

# AFRICAN DEVELOPMENT BANK GROUP

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## REPUBLIC OF CAMEROON

### COMPLETION REPORT

#### ROAD IMPROVEMENT IN THE WEST, LITTORAL AND SOUTH PROVINCES

INFRASTRUCTURE DEPARTMENT (OINF)

September 2008

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**BORROWER'S FISCAL YEAR**

1 January to 31 December

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**ABBREVIATIONS**

ADB	:	African Development Bank
ADF	:	African Development Fund
ADT	:	Average Daily Traffic
CF	:	Consulting Firm
CFAF	:	Franc of the African Financial Community
CSEPR	:	Road Projects Implementation Monitoring Unit
DF	:	Duty Free
DIER	:	Road Investment and Maintenance Department
EDF	:	European Development Fund
EPU	:	Environmental Protection Unit
FD	:	Final Design
HDM	:	Highway Design and Maintenance Standards Model
HIPC	:	Heavily Indebted Poor Countries
IRR	:	Internal Rate of Return
MINTP	:	Ministry of Public Works
PCR	:	Project Completion Report
PD	:	Preliminary Design
RP	:	Road Programme
SME	:	Small and Medium-size Enterprise
TSP	:	Transport Sector Project
UA	:	Unit of Account
Veh/d	:	Vehicles per day
VOC	:	Vehicle Operating Costs

**A BASIC DATA**

Country	:	CAMEROON
Project Name	:	Road Improvement in the West, LITTORAL and South Provinces
Loan Number	:	F/CMR/PL/D/2001/2
Borrower	:	Republic of Cameroon
Executing Agency	:	Ministry of Public Works
Beneficiary	:	Road Investment and Maintenance Department

**B ADF LOAN**

Loan Amount	:	UA 15 million
Loan Duration	:	50 years
Loan Interest Rate	:	0 %
Loan Repayment	:	1 % of the principal every year from the 11th to the 20th year inclusive, and 3 % per annum thereafter
Loan Grace Period	:	10 years
Service Charge	:	0.75%
Approval Date	:	29 March 2001
Signature Date	:	29 May 2001
Effectiveness Date	:	10 December 2001
Effective Last Disbursement Date	:	30 September 2007

**C Other Sources of Finance**

- Cameroonian Government : UA 2.26 million

**D PROJECT DATA**

Total Cost (in million UA)	Appraisal				Completion				Difference (Appr. – Compl.)		
	17.26				29.11				11.85		
Source of Finance	F.E.	L.C.	TOTAL	%	F.E.	L.C.	TOTAL	%	F.E.	L.C.	TOTAL
ADF	12.96	2.04	15	87%	8.25	6.75	15.00	51.6	+ 4.71	- 4.71	+ 0.00
GVT.	0	2.26	2.26	13%	0	14.11	14.11	48.4%	0	- 11.85	- 11.85
<b>TOTAL</b>	<b>12.96</b>	<b>4.30</b>	<b>17.26</b>	<b>100.0%</b>	<b>8.25</b>	<b>20.86</b>	<b>29.11</b>	<b>100.0%</b>	<b>+ 4.71</b>	<b>- 16.56</b>	<b>- 11.85</b>

	Estimated	Actual	Difference
1.1 Effective First Disbursement Date	15/01/2002	27/01/2004	24 months
1.2 Effective Last Disbursement Date	31/12/2004	30/09/2007	33 months
1.3 Start-up of Project Implementation Activities	April 2002	March 2004	23 months
1.4 Completion Date of Project Implementation Activities	November 2004	July 2007	33 months

**E PERFORMANCE INDICATORS**

1. Balance (in million UA)	00		
2. Time Overrun/Underrun (year)			
· Slippage on effectiveness (year)	2		
· Slippage on completion date (year)	2		
· Slippage on last disbursement (year)	3		
· Number of extensions of the disbursement deadline	1		
3. Project Implementation Status	Completed		
	Unsatisfactory	Fair	Satisfactory
4. Institutional Performance		x	
5. Performance of the Borrower		x	
6. Performance of the Consultant			x
7. Economic Rate of Return (%)	Appraisal		Completion
	16.2		15.68

**F MISSIONS**

N°	Type of mission	Start	End	Number of persons per mission	Composition per mission			Staff/days
					Civil Engineer	Transport Economist	Others	
1	Appraisal	11/11/2000	03/12/2000	4	1	1	2	88
2	Launching Mission	18/11/2001	11/12/2001	2	1	-	1	33
3	Field Supervision	08/05/2003	17/05/2003	1	1	-	-	09
4	Field Supervision	04/11/2003	14/11/2003	1	1	-	-	10
5	Field Supervision	06/04/2004	21/04/2004	1	1	-	-	16
6	Field Supervision	19/10/2004	02/11/2004	1	1	-	-	13
7	Field Supervision	23/04/2005	09/05/2005	1	1	-	-	16
8	Field Supervision	09/04/2006	24/04/2006	1	1	-	-	15
9	Field Supervision	12/11/2006	25/11/2006	1	1	-	-	13
10	PCR	01/11/2007	12/11/2007	2	1	1	-	26

**G DISBURSEMENTS (annual)***Disbursement Status (in million UA)*

Source of Finance	Year Status									TOTAL	
		2002	2003	2004	2005	2006	2007	2008	Appraisal	Completion	
ADF	Appraisal	6.17	6.18	2.65						15	
	Completion			5.03	6.27	2.91	0.79				15.00
GOVT	Appraisal	PIB	0.77	0.74	0.30					2.27 (1.81+0.46)	
		RF		0.46							
	Completion (in CFAF)	PIB			0.62	0.44	0.59	0.15	4.75		6.55 (1.80+4.75)/
		HIPC				0.81	2.43	3.84			7.07
	RF				0.49					0.49	

**H SERVICE PROVIDERS** (for the MELONG DSCHANG road financed by the Bank)

Type of Service		Roadworks Company	Consultants			
			Inspection Mission	Project Audit	Monitoring Evaluation	Sensitisation
Name of Service Provider		Andrade Gutierrez	SNC Lavalin International	CAEAC	FASA	CARFAD
Start-up date of services		01-March-04	01-Jan-04	Dec 2004	July 2004	August 2004
Contract Performance Duration		38 months	41.5 months	39 months	44 months	32 months
Contract Amount	Final Contract Performed	14 712,240	701,370	25.500	16,200	28,560
(in million CFAF DF)		19 478,094	1 127,270	25.500	16,200	28,560
	Balance	4 765 854 226	425 900 000	0	0	0
Date of End of Services		13/06/2007 (Provisional acceptance)	Augustt-07	31/03/2008	April 2008	April 2007
		13/06/2008 (Final acceptance)				
Last ADF Disbursement Date		17 August 2007	26 January 2004	13 September 2006	August 2006	May 2006
Amounts disbursed by ADF (million CFAF)		10 883.49	633.42	15.736	16.200	6.660
Amounts disbursed by ADF (million UA)		14.07	0.82	0.021	0.020	0.0086
Amounts disbursed by Govt. (million CFAF)		10 287.65	493.85	9.764	0	21.899
Amounts disbursed by Govt. (million UA)		13.3	0.63	0.011	0	0.028

**REPUBLIC OF CAMEROON: ROAD IMPROVEMENT PROJECT**

**Project Matrix**

Hierarchy of Objectives	Objectively Verifiable Indicators (OVI)		Means of Verification (MOV)	Assumptions/Risks
	<b><u>At Appraisal</u></b>	<b><u>At Completion</u></b>		
	<b>Sector Goal:</b>			
Sustainably improve the level of service of the priority network that contributes to the internal and external opening up of the country.	Fall of about 20 % in transport costs on the project highways and increase in the length of paved roads by 22.5 km from 2004.	Fall of at least 50% in vehicle operating costs. And increase of the priority network by 22.5 km in June 2007.	National surveys among the users and national transport statistics.	
<b>PROJECT OBJECTIVES:</b>				
Open up areas with high agricultural potential by providing permanent road links between Melong and Dschang and Eseka-Lolodorf. Furthermore, improve the living conditions of the people living near the road by constructing related facilities.	Reduction of the vehicle operating costs (VOC) by about 35% to 45% on the project highways and provision of better access to socio-economic facilities in 2004 for about 10 000 persons; reduction of water-borne diseases by around 10% in 2004 in Ntingué 1 and 2, Santchou and Ielen – About 5% increase in the primary school enrolment rate – 50% reduction in the class overcrowding rate in the 3 schools bordering the road – about 30% reduction of harvest losses.	<p>VOC reduced by 70% on the project highways. It took 1h30 to descend and 2h30 to climb the 9 km-cliff section. Today, it takes less than 30 minutes to descend and less than 45 minutes to climb;</p> <p>(i) The pupil/teacher ratio has increased from 47.2 pupils per teacher to between 49 and 56, but still remains below the Departmental average (67); (ii) the project has constructed three boreholes in the villages, but the Santchou borehole does not produce drinking water: the population of this village is still exposed to water-borne diseases; (iii) more than one year after its commissioning, the health centre is still not functional.</p> <p>The incidence of water-borne diseases of around 25% has not changed between 2004 and 2008, but 66.5% of the population has access to healthcare by car compared with 40 % before the project and medical evacuations are now swift</p> <p>From 2006 to 2007, the primary school enrolment rate increased by 4% and rose to 9.23% over the period 2004-2007.</p> <p>In the less crowded classes, the pupil population has dropped from 70 to 40 pupils on average in the three schools bordering the road; the pupil/teacher ratio has increased from 47.2 to 56, representing an 18.5% increase;</p> <p>The number of pupils using bench desks has dropped from 5 to 2;</p> <p>The daily tonnage of harvested crops has jumped from 160 to 207, i.e. 29.5% reduction in losses.</p>	Traffic counts, calculation of VOC and user surveys. Health, school and agricultural statistics, as well as farmer surveys.	Adequate road implementation capacity of the local SME

**OUTPUTS:**

<p>A new, two-lane paved road between Melong and Dschang</p> <p>Highway structures rebuilt in the Melong plain and in Lolodorf</p> <p>Related facilities put up.</p>	<p>15 km of cliff road, 7.5 km of plain on the Melong-Dschang highway paved and the wearing course renewed on the 22.5 km of the plain in 2004</p> <p>Highway Structures (HS) rebuilt on the road in the plain and 1 HS rebuilt in Lolodorf in 2004</p> <p>53 km of service roads constructed, 6 commercial sheds built in Ntingué 1 and 2, 4 drinking water points established in Ntingué 1 and 2, Santchou and Lelen; 10 classrooms rehabilitated, 8 classrooms built and equipped with furniture and latrines for the Ntingué and Litieu primary schools and at the entrance of Dschang in 2004, one health centre built and equipped in Ntingué 2 and one security centre at the foot of the cliff in 2004.</p>	<p>Road built and delivered to users in June 2007.</p> <p>Highway structures built and opened to traffic in June and July 2007.</p> <p>Service roads not opened for lack of resources. All the other related improvement works implemented.</p>	<p>-Status reports.</p> <p>Provisional and final works acceptance reports.</p> <p>Bank supervision reports</p> <p>Project completion report</p> <p>Project audit report.</p> <p>Report on the environmental protection measures.</p>	<p>Adequate maintenance of the project road and the structures</p>
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**ACTIVITIES**

<p>A <u>Construction Works</u></p> <p><b>A.1. Works</b></p> <p><b>A.2 Works Inspection</b></p> <p><b>B. Consultants</b></p> <p><b>C. Operation</b></p>	<p><b>Project Cost (million UA)</b></p> <table border="1"> <thead> <tr> <th rowspan="2">Component</th> <th colspan="3">Appraisal</th> <th colspan="3">Completion</th> </tr> <tr> <th>ADF</th> <th>Govt</th> <th>Total</th> <th>ADF</th> <th>Govt</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Works</td> <td>13.90</td> <td>2.08</td> <td>15.98</td> <td>14.07</td> <td>13.30</td> <td>27.37</td> </tr> <tr> <td>Consultants</td> <td>1.10</td> <td>0.13</td> <td>1.23</td> <td>0.92</td> <td>0.62</td> <td>1.54</td> </tr> <tr> <td>Operation</td> <td>0</td> <td>0.05</td> <td>0.05</td> <td>0</td> <td>0.18</td> <td>0.18</td> </tr> <tr> <td><b>Total DF cost</b></td> <td><b>15.00</b></td> <td><b>2.26</b></td> <td><b>17.26</b></td> <td><b>15</b></td> <td><b>14.11</b></td> <td><b>29.11</b></td> </tr> </tbody> </table>	Component	Appraisal			Completion			ADF	Govt	Total	ADF	Govt	Total	Works	13.90	2.08	15.98	14.07	13.30	27.37	Consultants	1.10	0.13	1.23	0.92	0.62	1.54	Operation	0	0.05	0.05	0	0.18	0.18	<b>Total DF cost</b>	<b>15.00</b>	<b>2.26</b>	<b>17.26</b>	<b>15</b>	<b>14.11</b>	<b>29.11</b>	<p>Contracts signed. Monthly statements.</p> <p>Disbursement status</p> <p>Final statements</p> <p>Audit report</p>													
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## **EXECUTIVE SUMMARY**

### **Introduction:**

1.1 Cameroon is a Central African country located between Nigeria, Chad, Central African Republic, Gabon, Equatorial Guinea, Republic of Congo and the Gulf of Guinea. It has an area of 475 442 km<sup>2</sup> and a population of about 16 380 000 inhabitants (2005). The most densely populated provinces (over 100 inhabitants per km<sup>2</sup>) are the West, Littoral and North-west provinces. On the other hand, the Adamoua, East and South provinces are very sparsely populated (less than 15 inhabitants per km<sup>2</sup>). The project – subject of this report – focuses on a road improvement programme in the West, Littoral and South provinces.

1.2 In its global transport sector development strategy, the Cameroonian government has designed a transport sector project (TSP) that has, among its priorities, the strengthening of the paved network and the surfacing of earth roads. TSP focuses essentially on the reduction of transport costs and the opening up of the country. The Cameroonian road network is 50,000 km long: 4,268 km of asphalt roads, 18 020 km of earth roads and 27 692 km of rural roads.

1.3 Under the road programme, the Bank, which took part in the financing of TSP, financed in 1997 detailed designs of the Melong-Dschang road, subject of a component of the present report. Moreover, in 1993 feasibility and detailed design (DD) studies were conducted, on European Union financing, on the other project components, in particular the four structures of the plain. The Government updated all these studies in 2000. In 2000, it also financed a socio-economic study on the project. These different studies served as a basis for the project appraisal by a Bank mission in December 2000.

1.4 The loan of UA 15 million was approved by the Board of Directors on 29 March 2001. The loan conditions were negotiated. No point of disagreement was raised by the Bank or the borrower during the negotiations and after its signature on 29 May 2001, the loan agreement entered into force on 10 December 2001. But owing to delays in the procurement process, the project only started up in March 2004.

1.5 This project completion report was prepared on the basis of the initial appraisal report, information gathered during the preparation mission of the said report, the Borrower's completion report and the project documents available at the Bank.

### **Project Objective and Description**

1.6 The objectives of the project financed from ADF and Government of Cameroon resources were to: (i) improve the level of service of the priority network, (ii) contribute to the internal opening up of a part of the Dschang region, which has high agricultural potential, and (iii) help improve the living conditions of those living near the road by building the related facilities.

1.7 The project components as planned at appraisal are: (i) carry out the surfacing works on the Melong Dschang road on 22.5 km (15 km on the cliff and 7.5 km in the plain), construct 5 highway structures: 4 in the plain on the Melong-Dschang road along with their points of

access, and one at the entry of Lolodorf on the Eséka-Lolodorf road and provide socio-economic facilities and social amenities to improve the welfare of residents living in the vicinity of the road; and (ii) consultancy services for works inspection and supervision, sensitisation actions and the monitoring/evaluation of the project impacts and the project audit.

1.8 The project objective was not modified during its implementation. There was however some modification to the engineering design during the project implementation. The Government bore the cost of road improvements and the related supplementary infrastructure.

### **Project implementation and implementation schedule of its activities.**

1.9 The Ministry of Public Works implemented the project through the Unit in charge of road programme implementation monitoring unit (CSEPR) at the Road Department and has a competent staff to monitor and supervise programme implementation.

1.10 In keeping with the loan agreement provisions, contract award was through: (i) international competitive bidding for the works after prequalification of the contractors, (ii) competition on the basis of a short list for works inspection and supervision services as well as for the audit; (iii) direct negotiation for the monitoring/evaluation of the project impacts; (iv) open competition among local NGOs for sensitisation and (v) national competitive bidding for the works on the Lolodorf bridge and the maintenance of the section of Melong-Santchou road fully financed from Government resources.

1.11 The Melong-Dschang road improvement works were awarded to the Brazilian company Andrade Gutierrez, winner of the works contract. The Government supported the proposal of this company to subcontract 100% of the contract to a local company. As Bank rules and procedures do not limit works subcontracting, the Cameroonian government's proposal was approved. The Bank however recalled, on the one hand, that the subcontract could not in anyway diminish the responsibility of the successful bidder and, on the other hand, that works should be implemented in keeping with the bid of the principal contractor in terms of the equipment and staff proposed. Although the contractor was notified in January 2004 of the order to start the construction works, project implementation that was to last 42 months from July 2001, only effectively started on 01 March 2004, the date on which the total mobilization fee was paid to the contractor, and was completed in June 2007.

1.12 The construction works on the bridge over the Lokoundje in Lolodorf were entrusted to the Dutch company Koop. The services of this company started in June 2005 and ended in July 2007.

1.13 Works inspection and supervision services were awarded to the Canadian company SNC Lavalin International Inc, for works inspection and supervision. However, owing to the delay encountered between the mobilization of the site inspection mission and the effective commencement of the Melong-Dschang road works (the company had predicated the start of works on the effective payment of the mobilization fee), the contract of SNC Lavalin was extended from 26 to 32 and then to 41.5 months to take account of the works on both the Melong-Dschang road and the Lolodorf bridge.

1.14 An NGO, 'The African Centre for Applied Forestry Research and Development' (CARFAD), carried out the sensitisation of the population. The intervention of the NGO stretched from August 2004 to end of April 2007. The implementation period was longer than projected owing to the slippage on the road works.

1.15 The project audit mission was entrusted to the Consulting and Accounting Audit Firm (CEAC). This Firm produced the reports of the 2004 and 2005 fiscal years. The last report that was to cover 2006 and 2007 was not submitted.

1.16 The monitoring/evaluation of the project impacts was conducted by the Faculty of Agricultural Sciences, University of Dschang. It produced 3 reports corresponding to the before, during and after project phases. The last report has been transmitted to the Bank.

### **Project Costs and Financial Resources**

1.17 At appraisal, the entire project cost was estimated at UA 17.26 million of which UA 12.96 million in foreign exchange. At completion, the project cost came to UA 29.11 million: 8.25 million paid in foreign exchange and 20.86 million in local currency. Government participation increased by more than UA 11.85 million (close to CFAF 9.2 billion). Thus in relation to the estimates at appraisal and the initial financing plan, Cameroon's participation in the project rose from UA 2.26 million to UA 14.11 million, i.e. from 13 to 48.4%.

### **Overall Assessment**

1.18 Despite almost 3 years' delay during project implementation and a significant increase in Cameroon's participation, the road improvement project in the West, Littoral and South provinces (PAR) was a success. Indeed, the project objectives at appraisal were achieved to the satisfaction of the project owner and the users. Nonetheless, their implementation encountered a delay of nearly two years due to the procurement process. The opening of the service roads did not start owing partly to the delays between project appraisal and its start and partly to the premature depreciation of the UA against the CFAF and the increase in works-related costs.

1.19 The project implementation delays resulted in the extension of the missions of the consultants responsible for works inspection and the project audit. To date, the audit report of the 2006 financial year and of the closing of the loan has not been prepared. Thus, the inadequate ADF resources caused the Cameroonian Government to bear the supplementary financing needed to execute the works on the Lolodorf bridge. The Government contribution to the funding of the project therefore jumped from 13 to 48.4%. In the final analysis, the ADF loan was used for the Melong-Dschang road improvement and consultancy services (works inspection, impact monitoring/evaluation, sensitisation actions and audit).

1.20 The project objectives at appraisal were achieved to the satisfaction of the project owner and the users, but their implementation was delayed by almost 3 years. Indeed, during its implementation, the project experienced several types of difficulties (demands by the contractor that the mobilization fee, including the Government's counterpart, be fully paid prior to the commencement of works, delay in mobilizing the counterpart funds and the procurement process). The time that elapsed between the studies and works start-up (almost 7 years) led to the introduction of structural modifications to the improvement works not

initially planned. These modifications were justified partly by the need to update the detailed engineering designs and partly by the need to improve the structures (bituminous concrete instead of double layer, steel instead of concrete bridge etc...). Indeed, the Government had the successful contractors execute supplementary works and bore the additional cost. Moreover, the contractors were constrained to occasionally suspend the works owing to technical problems or payment delays.

### **Economic Performance**

1.21 In view of the time between appraisal and completion (almost 7 years), the initial traffic forecasts made at appraisal were revised by taking into account the 2003-2004 data used as a baseline for calculation. The actual traffic after project completion (2006-2007) shows a growth rate of nearly 230% (private vehicles), 170% (pick-up trucks), 110% (minibus) and 550% (trucks). Projections based on the historic annual traffic growth rates envisage an annual growth rate of about 4% on average.

1.22 Recalculated, the internal rate of return (IRR) obtained is 15.68%. It is still below that established during project appraisal, namely 16.2%. This is explained by the increase in the project cost in relation to appraisal and the assumption of slower traffic growth. Indeed, the actual project improvement cost is 22 493 million, whereas it was initially estimated at CFAF 17 217 million and the future traffic growth used is 4% on average per annum (Government estimate), compared to about 4.5% at appraisal.

### **Conclusion**

The overall and specific project objectives have been fully achieved. The infrastructure built (roads and highway structures) has considerably improved road transport services in the West, Littoral and South provinces. Notwithstanding the significant delay encountered during project implementation (close to 3 years in relation to appraisal), the contribution of these structures, in value and quality, is essential for the internal opening up, agricultural economy of these regions and the improvement of the welfare of residents living near through the related improvements. Nevertheless, the contractors responsible for the road works, bridge, and the inspection mission are still waiting for the settlement of their fees of about CFAF 3.65 billion; the situation of those living near the road who have been compensated, but have not yet been moved away, are the weak spots in the implementation of the various project components. To date, the Administration has not signed certain supplementary contracts, whereas the works have been implemented. During the completion report preparation mission and several times, the Bank has, through its Cameroon office, drawn the attention of the authorities to these various points. The works were relatively well implemented in spite of some degradation noted on the Melong-Dschang road during the guarantee period, which the contractor should repair prior to final acceptance at the end of the rainy season. However, works implementation encountered long delays owing mainly to the time taken by the procurement phase.

## **1 INTRODUCTION**

1. The project, subject of the present PCR, had been scheduled under the road programme (RP) approved in 1991 for financing on ADB resources. But owing to delays in the implementation of the RP and, meanwhile, Cameroon's ineligibility for ADB loans, the two parties agreed to withdraw the project from the RP, as its works had not started.

2. To improve the state of the national road network, the Government of Cameroon designed in 1994 a transport sector project (TSP) defining the priority network on which the operations were concentrated. TSP focused primarily on the construction of regional roads, internal opening up and improvement of the level of service of the transport infrastructure. It was completed in 2004.

3. The Melong-Dschang highway is an important link in the roads opening up the West, Littoral and North-West provinces. Indeed, this section enables the users of these regions to avoid a diversion of more than 150 km to join highway 4 leading to Douala (economic capital of the country). The improvement of this road (situated in areas with high agricultural and livestock potential), was therefore necessary in view of its importance for the evacuation of the agricultural produce from the area and its impact on poverty reduction.

4. The Government, therefore, requested the Bank to finance on ADF resources the improvement of this road, the reconstruction of 4 highway structures on the same road and the construction of one highway structure in Lolodorf town on the Eseka-Lolodorf road developed under the RP. Apart from these structures, the project envisaged the construction of: (i) one security post for the police at the entrance to the cliff section; (ii) four (4) boreholes equipped with hand pumps to supply water to the population; (iii) six (6) commercial sheds; rehabilitation of ten (10) classrooms and the construction of eight (8) others; (iv) construction of one (1) health centre.

5. At appraisal, the total estimated project costs, net of taxes and customs duties, amounted to CFAF 17.22 billion, i.e. the equivalent of UA 17.27 million (prevailing cost at the time): CFAF 12.93 billion (UA 12.96 million) in foreign exchange and CFAF 4.29 billion (UA 4.31 million) in local currency. However, while Bank participation ended on 30/09/2007, with a total disbursement of UA 15 million, the Cameroonian Government's contribution, initially estimated at UA 2.26 million, reached UA 14.11 million at completion on 31/10/2007. The cost increase entirely borne by the Government was as a result of delays in the project implementation and the premature exhaustion of the loan resources due to the depreciation of the UA against the CFAF.

6. ADB intervention in Cameroon dates from 1972 and totals 13 operations in the transport sector for cumulative approvals amounting to UA 246.46 million. The principal road infrastructure projects are: Douala-Yaoundé road improvements (1983-1985), Mbalmayo-Ebolowa (1988 - 1994), Road programme (1991-2001), Bafoussam-Foumban (1992 - 2000), Ambam-Eking (2001-2006). In general, the operations financed by the Bank and completed were relatively well implemented. Nevertheless, there were major delays in their implementation owing in particular to slowness in the procurement of goods, works and services resulting from non-compliance with the relevant Bank rules of procedure.

7. The preparation of this completion report (PCR) was based on the following documents: (i) project appraisal report, various Bank mission supervision reports; (ii) end-of-works inspection mission report; (iii) first and second phase reports of the consultant in charge of monitoring/evaluating the project impacts; (iii) report of the consultant responsible for sensitisation (iv) field information and discussions with the various services involved during the mission to Cameroon from 01 to 12 November 2007, as well as the Borrower's completion report.

## **2. PROJECT OBJECTIVES AND FORMULATION**

### **2.1 Objectives**

2.1.1 The sector goal was to enhance the level of service of the priority network with a view to improving the internal opening up of the country. The specific objective was to open up regions with high agricultural potential, by providing permanent road links between Melong and Dschang on the one hand, and between Eseka and Lolodorf on the other. It also aimed to improve the welfare of those living near the road by constructing related facilities.

### **2.2 Project Description**

2.2.1 At appraisal the project had the following components:

A. Construction works comprising:

- a) Road surfacing improvement works of 22.5 km (15 km on the cliff section and 7.5 km in plain) and the renewal of the wearing course on 22.5 km of the Melong-Dschang road; market access along the road; they also comprise related improvements and the construction of 5 highway structures: 4 in the plain on the Melong-Dschang highway as well as access to them, and one at the entrance of Lolodorf on the Eseka-Lolodorf road.
- b) Provision of works inspection and supervision services.

B. Project management comprising: (i) sensitisation of the population on environmental protection and STD/AIDS control; (ii) monitoring/evaluation of the project impacts on development and poverty reduction; and (iii) provision of project audit services.

### **2.3 Project Formulation**

2.3.1 This project was in line with the Cameroonian Government's national road network improvement policy. The road network is characterized by its low level of improvement, which gives rise to high costs for the community and therefore constitutes a major handicap to the socio-economic development of the country and poverty reduction.

2.3.2 Consequently, the Government embarked on a series of reforms aimed to improve the situation of the transport sector, in particular the road network, through the following measures: (i) significant increase in the asphaltting of the earth road network; (ii) construction of express roads, especially between the major towns of the country; and (iii) internal opening up of the agro-pastoral regions. In this connection, a priority network has been identified for improvement actions, including the Melon-Dschang road, which constitutes the principal output of this project.

## **2.4 Identification, Preparation, Negotiation and Approval**

2.4.1 In 1997 a detailed design (DD) study financed under the RP was conducted. The EU financed the DD studies of four structures in the plain in 1993. These studies were updated in 2000 by the Government, which in addition financed a socio-economic study in 2000. These studies served as a basis for the project appraisal. During the project appraisal missions, the various stakeholders and beneficiaries of the project were sensitized. This participatory approach helped identify the concerns and needs of residents in the vicinity of the road. It also helped verify the consistency of the project with the Government sector strategy.

2.4.2 The project design therefore took into consideration past experiences and lessons in the road sector, notably lessons drawn from road programme implementation. The main lessons drawn related to procurements, mobilization of the counterpart funds and payment of compensations for expropriation by the Government.

2.4.3 The project was appraised by a mission composed of four Bank experts (civil engineer, transport economist, poverty reduction expert and environmentalist), who visited Cameroon from 11 November to 03 December 2000. The project was approved on 29 March and signed on 29 May 2001.

## **3 PROJECT IMPLEMENTATION**

### **3.1 Effectiveness and Works Start-up**

3.1.1 The loan entered into force on 10 December 2001 and the project implementation works started on 01 March 2004 for the Melong-Dschang road and on 01 April 2005 for the Lolodorf bridge. The slippage of more than two years on the schedule set at appraisal is due to: (i) slowness of the contract award process for the road improvement works, for which bidding was initiated on 31 December 2001 and then re-launched in October 2002 before a contract was signed on 06 October 2003; and (ii) problem of exhaustion of the loan resources, owing in part to the depreciation in the value of the UA against the CFA franc, whose parity slipped from 1 UA equal to 997 CFAF at the appraisal phase to 1 UA equal to 773 CFAF during the Bank disbursement period (2004-2007).

3.1.2 The Government fulfilled all the loan conditions in time: (i) a special account was opened to receive the counterpart funds intended to cover contributions to the cost of works and the operating costs of the CSEPR (Road Project Implementation Monitoring Unit) and was provisioned to the amount of CFAF 180 million in June 2002; (ii) adoption of the texts governing the CSEPR, its procedures manual and the appointment, to the Road Department, of the correspondents of the administrations and services concerned by the project enabled the team of this unit, composed of the Chief Coordinator, 2 engineers and one accounts administrator (all appointed after approval of their CV by ADF) to discharge their tasks properly and monitor the project implementation very closely; (iii) procurements for the present project were made within the special EDF procurement commission; (iv) residents affected by the road works were compensated before they were cleared away. The Government mobilized a global amount of CFAF 308 million for the compensation; and (v) finally, the work contracts signed with the contractors incorporated the environmental protection measures and were submitted for the Bank's prior approval in accordance with the procurement procedures.

### **3.2 Other Conditions**

3.2.1 For the other ADF loan conditions, the Bank received every year from July 2002: (i) the results of the traffic counts made on the project road by the Executing Agency; and (ii) the road maintenance budgets approved by the RF.

### **3.3 Project Implementation**

3.3.1 The improvement of the cliff section and the part in the plain, as well as the construction of bridges on the Melong-Dschang highway, including the socio-educational and health facilities for people living near the road, lasted 37.5 months and were completed on 15 April 2007, i.e. a 13.5 month time overrun. On the other hand, inadequate funds owing mainly to the depreciation of the UA against the CFAF and delays in mobilizing the counterpart funds, in addition to the significant contingencies due to the poor quality of the DD studies resulted in: (i) more than a year's delay in the construction of the new bridge on the Lokoundje in Lolodorf where works were completed on 13 July 2007; (ii) the postponement, to a later date, of the start of works on the service roads and (iii) the postponement of the renewal of the surface layer of the whole carriageway between Melong and Santchou until the resources needed for their construction are mobilized. In its place, periodic maintenance was provided.

### **3.4 Modifications**

3.4.1 The various project components have been implemented with the exception of the service roads. It turned out that these roads are rather opening, and not rehabilitation or maintenance works as scheduled at appraisal. This development occurred between appraisal and the actual start of the road works.

3.4.2 While, overall, the works were implemented as specified in the Detailed Designs, some improvement modifications proved necessary for the sustainability of the structures. They are mainly: (i) in the cliff area, the shifting of the carriageway towards the sidehill cut to guarantee a better bed on stable ground and avoid backfill retaining walls; (ii) strengthening the carriageway structure (replacement of a part of the crushed gravel with a bituminous gravel base course on the steep slopes of the cliff and of the double-layer surfacing with bituminous concrete in the plain); (iii) the growing of vegetation on the embankment slopes for better protection against erosion; (iv) the renovation of the roofs of all the buildings of the government school at the entrance of Dschang ; v) the establishment of three additional water points; (vi) the relocation of the Litieu government school (cliff); (vii) the extension of the foundation piles of the bridges on the plain because of the quality of the supporting soil; (viii) the laying of about 7 km of under-road groundwater drainage pipe; (ix) removal of the central pier and replacement of the concrete beams with metallic beams on the Lokoundjé bridge; and (ix) extension of the access road to the Lolodorf bridge.

### **Impacts of the Modifications and Delays on the Project Objectives**

3.4.3 The modifications did not have any direct and real impact on the project objectives. On the contrary, they enhanced the quality of the works and improved the related facilities. The additional cost of about CFAF 2.1 billion or UA 2.7 million resulting from these modifications was entirely borne by the Cameroonian Government.

*Project Status as at 31 October 2007*

	Component	Appraisal		Completion		Status (Appraisal - Completion)	
		CFAF (million)	UA	CFAF	UC	CFAF (million)	UA
A. CONSTRUCTION WORKS	<b>A. Road works, bridge and related improvements</b>						
	A.1 Melong-Dschang road	13 979.52	14.02	18 833.22	24.35	- 4 853.70	- 10.33
	A.2 Related facilities			644.87	0.83	- 225.66	- 0.41
	A.3 Service roads	419.21	0.42				
	A.4 Bridge on the Lokoundje in Lolodorf	1 114	1.11	1 311.05	1.69	- 197.05	- 0.58
	A.5 Surfacing of the Melong-Santchou section	459.59	0.46	382	0.49	77.59	- 0.03
	<b>Total A</b>	<b>15 972.32</b>	<b>16.02</b>	<b>21 171.14</b>	<b>27.37</b>	<b>- 5 198.82</b>	<b>- 11.35</b>
	<b>Including ADF loan</b>	<b>13 915.33</b>	<b>13.96</b>	<b>10 883.49</b>	<b>14.07</b>	<b>+ 3 031.84</b>	<b>- 0.11</b>
B. CONSULTANCY SERVICES	<b>B. Consultancy Services</b>						
	B1. Works inspection and supervision	1 097.02	1.10	1 127.27	1.45	- 30.25	- 0.35
	B2. Financial audit	33.22	0.03	25.5	0.03	+ 7.72	0.00
	B3. Monitoring/ Evaluation of project impacts	19.00	0.02	16.20	0.02	+ 2.80	0.00
	B4. Sensitisation	30.72	0.03	28.56	0.03	+ 2.14	0.00
	<b>Total B</b>	<b>1 179.96</b>	<b>1.18</b>	<b>1 197.55</b>	<b>1.54</b>	<b>- 17.59</b>	<b>- 0.36</b>
	<b>Including ADF loan</b>	<b>1 040.00</b>	<b>1.04</b>	<b>714.95</b>	<b>0.92</b>	<b>+ 325.05</b>	<b>+ 0.12</b>
C. OTHER ITEMS	C1. Operating cost of CSEPR	64.65	0.06	145.85	0.18	- 81.20	- 0.12
	C2. Compensations of expropriations	NE		172	0.22	- 172	
	<b>Total C</b>	<b>64.65</b>	<b>0.06</b>	<b>145.85</b>	<b>0.18</b>	<b>- 81.20</b>	<b>- 0.12</b>
	<b>Including ADF loan</b>	<b>0</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL PROJECT</b>	<b>TOTAL DF cost</b>	<b>17 216.60</b>	<b>17.26</b>	<b>22 514.54</b>	<b>29.11</b>	<b>- 5 297.94</b>	<b>- 11.85</b>
	<b>Including ADF loan</b>	<b>14 955.33</b>	<b>15.00</b>	<b>11 598.44</b>	<b>15.00</b>	<b>+ 356.8</b>	<b>+ 0.00</b>

3.4.4 The monetary erosion and technical modifications that took place are summarized in the table above. It reveals that as at 31 October 2007, the project DF cost amounting to UA 29.11 million shows a deficit of UA 11.85 million, i.e. an initial budget overrun of 68%. However, expressed in CFAF, this deficit is 5297.94 million corresponding to a less significant overrun of 30%. It stems from the supplementary works and other technical improvements, as well as from the implementation delays, which aggravated the effects of the price adjustment prompted by the surge in fuel price.

### **3.5 Implementation Schedule**

3.5.1 Project implementation was to last 42 months starting from July 2001. However, the project, which effectively started in December 2001 (loan effectiveness date), was completed in July 2007 with the provisional acceptance of the works of the Lokoundje bridge.

3.5.2 The provisional acceptance of the Melong-Dschang road improvement works took place in June 2007. At the end of the guarantee period, the final acceptance will take place in July 2008. The ADF loan mainly used to finance this road was closed on 30/09/2007 instead of 31/12/2006, as initially planned.

3.5.3 The consultancy services financed on the ADF loan were provided during the following periods: (i) from January 2004 to August 2007 for the inspection and supervision mission of the road works and highway structures, (ii) from August 2004 to April 2007 for the sensitisation services; (iii) from September 2003 to November 2007 for the monitoring/evaluation actions; and (iv) in 2005 and 2006 for the project financial audit. However, the audit report for the 2006 fiscal year and the loan closure report have not yet been prepared. The project impacts monitoring/evaluation report, after works completion, was transmitted to the Bank in May 2008.

3.5.4 The other project sub-components that were not yet implemented during the field mission are the renewal of the wearing course on the section of the Melong Santchou road and the opening of the service roads. Contract award for the renewal of the wearing course is in progress (September 2008). The service roads sub-component has been abandoned for lack of resources.

### **3.6 Reporting**

3.6.1 The consultant responsible for the road and bridge works inspection and supervision regularly submitted monthly work status reports to the Government and the Bank. A completion report was also submitted in August 2007.

3.6.2 Similarly, reports were prepared on the sensitisation actions on the Highway Code, forest and wildlife protection, STD/AIDS control and bush fires. These reports presented the topics covered as well as the conditions and achievements of the different sessions. Concerning the project audit, the firm CAEC produced 2 reports for the 2004 and 2005 fiscal years. The last report, which was to focus on the 2006/2007 fiscal years was not transmitted to the Bank, in spite of many reminders. Finally, under the monitoring/evaluation of the project impacts on development and poverty reduction in the Melong-Dschang road area, two reports produced by FASA have been examined and validated. They deal with the impacts before and after the project works. The third status report after the implementation of these works was expected in early 2008.

### **3.7 Procurement**

3.7.1 As stipulated in the loan agreement, contracts were awarded through: (i) international competitive bidding for the Melong-Dschang road works; (ii) competition on the basis of a short list for works inspection and supervision services, as well as the audit; (iii) direct negotiation for the inspection/assessment of the project impacts; (iv) open competition

among local NGOs for the sensitisation, and (v) local competitive bidding for the works on the Lolodorf bridge and the maintenance of a section of the Melong-Santchou road, entirely financed on own resources.

3.7.2 The contract for the Melong-Dschang road improvement works was awarded to the Brazilian company Andrade Gutierrez for CFAF 14,712,240,087 DF divided into 3 tranches: (i) a fixed tranche (road and bridge works – excluding those of the plain) of 12,264,364,682 financed to the tune of 90% on the ADF loan); (ii) 2 conditional tranches of related facilities financed by Government resources from either the PIB or the HIPC initiative, for a total amount of CFAF 3,805,469,316. At completion, the total cost of works was CFAF 19,478,094,370, i.e. cost overruns of CFAF 4,765,854,226 in relation to the initial contract (of which CFAF 1,481,548,188 for modifications and CFAF 3,284,306,095 for price adjustment), and CFAF 5,079,360,000 in relation to appraisal. These cost overruns entirely borne by the Government as indicated above were occasioned by the price adjustment and works not projected, which proved necessary for the sound management of the structures in order to sustain the investment. The contract for the Melong-Dschang road improvement works was sub-contracted to a local company after consideration and non-objection opinion of the Bank.

3.7.3 The construction works on the bridge over the Lokoundje in Lolodorf were entrusted to the Dutch company Koop for CFAF 1,068,001,394 DF financed by the Government, following the exhaustion of ADF resources. The final cost of the said works increased by CFAF 243 million owing to the supplementary works and delay. The effects of the price adjustment will be added to it.

3.7.4 Consultancy services were awarded to the Canadian company SNC Lavalin International Inc for works inspection and supervision amounting to CFAF 701,370,000 DF financed to the tune of 90.42% by the ADF loan. The Government bore the remaining 9.58% (CFAF 67,191,246). However, following the delay between the mobilization of the field inspection mission and the effective start-up of the Melong-Dschang road works (the company had predicated the start of works on the actual payment of the mobilization fee), the SNC Lavalin contract was extended from 26 to 32 and then 41.5 months to take account of the duration of the works on the Melong-Dschang road and the Lolodorf bridge. At project closure, the contract signed with Lavalin amounted to CFAF 1.127 million DF (including price adjustment of 171.24), 63% of which was paid by the loan resources.

3.7.5 An NGO, 'The African Centre for Applied Forestry Research and Development (CARFAD)', conducted the sensitisation campaign. The contract amount was CFAF 28,560,000 DF financed to the tune of 27.81% from the ADF loan. The intervention of the NGO stretched from August 2004 to late April 2007. The implementation duration was longer than planned owing to slippage on the road works. At the end of CARFAD services, ADF payments represented 23.32% of the invoices committed.

3.7.6 The project audit mission was entrusted to the Consulting and Accounts Audit Company (CEAC), for an amount of CFAF 25,500,000 DF. This firm produced the reports of the 2004 and 2005 financial years, and its last report, which was to cover 2006 and 2007, is still not available. 66% of the consultant's fees were paid from the ADF resources.

3.7.7 The project impacts were monitored and evaluated by the Faculty of Agricultural Sciences, Dschang University, for an amount of CFAF 16,200,000 DF financed in equal parts by the Government and the Bank. The reports have been prepared.

### 3.8 Costs, Sources of Finance and Disbursements

#### PROJECT COST

3.8.1 At appraisal, the project cost was estimated at UA 17.26 million comprising UA 12.96 million in foreign exchange and UA 4.30 million in local currency. At completion, except for the service roads and the partial surfacing of a section of the Melong - Santchou road, this cost rose to UA 29.11 million as at 31 October 2007: 8i25 million paid in foreign exchange and UA 20.85 million in local currency.

#### SOURCES OF FINANCE

3.8.2 At appraisal, the project was to be jointly financed by the Bank (87%) and the Government (13%, i.e. 10% by PIB and 3% by the Road Fund). As at 31 October 2007, the share of the Bank dropped to 51.6% and that of the Government rose to 48.4%. The increase in the Government share is owing to: (i) inadequate loan resources as a result of the depreciation of the UA against the CFAF (the loan resources covered only 51.6% of the commitments at appraisal, down from CFAF 14.955 to 11.627 million); and (ii) works not envisaged during the pre-feasibility studies and at appraisal.

#### 1. **Financing Plan (in million UA)**

Total cost	Appraisal				Completion				Difference (Appr. – Compl)			
	17.26				29.04				11.78			
Source of Finance		F.E.	L.C.	TOTAL	%	F.E.	L.C.	TOTAL	%	F.E.	L.C.	TOTAL
	<b>ADF</b>	12.96	2.04	15	87%	8.25	6.75	15.00	51.6	+ 4.71	- 4.71	+ 0.00
	<b>GOVT.</b>	0	2.26	2.26	13%	0	14.11	14.11	48.4%	0	- 11.85	- 11.85
	<b>TOTAL</b>	12.96	4.30	17.26	100.0%	8.25	20.86	29.11	100.0%	+ 4.71	- 16.56	- 11.85

#### 2. **Financing by Expenditure Category (in million UA)**

Component	Appraisal			Completion			Difference Appr. – Compl)		
	ADF	Govt	Total	ADF	Govt	Total	ADF	Govt	Total
A. Construction Works	13.90	2.08	15.98	14.07	13.30	27.37	- 0.17	- 11.22	- 11.39
Consultancy Services.	1.10	0.13	1.23	0.92	0.62	1.54	+ 0.18	- 0.49	- 0.31
C. Operating Cost	0	0.05	0.05	0	0.18	0.18	0	- 0.13	- 0.13
<b>Total cost DF</b>	<b>15.00</b>	<b>2.26</b>	<b>17.26</b>	<b>15</b>	<b>14.11</b>	<b>29.11</b>	<b>+0.00</b>	<b>- 11.85</b>	<b>- 11.83</b>

#### DISBURSEMENTS

3.8.3 At appraisal, disbursements were supposed to be made over a period of three years, starting from 2002. In fact, this schedule shifted by two years and disbursements were effected from 2004 to 2007. The table hereunder gives a summary of the disbursements made by the Bank.

*Disbursement Status (in million UA)*

Source of Finance	Year Status		2002	2003	2004	2005	2006	2007	2008	TOTAL	
										Appraisal	Completion
ADF	Appraisal		6.17	6.18	2.65					15	
	Completion				5.03	6.27	2.91	0.79			15.00
GOVT	Appraisal	PIB	0.77	0.74	0.30					2.27 (1.81+0.46)	
		RF		0.46							
	Completion (in CFAF)	PIB			0.62	0.44	0.59	0.15	4.75		6.55 (1.80+4.75)
		HIPC				0.81	2.43	3.84			7.07
		RF				0.49					0.49

3.8.4 Disbursements in respect of all the project components were, in fact, made from 04 February 2004 to 16 August 2007. Following loan closure (on 30/9/2007), the total amount disbursed represents 99.99% of the total loan value, thus showing a balance of UA 165.22.

## **4 PROJECT PERFORMANCE AND OUTCOMES**

### **4.1 Overall Evaluation**

4.1.1 Overall, the project objectives were achieved, but there was a significant delay in the implementation of the project components and, for lack of resources, the service roads component was abandoned. Nevertheless, the Melong-Dschang road improvement, the construction of five highway structures and the socio-economic facilities made it possible to: (i) improve the level of service of the priority network, which contributed to the internal opening up of the country; (ii) open up the regions with high agricultural potential by providing permanent road links between Melong, Dschang and Eseka-Lolodorf ; (iii) improve the welfare of residents living near the road through the construction of related facilities.

4.1.2 The ADF project resources proved inadequate to implement the various project components, owing, among others, to: (i) an increase in the costs of road construction and related works; (ii) implementation delays, connected with the delay encountered in the procurement process; (iii) depreciation of the UA against the CFAF; (iv) overrun of the road works implementation deadlines. As a result, almost 100% of the ADF loan resources were exhausted, thus leading the Cameroonian Government to finance the difference. Indeed, the estimates of the various categories of project expenditures fell short of the actual expenditure on the implementation of the works and corresponding actions.

### **4.2 Operational Performance**

4.2.1 The improvement works on the project road, including the building of structures, were implemented in accordance with the usual practices. Indeed, the geometrical and structural features of the project road have improved in relation to BD specifications.

4.2.2 The residents living near the Melong-Dschang road have been sensitized on STI/HIV/AIDS, environmental protection and respect of the Highway Code. The target populations of the sensitisation campaign have taken measures that are worth monitoring,

such as: (i) the formation of groups to clean the drainage channels; (ii) ensuring the removal of traders who occupy and dirty all the roadway as well as running the risk of accidents; (iii) establishing certain traffic rules on the Melong-Dschang highway; and (iv) prohibiting women from growing crops in the drainage channels.

4.2.3 Project implementation was delayed for procurement reasons. However, the Bank, the Cameroonian Government, the Executing Agency (CSEPR) and the contracting parties (2 companies, 3 Consultants and the Auditor) discharged their tasks properly. It is however worth pointing out: (i) the non-payment by the Government, to close the contracts, of accounts of the companies that executed the road works, built the Lolodorf bridge and carried out the inspection mission, and (ii) the failure to move the residents who had been compensated.

### **4.3 Institutional Performance**

4.3.1 Pursuant to the preliminary loan agreement provisions, the Ministry of Public Works was to be the Project Executing Agency through the Road Programme Implementation Monitoring Unit (CSEPR) within the Road Directorate. The Prime Minister's decree n°096/CAB/PM dated 08 July 2005 established the CSEPR and its organization. The staff of this unit comprises one coordinator, 2 project engineers, one accountant and the support staff (secretaries and drivers).

4.3.2 The project institutional performance is considered satisfactory as the Unit monitored the implementation of the various project components to the satisfaction of all. Therefore to successfully perform its duties, this unit was equipped, under the project, with computer facilities and a transport vehicle for movements on the work site. The Government took charge of the operating expenses. The unit produced status reports regularly as well as a completion report.

4.3.3 The sustainability of the maintenance of the project road and the national road network in general would be guaranteed following the adoption, by the Cameroonian Government, of a new policy based on the recommendations of the TSP implemented in 1996, which resulted in: (i) the creation of the Road Fund (RF). The resources of this Fund come mainly from the road user charge (RUC), road toll and weighing charges, proceeds from road use related fines and Government contributions; (ii) State disengagement from road investment and maintenance works in favour of the private sector and the refocusing of its role on planning, programming and works inspection. For the time being, the road fund is functioning properly, but lack of resources could lead to non-compliance with the commitments.

4.3.4 The Road Fund is a Public Administration Establishment (EPA) with financial and management autonomy under the supervision of the Ministry of Finance and Budget. It is the fruit of long negotiations and close consultation from 1995 between Cameroon and the lead donors, including the Bank, involved in the transport sector in general and road transport in particular. The Road Fund was created by law n° 96 /07 of 8 April 1996 establishing protection of the national assets. It is governed by decree n° 98/162 of 26 August 1998, which fixes the operating modalities. The Road Fund is a sustainable system dedicated to the financing of road maintenance under the Government's privatization policy of this sub-sector. By its duties and operating mode, the Road Fund gives credibility to State solvency and enhances the effectiveness, productivity and efficiency of public expenditure. The bulk of the resources of the road fund are constituted by credits allocated by the Government, the Road Fund, the HIPC funds, international donors and the private sector.

#### **4.4 Performance of the Contractors and Consultants**

##### **PERFORMANCE OF THE CONTRACTORS IN CHARGE OF WORKS**

4.4.1 Despite a time overrun of almost 15.5 months, the successful bidder for the Melong-Dschang road construction contract (Andrade Gutierrez) implemented the component and the services are considered satisfactory. Even though works implementation was behind schedule, and there were some modifications, most of the improvements in relation to the technical projections stipulated by the specifications were to the satisfaction of the executing agency, the Bank and the users. In fact, the successful contractor subcontracted all the works to a local contractor. The sub-contracting decision contributed to the delay in project start-up. Following several exchanges of views, the Bank gave its non-objection opinion.

4.4.2 From the social standpoint, the contractor that implemented the road works recruited local residents as menial labour. This participation of the local workers in the road construction generated another commercial activity through the sale of food to the workers.

##### **PERFORMANCE OF THE CONSULTANTS**

4.4.3 The company SN LAVALIN, which carried out the inspection mission of the Melong Dschang road construction works and the highway structures, left a very good impression on the Government. Overall, it satisfactorily ensured works quality control. Its performance is therefore deemed satisfactory. There was often friction between it and the contractors, but this did not give rise to conflict situations that affected works implementation, despite the many problems encountered during works implementation.

4.4.4 The local consultants responsible for sensitisation and project impact monitoring/evaluation provided services deemed satisfactory by the Government. The sensitisation component focused on HIV/AIDS awareness, environmental protection, good farming practices and the Highway Code. The aim was to: (i) understand the causes of road accidents and the mechanisms for preventing them (ii) know STI and HIV/AIDS transmission modes; (iii) identify good and bad farming practices in the region and behaviours that can affect the road assets; (iv) identify environmental impacts and possible mitigation and optimization measures; and (v) master the various outreach techniques and transmission modes.

4.4.5 The consultant in charge of project impact monitoring/evaluation submitted two reports known as first and second phase reports, which were to report on the initial findings and changes noted following the start of works. Based on the various reports produced, the consultant's services are considered satisfactory.

4.4.6 The performance of the consulting firm responsible for auditing the accounts of the different project components is satisfactory. It prepared the audit reports of the 2004 and 2005 fiscal years in which it: (i) presented the financial statements; (ii) evaluated the internal control system; (iii) verified compliance with the loan agreement and (iv) project implementation. The last service – audit of the fiscal year 2006 and final closure of the project accounts – was not provided.

#### 4.5 Economic Performance

4.5.1 The economic performance of the project is satisfactory. The economic analysis of the Melong-Dschang road was made using the ‘cost-benefit’ method by comparing the ‘with project’ situation (after completion of the improvement works) and the ‘without project’ situation in which the initial level of improvement is maintained. This economic analysis was conducted on the basis of the final cost of the improvement works and the actual traffic data.

4.5.2 The final cost of the project road improvement includes: i) road works; (ii) inspection and supervision of these works; ii) monitoring and coordination and; iii) environmental measures. It is presented, as follows (in CFAF DF):

*Final Cost of the Melong Dschang Road improvement and the Lolodorf Bridge (million CFAF)*

Description	Financing		
	ADF	Govt.	Total
Roadworks	10 879.49	10 284.09	21 163.58
Works Inspection & Supervision	711.38	479.41	1 190.79
Operating Cost	0	139.18	139.50
<b>Total</b>	<b>11 590.87</b>	<b>10 902.68</b>	<b>22 493.55</b>

4.5.3 The bridge on the Menoua (in the plain) collapsed in 2000, thereby isolating the region and resulting in a detour of about 150 km. The traffic counts used at appraisal therefore became null and void as they dropped from 326 PV/day in 2000 to 14 PV/day in 2004.

4.5.4 According to the counts furnished by FASA, the traffic trend on the project road at appraisal and after the works in 2007, which corresponds to the commissioning of the road, is presented as follows:

*Traffic Trend on the Melong Dschang Road at Appraisal*

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Year Type of Vehicle	2000		2007	
	Number	Share	Number	Share
PV	<u>326</u>	<u>73.92%</u>	<u>748</u>	<u>74.28%</u>
Pick up	<u>49</u>	<u>11.11%</u>	<u>84</u>	<u>8.34%</u>
Minibus	<u>43</u>	<u>9.75%</u>	<u>49</u>	<u>4.87%</u>
<b>Total LV</b>	<b>418</b>	<b>94.78%</b>	<b>881</b>	<b>87.49%</b>
Trucks	23	5.22%	126	12.51%
<b>Total HP</b>	<b>23</b>	<b>5.22%</b>	<b>126</b>	<b>12.51%</b>
<b>Grand Total</b>	<b>441</b>	<b>100%</b>	<b>1007</b>	<b>100%</b>

4.5.5 These results show that, based on the factors used at appraisal, traffic recorded a growth of 230% over the period 2000/2007, with 550% for trucks, which could not use the cliff section before the works.

4.5.6 The economic benefits of the works are mainly derived from the savings made in vehicle operating and maintenance costs. The time gain was also taken into account in view of the significant reduction in the travel time as a result of the improvements made. The costs considered are the economic costs (DF) for both the capital costs of the works implemented and the routine and periodic maintenance costs for the ‘without project’ situation and the ‘with project’ situation. These maintenance costs were estimated on the basis of the data culled from the appraisal report of the present project and the study of the Cameroon Road Master Plan (RMP). The benefits for 2006 used in the economic analysis are given hereunder:

4.5.6.1 The economic calculation was made by taking into account the volume of traffic, the (DF) amounts of the works and inspection, as well as the routine and periodic maintenance costs. The commissioning year used is 2007, and the economic analysis period considered is 20 years. Therefore, a residual investment value of 50% was used at the end of this period of analysis.

4.5.6.2 The internal rate of return (IRR) obtained on the basis of these data is 15.68%. It is slightly below that established during project appraisal, namely 16.2%. This is explained partly by the increase in the project cost in relation to appraisal and partly by the assumption of less rapid traffic growth. In fact, the actual project improvement cost is CFAF 22,493.55 million, whereas it was initially estimated at CFAF 17,217 million, and the future traffic growth used is 4% per annum on average (Government estimate), compared to about 4.5% at appraisal.

4.5.7 The sensitivity tests show that the IRR remain above 14%, attesting the economic justification of the implementation of the project road. The results of these tests are:  
*Sensitivity Tests*

## 2 SENSITIVITY ANALYSIS

	PARE			
	Case 1	Case 2	Case 3	Case 4
Discount Rate (%)	12.0	12.0	12.0	12.0
Multiplier Factor for Net Benefits				
* Agency Capital and Recurrent	1.00	1.10	1.00	1.10
* Vehicle Operating	1.00	1.00	0.90	0.90
Discounted Profits (million CFAF)	66 844	67 581	59 021	59 758
IRR. (%)	<b>15.68%</b>	<b>15.69%</b>	<b>14.30%</b>	<b>14.32%</b>

## 5 PROJECT SOCIAL AND ENVIRONMENTAL IMPACTS

### 5.1 Social Impacts

5.1.1 The socio-economic benefits of the project road are highly significant for the community. The project contributes to: (i) the strengthening of the national road network and the improvement of its interconnection; (ii) the opening up of several villages situated along the road; (iii) significant increase in the mobility of women and children; (iv) the socio-economic development of the project area of influence and poverty reduction.

5.1.2 The Melong-Dschang highway is an important link of the roads to open up the West, Littoral and North-West provinces. Its area of influence covers about 80 000 km<sup>2</sup>, i.e. close to 17% of the area of the country, for a population estimated at more than 5 million inhabitants in 2007. This road enables the users of these provinces to avoid about 150 km detour to join highway 4 leading to Douala. Its construction will help considerably reduce poverty in that it will facilitate (i) the opening up of areas of high agricultural and pastoral potential on the, Mbôs Plain in particular and the big Menoua productive granary in general; (ii) the supply of the agricultural inputs and manufactured products of those areas; (iii) the evacuation to Douala, the big port and economic metropolis of Cameroon, of produce from the farms situated at the foot of the Mbamboutos mountains and in the Noun valley ; iv) reduction of the time of absence of family members that have emigrated to the urban centres of Douala and Yaoundé, thereby promoting greater cohesion in the households; and the undertaking of new income generating activities (sand digging); etc. In general, transport costs, which represented about 50% of the direct costs of trading, are markedly reduced.

5.1.3 The bridge over the Lokoundje in Lolodorf is part of the Eseka-Lolodorf road whose improvement works were completed in 1999 under the Road Programme financed by the Bank with an ADB loan. The commissioning of this road revealed that the old bridge was in an advanced state of dilapidation and appeared to be a permanent danger for both the populations of Lolodorf town and the road haulers. The construction of the new structure therefore guarantees a permanent and safe link between the administrative and working- class areas, as well as the continuity of traffic in this part of the country (Eseka-Lolodorf-Kribi, Lolodorf-Ebolowa, and Yaounde-Lolodorf-Kribi).

5.1.4 The roadworks were implemented in a calm, social environment and mobilised a massive participation of the local populations (menial labour and subcontracting to local economic operators). During works implementation, women prepared and sold food to the workers. Furthermore, the construction of a police station at the entrance to the cliff section helps better safeguard a passage which was formerly used by highway robbers to attack travellers.

5.1.5 The rehabilitation of the 3 schools and therefore strengthening of school assets in the project area, will significantly improve enrolment and academic performance: (i) schools are brought closer to the children's places of residence, absenteeism is reduced during the rainy season and classes are less crowded; (ii) the provision of decent facilities gives greater incentives to the teachers; (iii) the organization of courses and other school activities is improved. The health facilities and drinking water facilities will reduce water-borne diseases that are rampant especially in the Mob Plain (diarrhoea, intestinal parasitic diseases and skin diseases) as well as infant mortality.

5.1.6 The project road also provides other benefits, namely: (i) improvement of the users' comfort and road safety, (ii) increase in the life of vehicles by improving their general state through better quality roadway; and (iii) substantial savings on maintenance in particular and, on vehicle operating costs in general.

## **5.2 Environmental Impacts**

5.2.1 By virtue of its nature, location, small size and environmental impacts easily controlled by the implementation of appropriate measures, the project was classified at appraisal in category 2. The evaluation of the environmental impact before, during and after

the works indicates that the direct impact area be limited to the immediate vicinity of the existing road. To that end, the Government incorporated in the works contract environmental protection measures to contain the negative impacts and take appropriate mitigation actions.

5.2.2 Therefore, upon completion of the road works, the contractor covered the embankment with top soil, replanted on the road sides the trees uprooted during the works and carried out restoration work on: (i) the site facilities; (ii) all the borrow pits used; (iii) the debris storage areas; and (iv) the massive rock quarries used for the sites.

5.2.3 Likewise, the contractor installed: (i) horizontal signs and markings with retro-reflecting white paint; (ii) vertical signs and markings in the form of reflective road signs; (iii) road bend marker posts; (iv) penta milestones, and (v) zinc coated guard rails. What is more, at the entrances of the cliff, information boards are posted to remind hauliers (in particular the heavy vehicles) of the safety and driving rules to be able to the steep and winding area without any difficulty.

5.2.4 For the expropriations, the Government mobilised a global financial package of CFAF 308 million to compensate residents displaced during the works of the present project (all compensated), but not entirely moved away, as well as those displaced in 1988 during the first phase of the works on the Melong-Dschang road. CFAF 172 million had actually been paid; the balance is paid progressively as the local administrative authorities carry out verifications.

## **6 PROJECT SUSTAINABILITY**

6.1 Considering the medium and long-term traffic projections, the geometrical characteristics of the project road will ensure strong resistance for the project life, provided there is proper routine and periodic maintenance. The first routine maintenance operation on the project road, whose provisional acceptance was declared in April 2007, is programmed for 2009.

6.2 The other positive aspects are the sustainability of the project: (i) the RF is functioning properly; (ii) the road maintenance budgets have increased substantially in the past 5 years (8% per annum on average); (iii) private sector promotion and the development of SME (from 1996), which should, however, improve their working methods and strengthen their human and material resources; (iv) through the community associations, the beneficiaries of the related facilities will generate the resources needed to maintain the installations by marketing them.

6.3 The sensitisation measures implemented under the present project covered aspects relating to HIV, the environment and Highway Code. To safeguard the works undertaken and improve project sustainability, it is strongly advised to programme a fresh sensitisation campaign among all the village populations concerned by the project so as to discourage them from damaging the road signs, the road bend marker posts and the guard rails. Furthermore, in view of the predictable traffic and the operating conditions, the Government should make all necessary arrangements to correctly provide routine and periodic maintenance, control axle overload and ensure traffic signs are obeyed. In this connection, establishing a planned weighing station at the entrance to Melong will be beneficial.

## **7 PERFORMANCE OF THE BANK, THE BORROWER AND OTHER DONORS**

### **7.1 Performance of the Bank**

7.1.1 The Bank undertook several missions under the implementation of this project. Thus apart from the project appraisal and launching missions, 7 short duration supervision missions were fielded. These supervision missions did help to monitor the implementation status of the project as well as find appropriate solutions to the various institutional problems that arose.

### **7.2 Performance of the Borrower**

7.2.1 The Borrower fulfilled all the specific loan agreement conditions. It took the necessary steps to make up for the premature exhaustion of the ADF resources and so increased its participation in the project financing from 13 to 48.4%. In view of this significant contribution, the counterpart funds were often mobilised very late, thereby impeding project implementation. The Borrower was therefore the cause of the slippage on effective project start up due to considerable delays in the procurement phase and in the mobilization of funds.

### **7.3 Performance of the Executing Agency**

7.3.1 The Ministry of Public Works (MINTP) delegated the project implementation to the CSEPR under the DIRM. The latter proved its ability to efficiently monitor the works by appointing an engineer exclusively in charge of the project. Furthermore, it regularly submitted works status reports to the Bank.

7.3.2 The CSEPR demonstrated that it has a qualified staff that masters all the technical and accounting aspects of road projects as well as Bank rules and procedures. It efficiently coordinated the different Cameroonian government services and the Bank during project implementation. For that reason, it constitutes a structure the Bank may still rely upon under its road projects in Cameroon.

## **8 OVERALL PERFORMANCE AND RATING**

8.1.1 The project obtains a rating of 2.5 out of 4 for implementation performance, and 2 out of 4 for the performance of the Bank. With regard to the project outcomes, the performance is satisfactory with a rating of 2 out of 4. The overall project performance rating is 2.6 out of 4.

## **9 CONCLUSION, LESSONS LEARNT AND RECOMMENDATIONS**

### **9.1 Conclusions**

9.1.1 The project, as designed during the appraisal phase, was fully implemented. The road works, which constitute the main project component, were executed despite a delay in the contractual time, to the satisfaction of the project owner and the users. On the other hand, the works of the service roads were postponed for lack of funds to implement them.

9.1.2 The various stakeholders, namely the Bank, the Executing Agency, the contractors responsible for the implementation of the road works and related infrastructure, the consultants (the inspection mission, the NGO responsible for sensitisation and the FASA in charge of the project impact monitoring/evaluation) accomplished their tasks properly. The project objectives at appraisal were achieved. The direct beneficiaries of the road, highway structures and related infrastructure now benefit from markedly improved access and a more pleasant environment and living conditions. The overall project performance is therefore satisfactory.

9.1.3 In all, the various project components, except for the service roads and the renewal of the wearing course of the Melong-Dschang road, were implemented after some modifications with a view to improving the technical solutions as planned at appraisal. Unfortunately, delays in the procurement phase and in the mobilization of the counterpart funds, contributed to the increase in the cost of the road and the structures. As a result, the Government contribution to the financing of the project jumped from 13% to over 48.4% and the ADF loan resources lost about 22% of their value in relation to the CFAF.

9.1.4 The Melong Dschang Road Improvement Project generated, at completion, a rate of return of 15.68%, although capital costs higher than estimated at appraisal were taken into account and assumptions on the future traffic growth were cautious. This result attests sure benefit for the community of the project road implementation. It has indeed very positive impacts on the socio-economic planning, especially in the area of opening up, as well as on transport costs and time.

## **9.2 Lessons Learnt**

9.2.1 The lessons that may be learnt from this project are:

- (1) The significant delay between the conduct of the studies (1997) and works implementation (2004) was not taken into account in updating the studies before the start of works, which would probably have helped avoid some technical problems and the delays in the construction of the Melong Dschang road or the Lolodorf bridge (constructed with steel instead of concrete);
- (2) The inadequacies in the composition of the project supervision missions and in the linking of field missions with others affected the efficient monitoring of the project and probably led to the extension of the project implementation period;
- (3) The project implementation difficulties owing to slowness of the contract award process of the improvement works of the project road, the depreciation of the UA against the CFAF resulting in a premature exhaustion of the resources, and the difficulties in mobilizing the counterpart funds led to considerable slippage on project implementation.
- (4) Cameroon saw its financial participation jump from 13 to 48%, owing in part to the depreciation of the UA against the CFAF, which resulted in a project cost overrun, whereas the cost estimates had been correctly made;

- (5) The considerable delay between appraisal and the start of the physical works implementation could negatively impact works specifications during implementation. In future, emergency plans should be examined at the same time as the formulation of projects of this type.

### **Recommendations**

#### It is recommended to the Bank to:

- (1) Give the staff of the Borrower specific training in the Bank procurement and disbursement procedures;
- (2) Find appropriate solutions during appraisal to the UA depreciation in relation to other currencies, in order not to hamper the smooth implementation of projects and thereby jeopardize the achievement of the expected objectives;
- (3) Update the engineering designs prior to works implementation;
- (4) Improve information by communicating to the executing agency the reason for the rejection, or part settlement, of the payment requests;
- (5) Communicate to the Borrower, in due course, the breakdown of the payments made to the contractors and consultants, in order to enable the Borrower to monitor the project disbursements at the same time;

#### It is recommended to the Borrower to:

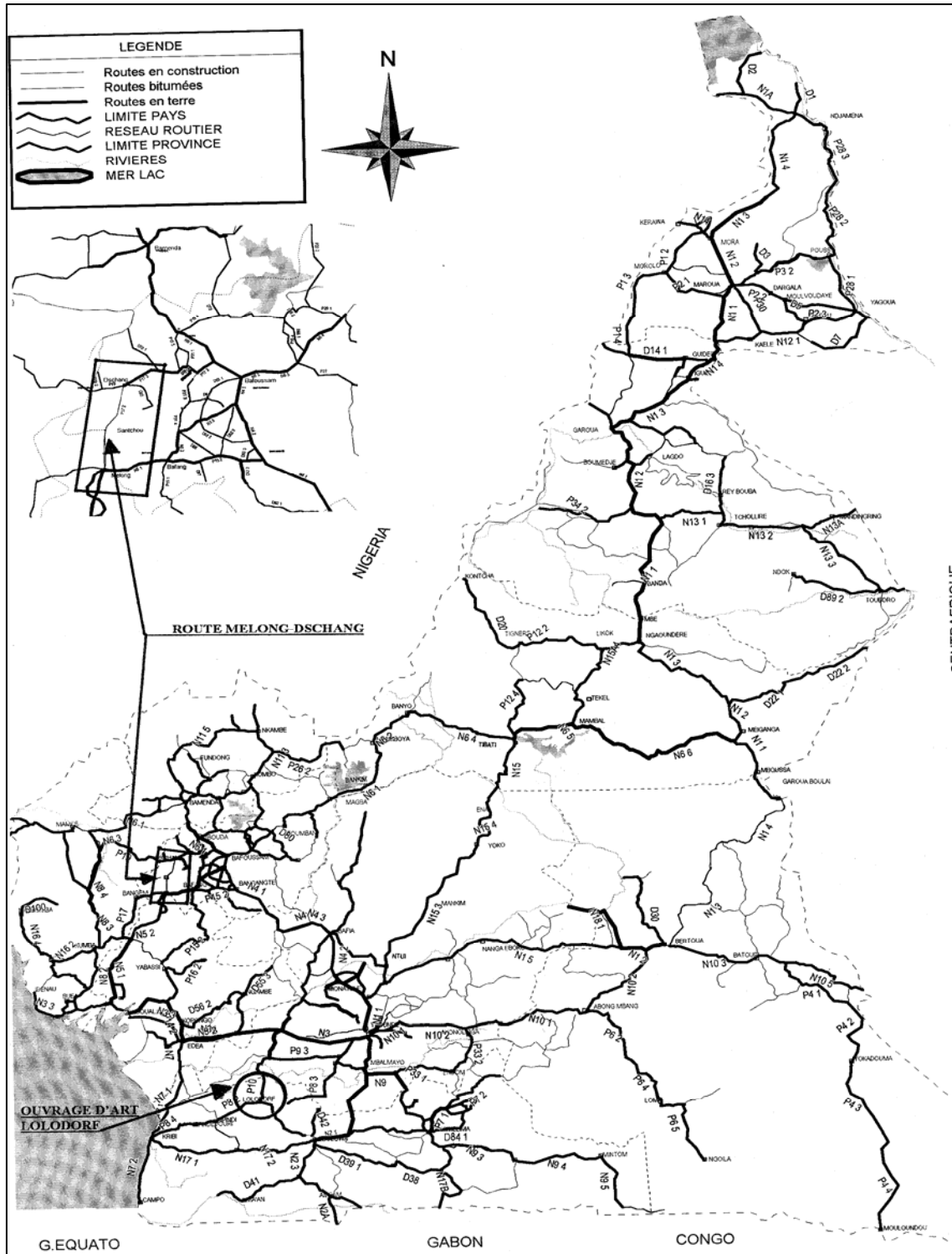
- (1) Take all the necessary steps to provide routine and regular maintenance, as well as control the axle load and ensure the road signs are obeyed;
- (2) Take the necessary steps to undertake works on the part of the road damaged by a landslide, observed during the site visit;
- (3) Expedite an evaluation of the project road structure to determine the causes of the slide and ensure regular technical monitoring so as to be able to make timely arrangements to avoid possible inconvenience;
- (4) In future, take the necessary steps to make procurements, as soon as possible, to avoid negative consequences in the smooth implementation of projects;
- (5) Make every arrangement to find a solution to the outstanding invoices of the project contractors;
- (6) Take all the necessary steps to compensate residents affected by the project route and ensure that those already compensated are moved away;
- (7) Make arrangements to have the audit of the project resources for 2006 performed as soon as possible, and to ensure the final closing of the project and loan accounts;

- (8) Take the necessary steps, as soon as the loan is signed, to mobilize the counterpart funds in order to avoid negative effects on project implementation;
- (9) Have the executing agency schedule a fresh awareness campaign among all the village inhabitants concerned by the project, so as to discourage them from damaging the road signs, bend marker posts and guard rails.

## **Annexes**

1. Location of the Project Road
2. Actual Project Financing Cost by Expenditure Category and/or by Component
3. Annual Disbursements
4. Results of the Economic Calculation
5. Performance Evaluation and Rating
6. Recommendations and Follow-up Measures
7. Borrower's Project Completion Reports
8. Sources of Information

**Location Map of the Project Road**



**Actual Project Cost by Expenditure Category and/or by Component**▪ **Financing Plan by Donors (in million UA)**

Total cost		Appraisal				Completion				Difference (Appr. – Compl.)		
		17.26				29.04				11.78		
Source of Finance		F.E.	L.C.	TOTAL	%	F.E.	L.C/	TOTAL	%	F.E.	L.C/	TOTAL
	<b>ADF</b>	12.96	2.04	15	87%	8.25	6.75	15.00	51.6	+ 4.71	- 4.71	+ 0.00
	<b>GOVT.</b>	0	2.26	2.26	13%	0	14.11	14.11	48.4%	0	- 11.85	- 11.85
	<b>TOTAL</b>	12.96	4.30	17.26	100.0%	8.25	20.86	29.11	100.0%	+ 4.71	- 16.56	- 11.85

▪ **Financing by Expenditure Category (in million UA)**

Component	Appraisal			Completion			Difference (Appr. – Compl.)		
	ADF	Govt	Total	ADF	Govt	Total	ADF	Govt	Total
A. Construction Works	13.90	2.08	15.98	14.07	13.30	27.37	- 0.17	- 11.22	- 11.39
B. Consultancy Services	1.10	0.13	1.23	0.92	0.62	1.54	+ 0.18	- 0.49	- 0.31
C. Operation	0	0.05	0.05	0	0.18	0.18	0	- 0.13	- 0.13
<b>Total DF cost</b>	<b>15.00</b>	<b>2.26</b>	<b>17.26</b>	<b>15</b>	<b>14.11</b>	<b>29.11</b>	<b>+0.00</b>	<b>- 11.85</b>	<b>- 11.83</b>

**Annual Disbursements**

Annual Disbursement Status by Source of Finance (in million UA)

Source of Finance	Year Status		2002	2003	2004	2005	2006	2007	2008	TOTAL	
										Appraisal	Completion
ADF	Appraisal		6.17	6.18	2.65					15	
	Completion				5.03	6.27	2.91	0.79			15.00
GOVT	Appraisal	PIB	0.77	0.74	0.30					2.27 (1.81+0.46)	
		RF		0.46							
	Completion (in CFAF)	PIB			0.62	0.44	0.59	0.15	4.75		6.55 (1.80+4.75)/
		HIPC				0.81	2.43	3.84			7.07
		RF				0.49					0.49

**ADB COMMITMENTS AND PAYMENTS**

Component	Invoices Committed				Amounts Paid (disbursements)				Balance			
	F.E.	F.E.	CFAF	Total	F.E.	F.E.	CFAF	Total	F.E.	F.E.	CFAF	Total
	(Euro)	\$CAD		CFAF	(Euro)	\$CAD		CFAF	(Euro)	\$CAD		CFAF
Road Works	8 642 879.41		5 499 111 56	11 168 468 805	8 233 899.57		5 305 567 853	10 706 651 413	408 979.84		193 544 203	461 817 392
Works Inspection		1 102 706.	256 090 081	999 848 748		1 081 099.51	246 408 269	681 471 902		21 606.49	9 681 812	18 376 847
Audit			16 906 500	16 906 500			6 813 000	16 813 000			93 500	93 500
Sensitisation			6 661 610	6 661 610			6 661 610	6 661 610			0	0
Impacts Monitoring/Evaluation			6 480 000	6 480 000			6 480 000	6 480 000			0	0
<b>TOTAL</b>	<b>8 642 879.41</b>	<b>1 102 706.00</b>	<b>5 785 249 747</b>	<b>11 898 365 664</b>	<b>8 233 899.57</b>	<b>1 081 099.51</b>	<b>5 581 930 232</b>	<b>11 418 077 925</b>	<b>408 979.84</b>	<b>21 606.49</b>	<b>203 319 515</b>	<b>480 287 739</b>

**Results of the Economic Calculation**  
*Economic Assessment (in million CFAF)*

## HDM 4

**CAMEROON**  
Road Improvement Programme in the Littoral, West and Centre provinces  
(Melong Dschang road and Lolodorf bridge)  
**COMPLETION REPORT**  
**ECONOMIC ANALYSIS**  
In million CFAF

PARE (Melong-Dschang road and Lolodorf bridge)

45 Km

Year	Administration cost overruns			Users' cost savings				Net benefits	
	Investment.	Operating cost	Special	VOC	Mot. time	Non mot. time + VOC.	Accidents	External net benefits	Total net benefits
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2004	5 450.11	80.32	0.00	0.00	0.00	0.00	0.00	-393.32	-5 923.75
2005	9 083.52	80.32	0.00	0.00	0.00	0.00	0.00	-655.53	-9 819.37
2006	3 633.41	80.32	0.00	0.00	0.00	0.00	0.00	-262.21	-3 975.94
2007	0.00	-121.93	0.00	2194.46	161.57	0.00	0.00	4.92	2 482.89
2008	0.00	-121.93	0.00	2533.60	195.38	0.00	0.00	6.26	2 857.16
2009	0.00	-50.97	0.00	2917.88	234.60	0.00	0.00	7.99	3 211.43
2010	0.00	-50.97	0.00	3322.92	275.85	0.00	0.00	10.23	3 659.97
2011	0.00	-45.97	0.00	3473.23	310.40	0.00	0.00	13.14	3 842.75
2012	0.00	-40.97	0.00	3520.80	330.80	0.00	0.00	16.93	3 909.50
2013	0.00	-35.97	0.00	3560.00	350.54	0.00	0.00	21.84	3 968.35
2014	2 657.02	-100.97	0.00	4395.01	372.84	0.00	0.00	28.22	2 240.01
2015	0.00	-80.97	0.00	4648.30	396.13	0.00	0.00	36.51	5 161.91
2016	0.00	-80.97	0.00	4904.11	420.76	0.00	0.00	47.29	5 453.12
2017	0.00	-75.97	0.00	5185.46	446.58	0.00	0.00	61.28	5 769.30
2018	0.00	-75.97	0.00	5461.00	473.81	0.00	0.00	79.48	6 090.25
2019	0.00	-60.97	0.00	5724.49	502.19	0.00	0.00	103.12	6 390.77
2020	0.00	-60.97	0.00	6038.41	532.45	0.00	0.00	133.86	6 765.69
2021	0.00	-50.97	0.00	6360.71	564.02	0.00	0.00	173.81	7 149.50
2022	-10 024.00	-50.97	0.00	6711.97	597.66	0.00	0.00	<b>225.73</b>	17 610.33
<b>Total:</b>	<b>10 800.06</b>	<b>-866.44</b>	<b>0.00</b>	<b>70 952.36</b>	<b>6 165.58</b>	<b>0.00</b>	<b>0.00</b>	<b>-340.45</b>	<b>66 844</b>
<b>IRR = 15.68%</b>									

**2 –SENSITIVITY ANALYSIS**

	PARE			
	Case 1	Case 2	Case 3	Case 4
Discount rate (%)	12.0	12.0	12.0	12.0
Multiplier factor for net incomes				
* Agency, Capital and Recurrent	1.00	1.10	1.00	1.10
*Vehicle Operating	1.00	1.00	0.90	0.90
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Discounted Profits (million CFAF)	66 844	67 581	59 021	59 758
IRR. (%)	<b>15.68%</b>	<b>15.69%</b>	<b>14.30%</b>	<b>14.32%</b>

**FORM IP1**  
**IMPLEMENTATION PERFORMANCE**

<b>EVALUATION CRITERIA</b>	<b>RATING (1 to 4)</b>	<b>OBSERVATIONS</b>
<b>1. Adherence to General Schedule</b>	2	There was 13.5 months' delay in the improvement of the Melong Dschang road and the building of highway structures and socio-economic facilities. Their completion scheduled for 2004 at appraisal, took place in July 2007.
<b>2. Adherence to Cost Schedule</b>	1.5	The final project cost at completion increased by over CFAF 5.2974 billion i.e. 30% in relation to the appraisal estimates. The share of the project cost financed by Cameroon jumped from 13 to 48.4% and that of the Bank in CFAF dropped from 87 to 51.6%.
<b>3. Compliance with Covenants/Conditions</b>	3	The Government fulfilled all the general and specific ADF loan conditions.
<b>4. Adequacy of Monitoring-Evaluation and Reporting</b>	3	For the project impact monitoring/evaluation studies, two reports were produced before they were considered and validated. The said works were executed before and during the project implementation. The third report is expected in early 2008. The reports and records, as well as the Borrower's completion report were considered and validated to the satisfaction of the Bank.
<b>5. Satisfactory Operations</b>		
<b>TOTAL</b>	<b>10</b>	
<b><u>Overall Assessment of Implementation Performance</u></b>	<b>2</b>	Category: fair

**FORM BP1**  
**PERFORMANCE OF THE BANK**

<b>EVALUATION CRITERIA</b>	<b>RATING (1 to 4)</b>	<b>OBSERVATIONS</b>
<b>1. At Identification</b>	<b>NA-</b>	The Bank did not undertake any specific identification mission. The project was identified under the TSP.
<b>2. At Project Preparation</b>	<b>2.0</b>	It carried out one specific preparation mission based on the PD and DD studies conducted by the consulting firm (CF) on behalf of the Government.
<b>3. At Appraisal</b>	<b>2.0</b>	The project was satisfactorily appraised. The report dealt with all the aspects relating to project viability and risks, but did not draw up an optimistic procurement schedule.
<b>4. At Supervision</b>	<b>2.0</b>	The Bank correctly monitored entry into force of the loan. Field supervision (7 times) and supervision from the headquarters were rigorous, but the composition of the supervision missions was not always adequate.
<b>TOTAL</b>	<b>6.0</b>	
<b>Overall Assessment of the Bank's Performance</b>	<b>2</b>	Category: Fair

**FORM PO1**  
**IMPACT ON DEVELOPMENT**

EVALUATION CRITERIA	RATING (1 to 4)	OBSERVATIONS
<b>1. Relevance and Achievement of Objectives</b>	<b><u>2.6</u></b>	<b><u>The relevance of the objectives is fully confirmed. The project achieved its main objectives.</u></b>
i. Macro-economic Policy	3.0	The project is in line with an opening up policy.
ii. Sector Policy	3.0	The project is scheduled in the Transport Sector Plan
iii. Physical Component	-	NA
iv. Financial Component	1.0	Premature exhaustion of ADF resources owing to depreciation of UA in relation to CFAP and delay in mobilizing the counterpart fund negatively affected the project.
v. Poverty Reduction, Social Dimension and Gender Issues.	4.0	The social objectives were achieved.
vi. Environment	4.0	The environmental objectives were achieved.
vii. Private sector promotion	1.0	Report of the nature of the works, the SME did not benefit from subcontract.
viii. Others (specify)	-	
<b>2. Institutional Development</b>	<b><u>2.5</u></b>	<b><u>The project institutional performance was satisfactory</u></b>
i. Institutional Framework (including restructuring)	3.0	The executing agency only played its role averagely, as it caused the project to encounter significant delay.
ii. Financial and Management Information Systems, including Audit Systems.	2.0	The project accounts were partially audited.
iii. Transfer of Technology	2.0	The engineer responsible for the project within the executing agency benefited from a transfer of technology through the works inspection mission. The works were therefore subcontracted to a local contractor.
iv. Staffing (including turnover), training and counterpart staff.	3.0	The condition that the Consultants should be provided with qualified staff was fulfilled by the Executing Agency.
<b>3. Sustainability</b>	<b><u>2.6</u></b>	<b><u>The sustainability of the project was ensured by the quality of the works executed and by road maintenance.</u></b>
i. Continued Borrower Commitment.	3.0	The Road Fund will take over road maintenance from the Borrower.
ii. Environmental Policy	-	NA
iii. Institutional Framework	2.5	The necessary reforms have been undertaken under the TSP.
iv. Technical Viability and Staffing.	3.0	The staff of the Executing Agency is adequate.
v. Financial Viability including Cost Recovery Mechanisms.	2.0	The RF is functioning properly and budgets allocated to road maintenance have increased substantially in the last five years (8% per annum on average). The toll will be introduced soon. .
vi. Economic Viability	3.0	The economic viability of the project has been demonstrated.
vii. Environmental Viability	3.0	The living environment of the populations will be improved through the supporting measures.
viii. Operation and Maintenance Facilitation (availability of recurrent funding, foreign exchange, spare parts, workshops, etc).	2.0	The RF will cater for the maintenance of the project road from the end of the guarantee period, i.e. July 2009 with the additional resources generated by the toll. .
<b>4. Internal Rate of Return</b>	<b><u>3.0</u></b>	The internal rate of return of the project highways and service roads is 15.68%
<b><u>Overall Assessment of the Impact on Development.</u></b>	<b><u>2.6</u></b>	<b>The overall performance of the project is fair.</b>

**Matrix of Recommendations and Follow-up Measures**

MAIN FINDINGS AND CONCLUSIONS	LESSONS LEARNT/RECOMMENDATIONS	FOLLOW-UP ACTIONS	RESPONSIBILITY
<p>▪ <u>Project Formulation and Justification</u> The mission was based on the technical-economic studies (PD and DD) of the project road.</p>	<p>The appraisal was based on the PD and DD studies of the project road, which are relatively correct.</p>	<p>-</p>	<p>Borrower/Executing Agency</p>
<p>▪ <u>Project Implementation</u> The CSEPR was efficient during works implementation.</p>	<p>It would be desirable to further strengthen this unit by training and retraining actions.</p>	<p>Drawing up of a training programme</p>	<p>Bank and the Executing Agency</p>
<p>▪ <u>Compliance with the Loan Covenants/Conditions</u> The Borrower fulfilled the conditions precedent to loan effectiveness.</p>	<p>Improve the reliability of the counts by possibly resorting to subcontracting.</p>	<p>Sensitisation and training of professional staff and workers in charge of road counts.</p>	<p>Executing Agency</p>
<p>▪ <u>Project Performance Evaluation and Outcome</u> The project achieved its objectives and was satisfactorily implemented. Nevertheless, owing to lack of funds due to UA depreciation and slowness in the mobilization of the counterpart funds, the completion of certain project components was postponed to a latter date.</p>	<p>The Borrower will have to mobilize the resources necessary to complete the remaining project components as soon as possible. It should also tidy up the completed works and resolve the outstanding problems, namely pay the balance due and effectively move the compensated residents.</p>	<p>Take all the necessary steps to complete the remaining project components as soon as possible and tidy up the completed components.</p>	<p>Borrower/Executing Agency</p>
<p>▪ <u>Sustainability</u> The technical and geotechnical characteristics of the project road make it possible, considering the predictable traffic, to ensure strong resistance throughout the project life.</p>	<p>The role of the SME should be strengthened to guarantee the quality of the routine and periodic maintenance.</p>	<p>Provide correct routine and periodic maintenance, control axle overload and ensure road signs are obeyed.</p>	<p>Borrower/Executing Agency</p>

**ANNEX 7**  
**Borrower's Completion Report**

Sources of information

Project appraisal report prepared by the Bank in December 2000.

Project supervision reports prepared by the Bank in

- May 2003
- November 2003
- April 2004
- October 2004
- April 2005
- April 2006
- November 2006
  
- Works completion report of the works inspection mission, prepared by Works Inspection (BET SNC LAVALIN), (August 2007);
- Project completion report prepared by the Borrower (October 2007);
- First and second phase reports on the Monitoring/Evaluation of project impacts, prepared by FASA;
- Final report on the sensitisation and health education of the populations, prepared by the NGO CARFAD;
- 2004 and 2005 audit reports of the Consulting and Accounting Firm CAEAC.

**ANNEX 9**

**Borrower's Comments on Bank PCR.**