

PROJECT COMPLETION REPORT

A. PROJECT DATA AND KEY DATES

I. BASIC INFORMATION

Project Number	Project Name	Country	
P-BJ-DB0-010	Djougou-N'dali Road Upgrade Project	Republic of Benin	
Lending Instrument(s):		Department:	Environmental Classification:
Loan No. 2100150007284		Transport and ICTs	Category II
Original Commitment Amount	Amount Cancelled	Amount disbursed	Percentage disbursed
ADF : UA 11,110,000 NTF: UA 4,000,000	ADF: UA 2 333 947.87 NTF: UA 3,194.94	ADF: UA 8,766,052.13 NTF: UA 3,996,805.06	ADF: 78.99% NTF: 99.92% Overall: 89.46%
Borrower			
Republic of Benin			
Executing Agency(ies) [List the main Ministries, Project Implementation Units, Agencies and civil society organizations responsible for implementing project activities.]			
Ministry Delegate at the Presidency of the Republic in charge of Road Transport, Air transport and Public Works.			
Co-financers and other External Partners [List all other sources and amounts of financing, technical assistance or other resources used in this project]			
BOAD: CFAF 3,500 million; Government: CFAF 4,198 million			

II. KEY DATES

Project Concept Note Cleared by Ops. Com.	Appraisal Report Cleared by Ops. Com.	Board Approval	
Not applicable	Not applicable	22 July 2003	
Restructuring(s)			
Not applicable, Project not restructured			
	Original Date DD/MM/YY	Actual Date DD/MM/YY	Difference in months
EFFECTIVENESS	July 2003	12/10/2004	15 months
MID-TERM REVIEW	22 May 2005	Not conducted	
CLOSING	31 December 2007	For on-going projects enter date of 98% disbursement rate	28 months
		30 April 2010	

III. RATINGS SUMMARY

Insert notes from the relevant tables in the different sections of the PCR. For example, please insert the “Overall Output score” in Section D.I. in the “Achievement of Outputs” box below.

CRITERIA	SUB-CRITERIA	SCORE
PROJECT OUTCOME	Achievement of Outputs <i>(insert score from Section D.I.)</i>	4
	Achievement of Outcomes <i>(insert score from Section D.II.)</i>	2.4
	Timeliness <i>(insert score from Section F.4)</i>	2
	OVERALL PROJECT OUTCOME <i>(score is calculated as an average of the ratings)</i>	3
BANK PERFORMANCE	Design and Readiness <i>(insert score from Section I.I)</i>	3
	Supervision <i>(insert score from Section I.I)</i>	3
	OVERALL BANK PERFORMANCE <i>(score is calculated as an average of the ratings)</i>	3
BORROWER PERFORMANCE	Design and Readiness <i>(insert score from Section I.I)</i>	2
	Implementation <i>(insert score from Section I.I)</i>	3
	OVERALL BORROWER PERFORMANCE <i>(score is calculated as an average of the ratings)</i>	3

IV. RESPONSIBLE BANK STAFF

POSITIONS	AT APPROVAL	AT COMPLETION
Regional Director	(OCDW)	J.K LITSE (ORWA)
Sector Director	R. RAKOTOBÉ (OCIN)	G. MBESHERUBUSA (OINF)
Sector Manager	B.L.M. ASKOFARE (OCIN.3)	A. KIES (OINF.1)
Task Manager	M. MBODJ (OCIN.3)	J.N ILBOUDO (OINF.1)
PCR Team Leader		Ms. SIDIBE DIOUF (OINF.1/SNFO)
PCR Team Members		

B. PROJECT CONTEXT

Summarize the rationale for Bank assistance. State:
 -what development challenge the project addresses,
 -the borrower's overall strategy for addressing it,
 -Bank activities in this country (ies) and sector over the past year and how they performed, and
 -ongoing Bank and other externally financed activities that complement, overlap with or relate to this project.
 Please cite relevant sources. Comment on the strength and coherence of the rationale.
[300 words maximum]. Any additional narrative about the project's origins and history, if needed, must be placed in Annex 6: Project Narrative]

The project entails opening up access to municipal capitals, improving the mobility of rural dwellers, developing local capacity, and promoting community participation in decision-making on local development and sub-regional integration issues. The strategy for addressing this challenge is defined in Benin's Poverty Reduction Strategy Paper (PRSP), the 2002-2004 ADF strategy for Benin which focused on the transport sector, and the 1997-2006 Transport Sector Programme (TSP) adopted by the Government with donor support. In 2009, the Bank's portfolio in Benin comprised 19 operations, including 2 (two) in the transport sector, namely: the current project co-financed by the ADF, BOAD, NTF, Government of Benin and beneficiaries; and the on-going Pobè-Kêtou-Illara Road Project. Construction of the remaining two segments, namely: the Djougou-Ouaké-Togo border stretch, currently under construction with BOAD financing, and the N'dali-Chicandou-Nigerian border stretch which is commencing with Bank financing, completes the transversal Northern corridor linking Togo to Nigeria.

C. PROJECT OBJECTIVES AND LOGICAL FRAMEWORK

1. State the Project Development Objective(s) (as set out in the appraisal report)			
The sector objective of the project was to improve transport sector efficiency to boost economic recovery and contribute to the expansion of national and international trade. The specific objectives included: (i) improving the standard of service along the Djougou-N'dali crossway; (ii) improving access to villages and rural community mobility in the project area (PA) through road maintenance and adherence of the beneficiary community to the road maintenance strategy; (iii) reducing the distance covered by local communities to fetch drinking water; and (iv) building the capacity of the Project Monitoring Unit.			
Describe the <u>major</u> project components and indicate how each will contribute to achieving the Project Development Objective(s).			
Project components: (i) double-layer upgrade/paving of 125 km of dirt roads to improve their standard of service; (ii) development of 250 km of rural roads to increase access to the villages and boost rural community mobility; (iii) drilling of new boreholes through a participatory strategy to reduce the distance covered to fetch drinking water; and (iv) provision of IT hardware and furniture to DGTP to build the monitoring capacity of the project unit.			
3. Provide a brief assessment (up to two sentences) of the <u>project objectives</u> along the following 3 dimensions. Insert a working score, using the scoring scale provided in Appendix 1.			
PROJECT OBJECTIVES DIMENSIONS		APPRAISAL	SCORE
RELEVANT	a) Relevant to the country's development priorities	The project's sector objective tallies with the country's Growth and Poverty Reduction Strategy Paper (GPRSP).	4
ACHIEVABLE	b) Objectives deemed achievable considering the contributions to the project and the envisaged timeframe	The targeted objectives were achievable within the prescribed timeframe despite the participatory approach which generally gives rise to longer deadlines.	4
CONSISTENT	c) Consistent with the Bank's country or regional strategy	The Project is consistent with the CSP for 2002-2004.	4

	d) Consistent with the Bank's corporate priorities	The project is in line with the Bank's strategy, which focuses on infrastructure development.	4
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4. Lay out the logical framework. Summarize the log. frame. If a log. frame does not exist, complete the table below, indicating the overall project development objective, the major components of the project, the major activities of each component and their expected outputs, outcomes, and indicators for measuring the achievement of outcomes. Add additional rows for components, activities, outputs or outcomes if needed.

SUMMARY DESCRIPTION	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS / RISKS
<p>SECTOR OBJECTIVE</p> <p>1.1. Improve transport sector efficiency to boost economic recovery and contribute to the expansion of national and international trade.</p>	<p>1.1. The state of the 3000-km road network improves from fair to good in 2007; 1.2. Transport sector share of GDP grows from 3% to 5% by 2007; 1.3. Increase of over 10% in transit transport from 2007.</p>	<p>1.1. MTPT statistical and itinerary plans 1.2. Economic and agricultural statistics</p>	
<p>PROJECT OBJECTIVES</p> <p>2.1. Improve the standard of service along the Djougou-N'dali crossway; 2.2. Improve access and rural community mobility within the PA as well as community support for the road maintenance strategy; 2.3. Reduce the distance covered by the community to fetch drinking water.</p>	<p>2.1.1. Over 15% increase in traffic from 2006; 2.1.2. A 25% reduction in vehicle operating costs along the crossway from 2007; 2.2. A 50% increase in trade and mobility in the PA in 2007 and in community financial contributions collected for the construction of roads and boreholes; 2.3. Distance covered to fetch water reduces from 5 km to 2.5 km in the PA from 2007; 2.4. Unit consolidated with staff and equipment; at least 10 persons trained in IT and rural road management and project accounting improved from 2003 to 2006.</p>	<p>2.1.1. Economic statistics 2.1.2. Road traffic counts and surveys 2.2. Agricultural statistics 2.3. Progress reports of the Directorates in charge of roads and FER 2.4. Same as 2.3 above</p>	<p>2.1. Continuation of works that promote regional integration; 2.2. Continuation of the policy to open up access to remote villages; 2.3. Effective control of road checkpoint regulation.</p>
<p>OUTPUTS</p> <p>3.1. 125 km of new paved roads; 3.2. PA communities sensitized to road and borehole financing, maintenance strategies, environmental protection, road safety, STD/AIDS and malaria; 3.3. 250 km of rural feeder roads rehabilitated and/or maintained; 3.4. Equipped boreholes constructed.</p>	<p>3.1. Total length and technical characteristics of paved roads in service at the end of 2006 that comply with ICTNAR norms and ECOWAS profiles; 3.2. At least 10,000 persons sensitized to road and borehole maintenance strategies, environmental protection, road safety, STD/AIDS and malaria; and close to 3000 treated mosquito nets distributed to project site workers from 2003 to 2006; 3.3. Eligible roads and boreholes selected from 2003; total length and technical characteristics of roads developed or rehabilitated at the end of 2006; 3.4. Eligible boreholes selected from 2003; number of constructed and equipped boreholes and worksite buildings handed over to the local community on works completion at end 2006.</p>	<p>3.1. Progress, supervision, audit and project completion reports. 3.2. Same as 3.1 above 3.3. Same as 3.1 above and report on handover of boreholes to village communities 3.4. Same as 3.1 above 3.5. Same as 3.1 above 3.6. Audit contract, audit reports, equipment procurement contract and training</p>	<p>3.1. Community capacity to contribute to the financing of roads and boreholes; 3.2. FER capacity to raise the resources needed for comprehensive road maintenance.</p>

		<i>attestation</i>																																																																																																																																	
<p>ACTIVITIES (COMPONENTS)</p> <p>4.1. Set up the Project Monitoring Unit (PMU);</p> <p>4.2. Recruit consultants or NGOs to conduct awareness-raising campaigns;</p> <p>4.3. Recruit consultants for road studies and detection of water points;</p> <p>4.4. Prepare bidding documents and recruit contractors and consultants for works control and project audit;</p> <p>4.5. Execution of road works and construction of boreholes</p> <p>4.6. Works monitoring and supervision.</p>	<p>4. INPUTS / RESOURCES</p> <p>Expenditure categories (in UA million)</p> <table border="1"> <thead> <tr> <th></th> <th>F.E.</th> <th>L.C.</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>A - Works</td> <td></td> <td></td> <td></td> </tr> <tr> <td>- Road development</td> <td>10.58</td> <td></td> <td>2.65</td> </tr> <tr> <td></td> <td>13.23</td> <td></td> <td></td> </tr> <tr> <td>- Road works</td> <td>1.40</td> <td>0.35</td> <td>1.75</td> </tr> <tr> <td>- Related works</td> <td>0.36</td> <td>0.09</td> <td>0.45</td> </tr> <tr> <td>B - Goods</td> <td>0.02</td> <td>0.03</td> <td>0.06</td> </tr> <tr> <td>C- Consultancy services</td> <td></td> <td></td> <td></td> </tr> <tr> <td>- Detailed road studies</td> <td>0.11</td> <td></td> <td>0.03</td> </tr> <tr> <td></td> <td>0.13</td> <td></td> <td></td> </tr> <tr> <td>- Awareness-raising</td> <td>0.09</td> <td></td> <td>0.02</td> </tr> <tr> <td></td> <td>0.11</td> <td></td> <td></td> </tr> <tr> <td>- Works monitoring and supervision</td> <td>0.88</td> <td>0.22</td> <td>1.10</td> </tr> <tr> <td>- Audit</td> <td>0.10</td> <td>0.03</td> <td>0.13</td> </tr> <tr> <td>- Technical assistance</td> <td></td> <td>0.03</td> <td>0.03</td> </tr> <tr> <td>- Training</td> <td>0.03</td> <td>0.01</td> <td>0.03</td> </tr> <tr> <td>D – Operating costs</td> <td></td> <td>0.09</td> <td>0.09</td> </tr> <tr> <td>Base costs</td> <td>13.57</td> <td>3.54</td> <td>17.11</td> </tr> <tr> <td>Physical contingencies</td> <td>1.36</td> <td></td> <td>0.35</td> </tr> <tr> <td></td> <td>1.71</td> <td></td> <td></td> </tr> <tr> <td>Price escalation</td> <td>1.13</td> <td>0.29</td> <td>1.42</td> </tr> <tr> <td>Total</td> <td>16.06</td> <td>4.19</td> <td>20.25</td> </tr> </tbody> </table> <p>Sources of Financing (in UA millions)</p> <table border="1"> <thead> <tr> <th></th> <th>F.E.</th> <th>L.C.</th> <th>Total</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>ADF</td> <td>10.10</td> <td>1.01</td> <td>11.11</td> <td>54.88%</td> </tr> <tr> <td>NTF</td> <td>3.20</td> <td>0.80</td> <td>4.00</td> <td>19.77%</td> </tr> <tr> <td>BOAD</td> <td>2.76</td> <td>0.68</td> <td>3.45</td> <td>17.02%</td> </tr> <tr> <td>Beneficiaries</td> <td></td> <td></td> <td>0.23</td> <td>0.23</td> </tr> <tr> <td></td> <td></td> <td></td> <td>1.16%</td> <td></td> </tr> <tr> <td>GOV'T</td> <td></td> <td>1.45</td> <td>1.45</td> <td>7.16%</td> </tr> <tr> <td>Total</td> <td>16.06</td> <td>4.19</td> <td>20.25</td> <td>100%</td> </tr> </tbody> </table> <p>Human Resources Project Unit staff and consultants for supervision, audit, training, technical assistance, studies and awareness-raising campaigns; ADF supervision mission and donors</p>		F.E.	L.C.	Total	A - Works				- Road development	10.58		2.65		13.23			- Road works	1.40	0.35	1.75	- Related works	0.36	0.09	0.45	B - Goods	0.02	0.03	0.06	C- Consultancy services				- Detailed road studies	0.11		0.03		0.13			- Awareness-raising	0.09		0.02		0.11			- Works monitoring and supervision	0.88	0.22	1.10	- Audit	0.10	0.03	0.13	- Technical assistance		0.03	0.03	- Training	0.03	0.01	0.03	D – Operating costs		0.09	0.09	Base costs	13.57	3.54	17.11	Physical contingencies	1.36		0.35		1.71			Price escalation	1.13	0.29	1.42	Total	16.06	4.19	20.25		F.E.	L.C.	Total	%	ADF	10.10	1.01	11.11	54.88%	NTF	3.20	0.80	4.00	19.77%	BOAD	2.76	0.68	3.45	17.02%	Beneficiaries			0.23	0.23				1.16%		GOV'T		1.45	1.45	7.16%	Total	16.06	4.19	20.25	100%	<p>4.1. Signed contracts</p> <p>4.2. Appraisal estimates</p> <p>4.3. Project accounting</p> <p>4.4. Disbursement contracts</p> <p>4.5. Loan agreements</p> <p>4.6. Meeting minutes</p>	<p>4.1. Coordination of implementation of project components</p> <p>4.2. Compliance with planning</p>
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5. For each dimension of the log. frame, provide a brief assessment (up to two sentences) of the extent to which the log. frame achieved the following. Insert a working score, using the scoring scale provided in Appendix 1. If no log. frame exists, score this section as a 1 (one).

LOG. FRAME DIMENSIONS		APPRAISAL	SCORE
LOGICAL	a) Presents a logical causal	The logical framework presents a logical causal chain	4

	chain for achieving the project development objectives	between objectives and expected outcomes.	
MEASURABLE	b) Expresses objectives and outcomes in a way that is measurable and quantifiable	The key objectives are expressed in a way that is measurable and quantifiable (125 km of paved roads, 250 km of earth roads, 40 boreholes to be constructed)	4
THOROUGH	c) States the risks and key assumptions	The logical framework clearly stated the assumptions and risks related to community capacity to participate in financing roads and boreholes, and coordinating the project.	4

D. OUTPUTS AND OUTCOMES

I. ACHIEVEMENT OF OUTPUTS

In the table below, assess the achievement of actual vs. expected outputs for each major activity. Import the expected outputs from the log. frame in Section C. Score the extent to which the expected outputs were achieved. Weight the scores by the activities' approximate share of project costs.

MAJOR ACTIVITIES		Working score	Proportion of project costs in percentage (as mentioned in the appraisal report)	Weighted Score
Expected Outputs	Actual Outputs			
The technical and economic studies are updated, bidding documents are prepared and the works are efficiently monitored and controlled.	Technical and economic studies updated, bidding documents prepared and works monitoring/control conducted	3	4.25%	0.128
Road works executed according to the required standards and on time.	The entire road was built. However, the six existing bridges were not expanded as planned because there were drawings showing new landmarks and figures. Nevertheless, the road signs at the entrance to these bridges were increased and the resources allocated for their enlargement were used for the construction of a new bridge to eliminate a highly hazardous road segment.	4	94.43%	3.777
Project area communities are sensitized to road maintenance and financing strategies, malaria, HIV/AIDS and road safety.	184,000 persons sensitized and 3,000 treated mosquito nets distributed.	3	0.30%	0.009
Technical studies, including bidding documents, for 250 km of feeder roads are prepared and the works executed.	Technical studies, including bidding documents, were conducted but the roads were not built. Executing these works required a third extension of the deadline for the last loan disbursement, which would have seriously affected the quality of the country's portfolio. Hence, the Government and the Bank decided to cancel the said works and the Government undertook to execute them with financing from other sources.	1	0.30%	0.3%
Identification and studies for	Identification and studies for 40 boreholes	1	0.05%	0.05

40 boreholes equipped with manual pumps are conducted and their construction completed.	were indeed conducted, but the boreholes were not drilled apparently due to feeder road works; the Government undertook to execute this component with financing from other sources.			
The technical, accounting and financial audits of the project for 2006, 2007, 2008 and 2009 are conducted in accordance with the applicable rules.	All audits were conducted and approved by the Bank.	4	0.13%	0.0052
An accountant is appointed to assist the project monitoring unit with project accounting and project account monitoring.	The accountant was appointed.	4	0.47%	1.88
The Project Monitoring Unit is provided with IT equipment and vehicles.	4.3 The Project Monitoring Unit was partially provided with the expected logistic resources and equipment.	3	0.08%	0.24
OVERALL OUTPUT SCORE [Score is calculated as the sum of weighted scores]				4

Check here to override the score

Provide justification for over-riding the score

Insert the new score or re-enter the calculated score	4
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II. ACHIEVEMENT OF OUTCOMES

1. Using available monitoring data, assess the achievement of expected outcomes. Import the expected outcomes from the log. frame in Section C. Score the extent to which the expected outcomes were achieved.
 OVERALL OUTPUT SCORE [Score is calculated as an average of the working scores] Override the auto-calculated score, if desired, and provide justification.

OUTCOMES		Working score
Estimates	Actual	
An increase of over 15% in traffic along the Djougou-N'dali crossway from 2006.	The road was commissioned in August 2009 instead of 2006 as planned. The weighted average traffic surged from 253 vehicles/day at project appraisal (2002) to 1085 vehicles/day in 2009, representing an increase of 329%. The traffic projections for 2009 stand at 356 vehicles/day.	4
A 25% reduction in vehicle operating costs along the crossway from 2007.	Savings on VOCs stood at CFAF 71175.57 million in 2009, compared to CFAF 54,826 at project appraisal, representing a VOC reduction of 29.82%.	4
A 50% increase in trade and mobility in the PA in 2007 and community financial contributions collected for construction of the roads and boreholes.	Since the rural roads were not built, the increased mobility is generated by the main road alone and the communities did not contribute financially to the project.	1

Distance covered to fetch water reduces from 5 km to 2.5 km in the PA from 2007.	Since the boreholes were not built, the expected outcomes were not attained. The boreholes used for road construction were handed over to the local communities.	1
Unit consolidated with staff and equipment. At least 10 persons trained in IT; rural road management and project accounting improve between 2003 and 2006.	The entire staff was not provided as planned; equipment was only partially provided by the Government.	2
OVERALL OUTPUT SCORE [Score is calculated as an average of the working scores]		2,4

Check here to override the auto-calculated score

Provide justification for over-riding the calculated score

Not Applicable

Insert the new score or re-enter the calculated score

2,4

2. Additional outcomes: Comment on the project's additional outcomes not captured in the log. frame, including crosscutting issues (e.g., gender).

Impact on gender: The benefits accruing to PA communities in general and women in particular are: (i) easy access to markets, reduced costs, increased farm income, lower medical evacuation costs, better understanding of risks associated with such diseases as STD/AIDS and malaria. Road safety campaigns organized along the paved road had a clear impact in reducing accidents in roadside schools, markets and at the entrance and exits of roadside villages and settlement areas.
Impact on poverty: (i) increased income for local employees and communities (sale of farm produce) during project implementation; and (ii) development of agriculture and local trade.

3. Risks to sustained achievement of outcomes. State the factors that affect, or could affect, the long-run or sustained achievement of project outcomes. Indicate if any new action or institutional change is recommended to sustain outcomes. The analysis should be based on the sensitivity analysis in Annex 3, if relevant.

Sustainability of the project road is predicated on Government's commitment to: (i) apply the WAEMU rule on axle load limits; the tollgate/weigh station, financed by the Bank, will be built in 2011 as part of works along the N'dali-Nikki-Chicandou-Nigerian border segment of the same road, which will make it possible to mitigate such risks; and (ii) increase own resources of the Road Fund, which is the organ responsible for road maintenance financing. Such increase is one of the conditions for financing the on-going N'dali-Nikki-Chicandou-Nigerian Border Road Project.

E. PROJECT DESIGN AND READINESS FOR IMPLEMENTATION

1. State the extent to which the Bank and the Borrower ensured the programme was commensurate with the Borrower's capacity to implement by designing it appropriately and by putting in place the necessary implementation arrangements. Consider all major design aspects, such as: Questions related to design are the following: Consider all major design aspects, such as extent to which project design took into account lessons learned from previous PCRs in the sector or the country (please cite key PCRs); whether the project was informed by robust analytical work (please cite key documents); how well Bank and Borrower assessed the capacity of the implementing agencies and/or Project Implementation Unit; scope of consultations and partnerships; economic rationale of project; and provisions made for technical assistance. [250 words maximum. Any additional narrative about implementation should be included in Annex 6: Project Narrative.]

The lessons learnt from 11 road projects executed in Benin from 1974 to 2001, an audit of Bank operations in Benin conducted in August 2001 and operations of other donors (lessons with regard to rural road design and maintenance strategies, and rural drinking water supply) have shown that despite the reforms implemented in this sector, other obstacles persist that must be addressed to guarantee the efficient and cost-effective construction of road projects. These include retraining and increasing human resources at the Roads Directorate to provide project technical and accounting monitoring, and especially to promote local SMEs in the public works sector. Considering these lessons, the Project Monitoring Unit comprising DGTP engineers, is

relying on experts in the regional public works and water supply directorates, who have been trained and provided with IT equipment support. Furthermore, the allotment of road and borehole works was done with a view to promoting local SMEs.

2. For each dimension of project design and readiness for implementation, provide a brief assessment (up to two sentences). Insert a working score, using the scoring scale provided in Appendix 1.

PROJECT DESIGN AND READINESS FOR IMPLEMENTATION DIMENSIONS		APPRAISAL	Working score	
REALISM	a) Project complexity is matched with country capacity and political commitment.	Project design took into account the country's capacity and political commitment, especially in implementing reforms under the Transport Sector Programme (TSP); however, its implementation performance was unsatisfactory. Community awareness-raising and considerations to transform the Road Fund into a second-generation fund are design elements aimed at mitigating risks identified. Country systems were used only for goods, supplies and travel expenses of Unit staff financed by the Government. All other procurements were done in accordance with Bank rules, since BOAD agreed to comply with these rules.	2	
RISK ASSESSMENT AND MITIGATION	b) Project design includes adequate risk		4	
USE OF COUNTRY SYSTEMS	c) Project procurement, financial management, monitoring and/or other systems were based on those already in use by government and/or other partners		4	
			3,33	
For the following dimensions, provide separate working scores for Bank performance and Borrower performance:			Bank	Borrower
CLARITY	d) Responsibilities for project implementation are clearly defined.	The provisions were clearly defined.	3	3
PROCUREMENT READINESS	e) Necessary implementation documents (e.g. specifications, design, procurement documents) are ready at appraisal.	The said documents were ready, except those concerning rural roads and boreholes. The latter should be finalized during the project phase, using the participatory approach.	2	2
MONITORING READINESS	f) Monitoring indicators and monitoring plan are adopted.	The indicators were defined in the logical framework but monitoring arrangements were not defined at project appraisal. The collection of certain monitoring/evaluation data caused delays in finalizing the project completion report. Having learnt from these weaknesses, new projects make provision for monitoring/evaluation by competent State structures.	2	2
BASELINE DATA	(g) Baseline data collection has been completed or is underway.	The project made no provisions for a specific monitoring/evaluation system, but baseline situation data was collected during project appraisal from the institute in charge of economic	4	4

statistics. As concerns road traffic data, annual traffic counts are conducted regularly. Thanks to this, baseline data was obtained.

F. IMPLEMENTATION

1. State the major characteristics of project implementation with reference to: adherence to schedules, quality of construction or other work, performance of consultants, effectiveness of Bank supervision, and effectiveness of Borrower oversight. Assess how well the Bank and the Borrower ensured compliance with safeguards.

[300 words maximum. Any additional narrative about implementation should be included in Annex 6: Project Narrative.]

Compliance with conditions precedent /commitments: The loan was signed (12/01/2004) 5 months following its approval (22/07/2003), and became effective (12/10/2004) 9 months after signature. The first disbursement was made on 30/03/2006, close to 3 years after approval.

Procurement performance: The project experienced bottlenecks in the procurement of rural road and borehole studies. As concerns the rural roads, services that were initially scheduled to start in April 2004 finally commenced in December 2008 and ended in September 2009, representing a four-year slippage. With respect to boreholes, bids were submitted on 15/07/2008, the contract approved on 22/09/2009 and the study report was expected in the first quarter of 2010. Consequently, works on rural roads and boreholes could not start before 30 April 2010, the extended final disbursement deadline. Completion of these works required a new extension of the final disbursement deadline. Doing so would have significantly affected overall portfolio performance. Hence, during the October 2009 portfolio review, the Government and the Bank decided to cancel these components.

Financial performance: The disbursement rate for Bank resources (ADF 79% and NTF 100%) is about 89.5%. The four audit reports for 2006, 2007, 2008 and 2009 were submitted to and approved by the Bank.

Compliance with implementation schedule: The projected closing date was 31 December 2007. Although the loan was extended to 30 April 2010 (representing 28 additional months), activities could not be completed due to late fulfilment of loan conditions and delays in procurement. However, the largest component in financial terms (Djougou – N'dali main road) was completed on schedule (25.5 months). During the implementation phase, the project encountered a number of institutional (the project management unit was not provided with its entire staff as planned), economic (the economic crisis led to a depreciation of the dollar and, consequently, of the UA) and financial problems (national counterpart contribution was not raised in time). It also faced the frequent turnover of project task managers at the Bank. These difficulties notwithstanding, the outputs achieved at completion are substantial, although all the components were not implemented. The quality of the road and engineering structures is satisfactory. The facilities meet the technical standards set in the bidding documents (road breadth of 7m, road shoulders of 1.5m and a double-layer surface course). Adjustments made have helped to improve the project's geometrical design (elimination of highly-winding alignments and hazardous road segments) and increased road safety.

A mid-term review mission was planned at appraisal but was not conducted. Supervision missions helped the project coordination team to take decisions requiring broad consensus or a high level of authority.

Although the supervision missions were beneficial overall despite their composition (task manager only), it is worth noting that there was a succession of five task managers at the Bank. This prevented the swift processing of dossiers and effective action. However, non-objection notices and disbursement applications were processed within a reasonable timeframe.

2. Comment on the role of other partners (e.g. donors, NGOs, contractors, etc.). Assess the effectiveness of co-financing arrangements and of donor coordination, if applicable.

BOAD, which co-financed the project, accepted that the Bank's procurement rules of procedure be used and that procurement dossiers be submitted only to the ADF for consideration prior to publication. This condition was one of the factors that increased project effectiveness notably by speeding up the procurement process. Oversight by BOAD and the Bank, acting through separate supervision missions, was satisfactory overall. However, the joint supervision missions that should have served as efficient coordination fora for donors and a catalyst to project performance could not be conducted. The Bank should have played a more active role in organizing fora (joint supervisions or coordination meetings) that bring co-financers together.

3. Harmonization. State whether the Bank made explicit efforts to harmonize instruments, systems and/or approaches with other partners.

With respect to aid coordination, the missions met regularly with donors operating in the sector and represented in Benin, such as the World Bank, BOAD, the European Union and DANIDA. Such meetings enabled various missions to ensure the consistency and complementarity of Bank operations in Benin, especially for the Rural Roads component that follows a community approach in selecting priority roads and executes works using the labour-intensive method. Furthermore, BOAD agreed to comply with the Bank's procurement rules.

4. For each dimension of project implementation, assess the extent to which the project achieved the following. Provide a brief assessment (up to two sentences) and insert a working score, using the scoring scale provided in Appendix 1.

PROJECT IMPLEMENTATION DIMENSIONS		APPRAISAL		WORKING SCORE
TIMELINESS	a) Extent of project adherence to the original closing date. If the number on the right is: below 12, "4" is scored between 12.1 to 24 "3" is scored between 24.1 to 36, "2" is scored beyond 36.1, "1" is scored.	Difference in months between original closing date and actual closing date or date of 98% disbursement.	The deadline for last disbursement initially set for 31/12/2007 was extended to 30/04/2010.	2
		28		
BANK PERFORMANCE	b) Bank complied with:			
	Environmental Safeguards	The project is classified in Category II. An ESMP and a resettlement plan were prepared and implemented in accordance with the relevant Bank and country policies.		4
	Fiduciary Requirements	The Bank regularly made loan disbursements for project activities. The 2006, 2007 2008 and 2009 audit reports were all validated by the Bank. Most of the recommendations were implemented.		4
	Project Covenants	The Bank respected its commitments as stipulated in the loan agreement.		4
	c) Bank provided quality supervision in the form of skills mix provided and practicality of solutions.	The supervision missions were spaced out (a little less than 1 per year) but the recommendations were relevant. . Furthermore, the project's initially planned mid-term review was not conducted.		1
d) Bank provided quality management oversight.	The Bank provided quality management oversight.		4	
BORROWER PERFORMANCE	e) Borrower complied with:			
	Environmental Safeguards	The Ministry in charge of the Environment, the Environment Unit of the Ministry of Public Works and the Beninese Environment Agency are appropriately involved in monitoring the implementation of ESMP measures.		4
	Fiduciary Requirements	Counterpart funds were not mobilised on time. The funds amounted to CFAF 3,868.62 million compared with the projected CFAF 4,076.68, representing a 95% implementation rate.		2
	Project Covenants	Despite reminders from the Bank, the Borrower did not respect the "Other Conditions" of the loan agreement relating to transmission of road maintenance budget		2

		allocations to the Bank on 30 April of each year.	
	f) Borrower was responsive to Bank supervision findings and recommendations.	The recommendations of supervision missions were communicated to the Borrower, but some of them were not implemented, especially those related to weaknesses noted within the PMU and its poor mobilisation.	3
	g) Borrower collected and used monitoring information for decision making.	The Borrower did not take the necessary measures to make the competent services collect the economic statistics provided for in the project's logical framework. However, road traffic counts were conducted after the road was commissioned.	2

G. COMPLETION

1. Is the PCR delivered on a timely basis, in compliance with Bank policy?			
Date project reached 98% disbursement rate (or closing date, if applicable)	Date PCR was sent to pcr@afdb.org MM/DD/YY	Difference in months	WORKING SCORE (auto-calculated) If the difference is 6 months or less, a 4 is scored. If the difference is 6.1 or more, a 1 is scored.
30 April 2010	March 2011	9	1

Briefly describe the PCR Process. Describe the Borrower's and co-financers' involvement in producing the document. Highlight any major differences of opinion concerning the assessments made in this PCR. Describe the team composition and confirm whether a site visit was undertaken. Mention any major collaboration from other development partners. State the extent of field office involvement in producing the report. Indicate whether comments from Peer Reviewers were received on time (provide names and positions of Peer Reviewers).

[150 words maximum]

Although the Borrower did not prepare the completion report, the project unit did so with the support of an infrastructure expert (SNFO). Such involvement enabled the mission to collect the required information from the Government, businesses and consultancy firms. Furthermore, the project unit participated in field visits and discussions held with the local authorities and beneficiaries. The mission also held discussions with enterprises, consultants and technical and financial partners, which gave a better understanding of the outputs achieved. The discussions revealed interest in the project due to construction of the paved road (its main component) and the need to source financing for rural roads and boreholes. To that end, the mission met with DANIDA which was willing to examine the financing of rural road works in its 2011 country programme. Therefore, the PCR is the result of participatory effort, involving all stakeholders and including lessons learnt from frank discussions with various stakeholders, local actors and the communities concerned.

The report was reviewed during an internal working session at the OITC Department by the following peer reviewers: M. DIOP LY (Health Expert, OSHD/GHFO), Kéba BA (Financial Analyst, OWAS.1), J.P. M. KALALA (Socio-economist, OITC.1) and Lamine SIAN (Consultant, ORWA).

H. LESSONS LEARNED

Summarize key lessons for the Bank and the Borrower suggested by the project's outcomes.

[300 words maximum. Any additional narrative about implementation should be included in Annex 6: Project Narrative.]

The main lessons learned from project outcomes are:

1. Project Implementation

1.1 Project Monitoring Unit: PMU experts reported to both their technical management and the project coordinator. This created problems that undermined the smooth conduct of the project. The PMU should have been set up within the permanent structures of DGTP and placed under the responsibility of one of its technical entities. Learning from this situation, a project unit

was set up within the DGTP to implement the on-going N'dali-Nikki-Chicandou-Nigerian Border Road Project. So far, this has worked satisfactorily.

1.2 Implementation schedule for the main road and related works: The initial project schedule provided for the commencement of works on the main road in December 2003 and on the rural roads in March 2005, representing a gap of 15 months. The respective works were scheduled for completion in December 2005 and March 2006, representing a gap of 3 months. The commencement of road works was subject to the recruitment of a consultancy firm to raise community awareness on the identification of roads and the recruitment of another consultancy firm for studies and works control. Considering the procurement delays recorded, it would have been more judicious to group awareness-raising, studies and road works control within the same consultancy contract, to shorten procurement timeframe and enable the simultaneous launching of works procurement (road and related works).

1.3 Counterpart contribution to project financing: The late mobilization of the counterpart contribution had an adverse impact on the project. As a financing condition, securing the counterpart contribution by opening a project account at the public treasury or in a commercial bank acceptable to the Bank and making regular payments into the account, could be a response to the low mobilization of counterpart funds.

2. Project Outcomes

2.1 During project appraisal (2002), the traffic was 253 vehicles/day. Projections for 2006 gave 356 vehicles/day, representing an increase of over 15% from that year. However, the traffic recorded in 2009 was 1085 vehicles/day, representing an increase of 329%. The proportion of heavy vehicles rose sharply from 2% to 11% within the same period. Furthermore, the project generated a 29.82% reduction in VOC compared to a projection of 25%. The sharp increase in traffic and VOC savings over projections shows, in the main, that the project's rate of return is far higher than expected, thus confirming its economic relevance. These traffic trends should be monitored in 2010, 2011 and 2012 as planned under the project, to evaluate the sustainability of the road.

2.2 It was projected that there would be a 50% increase in trade and mobility within the PA at project completion. This figure should be borne out by economic statistics and traffic surveys. Since no project monitoring/evaluation system was instituted during project design, it was difficult to obtain data on increased trade and mobility within the PA. During project design, a project-specific structure responsible for monitoring/evaluation should have been identified and a well-defined methodology put in place.

I. PROJECT RATINGS SUMMARY

All working scores and ratings must be found in the relevant section in the PCR. For example, please insert the "Overall Output score" in Section D.I. in the "Achievement of Outputs" box below.

CRITERIA	SUB-CRITERIA	Working score
PROJECT OUTCOME	Achievement of outputs <i>(insert score from Section D.I.)</i>	4
	Achievement of outcomes <i>(insert score from Section D.I.)</i>	2.4
	Timeliness <i>(insert score from Section F.4)</i>	2
	OVERALL PROJECT OUTCOME SCORE (score average)	3
BANK PERFORMANCE	Design and Readiness	
	Project objectives were relevant to country development priorities <i>(insert score from Section C.3.)</i>	4
	Project objectives could in principle be achieved with the project inputs and in the expected timeframe <i>(insert score from Section C.3.)</i>	4
	Project objectives were consistent with the Bank's country or regional strategy <i>(insert score from Section C.3.)</i>	4
	Project objectives were consistent with the Bank's corporate priorities <i>(insert score from Section C.3.)</i>	4
	The log frame presents a logical causal chain for achieving the project development objectives. <i>(insert score from Section C.5.)</i>	4
	The log frame expresses objectives and outcomes in a way that is measurable and	4

	quantifiable <i>(insert score from Section C.5.)</i>	
	The log frame states the risks and key assumptions <i>(insert score from Section C.5.)</i>	4
	Project complexity was matched with country capacity and political commitment <i>(insert score from Section E.2.)</i>	2
	Project design includes adequate risk analysis <i>(insert score from Section E.2.)</i>	4
	Project procurement, financial management, monitoring and/or other processes were based on those already in use by government and/or other partners <i>(insert score from Section E.2.)</i>	4
	Responsibilities for project implementation were clearly defined <i>(insert score from Section E.2.)</i>	3
	Necessary implementation documents (e.g. specifications, design, procurement documents) are ready at appraisal <i>(insert score from Section E.2.)</i>	2
	Monitoring indicators and monitoring plan are adopted <i>(insert score from Section E.2.)</i>	0
	Baseline data collection is completed or underway <i>(insert score from Section E.2.)</i>	0
	PROJECT DESIGN AND READINESS SUB-SCORE <i>(score average)</i>	3
	Supervision:	
	Bank complied with:	
	Environmental safeguards <i>(insert score from Section F.4.)</i>	4
	Fiduciary requirements <i>(insert score from Section F.4.)</i>	4
	Project covenants <i>(insert score from Section F.4.)</i>	4
	Bank provided quality supervision in the form of skills mix provided and practicality of solutions <i>(insert score from Section F.4.)</i>	2
	Bank provided quality management oversight.	4
	The PCR was submitted on time <i>(insert score from Section G)</i>	1
	SUPERVISION SUB-SCORE <i>(score average)</i>	4
	OVERALL BANK PERFORMANCE SCORE <i>(score average)</i>	4
BORROWER PERFORMANCE	Design and Readiness	
	Responsibilities for project implementation were clearly defined <i>(insert score from Section E.2.)</i>	3
	Necessary implementation documents (e.g. specifications, design, procurement documents) are ready at appraisal <i>(insert score from Section E.2.)</i>	2
	Monitoring indicators and monitoring plan are agreed upon and baseline data are available or are being collected <i>(insert score from Section E.2.)</i>	2
	PROJECT DESIGN AND READINESS SCORE	2
	Implementation	
	Borrower complied with:	
	Environmental safeguards <i>(insert score from Section F.4.)</i>	4
	Fiduciary requirements <i>(insert score from Section F.4.)</i>	2
	Project covenants <i>(insert score from Section F.4.)</i>	2
	Borrower was responsive to Bank supervision findings and recommendations <i>(insert score from Section F.4.)</i>	3
	Borrower used monitoring information for decision-making <i>(insert score from Section F.4.)</i>	2
	IMPLEMENTATION SUB-SCORE <i>(score average)</i>	3
OVERALL BORROWER PERFORMANCE SCORE	3	

J. PROCESSING

STEP	SIGNATURE AND COMMENTS	DATE
Sector Manager Clearance		

Regional Director Clearance		
Sector Director Approval		

Scoring scale and correspondence

SCORE	EXPLANATION
4	Highly satisfactory – Perfect implementation, flawless
3	Satisfactory – Most of the objectives have been attained despite a few shortcomings
2	Average – Project partially completed The outcomes almost equal the shortcomings
1	Poor – Very few achievements and serious shortcomings
NA	Not Applicable

LIST OF ANNEXES

- Annex 1: Project costs and financing, cost variance at appraisal and at completion.
- Annex 2: Contributions of the Bank
- Annex 3: Economic analysis (ERR) and financial analysis
- Annex 4: Main contracts signed
- Annex 5: List of documents consulted and forwarded to the Bank
- Annex 6: List of persons met
- Annex 7: Project description - Determinants

Project Cost and Financing

a. Project Cost by Component (CFAF million), including Physical and Financial Contingencies (UA rate in June 2003: UA 1 = CFA 787.877)						
At Appraisal:						
Components	ADF	NTF	BOAD	FRDC	BENIN	TOTAL
A) MAIN ROAD						
Updating of studies and control of paving works	389.84	205.70	233.21	233.21	57.80	1 119.76
Upgrading and paving of the Djougou-N'dali road (125 km)	6 023.58	2 942.10	3 264.96	3 264.96	3 422.85	18 918.45
B) FEEDER RURAL ROADS						
Awareness-raising	130.74					130.74
Detailed road studies	140.08					140.08
Supervision and control of road development works	112.07					112.07
Rural road development works	1 326.54				336.31	1 662.85
C) RELATED WORKS						
Hydro-geological works, supervision and control of borehole works	56.03					56.03
Construction works on 40 boreholes	383.02				102.47	485.49
D) PROJECT MANAGEMENT						
D1) Support to the Monitoring Unit	30.00				23.66	53.66
D1-1) Technical assistance and training	30.00				23.66	53.66
D1-2) Training					79.93	79.93
D1-3) Goods: Vehicles, IT equipment and software	19.00				30.00	49.00
D2) Project audits	140.10					140.10
Total	8 781.00	3 147.80	3 498.17	3 498.17	4 076.68	23 001.82
At completion:						
Components	ADF	NTF	BOAD	FRDC	BENIN	Total
MAIN ROAD						
Updating of studies and control of paving works	327.67	159.4	164.5	164.45	82.137	898.16
Upgrading and paving of the Djougou-N'dali road (125 km)	6239.17	3050.26	3509.12	3509.12	3670.8	19 978.47
B) FEEDER RURAL ROADS						
Awareness-raising	63.47					63.47
Detailed road studies	62.75					62.75

Supervision and control of road development works	0					0.00
Roads						
Rural road development works	0					0.00
C) RELATED WORKS						
Hydro-geological works, supervision and control of borehole works	11.5					11.50
Construction works on 40 boreholes						0.00
D) PROJECT MANAGEMENT						
D1) Monitoring Unit support						0.00
D1-1) Technical assistance and training						0.00
D1-2) Training						
D1-3) Goods: Vehicles, IT equipment and software					16.9	16.90
D2) Project audits	27					27.00
Total	6 731.56	3 209.66	3 673.62	3 673.57	3 868.62	21 157.03

b. Resources by Source of Financing (CFAF million): Loan Agreements

Source	At Appraisal	At Completion	Difference			
ADF	8 781.00	6731.56	2049.44			
NTF	3 147.80	3209.66	-61.86			
BOAD	3 498.17	3673.62	-175.45			
FRDC	3 498.17	3673.57	-175.4			
BENIN	4 076.68	3868.62	208.06			
Total	23 001.82	21157.03	1844.79			

Bank Contribution

<i>Dates</i>	<i>Missions</i>	<i>Nbr</i>	<i>Composition</i>
5 - 11 May 2003	Project update	1	Transport Engineer
8 – 18 May 2005	Supervision	2	Transport Economist
9 - 20 December 2006	Supervision	4	Transport Economist
11 – 23 June 2007	Supervision	2	Transport Engineer
20 February – 7 March 2008	Supervision	2	Transport Engineer and Socio-Economist
26 – 30 May 2008	Supervision	2	Transport Engineer
9 – 31 March 2009	Supervision		Transport Engineer
5 - 23 October 2009	Supervision	4	Transport Engineer
22 February – 5 March 2010	Completion mission	1	Infrastructure Specialist

Economic (ERR) and Financial Analysis

Recalculate the economic rate of return based on costs and benefits at completion and compare them with estimates made at appraisal. Distribution by component, if need be. Analyse ERR sensitivity to key assumptions. Present a financial analysis of the entities benefitting from the project.

At appraisal in 2002, the average weighted daily traffic per distance was 253 vehicles/day (motorcycles - 67%, light vehicles - 31% and heavy vehicles - 2%) and the traffic assumptions for 2009 356 vehicles/day. However, traffic counts done in 2009, when close to 95% of works had been executed, yielded an average daily weighted traffic per distance of 1,085 vehicles/day, comprising motorcycles - 67%, light vehicles - 22% and heavy vehicles - 11%. This sharp traffic increase over projections is the main reason why the project rate of return at completion (21.53%) exceeds the rate obtained at appraisal (13.15%).

HDM .4: 1- ECONOMIC ANALYSIS AT COMPLETION (in CFAF million)

Year	Traffic in veh/day	Extra Costs - Administration			Savings on user costs				Net benefits	
		Invest. costs	Operating costs	Special costs	VOC mot.	Time mot.	Non-mot. time + VOC	Accidents	Net exogenous benefits	Net total benefits
2005	285	0.00	-285.99	0.00	43.49	1.76	20.26	0.00	0.00	351.51
2006	290	185.75	-45.37	0.00	-309.66	-13.27	-122.88	0.00	0.00	-586.19
2007	296	4 457.91	-45.56	0.00	-78.85	-3.16	-48.96	0.00	0.00	-4 543.32
2008	302	6 501.12	-45.75	0.00	-318.67	-13.70	-129.76	0.00	0.00	-6 917.49
2009	1 084	6 129.62	-71.66	0.00	400.89	7.50	868.02	0.00	0.00	-4 781.56
2010	1 094	1 300.22	-72.02	0.00	-1 144.31	-21.51	-1 111.48	0.00	0.00	-3 505.50
2011	1 126	0.00	-60.56	0.00	3 819.95	54.42	3 463.91	0.00	0.00	7 398.84
2012	1 160	0.00	-61.68	0.00	2 211.96	24.46	1 103.53	0.00	0.00	3 401.63
2013	1 195	0.00	-62.84	0.00	4 007.96	58.41	3 935.20	0.00	0.00	8 064.41
2014	1 231	0.00	-64.03	0.00	2 350.69	27.31	1 242.88	0.00	0.00	3 684.91
2015	1 256	0.00	-64.85	0.00	4 165.45	61.92	4 449.61	0.00	0.00	8 741.82
2016	1 281	0.00	-65.68	0.00	2 414.81	29.33	1 379.14	0.00	0.00	3 888.96
2017	1 307	0.00	-66.53	0.00	4 267.49	64.82	4 997.01	0.00	0.00	9 395.86
2018	1 332	8 788.50	-67.40	0.00	2 466.83	31.42	1 527.06	0.00	0.00	-4 695.79
2019	1 359	0.00	-68.29	0.00	4 702.90	68.08	5 746.90	0.00	0.00	10 586.18
2020	1 386	0.00	-69.19	0.00	2 885.67	33.99	1 843.89	0.00	0.00	4 832.75
2021	1 414	0.00	-70.11	0.00	4 845.18	71.31	6 464.08	0.00	0.00	11 450.68
2022	1 442	0.00	-71.05	0.00	2 984.05	36.46	2 057.99	0.00	0.00	5 149.55
2023	1 471	0.00	-72.01	0.00	4 982.74	74.65	7 268.09	0.00	0.00	12 397.49
2024	1 501	0.00	-72.99	0.00	3 077.50	39.05	2 295.50	0.00	0.00	5 485.04
2025	1 530	0.00	-73.99	0.00	5 113.29	78.09	8 168.59	0.00	0.00	13 433.95
2026	1 561	8 788.50	-75.00	0.00	3 163.61	41.74	2 558.45	0.00	0.00	-2 949.69
2027	1 593	0.00	-76.04	0.00	5 636.31	81.94	9 376.74	0.00	0.00	15 171.04
2028	1 623	0.00	-77.10	0.00	3 674.38	44.97	3 072.75	0.00	0.00	6 869.20
2029	1 657	-3 714.92	-78.18	0.00	5 811.89	85.75	10 550.03	0.00	0.00	20 240.77
Total:		32 436.70	-1 883.87	0.00	71 175.57	965.74	80 976.55	0.00	0.00	122 565.05

IRR = 21.53%

2 – SENSITIVITY ANALYSIS

	Case 1	Case 2	Case 3	Case 4
Discount rate (%)	12.0	12.0	12.0	12.0
Net benefits multiplier				
*Capital and recurrent cost	1.00	1.10	1.00	1.10
*Vehicle operation	1.00	1.00	0.90	0.90
	-----	-----	-----	-----
Discounted profit (in CFAF million)	122 565	119 510	107 253	104 198
IRR (%)	21.53%	20.02%	19.86%	18.40%

Main Contracts Signed
Goods Contracts

Firm	Type of contract	Total amount (CFAF)	Date of Submission	Service Order	End of Contract Date
Bureau CIRA Sarl	Updating of studies, bid appraisal support, works control and supervision on the Djougou-N'dali main road.	897 253 750	June 2004	09/04/2007	30/07/2009
PIED ONG	Social intermediation	68 524 650	07/11/2007	03/07/2008	30/04/2011
GROUPEMENT ASSURANCE BTP/HYDRO TPE	Technical studies, works supervision and control	78 861 180	01/04/2008	28/11/2008	30/04/2011

Supplier	Type of Contract	Amount (CFAF)	Supply Date
SONAEC	Procurement of HYUNDAI vehicle	16,900,000	September 2007

Works Contracts

Component	Length (km)	Contract Amount (CFAF)	ADF Participation	Enterprise	Service Order	Provisional Acceptance	Final Acceptance
Djougou-N'dali paved road	125	18.106.892.460	5.817.744.547	COLAS-Benin	23/04/2007	29/06/2009	30/06/2010

GRUPEMENT HORSE SARL/SETEM BENIN	Technical studies, works supervision and control	64 960 000	01/04/2008	28/11/2008	30/04/2011
STE CANAL EAU	Hydro-geological research, technical studies, borehole works supervision and control	21 000 000	15/07/2008	30/09/2009	30/04/2011
CABINET D'AUDIT FINANCIER FIDEXCA	Project financial audit	27 000 000	16/07/2008	10/06/2009	30/06/2010
Bureau CIRA Sarl	Updating of studies, bid appraisal support, works control and supervision on the Djougou-N'dali main road.	897 253 750	27 months	09/04/2007	30/07/2009

Service contracts

List of Key Documents Consulted

Documents transmitted to and consulted by the ADB mission of 23/02/2010 to 15/03/2010

No.	Item
1	Various mails:
	Letter No. 7300/MDCTTP-PR/DC/SG/DGTP/DTN/SCT/SA of 23 September 2008
	Upgrading and paving works on the Djougou-N'dali Road: Extension of bridges
	Summary of sums owed to Colas by Benin as of 26/01/2008 and 31/12/2008
	Hard copies of Djougou-N'dali SIGFIP budget for 2009/2010
	Letter No. 2983/MDCTTPU-PR/DC/SG/DGTP-CPMP/CSP of 28/06/2006
	Letter No. 5413/MDCTTPU-PR/DC/SG/DGTP-CPMP/CSP of 26/09/2006
	Letter No. 2887/MDCTTPU-PR/DC/SG/DGTP-CPMP/CSP of 24/04/2007
	Letters about consultation of NGOs and BE for social intermediation
	Letter from CAA to DGTP of 17/02/2010
2	Reference No. 0162/2010/SMAE/DPP/DG/CAA
3	CIRA contract
4	COLAS contract
5	Project Appraisal Report, version of 18 June 2003
6	Road Fund (RF) Income Trends from 2002 to 2010
7	Public Procurement Form
8	Summary of social intermediation activities in the Djougou-N'dali road upgrade and paving project area
9	Various mission reference documents
10	Order No. 86/MTPT/DG/SG/DGTP/DTN/SA
11	Order No. 51/MTPT/DG/SG/DGTP/DTN/SA of 5 September 2005
12	MH statement No. 11/PR/SGC/REC on classified forests
13	MH statement No. 16 of 30/04/2008 on compensation
14	Results of manual counts from 2006 to 2008
15	DGTP/IT Unit data and statistics
26	Hard copy of the document on programming of counterpart payments in 2010 (submitted by DTN)
27	Vehicles registered from 1981 to 2008
28	Future trends for vehicles registered from 2010 to 2012
29	Road transportation of goods: Table of cost elements for second-hand vehicles
30	Evaluation percentage for VOC: passenger and goods transport
31	Environmental Compliance Certificate
32	CIRA final report
33	National Rural Transport Strategy, May 2008
34	Project request sent to various donors on 25/04/2007, Reference No. 572/MDEF/DC/CAA
35	SO No. 150/DGTP/DAF/DTN/SCT of 30/09/08 for the construction of a bridge over River Ouémé at Affon
36	Summary of routine maintenance for 2005/2006/2009/2010
37	File on procurement deadlines, Letter No. 2563/2009/MEF/DC/SGM/CAA of 16/10/2009
38	Financial audits for June/October/November 2008
39	Report on Hydro-geological Research Technical Studies and the Construction of 20 Operational Boreholes, Canal Eau 2008
40	Road and borehole study reports and BDs

List of Persons Met

	FULL NAME	STRUCTURES	TELEPHONE NUMBER		E-MAIL
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6	KETCHON Maurice	Head/SE/DGTP			
7	DAGBA Urbain	ABE			
8	HOUNSOU Rose Pentti	DAF/DGTP			
9	KOUZONDE Anatole	DPSE/DGTP			
10	DELE Come	DPSE/DGTP			
11	MOUYIDOU Moucharafou	C/STAC/DPR/DGTP			
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16	HOUSSA Lucien	Pobè-Kétou-Illara Project Coordinator			
17	AZIGUI Alexis	DG/DGTT			
18	AZONSI Félix	D.G. Water Directorate			
19	TOMENOU Emile	D.G. Water Directorate			
20	HOUMBIE Sévérin	Contracts administrator/COLAS			
21	GUIDI Pascal	North Sector Director of Operations/COLAS			
22	AHOMLANTO Abel	Canal Eau			
23	GARBA Abdoulaye	DDTTP-BA		97 07 30 35	
24	SINA O. Gbéro	C/ST N'dali Council		93 77 41 78	
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40	KOTCHOFA Sylvestre	Director of the Road Fund			
41	FASSINOU	Road Fund			
42	OKIDJI Albert	Director of Road Maintenance			
43	DOSSOU Arsène	Department of New Projects			

Project description - Determinants

Main factors not considered in the general matrix but which affected project design and implementation: Such factors, both positive and negative, could include: climate and meteorological conditions, political changes, contractual or personal issues, technical issues, the procurement process and interaction with other partners. If any of these factors is significant enough to affect the appraisal score, this should be mentioned in the matrix, and presented in this annex.

2.6.1 Institutional basis: The project was supervised by the Ministry Delegate at the Presidency of the Republic in charge of Road Transport, Air Transport and Public Works (MDCTTTATP-PR). For monitoring and implementation of project activities, it had to rely on the Directorate General of Public Works (DGTP), which is the executing agency for road projects in Benin and has the necessary capacity for managing projects of this nature through the Directorate of New Projects (DTN). To ensure efficient project implementation monitoring, a Project Monitoring Unit (PMU) was set up by Ministerial Order No. 086/MTPT /DC/SG/DGTP/DTN/SA of 27/08/2004, a copy of which was given to the mission. In addition to the Project Coordinator, the PMU was supposed to comprise two engineers and one accountant. However, due to lack of human resources at DGTP, the two engineers and the accountant were finally appointed as counterpart staff but never placed at the disposal of the PMU. Hence, the PMU comprised the Project Coordinator alone who ended up serving only as project facilitator, together with current DGTP operational directorates - the Directorate of New Projects (DTN), the Directorate of Rural Roads (DPR) and the Directorate of Administration and Finance (DAF).

2.6.2 Operational adjustments: No major adjustments were made to the project at commencement. Major adjustments were introduced during the implementation phase. Overall, the set objectives, planned activities and implementation conditions were maintained for the main road. Adjustments made stemmed from financial constraints encountered during overall project implementation, characterized by a general decline in allocated resources from the ADF and other co-financiers due to a fall in the UA and dollar exchange rates. Given these developments, the indicative list of related works was revised to accommodate the financing gap created by the depreciation of the Unit of Account (UA) to the CFAF. However, despite such revision of the list of roads and boreholes (reduction of the length of roads and the number of boreholes to be built), the related works had to be cancelled because of bureaucracy surrounding the procurement process.

As concerns works on the main road, some line items were revised upwards due to construction of a new bridge (Affon Bridge at PK 49+425) and road alignment rectifications. The cost of works per kilometre rose to CFAF 155 million instead of the CFAF 145 million estimated at appraisal in 2003, owing to a surge in petroleum product prices in 2007 and 2008.

For works execution under this project, provision was made in Contract No. 152/MDCF/MDCTTP/DNMP/SP of 20 March 2007 signed with the contractor, for the extension of six bridges to a breadth of seven metres of running surface, flanked by one metre-wide shoulders on both sides. While conducting the implementation studies, the contractor (COLAS) requested to be provided with the post-completion drawings of these engineering structures to ensure their consistency. This was also a precondition for granting a ten-year guarantee for these facilities. A search was conducted in vain in the archives of the Road Authority and of DYWIDAG and BELLER CONSULT, the firms that built and monitored these facilities in 1988. Faced with this situation, the Control Mission was requested to conduct studies, with headquarter support, on the construction of isolated causeways attached to the existing bridges. The technical report submitted to the Government on 21 August 2008 proposed three options for solving the problem. The third option, which entailed replacing the existing bridges by constructing new 9-metre wide bridge was retained because it yielded more durable works of the right dimension.

Furthermore, it also became necessary to adjust the road alignment between PK 45+500 and PK 50+500 with a view to straightening the small-radius curves and enhancing visibility on the bridge over River Ouémé at Affon. Due to this adjustment, it was necessary to rebuild the bridge since the road alignment passed over another site. The new site is part of the Ouémé Supérieur classified forest, which had to be delisted. The delisting of this part of the forest was approved by the Council of Ministers at its session of 30 March 2008. In light of the foregoing and the implementation schedule which provided for the commencement of expansion works end October 2007, and to avoid complaints from the contractor, it was decided that expansion works on the remaining five bridges be abandoned in favour of additional

safety measures such as the installation of extra road signs to signal a narrowing of the road segment over the bridges and construction of speed bumps.

Hence, the net construction cost of the bridge over River Ouémé at Affon was CFAF 492,300,961. Construction of the new bridge created an additional delay of one and half months and required that the initial quantities in the contract be revised in order to stay within the budget.

In summary, additional and consolidation works were carried out as follows:

Additional works: (i) rectification of the alignment, as a result of which the road passes through the classified forest between PK 48+000 and PK 52; and (ii) construction of the bridge over River Ouémé at AFFON.

Consolidation works: (i) enhancement of road safety along the unexpanded bridges by setting up additional road signs and speed bumps; and (ii) improvement of drainage by building lined ditches or culverts in large settlement areas made possible by a reduction in intake structures after the adoption of trapezoidal ditches, built with buck scrapers. These ditches have a higher drainage capacity.