Report Number : ICRR12623

IEG **ICR Review**
Independent Evaluation Group

1. Project Data:		**Date Posted :**	04/12/2007	
PROJ ID :	P044305		**Appraisal**	**Actual**
Project Name :	Petroleum Development and Pipeline Project	**Project Costs (US$M)**	3,723	4,817
Country :	Chad	**Loan/Credit (US$M)**	93	91
Sector(s):	Board: EMT - Oil and gas (84%), Railways (4%), Telecommunications (4%), Roads and highways (4%), Ports waterways and shipping (4%)	**Cofinancing (US$M)**	3630	4726
L/C Number :	L4558			
		Board Approval (FY)		
Partners involved :	Exxon Chevron (USA) Petronas (Malaysia)	**Closing Date**	06/30/2005	06/30/2005
Evaluator :	**Panel Reviewer :**	**Division Manager :**	**Division :**	
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2. Project Objectives and Components

a. Objectives

The PAD states that the development objectives of the project are to achieve the following goals, through environmentally and socially sound private sector investment in the petroleum sector:
1. increase Chad's expenditures on poverty alleviation activities; and
2.increase Cameroon's fiscal revenues available for financing priority development expenditures in the context of the Government's strategy for economic growth and poverty reduction.

b. Components (or Key Conditions in the case of Adjustment Loans):

The components supplied the following infrastructure equipment needed to enable oil exports:
1. a field system including the drilling and operation of about 300 wells in Chad.
2. an export system including a 1,070 km long pipeline to Kribi (Cameroon), an 11 km submarine one, pumping stations and offshore floating storage and loading facilities.

Environmental and social impact mitigation was not a component but an imperative for both governments. The Loan Agreement for Chad incorporated provisions to earmark 76.5% of petroleum royalties and 72% of dividends to poverty reduction plus 4. 5% of royalties for priority projects in the production zone.
The components were not revised.

c. Comments on Project Cost, Financing, Borrower Contribution, and Dates

The table below shows actual and estimates for components costs and financing including contingencies (but excluding US$15 million for preparation). A US$400 million bond issue was cancelled for lack of market interest and Consortium equity covered the gap. Project commissioning planned for end-2004 occurred in July 2003.

Project Cost and Financing By Component (US$million equivalent)

	Appraisal		Actual	
	Field System	Export System	Field System	Export System
Gov Equity	0	117.5	0	119
Of Which IBRD	0	92.9	0	90.6
Co-financing by	1521	2084.5	2648.3	2050

Consortium				
Of Which IFC	0	400	0	200
Commercial Banks	0	100	0	400
Consortium Equity	1521	684.5	2648.3	1450
Total	1521	2202	2648.3	2169

3. Relevance of Objectives & Design :

First, by directly addressing sustainable growth PSD and poverty alleviation in both countries, objectives are in line with CAS's priorities. Second, seizing the opportunity of the Consortium's interest in exploiting and exporting their find was an expeditious way to increase fiscal revenues. Third, project design ensured that the facilities would be successfully built and operated with adequate safeguards and private sector involvement. Lastly, special measures where taken to maximize the likelihood that most of the additional government revenues to Chad would go to poverty reduction namely a 1999 law and a Bank-supported Petroleum Revenue Management Program that allocates the monies to a positive list of expenditures.

The project's logical framework is consistent throughout.

4. Achievement of Objectives (Efficacy) :

1. **Chad**: **Substantial**. While the revenue target was $70 million/yr (50% of government fiscal revenues) actual revenues had already totalled $560 million through September 2006, thanks to much-higher than expected oil prices. 78% was allocated to priority projects including 5% to the producing region, in spite of temporary (first half of 2006) non-compliance with the LA when 11.5% was diverted to the general budget.
Production started 15 months earlier than the planned December 2004 and reached 69.9 million barrels by then. The 81 million barrels per year target will not be reached because the geological conditions are less favorable than expected. Price discounts with respect to the Brent marker crude were 28% v.s. 20%. But these adverse factors were (and will likely be) more than offset by higher than projected crude prices, on average $45 v.s. $16.4 per barrel.

2. **Cameroon**: **Substantial**. The project revenues (about 3% of government fiscal revenues) started to flow ahead of schedule but 12% short of the US$40 million/year target because of the lower than expected export flow.

In sum, the objectives were highly relevant and are expected to be achieved with only minor shortcomings: Chad's temporary breach of agreement and Cameroon's slight shortfall in theirs. In addition, private sector ownership and control of Doba oilfields and pipeline companies were fully achieved, while still giving minority shares of the latter to governments. Targets and norms in the Environmental Management Program were complied with, and resettlement was exemplary. These safeguards now also apply to the development of satellite fields.

Sustainability. Some risks are small: energy infrastructure is seldom left to deteriorate and in the petroleum sector, prices are set on a strictly commercial basis in contrast to many other infrastructure sectors. Geological risks will continue to exist but in spite of the production shortfall in Doba, other fields will be developed as their commerciality is boosted by the proximity of the pipeline and the prospect of high crude prices. Putting the private sector in control, especially the current high caliber operators ensure this risk can be managed. Barring expropriation by governments, the biggest risk is their failure to allocate enough revenues to environmental management and poverty alleviation. However, in Chad especially, in spite of the ongoing TA, the capacity for economic management will remain weak and the hesitancy on the law allocating petroleum proceeds is a sign that government commitment may be fickle on budget priorities. Unrest and wars in the region are putting both under a lot of stress. **The risk to development objectives is thus substantial overall.**

5. Efficiency :

The NPV projected at completion is US$3,721 million vs. US$1,417 million estimated at appraisal, that is, 162% higher. Chad's share (US$1,884 million) is 300% higher but Cameroon's share (US$112 million) is 22% lower. These estimates are based on conservative assumptions about production and prices.

6. M&E Design, Implementation, & Utilization:

The design sets relevant date-bound targets and aims at the right data on expenditures, output (progress of drilling, pipeline and EMP activities) and outcome (petroleum exports, generated revenues, amounts transferred to Treasuries and spent on priority activities). Physical completion is oddly presented in the matrix as both outcome and output. The data was collected and did inform decision making, e.g., the shortfall in the quantity and quality of crude production led to new investments by the Consortium, and revenues allocation data prompted improvements in their management as well.However, both this ICR and the ICR on the parallel Petroleum Economy Management project point to shortcomings in the monitoring of the actual utilization of petroleum revenues. Also the welfare and poverty impact of the poverty-reduction activities financed by these revenues is todate unknown and it is not clear whether provisons have been made (e.g. through surveys) to evaluate it in future. The region subsequently informed IEG that the the Oversight Committee ("College") is currently doing a specific assessment of the use of oil revenues from the advent of the resources used for poverty reduction to the end of 2006.

7. Other (Safeguards, Fiduciary, Unintended Impacts--Positive & Negative):

Deviations from Bank ODs were noted by the Inspection Panel on a handful of EMP activities. A Management Response promised remedial actions; some occurred (rehiring of the International Panel of Experts, accelerating institutional strengthening) and some remain on the agenda (expanding baseline data collection, assessing cumulative impact). Monitoring lagged for construction funding and compliance with covenants.

Institutional development impact is positive but modest and more pronounced in the oil sector than in public finances management. ID was not an objective of this project but of three companion credits. The accounting and analysis of institutional impacts must await their evaluation. No unintended impacts were detected.

Quality at entry was highly satisfactory. First the Bank must be commanded for accepting to be involved in such a high risk (and potentially high-reward) operation in a sector where its policies are very restrictive, and second in maximizing its relevance and design quality while financing only about 3% of the cost. Of great weight in the overall rating, this is the first time that a petroleum project ties its bonanza to poverty reduction in the most effective way possible. Preparation was thorough, e.g., the due diligence on project costs and production potential, upfront agreements in key areas such as the EMP, innovative supervision arrangements, and an earmarking of benefits that became law in 1999. The deficiencies noted by the Inspection Panel were relatively minor and they were or will be soon remedied as needed.

Quality of supervision was satisfactory. Arrangements were results oriented (using the capacity of the Consortium) but did not sacrifice borrowers' ownership and capacity development. They included special staffing in the field and an International Advisory Group as with many large projects plus two innovations: (i) the "Collège" to monitor the management of revenues and (ii) the External Compliance Monitoring Group to report on work by the Consortium and both governments. This oversight made supervision more agile and more candid but did not come cheap (US$1million/yr). Also there were lags in the monitoring of construction funding and compliance with covenants, but importantly, the Bank showed a good balance of firmness and flexibility in dealing with Chad's temporary breach of the revenue allocation agreement.

Governments' performance was moderately satisfactory overall. Both countries showed project ownership in many ways e.g., at the outset, they secured the pipeline right-of-way and Chad passed that law in 1999. They were also very cooperative in the design and implementation of the physical project arrangements but they were deficiencies in both countries for setting up EMP supervision. Cameroon's performance is rated satisfactory, Chad's is moderately unsatisfactory because of its breach of the Loan Agreement on revenue allocation.

Implementing agencies performance was satisfactory. Esso Chad was very efficient in project execution, monitoring and problem-solving, such as (just to name three): replacing the Consortium partners who dropped out, filling the financing gap after the bond issue fell through, and getting rid of the excess water in the pipeline. It cooperated with the governments and the Bank, applying Bank guidelines on procurement for jointly financed components and for the EMP (with minor defects at the start as mentioned under QAE). At completion, it stayed on to run the facilities and the transition to regular operations was seamless.

8. Ratings:	ICR	ICR Review	Reason for Disagreement /Comments
Outcome:	Satisfactory	Satisfactory	
Institutional Dev .:	Modest	Modest	Full impact will need to be reviewed together with the impact of on-going companion Credits.
Sustainability :	Unlikely	Unlikely	
Bank Performance :	Satisfactory	Satisfactory	(see section 7 above)
Borrower Perf .:	Satisfactory	Satisfactory	But only moderately so, and combining performance of the two Governements and of the implemnting agency (see discussion in section 7 above)
Quality of ICR :		Satisfactory	

NOTES:
- When insufficient information is provided by the Bank for IEG to arrive at a clear rating, IEG will downgrade the relevant ratings as warranted beginning July 1, 2006.
- ICR rating values flagged with ' * ' don't comply with OP/BP 13.55, but are listed for completeness.

9. Lessons:

Regional energy projects (REPs) are a special breed of regional interventions above all because they may be designed to be little more than big infrastructure projects. Their risks may be high but manageable since rather typical of big infrastructure projects. So are most lessons. The following three emphasize differences with national projects.

1. Much more than national projects, REPs can be politically controversial , and they better have obvious and immediate benefits which is often less the case for improving networks and market organization, than for increasing production .

2. Much more than for national projects, complexity is around the corner so REPs should not involve more countries and reforms than needed to optimize the reward-to-risk ratio, i.e., tap a resource and/or economies of scale before those of competition.

3. In REPs, governments provide each other some kind of checks and balances and international standards are often followed as common grounds acceptable to all . Thus more than national projects, REPs include features that add robustness and efficiency:

- Clear and equitable agreements on costs and benefits sharing that tend to really "stick".
- Project management and operation that are ring-fenced against political interference and very capable, possibly by entrusting it to global energy investors i.e the Consortium of oil majors for the CCPDP.
- Supervision processes that inspire trust and respect by diverse stakeholders and can work with them all in an agile way i.e. minimizing “silo effects”.The CCPDP's recourse to external independent bodies is a good example.

10. Assessment Recommended? ● Yes ○ No

Why? It is good practice to follow up on ongoing environmental management. The experience with the petroleum revenue allocation in Chad is an innovation that needs monitoring over time. The assessment should also include the institutional development impact of the project and of the three companion capacity building credits.

11. Comments on Quality of ICR:

Satisfactory overall, when taken in conjunction with the complementary "Overview" document which includes a large amount of relevant information and data. Specifically:

(i) on evidence presented: satisfactory overall but could have been clearer on Bank disbursements and on monitoring lapses and said moire on the effectiveness of IFC's involvement (by cross-referring to the separate XPSR issued by IFC) and on actual spending (versus "allocations") for priority projects. Report No 36569-TD (the "Overview" report) issued as a supplement is helpful in filling some but not all the blanks in the ICR and it is hard to reconcile some of its data with the ICR's e.g. on WBG's financial contribution and Chad's oil revenue allocation.

(ii)on analysis : sound and easy to follow, and not overwhelming in quantity.

(iii) on lessons. A few ones are tantamount to safely general recommendations although with a project flavor, e.g., the importance of good communications and managing expectations with civil society, and the need to maintain WB involvement to build capacity and help sustain the revenue allocation principles and compliance with EMP principles. Other ones are congruent with other evaluations (energy and extractive industries reviews) and are shown above.

(iv) on consistency with guidelines. This Intensive Learning ICR included in-country workshops with input from civil society.

It took 18 months for the ICR to get issued as a result of two OPCS-approved 6-months extensions so as to avoid releasing the report at a time (late 2005) when the future of Chad's oil revenue management was very uncertain and the Bank was engaged in delicate negotiations about it.