMPLEMENTATION</u>		
Start of project monitoring	CSEP-DIER	January-2007
End of project monitoring	CSEP-DIER	July-2011

5.3.2 Following approval of the loan, ADF will launch of project, and subsequently undertake supervision missions whose provisional schedule and composition are summarized below.

Table 5.2
Provisional Supervision Schedule

Approximate Date	Activity	Mission Composition	Staff/Weeks
01/02/2007	Launching	Project officer (Engineer or Transport Economist) – Disbursement officer – Procurement Officer - Environmentalist	6
28/11/2007	Supervision	Project officers (Transport Economist or Civil Engineer)	2.5
29/06/2008	Supervision	Project officers (Economist or Engineer)	2.5
26/12/2008	Mid-term review of projects	Project officers (Economist or Engineer), Socioeconomist and Environmentalist	10
27/08/2009	Supervision	Project officers (Transport Economist or Civil Engineer)	2.5
28/04/2010	Supervision	Project officers (Transport Economist or Civil Engineer)	2.5
27/02/2011	Supervision	Project officers (Transport Economist or Civil Engineer)	2.5
15/01/2012	Completion report	Project officers (Economist or Engineer) and Socioeconomist	7.5
	Total		36

5.4 Procurement of Goods, Works and Services

5.4.1 Procurement of goods, works and services financed by ADF will be in accordance with the relevant Bank rules of procedure for procurement of goods and works or, where applicable, with the Bank rules of procedure for the use of consultants, using appropriate bidding documents of the Bank or those accepted by the Bank for works whose value is above UA 10 million. The various procurement methods to be used in the project are summarized in the following table and detailed subsequently.

Table 5.3
Procurement of Works and Services
(UA Million)

Expenditure Category	ICB	NCB	Other ^(a)	Shortlist	Other than ADF ^(b)	Total
A – Goods						
- IMT and minor equipment for processing farm produce		0.15 [0.11]				0.15 [0.11]
Total A		0.15 0.11				0.15 [0.11]
B – Works						
- Roads development works	45.81 [39.08]					45.81 [39.08]
- Environmental mitigation works including expropriations	0.37 [0.32]				0.59	0.97 [0.32]
- Earth road works	2.41 [2.05]					2.41 [2.05]
- Borehole works	0.05 [0.04]					0.05 [0.04]
- Social and market infrastructure rehabilitation works	1.25 [0.95]					1.25 [0.95]
Total B	49.89 [42.44]				0.59	50.49 [42.44]
C – Constancy Services						
- Works inspection and supervision				2.14 [1.83]		2.14 [1.83]
- Auditing				0.09 [0.09]		0.09 [0.09]
- Sensitization				0.12 [0.10]		0.12 [0.10]
- Monitoring-Evaluation			0.13 [0.13]			0.13 [0.13]
Total C			0.13 [0.13]	2.35 [2.02]		2.48 [2.15]
D – Other						
- Operating Costs					0.68	0.68
Total D					0.68	0.68
Total	49.89 [42.44]	0.15 [0.11]	0.13 [0.13]	2.35 [2.02]	1.27	53.80 [44.70]

[] ADF

Procurement by direct negotiation

Procurement based on national procedures for goods financed by the Government (coordinator, project officer, expropriation)

Works

5.4.2 Procurement of the Numba-Bachuo Akagbé road development works, environmental protection and development of rural roads, drilling of boreholes and socioeconomic amenities, amounting to UA 49.89 million, will be by a single tranche based on international competitive bidding.

Goods

5.4.3 Procurement of intermediate means of transport and minor equipment for processing farm produce, amounting to UA 0.15 million, will be by national competitive bidding.

Consultancy Services

5.4.4 Consultancy services for the inspection and supervision of road development works and development of ancillary infrastructures, in the amount of UA 2.14 million, will be procured through competitive bidding on the basis of a shortlist of consulting firms.

5.4.5 Consultancy services for auditing the project, amounting to UA 0.09 million, will be procured through competitive bidding on the basis of a shortlist. The specific procurement notice could be limited to the country, in view of the fact that the amounts that are involved are low and do not exceed UA 0.35 million.

5.4.6 Procurement for the sensitization of communities on diseases such as HIV/AIDS and malaria, environmental protection, road safety and risks related to early marriages and pregnancies, as well as training in the management of women's groups, amounting to UA 0.12 million, will be based on consultancy services or NGO commissioned on the basis of shortlist. The latter, who are very active in the project, are also involved in other operations financed by UNICEF, UNFPA and other donors. The specific procurement notice could be limited to the country, in view of the fact that the amounts involved are low and do not exceed UA 0.35 million.

5.4.7 Consultancy services for the monitoring-evaluation of the socioeconomic and environmental impact of the project, amounting to UA 0.13 million and comprising two tranches, will be by direct negotiation with the Faculty of Agronomic Sciences (FASA) of the University of Dschang for the socioeconomic component and with the World Wide Fund for Nature (WWF) for the environmental component. The estimated cost of each of the services (UA 0.07 million) is lower than UA 100,000. The choice of UD is guided by the following criteria: (i) availability of a database and multi-sector research findings on the project area (which constitutes a unique expertise in this zone) as well as the existence of multidisciplinary teams at the University, (ii) proven experience in carrying out surveys on the impact of project measures on socioeconomic development and the many years of surveys conducted in the area for the preparation and monitoring of the PRSP. In addition, the FASA has recently executed a similar contract for the road development project in the West, South and Littoral Provinces financed by ADF in 2001 to the full satisfaction of the Borrower and the Bank. Concerning WWF, this NGO has the technical and material capacity, and is the only one active in the project area for environmental-monitoring services, and this also constitutes a unique expertise in this zone. It has already satisfactorily provided similar services under projects financed by other donors (WB, EU, KFW, etc.).

5.4.8 For the selection of consultants, an evaluation method based on a combination of technical proposals and the amount of the bids will be used.

Miscellaneous

5.4.9 The operating costs of the CSEP, amounting to UA 0.68 million, and compensations to communities in the amount of UA 0.59 million totally financed by the Government, will be based on the relevant procedures of the Government. However, payment of compensation for expropriation will be a condition precedent to the first disbursement of the loan.

National Laws and Regulations

5.4.10 The reform of the public procurement system by the Government with WB financing under the TSP, culminated in Presidential Decree No. 2002/30 of 28 January 2002 relating to the creation, organization and operation of Public Procurement Commissions (CPMs). This Decree establishes CPMs for project owners or delegated project owners and specialized commissions for procurement control (CSCMs) at the level of the Prime Minister's Office (PM). These various commissions are obliged to work in the presence of independent observers who report to the Prime Minister and the Public Procurement Regulation Agency created by Decree No. 2001/048 of 23 February 2001. Analysis of the decree indicates that direct procedures are likely to foster transparency of the public procurement process.

5.4.11 The Decree of 28 January 2002 enables the project owner to carry out, through the CPM, all the bidding and procurement procedures under the control of CSCMs. Three CPMs have been established at the level of MINTP. These are responsible for: (i) new road works, (ii) road maintenance works and (iii) other works respectively. For the present project, procurement will be undertaken by the CPM of MINTP in charge of new works.

General Information Notice

5.4.12 The text of a General Information Notice on procurement was discussed with the various parties during the negotiations. It will be published in *Development Business* as soon as the Bank's Board of Directors approves the loan proposal.

Review Procedures

5.4.13 The following documents will be submitted for review and approval by ADF prior to publication:

- (i.) Specific procurement notes and notices;
- (ii.) Bidding documents, consultancy documents, terms of reference and invitation letters to consultants;
- (iii.) Publication of procurement notices restricted to the national level;
- (iv.) Evaluation bid reports for works comprising recommendations on award of contracts;
- (v.) Bid evaluation reports for consultancy services following analysis of technical and financial bids, including recommendations on award of contracts. It is understood that the financial bids of firms that do not obtain the minimal rating will not be opened, but will be returned to the bidders concerned only after the non-objection of the Bank on the choice of the successful consultant;
- (vi.) Draft contracts, if those incorporated in the bidding documents or consultancy documents have been changed.

It should be noted that the bid evaluation reports will be forwarded to the Bank for approval together with at least a copy of the best 3 bids.

5.5 Disbursement Arrangements

The direct disbursement method will be used for works and consultancy services financed by ADF. Counterpart funds will be lodged in a special account to be opened in a bank acceptable to ADF and which will be replenished following the annual expenditure schedule to be updated on an annual basis. At the request of the Government, necessary adjustments will be made depending on the actual progress of the project after prior approval by ADF. This account will also receive funds to cover the operating costs of CSEP in charge of the project monitoring. Opening of this account will be a condition precedent to the first disbursement of the loan. The ADF will monitor its regular replenishment. It will be managed by the Road Fund (RF), through its investment window.

5.6 Monitoring and Evaluation

5.6.1 Monitoring and evaluation will consist in internal and external monitoring, the Bank's supervision missions, a mid-term review and a final evaluation, including the completion report of the Borrower and that of the Bank. The execution of works will be subject to monthly and quarterly reports established by consultants in charge of works inspection and supervision. The executing agency will provide the Bank with a quarterly report on project implementation in the format in force. This will also be the case for annual activity programmes and reports, annual budgets as well as their implementation reports. The timely production and submission to the Bank of bidding documents, periodic reports, as well as annual activity programmes and reports by CSEP will constitute the basis of the performance contract of the said unit.

5.6.2 At the end of the works, the consultant in charge of their inspection and supervision will prepare the end-of-works report, which it will submit to the executing agency. The latter will use this report to prepare the "Borrower's Project Completion Report" to be submitted within six months following completion of the project and based on the standard format. The consultant will assist the executing agency in the final acceptance of the works. Also, the executing agency will organize annual traffic counts on the project road to be used to verify traffic assumptions.

5.6.3 The accountant of CSEP will keep the project accounts. Annual auditing of the project will be conducted, and the reports communicated to the Bank. This will enable the Government and the Bank, as part of the monitoring of project implementation, to ensure that: (i) the loan resources are effectively used to finance the project, (ii) the account of the loan is correctly kept, and (iii) the Bank's procedures relating to the administration of loans are well followed.

5.6.4 Furthermore, the consultant in charge of monitoring-evaluation of the socioeconomic impact of the project will undertake a monitoring and annual evaluation of the indicators based on the project objectives. This will involve assessment of the impact of the project on the living conditions of the population through 3 surveys (prior to the start of works, during the execution and after the tarring of the road). Each survey will relate to 6 major themes, namely: economic development and social organization of the local communities, movements of goods and persons, access to basic services, management of village lands and control of major diseases. The expected outcomes are: (i) an analysis of the current situation, in terms of the economic and environmental aspects and the management of resources, (ii) an evaluation, based on the original situation, of the impact of the road on the evaluation of indicators used in the analysis, and lastly a proposal of measures and a plan of action to support the achievements of the project in terms of sustainability. This will notably entail: (i) the trend of social indicators and level of prevalence of certain diseases, (ii) evolution of level of family incomes, (iii) work schedule within households (time saving), etc.

5.7 Accounting and Financial Audit Reports

The project accounts will be kept separately and based on a private computerized system by the project executing agency in accordance with an accounting plan. This system should help monitor project expenditures in relation to estimates, by source of finance, by

category and by component. An audit firm commissioned on the basis of the Bank Group's procedures will carry out the external auditing of the project accounts annually. To this end, provision has been made from the project funds. Audit reports will be submitted to ADF at the latest within six months following the end of each fiscal year. Since the project will be implemented over 53 months, the Borrower will have four annual audits carried out, the last of which will be at the end of the project.

5.8 Aid Coordination

5.8.1 Coordination of activities of donors operating in Cameroon will be carried out by MINEFI, the central body for coordinating the Government's economic policies. The African Development Bank, through its national programme office for Cameroon, regularly participates in donor meetings organized by the Government, and the constant contact between the Bank's Office and the other donors present in Cameroon helps to strengthen this coordination.

5.8.2 Until the end of 2003, sectoral coordination was conducted through the transport sector project (TSP) and the TSP Unit established in 1994 by the World Bank and placed under the direct authority of the Minister in charge of Transport. Periodic donor meetings were organized by the Government to review the implementation of the TSP. Pending the setting up of TSP 2, the MoU prepared in May 2004 constitutes the dialogue framework between the Government and Donors and, as in the case of the TSP, periodic reviews (at least twice per year) were to be carried out, the first of which took place in February 2005. Furthermore, the appraisal team of the present project met donors present in the country including the World Bank, the AFD, the European Union and the UNDP. The relevance of the project was noted and the desire to strengthen the coordination of donor interventions affirmed. Lastly, the Bank's project supervision missions will help pursue and strengthen coordination with the donors of the sector represented in Cameroon.

6 PROJECT SUSTAINABILITY AND RISKS

6.1 Recurrent Costs

6.1.1 Recurrent costs relate to the routine and periodic maintenance costs of the road and those of other socioeconomic infrastructure. Concerning the road, this will entail guaranteeing periodic maintenance works and those of routine maintenance of ancillary structures and the carriageway. On the basis of current three-year contracts, the "without project" routine maintenance cost of the road is estimated at CFAF 120 million per year and that of the periodic maintenance at about CFAF 300 million every three years. These expenditures are currently borne by the Road Fund (RF).

6.1.2 For the post-commissioning situation of the paved road, annual recurrent costs generated by the HDM 4 model are CFAF 113 million for routine maintenance and CFAF 4,300 million for periodic maintenance during the life cycle of the road estimated at 20 years.

6.1.3 Recurrent costs for ancillary works are estimated at about CFAF 38.35 million per year, comprising CFAF 32.40 million for feeder roads, CFAF 0.70 million for boreholes, CFAF 1.02 million for IMTs and equipment for processing farm produce and CFAF 4.22 million for social and market infrastructure. The beneficiaries will carry out the routine

maintenance of rural roads. As for periodic maintenance, this will be the responsibility of the Government through the RF and in conjunction with the councils, in accordance with the rural roads rehabilitation and maintenance strategy. Since social amenities form part of the Government's development programmes (school map, health coverage, women's promotion programme), the recurrent costs are partly covered by the ministries, the councils and beneficiary communities. Maintenance and management of water points and markets will be the responsibility of the beneficiary communities organized into village management committees and community interest groups. The total contribution expected from the beneficiaries to the recurrent costs represents CFAF 12 million per year, that is, about CFAF 45 per day and per person.

6.2 Project Sustainability

6.2.1 Project sustainability depends on: (i) the quality of works; (ii) availability of resources to cover the direct recurrent costs; (iii) conditions of operation of the road, earth roads and boreholes of the project; and (iv) capacity of the beneficiaries, the Government, SMEs and local consulting firms to successfully execute the contracts pertaining to the road maintenance component.

6.2.2 The solution for the technical design of the road recommended in the studies was based on the intensity of the current and future traffic and the nature of the ground. The geo-technical studies identified quality materials to be used in the project area. An international consultant will be recruited for works inspection and supervision, and it will be supported by an experienced and approved laboratory. This will help to guarantee sustainability of the project by ensuring that the implementation will be carried out according to standards.

6.2.3 To ensure sustainability of investments in the road sector, the Government undertook the privatization of the roads maintenance works, and has put in place since 1998 a 2nd generation road fund to finance the maintenance works of the priority network of which the project road forms part. The RF resources grew steadily from CFAF 15 billion in 1998/99 to CFAF 35 billion in 2005. The projected RF resources for 2006 are estimated at CFAF 40 billion, and this is expected to attain CFAF 50 billion by the year 2008 in view of commitments made by the Government under the MoU. The financing gap of the RF is 26% of the needs for 2006.

6.2.4 Operation and management conditions on the roads, especially those relating to over-loading and rain barriers influence sustainability of investments. In 1998, the Government started the construction of the first weighing station on the highways and, subsequently, approved legislation and regulations governing axle load control. Since January 2004 lorry tankers, which were previously exempted, have now been included. The achievements of the control measures are as follows: (i) most transport operators have been sensitized and are complying; (ii) the offence rate has decreased from 80% prior to the enforcement of the law to a little over 7% currently. Under the MoU, the Government is committed to constructing new weighing stations to cover a greater portion of the priority network. The number of stations will increase from the current 8 to 23 by 2015. Similarly, pursuant to the law on the protection of the network (No. 96/07 of 8 April 1996, amended by Law No. 2004/021 of 22 July 2004), the Government intensified the control of axle loads with the procurement of mobile axle scales to combat attempts to avoid weighing by taking other roads, and the application of sanctions against offenders. The management of rain

barriers on rural roads at the local level by the beneficiaries will contribute to reducing the risk of early degradations and those related to road safety during the rainy season (falling trees, lack of visibility etc.).

6.2.5 Under the PERFED II funded by the EU and TSP (with WB and ADF financing) training was provided to the actors namely SMEs, engineering firms and MINTP. All these actions contributed to increasing the performance of MINTP in road maintenance and increasing the length of roads of the priority network maintained.

6.2.6 The feeder earth roads will be maintained by the communities under the supervision of the village committees, in accordance with the Government's strategy adopted in 2000. Furthermore, the other developments will be used and maintained by the beneficiaries and councils. These will be supported by sensitization and training activities to be implemented as part of the project.

6.2.7 The experience in the implementation of routine maintenance attained by the SMEs between 1996 and 2000 by the SMEs did not yield the expected results due to the lack of equipment and unsatisfactory organization. However, the various training programmes for these SMEs that are still ongoing and the award of three-year contracts have definitely improved the performance of SMEs. With regard to ancillary infrastructure, the organization of the rural communities and the institutional framework put in place are designed to build financing capacities and safeguard the investments made on the earth road network. All these factors will contribute to sustainability of the project.

6.3 Major Risks and Mitigation Measures

6.3.1 The main risks facing the project relate to: (i) lack of consolidation of the achievements of the TSP, (ii) discontinuation of the RF, and (iii) inability of the GIC of the villages to manage the socioeconomic amenities provided them. The two major objectives of the TSP were the liberalization of the transports sector and achievement of sustainable development. At the end of the TSP in 2003, most of the reforms undertaken by the Government to divest itself from the sector were completed. Inadequacies were noted in the areas of improvement of a balanced distribution of resources between investments and maintenance expenditures, and the sustainable mobilization of resources. Consolidation efforts will focus on the actions identified in the MoU concerning: (i) for the RF, the allocation of sufficient resources to cover road maintenance needs and consolidate achievements in the rapid payment mechanism to improve implementation of the projected road investment programmes, (ii) for the execution of road maintenance, build the capacities of private sector actors (SMEs and engineering firms) to enable them to handle the growing volume of maintenance and rehabilitation activities relating to its planning, budgeting, tender award and management role, (iii) in the area of regional integration: implement the Consensual Transport Master Plan of the sub-region and the plan of action for the facilitation of inter-State transit through the development of the road network in the border areas, (iv) for the strengthening of the road network protection measures: extend axle load control to the entire structuring network and all categories of heavy vehicles, etc. The Government's commitment under the MoU to undertake these measures will help to reduce this risk.

6.3.2 The continuation of the RF reform, which constitutes the 2nd risk, will be reduced by the fact that in the MoU the Government has undertaken to increase the resources of the RF by increasing incomes accruing from road tolls and fines from axle weighing-related offences. Furthermore, other sources of incomes such as axle levies and a transit fee are envisaged for the RF. The expected increase in RF resources should help achieve a balance between investments and road maintenance.

6.3.3 The third risk relates to the capacity of beneficiaries to manage and maintain public amenities to be provided under the project. The beneficiary communities in the PA, notably women, are organized into community interest groups. As a result, they already manage incomes from their present activities, mainly related to the artisanal processing of farm produce. The project aims to provide them with more effective facilities for the processing of such produce. Also, the project will provide training in the management of the facilities. This will help to lessen this risk.

7 PROJECT BENEFITS

7.1 Economic Analysis

7.1.1 The expected economic benefits of the project relate to the impacts of the opening up of the PA, increased mobility and link with neighbouring countries, enhanced agricultural production and the development of commercial activities in the PA. For the economic analysis, the benefits were determined on the basis of “without project” and “with project” scenarios over a 20-year period beginning from the commissioning of the road. An update rate of 12% and a residual value of 45% were used for the economic calculation. The economic analysis was based on the HDM.4 model. Elements used were as follows: data on the condition of the road (light and heavy vehicles of over 3 tonnes), current and future traffic, maintenance policies and strategies and the various corresponding economic and unit costs collected during the mission (fuel, lubricants, prices of vehicles, maintenance tasks etc). The investment costs of ancillary amenities (feeder roads, boreholes and farm produce processing equipment) and the agricultural value added were taken into account as cost and exogenous benefits in the model, particularly value added due to the increase in palm oil production.

7.1.2 The volume of average normal traffic recorded in 2005 on the Numba - Bachuo Akagbé road, for all categories of vehicles, was about 250 vehicles/day with a percentage of heavy vehicles of over 16%. Traffic projections, which were calculated on the basis of past trends, generate an average growth of 3% for all categories of vehicles prior to the commissioning of the road and 6% after the commissioning. Induced traffic of 20% of normal traffic was taken into consideration.

7.1.3 With these various data and estimated costs of the works and supervision of works excluding price escalation, annual routine maintenance and periodic maintenance costs generated when the road service reaches a certain level (IRI higher than 6), an economic rate of return (ERR) of 15.62% was obtained for the project. This is higher than the opportunity cost of the capital estimated at 12%.

7.2 Social Impact Analysis

7.2.1 The region through which the Bachuo Akagbé – Numba road passes is one of the most remote areas of Cameroon with forestry and agricultural potentialities that augur well for a dynamic and autonomous future, while contributing to regional integration. The road will contribute significantly to opening up the area and reducing poverty in the project area. Indeed, it will play a key role in farming by facilitating the supply of agricultural inputs and manufactured goods to the rural areas and the evacuation of produce. The project area accounts for 20% the country's food crop production. Marketing of products in the Bamenda, Mamfé, Batibo, Tiko areas and on the local markets of Bachuo Akagbe, Widikum, Numba and the supply to the area are hazardous and costly as a result of the state of the road and high road transport costs. This affects the level of household incomes in Cameroon 53.4% of which is allocated to food consumption, as indicated in the findings of the 2001 survey on household living conditions. Investigations and interviews carried out with the divisional delegation of Mamfé, the road users, traders and the rural local communities have highlighted the high cost of transportation on the project road which represents about 70% of the direct marketing cost. This cost is doubled during the rainy season. The continuous flow of traffic throughout the year will reduce, if not eliminate, harvest losses by 50% and diminish the cost of transportation, thereby enabling farmers to market their produce more easily and earn profits from their farms. It will also result in reducing the period of absence by members of families that have emigrated to the urban centres of Douala, Yaoundé, Bamenda, Buéa, and thus foster family reintegration in households in the North-West and South West Provinces of the country.

7.2.2 The project will also contribute to improving the quality and living conditions of deprived communities, notably by: (i) creating permanent jobs (transport operators, other activities induced by the construction of the road and feeder roads) and about 3300 temporary jobs during the works period; (ii) nearly 2000 permanent jobs induced by spot repair works, (iii) providing easy access to markets for the sale of produce at profitable prices and supply to the area; (iv) enabling access to health care; this will help reduce the time required to evacuate sick persons to health centres and facilitate the redeployment of personnel into basic social services in the project area; (v) improving learning conditions, notably for children and teachers, in view of improved educational amenities and traffic flow. This will contribute to reducing current congestion of classrooms in the local schools and ensuring better academic achievement by the children throughout the year. Implementation of the project will contribute to promoting the redeployment of teachers to these remote areas by curbing the rate of absenteeism, raising their level of motivation and improving the quality of education, thereby contributing to achieving nearly 100% enrolment rate, (vi) promoting social reintegration with the regular return of members of families from the area living in the urban centres such as Batibo, Bamenda and Buea and in all the other regions of Cameroon; (vii) development of tourism in the region through which the road passes and induced activities such as catering and accommodation, (viii) control of water-borne diseases and protection against HIV/AIDS and STDs of which 15% of cases were tested positive in the district of Mamfé in 2005, (ix) increasing coverage rate which has been stagnating around 69% of the population affected by onchocerciasis due to the irregular doses of Mectizen resulting from the poor condition of the road in the area.

7.2.3 The project will strengthen ongoing actions. It will contribute to improving marketing conditions through the construction of sheds and water supply through boreholes. It will reduce by about 10% diseases raging in the Kendem area (343 cases of diarrhoea for under 5 year-olds for a total population of 10,000 inhabitants) as well as intestinal parasitic diseases, typhoid and skin infections). Many induced impacts are also expected, with the development of agricultural and agro-pastoral potential. The project will reduce the risks of drop in sales and production losses that discourage numerous operators interested in investing in the region. The road will also provide support to micro-enterprises by promoting the emergence and development of individual transport companies, small road maintenance enterprises and farm produce processing entities. The road will form part of the development of the hinterlands of the Upper Manyu and Momo Divisions, which have significant agricultural and forestry potential that are insufficiently exploited due to lack of adequate infrastructure to open up these areas and connect them to major consumption centres. Moreover, the relative isolation of the region creates a feeling of frustration and marginalization of the local community; the development of this road will create a permanent link between this part of the territory with the rest of the country, thereby constituting a springboard for better national integration.

Impact on Women

7.2.4 Women form a sizable proportion of the population of the project area and occupy two-thirds of employment in the informal sector. In this area, women head 22% of households. They account for an estimated 90% of the basic food production and are particularly active in the following activities: farm work, notably food crop cultivation, market gardening, processing of farm produce (cassava into flour and gari, groundnuts and palm nuts into edible oil), fishing and processing of fish (smoking and drying), stockbreeding, handicraft and marketing. The financing of these activities is often through the mobilization of savings by the women. Women have formed operational associations (120 community interest groups). Their economic activities and, especially the marketing of productions expose them to hazards generated by the traffic on the present unpaved road, notably on the portion on the cliff (insecurity, dust during the dry season due to movement of vehicles on laterite surfaces, mud, risk of accidents related to land slide and gully erosion in the rainy season). The project which will reduce these hazards will therefore be beneficial to health. As actors of the commercial sectors, women will benefit from the saving in time and substantial reduction of transport costs. The current transport tariffs are exorbitant on the project road (for example, transport fare on the 75 km long Bachuo Akagbe - Bamenda stretch is CFAF 2000 during the dry season and CFAF 4,500 during the rainy season). The price of transportation of a can of oil and plantain is CFA F 400 and 600 respectively. In view of the non-motorable state of the road during the rainy season, the area does not receive supplies during this period of the year with the exception of products such as beer. This situation, which prevails for nearly 6 months a year, has resulted in the doubling of prices: these are CFAF 4000 for the traveller, CFAF 400 and 600 for crates of tomatoes and plantain respectively and CFAF 175,000 for the transportation of 15 tonnes of non-perishable items. Furthermore, the project will facilitate the evacuation of the sick to health centres and reduce evacuation time of patients to the Mamfe or Widikum district hospital, entailing a distance of over 50 km. Indeed, in this health area, 45% of caesarean deliveries are evacuated to Mamfé or Widikum entailing over 4 hours of travel time in difficult conditions. The project will improve the state of health of pregnant women and their supervision, and reduce the risks of maternal and infant mortality related to home births and evacuations under difficult conditions.

7.2.5 The project will develop local trade and small trades made possible with the improvement in road transport by facilitating the marketing of goods produced by women's GIC, as well as their supply with farm inputs. It will thus constitute a strategic lever in the poverty reduction process in households, in view of the responsibilities passed on to women and their role as promoters of income-generating activities. Furthermore, women, children and the youths are those most in demand for the transportation of harvests. The development of feeder roads will come as a relief and facilitate their access to farms. Travel time on the Batibo – Numba - Bachuo Akagbé road is at least 5 hours in the dry season and over 12 hours in the rainy season with the risk of non-arrival at the destination. Women will devote the time saved (ranging from 30 to 3 hours 30 minutes) to other activities such as literacy, training and children's education.

7.2.6 The construction of these feeder roads and the supply of equipment will significantly lighten women's work, especially by reducing the time taken to process palm oil from 5 hours to 15 minutes for the production of 30 litres. It will generate an estimated income of CFAF 150 for each litre sold, that is an average additional income of CFA F156,000 per woman member of the association in the project area (2 days per week x CFAF 150 X 30 litres per woman x 52 market days).

7.3 Sensitivity Analysis

Sensitivity tests show that the ERRs vary from 15.62% to 12.87% in the most unfavourable scenarios depending on variations in costs (+10%) and benefits (-10%). The project is consequently economically viable.

8 CONCLUSIONS AND RECOMMENDATIONS

8.1 Conclusions

8.1.1 Based on available technical and economic data, the Bachuo Akagbe-Numba road project is viable and consistent with the Government's strategy for the Transport Sector. The technical and geometrical characteristics are adapted to the geometry of the terrain and in line with standards adopted by MINTP. They will ensure sustainability of the proposed investments. Routine and periodic maintenance of the project infrastructure will be covered by resources from the road fund put in place since 1998. These resources have witnessed an increase commensurate with the annual needs of road maintenance. The costs of maintenance of ancillary infrastructure and feeder roads will be borne by the beneficiary communities through the existing community structures.

8.1.2 The developments outlined in the project form part of the internal and external opening up of the country and regional integration. They contribute to effective improvement of the living conditions of communities in the project area. The project corresponds to the Bank's vision and guidelines of the 2005-2009 RBCSP for Cameroon. Indeed, the latter will contribute to reducing poverty and improving the living conditions of the communities. It will also significantly contribute to promoting rural women.

8.1.3 The project has been technically well studied, and the road component has undergone detailed studies. Its negative impacts on the environment have been identified and mitigation measures incorporated into the project. It is economically viable, and yields an average economic rate of return of 15.62%, which is higher than the opportunity cost of the capital estimated at 12%. The sustainability of investments is ensured through reinforced control of axle loads and gross weight of vehicles, as well as measures envisaged by the Government to strengthen road maintenance.

8.2 Recommendations

8.2.1 In view of the foregoing, it is recommended that an ADF loan not exceeding UA 44.70 million be awarded to the Republic of Cameroon. This loan will be used to implement the project as described in this report. It will be subject to the conditions specified in the Loan Agreement.

A. Conditions Precedent to Effectiveness

8.2.2 Effectiveness of the Loan Agreement shall be subject to fulfillment, by the Borrower and to the satisfaction of the Fund, of the conditions provided for in Section 5.01 of the General Conditions applicable to Loan Agreements and to Guarantee Agreements of the Fund.

B. Conditions Precedent to First Disbursement

8.2.3 The first disbursement of the Loan shall be subject to fulfilment by the Borrower of the following conditions:

- (i) Provide evidence to ADF of the opening of a special account in a bank acceptable to ADF to receive the Government's contribution to the project cost; this account shall be replenished at the appropriate time in the course of implementation of the project based on the annual financing plan (Paragraph 5.5);
- (ii) Provide evidence to ADF of the payment of compensations to communities affected by the expropriation of dwellings and farms (Paragraph 4.6.7);
- (iii) Following the invitation for candidature at the Ministry of Public Works (MINTP), appoint the engineer in charge of the project; his/her CV should received prior approval of the ADF (Paragraph. 5.1.2);
- (iv) Appoint the counterparts of CSEP-ADB in the Ministries of Basic Education, Women's Promotion and Family, Energy and Water and Environment in charge of ancillary development works. (Paragraph. 5.2.1).

C. Other Condition

8.2.4 Also, the Borrower shall, in addition, fulfil the following condition.

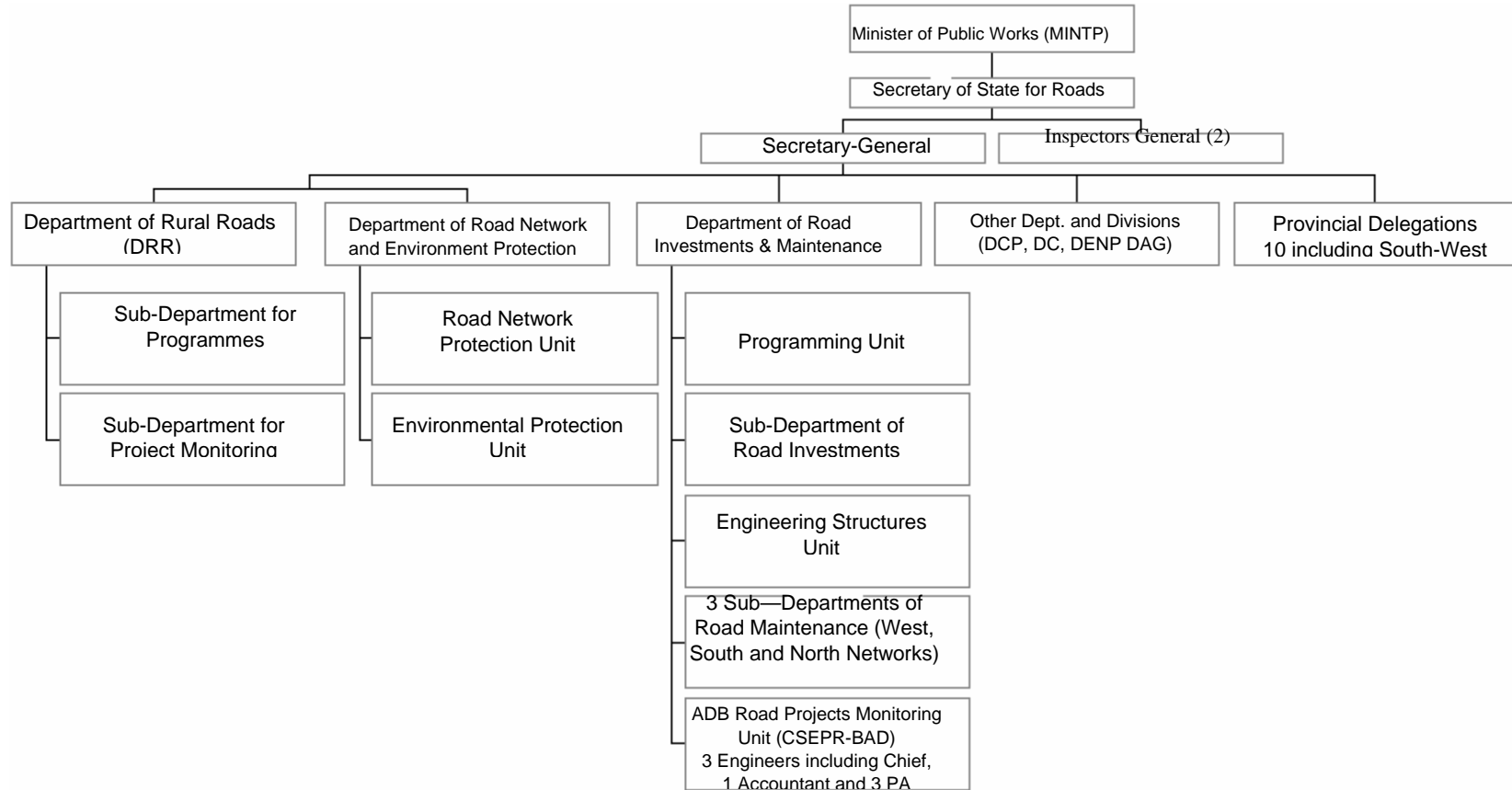
- (i) Increase the Road Fund to at least CFAF 40 billion in 2006, CFAF 45 billion in 2007, and CFAF 50 billion in 2008, representing an annual increase of CFAF 5 billion, in accordance with commitments made by the Government to donors of the sector under the MoU (Paragraph 6.3.1 and 6.3.2).

REPUBLIC OF CAMEROON
NUMBA - BACHUO AKAGBE ROAD DEVELOPMENT PROJECT
PROJECT MAP



This map has been prepared by the African Development Bank Group for the convenience of the readers of the report to which it is attached. The denominations used and the boundaries shown on this map do not imply on the part of the Group and its affiliates, any judgment on the legal status of any territory or any endorsement or acceptance of such boundaries

REPUBLIC OF CAMEROON
NUMBA - BACHUO AKAGBE ROAD DEVELOPMENT PROJECT
ORGANIZATION CHART OF PROJECT EXECUTING AGENCY (MINTP)



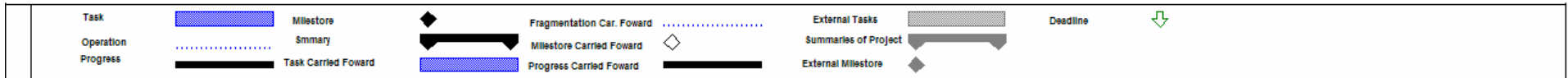
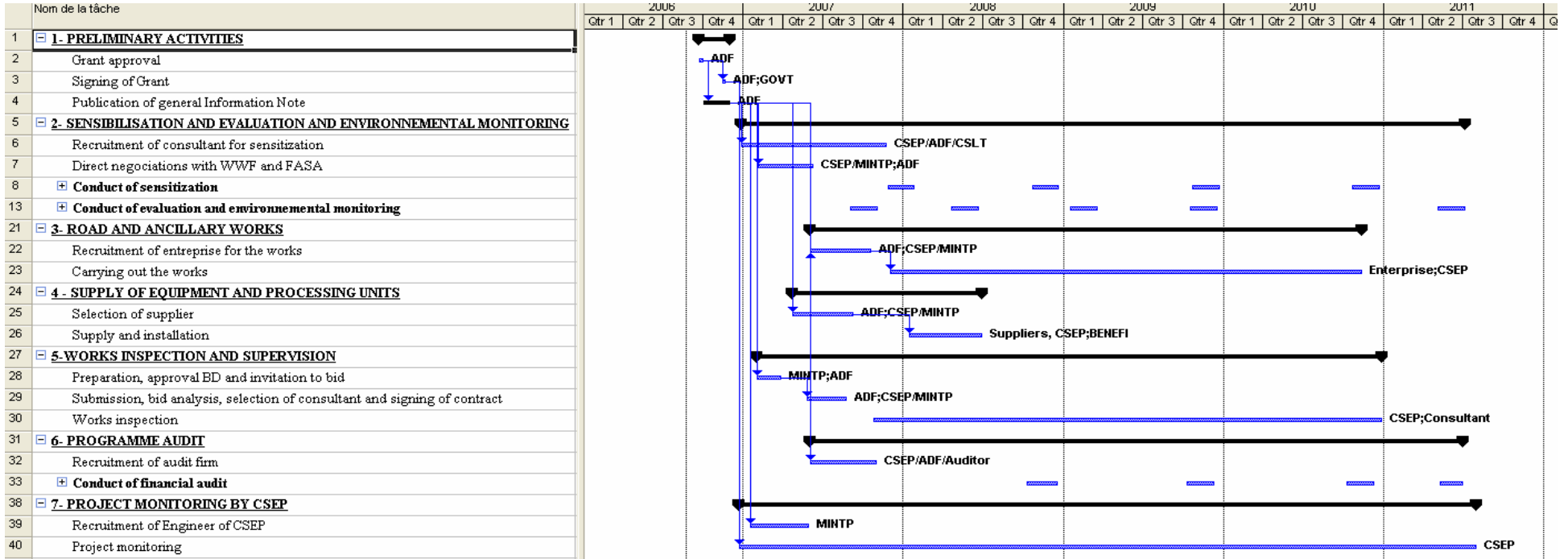
REPUBLIC OF CAMEROON
BACHUO AKAGBE NUMBA ROAD DEVELOPMENT PROJECT
PROVISIONAL LIST OF GOODS AND SERVICES

Category	In Millions of CFAF			In Millions of UA			COFINANCIER (UA Million)		
	F.E.	L.C.	Total	F.E.	L.C.	Total	ADF	Beneficiaries	GOV'T
1- Goods									
- IMT and minor farm produce processing equipment		102.40	102.40		0.13	0.13	0.10	0.01	0.02
2- Works									
- Road management works	24 670.62	6 167.66	30 838.28	31.59	7.90	39.49	33.70		5.80
- Env. mitigation works including expropriations				0.26	0.58	0.83	0.27		0.56
- Earth road works	1 296.00	324.00	1 620.00	1.66	0.41	2.07	1.77		0.30
- Borehole works	28.16	7.04	35.20	0.04	0.01	0.05	0.03	0.00	0.01
- Social amenities and market rehabilitation works	636.80	208.00	844.80	0.82	0.27	1.08	0.81	0.11	0.16
3- Consultancy Services									
- Works Control and supervision	1 153.36	288.34	1 441.70	1.48	0.37	1.85	1.58		0.27
- Audit	48.00	12.00	60.00	0.06	0.02	0.08	0.08		
- Senisitization	64.00	16.00	80.00	0.08	0.02	0.10	0.09		0.02
- Monitoring-evaluation	72.00	18.00	90.00	0.09	0.02	0.12	0.12		
4- Other									
- Operating costs		456.42	456.42		0.58	0.58			0.58
Base Cost	28 168.94	8 049.86	36 218.80	36.07	10.31	46.38	38.54	0.13	7.72
Physical contingencies	2 253.52	643.99	2 897.50	2.89	0.82	3.71	3.08	0.01	0.62
Price escalation	2 249.21	642.76	2 891.97	2.88	0.82	3.70	3.08	0.01	0.62
Total Cost	32 671.67	9 336.61	42 008.28	41.84	11.96	53.80	44.70	0.15	8.95

REPUBLIC OF CAMEROON
NUMBA - BACHUO AKAGBE ROAD DEVELOPMENT PROJECT
INDICATIVE LIST AND COST ESTIMATES OF ANCILLARY WORKS

SITE	Kendem	Bokwa Villages	Etoku	Bachuo Akagbé	Tchamba	Nfaitcok	Numba	Total Quantity	Unit Price in CFAF million
Market sheds		5	3	5			1	14	22
Youth centre			1	1		1		3	25
Women's centre		1						1	70
Primary school classes		4	4		5	7		20	17.39
Boreholes		1			1	1	1	4	8.8
Health centre			0					0	
Oil press	6	2	3	6	2	1	2	22	3
Cassava mill	6	2	4	15	3	3	4	37	0.7
Push cart	12	8	30	25	10	10	10	105	0.1
Desk with bench		200	200		250	350		1000	0.04
Teachers' offices		1	1					2	2
Earth roads	25	30	10	30	15	15	10	135	12

REPUBLIC OF CAMEROON: NUMBA - BACHUO AKAGBE ROAD DEVELOPMENT PROJECT
Implementation Schedule



HDM 4

REPUBLIC OF CAMEROON
NUMBA - BACHUO AKAGBE ROAD DEVELOPMENT PROJECT
1 – ECONOMIC ANALYSIS
(CFAF Million)

NUMBA - BACHUO AKAGBE ROAD (50 km)

Year	Traffic in veh/d	Administration Cost Overruns			User Cost Savings				Net Benefits	
		Investment	Operation	Special	VOC mot.	Time mot.	Time + VOC non mot.	Accidents	Net Exogenous Benefits	Net total Benefits
2006	257	0.00	-360.10	0.00	0.00	0.00	0.00	0.00	0.00	360.10
2007	264	0.00	-360.10	0.00	0.00	0.00	0.00	0.00	0.00	360.10
2008	271	11 090.08	-360.10	0.00	0.00	0.00	0.00	0.00	0.00	-10 729.98
2009	279	14 786.78	-360.10	0.00	0.00	0.00	0.00	0.00	-0.92	-14 427.60
2010	287	11 090.08	-360.10	0.00	0.00	0.00	0.00	0.00	-0.92	-10 730.90
2011	295	0.00	-360.10	0.00	2378.10	1933.60	2.51	0.00	-0.92	4 673.39
2012	407	0.00	-243.90	0.00	2384.89	1858.15	2.50	0.00	8.88	4 498.32
2013	429	0.00	-243.90	0.00	3069.13	2029.94	2.50	0.00	11.58	5 357.04
2014	451	0.00	-243.90	0.00	3327.01	2339.40	2.49	0.00	15.08	5 927.88
2015	475	0.00	-243.90	0.00	4437.21	2161.82	2.49	0.00	19.64	6 865.06
2016	500	0.00	-243.90	0.00	4991.06	2211.97	2.48	0.00	25.56	7 474.97
2017	527	3 150	-243.90	0.00	5032.07	2459.74	2.47	0.00	33.27	4 621.45
2018	554	0.00	-243.90	0.00	5757.09	2921.29	2.46	0.00	43.29	8 968.03
2019	584	0.00	-243.90	0.00	5939.81	3041.07	2.45	0.00	56.32	9 283.55
2020	615	0.00	-243.90	0.00	5826.72	3234.95	2.44	0.00	73.25	9 381.25
2021	648	0.00	-243.90	0.00	5711.45	3329.93	2.42	0.00	95.27	9 382.97
2022	683	0.00	-243.77	0.00	5406.02	3527.25	2.40	0.00	123.90	9 303.35
2023	720	0.00	-243.67	0.00	5216.68	3126.35	2.38	0.00	161.11	8 750.20
2024	759	4 300	-242.32	0.00	4519.77	4134.89	2.36	0.00	209.49	4 808.84
2025	800	0.00	-243.90	0.00	5329.94	4252.78	2.40	0.00	272.39	10 101.40
2026	843	0.00	-243.90	0.00	4724.12	4788.18	2.38	0.00	354.16	10 112.73
2027	889	0.00	-243.90	0.00	3787.30	4543.54	2.36	0.00	460.46	9 037.56
2028	938	0.00	-243.90	0.00	3145.25	4731.60	2.35	0.00	598.65	8 721.75
2029	989	0.00	-243.90	0.00	2196.12	3530.44	2.33	0.00	778.30	6 751.09
2030	1 044	-16 635.13	-243.90	0.00	1075.07	4074.48	2.31	0.00	1011.86	23 042.74
Total:		27 781.82	-6 792.78	0.00	84 254.81	64 231.37	48.46	0.00	4 349.68	131 895.29
IRR = 15.62%										

2 – SENSITIVITY ANALYSIS

	Bachuo Akagbé – Numba Stretch			
	Case 1	Case 2	Case 3	Case 4
Discount rate (%)	12.0	12.0	12.0	12.0
Multiplier factor for net benefits				
*Capital Agency and Recurrent	1.00	1.10	1.00	1.10
* Vehicle Operation	1.00	1.00	0.90	0.90
	-----	-----	-----	-----
Discounted Income in Millions of CFAF	131 895	129 117	115 928	113 149
I.R.R. (%)	15.62%	14.27%	14.13%	12.87%

TABLE OF BANK GROUP ONGOING OPERATIONS IN CAMEROON
30/04/2006 (UA Million)

Name of Project	Window	Date of Approval	Date of Signature	Amount Approved	Amount Disbursed
Agriculture Sector					
FAMILY INCOME IMPROVEMENT PROGRAMME	ADF	28-Jun-01	16-Nov-01	14,000,000.00	2,379,527.10
SUPPORT TO RURAL FORESTRY & AGROFORESTRY (Loans)	ADF	10-Feb-99	5-Mar-99	4,130,000.00	2,582,487.07
SUPPORT TO RURAL FORESTRY & AGROFORESTRY (Grant)	ADF	10-Feb-99	5-Mar-99	780,000.00	465,091.70
SUPPORT TO NATIONAL AGRIC EXTENSION (P.N.V.A)	ADF	15-Jul-98	8-Dec-98	7,000,000.00	5,134,462.65
LIVESTOCK & FISHERY DEVELOPMENT PROJECT	ADF	16-Dec-98	5-Feb-99	4,590,000.00	2,818,092.20
GRASSFIELD RUR DEV PARTIC. & DECENTR	ADF	26-May-03	8-Jan-04	15,000,000.00	483,014.08
RUMPI PARTICIPATORY DEVELOPMENT PROJECT (Loans)	ADF	13-May-03	8-Jan-04	15,000,000.00	224,574.58
RUMPI PARTICIPATORY DEVELOPMENT PROJECT (Grant)	ADF	13-May-03	8-Jan-04	1,500,000.00	-
Sub/Total Agriculture				62,000,000.00	14,087,249.38
Multisector					
SUPPORT TO NAT GOVERNANCE PROGRAMME	ADF	25-Oct-01	15-Feb-02	3,180,000.00	316,586.44
Sub /Total Multisector				3180,000.00	316.586,44
Social Sector					
HEALTH SYSTEM DEVELOPMENT PROJECT	ADF	7-Jun-00	4-Sep-00	8,050,000.00	1,632,898.74
EDUCATION II	ADF	14-Jul-99	11-Feb-00	7,500,000.00	7,381,793.86
POVERTY REDUCT. & WOMEN'S PROMOTION (Loan)	ADF	3-Dec-97	13-Feb-98	14,100,000.00	10,419,521.06
POVERTY REDUCT. & WOMEN'S PROMOTION (Grant)	ADF	3-Dec-97	13-Feb-98	700,000.00	123,867.75
SUPPORT TO VOCATIONAL TRAINING REFORM (Loan)	ADF	3-Dec-03	5-Apr-04	14,000,000.00	347,833.81
SUPPORT TO VOCATIONAL REFORM. (Grant)	ADF	3-Dec-03	5-Apr-04	1,000,000.00	35,972.82
SUPPORT TO REPRODUCTIVE HEALTH PROGRAMME (Loan)	ADF	16-Jun-04	11-Oct-04	10,230,000.00	-
SUPPORT TO REPRODUCTIVE HEALTH PROGRAMME (Grant)	ADF	16-Jun-04	11-Oct-04	1,900,000.00	-
Sub /Total Social Sector				57,480,000.0	19,628,838.04
Transport Sector					
ROAD DEVELOPMENT PROJECT IN PROVINCES	ADF	29-Mar-01	29-May-01	15,000,000.00	11,745,94.52
AMBAM-EKING ROAD DEVELOPMENT PROJECT	ADF	14-Dec-00	2-Feb-01	8,900,000.00	8,058,73.20
MAINTENANCE INFRASTRUCTURES CONSTRUCTION PROJECT	ADB	12-DEC-02	2-June-03	30780704.43	5804632.74
Sub/Total Transport				54680704.43	25,609.319.46
Water and Sanitation Sector					
YAOUNDE SANITAION PROJECT	ADF	Decem 05		25,600,000.00	-
Sub/Total Water and Sanitation				25,600,000.00	-
GRAND TOTAL				202,940,704.4	54,863,281.3

REPUBLIC OF CAMEROON
NUMBA - BACHUO AKAGBE ROAD DEVELOPMENT PROJECT
LIST OF PROJECT IMPLEMENTATION DOCUMENTS

1. Cameroon household survey (ECAM), Vol II: Results, Vol. 1 to 5, Yaounde, December 97, MEF, DSCN ;
2. Statistical Directory, MEF, DSCN, November 99;
3. Poverty reduction Strategy Paper, Interim draft document, August 2000;
4. Transport sector policies and strategies, Ministry of Transport, June 2000;
5. Regional socioeconomic studies in Cameroon, poverty eradication, national framework, improvement of social data, Synthesis of ten provinces, Ministry of Public Investments and Land Use Planning, 2001edition;
6. Transport statistical bulletin 2000, Ministry of Transport, N°2, July 2001;
7. Survey on household consumer expenditures in Yaoundé and Douala, Results on household final consumption, Directorate of Statistics and National Accounting, MEF, December 2001;
8. Declaration on rural roads rehabilitation and maintenance strategy in Cameroon, Yaoundé, April 2000;
9. Improvement of RN6 Batibo – Bachuo Akagbé and Mamfé –Ekok, Mamfé-Ekok stretch, economic feasibility study, provisional report, FRISA Engineering SA, September 2002;
10. Improvement of the RN6 Batibo – Bachuo Akagbé et Mamfé –Ekok road, Mamfé-Ekok stretch, environmental impact study, provisional study, FRISA Engineering SA, August 2002;
11. Cameroon in figures 2000, Directorate of National Statistics and Accounts, MEF, October 2001;
12. Statistical Directory of Cameroon 2000, December 2001, INS
13. Evaluation of transport sector reforms, TSP coordination unit, January 2002;
14. TSP progress report, TSP coordination unit, August 2002;
15. Post-evaluation of road maintenance emergency programme, provisional report, Tchamagam and Mezo Soua Jacqueline, CCTSP, July 2002;
16. Activity report as of 30 June 2002, Road Fund;
17. Civil engineering magazine, quarterly review of MINTP, N°005 of March 01 and N°006 of Dec-Jan 02;
18. Study on implementation of new rural road maintenance strategy, report of 1st phase, Scetautoroute International, Jan 98;
19. Note on urban poverty- cases of Yaoundé and Douala, Priority Investments, AFD, March 2001;
20. Living conditions of communities and poverty profile in Cameroon in 2001, initial results, Directorate of Statistics and National Accounting, May 2002
21. Input data and outputs of HDM4 model.
22. Report on Phase IV of road master plan – October 2004
23. Building and public works sector strategy
24. Building and public works sector strategy draft declaration (February 2001 – SADEG Consultancy)
25. Note on diagnosis of public works sector (September 2002 – BETA Consult);
26. Note on formulation of building and public works sector strategy – progress report and proposal for methodological framework for completion (July 2003 - BREIT Consulting)

REPUBLIC OF CAMEROON
NUMBA - BACHUO AKAGBE ROAD DEVELOPMENT PROJECT
PROJECT PROCESSING SCHEDULE

<u>Activities</u>	<u>Dates</u>	<u>Recommendations</u>
Decades of des transports that identified the Douala-Yaoundé-Bamenda-Batibo-Bachuo Akagbé-Mamfé-Ekok roads as sections of African roads namely the Lagos – Mombassa Trans-African Highway	1978-1998	Search for financing for studies and works
Initial studies conducted	1984	Decision in 1987 to construct road section by section in view of sizable financing to be mobilized for the development of the Bamenda-Ekok link
Start of development section by section	1991 to 2002	The Bank finances the development of Bamenda-Batibo and Bachuo Akagbe-Mamfé road sections under the road programme
Incorporation of Bank's road programme into the TSP implemented from 1994 to 2003	1995	The Bank finances the updating of technical, economic and environmental studies of other sections of the Bamenda-Ekok road
The Government approached the Bank and Arab donors for the financing of the development of the Batibo- Bachuo Akagbé and Mamfé-Ekok sections development works.	2001	Update of studies
Appraisal of Mamfé-Ekok section	2002	At the request of Cameroon and Nigeria, this section is included in the Bank's 2006-2007 pipeline projects as part of the multinational project (Mamfé-Ekok-Ikom Abakaliki-Enugu) under preparation
Government undertakes updating of technical and economic studies and complementary social and environmental impact studies (ESIA) on the Batibo-Bachuo Akagbe road.	2005 and March 2006	The Government requested the Bank to pursue the development in line with the sequential approach starting with the 50 km-long Numba - Bachuo Akagbé section.
Appraisal of the project by ADF	From 05 to 24/04/2006	Prepare the appraisal report and initiate the internal review process
Internal task force	10/05/2006	Make corrections for the GTID
Inter-departmental task force	20/05/2006	Make corrections for Committee
Publication of environmental summary and distribution to Board	31/05/2006	ADF
Meeting of Higher Committee	14/06/2006	Make corrections and submit for translation
Project negotiation	From 26 to 27/07/2006	ADF/CAMEROON
Submission for translation	01/08/2006	OINF
Presentation of project to Bank Board	25/10/2006	ADF

REPUBLIC OF CAMEROON
NUMBA - BACHUO AKAGBE ROAD DEVELOPMENT PROJECT
COST ESTIMATES OF ROAD WORKS COMPONENT BY MAJOR ITEM IN CFAF
NET-OF-TAXES

PRICE N°	DEFINITION	In CFA F.
1	GENERAL PREPARATION OF WORK SITE	2 783 911 416
2	PREPARATION OF RIGHT OF WAY	731 853 002
3	EARTHWORKS AND IMPROVEMENT WORKS	10 316 198 951
4	ROADWAY	5 956 512 857
5	SANITATION AND DRAINAGE	5 941 005 895
6	MINOR BRIDGES	3 451 125 822
7	CROSSING STRUCTURES FOR LARGE RIVERS	938 091 181
8	SIGNING AND EQUIPMENT	719 579 070
	TOTAL WORKS	30 838 278 194
	CONTROL AND SUPERVISION	1 233 531 128
	TOTAL WORKS + Control	32 071 809 322
	PHYSICAL CONTINGENCIES	2 565 744 746
	Total	34 637 554 068
	PRICE REVISION	2 560 846 948
	GRAND TOTAL	37 198 401 015