CHAD-CAMEROON PETROLEUM DEVELOPMENT AND PIPELINE PROJECT:

OVERVIEW

DECEMBER 2006
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AfDB</td>
<td>African Development Bank</td>
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<tr>
<td>CED</td>
<td>Centre pour l'Environnement et le Développement</td>
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<tr>
<td>CIA</td>
<td>Cumulative Impact Assessment</td>
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<tr>
<td>COTCO</td>
<td>Cameroon Oil Transportation Company</td>
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<tr>
<td>CPPL</td>
<td>Coordination Permanente Pétrole Locale</td>
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<td>CTNSC</td>
<td>Comité Technique National de Suivi et de Contrôle</td>
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<tr>
<td>EA</td>
<td>Environmental Assessment</td>
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<tr>
<td>ECMG</td>
<td>External Compliance Monitoring Group</td>
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<td>EIB</td>
<td>European Investment Bank</td>
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<td>EMP</td>
<td>Environmental Management Plan</td>
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<tr>
<td>FEDEC</td>
<td>Foundation for Environment and Development in Cameroon</td>
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<td>FGF</td>
<td>Future Generations Fund</td>
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<td>FOCARFE</td>
<td>Fondation Camerounaise d’Actions Rationnalisées et de Formation sur l’Environnement</td>
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<tr>
<td>FUC</td>
<td>United Force for Change</td>
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<td>GCA</td>
<td>Groupe de Concertation et d’Action</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GEEP</td>
<td>Management of the Petroleum Economy Project</td>
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<td>IAG</td>
<td>International Advisory Group</td>
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<td>IBRD</td>
<td>International Bank for Reconstruction and Development</td>
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<td>IDA</td>
<td>International Development Association</td>
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<tr>
<td>IFC</td>
<td>International Finance Corporation</td>
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<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
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<td>PDPP</td>
<td>Petroleum Development and Pipeline Project</td>
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<td>PRGF</td>
<td>Poverty Reduction and Growth Facility</td>
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<td>PRML</td>
<td>Petroleum Revenue Management Law</td>
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<td>PRMP</td>
<td>Petroleum Revenue Management Program</td>
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<td>PSMC</td>
<td>Pipeline Steering and Monitoring Committee</td>
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<td>SME</td>
<td>Small and Medium-Size Enterprises</td>
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<td>SNH</td>
<td>Société Nationale des Hydrocarbures</td>
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<td>TOTCO</td>
<td>Tchad Oil Transportation Company</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>WBG</td>
<td>World Bank Group</td>
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</tbody>
</table>
PREFACE ......................................................................................................................................................... i
EXECUTIVE SUMMARY ............................................................................................................................. ii

I. CONTEXT OF THE CHAD-CAMEROON PIPELINE ................................................................. 1
   A. Political and Economic Context ................................................................................................. 1
   B. History of Petroleum Development in Chad ........................................................................... 2

II. CONSIDERATIONS FOR WORLD BANK GROUP INVOLVEMENT .................................. 4

III. PREPARATION AND DESIGN OF THE PIPELINE PROJECT ........................................... 6
   A. Capacity Building .................................................................................................................. 8
   B. Institutional Aspects ............................................................................................................. 8
   C. Revenue Management ......................................................................................................... 9
   D. Environmental Management and Social Aspects ................................................................. 11
   E. Monitoring ........................................................................................................................... 14

IV. PROJECT IMPLEMENTATION ................................................................................................. 16
   A. Revenue Management .......................................................................................................... 17
   B. Environmental Management and Social Aspects ................................................................. 20
   C. Local Businesses .................................................................................................................. 22
   D. Supervision Arrangements ................................................................................................... 23
   E. Communication Efforts ......................................................................................................... 24

V. THE CONTRIBUTION OF CIVIL SOCIETY ....................................................................... 26

VI. LESSONS LEARNED TO DATE ......................................................................................... 28
   A. Petroleum Revenue Management Program .......................................................................... 31
   B. Economic Impact .................................................................................................................. 35
   C. Environmental and Social Issues ......................................................................................... 37
   D. Monitoring ........................................................................................................................... 40
   E. Institutional Issues ............................................................................................................... 40
   F. Communication Issues ......................................................................................................... 41

ANNEX 1: TWO INSPECTION PANEL REVIEWS ........................................................................... 42
PREFACE

This document has been prepared as a supplement to the Implementation Completion Report being submitted to the World Bank’s Board of Directors. It provides an overview of the World Bank’s support for the petroleum sector in Chad and Cameroon which included two IBRD loans to Chad and Cameroon for the main Petroleum Development and Pipeline Project in Chad and Cameroon and three IDA credits for capacity-building projects—one in Cameroon and two in Chad. It describes the context in which the projects were developed, the issues raised about World Bank participation, the development of the lending instruments used, the implementation of the projects (including monitoring), and the two investigations undertaken by the World Bank Inspection Panel. It also provides a description of civil society’s contribution to the unique implementation arrangements and the lessons learned from the Project thus far.
EXECUTIVE SUMMARY

Chad is one of the poorest countries in the world, with an estimated gross domestic product per capita at about US$340. The indicators of socioeconomic development are low compared with other low-income countries and even compared with the rest of sub-Saharan Africa. In addition, the government has been challenged by sporadic rebel activities and the spillover effects of fighting in Darfur, western Sudan, and more recently by military insurgency. Under the circumstances, Chad has been unable to generate significant domestic resources for development.

In 1988, the government signed an agreement with a joint venture Consortium of petroleum companies granting a 10-year permit for exploration (subsequently extended) and a 30-year lease to develop three oilfields near Doba in southern Chad and to export the crude oil produced there. As Chad considered various options for developing its petroleum resources, the only viable solution identified was to build a pipeline from the oilfields in Chad to somewhere on or near the coast of Cameroon.

The Consortium and the commercial banks interested in the pipeline option made it clear that a multilateral development agency had to be brought in as a partner to help mitigate a number of adverse conditions that prevailed at the time. Chad was a low-income country, lacking capacity to address both environmental issues resulting from such a complex project and issues related to the transparent and accountable use of oil revenues and its impact on the economy. Given these challenges, the World Bank Group (WBG) was seen as the logical choice. After being consulted and after careful consideration, in late 1994, the World Bank Group agreed to work with the Consortium and the governments of Chad and Cameroon on the Project. The institution saw its participation in providing financing for this project as a prime opportunity to help Chad increase its fiscal revenues and ensure that the new funds would be dedicated for the most part to poverty alleviation. A second objective was to ensure that the Project would be carried out in an environmentally and socially sound manner, which would involve supporting capacity building in Chad for petroleum sector management and in both Chad and Cameroon for environmental and social management. Finally, World Bank Group participation would catalyze private sector investment in a difficult environment by mitigating political risks identified by the private sponsors. In summary, the World Bank Group recognized that the Project was a high-risk project but one worth supporting with the necessary precautions, as it could, if properly implemented, contribute to a major change in the pace of Chad’s economic development and make a significant difference in poverty reduction in Chad.

Project Design and Launch

The Petroleum Development and Pipeline Project (PDPP) covered the development of the three oil fields, which included drilling about 300 wells, building associated facilities and infrastructure, and constructing a 1,070-kilometer buried pipeline from the Doba
fields to an offshore floating storage and loading facility about 11 kilometers from the Cameroon coast. Development of the oil fields was to be fully financed by the private sponsors (by late 1999, this consisted of ExxonMobil, Chevron, and Petronas, the Malaysian state oil company). The pipeline and floating facility would be constructed and operated by oil transport companies in Chad and Cameroon (TOTCO and COTCO); with the governments having minority equity shares along with the private sponsors.

The total Project cost was estimated at US$3.72 billion, with the costs of the export system accounting for US$2.2 billion. An IBRD loan to Chad of US$39.5 million, together with a European Investment Bank (EIB) loan of €20.3 million, would enable Chad to acquire an 11 percent share in TOTCO and a 5 percent share in COTCO, as well as to pay interest during construction and other charges. The loan to Cameroon would amount to US$53.4 million, which combined with an EIB loan of €35.7 million would allow Cameroon to acquire a 10 percent share in COTCO as well as to pay its share of interest during construction and other charges. Subsequently, the equity shares of the governments in the pipeline were reduced as the financing plan was restructured. Overall, World Bank financing for the Project amounted to less than 3 percent of total costs.

- During preparation of the PDPP, the need for capacity building was identified in several areas, including oil revenue management in Chad, environmental monitoring in both countries, and petroleum sector development in Chad. Ultimately, an IDA-funded capacity-building program included three operations: Chad—Management of the Petroleum Economy Project (Cr. 3316-CD of January 27, 2000, of about US$17.5 million); Chad—Petroleum Sector Management Capacity Building Project (Cr. 3373-CD of June 6, 2000, of about US$23.7 million); and Cameroon—Petroleum Environment Capacity Enhancement Project (Cr. 3372—CM of June 6, 2000, of about US$5.8 million).

- While PDPP construction proceeded at a rapid pace, implementation of the capacity-building projects moved slowly, particularly in Chad. Oil production started in July 2003, more than a year in advance of the initial target date. Only about one-third of the originally planned wells had been drilled at this point, but work continued to increase production to full capacity. Project employment peaked in November 2002 at over 13,000 workers. Substantial amounts were contributed to the local economies of Chad and Cameroon through wages and local procurement of goods and services.
Table A: Timeline of Petroleum Development and Pipeline Project

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>Late 1994</td>
<td>World Bank Group agrees to work with Consortium and two governments on Pipeline Project</td>
</tr>
<tr>
<td>27 January 2000</td>
<td>Executive Directors approve Management of the Petroleum Economy Project</td>
</tr>
<tr>
<td>6 June 2000</td>
<td>Executive Directors approve Pipeline Project and Petroleum Sector Management Capacity Building Project</td>
</tr>
<tr>
<td>November 2002</td>
<td>Peak employment, under the project was at 13,400 workers</td>
</tr>
<tr>
<td>July 2003</td>
<td>Pipeline completed</td>
</tr>
<tr>
<td>October 2003</td>
<td>Official first oil ceremony</td>
</tr>
<tr>
<td>November 2003</td>
<td>First royalties paid to Chad’s escrow account in London</td>
</tr>
<tr>
<td>July 2004</td>
<td>First repatriation of funds to Chad from escrow account</td>
</tr>
<tr>
<td>October 2004</td>
<td>Lenders declare Project completed</td>
</tr>
<tr>
<td>30 June 2005</td>
<td>Closing date of Pipeline and Management of Petroleum Economy projects</td>
</tr>
<tr>
<td>29 December 2005</td>
<td>National Assembly of Chad amends the PRML</td>
</tr>
<tr>
<td>6 January 2006</td>
<td>World Bank operations in Chad suspended and funds in escrow account frozen</td>
</tr>
<tr>
<td>11 January 2006</td>
<td>Revised Petroleum Management Law enacted</td>
</tr>
<tr>
<td>26 April 2006</td>
<td>Interim agreement between the World Bank and the government of Chad; World Bank resumes most operations in Chad and stage is set for phased, partial release of funds in escrow account</td>
</tr>
<tr>
<td>13 July 2006</td>
<td>Memorandum of Understanding signed between the Government of Chad and the World Bank, providing the foundation for a long term, durable framework for cooperation between the two parties</td>
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Revenue Management

To ensure that the revenues of this Project supported poverty alleviation efforts, a transparent revenue management framework was considered vital. In addition, petroleum revenues needed to be managed carefully in order to avoid domestic inflation and to pursue poverty alleviation programs efficiently and effectively. The government’s strategy for managing these funds was set forth in the Petroleum Revenue Management Law (PRML) adopted in January 1999. The PRML specified that one-tenth of the royalties and dividends generated by exports would be set aside in a Future Generations Fund, 80 percent of royalties and 85 percent of dividends would be allocated to finance expenditures in the priority poverty reduction sectors, while 5 percent of royalties would be earmarked for expenditure by local entities in the producing region. The remaining 15 percent of the funds would be used for general expenditures until the end of 2007.
Revenues generated by oil exports (royalties, dividends, and direct taxes) would move through an escrow account based in London before being transferred to Chad and would be transparently managed through the general budget process. Oil revenues would be used to finance both investment and recurrent expenditures and would be treated as additional to the “baseline” budget of the fiscal year preceding the first oil revenues. Expenditures from the special petroleum revenue accounts would be authorized in accordance with sector expenditure programs, taking into account implementation capacity constraints, and would require the approval of a body established for this purpose—the Collège de Contrôle et de Surveillance des Resources Pétrolières (the Oversight Committee on the Management of Petroleum Resources, known as the Collège).

Petroleum royalties and transit fees were first paid to the escrow account in 2003, followed by dividends in 2004. However, establishing the special accounts in two local banks and the mechanisms for funds transfer from the offshore escrow account took more time than initially envisaged. The first transfer to Chad (US$32 million) was made in July 2004. As of the end of December 2005, cumulative petroleum revenues amounted to US$426 million. Of this total, US$307 million had been transferred to Chad and US$36.2 million had been placed in the Future Generations Fund. Of the US$162.1 million allocated to the priority poverty alleviation sectors in 2005, 90.7 percent was effectively committed and approved by the Collège.

In 2005, a tight financial situation continued to prevail despite the approval of a new program under the IMF’s Poverty Reduction and Growth Facility at the beginning of the year. Eventually, the government decided to amend the law as a way to address these problems, reservations and alternative recommendations from the World Bank and other partners notwithstanding. It submitted to Parliament amendments abolishing the Future Generations Fund and allowing use of monies saved so far to cover the budget deficit; expanding the priority sectors to justice, territorial administration, and security; increasing the percentage of direct oil revenues used in non-priority sectors from 13.5 to 30 percent; and expanding the scope of the law to all oil fields. The revised Law was enacted on January 11, 2006, and subsequently the government repatriated the balance of US$36.2 million in the Future Generations Fund to the national treasury accounts.

Because the amendments were in breach of key provisions of the legal agreements signed with the World Bank, in early January 2006 the World Bank suspended disbursements on active operations in Chad (except for a regional operation aimed at controlling and preventing locust infestation). This state of default also entailed, upon notification of the account bank, a freeze on the resources in the escrow account in London under the Escrow Agreement.

In late January 2006, the World Bank and the government discussed how to have the two parties jointly assess the poverty and social challenges as well as the financial and institutional constraints facing Chad, as well as how to best address these while preserving the principles of the initial agreement. On April 26, 2006, the World Bank and the government of Chad reached an interim agreement on the resumption of cooperation.
This was based on an understanding that a comprehensive agreement would be developed to ensure that oil revenues serve Chad’s poor, and that in the interim (to be formalized in a revised 2006 budget), Chad would undertake to apply 70 percent of direct revenue to priority sector spending excluding security. The interim agreement has been substantially implemented as the government has prepared a revised budget for 2006 in line with the agreement; which has led to partial release of funds from the escrow account. On its side, the World Bank has lifted the suspension of disbursements on its portfolio.

Further progress was made with the signature of memorandum of understanding in July 2006 providing the foundation for a long term, durable framework for cooperation between the Government of Chad and the World Bank. Among key features, the government has recently agreed to allocate 70 percent of its 2007 budget to priority poverty reduction programs. Annual expenditures will be determined within a Medium Term Expenditure Framework and funds in excess of these agreed annual needs will be reserved in a stability fund for future use. During the period, the government will develop a new Poverty Reduction Strategy Paper by 2008 which will form the basis for a permanent framework for government spending to be enacted in a revised law.

Environmental Management and Social Aspects

World Bank Group participation in the Project was predicated on the introduction and enforcement of sound environmental and social standards in both countries, consistent with WBG safeguard policies. It was also hoped that the development of Project Environmental Assessments (EAs) and Environmental Management Plans (EMPs) would ultimately become applicable to the petroleum sector as a whole, notably in Chad. Thus the Project could provide a model for analyzing and mitigating environmental and social impacts of other petroleum operations, as well as for large-scale infrastructure and other investments.

In 1999, the Consortium submitted an EMP covering the Chad and Cameroon portions of the Project in 19 volumes, which was placed in the World Bank’s Public Information Center to solicit additional public comments. After careful review, the EMP was endorsed by the World Bank Group. The EMP is a comprehensive document that was finalized upon completion of additional studies that the World Bank had recommended to address environmental and social aspects of the Project in the two countries. Of particular concern were the resettlement of indigenous peoples (in Cameroon), community and regional compensations, and health and safety issues along the pipeline right-of-ways.

In October 2004 the External Compliance Monitoring Group (ECMG)—an independent environmental monitoring panel—issued a Certificate of Compliance, confirming that the Project had been implemented in accordance with the provisions of the EMP.

The number of households eligible for resettlement assistance in Chad increased to 400 from the originally anticipated 150 due, among other things, to the larger size of the well pads in the oil field area. Compensation programs in both countries were carried out successfully. Worker health and safety programs were implemented as planned.
To maximize the developmental impact of the Project and to encourage the greater involvement of local enterprises, the IFC introduced a micro, small, and medium-size enterprise development program to promote potential entrepreneurs and train them so they could benefit from the economic opportunities afforded by the Project. This program involved business training, technical assistance, improved access to microfinance, and facilitation of linkages between entrepreneurs and the Project.

As a result of involvement in the preparation phase of the Project, the capacities of local NGOs also increased significantly. These groups played and continue to play an important role during implementation of the Project in both Chad and Cameroon.

**Monitoring and Supervision**

Due to its complexity and the high level of public concern about the Project, it was designed with multiple levels of monitoring that complement each other: operator monitoring, government monitoring, World Bank Group monitoring, and two independent monitoring panels (the ECMG and an International Advisory Group). In addition, in response to the challenges presented as the petroleum revenues became available, the World Bank took steps to strengthen its supervision arrangements, including enhanced coordination, improved access to specialized expertise and technical oversight in the World Bank and the IFC, and better interaction with the broader Chad poverty reduction program.

Independent supervision provided by the ECMG was effective. Its team visited Chad and Cameroon on a regular basis to monitor compliance with the provisions of the Environmental Management Plan. Quarterly visits took place during the construction phase; after the financial closure, these became annual visits. IFC and World Bank teams participated in all these field visits and attended the wrap-up meetings. ECMG quarterly reports were published on the World Bank’s Project Web site.

A group of five distinguished individuals, under the leadership of a former Prime Minister of Senegal, was selected to independently advise both the World Bank’s senior management and the two governments on the achievement of the broad objectives of the Pipeline Project and the three capacity-building projects. This International Advisory Group visited the two countries twice a year. Its members met regularly with the President or the Managing Director of the World Bank to discuss progress made and any recommendations. Its reports were also disclosed on the dedicated World Bank Web site.

**Lessons Learned to Date**

Just over two years after the petroleum revenues started to flow, it is premature to draw any final conclusions. But in light of difficulties encountered in implementing the capacity-building projects, especially in Chad, and of recent developments with regard to the Petroleum Revenue Management Program, this summary highlights lessons that
could guide World Bank future interventions in similar projects in the following three areas: management of oil resources; capacity building, and communications.

However, as mentioned above, from its inception, the Project was identified as a high-risk, high-reward project and it was carefully designed to take into account weaknesses. Nevertheless, some developments in the last six years could not have been anticipated when the Project was approved by the World Bank’s Executive Directors in June 2000. In different ways, these developments contributed to shaping the status of the Project in early 2006, and they must be taken into account when considering the lessons to be learned from the PDPP by the World Bank Group, by governments, and by civil society.

Petroleum Revenue Management and Public Finance Management

In terms of the design of the PRMP, the geographic and revenue scope could have been wider. The basic principles of saving and investing a portion of oil revenues when dealing with a volatile source of government revenues and of stabilizing expenditures should have been stressed more. When establishing that the management of public resources would defacto be fragmented in order to insulate petroleum revenues from pressure to use them for lower-priority expenditures, generic weaknesses in public finance management should have been considered. In particular, efforts should have been made to design a less sophisticated public financial management system with more realistic outputs and key implementation benchmarks to force some concrete advances within the time frame leading to the availability of oil revenues. Also, the PRML could have given the government some flexibility in case of greater-than-expected legitimate expenditures or less-than-expected revenues from other sources.

Greater efforts should have been made early on to prepare detailed procedures, as was done for the Oversight Committee (the Collège), and the revenue management should have been simplified to reduce transaction costs and improve efficiency. The ability of the Collège to remain independent and resist pressure from the government should have been strengthened, and the PRML should have included an enforcement mechanism to ensure that recommendations of the Collège were fully implemented.

Overall, several principles need to be maintained as the PRMP structure evolves. The comprehensiveness of the budget is essential and should be a medium-term objective supported by a rigorous public financial management strengthening program. Anchoring annual expenditures within a Medium Term Expenditure Framework along with a stabilization mechanism is essential to avoid overly rapid increases in spending followed by sharp declines when oil revenues are no longer available. Flexibility is needed at all times, given the volatility of oil prices and the uncertainty associated with oil reserves forecasts. Using the Poverty Reduction Strategy Paper as a reference for allocating oil revenues should be a basic principle, but efforts must be made to identify and monitor a few key observable outcome indicators. Constraints linked to the lack of capacity within sectors need to be addressed in a comprehensive manner. Using a portion of oil revenues for the oil-producing region is important, but the methodology for effective use needs to
be improved. Placing the overall PRMP within the broader government reform agenda is essential and requires strong support from other donors.

**Capacity Building**

World Bank support could have been designed to reduce the disconnect between the quick pace of project construction activities of the private sector and the slower pace of capacity building by the government. Capacity-building activities should have been planned and implemented earlier and should have been more clearly defined and better monitored. Better indicators should have been designed and strictly applied to measure progress in capacity building. A budget should have been prepared to cover the costs of monitoring and supervision by the government, with costs borne by the project sponsor and with the management handled independently by the government.

Similarly, to ensure that the economic impacts in Chad were optimized, it would have been best to work much earlier with the private sector so as to assess and strengthen its capacity thereby enhancing it with the means to capitalize on the opportunities offered by the project. Also, to show some early successes, avenues needed to be explored to leverage the project management expertise of the Consortium in order to get tangible achievements, such as the proposed construction of a topping plant to produce distillate in order to fuel the power plants in N’Djamena.

**Communication**

To maintain the momentum of dialogue and participation generated by the Project, a platform for participation that involves the government, civil society organizations, the Consortium, and development partners including the World Bank is needed in order to periodically assess performance, identify critical issues and facilitate sharing of information among stakeholders.
I. CONTEXT OF THE CHAD-CAMEROON PIPELINE

A. Political and Economic Context

1. Chad is one of the poorest countries in the world, with an estimated gross domestic product (GDP) per capita at about US$340. The population of some 8.6 million is thinly spread over a vast, semi-arid territory. Labor productivity is low, with the economy based largely on cotton, subsistence agriculture, and traditional cattle breeding. The economy is also handicapped by the country’s landlocked location, which increases the cost of imports considerably and reduces the competitiveness of exports. Service delivery and communications are extremely limited. The indicators of socioeconomic development are low compared with other low-income countries and even compared with the rest of sub-Saharan Africa. Chad ranked 173rd among the 177 countries surveyed in the Human Development Report 2005 by the United Nations Development Programme (UNDP).

2. In the first few decades following independence in 1960, Chad experienced recurrent internal and external conflict. In addition, the country suffered considerably from drought in the 1970s. The situation improved after 1990, when the current leadership assumed power. Multiparty elections were held in 1996 and 1997, and again in 2001 and 2002. More recently, however, challenges have again mounted with sporadic rebel activity and the spillover effects of fighting in Darfur, western Sudan, which has led to an increasing number of refugees and internally displaced persons in eastern and southern Chad. There have also been recent episodes of military insurgency and defections by members of the regime’s inner circle.

3. Against this backdrop, Chad has been unable to generate significant domestic resources for development. The government has depended largely on external financing for public investment as well as for a significant share of its recurrent expenditures. Following the 1994 devaluation of the CFA franc, good progress was made in implementing a program of structural reforms aimed at controlling inflation, liberalizing the economy, and improving revenue mobilization. Exploitation of the country’s oil resources was seen as a way to improve prospects for accelerating recovery and development.

4. In early March 2006, the government reported that it had foiled an attempted coup against President Idriss Déby Itno. Then, on April 13th, heavy fighting took place in the capital between government troops and rebels from the United Force for Change (FUC), one of several politico-military movements at work in the country. The government brought the situation under control through the course of the day, but the situation has remained tense in Chad. The tension is likely aggravated by the new petroleum resources, which have raised the stakes associated with power, and by the paucity of tangible results associated with oil revenues to date. On May 3rd a national Presidential election was held and President Déby Itno was re-elected. This followed a referendum held on June 6, 2005, to approve a proposed constitutional amendment removing the cap on successive presidential mandates.

5. Since late October 2006, the security situation has worsened in Chad with recurrent rebel attacks in the Eastern part of the country and threats of attacks on N’Djamena. The main rebel groups have entered into a hit-and-run campaign against the current regime and it is extremely difficult to predict how long this will last and what the final outcome might be.
6. Cameroon is a country with quite a different history, economy, and path to development. During the first half of the 1980’s, Cameroon was a middle-income country thanks to favorable conditions for agriculture, among other factors, and to the country’s production of oil, which facilitated the emergence of a small industrial sector. The government created a powerful parastatal (Société Nationale des Hydrocarbures—SNH) to manage domestic petroleum production. From 1986 to 1993, however, Cameroon experienced serious economic difficulties as the terms of trade deteriorated, exports declined, and per capita income fell by 50 percent. The contraction was also reflected in a severe fiscal crisis, leading to a large cut in nominal wages, to drastic cuts in education, health, and infrastructure spending, and to the accumulation of external and internal arrears. Following the 1994 devaluation of the CFA franc, the government began implementing reforms in various sectors and privatized public utilities with support from the World Bank and the International Monetary Fund (IMF), and Cameroon’s economic performance improved.

B. History of Petroleum Development in Chad

7. International oil companies started to explore in Chad during the early years of independence, and in the 1970s several petroleum discoveries were made. They were not developed, however, owing variously to the state of insecurity in the country and unfavorable conditions in the international petroleum market. It was not until 1988 that the Republic of Chad signed an agreement with a joint venture Consortium composed of Esso (now ExxonMobil), Shell, and Elf, granting a 10-year permit for exploration (which was subsequently extended) and a 30-year lease to develop three oilfields in the vicinity of Doba in southern Chad as well as to export the crude oil produced there. In 1999, Shell and Elf withdrew from the Consortium and were replaced by Chevron and the Malaysian state oil company, Petronas. Interest in Chad’s resources revived as the country regained stability and the climate for investment improved.

8. Given Chad’s landlocked location and its remoteness from potential markets, the most natural option was to transport oil from the Doba basin to the Atlantic coast and from there ship it to world markets. The optimal arrangement for this required the agreement of Chad’s neighbor, Cameroon. As Chad considered various options for developing its petroleum resources, feasibility studies on the best way to export crude oil were done in 1985 and again in 1994. They examined the possibility of trucking oil from Doba in Chad to Ngaoundere in northern Cameroon and sending it on by rail (or by river barge) to the port of Douala. Given the volumes of oil to be shipped, however, all the options considered proved infeasible. The only viable solution was to build a pipeline from the oilfields in Chad to somewhere on or near the coast of Cameroon.

9. Given the political instability in the area, the financial risks of investment, and the capacity challenges in Chad, the Consortium and the commercial banks interested in the pipeline option made it clear that a multilateral development agency had to be brought in as a partner. The World Bank Group (WBG) was the logical choice for this. When the Consortium raised the possibility of cooperation, the World Bank saw this as a unique opportunity to bring about change in one of the poorest countries in the world. In late 1994 the World Bank agreed to work with the Consortium and the governments of Chad and Cameroon on the Project.

10. In 1996, Chad and Cameroon entered into a treaty providing for the construction and operation of an oil pipeline crossing Cameroon’s territory as well as related facilities. The convention established the procedures and rules applicable to land acquisition, environmental
and social safeguards, and the revenue entitlements of Cameroon as a transit country. It was agreed that the governments of Cameroon and Chad would hold respectively 10 percent and 5 percent equity shares in the Cameroon Oil Transportation Company (COTCO) responsible for constructing and operating the pipeline in Cameroon. The government of Chad would also hold an 11 percent stake in the Tchad Oil Transportation Company (TOTCO), which was responsible for building and operating the pipeline in that country.
II. CONSIDERATIONS FOR WORLD BANK GROUP INVOLVEMENT

11. The World Bank Group saw its participation in funding for the Pipeline Project as a unique opportunity to help Chad make a paradigm shift in its economic development. Allowing a country with such limited resources and prospects for growth to access higher fiscal resources could make a significant difference for the Chadian people. The first objective was therefore to increase fiscal revenues and ensure that the new funds would be dedicated to poverty alleviation and to create the conditions to promote new sources of growth. The World Bank Group equally desired to ensure that the Project would be carried out in an environmentally and socially sound manner. This called for supporting capacity building in Chad for petroleum sector management and in both Chad and Cameroon for environmental and social management. Finally, World Bank’s and IFC’s participation would catalyze private sector investment in a difficult environment by mitigating political risks identified by the private sponsors.

12. Experience in many other countries over the years has highlighted the risk that petroleum revenues will be misappropriated. To ensure that the revenues of this Project supported poverty alleviation efforts, a transparent revenue management framework was a precondition for the World Bank Group’s involvement. In addition, petroleum revenues needed to be managed carefully in order to avoid the “Dutch disease” (whereby large foreign exchange inflows lead to a real exchange rate appreciation, to the detriment of traditional tradable goods sectors) and to pursue poverty alleviation programs efficiently and effectively. Furthermore, the exploitation of resources in one part of the country to benefit all areas could be a source of political upheaval, particularly if the inhabitants of the producing area did not receive a fair share of the benefits.

13. World Bank Group participation in the Project was predicated on the integration into it and enforcement of sound environmental and social standards in both countries, consistent with WBG safeguard policies. It was also hoped that the development of Project Environmental Assessments (EAs) and Environmental Management Plans (EMPs) would ultimately become applicable to the petroleum sector as a whole, notably in Chad. Thus the Project could provide a model for analyzing and mitigating environmental and social impacts of other petroleum operations, as well as for large-scale infrastructure and other investments.

14. In terms of the technical, environmental, social, financial and economic aspects of the Project, the Chadian government clearly lacked the means to protect the country’s interests. Qualified and skilled labor was rare as the legacy of insecurity, political instability, and lack of development prospects encouraged many graduates to leave the country, and several skilled professionals working with the government were hired away by the oil companies. When the Project was approved, it appeared that the country was not in a position to exercise oversight functions, particularly for a project of this magnitude. To address this challenge, three Project Preparation Facility advances and two Japan Policy and Human Resources Development Fund grants helped the government negotiate the requisite agreements for the Project and review the EA through a panel of experts (although their role ultimately turned out to be quite limited).

15. Regarding the lending instrument, the initial preference was to support the Project through the WBG private sector windows (Partial Risk Guarantee, the International Finance Corporation (IFC), and the Multilateral Investment Guarantee Agency). But the Consortium
made it clear that World Bank financing and government participation would be essential to guarantee some stability in the policy framework and to provide vital capacity support to government agencies; and hence for the Project to proceed. Both Chad and Cameroon are low-income countries eligible only for International Development Association (IDA) credits. The IDA allocations to them were far below the Project’s requirements. Moreover, using IDA funds for this purpose would “crowd out” other important activities in the country programs. As the Consortium was not interested in giving the governments equity in upstream activities, it was ultimately decided to finance the governments’ equity participation in the export system through International Bank for Reconstruction and Development (IBRD) loans to Chad “enclave” and to Cameroon jointly with the European Investment Bank (EIB). The enclave structure involved the establishment of an offshore account in which all the revenues accruing to the Chadian government would be deposited and from which IBRD and EIB debt service obligations would be paid first.
III. PREPARATION AND DESIGN OF THE PIPELINE PROJECT

16. The Petroleum Development and Pipeline Project (PDPP) covered the development of three oil fields near Doba in southern Chad, which included drilling about 300 wells, building associated facilities and infrastructure, and constructing a 1,070-kilometer buried pipeline from the Doba fields to an offshore floating storage and loading facility about 11 kilometers from the Cameroon coast. Development of the oil fields was to be fully financed by the private sponsors. The pipeline and floating facility would be constructed and operated by TOTCO in Chad and COTCO in Cameroon, with the governments having minority equity shares along with the private sponsors. The PDPP was funded by the private sponsors, by government equity, and by debt financing from the IFC, the U.S. Export-Import Bank, and Compagnie Française d’Assurance pour le Commerce Extérieur.

17. The total Project cost was estimated at US$3.72 billion, with the costs of the export system accounting for US$2.2 billion. The IBRD loan to Chad would amount to US$39.5 million. Together with a European Investment Bank loan of €20.3 million, this would enable Chad to acquire an 11 percent share in TOTCO and a 5 percent share in COTCO, as well as to pay interest during construction and other charges. The loan to Cameroon would amount to US$53.4 million, which combined with an EIB loan of €35.7 million would allow Cameroon to acquire a 10 percent share in COTCO as well as to pay its share of interest during construction and other charges. Subsequently, the equity shares of the governments in the pipelines were reduced somewhat as the financing plan was restructured. Overall, World Bank financing for the Project amounted to less than 3 percent of total costs.

18. The PDPP was appraised by the World Bank in June 1999. As mentioned earlier, in late 1999 Shell and Elf decided to leave the Consortium and they were replaced by Petronas (at 35 percent stake in the Project) and Chevron (at 25 percent). ExxonMobil, through its affiliates, remained the operator with a 40 percent stake in the venture. These changes, along with the need to complete an Environmental Management Plan and conduct consultations with all stakeholders, delayed presentation of the PDPP until June 2000. It included IBRD financing for the two governments involved, as well as IFC financing for TOTCO and COTCO. Project implementation was expected to require five years, with the first oil due to flow by December 2004.

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1 The IFC provided US$200 million, broken down into an A Loan (for IFC’s own account) of US$100 million (US$13.9 million to TOTCO and US$86.1 million to COTCO) and a B Loan (for the account of commercial banks under IFC’s umbrella) of US$100 million (US$13.9 million to TOTCO and US$86.1 million to COTCO). Eighteen commercial banks participated in IFC’s B Loan. The U.S. Export-Import Bank and COFACE provided US$200 million each. An expected US$400 million bond issue did not materialize, and that gap was largely funded through oil companies’ equity.
### Table 1: Project Costs

<table>
<thead>
<tr>
<th>Amounts (Million US$)</th>
<th>Appraisal</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Project Costs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field Systems</td>
<td>1,521</td>
<td>2,648</td>
</tr>
<tr>
<td>Export System</td>
<td>2,202</td>
<td>2,169</td>
</tr>
<tr>
<td><strong>Total Costs</strong></td>
<td>3,724</td>
<td>4,817</td>
</tr>
<tr>
<td><strong>B. Financing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field System</td>
<td>1,521</td>
<td>2,648</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>1,521</td>
<td>2,648</td>
</tr>
<tr>
<td>Export System</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Loans (Commercial)</td>
<td>600.0</td>
<td>400</td>
</tr>
<tr>
<td>- Loans (IFC A and B)</td>
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<td>200</td>
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<tr>
<td>- Capital Markets Bond</td>
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<tr>
<td>- Equity Consortium</td>
<td>685.0</td>
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<tr>
<td>- Equity Govt Chad</td>
<td>48</td>
<td>49</td>
</tr>
<tr>
<td>- Equity Govt Cameroon</td>
<td>70.0</td>
<td>70</td>
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<tr>
<td><strong>Subtotal</strong></td>
<td>2,203</td>
<td>2,169</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,724</td>
<td>4,817</td>
</tr>
</tbody>
</table>

#### Table 2: World Bank Group Financing

<table>
<thead>
<tr>
<th>World Bank Financing (Million US$)</th>
<th>Chad</th>
<th>Cameroon</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBRD Loan</td>
<td>37.2</td>
<td>53.4</td>
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<tr>
<td>IDA Technical Assistance</td>
<td>23.7</td>
<td>5.8</td>
</tr>
<tr>
<td>IFC Loans to Consortium</td>
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<td>172.2</td>
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<tr>
<td><strong>Total</strong></td>
<td>106.2</td>
<td>231.4</td>
</tr>
</tbody>
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#### Table 3: European Investment Bank Financing

<table>
<thead>
<tr>
<th>Amounts in Million</th>
<th>Chad</th>
<th>Cameroon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Euro</td>
<td>US$ 3</td>
<td>Euro</td>
</tr>
<tr>
<td>EIB Loan to the Governments</td>
<td>20.3</td>
<td>22.56</td>
</tr>
<tr>
<td>EIB Loan to the Oil Consortium</td>
<td>88</td>
<td>97.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>108.3</td>
<td>120.3</td>
</tr>
</tbody>
</table>

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2 Between 2000 and 2005
3 In 2001 the exchange rate was 0.90 Euro/US$
A. Capacity Building

19. During preparation of the PDPP, the need for capacity building was identified in several areas, including oil revenue management in Chad, environment monitoring in both countries, and petroleum sector development in Chad. Ultimately, the IDA-funded capacity-building program included three operations:

- Chad—Management of the Petroleum Economy Project (GEEP) (Cr. 3316-CD of January 27, 2000, of about US$17.5 million): The development objective was to help Chad build capacity to implement its petroleum revenue management strategy and to enable it to absorb and allocate expected oil revenue effectively, thus pursuing the poverty reduction objective of petroleum resources development.
- Chad—Petroleum Sector Management Capacity Building Project (Cr. 3373-CD of June 6, 2000, of about US$23.7 million): The threefold development objective was:
  - To strengthen Chad’s capacity to manage the development of its petroleum resources in an environmentally and socially sound manner, beginning with the Doba Petroleum Project in southern Chad;
  - To minimize and mitigate the potential negative environmental and social impacts of that Project on the producing region, strengthen local capacity in the region, and provide opportunities for residents to improve their living conditions; and
  - To establish an effective framework for further sound private sector investment in the petroleum sector and engage effectively with investors.
- Cameroon—Petroleum Environment Capacity Enhancement Project (Cr. 3372—CAM of June 6, 2000, of about US$5.8 million): The development objective was to establish and nurture a national capacity in Cameroon for the environmental management and monitoring of the PDPP.

B. Institutional Aspects

20. In Chad, a national coordination unit liaised between various government entities and the Consortium and provided oversight on both the PDPP and the Petroleum Sector Management Capacity Building Project. The government also established an interministerial committee (Comité Technique National de Suivi et de Contrôle—CTNSC), chaired by the Ministry of Environment and Water, to monitor the environmental and social aspects of the Project. This committee would oversee recruitment and training of personnel to supervise and monitor these aspects, including implementation of mitigation measures to address the impacts on local communities. The Petroleum Directorate in the Ministry of Mines, Energy, and Petroleum was responsible for overseeing all petroleum sector aspects. In 2002, a full-fledged Ministry of Petroleum was created; it subsequently took on oversight of the Project in September 2004.

21. In Cameroon, a 1997 decree created an interministerial Pipeline Steering and Monitoring Committee (PSMC), chaired by the General Manager of the Société Nationale des Hydrocarbures, the petroleum parastatal. The PSMC was supported by a Technical Secretariat with a Permanent Secretary based in the SNH. It led the preparatory work and negotiations and:
- Coordinated the involvement of various government bodies and the arrangements between the Consortium and the government during construction;
• Facilitated the issuance of the various permits needed to build and operate the pipeline and floating storage and loading facility in Cameroon, including a Certificate of Conformity of the pipeline to the authorized specifications before the start of pipeline operation;
• Led the consultations to approve the pipeline route and the acquisition of lands for the Project, including compensation and rehabilitation of affected peoples and communities; and
• Was in charge of monitoring implementation, including the operation and maintenance of the export system in Cameroon.

The 1997 decree also created a Pipeline Inspection Service in the Ministry of Mines, Water, and Electricity; its main mandate is to undertake technical inspection of the pipeline.

C. Revenue Management

22. Chad’s expected revenues from the PDPP were estimated at about US$1.8 billion (in current terms) during the Project’s likely 24-year operating period, equivalent to about US$75 million a year on average and based on a price of oil of US$15.25 per barrel. These revenues would increase government fiscal resources by about one-third. The government’s strategy for managing these funds was set out in the Petroleum Revenue Management Law (PRML) adopted in January 1999. The law provides for the allocation of a large share of direct oil revenues to development expenditures, giving priority to sectors linked directly to poverty reduction objectives—health, social services, education infrastructure, rural development, environmental protection, and water resources. Oil revenues would be used to finance both investment and recurrent expenditures in these priority sectors, which would be treated as additional to the “baseline” budget of the fiscal year preceding the first oil revenues. Revenues generated by oil exports (royalties, dividends, and direct taxes) would move through an escrow account based in London before being transferred to Chad and would be transparently managed through the general budget process.

23. The PRML specified that one-tenth of the royalties and dividends generated by exports would be set aside in a Future Generations Fund (FGF). The balance would be placed in special petroleum revenue accounts in local commercial banks and managed according to strict transparency and prudent management criteria. Of these funds, 80 percent of royalties and 85 percent of dividends would be allocated to finance expenditures in the priority poverty reduction sectors, while 5 percent of royalties would be earmarked for expenditure by local entities in the producing region. The remaining 15 percent of the funds would be used for general expenditures until the end of 2007.
24. Expenditures from the special accounts would be authorized in accordance with sector expenditure programs, taking into account implementation capacity constraints, and would require the ex ante approval of a body established for this purpose—the Collège de Contrôle et de Surveillance des Resources Pétrolieres (see Box 1). The government also agreed to undertake an information and communication campaign to keep the public informed of these arrangements and of how the petroleum revenues were used.

Box 1. The Oversight Committee on the Management of Petroleum Resources

The Oversight Committee (the Collège) was established by the government of Chad to monitor the Petroleum Revenue Management Program (PRMP). It includes five statutory members:

- Supreme Court judge,
- Two members of the National Assembly,
- The National Director of the Regional Central Bank,
- The Director of the Treasury, and
- Four representatives from civil society or nongovernmental organizations (NGOs) (development groups, religious groups, human rights organizations, and trade unions).

The committee has been very active in carrying out its mandate. Led by a fully staffed formal membership, the technical staff of the Collège exercised its role in prior review (authorization of commitments and payments in line with the PRML) and in meeting its mandatory deadline of four working days to provide feedback on applications received. The Collège received additional funds from the government budget to support the professional staff, previously financed by a World Bank project, as well as to meet the increasing demands in terms of substantive work on the part of the Collège.

The Collège reviewed the use of the oil revenues in 2004, and its findings confirmed weak points in public financial management, which were exacerbated in the use of oil revenues. Its recommendations were very much in line with the proposed priority corrective measures envisaged in the national action plan for modernization of public financial management. The report is posted on the Collège’s Web site. While some of the recommendations have been implemented, it appears that a formal follow-up mechanism is needed, as the Collège has no enforcement power.
25. To support the implementation of the Petroleum Revenue Management Program, the World Bank prepared with the government an IDA credit for the Management of the Petroleum Economy Project. It was approved on January 27, 2000, in advance of the PDPP itself. The project development objective was to enable Chad to absorb and allocate expected oil revenues effectively and thus help advance the poverty reduction goal of petroleum resource development. The Project helped Chad in a broad sense prepare the economy to absorb additional resources. It did not focus on specific details of the various components of the PRML except for the Collège, which benefited significantly. Yet it tried to strengthen public finance management more broadly, focusing on budget preparation and execution and on the development of a poverty reduction strategy to guide the use of oil resources. The Project cost was estimated at US$19.4 million, with US$17.5 million of IDA financing and the balance provided by the government.

- The first component of the Project provided for technical assistance and training to improve public financial management, including preparing and presenting a consolidated budget, managing budget expenditures, managing the Treasury and public accounting, establishing internal controls and auditing, mobilizing revenue, developing a financial management information system, and supporting the Project management unit.
- The second component supported development of a poverty database, a poverty profile, and a participatory poverty reduction strategy.
- The third component included preliminary actions for civil service reform.
- The fourth component supported implementation of the oversight and control functions mandated by the new law, including those of the Collège, and for an outreach campaign aimed at civil society.
- The fifth component provided for monitoring the economic reform program agreed with the IMF, including support for the Structural Adjustment Unit and the National Secretariat for Capacity Building.

26. The revenues that Cameroon was to receive from the Pipeline Project were small in relation to that country’s total budget (about 2 percent of annual fiscal revenues) and therefore no specific framework was put in place to manage them. However, strengthening public finance management has been and continues to be supported under the general World Bank program in Cameroon.

D. Environmental Management and Social Aspects

27. Following initial contacts with the World Bank and the IFC, in 1993 the Consortium conducted a limited “scoping” process for an Environmental Assessment with selected ministries, academics, and local NGOs. The alternative corridor analysis already done by the Consortium’s technical consultants was reviewed and validated, and key issues were identified for an assessment. Following scientific and technical studies, a draft EA was prepared by an independent consultant for public review and comment beginning in 1997. During this period, the World Bank also conducted an assessment of the governments’ capacities; as a result, a plan was developed to strengthen relevant units to ensure adequate environmental management and monitoring.

28. At the time, Chad had little capacity to assess and monitor environmental impacts. Its National Plan for Sustainable Development dealt largely with desertification and took no account
of potential petroleum developments. Although an environmental framework law was adopted in 1998, it was not followed up by implementing decrees and regulations, such as rules and procedures on environmental impact assessment and monitoring, environmental quality standards, or disclosure and consultation regulations. In sum, the main parts of the law could not be enforced. The Ministry of Environment and Water had only recently been created, and its Environment Department was virtually devoid of staff and logistical support. However, the Chadian committee charged with overseeing Project preparation used a panel of environmental experts that the World Bank helped establish and took an active part in the discussion and review of the mitigating measures provided in the EMP for environmental and social impacts in the oilfield area.

29. In Cameroon, the 1996 Environmental Management Law provided for an Environmental Assessment of the Project, although specific rules and procedures for this were not defined when the Project was being prepared. This law, too, lacked the necessary implementation rules and regulations, and a nucleus of environmental management capacity was being developed within the Ministry of Environment and Forests through the Permanent Secretariat for Environment. The Pipeline Steering and Monitoring Committee created a subcommittee with representatives of the Ministry of Environment and Forests, the Ministry of Housing and Urban Development, and the PSMC Permanent Secretariat to oversee the EA preparation process. That subcommittee drew as needed on other ministry staff to oversee specific aspects of the EA and EMP, including the Area Specific Oil Spill Response Plan prepared by the Consortium.

30. In 1997, the Consortium and the two governments submitted a draft EA for the Project to the World Bank Group. It was not considered satisfactory and was described by the World Bank Group as having many flaws and gaps. The World Bank Group noted that consultation by the Consortium had been limited to direct Project beneficiaries and affected people, as well as some NGOs with relevant specialized knowledge, that the proposed pipeline route crossed part of Cameroon that had been flagged by the panel of environmental experts as particularly sensitive in terms of biological diversity, that some of the baseline data were inadequate to address key concerns (notably regarding water quality), and that the draft EA did not include a satisfactory Environmental Management Plan.

31. Based on the World Bank Group’s comments, the Consortium held broader public consultations, carried out additional studies, prepared a detailed EMP, and conducted further consultations on the results. Significant changes in Project design followed. In particular, the pipeline route was modified to avoid crossing the Mbéré Rift Valley and the Deng Deng Forest in Cameroon. Crossing the Atlantic littoral forest could not be avoided, but the pipeline route (roughly paralleling an existing road) was optimized to minimize damage to areas of high biodiversity value. In addition, the Consortium agreed to provide funds to support the development and implementation of management plans for two protected areas in Cameroon to offset any residual biodiversity impacts. In 1999, the Consortium submitted an EMP covering the Chad and Cameroon portions of the Project in 19 volumes, which was placed in the World Bank’s Public Information Center to solicit additional public comments. After careful review, the EMP was endorsed by the World Bank Group. The EMP is a comprehensive document that was finalized upon completion of additional studies that the World Bank Group had recommended to address environmental and social aspects of the Project in the two countries. Of particular concern were the resettlement of indigenous peoples (in Cameroon), community and regional compensations including the two offsets in Cameroon, and health and safety issues along the
pipeline right-of-way. The World Bank Group conducted its own due diligence on all these aspects, held field consultations, and reviewed and discussed all studies to inform its own decision process about the final EMP.

32. Beyond their sovereign responsibilities (including security and public health), the main responsibilities of the two governments under the EMP were to facilitate the operator’s access to the Project site during implementation of the Compensation and Resettlement Plan in Chad and the Compensation Plan and Indigenous Peoples Plans in Cameroon and to monitor the activities of the operator during the construction and operation periods. The governments were also responsible for managing any indirect impacts of Project activities on the surrounding communities.

33. In Chad, the Comité Technique National de Suivi et de Contrôle (CTNSC) established a field unit in Komé to monitor Project implementation, both for the oilfield and for the Chad portion of the pipeline. This group was tasked with oversight of the Consortium’s environmental monitoring activities, which covered implementing the Compensation and Resettlement Plan, managing the government’s activities for mitigating indirect impacts on local communities, and supporting the preparation of a Regional Development Plan to guide the development of the oil-producing area. The Petroleum Sector Management Capacity Building Project provided support to the government to draft and adopt new environmental regulations to govern petroleum sector activities, to train technical staff and mobilize technical assistance for the CTNSC (US$6.7 million), to mitigate indirect Project impacts, and to support community initiatives in the oil-producing area (US$9.0 million, including US$3.5 million for the Local Initiatives Fund, FACIL). These components of the Project were implemented by the Ministry of Environment and Water through the CTNSC.

34. In Cameroon, the Pipeline Steering and Monitoring Committee’s (PSMC) Environment, Route, and Security Section was to have three expert staff based at SNH headquarters in Yaoundé, as well as field teams located along the pipeline route to deal with environmental and social issues on the ground. Through the PSMC, it was expected that the support of local administrations and local branches of other ministries could be mobilized as needed. In particular, the government would need to address potential health, water pollution, and safety issues in the communities likely to be affected by pipeline construction and related activities.

35. The Cameroon Petroleum Environment Capacity Enhancement Project had four main components:

- The first component supported drafting, disseminating, and enforcing the needed implementing decrees and regulations for the 1996 Environmental Management Law, as well as the preparation of a long-term strategic plan for the petroleum sector.
- The second component provided support to the Permanent Secretariat of the PSMC, which included four field units, as well as development of a communications strategy.
- The third component supported activities carried out by other government units, including implementing a public health program in the area affected by the pipeline, national oil spill response planning, and other activities such as technical monitoring in the two national parks selected as biodiversity offsets.
- The fourth component supported an International Advisory Panel and a Project-related management information system.
IDA financing was limited exclusively to the investment costs of the Project (notably under the first and fourth components), while the government covered all the recurrent costs.

36. The environmental liabilities associated with petroleum development were addressed through two distinct channels that were part of the IBRD loan and the IDA credit for petroleum management capacity building in Chad. The first channel was the application of the World Bank’s safeguard policies, which led to the preparation of the Environmental Management Plan and the inclusion of a gate-keeping clause in the loan agreement and the Project agreements to ensure that any crude transported through the pipeline was developed in accordance with the principles set forth in the original EMP. The second channel was the support provided to Chad to develop a framework to ensure the social and environmental sustainability of future petroleum development.

E. Monitoring

37. During the preparation phase, the Pipeline Project attracted an extraordinary level of public interest and concern. Comments covered a broad set of issues—from the environmental and social impacts associated with previous oil projects in Africa (which the World Bank Group had not been associated with) to the political and social climate in Chad and global issues such as climate change and human rights. This concern also reached the World Bank’s Board, where several Executive Directors and their staff took a personal interest in progress with the Project. The two regional Vice-Presidents for the Africa Region saw the Project as an innovative way for the institution to help catalyze private investment in Africa. Eventually, the World Bank Group’s President, Managing Director, and Senior Vice-Presidents became involved. The reputational risk to the World Bank Group was seen as very high, and senior management wanted to be assured that the Project would be designed and carried out in conformity with all relevant World Bank policies.

38. Before submitting the Project to the Board, the Africa Region convened a review panel composed of the most senior environmental experts within the World Bank Group. After spending several days reviewing the Project documentation, this group concluded that the Project was in compliance with all relevant World Bank Group safeguard policies and, although risky, should go forward.

39. Due to its complexity and the high level of public concern about the Project, it was designed with multiple levels of monitoring that complement each other:

First level: operator monitoring
- The operator would monitor its own work on the ground and the work of its subcontractors, providing regular reports to the governments and to major lenders. It was agreed that quarterly reports would be made public and disclosed to stakeholders and the public at large.

Second level: government monitoring
- The governments would monitor the performance of the operator on the ground and provide regular reports to the World Bank Group under the two capacity-building projects.
- Both governments would continue to be advised by international panels of experts, also financed under the capacity-building projects.

Third level: World Bank Group monitoring
• World Bank Group staff in the field and from headquarters would supervise the projects regularly.

Fourth level: independent monitoring panels

• The lender group would recruit an External Compliance Monitoring Group (ECMG) to provide independent environmental monitoring of the Project, and its reports would be available on the World Bank’s Web site and made public in the two countries.

• An International Advisory Group (IAG) would be established to oversee broader social and economic aspects of the Project, in particular to monitor whether Project revenues were being used to achieve the basic Project objective of poverty alleviation, and its reports would also be available on the World Bank’s Web site.

Finally, it was clear from its inception that this Project—because of its magnitude and sensitivity—would attract interest from civil society organizations that would monitor all its activities closely.
IV. PROJECT IMPLEMENTATION

40. The Consortium mobilized to begin construction activities on the field system and the export systems almost immediately after the loans were approved in June 2000. But implementation of the capacity-building projects in both Chad and Cameroon was delayed by the need to complete acceptable Project implementation manuals and to set up staff and support for the new institutions being created. In Chad, capacity weaknesses made it difficult for the local teams to jumpstart the Project. In Cameroon, the authorities did not display strong ownership of the Project, including the petroleum environment capacity enhancement component. They concentrated on ensuring the presence of field teams—entirely financed by government resources—and relying on the logistics provided by the Consortium, as per the agreement. The IDA credits in Chad and Cameroon became effective in March 2001, after three extensions of the effectiveness date. The loans for the PDPP became effective in August 2001.

41. While PDPP construction proceeded at a rapid pace, implementation of the capacity-building projects moved slowly, particularly in Chad, where the tragic loss of the Minister of Planning and the General Secretary of the Presidency of the Republic—two key members of the Chadian development team—in a plane crash in February 2001 was a considerable setback for the Project. In addition, delays in recruiting qualified staff, launching contracts to buy vehicles and office equipment, and finding office space and housing for the field units meant that the governments could only monitor onsite activities with the collaboration and active support of the Consortium. Similarly, delays in contracting for planned training activities and inadequacies in some of the training plans meant that the field staff initially had to rely on the Consortium to provide on-the-job training.

42. Oil production started in July 2003, more than a year in advance of the initial target date. Only about one-third of the originally planned wells had been drilled at this point, but work continued to increase production to full capacity. Employment under the Project peaked in November 2002 at over 13,000 workers. Substantial amounts were contributed to the local economy in both Chad and Cameroon through wages and local procurement of goods and services. In 2004, the Project received a Global Excellence Award from the United States. Department of State for environmental and socioeconomic management.
Table 4: Timeline of Petroleum Development and Pipeline Project

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Late 1994</td>
<td>World Bank agrees to work with Consortium and two governments on Pipeline Project</td>
</tr>
<tr>
<td>27 January 2000</td>
<td>Executive Directors approve Management of the Petroleum Economy Project</td>
</tr>
<tr>
<td>6 June 2000</td>
<td>Executive Directors approve Pipeline Project and Petroleum Sector Management Capacity Building Project</td>
</tr>
<tr>
<td>November 2002</td>
<td>Peak employment, under the project was, at 13,400 workers</td>
</tr>
<tr>
<td>July 2003</td>
<td>Pipeline completed</td>
</tr>
<tr>
<td>October 2003</td>
<td>Official first oil ceremony</td>
</tr>
<tr>
<td>November 2003</td>
<td>First royalties paid to Chad’s escrow account in London</td>
</tr>
<tr>
<td>July 2004</td>
<td>First repatriation of funds to Chad from escrow account</td>
</tr>
<tr>
<td>October 2004</td>
<td>Lenders declare Project completed</td>
</tr>
<tr>
<td>30 June 2005</td>
<td>Closing date of PDPP and GEEP</td>
</tr>
<tr>
<td>October 2005</td>
<td>ICR workshops held in N’Djamena and Yaoundé</td>
</tr>
<tr>
<td>29 December 2005</td>
<td>National Assembly of Chad amends the PRML</td>
</tr>
<tr>
<td>6 January 2006</td>
<td>World Bank’s operations in Chad suspended and funds in escrow account frozen</td>
</tr>
<tr>
<td>11 January 2006</td>
<td>Revised Petroleum Management Law enacted</td>
</tr>
<tr>
<td>28 February–2 March 2006</td>
<td>World Bank delegation and Chadian officials meet in Paris</td>
</tr>
<tr>
<td>24 March–6 April 2006</td>
<td>Fact-finding mission to Chad</td>
</tr>
<tr>
<td>26 April 2006</td>
<td>Interim agreement between the World Bank and the government of Chad; World Bank resumes most operations in Chad and stage is set for phased, partial release of funds in escrow account</td>
</tr>
<tr>
<td>13 July 2006</td>
<td>Memorandum of Understanding signed between the Government of Chad and the World Bank, providing the foundation for a long term, durable framework for cooperation between the two parties</td>
</tr>
</tbody>
</table>

A. Revenue Management

43. Petroleum royalties and transit fees were first paid to the escrow account in 2003, followed by dividends in 2004. In January 2003, the Ministry of Finance established a working committee to develop modalities for managing oil revenues. In July 2003, in three decrees, the government established a stabilization mechanism, facilitated the role of the regional Central Bank in conducting monetary policy, and defined the role of the Collège in overseeing oil revenue and associated spending, as well as, in budget preparation and implementation. Two decrees in 2004 defined how to use the oil revenues allocated to the oil-producing region and the mechanisms for the Future Generations Fund.

44. Establishing the special petroleum revenue accounts in two local banks and the mechanisms for funds transfer from the offshore escrow account took more time than initially envisaged. The first transfer to Chad (US$32 million) was made in July 2004. As of the end of
December 2005, cumulative petroleum revenues amounted to US$426 million, of which US$399 million was in the form of royalties, US$22 million was a reimbursement of the share premium, US$28,000 was dividends, US$4.1 million was income tax from TOTCO, and US$728,000 was interest income. Of the total amount, US$307 million had been transferred to Chad and US$36.2 million had been placed in the Future Generations Fund. Of the US$162.1 million allocated to the priority poverty alleviation sectors in 2005, 90.7 percent was effectively committed and approved by the Collège.

Table 5: Chad Oil Revenues and Allocations

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006 (Until Sept)</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oil Exports</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Millions barrels)</td>
<td>8.6</td>
<td>61.3</td>
<td>63.3</td>
<td>41.6</td>
<td>174.8</td>
</tr>
<tr>
<td><strong>Movements in Escrow Account</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Millions of US dollar)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Allocations in Chad</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Millions of US dollar equivalent)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Royalties</td>
<td>12.93</td>
<td>121.62</td>
<td>264.32</td>
<td>213.30</td>
<td>612.17</td>
</tr>
<tr>
<td>Dividends</td>
<td>0.52</td>
<td>2.51</td>
<td>1.95</td>
<td></td>
<td>3.03</td>
</tr>
<tr>
<td>Share Premiums</td>
<td>11.86</td>
<td>10.13</td>
<td>4.12</td>
<td></td>
<td>23.94</td>
</tr>
<tr>
<td>Taxes</td>
<td>0.15</td>
<td>0.58</td>
<td>1.22</td>
<td></td>
<td>1.95</td>
</tr>
<tr>
<td>Others</td>
<td>0.15</td>
<td>0.58</td>
<td>1.22</td>
<td></td>
<td>1.95</td>
</tr>
<tr>
<td><strong>Debits</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfers to FGF</td>
<td>9.40</td>
<td>26.80</td>
<td>-36.20</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Fees</td>
<td>0.029</td>
<td>0.026</td>
<td>0.055</td>
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<td></td>
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<tr>
<td>Debt Service Provision</td>
<td>15.37</td>
<td>-2.37</td>
<td>1.96</td>
<td>14.96</td>
<td></td>
</tr>
<tr>
<td>Transfers to Chad</td>
<td>84.60</td>
<td>222.47</td>
<td>289.84</td>
<td></td>
<td>596.91</td>
</tr>
</tbody>
</table>

**Allocation in Chad**

(Millions of US dollar equivalent)

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority Sectors</td>
<td>67.68</td>
<td>177.97</td>
<td>164.87</td>
<td>410.52</td>
<td></td>
</tr>
<tr>
<td>General Budget</td>
<td>12.69</td>
<td>33.37</td>
<td>76.09</td>
<td>122.15</td>
<td></td>
</tr>
<tr>
<td>Oil-producing Region</td>
<td>4.23</td>
<td>11.12</td>
<td>12.68</td>
<td>28.03</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>84.60</td>
<td>222.47</td>
<td>253.64</td>
<td>560.70</td>
<td></td>
</tr>
</tbody>
</table>

45. In keeping with its mandate, the Collège reviewed the draft 2004 and 2005 budgets to ensure they were fully in keeping with the provisions of the Petroleum Revenue Management Law. It approved the disbursement of oil revenues to the priority sectors. It also produced a first inspection report on the 2004 expenditures in July 2005. The Collège reports are available on its Web site.

46. As mentioned earlier, the PRMP included two other features: the Future Generations Fund (FGF) and an allocation of some oil revenues to the oil-producing region. The FGF was expected to be managed by an investment committee chaired by the Prime Minister and defined

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4 The Balance of FGF ($36.20 million) transferred to Chad in January 2006 is not taken into account.
by Decree No. 096/PR/MEF/2004. The government approved its investment strategy and defined the modalities for selecting the Fund Manager in mid-2005. This strategy was never implemented, however, as the government subsequently decided to abolish the FGF and transfer the balance into the general Treasury account.

47. As for the 5 percent of royalties earmarked for the beneficiaries of the producing region, a transitory mechanism was put in place, as elected decentralized institutions that could normally manage these funds have still to be put in place. The Transitory Committee, formally installed by President Déby Itno in Doba in May 2005, set up a technical team and worked with the communities on a first-year investment program. Some priority investments are currently under way, notably for the construction of markets in two main urban centers (Doba and Bebedja), water facilities, and schools, as well as the provision of school equipment.

48. Since 2004, with the expiration of the agreement under the IMF’s Poverty Reduction and Growth Facility (PRGF) early in the year, the government of Chad has faced recurring financial difficulties despite the newly available oil revenues. In 2005, the tight financial situation continued to prevail despite the approval of a new program under the PRGF at the beginning of the year. Eventually, the government decided to amend the PRML as a way to address these problems. It submitted the amendments to Parliament for review in November 2005 and the amendments were approved on December 29, 2005. The main changes proposed included:

• Abolishing the Future Generations Fund and allowing the use of monies saved so far to cover the budget deficit;
• Expanding the priority sectors to justice, territorial administration, and security;
• Increasing the percentage of direct oil revenues used in non-priority sectors from 13.5 to 30 percent; and
• Expanding the scope of the law to all oil fields.

The revised law was enacted on January 11, 2006, and subsequently repatriated the US$36.2 million in the Future Generations Fund to the general treasury accounts.

49. The World Bank had previously explained that it was not opposed to changes in the law per se, but it was important that the initial PRML be fully implemented for a sufficient period—at least over one complete budget year—in order to allow a proper assessment. In addition, an analysis done by the World Bank and the IMF in close collaboration with Chadian authorities had concluded that the PRML was not the principal cause of the government’s financial difficulties. Instead, these stemmed from broader institutional weaknesses in public budget management and spanned the entire chain on the expenditure side—from budget preparation inadequately rooted in an overall long-term vision of priorities to continuing deficiencies in the execution of spending, including cash-flow management and ex post evaluation and auditing of spending.

50. The World Bank had reiterated a commitment to help the government of Chad address these structural issues by supporting implementation of an action plan for the modernization of public finances prepared by the government, as well as by finding ways to address short-term financial issues, notably by taking advantage of existing flexibility in the PRML to cover operating expenditures with oil revenues and mobilizing additional funding to help fill financing gaps. Other donors—including the European Union, the African Development Bank (AfDB), the United States, and France—were consulted and expressed support for the proposed approach,
which stressed the importance of transparency and good governance while showing some understanding of possible additional financial needs.

51. Because the amendments were in breach of key provisions of the legal agreements signed with the World Bank, in early January 2006 the World Bank suspended disbursements on active operations in Chad (except for a regional operation aimed at controlling and preventing locust infestation). This state of default also entailed—upon notification of the account bank—a freeze on the resources in the escrow account in London under the Escrow Agreement.

Since then, efforts have been made on both sides to maintain the dialogue and find a solution satisfactory to all parties. At a meeting in Paris in January 2006, delegations of the World Bank Group and the Government met in Paris to discuss options for re-engagement. Between March 24 and April 6, 2006, a multipartner fact-finding mission took place in Chad and included some bilateral partners (France, Germany, and the United States) and the main multilateral institutions involved in Chad—the AfDB, European Union, IMF, U.N. High Commissioner for Refugees, UNDP, and the World Bank. The mission allowed Chad and its partners to share views and reach a common understanding of the challenges the country faces in implementation of its poverty reduction strategy, aggravated by the Darfur crisis and other security concerns. It also laid the groundwork for further policy discussions through the preparation of a framework detailing the specific issues and options for resolving them. On April 26, 2006, the World Bank and the government of Chad reached an interim agreement on the resumption of cooperation. This was based on an understanding that a comprehensive agreement would be developed to ensure that oil revenues serve Chad’s poor, and that in the interim (to be formalized in a revised 2006 budget), Chad would undertake to apply 70 percent of direct revenue to priority sector spending excluding security. The interim agreement has been substantially implemented as the Government has prepared a revised budget for 2006 in line with the agreement; which has led to partial release of funds for the escrow account. On its side, the World Bank has lifted the suspension of disbursements on its portfolio.

52. Further progress was made with the signature of memorandum of understanding in July 2006 providing the foundation for a long term, durable framework for cooperation between the Government of Chad and the World Bank. Among key features, the Government has recently agreed to allocate 70% of its 2007 budget to priority poverty reduction programs. Annual expenditures will be determined within a Medium Term Expenditure Framework and funds in excess of these agreed annual needs will be reserved in a stability fund for future use. During the period, the Government will develop a new Poverty Reduction Strategy Paper by 2008 which will form the basis for a permanent framework for government spending to be enacted in a revised law.

B. Environmental Management and Social Aspects

53. During the construction phase, the External Compliance Monitoring Group (ECMG) had identified numerous issues and made recommendations that were generally well received and implemented by the Consortium. The issues not satisfactorily resolved were mainly in the hands of the governments (some land use planning issues, staff training, and country programs to follow up on archaeological finds). Other issues—gas flaring at the oilfield, possible discharge of
excess water from the offshore storage and loading vessel, an unsatisfactory draft Regional Development Plan in Chad—developed more recently and are in the process of being resolved. These issues, notwithstanding, in October 2004 the ECMG issued a Certificate of Compliance, confirming that the Project had been implemented in accordance with the provisions of the Environmental Management Plan.

54. As agreed, the Consortium prepared a General Oil Spill Response Plan and six Area-Specific Oil Spill Response Plans for segments of the pipeline corridor. These plans have been distributed to the governments and placed in public reading rooms in Chad and Cameroon. In addition, COTCO conducted a public awareness campaign on this subject along the pipeline route in Cameroon. The PSMC in Cameroon and the CTNSC in Chad completed the two National Oil Spill Contingency Plans under the capacity-building projects, but these still need to be approved by the governments.

55. The Foundation for Environment and Development in Cameroon (FEDEC) was established as planned, though with delays. The government met its obligations to recognize FEDEC as a nonprofit, tax-exempt organization, and the Consortium provided the promised financial resources promptly. Under the Offsite Environmental Enhancement Program of the EMP, FEDEC awarded contracts to two international NGOs—one to the World Wildlife Fund to support preparation and implementation of the management plan for Campo Ma’an National Park that had been developed under a prior Global Environment Facility project, and the other to the Wildlife Conservation Society to prepare a management plan for the newly created Mbam Djere National Park.

56. Surface and groundwater quality in the Project area was a major concern of local residents during Project preparation. The Project included a comprehensive groundwater monitoring program, and specific measures were adopted to control soil erosion along the right-of-way and at river crossings. An independent study of water quality in the oilfield area in 2004 by the Pasteur Institute confirmed that drinking water standards had been maintained.

57. Managing solid and oily wastes has been a continuing challenge. Due to limited processing capacity, significant volumes of waste accumulated, especially at the oilfield. The Project sponsors attempted to solve this problem by re-injecting waste oil into special wells, by adding an onsite incinerator, and by helping a local contractor increase his waste processing capacity. Waste management improved during the construction period, and the Project remained in compliance with the standards set in the EMP.

58. The number of households eligible for resettlement assistance in Chad increased to 400 from the originally anticipated 150 due, among other things, to the larger size of the well pads in the oilfield area. In Cameroon, the Project succeeded in avoiding any need for resettlement. Compensation programs in both countries were carried out successfully, and social closure was obtained in Cameroon from all the affected communities. However, some grievances have been voiced by some communities (such as water wells not being properly constructed). In response, COTCO has arranged for five Cameroonian NGOs to participate in the field to resolve grievances and monitor the situation. This process, referred to as the Social Statement, includes periodic field visits and then issuance of a joint report by NGOs, COTCO, and the government on the status of any grievances.
59. In Chad, given the current situation with the Project footprint—notably, the restoration and the return to local residents of land that is no longer needed for Project construction—the ECMG recommended that “social closure” be postponed until the pending issues have been resolved. It was agreed that once the assessment is completed and recommendations implemented, then discussion about social closure can begin.

60. Migration into the Project area was successfully controlled by the government and the contractors through labor recruitment policies. Still, spontaneous settlements developed in the vicinity of the major construction camps, primarily around the fixed facilities. Local authorities were slow to recognize these settlements, but eventually the Consortium provided basic water and sanitation services to some, including Komé Atan, located near the Project’s permanent base at Komé in Chad.

61. Worker health and safety programs were implemented as planned. The Consortium also worked closely with the National HIV/AIDS Program in Chad and the Roll Back Malaria programs in Chad and Cameroon to promote public awareness and prevention. In Cameroon, implementing the public health component of the capacity-building project was delayed due to the limited capacity of and heavy demands on the National HIV/AIDS Program staff and the initial reluctance of the Ministry of Health to work with the Société Nationale des Hydrocarbures. Ultimately, however, an HIV/AIDS awareness-building campaign was implemented along the pipeline corridor in Cameroon by local NGOs, and health centers in the corridor were reinforced.

62. In the framework of the Indigenous Peoples Plan (IPP), a community development facilitator was recruited in Cameroon to work with the Bakola/Bagyeli communities affected by pipeline construction activities in the southwestern part of the country. Resources from the Foundation for Environment and Development in Cameroon were used to support programs proposed by these indigenous people in the areas of agriculture, health, education, housing, and citizenship. Assuring land rights for the Bakola/Bagyeli is a longer-term issue that FEDEC is assessing in order to develop a viable program for implementation during the pipeline operating period over the next 25 years.

63. The pipeline corridor exists in a remarkable part of Africa that could contain valuable evidence of early human occupation, particularly in the more arid zone, where remains are more likely to be preserved. In spite of the Project’s impeccable record for management of contemporary cultural property, the ECMG cited issues of noncompliance with the archaeological program, which resulted in removal of a rock shelter and inadequate treatment of an archaeological site during right-of-way clearing. To mitigate the damage done, the sponsors financed a comprehensive scientific report on the archaeological knowledge gained from the construction of the pipeline, provided doctoral scholarships for Cameroonian archaeologists, and provided funding for a curation facility needed to house and analyze artifacts. Also, measures were taken to ensure that significant archaeological sites would be avoided and that “chance finds” would be properly preserved, recorded, and stored for future study.

C. Local Businesses

64. To maximize the developmental impact of the Project and to encourage the greater involvement of local enterprises, the IFC introduced a micro, small, and medium-size enterprise development program to promote potential entrepreneurs and train them so they could benefit
from the economic opportunities afforded by the Project. This program involved business training, technical assistance, improved access to microfinance, and facilitation of linkages between entrepreneurs and the Project.

65. Partly due to the speed of the pipeline’s construction, some of the early activities of the Chad small and medium-size enterprise (SME) program had little success in securing contracts with the Consortium or its subcontractors. Over the past two years, however, a revamped program structured around an Enterprise Center has forged a relationship between Esso Chad and its subcontractors on the one hand and Chadian small businesses on the other hand. So far, more than US$6 million worth of procurement contracts have been awarded to Chadian businesses through this center. Concerning access to finance, FINADEV—the only commercial micro-finance institution accredited in Chad—is making important strides with more than 2,500 clients, including 1,436 women. Most recently, an agribusiness promotion project (initially starting with a poultry development program) was launched in the producing region.

D. Supervision Arrangements

66. As indicated above, the complexity of the Project and its high-risk, high-reward nature led to a very comprehensive supervision structure involving not only World Bank staff but also review by outside structures notably the International Advisory Group (IAG) and the External Compliance Monitoring Group (ECMG). This constituted a new supervision approach that has now been replicated in similar complex projects.

67. First of all, the President of the World Bank Group appointed five distinguished individuals, under the leadership of a former Prime Minister of Senegal, to independently advise him on the achievement of the broad objectives of the Pipeline Project and the three capacity-building projects. This IAG visited the two countries twice a year. Its members met regularly with the President or the Managing Director of the World Bank to inform him of progress made and any recommendations. Its reports were also disclosed on the dedicated World Bank Web site.

68. Concerning, environmental aspects, independent supervision was provided by the ECMG. Its team visited Chad and Cameroon on a regular basis to ensure compliance with the provisions of the Environmental Management Plan. Quarterly visits took place during the construction phase; after the financial closure, these became annual visits. The IFC and World Bank teams participated in all these field visits and attended the wrap-up meetings. ECMG quarterly reports were published on the World Bank’s Project Web site.

69. Regarding the World Bank Group, supervision approach evolved over time. Initially, supervision teams led by staff from headquarters and supported by staff in country offices were set up for each of the projects. The IFC also established supervision arrangements for its loans to the private sponsors. By a tacit agreement between the World Bank and IFC, IFC took the main responsibility for PDPP supervision and for interaction with the members of the consortium, while the World Bank focused on implementing the capacity-building projects and on policy dialogue with the government.

70. In November 2001, the IAG drew the President’s attention to unsatisfactory progress in the execution of the three capacity-building projects and to the fact that construction of the pipeline was moving ahead of schedule, creating a “two-speed project.” As a result, the World
Bank decided to change its supervision arrangements in Chad. A former World Bank manager was posted in Chad in early 2002 to coordinate supervision efforts and help the government implement the capacity-building projects. Supervision arrangements were unchanged in Cameroon, and the Cameroon Petroleum Environment Capacity Enhancement Project was amended to reflect actual needs of the government in terms of development capacity. The World Bank’s Managing Director and senior managers from the Africa Region and the Environmentally and Socially Sustainable Development Network undertook several visits to the Project.

71. In response to the challenges presented as the petroleum revenues began flowing to Chad, the World Bank took steps to further strengthen its supervision arrangements. These steps included enhanced coordination within the cluster of projects (managed by a Senior Program Manager, who spent most of her time in the field), improved access to specialized expertise and technical oversight from sector units in the World Bank and the IFC, and better interaction with the broader, World Bank assistance to Chad for poverty reduction, given the increasing importance of the revenues. In order to strengthen the N’Djamena office, two positions were filled: a senior infrastructure specialist and a senior public financial management specialist. In addition, a senior country officer was appointed to help the Senior Program Manager monitor the cluster’s activities.

E. Communication Efforts

72. The communication issues for the Chad-Cameroon Pipeline Project varied overtime and covered three principal phases: preparation, construction, and exploitation.

73. The preparation phase was marked by an intense period of information disclosure and communication essentially consistent with the World Bank’s safeguard policies on the environmental assessment of Category A projects. In 1993, the Consortium, the two governments and the World Bank Group began an information and consultation campaign with the intention, among other things, of selecting the design of the Project and particularly the corridor to, along with the EA. The information and communication campaign intensified in 1997 with the publication of the draft EA. This campaign took place simultaneously at the level of the communities and local administrations, national and international NGOs, and the general public. In both countries, public reading centers were created to collect feedback on the EA and later on the EMP. These documents were also made available in Public Information Centers of the World Bank in Washington, London, Paris, Tokyo, N’Djamena, and Yaoundé.

74. During the construction and operational phases, the information and communication campaign gained in intensity. In Cameroon, a Global Communications Plan was jointly elaborated by the Consortium, the Pipeline Steering and Monitoring Committee, and the World Bank. The Consortium and the PSMC were responsible for its implementation. In Chad, the World Bank helped the National Coordination to draw up a Communications Plan. The World Bank went further, hiring consultants to help the National Coordination with the plan’s implementation.

75. Within the World Bank, a communication specialist was appointed in late 2004 under a one-year developmental assignment to step up communication activities, and the Project’s Web site was revamped. One of the communications priorities for 2005 was to help Chad develop its communication and information program in the export phase of the Project, which had not followed at the same pace or with the same vigor as in the construction phase. Building
consensus around the urgency for communication proved to be challenging. Despite the World Bank’s assistance in numerous tasks—identifying the right information to communicate, outlining a communications strategy, establishing clear responsibility for its execution, and providing financing for an opinion survey to guide the strategy—the Chadian team was never politically empowered to disseminate information or undertake communications activities. To date, the World Bank web site remains the main provider of public information on revenue and allocation figures.
V. THE CONTRIBUTION OF CIVIL SOCIETY

76. As a result of involvement in the preparation phase of the Pipeline Project, the capacities of local NGOs increased significantly, and these groups played and continue to play an important role during implementation in both Chad and Cameroon.

77. In Chad, in addition to the four civil society representatives in the Collège, a large number of organizations at the national level and in the oil-producing region closely monitor field activities. For example, Groupe de Recherches Alternatives et de Monitoring du Projet Pétrole Tchad-Cameroun produces a monthly newsletter on the petroleum sector and publishes key data on oil production and revenues obtained from the Ministry of Finance, the Petroleum Ministry, and the Consortium. It has produced a report on the implementation of the Environmental Management Plan based on field surveys in the region.

78. The NGO consortium Coordination Permanente Pétrole Locale (CPPL) was also created as a consequence of the Project. It includes development NGOs, human rights associations, trade unions, and women’s groups in the producing area. This group plays an important role in monitoring the Consortium’s activities on the ground. It has collaborated with and informed the World Bank, the government of Chad, and the External Control and Monitoring Group of concerns about some Consortium activities. The CPPL also connected the canton chiefs of the oil areas of Cameroon and Chad to share experience on their respective situations.

79. In addition, the Regional Space Applications Program for Sustainable Development was formed in the former Moyen Chari region, following mobilization of local NGOs during the implementation phase. The network’s purpose is to raise awareness among people in the area and to prepare them for the oil era. A network of communities in the area was set up for the defense of the interests of the populations of the zone. This network takes action on Project information, and environmental protection.

80. Similarly, in Cameroon a coalition of local NGOs called Groupe de Concertation et d’Action (GCA) was created to monitor the Project. The GCA was fully involved in negotiations on the Project as well as during construction of the pipeline. During negotiations, it played an active role in consulting local populations and reviewing the Environmental Management Plan. The GCA was also very active during negotiations on the compensation rate for local people. During the construction phase, the GCA organized its own monitoring but could not produce regular reports.

81. On top of the monitoring carried out by the GCA, other NGOs such as the Centre pour l’Environnement et le Développement (CED) did their own supervision of the Pipeline Project with the assistance of international NGOs. It was within this framework that CED initiated the request to the Inspection Panel regarding Cameroon in September 2002 (see Annex 1). CED has worked closely with the international NGO Friends of the Earth, and in June 2001 the two groups published a report entitled Broken Promises: The Chad Cameroon Oil Project, Profit at Any Cost.

82. The international NGO Catholic Relief Services also supported an independent pipeline monitoring project in Cameroon. Its mission was “to insure that the rights and dignity of
Cameroonianis are respected, the environment is preserved and the welfare of Cameroonianis improves.” Four local NGOs were involved in this Project: Service Ecuménique pour la Paix/Ecumenical Service for Peace, CED, Environnement Recherche Action, and Fondation Camerounaise d’Actions Rationnalisées et de Formation sur l’Environnement (FOCARFE). Recently, these local NGOs carried out a review of the “social closure” process and activities, and FOCARFE issued a report.
VI. LESSONS LEARNED TO DATE

83. As noted earlier in this report, the World Bank’s objectives in the Chad-Cameroon Petroleum Development and Pipeline Project were to increase the fiscal revenues of Chad and make sure that the new funds were directed for the most part to poverty alleviation, to ensure that the Project would be implemented in an environmentally and socially sound manner, and to catalyze private investment in a difficult environment. While the second and third goals could be considered as almost achieved, the first—and perhaps the most important one—remains a major challenge.

84. As this Overview indicates, even though the World Bank team identified various problems during the preparation of the project that were taken into account in the design, some developments during the last six years could not have been anticipated when the Project was approved by the World Bank’s Executive Directors in June 2000. In different ways, these all contributed to shaping the status of the Project in early 2006, and they must be taken into account when considering the lessons to be learned from the PDPP by the World Bank, by governments, and by civil society.

Table 6: Assumptions Versus Project History

<table>
<thead>
<tr>
<th>Project Assumption</th>
<th>What Actually Happened</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant support would be available from staff who developed</td>
<td>In February 2001 a plane crash killed two key Chadians who were working on the Project. At the World Bank, a number of core staff members moved on to other projects after the PDPP was presented to the Executive Directors</td>
</tr>
<tr>
<td>the projects</td>
<td></td>
</tr>
<tr>
<td>Pipeline construction would start 18 months after Project</td>
<td>Pipeline construction started 4 months after Project approval</td>
</tr>
<tr>
<td>approval</td>
<td></td>
</tr>
<tr>
<td>Oil would be shipped to international markets in December</td>
<td>Oil shipped to international markets in October 2003</td>
</tr>
<tr>
<td>2004</td>
<td></td>
</tr>
<tr>
<td>Crude oil price would be US$15.25 per barrel</td>
<td>Crude oil price reached an average of US$37.66 per barrel in 2004, US$54.64 in 2005, and US$61.68 in the first half of 2006</td>
</tr>
<tr>
<td>Government petroleum revenues would be at least US$70</td>
<td>Government total petroleum revenues were US$146 million as of December 2004, US$266 million in 2005, and US$480 million in 2006 (estimate)</td>
</tr>
<tr>
<td>million a year in 2005-08</td>
<td></td>
</tr>
<tr>
<td>Original three oil fields near Doba would remain the focus</td>
<td>Other oil fields quickly attracted considerable interest from Esso Chad and other oil companies</td>
</tr>
<tr>
<td>of interest</td>
<td></td>
</tr>
<tr>
<td>150 households in Chad would be eligible for resettlement</td>
<td>400 households in Chad were eligible for resettlement assistance</td>
</tr>
<tr>
<td>assistance</td>
<td></td>
</tr>
<tr>
<td>The government of Chad would meet its obligations under the</td>
<td>In December 2005, the law was amended, undermining—in the World Bank’s view—the poverty reduction goals under the original agreement</td>
</tr>
<tr>
<td>Petroleum Revenue Management Law</td>
<td></td>
</tr>
<tr>
<td>Indirect revenues would begin to flow in 2014</td>
<td>First corporate upstream income tax payment was made in March 2006 and will significantly increase in 2007 due to the high level of crude oil prices on international markets</td>
</tr>
</tbody>
</table>

85. Just over two years after the petroleum revenues started to flow, it is premature to draw any final conclusions. But in light of difficulties encountered in implementing the capacity-
building projects, especially in Chad, and of recent developments with regard to the Petroleum Revenue Management Program, two questions come to mind: How should the World Bank shape its policy dialogue in countries with weak institutional and governance capacity? And how should the World Bank be involved in complex projects, notably those in the infrastructure and extractive industries sectors? The eventual answers to these two questions will certainly constitute major lessons learned from the Chad-Cameroon Petroleum Pipeline and Development Project. In the meantime, it is possible to describe some preliminary lessons.

A. Capacity Building

86. It was no surprise that stakeholders acknowledged the weakness of the institutions and of their own capacity to implement or monitor such a complex project. Many of them maintained that Chad was not ready for such a challenging undertaking. Clearly there was a need first to develop sound public financial management, environmental, and social policies for the oil sector to support effective project development, to build the institutional capacity to implement and enforce policies, to strengthen public expenditure management, and only then—when those capacities were in place—to consider financing the Project.

87. The option of postponing Project development until capacity could be built was assessed and excluded, but mitigating factors were put in place through the design of two specific instruments to help strengthen capacity in the areas of public financial management as well as management of environmental, social, and other technical aspects of the oil sector. In addition, specific supervision arrangements were made to monitor the implementation of the EMP while capacity was developed, particularly through setting up the External Compliance Monitoring Group to ensure that the EMP was fully implemented.

- Assessment of capacity needs for both financial management and management of environmental and social aspects could have been more comprehensive.

88. In Chad, the assessment lacked a clear appreciation of the importance of the institutional, legal, and regulatory environment or governance context, while in Cameroon the legal and regulatory framework was assessed against sound international practice, and activities to strengthen institutions were designed.

89. In the area of public financial management, as mentioned earlier, designing a simpler system with adequate transitory mechanisms focusing on time-bound outputs could have helped show more concrete results in the short term and hence helped meet people’s expectations.

- Capacity-building activities should have been promoted and implemented earlier.

90. The review of the 1998 EA/EMP was a critical opportunity to reveal that both Chad and Cameroon lacked the capacity to monitor implementation of environmental and social mitigation measures. In future projects, it is important to start capacity-building activities as soon as possible in order to have at least some capacity in place when the project is implemented. In addition, if technical assistance is provided by an independent panel of experts or someone else, it should be linked to local capacity building and not limited in its scope and timing. It is clear that establishing an independent panel or providing outside technical assistance will not replace investments to fill the gap in capacity and to equip the country with an adequate legal, institutional, and regulatory framework before a project is approved.
91. However, it should be noted that despite all the shortcomings, implementation of the Project offered the various stakeholders the opportunity to be exposed to real issues in real time and therefore to learn by doing. Acquiring capacity is a long-term process that also requires learning-by-doing.5

- **Capacity-building activities should have been more clearly defined and better monitored.**

92. A commitment from the government of Chad to establish and fund from oil revenues or the general budget a permanent organizational unit to regulate and monitor environmental performance in the petroleum sector should have been obtained at the outset. Instead, there is a unit financed by the World Bank, but when that funding lapses, the unit becomes inactive.

93. At the beginning, there should have also been a well-directed effort to establish regulations to govern the EA process and monitor EMP implementation in the sector. This would have reinforced the sustainability of the “gate-keeping clause” that has no enforcement mechanism. The standard concession agreement should also be rewritten to include compliance and to have the prospective developer pay fees that will cover the costs of reviewing the EA and the permit application, although it would be better if the compliance were with Chadian regulations, not with the World Bank gate-keeping condition. A fundamental tenet of the regulations should be that no permit for development of oilfields can be issued by the Ministry of Petroleum until the Ministry of Environment has approved and accepted an environmental impact assessment from the proponent.

94. Similarly, as indicated in the implementation section, the Management of the Petroleum Economy Project could have devoted explicit resources to building capacity around the various components of the PRSP. It appears that explicit resources were only allocated for the Collège. Establishing means to monitor the resources allocated to the producing region should have received the same consideration.

- **Better indicators should have been designed to measure progress on capacity building.**

95. The design of the capacity-building projects could have put greater emphasis on achieving observable results and the responsiveness to specific stakeholder demands. In the future, there should be explicit indicators of tangible results that can be observed by government agencies and organizations and by civil society groups. Seeking results in terms of improvements in environment or social development that are understood and appreciated by stakeholders requires indicators that are clearly linked to the Project. For example, in the case of the Cameroon Petroleum Environment Capacity Enhancement Project, quantitative indicators were developed, but in practice they were not helpful for showing actual progress in environmental or social management or for monitoring of the pipeline by government institutions. In turn, this should lead to closer monitoring and adaptability so that issues can be flagged early and adjustments made rapidly.

- **Commitment is required at the leadership level.**

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5 The current strength and level of involvement of civil society organizations in all pipeline operation–related issues has never been reached before under any other project. It is an indicator of civil society’s capacity development and it needs to be recognized.
96. It appears that the focus on the pipeline as the central tenet of the Project may have overshadowed the fact that building capacity requires strong commitment by the highest authorities. They needed to carry out a participatory strategic planning exercise to identify needs both in government institutions and at the grassroots level in oil-producing regions and the areas affected by the pipeline and to reach consensus on priorities identified at the local and national levels for oil sector development, revenue management and use, environmental and social management, and other connected issues.

- **Civil society organizations need to have their capacities strengthened.**

97. The Project has helped develop the capacity of civil society organizations in both Chad and Cameroon. They also received support and assistance from other international NGOs and organizations that allowed them to strengthen their capacity and sharpen their dialogue with the Project sponsor, the governments, and the World Bank. This need would have been assessed during preparation of the Project, and capacity-building efforts need to be sustained.

B. **Petroleum Revenue Management Program**

98. Chad’s Petroleum Revenue Management Program and its corresponding law were designed to avoid the experience of other “oil-cursed” countries, where large resource revenues flowing into administrations with weak capacity and poor accountability and transparency translated into increased corruption and poverty. Some initial lessons can be drawn on both the design and the implementation of this system.

**Design**

- **The geographic and revenue scope of the Project could have been wider.**

99. The PRMP covers only the three fields of Bolobo, Kome, and Miandoum that have been developed under the Project and applies only to direct oil revenues defined as royalties and dividends. Should the system have been more comprehensive from its inception?

100. The question of the geographical scope was discussed during preparation of the Project, and Chadian authorities decided to limit the scope to the three fields for which commercial viability was confirmed and development financially secured under the Project. Nevertheless, very early on the authorities expressed their intention to apply the same principles to new fields; in September 2004 the Council of Ministers issued a formal public statement to that effect. One positive change in the amendments made to the PRML in December 2005 was the extension of its scope to all new fields.

101. As for petroleum revenues, some commentators have argued that the framework should have also included the indirect revenues—essentially, taxes resulting from upstream and downstream activities—which are not under the scrutiny of the Collège and are not specifically dedicated to priority sectors. This is a valid point. During the design of the PRMP, the planners acknowledged that significant indirect revenues would be coming from corporate taxes on upstream activities, but these were not expected to flow until 2014. Chadian authorities argued that corporate taxes represented ordinary state revenues and should therefore be treated as such and paid in the Public Treasury Account, as are all other taxes.
102. It is important to note that the PRMP stipulates that indirect revenues would be aimed at increasing development expenditures, which normally qualifies their use even if they are not explicitly fully covered by the PRMP. More important, the PRMP was based on the premise that significant efforts would be devoted to the improvement of public financial management, which should have significantly improved by the time these revenues accrued. Yet in 2006 oil brings in more than US$60 a barrel versus US$15 a barrel at the time of Project appraisal, and Chad is now expected to benefit from these resources much earlier. Hence there is a need to accelerate efforts to implement the public financial management reforms as defined by the government.

- The basic principles of saving and investing a portion of oil revenues when dealing with a volatile source of government revenues and of stabilizing expenditures should have been stressed more.

103. The government acknowledged the nonrenewable nature of petroleum revenues and established the principle of using the money according to Chad’s capacity to invest efficiently. It was in that context that the proposal was made to allocate 10 percent of oil revenues to future generations for 25 years. Other oil-producing countries with good track records in the management of their oil revenues (Kuwait and Norway, for instance) have saved and invested part of their resources with the objective of ensuring a steady stream of revenues once oil is exhausted. In late 2005, however, the government of Chad decided that the needs of present generations were more important and it abolished the FGF, in spite of strong objections from certain quarters, including civil society. Looking forward, it is vital that the Chadian authorities recognize the importance of the investment principle and agree to its implementation.

104. As for the stabilization principle embodied in the PRML and its implementing decrees, budget preparation was to be based on an objective and realistic projection of oil prices (using IMF projections for oil prices and exchange rates). If during budget implementation oil prices were to be higher than anticipated, excess revenues would be saved. These savings would be only used in years when actual oil prices were lower than anticipated so as to avoid disruptions in the implementation of expenditure programs in priority sectors. This principle was consistently applied during budget preparation in the first two years but not during implementation.

- When establishing that the management of public resources would defacto be fragmented in order to insulate petroleum revenues from pressure to use them for lower-priority expenditures, generic weaknesses in public finance management should have been considered.

105. In establishing a direct link between revenue and social development objectives, the PRMP tried to protect oil revenues from pressure through specific allocation rules. Many commentators have rightly argued that these provisions are not in line with good budget management principles, particularly the comprehensive of the budget. In fact, Chad manages four parallel budgets that are subject to different modalities of management and control—baseline (non-oil budget), oil budget, HIPC budget, and foreign-financed expenditures—and this create risks of inefficient resource allocation, mismanagement, and misreporting. While these shortcomings were acknowledged, the fragmentation was a conscious decision to protect social spending from risk of capture by sovereign sectors such as security.
106. After two years of implementation, it appears that the mechanism has indeed helped ensure that significant oil resources were dedicated to key social and infrastructure sectors. On the other hand, the use of these resources faced generic weaknesses in public finance management, such as deficiencies in the execution of spending (notably in procurement of goods and services and in cash management), lack of coordination between the Ministry of Finance and technical ministries, and poor reporting systems. Building on previous technical assistance projects, the World Bank designed a specific operation to improve public expenditure management, but the results have been limited. Thus while the issue of fragmentation is a valid one, it appears that serious improvement is needed in budget execution and that performance will not improve solely with the establishment of a unified budget.

- Overall, efforts should have been made to design a less sophisticated public financial management system with more realistic outputs within the time frame leading to the onset of oil revenues. Also, the PRML could have given the government some flexibility in case of greater-than-expected need for legitimate expenditures or lower-than-expected revenues from other sources.

Implementation

- Greater efforts should have been made early on to prepare detailed procedures, as was done for the Oversight Committee (the Collège), and the system should have been simplified to reduce transaction costs and improve efficiency.

107. Setting up the legal instruments and the practical mechanisms to implement the PRMP took more time than anticipated, particularly organizing activities within the Ministry of Finance. Efforts were made to define the procedures in the first part of 2003, before completion of the oil pipeline, with a small Chadian team.

108. While the escrow structure and the allocation and flows of funds from the escrow account in London to the various special accounts in Chad were well-defined, they proved to be too complex for Chad, which had little exposure to foreign exchange transactions. Citibank attempted to explain the escrow structure and the banking circuit between London and N’Djamena, but monitoring simple foreign exchange transactions proved more difficult, in particular given high Chadian staff turnover. The weak telecommunication infrastructure also made it difficult to get access to the accounts online.

109. Finally, given the fact that the PRMP involved various departments in the Ministry of Finance, it was suggested that the Ministry establish a Petroleum Coordinating Unit to pull together activities between the departments involved (Budget, Tax, and Treasury) and the Ministry of Petroleum, which is the official contact for the Consortium members. However, this was not done until October 2005.

Allocation to Priority Sectors

- Efforts to help Chad prepare medium-term expenditure programs in the priority sectors should have been initiated earlier, allowing sufficient time for the ministries concerned to be better prepared for the oil era.
110. The PRML stipulated that oil revenues would fund expenditures in the priority sectors over and above the level reached in the year prior to oil exploitation (2002). This principle of additionality was observed during budget preparation but typically fell short in the course of budget execution because of inadequate budget implementation mechanisms. As a result, the share of priority sectors in actual domestically-financed expenditures has been significantly below initial allocations, although rose significantly above historical levels.

- A mechanism to help communities in the producing region decide on allocation of resources should have been established with the agreement of appointed officials.

111. The principle of allocating part of the resources to the producing region is anchored in the Chadian constitution. The challenge Chad faced was to organize the management of such resources, as the decentralized administrative structures are not yet in place. (A decentralization law was approved in 2000, but to date none of the structures have been put in place and the mayors are still appointed.) Again, it took considerable time to define an acceptable interim mechanism where the representatives of the producing region would be involved in the decision-making process. The World Bank team devoted significant time to helping establish the Interim Committee and preparing operating procedures. A funding mechanism to support local initiatives was put in place in the context of the capacity-building project for the petroleum sector. After a lengthy period, this mechanism demonstrated its effectiveness in helping local communities build social infrastructure. It could have been used to allocate resources earmarked for the oil-producing region. This option was rejected by the government, however, because appointed officials in the region were basically not in favor of a community-driven mechanism for resource allocation.

- The ability of the Collège to remain independent and resist pressure from the government should have been strengthened, and the PRML should have included an enforcement mechanism to ensure that the Collège's recommendations were fully implemented.

112. The Collège can be considered the most innovative structure of the PRMP since it involves representatives of the government, Parliament, the judiciary and civil society. In terms of capacity building, it can also be considered a relative success, despite some shortcomings, in that a comprehensive approach was taken to establish this body, including ensuring that facilities were available and equipped and that five technical and administrative staff were hired. Comprehensive procedures were prepared and published, and the Collège benefited from significant training through tailor-made courses and study tours. The main shortcoming is that there is no enforcement mechanism to ensure that recommendations are effectively taken into account. Therefore, most of its recommendations remain at a proposal stage. And in 2005, the independence of the Collège was challenged, as it was asked to approve advances to the Treasury to finance non-priority expenditures, a provision that is not in the law.

113. More broadly, some commentators have questioned the value of establishing a specific mechanism for the use of oil revenues, arguing that strengthening regular monitoring and audit mechanisms of government should have been considered rather than creating a whole new

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6 Article 212 stipulates that part of revenues generated from natural resources must be allocated to the beneficiaries of the producing region.
system that requires significant resources. While this is a valid point, it is important to underline the real added value of having four representatives of civil society in the oversight mechanism that put the resources under greater scrutiny.

**Summary Lessons on PRMP**

Overall, the following principles need to be maintained as the PRMP structure evolves:

- Comprehensiveness of the budget is essential and should be a medium-term objective supported by a strong public financial management strengthening program.
- Stabilization is essential to avoid overly rapid increases in spending followed by sharp declines when oil revenues are no longer available. Flexibility is needed at all times, given the volatility of oil prices and the uncertainties of oil reserves forecasts.
- Using the PRSP as a reference for allocating oil revenues should be a basic principle, but efforts must be made to identify and monitor a few key observable outcome indicators. Constraints relating to lack of capacity within sectors need to be addressed seriously.
- Using a portion of oil revenues for the oil-producing region is important, but the methodology for effective use needs to be improved.
- Placing the overall PRMP within the broader government reform agenda is essential. This requires strong partnership and support from other donors.

C. **Economic Impact**

114. In the absence of a comprehensive assessment on this subject, it is difficult to venture a judgment of the true impact of the Pipeline Project on the economies of Chad and Cameroon. With the empirical information available, however, it is possible to make a preliminary assessment. But since this is a 30-year project, continued monitoring is essential.

115. The Project documents anticipated that the fiscal revenues for Chad would peak in 2009 and would be US$116 million per annum. But as of the end of November 2006, direct revenues generated from petroleum amounted to US$663 million, of which US$620 million was transferred to Chad.

116. For Cameroon, total revenues amounted to US$85 million (including US$54 million for transit fees and US$31 million as dividends and share premium reimbursements). These revenues are in line with expected revenues for the first two years. But it is important to remember that, as anticipated, these revenues are equivalent to less than 2 percent of the annual fiscal revenues of the country and therefore do not have the same impact as in Chad.

117. The economic performance of Chad, measured by GDP growth, is mixed. From 10.4 percent in 2001 (with the first effects of the construction phase of the petroleum project), growth reached a peak of 29.8 percent in 2004 and then slowed considerably in 2005, to 5.6 percent, due to lower-than-expected oil production.

118. From the launch of the Project in 2000 to the end of December 2005, the Consortium spent close to US$610 million in subcontracting and the purchase of goods and services in Chad and close to US$509 million in Cameroon. The Chadian private sector complained that most of
the contracts were won by foreign companies based in Chad. While this is partially true, the Project helped developed successful small and medium-size enterprises in both countries. The Project has therefore been instrumental in the emergence of successful SMEs. The challenge is to build on the various success stories to further the development of SMEs and the role of the domestic private sector.

119. In terms of employment, more than 6,100 Chadians are currently working on the Project (down from a peak of 7,400 in 2002). At the end of 2005, 84 percent of the Project’s workforce was Chadian, and the study projects that this will reach 88 percent by 2008 and 92 percent by 2010. More than half of the Chadian workers hold skilled or semiskilled positions. In total, wages generated by local employees from the start of the Project to December 2005 amounted to more than US$100 million. In summary, however, it is at best unclear whether the growth generated by oil has not yet had a significant impact on the poor population of Chad, particularly in the rural areas.

120. As for Cameroon, the impact on permanent employment is lower, with 969 Cameroonians employed at the end of December 2005. However, employment reached a peak of 6,000 in 2002 during the construction phase. Total wages generated in Cameroon since the start of the Project amounted to US$33.8 million.

121. Indirect effects were expected to be more significant in the infrastructure sector, notably roads (improved in both countries), railways, the port upgrading in Cameroon, and telecommunications in both countries. In this regard, it is important to highlight a great opportunity that was opened to both governments with the construction of a fiber optic cable along the pipeline, with capacity allocated to both the Chadian and the Cameroonian authorities. A World Bank Group team is now working with them to help use this infrastructure to develop a trans-African broadband network.

- To ensure that the economic impacts in Chad were optimized, it would have been best to assess and strengthen the capacity of the local private sector so as to capitalize on the opportunities offered by the Project.

122. The activities generated by the pipeline during both construction and operation contributed significantly to boosting GDP, particularly in Chad, and generated business opportunities that were taken up in varying degrees by the private sector. It would appear that Cameroonian companies were better prepared and took more advantage of these opportunities not only in Cameroon but also in Chad.

123. There are also some lessons to be drawn from the SME development program being implemented in Chad by the Chamber of Commerce with IFC support. The most important one is that the design of a successful linkages program needs to take place upstream, prior to the commencement of the investment project itself. The earlier the design, the higher the potential of tapping into the many local business opportunities, especially when the first stage of the Project involves construction work. This is particularly important in industries where it is common for project sponsors to contract out a larger portion of field work to third-party (mostly foreign) companies. However, as with the public sector, developing capacity in the private sector is a long-term endeavor. Managing the high expectations raised by the development of the Project remains a big challenge.
124. The Project did inculcate in local entrepreneurs, among other things, notions of transparency, competition, competitiveness, standards, and quality—which were preconditions to the awarding of contracts within the framework of the Project. The realities of globalization are now better understood by the local private sector.

- Avenues needed to be explored early on to leverage the Project management expertise of the Consortium in order to secure some early wins, such as a power plant that could sell excess power to the region, or possibly the use of excess fiber optic capacity.

D. Environmental and Social Issues

125. The lessons learned from the preparation, review, implementation, supervision, and monitoring of the EA/EMP are numerous and diverse. Some of them are important because they can easily be used for similar large infrastructure projects that involve a high level of public scrutiny. Others are project-specific, and by taking stock of them the World Bank Group can improve supervision and focus on improvements needed in EMPs and related processes.

126. It is generally agreed that the Project’s environmental and social outcomes have in large measure been mostly positive and that the Project can be seen as good practice in terms of process, substance, and outcomes in addressing these issues. Mobilization of substantial specialist resources on environmental and social issues, well beyond those needed for any regular infrastructure project, was key to the successful completion of the agreed EMP. It was an iterative process during which the World Bank Group worked extensively with the two governments, the Project sponsor, and civil society organizations at both domestic and international levels to ensure that the Project was managed in an environmentally and socially sustainable and sound manner. On the World Bank Group side, dialogue with the two governments and the sponsor was handled by a joint IFC-World Bank team, which created numerous synergies that allowed it to better address the many unique challenges raised by the preparation and review process of the EA/EMP.

127. It is important to note that the preparation of the final EMP was done in consultation with stakeholders. After the review and discussion of the 1998 EA/EMP, a comprehensive strategy based on a participatory approach with the involvement of all stakeholders—especially civil society organizations and people potentially affected by the Project—was developed and implemented by the Project sponsor and the two governments. The consultation process that followed helped to improve understanding of the Project within stakeholder groups and provided them with a vehicle for expressing concerns with regard to impacts, benefits, mitigation measures, and compensations.

- More work on baseline data during EA/EMP preparation would have helped develop cumulative impact assessments (CIAs) for the Project.

128. One major concern highlighted by the panel of environmental experts was the insufficient amount of baseline data against which Project impacts would be assessed and measured. (All stakeholders agreed that scientific data in both the countries concerned are indeed sparse, often out of date, and commonly unreliable.) The Inspection Panel (see Annex) also found that there was a weak link from the baseline data to impacts and mitigation. The Project sponsor addressed this issue by collecting additional baseline data related to the measurement of potential impacts during implementation. In addition, the World Bank continued to follow up on recommendations
of the ECMG and the IAG regarding baseline data linkages to impacts and mitigation. It also facilitated the provision of new economic, social, demographic, and health data, including on HIV/AIDS, to the governments to help prepare additional mitigation measures in both countries and a Regional Development Plan in Chad.

129. Cumulative impact assessments were not prepared in Chad or Cameroon. The lack of a formal CIA was discussed by the Inspection Panel. Although the Regional Development Plan in Chad and National Oil Spill Plans in the two countries have many features of a CIA, they were not seen as replacing a full-fledged cumulative impact assessment. In the future, large infrastructure projects of this type should be carefully reviewed to determine if a CIA should be prepared as an integral part of the overall EA process.

- A budget should have been prepared to cover the cost of monitoring and supervision by the government, with the costs borne by the Project sponsor and the management handled independently by government.

130. The division of responsibility between the government and the Project sponsor in terms of implementation of the EMP was a critical issue during the preparation of the 1998 EA/EMP, and it remained so for the World Bank and other stakeholders. One major aspect seen as a hindrance to capacity-building efforts and transparent monitoring by government was the fact that the Consortium was providing “material and technical” assistance to government officers in charge of monitoring compliance of the Consortium’s activities with the EMP, including training. Government officers built their monitoring report on information and data solely provided by the Consortium without any additional due diligence or investigation on their part. It took more than three years after the start of the construction for government officers (especially PSMC staff in Cameroon) to start developing a more independent approach to monitoring. Such arrangements should not be accepted in future projects and should instead be replaced by the sponsor bearing the cost of government monitoring through a budget allocation that will be defined upfront and in a transparent manner.

- The EMP should have included an itemized budget for all mitigation and compensation measures.

131. The costs of environmental and social mitigation measures, including the resettlement program, were not clearly provided for in the final EMP. The actual costs of compensation provided to individuals and communities were challenged in many instances, and NGOs were skeptical about the costs of some mitigation measures and compensation provided to affected peoples and communities. This could have been avoided by a clear itemization and description in the EMP of the costs involved, in order not to raise expectations beyond the required appropriate level of compensation and mitigation of Project impacts. An itemized budget could have avoided misunderstandings about the scale of such measures and their costs. An independent audit and monitoring process would have helped ease the tension about this cost aspect.

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7 Connected to that concern was the fact that both governments lacked capacity to implement the EMP and that environmental capacity-building projects needed to be designed to help the governments identify the necessary investments and institutional arrangements and to strengthen the capacity of the different actors likely to be involved.
• Measures to address negative indirect impacts should have been considered, along with the institutional framework to deal with them, including contracting NGOs and consultants and then training and equipping them adequately.

132. The Chad and Cameroon EAs both illustrated how difficult it is to predict and adequately assess the indirect impacts likely to occur as a result of people coming to Project areas for work. As with other large projects, and despite many precautionary measures, the construction of the pipeline led to a significant influx of “camp followers” both to the oilfield area and to communities near the pipeline. The World Bank Group required that “positive measures [be taken] to control population influx to remote areas due to increased access created by the pipeline right-of-way and to prevent associated secondary impacts (e.g. encroachment on traditional indigenous populations, lands or preserves, uncontrolled exploitation of natural resources).”

133. The approved EMP provided measures to address the direct impacts created by construction workers and contractors, and commendably it included a Community Health Outreach Program. But implementation was uneven and activities started slowly. Local NGOs showed great willingness to participate in the planning and execution of such programs. But their capacity, as with local authorities and service providers, was not carefully assessed or strengthened to meet Project objectives. Although financing was available, it was very difficult, for example, to contract local NGOs to work with communities along the pipeline right of way, and some portions are not yet covered by NGOs.

• Defining rules and procedures for public participation and consultation among all stakeholders during Project implementation is important for any sound EMP for large infrastructure projects.

134. Following consultation and public participation during the EA/EMP preparation process, the Project continued to be under scrutiny from civil society organizations both domestically and internationally. Efforts of the Consortium and the two governments to maintain a high level of public consultation waned in the course of implementation. Few actions were taken by the Project sponsor or the governments to strengthen civil society’s forces to monitor the Project; there was, for example, no timely release of available and relevant information about EMP implementation. Throughout the first phase, the World Bank Group supervision teams recommended additional efforts to enable and empower stakeholders through institutional strengthening, information generation and dissemination, and the creation of opportunities for expanded consultation and participation.

• The government of Chad should have developed rules, procedures, and principles of EA consistent with World Bank policies and good international practices and should have equipped itself with appropriate institutional capacity on EA/EMPs for oil fields beyond the three in the Project.

135. The pipeline was built to transport oil developed in compliance with all applicable safeguard policies of the World Bank and other sound international industry practices. It was therefore agreed that any oil transported through this pipeline would be subject to similar policies

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8 See World Bank’s Environment, Health, and Safety Guidelines, which were appended to both the Chad and the Cameroon 1998 EA/EMPs.
and practices. A legal covenant was added to the Loan and Project Agreements with the two
governments and the Project sponsor. However, since the World Bank will most probably not be
involved in financing any new oil development, the enforcement of this clause may be quite
problematic. In addition, the government of Chad is not yet equipped with a sound and
comprehensive legal and regulatory framework for oil development; subjecting oil to be
transported through the pipeline to the same level of environmental protection as the oil
originating in Doba may raise many questions.

E. Monitoring

- The monitoring completed by the ECMG and the IAG, two independent panels that
  were an innovative feature of the Project, provided an experience that the World Bank
  is already using to good advantage in other large infrastructure projects.

136. The ECMG and the IAG played a critical role, particularly in the construction phase. In
the case of ECMG—hired to assist both the World Bank and other lenders in independent
monitoring of environmental and social aspects of the Project—there is no doubt that the group
played an essential role in ensuring that Project implementation complied with the requirements
and provisions of the EMP and therefore achieved its environmental and social objectives.

137. The IAG focused on more macro-level aspects of governance, revenue management,
environmental, social, and public participation issues. It paid special attention to the effective use
of revenues in poverty alleviation, complemented the ECMG’s contribution effectively with a
panel of high-level individuals knowledgeable about the management of public revenue, about
environmental, social, and public participation issues, and about relations with civil society.
Lessons from this experience have already proven useful in the World Bank–supported Nam
Theun 2 Hydroelectric Power Project that is under implementation in Laos PDR.

F. Institutional Issues

- Although the IBRD and the IFC share many development objectives and can
  coordinate their efforts, a certain degree of separation may still be required to obtain
  optimal results.

138. The IBRD and IFC share many development objectives, yet it can at times be difficult to
expedite a unified World Bank Group action plan because of the differing constituencies of these
two institutions. For the IFC, it is clear that Project arrangements need to be grounded in pure
commercial principles. The challenge is to devise ways that allow a direct connection between
IBRD approaches and those commercial requirements. The experience in Chad has shown that
while this link will facilitate a group response, the WBG should consider the implications of the
approach: such a link will turn away investors as it will make them liable for actions beyond
their control; it increases the risks to the Project, which is directly counter to the World Bank
Group’s objective of project risk mitigation; and it decreases the options available to resolve
disputes—if such a link existed, it could have forced the commercial lenders to declare default,
which would have closed down the Project to the detriment of all involved.
G. Communication Issues

- To sustain the momentum of dialogue and participation generated by the Project, a platform for participation that involves the government, civil society organizations, the Consortium, and the World Bank is needed.

139. The participatory approach in this Project was innovative. The consultation process not only gave stakeholders room to understand the Project better, it equally gave the sponsors the opportunity to take stakeholders’ concerns into account with regard to impacts, benefits, mitigation measures, and compensation. And it strengthened local civil society organizations that lacked capacity at the beginning of the Project.

- Messages should have been more realistic to avoid situations in which expectations were raised that were beyond the possible outcomes of the Project.

140. The intensive communication campaign in the context of extreme poverty created many expectations from the international community. Some of those expectations cannot be met, or at least have not yet been met.

141. The communication strategies in both countries had shortcomings. They did not evaluate the communication needs of the different parties involved (local communities, NGOs, and the general public), and they lacked a mechanism to assess the relative impact of their communications.
ANNEX 1: TWO INSPECTION PANEL REVIEWS

142. The World Bank’s Inspection Panel was established by the Board of Directors in 1993 in response to external and internal concerns about the effectiveness of World Bank lending. The Panel provides independent institutional recourse for people who feel adversely affected by World Bank–financed projects or programs because the institution did not follow its own policies or procedures.

143. In March 2001, the Inspection Panel received an inspection request from a member of Chad’s National Assembly on behalf of some residents of the Doba area. The residents alleged that the program in Chad constituted a threat to the cultural property and the environment of local communities, that people in the Project area would be harmed because of the inadequacy of the Environmental Assessment and compensation provisions, and that proper consultation with local communities had not taken place.

144. The Panel’s report, issued in July 2002, concluded that the Project was in compliance with World Bank policies on natural habitats, forestry, pest management, involuntary resettlement, cultural property, poverty reduction, and disclosure. But there was only partial compliance with OD 4.01 on Environmental Assessment because the EA had not included a regional or cumulative impact assessment. The Panel was also concerned about deficiencies in the baseline data and the failure to quantify environmental costs and benefits in the Project’s economic analysis. It expressed concern about the delayed implementation of the capacity-building projects, which made it more likely that the Project’s poverty alleviation objectives would not be achieved.

145. In response, World Bank management welcomed the finding that the Project was generally in compliance. Management agreed that a Regional Development Plan would be prepared in Chad under the Petroleum Sector Management Capacity Building Project. World Bank management shared the Panel’s concern about the capacity-building projects, as reflected in recent changes in its supervision strategy. It stressed that the multiple layers of monitoring that were in place were meant to mitigate the risks associated with the limited capacity in government. World Bank management committed to re-doubling efforts in its assistance programs in the two countries and to following up promptly on recommendations of the External Control and Monitoring Group and the International Advisory Group. The Action Plan presented by management to address the issues identified by the Panel was endorsed by the Board in September 2002.

146. In September 2002, the Panel received a second request for inspection concerning PDPP impacts in Cameroon and the implementation of the Petroleum Environment Capacity Enhancement Project. The request alleged that several Bank policies had been violated by the Project. It also made claims regarding labor relations and HIV/AIDS. An investigation was authorized by the Board of Executive Directors, and the Panel’s report was issued in May 2003.

147. Again, the Panel found the Project to be in compliance with most World Bank policies, but only partly in compliance with the policies on Environmental Assessment and indigenous peoples. The concerns about the EA were largely the same as those in the Chad Panel report. In addition, the Panel felt that the baseline data on indigenous peoples affected by the Project were...
not fully compliant with the requirements of OD 4.20. However, it found the Project to be in compliance with regard to the consultation and participation requirements of this OD, and it endorsed the “process” approach taken in preparing the Indigenous Peoples Plan.

148. In response, World Bank management again welcomed the finding of general compliance and proposed an action plan to address the Panel’s remaining concerns. Management reiterated its commitment to continue intensified supervision and to promote a process of regular consultation and disclosure in order to ensure the continuing environmental and social soundness of the program in Cameroon. The Action Plan presented by management to address the issues identified by the Panel was endorsed by the Board in July 2003.