The Inspection Panel

Investigation Report

Chad-Cameroon Petroleum and Pipeline Project (Loan No. 4558-CD); Petroleum Sector Management Capacity Building Project (Credit No. 3373-CD); and Management of the Petroleum Economy (Credit No. 3316-CD)

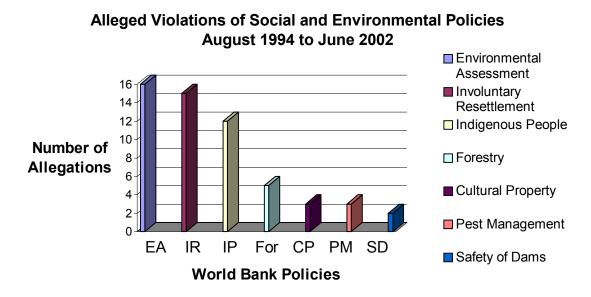
About the Panel

The Inspection Panel was created in September 1993 by the Board of Executive Directors of the World Bank¹ to serve as an independent mechanism, which would ensure accountability in Bank operations with respect to its policies and procedures. The Inspection Panel is intended to be an instrument whereby groups of two or more citizens who believe that they or their interests have been or could be harmed by Bank-financed activities can present their concerns through a Request for Inspection. The Panel thus provides a link between the Bank's highest governing body (the Board) and the people who are likely to be affected by the projects it finances.

Members of the Panel are selected "on the basis of their ability to deal thoroughly and fairly with requests brought to them, their integrity and their independence from the Bank's Management, and their exposure to developmental issues and to living conditions in developing countries." The three-member Panel is empowered, subject to Board approval, to investigate problems that are alleged to have arisen as a result of the Bank having ignored its own operating policies and procedures. The Panel focuses on the Bank, not the Borrower. Its findings, which are presented in its Investigation Report, are sent to the World Bank Board of Directors.

To date, the Panel has dealt with over 26 Requests for Inspection, including eight from Africa, seven from South Asia, nine from Latin American, and two from East Asia and the Pacific regions. While the majority of the cases brought before the Panel alleged violation of the Bank's social and environmental policies (Figure 1 below indicates the number of alleged violations to such policies), others related to Bank policies on Project Supervision, Poverty Reduction, Economic Analysis, and Disclosure of Information have also been raised by Requesters.

Figure 1:



¹ Unless the context otherwise indicates, reference to the Bank includes IBRD and IDA.

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² IBRD Resolution No. 93-10; IDA Resolution No. 93-6.

PROCESSING REQUESTS

When the Panel receives a Request for Inspection, it is processed as follows:

- 1. The Panel decides whether the Request is *prima facie*³ not barred from its consideration.
- 2. The Panel registers the Request—a purely administrative procedure.
- 3. The Panel sends the Request to Bank Management, which has 21 working days to respond to the allegations of the Requesters.
- 4. On receipt of Management's response, the Panel conducts a short (21 working-day) assessment to determine the eligibility of the Requesters and the Request.
- 5. If the Panel does not recommend an investigation, and the Board of Executive Directors accepts this recommendation, the case is considered closed. The Board, however, may approve an investigation against the Panel's recommendation.
- 6. Three days after the Board decides on whether or not an investigation should be carried out, the Panel's Report (including the Request for Inspection and Management's Response) is made publicly available at the Bank's InfoShop and the respective Bank Country Office.
- 7. If the Panel recommends an investigation, and the Board approves it, the Panel undertakes a full investigation, which is not time-bound.
- 8. When the Panel completes an investigation, it sends its findings and conclusions on the matters alleged in the Request for Inspection to the Board as well as to Bank Management.
- 9. Bank Management then has six weeks to submit its recommendations to the Board on what actions the Bank would take in response to the Panel's findings and conclusions.
- 10. The Board thereafter takes the final decision on what should be done based on the Panel's findings and Bank Management's recommendations.
- 11. Shortly after the Board's decision, the Panel's Report and Management's Recommendation are made available to the public through the Bank's InfoShop and the respective Country Office.

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³ Requests that are clearly outside the Panel's mandate such as requests concerning projects with no involvement of the Bank, matters related to procurement decisions of the Bank or the borrower, etc.

Acknowledgements

The Panel had the opportunity to consult with the Executive Director and Alternate Executive Director representing Chad throughout the investigation process, including before and after the field visits to Chad, and wishes to convey its gratitude to them and their staff for their advice and assistance

It also wishes to thank the Requesters, the Government officials who gave freely of their time in N'Djaména and in the Project areas, the representatives of NGOs, and other local individuals who met with the Panel. It also extends thanks to the staff of ExxonMobil and Esso Exploration and Production Chad, Inc. and the Bank's Resident Representative and his staff at the World Bank Office in N'Djaména for giving of their time and for providing logistical support during the field visit.

Special thanks are due to former and current Bank staff, including IFC staff, associated with the Projects dealt with in this Report. Bank staff, in Washington D.C. and Chad, cooperated fully with the Panel.

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Abbreviations and Acronyms

ACCORD Association for Cooperation and Development Research

ASOSRP Area Specific Oil Spill Response Plan
ASTM American Society for Testing and Materials

BP Bank Policy

CAR Central African Republic

CPPL Commission Permanente Pétrole Local

CTNSC Comité Technique National de Suivi et de Contrôle - National Technical

Committee for Monitoring and Evaluation of the Pipeline Project

COTCO Cameroon Oil Transportation Company, S.A.

EA Environmental Assessment

ECMG External Compliance Monitoring Group EMP Environmental Management Plan

FACIL Fonds d'Actions Concertées d'Initiative Locale - Local Initiatives Social Fund

GOC Government of Chad

GOSRP General Oil Spill Response Plan

GHG Greenhouse Gases

HIV/AIDS Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome

IAG International Advisory Group

IBRD International Bank for Reconstruction and Development

IDA International Development Association IFC International Finance Corporation

IRR Internal Rate of Return

NGO Non-Governmental Organization

NPV Net Present Value OD Operational Directive OP **Operational Policy** Operational Policy Note OPN Oil Spill Response Plan **OSRP** Project Appraisal Document PAD Regional Development Plan RDP STD Sexually Transmitted Disease

TOTCO Tchad Oil Transportation Company, S.A. UNDP United Nations Development Programme

WHO World Health Organization

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Overview of the Chad-Cameroon Petroleum Development Pipeline Project Including Locations Visited by the Inspection Panel

EXECUTIVE SUMMARY

INTRODUCTION

- 1. The Chad-Cameroon Oil Pipeline Project (hereinafter referred to as the Pipeline Project or the Project) is the largest energy infrastructure development on the African continent. Estimated at US\$3.7 billion, it is being funded largely by private industry (ExxonMobil, Petronas, and Chevron). It involves the drilling of 300 oil wells in the oil fields in the Doba region of southern Chad and the construction of a 1,100km long export pipeline through Cameroon to an offshore loading facility. With petroleum reserves estimated at 225,000 barrels per day, the Project is expected to yield approximately US\$2 billion in revenues to Chad over a 28-year operating period. The World Bank and the International Finance Corporation (IFC) are participating in the Project by providing US\$39.5 million and US\$ 100 million respectively.
- 2. Two complementary projects are supported by the International Development Association (IDA) of the World Bank Group, namely (i) The Petroleum Sector Management Capacity Building Project (IDA credit US\$ 23.7 million equivalent) which aims to build Chad's capacity to manage oil revenues and to use them efficiently for poverty reduction; and (ii) Management of the Petroleum Economy Project (IDA credit US\$ 17.5 million equivalent) which aims to assist the Government of Chad in building capacity to implement its petroleum revenue management strategy.
- 3. The Request for inspection (the 'Request') was submitted on March 22, 2001 by Mr. Ngarlejy Yorongar, a Member of Parliament in Chad's National Assembly and an active opposition leader, who was acting for himself and on behalf of more than 100 residents (the 'Requesters') in the vicinity of three fields of the Pipeline Project area. The Requesters alleged that the Pipeline Project constituted a threat to local communities, their cultural property and the environment and that people in the oil field region (in the Doba Basin area) were being harmed, or were likely to be harmed, because of the absence, or inadequacy, of environmental assessment and compensation; and that proper consultation with and disclosure of information to the local communities had not taken place.
- 4. The above-mentioned allegations (and related subsidiary ones) involved possible violations of the following Bank policies and procedures: Environmental Assessment (OD 4.01), Involuntary Resettlement (OD 4.30), Natural Habitats (OP/BP 4.04), Pest Management (OP 4.09), Poverty Reduction (OD 4.15), Indigenous peoples (OD 4.20), Forestry (OP 4.36), Disclosure of Operational Information (BP 17.50), Economic Evaluation of Investment Operations (OP 10.04), Project Monitoring and Evaluation (OD 10.70), Project Supervision (OD 13.05), and Management of Cultural Property in Bank financed Projects (OPN 11.03).

5. After reviewing Management's response to the allegations (and following a visit to Chad) the Panel recommended an investigation to the Board of Executive Directors. The Board approved the Panel's recommendation on October 1st 2001.

ENVIRONMENTAL COMPLIANCE

General Environmental Concerns

- 6. The Panel notes the substantial effort that has been made in the assembling of the 19-volume Environmental Management Plan (EMP), which followed the preparation of an Environmental Impact Assessment (EIA) in 1997. It also notes the exceptional operational and managerial demands in implementing this plan in a challenging physical and political environment. Furthermore, the Panel finds that Management is in compliance with OD 4.01 with respect to project classification.
- 7. In considering the spatio-temporal context of the Project, the Panel finds that Management did not explicitly consider them, as required by OD 4.01. There is neither a discussion on how the boundary of the study area was defined, nor any mention of the potential area that could be affected by project development. In the light of this, the Panel finds Management not in compliance with OD 4.01 in this respect. On the other hand, the Panel is satisfied that the EA covers the life of the Project and that the temporal context has been clearly defined
- 8. Evidence collected by the Panel both at the Bank's headquarters and during field visits indicates that oil and other economic development activities are already taking place outside of the scope addressed in the approved EMP. In reviewing the documentation contained in the EMP, however, the Panel cannot find any indication that any cumulative effects assessment was completed. The Panel finds this a serious omission, particularly when one of the objectives of the Petroleum Sector Capacity Management Project is to assist the Government of Chad to manage the development of its petroleum resources in an environmentally and socially sound manner, "including the need for cumulative/regional/sectoral environmental assessments." The Panel finds that in failing to require a cumulative effects assessment, Management is not in compliance with OD 4.01.
- 9. The scale of the now proposed development will impact on the lives of all the people living in the Region as a whole. In failing to require the preparation of a Regional Environmental Assessment, which would adequately assess the nature, and extent of broader environmental and social concerns resulting from the Project, the Panel finds that Management is not in compliance with paragraph 5 of OD 4.01.
- 10. OD 4.01 makes specific reference to the importance of engaging an independent advisory panel of international experts. The need for an Expert Advisory Panel is particularly acute "for major, high risk or contentious projects with serious, multidimensional concerns," and is clearly evident in the case of the Pipeline Project. The Panel noted that the Government of Chad (GOC) retained independent experts on

environmental assessment but, to its surprise, it was unable to find any relevant records reflecting their work or the conclusions. The Inspection Panel finds this disturbing. Moreover, the Panel cannot understand why or how Management was unable to follow-up and monitor the work of such an important part of the EA process. The Panel, therefore, finds Management not in compliance with paragraph 13 of OD 4.01.

- 11. The Panel notes the significant efforts made by the Consortium to collect baseline information about the Project. Apart form the additional baseline data collected in response to previous reviews of the 1997 EA, significant site-specific information in the form of environmental baseline assessment has also been collected in areas scheduled for Project development. The Panel finds, however, that this data has not been properly utilized to support the EA process. There is no direct reference of data gaps in the 1999 EMP and those embodied in the 1997 EA. Consequently it is not clear how each specific management action is related to specific impacts or how these impacts relate to relevant data in Management's actions. The Panel, therefore, finds that Management is not in compliance with Paragraph 2 of Annex C of OD 4.01.
- 12. With the exception of the economic evaluation of Project alternatives, the Panel considers the analysis made by Management to be extensive, well prepared, and in support of the final decision for process and route selection. OD 4.01, however, requires that for each of the alternatives, the environmental costs and benefits should be quantified to the extent possible, and economic values should be attached where feasible. The Panel finds little evidence that this economic analysis was undertaken in the evaluation of Project Alternatives. While noting its satisfaction with the justification provided for the selection of the Project alternative, the Panel concludes that Management is, however, not in compliance with paragraph 2 (f) of Annex B of OD 4.01 concerning the cost-benefit analysis of Project alternatives.
- A key objective of the Capacity Building Project, and a major rationale for the Bank's involvement in the Project, was to develop and strengthen the institutional capabilities of the Government to a level where it could manage the petroleum sector in environmentally and socially sound manner. This included increasing the Government's capacity to the point where it could begin to monitor the Project effectively before the revenues start to flow. This objective has not been achieved and raises questions about the Project's ability to realize several of its social objectives. The largest component of the Capacity Building Project involves the development of the capacity of the Committee for Monitoring and Evaluation of the Pipeline Project (CTNSC), which up to January 2002 had limited field staff, was not in position to execute its mandate. The Panel recognizes the lack of human and institutional capacity at the national level to manage and monitor projects of this magnitude and complexity and recognizes Management's significantly increased efforts to improve the situation on the ground. In the light of the above, however, the Panel finds that Management is not in compliance with the institutional/capacity requirements of OD 4.01, in respect to CTNSC.

- 14. As a general observation on environmental issues, the Panel notes the substantial effort the Consortium and the two host Governments have made in the preparation of the 19-volume EMP. Despite the shortcomings to which we have drawn attention, the Chad Project, in terms of other similar oil and gas projects, is noteworthy for implementing a practical, 'hands-on' approach to environmental management. The EMP reflects an exceptional effort to address the challenges associated with environmental management of a complex project in a challenging physical and political environment.
- 15. The Panel, however, wants to restate some of the actions indicated by its general findings:
 - The Project's spatial dimensions have to be explicitly defined to embrace all areas that will experience significant impacts from the Project.
 - Issues relating to Regional Assessment, embodying assessment of cumulative impacts, which were not undertaken should be integrated with the Environmental Management Plan.
 - It is imperative that action on the Regional Development Plan be expedited and that the needed institutional capacity be put in place or developed without delay.
 - Each mitigation measure identified in the EMP should be related to a specific impact, which can be evaluated on the basis of relevant and adequate data.
 - It is vital that the capacity for formulation of environment management plans, which meet the Bank's operational policies and procedures, be matched by institutional capacity for implementation.

SPECIFIC ENVIRONMENTAL CONCERNS

Oil spills

- 16. Concerning possible oil spills, the Panel has noted that, apart from a Hazardous Operation assessment and risk assessment that had been already performed and would be repeated at least yearly, the oil field facilities have been designed to conform to international standards, including corrosion prevention and leak detection. An Area Specific Oil Spill Response Plan (ASOSRP), which includes immediate shut off protection and containment and clean-up provisions, is also expected to be in place and operational three months before the first oil is transported. The plans will be subject to audit and approved by outside experts. In the Panel's view, however, Management must require that the Area Specific Oil Spill Response Plans reflect adequate consultation with affected stakeholders and civil society within the geographical area covered by each plan.
- 17. The Panel understands the concerns of the Requesters and their apprehension about a possible repeat of the environmental situation in Ogoniland, Nigeria. It should be noted, however, that the Pipeline project is using a much more advanced technology for petroleum extraction, including specially insulated buried pipelines, lined pits and ponds, use of non-toxic drilling muds, and the latest oil spill detectors. Based on its field observations, discussion with Bank staff, and the monitoring results provided by

the Consortium, the Panel concludes that the situations are profoundly distinct. In the Panel's view, however, it is imperative that the environmental management actions in the 1999 EMP are fully implemented and that Management ensures periodic independent monitoring to assess the success of these actions.

18. In the light of the above, the Panel finds that the overall preparatory steps undertaken by the Consortium so far, and the existing obligations set forth in the relevant Project documents suggest that Management is in compliance with the provisions of OD 4.01 related to assessment and management in the event of an oil spill. The Panel observed, however, that it is imperative for Management to monitor and ensure that all commitments by the relevant parties, in particular the complementary oil spill response plan to be developed by CTNSC, are implemented in their entirety and on a timely basis. The Panel concludes that there is no violation of Bank policies in this regard.

Contamination of Lake Chad and Groundwater

- 19. With respect to pollution of surface water sources and Lake Chad, the Panel was able to confirm the assertion that the Project EA includes a Comprehensive Ground Water Quality Monitoring Program, which is planned to be in place before the commencement of oil production. Among other measures, flow-lines and production pipelines are buried as safeguard against third party damage. The Panel further noted that, in accordance with the relevant legal documents, a review of the response to a spill to watercourses including the watershed of Lake Chad should form part of the ASOSRPs to be instituted.
- 20. Although the Consortium has incorporated a number of mitigation measures in the Project design to avoid contamination of regional water supplies, the institutional mechanism for regional water management has not been developed to a similar extent. In the Panel's view, it is imperative that Management ensures that the Regional Development Plan, and those responsible for its implementation give priority to the provision of safe and clean water to those living in the Project area. It is also imperative that such Area Specific Oil Spill Plans contain a review of the response to a spill to watercourses that form part of the watershed of Lake Chad.
- 21. Given the current status of Project implementation, and the cyclical nature of water shortages and availability in southern Chad, the Panel was unable to find any conclusive evidence that Management is in violation of OD 4.01 in connection with this issue. In the Panel's view, however, it requires continuing observation and monitoring by Management, perhaps through the International Advisory Group (IAG).

Air Pollution Concerns

22. Since local Non-Governmental Organizations (NGOs) raised concerns about gas flaring, the Panel investigated whether the Project was likely to cause air pollution and degradation of the environment. Although the Panel is satisfied that the probability of

future harm due to air pollution is low, it should be subject to periodic monitoring by Management.

Natural Habitats

23. The Requesters allege in general terms that OP/BP 4.04 on Natural Habitats had not been complied with. From its own field observations and from the relevant documentation, the Panel accepts the response of Management that the vegetation in the oilfield area and around the pipeline in Chad is almost exclusively wooded savannah, much of which has been heavily grazed or cultivated. Furthermore, what native habitat remains, largely in the form of gallery forest along watercourses, is not expected to be subject to significant conversion during pipeline construction. At the current stage of Project implementation, the Panel finds Management in compliance with the provisions of OP/BP 4.04, but as construction progresses, monitoring should continue to ensure the detection of any problems that may arise.

Forestry

24. The Requesters allege in general terms that Bank Policy on Forestry OP 4.36 has not been complied with. The Panel was able to confirm Management's observation, based on aerial and field surveys, that there is no primary moist tropical forest in Chad. The Panel is also satisfied that the Project design avoids or minimizes the clearing of riverbank gallery forest. Based on the foregoing and on its own observations, the Panel is satisfied that Management is in compliance with the provisions of OP 4.36.

Pest Management

25. The Requesters allege that the Bank's Policy on Pest Management (OP 4.09) has not been complied with. The Panel accepts Management's response that the Project will not finance pesticides for public use and that land clearance for pipeline construction will not involve the use of herbicides. The Panel further notes that pesticide use will be limited to the protection of the Consortium's work force against vector-borne diseases for which the Bank's safeguard polices would not be appropriate. Based on the foregoing, the Panel finds that Management is in compliance with the relevant provisions of OP 4.09.

Consultation

26. The Requesters allege that the obligation to take the views of affected groups and local NGOs fully into account in Project design and implementation, and particularly in the preparation of the EA was never fulfilled. Management maintains that consultation of the affected population was extensively undertaken. The Panel finds that, at least prior to 1997, the consultations were conducted in the presence of security forces, which is incompatible with Bank's policy requirements. As the Panel has said on previous occasions, full and informed consultation is impossible if those consulted perceive that they could be penalized for expressing their opposition to, or honest opinions about, a

Bank financed project. At the same time, the Panel recognizes that, since 1999, Management has made significant efforts to achieve compliance with paragraph 19 of OD 4.01, by encouraging frequent consultations with local communities and civil society in an environment more conducive to an open exchange. In these circumstances, the Panel would commend these efforts and urge that they continue.

Disclosure of Information

27. On disclosure of information, the Panel concludes that adequate and timely release of documents was the norm rather than the exception in the context of the Pipeline Project. In fact, key Project documents (in particular the multi-volume EMP) appear to have been made routinely available on a continuous basis to the local population through specific events and the existence of 'reading rooms.' The Panel finds, therefore, that Management has complied with BP 17.50 on Disclosure of Operational Information.

SOCIAL COMPLIANCE

Involuntary Resettlement

- 28. The Requesters allege that the Bank has not followed its own rules and procedures on Involuntary Resettlement, while Management maintains that it is in compliance with OD 4.30.
- 29. The Requesters raise questions about the possibility of 80,000 to 100,000 people being displaced in the production region. The Panel notes that Chad differs widely from other large projects funded by the World Bank in respect of involuntary resettlement. In Chad, only 50 households (much lower than the 150 households anticipated in the EMP) have had houses replaced and thus officially relocated to make way for oil well sites, pipeline route, or road widening and they have been successfully accommodated within existing village and lineage-based land resources.
- 30. Concerning compensation, the Requesters allege that failure to comply with Bank policies has led to expropriation without compensation. Management believes that the compensation design and implementation is in compliance with applicable Bank policies and procedures. In the Panel's view, Esso's policy of compensating the community rather than the individual for fallow land is a sensible one and consistent with Bank policies and procedures on involuntary resettlement. More generally, it appears that all actions in the Compensation and Resettlement Plan with regard to expropriation have so far been respected. The Panel was able to confirm that a 12-step land acquisition procedure has been followed, involving public consultation. Villagers have also accepted compensation in the form of cash payments or 'in-kind' payments in the form of bicycles, plows and water pumps.

31. After a careful review of the available evidence, the Panel is satisfied that Management is so far in compliance with the provisions of OD 4.30 concerning compensation. The Panel, however, views the monitoring of the overall resettlement process as critical to ensure continuing compliance with the requirements of this policy.

Indigenous Peoples

32. The Requesters allege that OD. 4.20 on Indigenous Peoples has not been complied with. The Panel finds that the people affected by the Pipeline Project do not constitute an 'indigenous people' because they form a majority of the population in southern Chad and share a larger identity with the region as a whole. On the basis of the above considerations, the Panel concludes that OD 4.20 is not applicable to the present case.

Cultural Property

33. The Requesters allege that OPN 11.03 on Management of Cultural Property was not followed. Management asserts that the Project EA paid particular attention to sacred sites, graves, and other elements of cultural property. The Panel finds that EMP procedures on cultural property have been adhered to, as it was able to witness several concrete examples in the field. A pre-construction survey was conducted by a Chadian archaeologist and a 'Handbook on Archaeological Sites' was developed for Project environment staff in the field. Accordingly, the Panel is satisfied that Management is in compliance with OPN 11.03 on Management of Cultural Property.

Governance and Human Rights

- 34. The Requesters allege violations of Directives on proper governance and human rights. Management maintains that improving governance is one of the key objectives of the Bank's Assistance Strategy to Chad and instances of poor governance are of great concern to it. As for human rights, Management states that the Bank is concerned about violations of human rights in Chad as elsewhere while respecting the Bank's Articles of Agreement but that, in this case, it believes that the Project can achieve its developmental objectives.
- 35. It is not within the Panel's mandate to assess the status of governance and human rights in Chad in general or in isolation, and the Panel acknowledges that there are several institutions (including UN bodies) specifically in charge of this subject. However, the Panel felt obliged to examine whether the issues of proper governance or human rights violations in Chad were such as to impede the implementation of the Project in a manner compatible with the Bank's policies.
- 36. As far as "good" or "proper" governance is concerned, the Panel recognizes that this is an evolving process in Africa and elsewhere in the developing world and that several Bank-supported Projects, including the Capacity Building Project which is the subject of this investigation, have components designed to improve the country's governance record and performance.

As for human rights, the Panel has examined several reports addressing the situation in the country and the extensive exchange of correspondence between Bank Management and NGOs in Chad and abroad. The Panel takes note of the fact that on more than one occasion when political repression in Chad seemed severe, the Bank's President personally intervened to help free local opposition leaders, including the representative of the Requesters, Mr. Yorongar, who was reported as being subjected to torture. During its visit to Chad, the Panel did not seek out the other opposition leaders in N'Djaména who had been arrested. In the field, however, several local leaders and organizations mentioned to the Panel that, while at times feeling harassed by the authorities, they have expressed their opinions about the Project without incurring physical violence. The Panel observes that the situation is far from ideal. It raises questions about compliance with Bank policies, in particular with those that relate to informed and open consultation, and it warrants renewed monitoring by the Bank.

ECONOMIC COMPLIANCE

Economic Evaluation

- 38. The Requesters allege that OP 10.04 on Economic Evaluation of Investment Operations has not been complied with. In view of the general nature of this allegation the Panel examined the Bank's actions with regard to the salient provisions. Concerning alternatives, the Pipeline PAD states that design effort for the Project began in 1993 with the consideration of alternatives, and says that it was decided to proceed with the Project because estimates of costs and benefits indicated that the Project would provide net benefits to all parties. As for the 'no project' case, it argues that without the Project Chad would forgo the expected significant net benefits. However, the discussion in the PAD of alternatives for oil field development and oil transportation is limited to two key paragraphs. They contain no quantitative economic evidence to support the findings reported. In the Panel's view this is inconsistent with the emphasis in paragraph 3 of OP 10.04 which states "Consideration of alternatives is one of the most important features of proper project analysis throughout the project cycle." In this respect, therefore, the Panel finds Management not in compliance with OP 10.04.
- 39. The Panel was struck by the estimated financial returns to Chad over a 28-year period, having regard to the magnitude of the Project, and is concerned that it was unable to find any analysis to justify the allocation of revenues among Chad, Cameroon and the Consortium. While the Panel recognizes that Management sought to ensure that Chad had access to reputable legal and financial services in its negotiations with the Consortium, it remains concerned about the adequacy of the allocation of revenues to Chad.
- 40. The economic analysis for the base-case scenario reports switching values for four key variables (capital expenditures, operating costs, crude sales revenue (price) and crude sales revenue (quantity) in relation to the economics of the Project as a whole, but none is reported for the benefits to Chad. Although it can be reasonably argued that this is

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not strictly a matter of compliance with OP 10.04 (since the switching values are reported for the whole Project), in the Panel's view it would have been appropriate and valuable to supply them. The Capacity Building Project makes provision for technical assistance to place Chad in a position where it can monitor and audit both the oil produced and the revenue generated by the Pipeline Project. In the Panel's view it is essential that this be made operational before oil production commences and revenues begin to flow.

- 41. The risk analysis reported in Annex 4 (and elsewhere in the PAD) is broadly in compliance with paragraph 6 of OP 10.04 in that it took, "into account the possible range in the values of the basic variables," and assessed, "the robustness of the project's outcome with respect to changes in these values." It also considered the sensitivity of the Project's net present value to changes in certain key variables. Nevertheless, in the Panel's view, a fuller and more systematic examination and explanation of the results for Chad (as opposed to the results for the Project as a whole), including the apportionment of the oil revenues between Chad and the Consortium, would have been desirable.
- 42. The PAD notes that other economic benefits apart from the direct project revenues included in the economic analysis will be experienced by Chad, but the economic analysis focuses on the direct revenues to Chad. While accepting that some of the 'other economic benefits' might not have been easy to value, in the Panel's view full compliance with OP 10.04 required a more detailed examination of these other benefits than was reported in the PAD.
- 43. The Economic and Financial Summary of the Petroleum Economy Project PAD does not attempt to explain why the project represented the least-cost way of attaining the stated objectives. This matters because the PAD does not include an explicit discussion on Economic Analysis, which would normally set out in some detail the satisfaction of the criteria and procedures covered by OP 10.04.
- 44. The discussion of *Sustainability and Risks* is very brief. This is significant because of the acknowledged complexity of the project's design and the recognition that to avoid the failure associated with development of oil or mineral resources in other Sub-Saharan African countries, Chad must put in place before 2004 the essential building blocks of its strategy for the management of the petroleum economy. In the Panel's view, therefore, a **more** thorough appraisal of sustainability and risks would have been required in order to ensure proper compliance with paragraphs 5 and 6 of OP 10.04.
- 45. OP 10.04 states that the main purpose of the analysis of risk is "to identify the scope for improving project design, increase the project's expected value, and reduce the risk of failure." Given the identified weakness in implementation capacity in the Ministries of Environment and of Energy and Petroleum, and the importance of timely implementation of the rapid intervention measures, the Regional Development Plan and the pilot development fund (FACIL), the Panel finds that Management is not in compliance with OP 10.04 in respect of the analysis of sustainability and risk issues.

46. The analysis in Annex 4 of the PAD shows that, consistent with the requirements of OP 10.04, and despite problems of quantification, some detailed attempts were made to take externalities into account, and in several cases to produce cost estimates. The Panel therefore finds Management in compliance with OP 10.04 in respect of its treatment of externalities.

Poverty Reduction

- 47. Although the Request does not explicitly mention OD 4.15 on Poverty Reduction, issues related to compliance with this policy are addressed in Management's Response. According to Management, the Bank's approach with regard to petroleum revenue management is to help Chad target the bulk of direct oil revenues from the Project to expenditures in priority sectors for poverty alleviation.
- 48. The Revenue Management Program has detailed rules for the handling and allocation of the oil revenues. The Pipeline PAD notes that 10% of royalties and dividends (which represent 85% of expected revenues over the first ten years of production) will be invested in long-term external investments, whose proceeds will be used to benefit poverty reduction programs in the future. The remaining 90% will pass through Special Petroleum Revenue Accounts. The Panel recognizes the importance of this but, in its view, it is vital that this be the subject of continuing monitoring, review and assessment by an independent body such as the IAG.
- 49. The Panel recognizes Management's intention to comply with the broad provisions of OD 4.15, and its awareness of the challenges to effectively reduce poverty in Chad. Nevertheless, the Panel has concerns on whether some components of OD 4.15 have been fully met and whether Management has succeeded to put in place sufficient measures to ensure the sustained delivery of poverty reduction outcomes, and hence future compliance with OD 4.15.
- 50. The Panel's investigation revealed serious concerns about the failure to develop and strengthen the institutional capabilities of the Government of Chad to a level where it could begin to monitor the Project effectively before the revenues start to flow. In this regard, it is vital that the operations of the dedicated special account be subject of continuing monitoring, review and assessment by an independent body such as the IAG.
- 51. During the Panel's visits to Chad, several local leaders expressed deep reservations on whether Chadians would be the ultimate beneficiaries of the Project. In more specific terms and in relation to the oil-producing region, the Request alleged that "the laughably small quota assigned to the production zone bears little or no relation to the magnitude of the needs of this region and the size of its population." This refers to the 5% of royalties from oil revenues over the life of the field project for the producing region. While there are no Bank policies and procedures that directly guide the allocation of resource revenues to producing regions, and consequently no question

here of non-compliance with OD 4.15, it would appear that no targeted studies were carried out to determine the appropriate share; nor is there any review of material that might underpin the choice of 5 per cent. In the Panel's view, this is a matter of great concern. It is also not clear that Management yet has the information that would enable it to estimate regional shares of planned priority sector expenditures. In the Panel's view, this kind of information is essential if the various stakeholders are to be in a position to debate and argue for appropriate shares in national income and wealth.

- 52. The Panel is concerned that activities such as project mitigation measures, establishment of FACIL, the completion of a Regional Development Plan, and the establishment of the Collège de Contrôle et de Surveillance des Ressources Pétrolières have been running significantly behind schedule while oil field and pipeline development are running ahead of schedule. In the Panel's view, these delays threaten to compromise the delivery of poverty reduction in the later stages of construction and the early stages of operation of the Pipeline Project. Obviously, Management must renew and invigorate its efforts to ensure that the structures created are fully operational before the expected earnings arrive.
- 53. It is neither obvious to the Panel that the Capacity Building Project nor the Petroleum Economy Project have made appropriate provisions to identify and address the above-mentioned types of problems in the areas touched by the Pipeline Project's activities This is despite their potential to impinge on that Project's potential to attain the poverty reduction envisaged in OD 4.15. Furthermore, it is not obvious to the Panel that there is sufficient communication and coordination between the two projects to rule out the possibility of their becoming poverty-increasing problems which fall between two stools and fail to be identified and addressed. In the light of this, the Panel finds that the Project is not in compliance with these aspects of OD 4.15. The Panel, therefore, reiterates its call for Management to accelerate its efforts to improve the situation on the ground.
- 54. With regard to the Revenue Management Program, no explicit set of arrangements for dealing with large surpluses and fluctuations that would smoothen out the annual inflows has been agreed upon. Such an eventuality will need to be accommodated to ensure a gradual consistent rise in spending within the bounds of absorptive capacity. In the Panel's view, in order to avoid macroeconomic risks that could jeopardize poverty reduction, Management should have addressed this serious risk to its poverty reduction objectives in a more definite manner than the statement in the Revenue Management Program that "Revenues (...) will be sterilized under arrangements acceptable to the Bank." In the light of this, the Panel finds that Management is not in compliance with the provisions of OD 4.15 concerning risk analysis and institutional design.

PROJECT MONITORING AND SUPERVISION

55. The Panel had expressed its concern about delays in establishing local capacity required to monitor effectively the Project in order not to compromise its long-term sustainability. At the same time, the Panel wishes to express its satisfaction that

Management has established a strong external Project monitoring capacity in the form of the IAG and the External Compliance Monitoring Group (ECMG). Under the circumstances surrounding the Project, they clearly have a very important role to play. The Panel would urge the Board to ensure that this function is sustained for as long as is necessary and certainly well beyond disbursement of the loans in question.

Part One

Introduction

Part One: Introduction

- 1. PROJECTS EXAMINED IN THIS REPORT: CHAD CAMEROON PETROLEUM AND PIPELINE PROJECT (LOAN NO. 4558-CD); PETROLEUM SECTOR MANAGEMENT CAPACITY BUILDING PROJECT (CREDIT NO. 3373-CD); AND MANAGEMENT OF THE PETROLEUM ECONOMY (CREDIT NO. 3316-CD)
 - The Chad-Cameroon Oil Pipeline Project is the largest energy infrastructure development on the African continent. Estimated at US\$3.7 billion, it is being funded largely by the private sector. It involves the drilling of 300 oil wells in three oil fields in the Doba region of southern Chad (see general information on Chad in Box 1 below) and the construction of an export pipeline more than 1,100 km long through Cameroon to an offshore loading facility. With petroleum reserves estimated at 917 million barrels and with a production capacity estimated at 225 thousand barrels per day, the Project is expected to yield approximately US\$2 billion in revenues for Chad over a 28-year operating period.⁵ The World Bank and the International Finance Corporation (IFC) are participating in the Project, lending US\$39.5 million and US\$100 million respectively. Participation by the World Bank has enabled the oil producing consortium (the 'Consortium') and the Government of Chad to agree to a 'Revenue Management Plan' and, as a result, the Bank expects that the oil revenue should be spent on poverty reduction programs including, among others, improvements in infrastructure, education and health, supervised by an independent oversight board made up of government and civil society representatives.

Box 1

Chad: General Country Information⁶

Population: 8.5 million

Major languages: French, Arabic, Saran Life expectancy: 48 years (men),

52 years (women)

Population growth rate 3.29%

Main exports: Cotton, livestock, textiles

Capital: N'Djaména

Major religions: Islam, Christianity, Animist

Infant mortality is 95/1000 live births Total fertility rate 6.56 children Literacy: male 62.1%, female 34.7% Average annual income: US\$210

Chad was part of France's former African colonial empire until 1960, after which the country suffered three decades of internal warfare and invasions by Libya before peace was restored in 1988. In 1990, General Idriss Deby took power from President Hissen Habré, suspended the constitution, and dissolved the legislature. The government eventually drafted a multiparty democratic constitution, and held Presidential and National Assembly elections in 1996 and 1997 respectively. However, there were serious allegations of irregularities and human rights abuses. In 1998 a new rebellion broke out in northern Chad, which continued to escalate throughout 2000. Presidential elections were again held in 2001. Again there were serious allegations of irregularities and human rights abuses.

⁴ Private sector participation (the 'Consortium') is divided as follows: ExxonMobile 40%, Petronas 25% and Chevron 35%.

⁵ In Part Four of this Report, the Panel examines, *inter alia*, the Project's economic rate of return for Chad.

⁶ UNDP, Human Development Report, 2000.

Politically and socially, Chad is divided between a predominantly Muslim population in the north and Christians and other religious sects in the south. The ruling party of President Idriss Deby is made up predominantly of northerners, but the oil fields and pipeline lie in the south around Doba, Komé, and Moundou. Northern Chad is still covered extensively in landmines.

Over 80 percent of Chad's population lives on less than a dollar a day. Poverty is severe in every region, as shown by extremely high illiteracy rates and weak health indicators. The health situation is particularly precarious in rural areas, with one doctor for 41,000 inhabitants at the national level compared to 3,904 inhabitants in N'Djaména, the capital city. The prevalence of HIV/AIDS (Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome) is increasing and is about 5 percent among adults (older than 16 years), while it was 2.9 percent in 1994. The road network is extremely limited, both in absolute terms and with respect to the size of the country. Chad has only 500 km of paved roads, and most of its national road network comprises unpaved roads that are not accessible all year-round. This situation seriously affects the cost of agricultural products as well as food security.⁷

The World Bank's country assistance strategy for Chad includes: (i) a Health Sector Support Project, and a separate project dealing specifically with population and AIDS; (ii) a Civil Society Capacity Building Project which complements the Capacity Building Project linked to the Pipeline Project; (iii) a National Environmental Action Plan; and (iv) a Parliamentary Economic Capacity Building Project. In addition to these projects there is a structural adjustment credit and a debt relief component under the Highly Indebted Poor Countries (HIPC) initiative.

According to the Bank, the overall objective of the three Projects related to oil 2 development in southern Chad is to increase government expenditures on poverty alleviation activities and to promote economic growth in Chad and Cameroon through private sector-led development of Chad's petroleum reserves and their export through Cameroon. The "Petroleum Development and Pipeline Project" (hereinafter referred to as the "Pipeline Project") aims to support Chad's sustainable development objectives. The "Petroleum Sector Management Capacity Building Project" (hereinafter referred to as the "Capacity Building Project") aims to build Chad's capacity to manage oil revenues and to use them efficiently for poverty reduction through priority sectors and regional distribution⁸, by strengthening "the capacity of the Borrower to: (i) better manage the development of petroleum resources in an environmentally and socially sound manner; and (ii) increase the use of petroleum resources generated from the Chad Export Project." Finally, the "Management of the Petroleum Economy Project" (hereinafter referred to as the "Petroleum Economy Project") aims to assist the Government of Chad "in building capacity to implement its petroleum revenue management strategy to enable it to effectively absorb and allocate expected oil revenue, and thus pursue the poverty-reduction objective of petroleum resources development.",10

⁷ World Bank, Country Brief, August, 2001.

⁸ Section 1 article 7 of the Chadian Law on Petroleum Revenue Management Act No. 001/PR/99, adopted by the Chadian Government on December 30th 1998, enumerates priority sectors as being public health and social affairs, education, infrastructure, rural development, and, environment and water resources.

⁹ IDA Credit Number 3373-CD, Schedule 2 at p. 18.

¹⁰ IDA Credit Number 3316-CD, Schedule 2 at p. 14.



Picture1: Esso staff explaining to Panel team the extent of the feeder line network

3. Also according to the Bank, all three Projects are independent but complementary to each other. The three projects and their respective status may be summarized as follows:

Project	Chad Petroleum Development and	Petroleum Sector Management	Management of the Petroleum
	Pipeline Project	Capacity Building	Economy Project
		Project	
Financed by	IBRD Loan	IDA Credit	IDA Credit US\$17.5
	US\$39.5 million	US\$23.7 million	million equivalent
	IFC A-Loan	equivalent	
	US\$100 million		
Sector	Energy	Energy/Petroleum	Public Financial
			Management
Board Approval Date	June 6, 2000	June 6, 2000	January 27, 2000
Effectiveness Date	August 10, 2001	March 23, 2001	September 21, 2000

2. REQUEST FOR INSPECTION SUBMITTED TO THE INSPECTION PANEL

4. The Panel's investigation was initiated by a Request for Inspection submitted by Mr. Ngarlejy Yorongar, a Member of Parliament in Chad's National Assembly and active opposition leader. He was acting for himself and on behalf of more than 100 residents¹¹ (hereinafter collectively called 'Requesters') in the vicinity of three oil fields of the Pipeline Project area in the cantons of Miandoum, Komé, Béro, Mbikou, Bébédjia and

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¹¹ During its field visit to the project areas in the end of August 2001, the Panel received a number of additional individual authorizations appointing Mr. Yorongar as their representative for the purposes of the Request. This brought the total number of Requesters to 296 during that specific visit.

Béboni, in the Bébédjia sub-prefecture of southern Chad. The Panel received the Request on March 22, 2001. The Requesters claimed that numerous attempts were made to bring the problems associated with the Project to the attention of Bank Management with no satisfactory results.

5. Mr. Yorongar alleged, while in Paris for medical treatment, that the Request was originally submitted to the Resident Mission of the Bank in N'Djaména, in December 2000. It was not, however, received by the Inspection Panel. During the interviews with the Panel, Management consistently denied having received the Request at that time. The Panel was unable to confirm or deny Mr. Yorongar's claim that the Request was delivered to the Resident Mission in December 2000.

2.1 THE REQUEST FOR INSPECTION

- 6. According to the Request for Inspection ('the Request'), the Requesters claimed that their rights and interests had been, or were likely to be, directly harmed as a result of Management's actions or omissions in the preparation, appraisal, implementation and/or supervision of the Projects. In particular, the Requesters claimed that the development of petroleum activities, including the development of the oil fields in southern Chad and the construction of the oil pipeline between Chad and Cameroon, represented a threat to local communities, their cultural property, and the environment. The Requesters further claimed that people living in the Doba Basin were being harmed, or were likely to be harmed, because of the absence, or inadequacy, of compensation and environmental assessment. The Requesters added that proper consultation with, and disclosure of information to, the local communities had not taken place.
- 7. The allegations by the Requesters involved possible violations of the following Bank policies and procedures: Environmental Assessment (OD 4.01), Involuntary Resettlement (OD 4.30), Natural Habitats (OP/BP 4.04), Pest Management (OP 4.09), Poverty Reduction (OD 4.15), Indigenous Peoples (OD 4.20), Forestry (OP 4.36), Disclosure of Operational Information, (BP 17.50), Economic Evaluation of Investment Operations (OP 10.04), Project Monitoring and Evaluation (OD 10.70), Management of Cultural Property in Bank-Financed Projects (OPN 11.03), and Project Supervision (OD 13.05).
- 8. On April 11th 2001, the Inspection Panel registered the Request and sent a notice of registration to the President, the Executive Director representing Chad as well as the rest of the Executive Directors, and finally to the Requesters. The notice of registration was also placed on the Inspection Panel's web site.¹²

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¹² www.inspectionpanel.org. Also, for a chronology of the projects in question and Panel-related activities, please refer to Annex 3 of this Report.

2.2 THE MANAGEMENT RESPONSE

- 9. On May 10th 2001 the Panel received Management's Response ('the Response'). The Response included a summary and justification of the overall project framework and of the Bank Group's role in the design, implementation, and supervision of the Pipeline Project and the associated Petroleum Economy and Capacity Building Projects.
- 10. In its Response, Management maintained that the Bank had complied with its operational policies and procedures with regard to the environmental, social, cultural, and procedural matters raised in the Request. Management was also of the view that the Bank had taken the necessary measures to ensure that people in the Project area would not be directly and adversely affected as a result of the Project design and its implementation. Finally, Management did not believe that the Requesters would be adversely affected by the implementation of the Project in the future, noting that systems were in place that could ensure that their views and concerns were adequately identified and addressed.
- 11. Both the Request for Inspection and Management's Response are examined in detail in the investigation sections of this Report.

2.3 THE PANEL REPORT AND RECOMMENDATION

- 12. For purposes of determining the eligibility of the Request and the Requesters, the Panel reviewed the Request for Inspection and Management Response and, in August 2001, visited N'Djaména and the relevant Project areas, including Komé Base, Doba, Bébédjia, Béro (I & II), Miandoum and Moundou. Before and after the visit to Chad, the Panel consulted with the Executive Director and Alternate Executive Director representing Chad and their staff.
- 13. During the eligibility phase field visit, Panel Members Edward S. Ayensu (lead inspector) and Maartje van Putten met with the Requesters and with representatives of a number of non-governmental organizations in Chad, as well as with local officials and individuals living in and around the relevant Project areas. The Panel also met with Bank Management and staff at Headquarters and in N'Djaména and exchanged views with Chadian Government and Project officials in N'Djaména and in the relevant Project areas.

2.4 THE BOARD'S DECISION

14. The Panel reviewed the technical eligibility criteria applicable to a Request for Inspection, and agreed that they had all been met with respect to the present Request. Accordingly, it recommended an investigation into the matters alleged in the Request to

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¹³ Panel members were assisted by Assistant Executive Secretary, Mr. Alberto Ninio.

the Board of Executive Directors. On October 1, 2001, the Board approved the Panel's recommendation¹⁴ to conduct an investigation into the claims made by the Requesters in all three projects. The Request, Management Response, and the Panel's Report and Recommendation were made public shortly after the Board decided to authorize the inspection sought by the Requesters.

3. THE INVESTIGATION PROCESS

- 15. The investigation phase was conducted by Edward S. Ayensu and was divided into two interlinked parts. The first part took place at the World Bank Headquarters in Washington, DC while the other took the form of in-country, fact-finding visits. Panel Member Jim MacNeill accompanied Lead Inspector Edward S. Ayensu in his investigation field visit to Chad
- 16. To facilitate its work, the Inspection Panel enlisted the services of three consultants who are experts in their respective fields: Professor Elliot M. Fratkin, anthropologist and social scientist, Dr. Peter J. G. Pearson, economist, and Mr. Miles Scott-Brown, environmental specialist. The Inspection Panel also hired the services of three other professionals, namely Ms. Alka Kothari, Mr. Serge Selwan, and Ms. Roopa Sukthankar, the last-named as the Panel's translator during its visits to Chad.

3.1 INVESTIGATION METHODOLOGY

- 17. During the whole investigation process, the Panel maintained open communications with all parties involved, as required under its regulations, but all contacts with the media in Chad were carefully handled by the investigation's Lead Inspector who limited his remarks to questions of process.
- 18. For the investigation, the Inspection Panel studied all the documents relevant to the case, and analyzed the facts presented to it during the field visits. Accordingly, the Panel interviewed World Bank Group's staff, of both the International Bank for Reconstruction and Development (IBRD) and the IFC. It also received a team from ExxonMobil that clarified some relevant aspects of the Project. Although not subject to the Panel's investigation, the ExxonMobil team provided valuable information and insights on the Pipeline Project.
- 19. The Panel carried out three visits to Chad, and in particular to the Project area. While contacting the Requesters and consulting with local people, the Panel ensured that the parties understood that the Panel was not investigating the borrower's performance. Given the nature of the claims set forth in the Request for Inspection, a special visit was undertaken by Professor Fratkin to get acquainted with the local population, their living

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¹⁴ M2001-0064 and IDA/M2001-0063.

- environment and their particular concerns. The map attached to this Report shows the areas visited by the Panel during its three missions to Chad.
- 20. On its return to Washington, the Panel prepared a series of written questions intended to clarify certain points raised during the investigation process. Answers to all the issues were provided by staff of the Bank, ExxonMobil and Esso Chad, respectively.

3.2 INVESTIGATION TIME FRAME

21. During the eligibility phase, the Panel recommended that its eligibility report to the Board be delayed for a period of 90 days because of the electoral and post-election process in Chad. After the elections, there was much controversy over whether they were free and fair, and the Requester, Mr. Yorongar, and other opposition candidates were arrested by the national authorities. There was further civil unrest in August following the presidential election. In the event, the Board approved the Panel's recommendation that it submit its eligibility report to the Board before September 17th 2001. This recommendation was made after consultation with the Executive Director and Alternate Executive Director representing Chad, the Requesters, Bank Management and the United Nations Development Programme (UNDP) office in N'Djaména.

3.3 SCOPE OF THE INVESTIGATION

- 22. The relevant directives and policies cover five different topics: environmental and social safeguards, economics, supervision, and information disclosure. The Panel has examined not only for compliance with the Bank's policies and procedures, but also whether harm was done as a result of Management action or omission.
- 23. The Panel's investigation focused only on Management's actions and omissions as they relate to the Projects. Since the Requesters are located in Chad, this investigation deals only with the Chad portion of the Pipeline Project. The Consortium, IFC and the borrower are outside the Panel's mandate. Also, the geographic scope of the investigation followed the areas referred to in the Request as being areas where Requesters lived or were referred to by them.

Part Two

Environmental Compliance

Part Two: Environmental Compliance

4. RELEVANT BANK POLICIES AND PROCEDURES

24. In this part of the Report, the Panel presents the results of its investigation regarding alleged violations of the Bank's environmental policies. The following policies were examined: OD 4.01 on Environmental Assessment, OP/BP 4.04 on Natural Habitats, OP 4.36 on Forestry, and OP 4.09 on Pest Management. Although OP 4.01, the current Bank policy on environmental assessment, has been in effect since January 1999, the project environmental assessment and environmental management plan are reviewed with reference to OD 4.01, which was applicable at the time of document preparation. This part of the Report also examines Management compliance with Bank policies and procedures on consultation and disclosure of information.

5. THE PROJECT IN SPACE AND TIME

25. A clear understanding of the spatial and temporal parameters of a project is fundamental to its proper evaluation and assessment. It is important to consider the spatial extent of a project's social and environmental impacts and the time frame in which these impacts occur. The setting of temporal and spatial boundaries at the outset of the assessment process provides a context and sets limits for all further Environmental Assessment (EA) activities, such as baseline data collection and impact evaluation. OD 4.01 provides a clear direction on the need for consideration of a project's spatial and temporal context. It calls for "a concise description of the geographic, ecological, social and temporal context, including any offsite investments that may be required by the project." This requires, among other things "an assessment of the dimensions of the study area (...) Current and proposed development activities within the project area (but not directly connected to the project) should also be taken into account."

5.1 THE SPATIAL CONTEXT

26. One of the allegations by the Requesters draws attention to the need for a clear delimitation of the spatial extent of the Project. The Requesters write: "In other words, its surface waters (consisting of flood waters and waters of its rivers), polluted by three million liters of oil a day for six months, will empty in the Logone, the Pendé, the Nya, the Chari, the Mandoul, the Tandjilé, and the Mayo-Kebbi. These rivers now polluted in their turn, will continue flowing into Chad. As a result, not only Chad, but

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¹⁵ OP/BP 4.01 on Environmental Assessment only applies to those projects, which had their Project Information Document – PID, issued after March 1, 1999. The PID for the Pipeline Project was issued in April 1995.

¹⁶ OD 4.01, Annex B, Outline of a Project-Specific EA Report, at § 2 (c).

¹⁷ Id., at § 2 (d).

also its neighboring States – Nigeria, Cameroon, Niger etc. – will be contaminated." While the Panel believes that the probability of a major catastrophic spill as described in the Requester's submission is low, it is a concern that could have been addressed in the initial formulation of the spatial context of the EA.

- 27. The 1997 Environmental Assessment document provides a map of the study area in Chad, which indicates the oilfield development area, a surrounding larger rectangular area and an apparent 30km pipeline corridor to the Cameroon border. The report also makes reference to a much larger oil exploration concession area including Lake Chad, Bongor, Doba, Doseo and Salamat Basins. However, there is neither discussion on how the boundary of the study area was defined, nor any mention of the potential area that could be affected by project development. Although a study area is presented in the form of a map, there is neither a discussion as to how and why the study area around the oilfield development area was defined, nor any discussion as to why the other oilfield concession areas were excluded in the definition of the spatial boundaries of the Project.
- 28. The Panel also notes, in this connection, that the Sédigui/SEERAT project¹⁹ which includes a small oilfield and refinery in west central Chad, the Consortium's activities of seismic exploration in the Sarh area, additional exploratory drilling of the Consortium in the oilfield area, and activities in other concession areas by the Consortium and other companies are not included in the original EA.
- 29. The Consortium and Bank Management did not explicitly consider the spatial dimensions of the Project as required by OD 4.01 with the result that they tend to restrict it to the immediate area of the three oilfields and the pipeline right-of-way to Cameroon, as will become evident in subsequent sections of this report. In the light of this, the Panel finds Management not in compliance with OD 4.01 in this respect.

5.2 THE TEMPORAL CONTEXT

30. The 1997 EA document states that the life of the Chad Export Project is 30 years with an anticipated construction period of 2 years. Project impacts are described as either being construction related (duration of 2 years or less) or operations related (over the 30 year life of the Project). The Panel is satisfied that the EA covers the life of the Project and that the temporal context has been clearly defined (Figure 2 provides some key notes relevant to the Environmental Assessment timeline).

 $^{^{18}}$ Request for Inspection, March 22 nd 2001 (hereinafter "Request for Inspection"), at \S 4 \P 3.

¹⁹ The Sédigui/SEERAT Project, which includes a refinery, is expected to supply enough energy for an expanded and modernized power generating station for the capital city of N'Djaména. According to Esso, a separate Environmental Assessment and Environmental Management Plan are being finalized for the small oilfield development at Sédigui, in West Central Chad.

5.3 REGIONAL ENVIRONMENTAL ASSESSMENT

- Delineation of the spatial dimensions of the Project is closely linked to the issue of Regional Assessment. Furthermore, several of the allegations by the Requesters have broad regional implications. The question thus arises whether a Regional Environmental Assessment complementary to the Project-specific assessment was required in terms of the Bank's own operating policies and procedures.
- According to OD 4.01, "Regional EAs may be used where a number of similar but significant development activities with potentially cumulative impacts are planned for a reasonably localized area... Regional EAs are particularly useful when they precede the first in a series of projects or development interventions in an undeveloped region, where a region is slated for major developments, where cumulative impacts are anticipated, or in regional planning or agroecological zoning."²⁰ OD 4.01 makes it clear that a Regional Assessment does not necessarily preclude the need for project specific assessments: "Though in some cases regional or sectoral EAs cover some of the requirements of project-specific EAs, the latter are still needed for major investments.",21
- Following its detailed examination of the multi-volume Environmental Management Plan (EMP) prepared for the Pipeline Project (and the earlier 1997 Environmental Assessment) the Panel finds that potential regional impacts resulting from cumulative actions were not adequately dealt with. Evidence collected by the Panel both at headquarters and during field visits indicates that oil and other economic development activities are already taking place outside of the scope addressed in the approved EMP. As for oil development outside of the currently agreed project area, Bank staff repeatedly pointed out a contractual clause in the legal documents for the operation which reads: "(...) any oil developed outside the Doba basin oil fields which is proposed to be transported through any part of the Transportation System in Chad is developed in accordance with the principles set forth in the EMP with respect to environmental analysis and protection, consultation, information disclosure, resettlement and compensation and with the equivalent legal and administrative approval processes and information disclosure as applied with respect to the oil developed in the Doba basin oil fields."²²
- In interviews with the Panel and following a written response to specific questions by the Panel, Bank staff acknowledged that a Regional Environmental Assessment per se was not prepared. They nonetheless, felt confident that through the implementation of 'emergency measures' under the Capacity Building Project or through the

²¹ Id. at § 7.

²⁰ OD 4.01 Types of Environmental Analysis, *Regional and Sectoral EAs*, at § 5.

²² Similar provisions appear in the Loan Agreement between the Government of Chad and the Bank and in the corresponding Project Agreements between the Bank and the members of the Consortium.

implementation of the Regional Development Plan²³ those impacts not directly or immediately associated with the construction of the oil pipeline could be safely avoided or mitigated. Bank staff stated, "we have not done, as you say a regional EA and how that will work out, but we have looked into induced impacts, especially on social infrastructure, and we know that there are a lot of trucks coming in over these roads, and we will be looking at safety issues, health issues – you will find that in the documentation."

- 35. In their response to the Panel as to whether preparation of a Regional Assessment was initially considered, Bank staff stated: "the present EMP, although not called a regional EMP, addresses regional issues, other than the transport of oil from other field in southern Chad (...) These regional issues are being and will be addressed by the project."²⁴ The Panel did not find evidence for this view.
- 36. In their comments on the Draft 1997 EA, Bank staff stated, "the EA for Chad should include a cumulative effects assessment of planned oil development in Chad including the development of the Sédigui oilfield for domestic consumption and the construction of a pipeline and refinery in N'Djaména. For both the Chad and Cameroon EAs, an assessment of the cumulative effects of all project components (pipeline routes, infrastructure upgrades etc.) on existing condition must be provided." In reviewing the documentation contained in the EMP, however, the Panel cannot find any indication that any cumulative effects assessment was completed. This is surprising since the evidence clearly indicates that the Consortium recognized the need for cumulative effects analysis in the review of the Draft 1997 EA. Moreover, as just noted, Bank staff also drew attention to the need to assess the cumulative effects of other energy and industrial developments.
- 37. The Panel finds this a serious omission, particularly when one of the objectives of the Petroleum Sector Capacity Management Project is to assist the Government of Chad to manage the development of its petroleum resources in an environmentally and socially sound manner, "including the need for cumulative/regional/sectoral environmental assessments." The Panel finds that in failing to require a cumulative effects assessment, Management is not in compliance with OD 4.01.
- 38. In the Panel's view, after careful consideration of the evidence, the Pipeline Project requires a Regional Environmental Assessment. The scale of the now proposed development will impact on the lives of all the people living in the Region as a whole. Moreover, being the first major industrial development Project in a largely undeveloped region, and given the ongoing seismic and drilling exploration activities, it is very likely that the Project will lead to other energy development projects in the future. Additionally, one of the major objectives of

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²³ See Panel observations on the Regional Development Plan in sub-section 5.4 below.

²⁴ Management Response to the Inspection Panel Request for Additional Questions/Clarification (hereinafter "Additional Response"), March 28th 2002.

²⁵ Petroleum Sector Management Capacity Building Project PAD (Credit No. 3373-CD), Report No. 19342 CD (hereinafter "Capacity Building PAD"), at p. 42 at § 45.

the Petroleum Sector Management Capacity Building Project is to assist the Government of Chad in developing the energy sector in a sustainable manner. This includes the assessment of regional, cumulative and sectoral impacts.

39. In failing to require the preparation of a Regional Environmental Assessment, which would adequately assess the nature and extent of broader environmental and social concerns resulting from the Project, the Panel finds that Management is not in compliance with paragraph 5 of OD 4.01.

5.4 THE REGIONAL DEVELOPMENT PLAN

- 40. As mentioned above, adequate assessment of Project impacts on a regional basis required the preparation of a Regional Environmental Assessment. Even in the absence of preparing such an Assessment, Management indicated the need for developing a regional response to project impacts. Such a response, at least in concept, was intended to ensure not only the implementation of urgent measures to mitigate indirect social and environmental impacts, but also to assist the economic development of the region. Recognizing their dissatisfaction with the proportion of expected Project benefits that would go to their region, the Requesters allege that "a laughably small quota assigned to the production zone [5%] bears little or no relation to the magnitude of the needs of this region and the size of the population."²⁶
- 41. Management, in its Response, observes that "the wider issue of benefits for the population of the oil production [region] is addressed by the Project. A Regional Development Plan [Project EA, Chad Portion, Volume 4] addresses issues related to in-migration, health and public hygiene and sanitation services, energy, water supply and food and housing in the oil field development." ²⁷ In addition, Management argues that FACIL (Fonds d'Actions Concertées Initiative Locale, a local initiatives social fund) is to be put "(...) in place under the Capacity Building Project to support local groups with development projects." ²⁸ The Response also makes reference to the program for disbursement of royalties from oil revenues under the Petroleum Management Law.
- 42. In the Panel's view, although a preliminary discussion of a Regional Development Plan exists in the EA, it has not been sufficiently developed to meet upcoming needs in the short time that remains before oil revenues begin to accrue. Furthermore, some of the key implementing agencies for the Project are not yet properly in place.²⁹ Neither the CTNSC³⁰ (National Technical Committee for

²⁶ Request for Inspection, *supra* note 18, at § $4 ext{ } ext{ }$

²⁷ Management Response, May 10th 2001 (hereinafter "Management Response"), at § 91.

²⁸ Ibid.

²⁹ See discussion on The Petroleum Economy Project and Capacity Building Project in sub-section 21.2 below.

³⁰ CTNSC – '*Comité Technique National de Suivi et de Contrôle*' – is the National Technical Committee for Monitoring and Evaluation of the Pipeline Project. It is the Government entity created to monitor the Pipeline Project in particular the social and environmental components.

Monitoring and Evaluation of the Pipeline Project) nor the 'Collège du Pétrole'³¹ has an operating budget, central office or regional personnel. FACIL is not yet in place although it has been discussed since 1998 (for further explanation on the role of the CTNSC please refer to paragraph 76). Thus the development of the oil production capacity is moving faster than the development of the social capacity needed to manage it. This 'two speed' pace of advance, with the infrastructure component well in advance of the social component, was also commented on by the International Advisory Group (IAG) during their initial visit in July to August 2001.³² This situation illustrates the relevance of attaching as much importance to Project implementation as to assessment, and formulation. Unfortunately, as discussed below in this report, this situation raises serious questions about the ability of the Project to realize several of its more crucial social objectives.

- 43. As for the Regional Development Plan itself, it would have to take into account, among other things, the cumulative effects already discussed. It would also have to enlist fully the participation of various segments of society. This latter issue was stressed by a local NGO, the umbrella CPPL (Commission Permanente du Pétrole Local), during an interview with the Panel: "Does the Regional Development Plan exist? We ask for it, and it does not exist. There are four levels [of government organization]: villages, cantons, sub-prefectures, and departments. The plan was to start from the lowest to the highest. The plan was elaborated in N'Djaména by the government, but we don't accept it because it doesn't come from below... As long as there is no development plan, the Project will only be commercial, with no [broader development] benefits for us."
- 44. The Panel notes that, although a Regional Development Plan is currently in preparation by the Government of Chad and the framework for such a document appears in the Project EMP documentation, the lack of capacity within the Government to prepare this document in step with the rapid pace of Project development is now clearly evident. This needs to be put in place without delay. Some of the impacts arising from development of the Project such as inflation and immigration to the work site are continuing, and the measures needed to mitigate these problems are not available.
- 45. In the light of the foregoing, the Panel recalls its finding that Management failed to comply with paragraph 5 of OD 4.01 with regard to the preparation of a Regional Environmental Assessment as this would have provided the needed initial framework for the preparation of a Regional Development Plan.

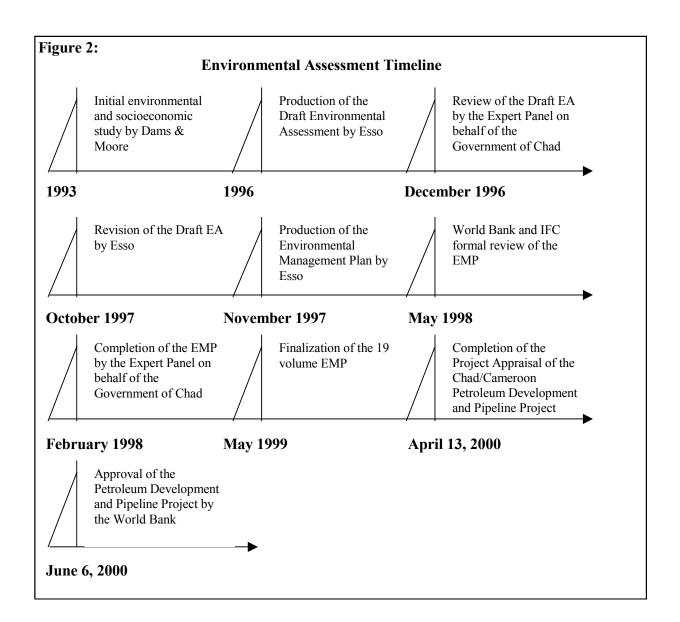
³² Independent Advisory Group, Report of Mission to Cameroon and Chad (hereinafter "the IAG Report"), October 4th 2001, at p.6.

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³¹ 'Collège du Pétrole' is the Petroleum Revenue Oversight and Control Committee in charge of authorizing and controlling the disbursement of funds from the special accounts referred to in the Finance Law and related to oil revenues. It is composed of one Supreme Court member, one member of the National Parliament, one Senator, the National Director of BEACD, the Director of Treasury, and four representatives from NGOs.

5.5 THE ENVIRONMENTAL ASSESSMENT PROCESS

- 46. According to Management, "[t]he Pipeline Project was classified as a Category A project. Consequently, in accordance with the provisions of this OD, and in collaboration with the Government of Chad, the Consortium has prepared an environmental assessment and environmental management plans for the Project. In 1997, a Draft Environmental Assessment (the 1997 Draft EA) was prepared and made publicly available in the InfoShop in October 1997. In May 1999, an EMP was finalized and made publicly available in June 1999. Together the 1997 Draft EA and the EMP constitute the Project EA. The accompanying Capacity Building Project was classified as a Category B project and the Petroleum Economy Project as a Category C project." The Panel finds that Management is in compliance with OD 4.01 with respect to project classification.
- 47. Figure 2 below provides some key dates relevant to the environmental assessment process:



5.5.1 The Independent Expert EA Panel

48. During its investigation, the Panel noted that, as provided for in paragraph 13 of OD 4.01, independent experts on environmental assessment were retained by the Government of Chad (GOC), presumably to advise it on EA preparation. As an internal 'Back to Office Report, dated December 21st 1995 states, "all of the government officials visited endorsed the Expert Panel suggestion and urged the Bank to proceed with the ground work toward establishing the panel in a timely fashion." Normally, as envisioned in the OD, an independent expert panel helps to enrich the EA process by providing critical, specialized advice, particularly in countries with insufficient environmental capacity.

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³³ Project Files, December 21, 1995.

- The Panel reviewed the terms of reference for the Expert Advisory Panel, which were drafted in 1996. The Expert Advisory Panel was to serve as independent advisors to the Government of Chad on environmental aspects of the development and operation of the pipeline project and associated petroleum development. It was charged with a onetime review of the Project Environmental Assessment (Chad portion) in December 1996 and the Project Environmental Management Plan (Chad Portion) in February 1998, as well as similar duties in Cameroon. Furthermore, the Terms of Reference state that the contract could be renewed for three years by the GOC. With regard to the duties of the Expert Advisory Panel, the terms of reference state that "as independent advisors, the Panel will report and be responsible to the GOC. The Panels formal advice will be in the form of written Panel reports submitted to the GOC prior to the end of [each] visit [and at other times when appropriate]. The Panel Reports will include the Panel recommendations. While the reports are addressed to the GOC, the recommendations may be of direct application or concern to the World Bank Group and the private promoters conducting the construction or operation. Consequently the reports will be made available to them by the GOC, and in view of the nature and magnitude of the Project, it would be desirable that the Panel's reports and recommendations be made more widely available (...). The Panel is to be concerned both with immediate and direct effects, and with secondary, cumulative and longer term effects within the Project areas and elsewhere as the Panel deems appropriate."³⁴
- 50. To its surprise, the Inspection Panel was unable to find any relevant records reflecting the work or the conclusions reached by the Expert Advisory Panel. In its Response, Management is silent on the work performed by the Expert Advisory Panel, even as it attempts to provide a picture of the EA process. Also in response to additional written questions presented by the Panel, Management states that: "The Bank Group assisted the Governments of Chad and Cameroon in setting up the Expert Advisory Panel. The actual contracts were between the Panel and the two Governments. Although several meetings were held by the Bank Group with the Advisory Panel, there does not appear to be any record of correspondence or review regarding comments of the Expert Advisory Panel on the EA or EMP. We also do not have any record of any formal response provided by the Bank Management to the Chadian Government or to the Expert Panel."
- 51. OD 4.01 makes specific reference to the importance of engaging an independent advisory panel of international experts. It is to advise on the terms of reference for the EA, the key issues to be addressed, and methods of preparation, the recommendations and findings, and their implementation as well as measures to strengthen the institutional capacity of the implementing agency, in this case the GOC. The need for an Expert Advisory Panel is particularly acute "for major, high risk or contentious"

³⁴ The Expert Advisory Panel, Review of the Draft Environmental Assessment prepared by Esso Exploration and Production Chad Inc. for the Government of Chad, December 1996, at p.68.

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³⁵ Management Response, *supra* note 27, at §§ 24-31. See also Annex B, which provides the list of relevant EA documents.

projects with serious, multidimensional concerns."³⁶ The need is clearly evident in the case of the Pipeline Project.

- 52. The Panel finds Management's stance on this matter disturbing. The contention that the contracts were solely between the governments and the consultants is not consistent with the Bank's obligation to have significant involvement in project preparation. The Panel also doubts that the Government of Chad, if asked, would deny Bank access to the work of the Expert Advisory Panel. Finally, the Panel cannot understand why or how Management failed to follow-up on and monitor the work of such an important part of the EA process either directly with the consultants or with the relevant governmental authorities.
- 53. Based on the foregoing, the Panel finds that Management is not in compliance with paragraph 13 of OD 4.01 for failing to involve the independent Expert Advisory Panel during the formulation of the Project's Environmental Assessment. Finally, the Panel notes that the CTNSC is currently recruiting a 'new' International Advisory Panel. Mechanisms should be put in place to ensure that comments of that Panel are fully incorporated into the Project review process.

5.5.2 An 'Adaptive Design Process'

- 54. The Panel notes that following a review in May 1998, a decision was taken not to redo the environmental assessment but rather to update it and to rewrite the original Environmental Management Plan.³⁷ This led to the production of the 19-volume EMP that is the basis of the project environmental documentation at the present time.
- 55. The Project's environmental documentation refers to an "adaptive design process" as a key part of their approach to environmental assessment. "The project's adaptive environmental design process centers around an information feedback mechanism that provides project planners with an ongoing flow of up-to-date information throughout the design process. As a result of this feedback mechanism, the project design has grown and adapted many times over (...) ultimately bringing the design to its present stage. This adaptive design process is still in progress." Bank staff has also expressed this viewpoint as follows: "The EA is a living document and we include in this document a change management process. That means there are things which are important which come up, things which we did not expect, or things which are brought up by local people, and with things which are really essential to change, there is an opportunity to change. It is not a static process."

³⁶ OD 4.01 Institutional Aspects, *Environmental Advisory Panels* at § 13.

³⁷ Proiect Files, May 26th 1998.

³⁸ Environmental Management Plan for the Chad Export Project, May 1999 (hereinafter "EMP"), Executive Summary and Update at p. 4-3.

56. The "change management process" involved in adaptive design is more appropriate to things not previously anticipated (though not exclusively). Although the use of such process for this case is understandable, it cannot be an excuse for failing to undertake an assessment of those impacts, which can be clearly anticipated and must be mitigated. On the basis of the foregoing, the Panel confirms its view that a cumulative impacts assessment should have been undertaken in the context of the Pipeline Project.

6. BASELINE DATA

- 57. The above considerations also apply to relevant baseline data. Paragraph 4 of OD 4.01 requires that "Project-specific EAs should normally cover existing environmental baseline conditions;" and paragraph 2 of OD 4.01 Annex C states, among other requirements, that a mitigation or management plan should include an "identification and summary of all the significant adverse environmental impacts that are anticipated; [and a] description and technical details for each mitigation measure, including the type of impact to which it relates and the conditions under which it is required (e.g., continuously or in the event of contingencies), together with designs, equipment descriptions, and operating procedures, as appropriate." *40*
- 58. Both Bank staff and the Dutch Commission on Environmental Impact Assessment have drawn attention to deficiencies in the amount of baseline data that was collected for the purposes of the initial environmental impact assessment document. In their May 1998 review, Bank staff observed, "A final concern (...) is the lack of baseline data against which project impacts may be measured (...) The Environmental Management Plan should therefore include provisions to address this issue by a campaign of baseline data collection, related to the measurement of project impacts, as soon as (and preferably before) the project gets underway." More recently, some concerns about this have been expressed by the IAG in their July-August 2001 mission report.
- 59. The 1999 Environmental Management Plan does present the results of additional studies collected for vegetation, fish, birds, and mammals for Chad and Cameroon. Also Environmental Baseline Assessments are currently being conducted for each area under development, such as camp locations, well pads, etc. Further to these additional baseline data studies, the Consortium has completed 26 alignment sheets for the pipeline corridor and 12 alignment sheets for the Doba project area. "In addition to allowing for a site-specific depiction of important biological resource information, these Environmental Alignment sheets also function as a tool for highlighting the locations along the TOTCO (Tchad Oil Transportation Company) Transportation System and in the oil field development area where site-specific environmental

³⁹ OD 4.01 Types of Environmental Analysis, *Project-Specific EAs* at § 4.

⁴⁰ OD 4.01 Annex C Environmental Mitigation or Environmental Management Plan at § 2 (a) and (b).

⁴¹ Project Files, May 26th 1998.21

⁴² The IAG Report, *supra* note 32, October 4th 2001, at pp.14-15.

- management requirements are to be implemented prior to/during, and/or after construction of the pipeline and the oilfield area facilities."⁴³
- 60. While noting the extent of the above activities to collect more Project baseline data, the Panel is unclear as to how the process of data collection relates to the overall assessment of Project impacts as presented in the Environmental Assessment. The linkages between collection of baseline data, the assessment and evaluation of Project impacts, and their relation to specific environmental management actions, are not clearly established in the EMP. OD 4.01 states that each mitigative measure should be related to a specific impact. There is no specific mention in the 1999 EMP of any data gaps and the program required to address the lack of data required for informed decision-making. Thus while the Consortium appears to be committed to an additional baseline data collection program in Chad of largely ecological information, no indication is presented as to why the data being collected is related to the needs of the environmental impact assessment and the environmental management plan. In the Panel's view, there is a lack of linkage among baseline data collection, assessment of Project impacts, and the application of specific mitigation and Management actions.
- 61. With regard to socio-economic baseline data the Panel notes that the environmental assessment is written almost entirely from the perspective and needs of Project activities that deal with physical construction of the fields, pipeline, and service roads. Broader regional assessments of socio-economic conditions are largely ignored.
- 62. The Panel finds, however, that the baseline studies for communities and individuals directly impacted by the Project were adequately designed and administered. In 1995, 661 surveys and interviews were conducted with individual adults in 74 locations (total population 146,672) in the oil-field area of Chad. This survey identified ethnic and geographic affiliations, family size, sources of livelihood, and income. Two further in-depth surveys were conducted among smaller samples, one among rural villages and the second among merchants and townspeople in Doba, Mbikou, Moundou, and Bébédjia, constituting an adequate sample size for the oil field area.
- 63. The Panel finds that the socio-economic baseline survey for the larger region of the pipeline is adequate, but with certain qualifications. The Environmental Assessment Appendix B (Human Environment) does provide a detailed census and review of health problems of the region in southern Chad affected by the Project, based on information presented in the first (1995) of two Population and AIDS Projects in Chad undertaken by the World Bank. It does not, however, provide baseline data with which to compare pre-and-post-oil revenue changes including inflation, employment, or projections of the increase in health risks such as HIV/AIDS (Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome) and sexually

⁴³ EMP, *supra* note 38, Volume 6, Environnemental Alignements List, at p. 1.

⁴⁴ OD 4.01 Annex C Environmental Mitigation or Environmental Management Plan at § 2 (b) and § 5.

transmitted diseases (STDs) resulting from the Oil Pipeline Project. Despite this detailed presentation of baseline information, the EA does not clearly identify mitigation measures to deal with the increase in social, economic, and health problems resulting from, or influenced by, the Oil Pipeline Project. Integration of these findings would greatly enhance the EMP and contribute to the Regional Development Plan. (Box 2 below and Annex 1 of this Report discuss in further detail the health issues associated with the Project)

Box 2

Health Impacts Associated with the Project

There are a variety of health impacts associated with the Project, both directly in the oil fields and along the pipeline route, and in the larger region of southwestern Chad. The EMP mentions possible health impacts and mitigation including sexually transmitted diseases, HIV/AIDS, and accidents resulting from construction activities. However, the EMP does not consider the health impacts to the larger region in a comprehensive way. The Project is having a larger effect on the inhabitants of the region than on those employed directly by the Project, which is the main focus of the EMP. In addition to failing to incorporate a regional health plan in the EMP or Regional Development Plan, the Bank has also ignored the public health issue of developing clean water and sanitation outside of the construction area. Finally, although the Request for Inspection does not specifically raise the issues of HIV/AIDS, this topic was considered to some degree in the Environmental Management Plan and mentioned as a concern by several local groups. An increase in HIV/AIDS is a grave threat posed by the construction of the oil wells and pipeline. Considering the seriousness of the secondary effects of the Project, the Panel decided to further investigate these issues. The Panel examined related health projects, including the Second Population and AIDS project in Chad, and collected various data to gain a better picture of the changing health situation in Chad. These topics are discussed at length in Annex 1 of this Investigation Report.

- 64. The Panel is aware, however, that it is possible to overstress the relevance of baseline information as compared with implementation issues in the context of the increasing trend towards a more 'hands-on' management approach that constitutes the new strategy of the 1999 Environmental Management Plan. In interviews with the Panel, a Bank staff member makes the following significant comment on the issue: "Sometimes we spend so much time developing studies to demonstrate compliance with the safeguard policies and less time to develop a strategy for implementing the plans that are needed to ensure compliance. This is not to say that you don't do the baseline studies; you need them to develop the plans – but the focus should be how are you going to implement those plans, what are the constraints in terms of dealing with large Consortia, lack of government capacity, the fact that you have major subcontractors involved, and focus on getting all that stuff done up front as opposed to learning on the job. The way we work and most of the world works is that you do the EA, and then you have a plan, and everybody is not quite sure which plan people are doing. So the point I'm making is that if we could be more focused on implementation... on what needs to be done in order to implement this to ensure compliance with the Safeguard Policies. That would probably mean our investment agreements would have a different tone and tenor."
- 65. The Panel notes the significant effort which the Consortium has made to collect baseline information about the Project and its effects. Not only has there been additional baseline data collected in response to previous reviews of the 1997 EA,

- but significant site-specific information in the form of environmental baseline assessments has also been collected in areas scheduled for Project development.
- 66. The Panel finds, however, that this data has not been properly utilized to support the EA process. The linkages among the data collection program, data gaps, certainty of impact assessment and the development of specific environmental management actions are not clearly established in the available Project documentation. The 1999 EMP makes no direct reference to these linkages, including linking the above-mentioned elements to specific impacts stated in the 1997 EA. Moreover, there is no mention of data gaps in the 1999 EMP. Consequently it is not known how each specific management action is formulated to respond to specific impacts or how these impact predictions and their corresponding management actions are based on adequate and relevant data. This would form the basis of a future audit in which the success or failure of mitigation actions can be addressed. The Panel, therefore, finds that Management is not in compliance with Paragraph 2 of Annex C of OD 4.01.

7. CONSIDERATION OF ALTERNATIVES IN THE EMP

- 67. There remains for consideration the question of whether alternatives to the Chad-Cameroon Project were fully considered in the Environmental Management Plan. With regard to the No Project Alternative, the document states that it "fails to meet the environmental, socioeconomic and development objectives of the Republics of Chad and Cameroon, and without the Project other means to improve socioeconomic and environmental conditions would be needed." In almost all the interviews conducted with Bank staff, the Panel heard the same comment that this Project was the only hope for the future economic and social development of Chad.
- 68. OD 4.01 states that analysis of alternatives should include "a systematic comparison of the proposed investment design, site, technology and operational alternatives in terms of their potential environment impacts, capital and recurrent costs." In 1998, Management commented on the review of alternatives as follows: "the environmental assessment describes alternatives to oil development scenarios, alternatives to pipeline transport of produced crude oil, road and rail route alternatives, and alternative pipeline and facility siting with a somewhat detailed description of the process of corridor selection. The discussion talks about the methods applied but does not actually reveal the results of the analysis to say which option was selected. Only brief mention is given to the no-project alternative."
- 69. The Consortium responded to this comment by producing volume 2, *Alternative Analysis*, in the supporting Documents of the 1999 EMP. With the exception of the economic evaluation, the Panel considers this analysis to be extensive, well

⁴⁵ EMP, *supra* note 38, Volume 2, Alternative Analysis, at p. 2-1.

⁴⁶ Project Files, May 26th 1998.

prepared, and in support of the final decision for process and route selection. OD 4.01, however, requires that for each of the alternatives, the environmental costs and benefits should be quantified to the extent possible, and that economic values should be attached where feasible. The Panel finds little evidence that this economic analysis was undertaken in the evaluation of Project Alternatives.

70. While noting its satisfaction with the justification provided for the selected Project alternative, the Panel concludes that Management is not in compliance with paragraph 2 (f) of Annex B of OD 4.01 concerning the cost-benefit analysis of Project alternatives.⁴⁷

8. Institutional Capacity

- 71. The Requesters and several local and foreign NGOs expressed concern with Chad's capacity to detect and manage impacts resulting from the construction and operation of the Pipeline Project. Also, several NGOs seemed to have called the attention of the Bank to the problem of inadequate environmental capacity in Chad. Therefore during the investigation, the Panel examined the Bank's adherence to the requirements of OD 4.01 concerning institutional capacity.
- 72. OD 4.01 states that the "EA process plays an important role in building environmental management capability in the country." OD 4.01 adds, "the ultimate success of EA depends upon the capability and understanding of environmental matters of the government agencies concerned." According to the policy, projects such as the Pipeline Project "with potentially major impacts normally require the strengthening of several environmental functions (e.g., environmental monitoring, inspection, management of mitigatory measures, EA scientific and technical review, and cross-sectoral coordination)." ⁵¹
- 73. OD 4.01 further stipulates that "early focus on institutional involvement in the EA process (a) helps ensure that the executing agency's and central policy entity's knowledge and perspectives are taken into account, (b) provides on-the job training for staff, and (c) provides continuity for implementing the EA's recommendations." In

⁴⁷ See Panel's additional observations on Project Alternatives in sub-section 21.1.1 of the Economic Evaluation, at §§ 227- 230 below.

^{48°} For evidence of such concern, please refer to: (a) 'Liability for Environmental Damage and the World Bank's Chad-Cameroon Oil and Pipeline Project', NC-IUCN Symposium, The Hague, February 25th 2000. Chapter 4 'The Chad-Cameroon Oil and Pipeline Project Plans for Environmental Monitoring: Multilayered Conflicts of Interest?' By Korinna Horta. (b)The Report from the 'Netherlands Commission for Environmental Impacts Assessment, Development Cooperation Department' available at: http://www.eia.nl/site-os/mer-os.htm.

⁴⁹ OD 4.01, Purpose and Nature of EA at § 2.

⁵⁰ Id., Institutional Aspects, Strengthening Environmental Capabilities at § 12.

⁵¹ Ibid.

⁵² Ibid.

- addition, OD 4.01 encourages the use of local expertise and the training of local staff and consultants "to help develop EA capability in the country."⁵³
- 74. The evidence indicates that Management was fully aware of the fact that Chad's institutional capacity for dealing with the impacts of the Pipeline Project was weak and inadequate. In interviews with the Panel, Bank staff time and again acknowledged (even with some distress) these institutional limitations in Chad and the need to act on them. As a seasoned member of the Bank staff observed, "one thing that everybody's got to accept is that Chad has very few people, frankly, who can handle a project like this, and they have huge demands."
- 75. The Bank supported "Petroleum Sector Management Capacity-Building Project", was approved on June 6th 2000, as was the Pipeline Project. It aims to assist the Government of Chad in achieving three major objectives: (a) developing and strengthening its institutional capabilities to manage the petroleum sector in an environmentally and socially sound manner; (b) minimizing and mitigating the potential negative environmental and social impacts within the oilfield and pipeline project area; and, (c) establishing an effective framework for further private investment in the petroleum sector. ⁵⁵
- 76. Requesters and NGOs alike have questioned the ability of the Capacity Building Project to produce timely results, arguing that adequate institutional capacity should have been put in place before the construction of the pipeline. In interviews with the Panel, Bank staff recalled that for several years there was no certainty whether the Pipeline Project would materialize or not and that, in general, governments are reluctant to borrow funds to reinforce their institutional capacity "in a vacuum." Bank staff observed that "there is no way that we would have ever gotten the Government of Chad (or the Government of Cameroon) to agree to a project to sit for several years to develop a capacity for a project which might happen or might not." Determining when a country can be expected to be ready to cope with a Project's impacts represents a challenging dilemma. On the one hand, institutions in developing countries have technical and operational limitations, and Chad is no exception. On the other hand, the Bank has the obligation to ensure that systems are in place to avoid or mitigate adverse impacts. The Pipeline Project clearly exemplifies this dilemma.
- 77. The largest component of the Capacity Building Project involves the development of the capacity of the CTNSC. This agency has been established by the Government of Chad to represent it in monitoring and controlling the environmental and social impacts of the Chad-Cameroon Project. The Panel met with the CTNSC and the 'Direction du Pétrole' (DP) during a site visit between January 13th and January 20th 2002. It observed that (a) the CTNSC had recently moved into a new building and purchased

See § 2 of this Report for short description on the Capacity Building Project. For more information please refer to the Capacity Building PAD, *supra* note 25.

⁵³ Ihid

⁵⁵ Capacity Building PAD, *supra* note 25, at p. 2.

Project vehicles; (b) the CTNSC had three employees and a director, and (c) one expatriate professional had just been recruited.

- 78. It was clear to the Panel that the CTNSC, which up to January 2002 had only one field staff and one executive staff, is not yet in a position to execute its mandate. To date, it has recruited only one expatriate specialist and although the individual has environmental credentials, he has limited oilfield experience. The available evidence suggests that CTNSC will not be a credible independent monitoring force by the time this project is operational in Chad.
- 79. Confronted with CTNSC's lack of readiness 18 months after Board approval of the Project, Bank staff acknowledged that there had been a delay in getting the CTNSC ready to monitor the Pipeline Project, but they argued that "any capacity development project takes time, and we cannot expect in 3 years to see the government officials at the level where they should be in order to monitor efficiently what the Consortium is doing." They repeatedly observed that measures were being taken to improve the local monitoring framework for the Project. The Panel further notes that the Project Appraisal Document for the Pipeline Project acknowledged that there were risks associated with the development of the 'environmental management capacity', and suggested that, as a risk minimization measure, parallel capacity building operations be planned for Chad and Cameroon as well as private sponsor assumption of significant responsibilities. ⁵⁶
- 80. As noted in paragraph 75, a key objective of the Capacity Building Project, and a major rationale for the Bank's involvement in the Project, was to develop and strengthen the institutional capabilities of the Government to a level where it could manage the petroleum sector in environmentally and socially sound manner: This included increasing the Government's capacity to the point where it could begin to monitor the project effectively before the revenues start to flow. This objective has not been achieved and raises questions about the Project's ability to realize several of its social objectives. However, the point made by Bank staff, as quoted above, suggesting that institutional capacity could not be built "in a vacuum" is not entirely irrelevant. The PAD did acknowledge risks in the development of "environmental management capacity."
- 81. The Panel recognizes the lack of human and institutional capacity at the national level to manage and monitor projects of this magnitude and complexity and recognizes Management's significantly increased efforts to improve the situation on the ground.⁵⁷ In the light of the above, however, the Panel finds that Management is not in compliance with the institutional/capacity requirements of OD 4.01, particularly in respect to CTNSC.

⁵⁷ In its January visit to Chad, the Panel indeed noticed that Bank presence in the field is now considerably more robust with the additional of several professional staff, including a new Resident Representative, a senior petroleum engineer, a NGO liaison officer and a senior human development (health and education sectors) officer.

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⁵⁶ Petroleum Development and Pipeline Project PAD (Credit No. 4558-CD), Report No. 19343 AFR (hereinafter "Pipeline PAD"), at p. 36.

9. OVERALL ASSESSMENT OF GENERAL COMPLIANCE

- 82. The Panel notes the substantial effort the Consortium and two host Governments have shown in the preparation of the 19-volume Environmental Management Plan. Despite the shortcomings to which we have drawn attention, the Chad Project, in terms of other similar oil and gas projects, is noteworthy for implementing a practical, 'hands-on' approach to environmental management. The EMP reflects an exceptional effort to address the challenges associated with environmental management of a complex project in a challenging physical and political environment.
- 83. The Panel, however, restates some of the actions indicated by its general findings:
 - The Project's spatial dimensions have to be explicitly defined to embrace all areas that will experience significant impacts from the Project.
 - Issues relating to Regional Assessment, embodying assessment of cumulative impacts, which were not undertaken should be integrated with the Environmental Management Plan.
 - It is imperative that action on the Regional Development Plan be expedited and that the needed institutional capacity be put in place or developed without delay.
 - Each mitigation measure identified in the EMP should be related to a specific impact, which is evaluated based on relevant and adequate data.
 - It is vital that the capacity for formulation of environment management plans, which meet the Bank's operational policies and procedures, be matched by institutional capacity for implementation.

10. SPECIFIC ENVIRONMENTAL CONCERNS

84. In addition to concerns related to specific provisions of Bank policies, the Requestors raised additional concerns relating to specific environmental and social harm that could arise from the Project. These are addressed in the following section, as are concerns relating to Bank environmental policies other than OD 4.01.

10.1 CONCERNS ABOUT OIL SPILLS

85. The Requesters allege that a significant oil spill would have possible far-reaching consequences in terms of pollution. They state, "In the Sub-Prefecture of Bébédjia and its environs alone, for example, the Consortium has drilled 300 wells. If you multiply these 300 wells by 10 feeder lines for each one, one will have 3,000 feeder lines in this district (...). If we multiply the 300 pipelines leading from the 300 wells by 10,000 liters per day, we get three million liters seepage of crude oil every day in this production

- region. In other words, its surface waters (consisting of flood waters and the waters of its rivers) [will be] polluted by three million liters of oil a day for six months (...)."58
- OD 4.01 states that "EAs identify ways of improving projects environmentally, by preventing, minimizing, mitigating, or compensating for adverse impacts." Thus the environmental assessment includes "the set of measures to be taken during implementation and operation to eliminate, offset, or reduce adverse environmental impacts to acceptable levels ...[and] the actions needed to implement them." With regard to oil spill risk, the actions needed to eliminate or reduce such risk must be specified.
- In its Response, Management has explained that each producing well will be connected through a single, buried, fiberglass feeder line (not ten feeder lines per well as stated in the Request). Both the Export System and the Field System⁵⁹ would be operated from the perspective that prevention is the best possible "response" to an oil spill. Hazardous operations assessment and risk assessments had been performed during the design phase and it was the intention to assess further risks at a minimum of every five years in accordance with industrial practice. 60 Management further observes that the oil field facilities (and other relevant facilities) had been designed to conform to international standards, including corrosion prevention and leak detection, and guidelines developed by the American Society for Testing and Materials (ASTM). In the event of an oil spill in the Field System, an Area Specific Oil Spill Response Plan (ASOSRP) will guide the emergency effort. This response plan for the Field System, which will conform to international standards and guidelines, as well as the Project's Integrity Management System's standards and guidelines, includes immediate shut off protection and containment and clean-up provisions in the event of a spill.
- Management also states that it had given thought to the possible pollution of Lake Chad mentioned by the Requesters. In addition to taking preventive measures, the Chad Government had sought no-objection to the Project from Niger, the Central Africa Republic, and Nigeria.⁶¹
- The Panel notes that the Consortium has prepared two documents to date relating to oil spill planning and response. The first is presented in Volume 4 of the EMP supporting documents. The second is the General Oil Spill Response Plan presented in the EMP. Both documents have been appraised as being adequate by outside reviewers. The Panel is aware that normally a comprehensive Oil Spill Response Plan (OSRP) is not ready for major pipelines until 3 to 6 months prior to the commencement of pipeline operations. The two documents prepared to date serve as initial planning documents and should not be viewed as forming a comprehensive oil spill response plan. In

⁵⁸ Request for Inspection, *supra* note 18, at § $4 \, \P \, 3$.

⁵⁹ The 'Field System' is where the oil production activities are located and the 'Export System' is the pipeline structure *per se* (see Management Response, *supra* note 27, at § 56). Management Response, *supra* note 27, at § 69.

⁶¹ See reference to the development on the issue in Contamination of Regional Water Bodies and Lake Chad subsection 10.2.1 at § 97 of this Report.

discussions with the Panel, the Consortium appeared committed to produce the Area Specific Oil Spill Response Plans three months before the first oil is transported in the pipeline system. It is noted that the plans will be subject to audit and approved by outside experts. The Consortium indicated to the Panel that the plan must be approved and put in place (including all equipment, training and human resource requirements and assessment of environmental risks) before the flow of the first oil in the pipeline will be allowed.

- 90. The Panel notes that in addition to the efforts of the Consortium to provide project specific oil spill response plans, there is a component of the Capacity Building Project which requires that the Government of Chad develop a complementary oil spill response plan during its first year of operation. It would be designed (i) within the Doba Petroleum Project context to complement the Consortium's effort in preventing and mitigating the environmental impacts of oil spills, if and when they occur; and (ii) at the national level to prevent and mitigate oil spills from any future project. The responsible party for the production of this complementary OSRP is the CTNSC. The Panel is concerned about the current capacity of the CTNSC to implement this plan by middle of 2003. Given the state of CTNSC's capacity as discussed above, it is clearly unrealistic to expect it to "develop a complementary oil spill response plan" and be in a position to implement it by the expected first year of pipeline operation.
- 91. The NGOs concern about the risks and the capacity to respond in a timely and effective manner to a major oil spill seem legitimate. In the Panel's view Management must require that the Area Specific Oil Spill Response Plans reflect adequate consultation with affected stakeholders and civil society within the geographical area covered by each plan.
- 92. In the light of the above, the Panel finds that the overall preparatory steps undertaken by the Consortium so far, and the existing obligations set forth in the relevant Project documents⁶³ suggest that Management is in compliance with the provisions of OD 4.01 related to assessment and management in the event of an oil spill. The Panel would observe, however, that it is imperative for Management to monitor and ensure that all commitments by the relevant parties, in particular the complementary oil spill response plan to be developed by CTNSC, are implemented in their entirety and on a timely basis.

10.2 CONCERNS RELATING TO WATER CONTAMINATION

93. Three major water contamination issues were raised by Requestors: (a) contamination of surface water supplies and eventual contamination of Lake Chad from a major oil spill; (b) contamination and blockage of local water supplies from contractors; and, (c) contamination of surface and groundwater from drilling operations. These concerns, which relate to OD 4.01, are addressed below in sequence.

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⁶² Capacity Building PAD, *supra* note 25, at p. 32.

⁶³ See reference to relevant legal obligation in § 99 of this Report.





Picture 2: Panel environmental consultant discusses water issues with Esso Chad officials

Picture 3: Potable water used by the Project

10.2.1 Contamination of Regional Water Bodies and Lake Chad

- 94. The Requesters allege that along the Chad Cameroon pipeline "the capacity for detecting seepage with even the most sophisticated systems will still not prevent the escape of 10,000 liters of petroleum per day, undetected." The requesters also raise concerns about the surface and ground waters in the region being polluted "by three million liters of oil a day for six months." Specifically, the Requesters allege that "[t]he slightest pollution of surface water sources will inevitably lead to pollution of water tables, rivers, marshes and watercourses down to Lake Chad. The same is true of the Sédigui, Bongor, Kyabé and Salamat oil deposits."
- 95. In its Response, Management explains that "the Project EA includes a Comprehensive Ground Water Quality Monitoring Program, which will be in place before oil production starts." Management also states that "alternative routings for the proposed pipeline and alternative locations for the marine terminal, with a view to minimizing the potential impacts of the Project from oil leaks and spills" were examined in the 1997 Draft EA, as well as "alternative development configurations for the Field System."
- 96. Management further explains that, according to the 1997 Draft EA, "The specific locations for each of the major field components were selected and configured in a cost-effective manner that optimizes technical efficiencies while considering potential

⁶⁴ Request for Inspection, *supra* note 18, at § $4 ext{ } ext{ }$

⁶⁵ Ibid.

⁶⁶ Ihid

⁶⁷ Management Response, *supra* note 27, at § 62.

⁶⁸ Id., at § 60.

⁶⁹ Ibid.

impacts to the local human, biological, and physical environments." In this connection, "field facilities have been sited to avoid, to the extent possible, existing living space and areas of dense population, water resources including existing wetlands and drainages in the field areas, known transhumant movement corridors, areas of vegetation with high conservation value (including gallery forest), and, active agricultural areas." Management adds that "mitigation includes, among other measures, the burial of flowlines and production pipelines to safeguard against third party damage and the use of fiberglass flowlines in the Field System for lines less than or equal to 203 millimeters (8 inches) in diameter to avoid corrosion." Management accordingly maintains that the Project EA is satisfactory and complies with OD 4.01.

- 97. With regard to the Requesters' concerns about polluting Lake Chad, Management explains that "the Project is designed (...) so as not to cause appreciable harm to Lake Chad." It further explains that "in January 1998, with the consent of the Government of Chad, the Bank notified the Central African Republic (CAR), Niger and Nigeria (...). CAR and Niger endorsed the Project proceeding. As Nigeria did not respond to repeated requests within the six-month period allocated for non-objection, Bank staff, in conformity with the provisions of BP 7.50, sought approval from Management to proceed with the Project. Chad had also informed the Commission for the Lake Chad Basin." The commission is headquartered in N'Djaména, and all the Lake Chad riparian states are members.
- 98. Management also addresses the allegation of potential pollution in the Sédigui, Bongor, Kyabé and Salamat oil deposits by a disclaimer of any responsibility: "these deposits lie outside of the scope of any activities financed by the Bank in the context of the Pipeline Project and that the Bank can therefore not be held accountable for the application of its policies in the context of any activities related to these fields." Nevertheless, Management observes that in the provisions of the Bank's Chad Loan Agreement, the Government of Chad has given an undertaking that any oil developed outside the Doba basin oil fields, transported through any part of the Transportation System in Chad "will be developed in accordance with the principles set forth in the EMP as applied (...) with respect to the oil developed in the Doba basin oil fields." 77
- 99. The Area Specific Oil Spill Plans prepared for each geographical area, in consultation with affected stakeholders and civil society are to be reviewed within 90 days of pipeline operation. Although the Consortium has incorporated a number of mitigation measures in the Project design to avoid contamination of

⁷² Id., at § 66.

⁷⁰ Id., at § 65.

⁷¹ Ibid.

⁷³ Id., at § 72.

⁷⁴ Ibid

⁷⁵ See reference to Concerns about Oil Spills in sub-section 10.1 at § 92 of this Report.

⁷⁶ Management Response, *supra* note 27, at § 134.

⁷⁷ Id., at § 135.

regional water supplies, the institutional mechanism for regional water management has not been developed to a similar extent. In the Panel's view, it is imperative that Management ensures that the Regional Development Plan, and those responsible for its implementation, give priority to the provision of safe and clean water to those living in the Project area. It is also imperative that such Area Specific Oil Spill Plans contain a review of the response to a spill to watercourses that form part of the watershed of Lake Chad.⁷⁸

10.2.2 Contamination of local potable water supplies

- 100. The Panel received a complaint from the Community of Bam that access to their surface water supply had been affected by construction of the David Terrassement camp. During a site visit, the Panel noted that access to what appeared to be a secondary water supply was blocked and this necessitated a detour of about 10 to 15 minutes. The Panel also visited a main water source, the outlet of which was contaminated with sediment resulting from runoff from road construction.
- 101. Additionally, according to local leaders, part of the community compensation called for the company David Terrassement (a sub-contractor in the Project) to provide an additional water tank that would be filled on a routine basis. According to the community, this tank was provided in December and never filled since.



Picture 4: Available water during the dry season at Bam



Picture 5: Women walk miles to fetch water

102. The issue of access to safe and clean water supplies, such as the problem found at Bam, will continue to occur throughout the life of the Project until secure water supplies become available. It requires urgent and continuing attention. This problem is particularly exacerbated in the dry season when less permanent water sources dry up. Additionally, it is aggravated by the construction of camps and other facilities, adjacent to communities where water wells are drilled to provide safe water to workers. In the Panel's view, it is imperative that Management ensures that a priority of the Regional Development Plan, and those responsible for its implementation, be able to provide safe and clean water to those living in the Project area.

⁷⁸ Project Agreement between Esso Chad and the World Bank dated March 29th 2001, Section 2.09 (c), Loan N. 4558-CD and 7020-CM.

10.2.3 Contamination of surface and groundwater from drilling operations

- 103. Concerns were raised by the Requesters regarding possible groundwater contamination by toxic materials supposedly contained in drilling pits. The Panel visited the Nya drilling location in January 2002, which had recently been abandoned. At the time of the visit, the drilling pits still contained waste drilling fluids and muds. The pits were lined with impermeable liners, and the Consortium's EMP for drilling operations indicates that only non-toxic biodegradable fresh water-based drilling muds and fluids would be used. The Consortium has promised to test the ponds with regard to their toxicity and to develop a site-decommissioning plan for the safe disposal of liquids and the reclamation of the drilling pits. Tests of the drilling muds presented to the Panel indicated no toxicity with heavy metals and low levels of hydrocarbons (less than 500 mg/kg).
- 104. Given the current status of Project implementation, and the cyclical nature of water shortages and availability in southern Chad, the Panel was unable to find any conclusive evidence that Management is in violation of OD 4.01 in connection with this issue. In the Panel's view, however, it requires continuing observation and monitoring by Management, perhaps through the IAG.

10.3 AIR POLLUTION CONCERNS

- 105. With reference to air pollution in the context of the EMP, the Requesters alleged that Management's failure to meet the terms of its policies and procedures have and will result in direct and adverse impacts on them. "We consider that our rights and interest have been, or are likely to be, directly harmed as a result of the Bank's action. This causes, or is likely to cause, the following types of damage, among others: pollution and degradation of the environment (...)."
- 106. During the Panel's visits to Chad, concerns were raised by local NGOs in respect to gas flaring and also the construction of a gas plant.
- 107. In response to these concerns, the Consortium has indicated that during operations, all of the natural gas produced, which is expected to be small, will be consumed by the Central Treating Facility's power plant to generate electricity. According to the Consortium (a) gas flaring will only occur during emergency or a malfunction in the system; (b) a small gas fueled pilot flame will exist on the top of the emergency flare stack at the Central Treating Facility; (c) during the drilling phase, all produced fluids from well testing and cleanup will be re-injected into the producing formation, with the exception of one or two locations, where they will be flared in an Evergreen burner; and, (d) immediately prior to flaring well testing fluids at the small number of sites where flaring is required, local communities will also be informed via a focused consultation effort. 80 Although the Panel is satisfied that the probability of future

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⁷⁹ Request for Inspection, *supra* note 18, at § 5.

⁸⁰ Response to the Inspection Panel's written questions to ExxonMobil Development, March 15th 2002.

harm due to air pollution is low, it should be the object of periodic monitoring by Management.

108. During the Panel's field visits, Requesters repeatedly expressed concern about excessive dust produced by road traffic from the Project. They were also concerned about the amount of water withdrawn from rivers to be used for dust control on roads. During the site visit, a dust buildup on vegetation was noted in a 10-meter or so strip on either side of roads. This phenomenon is apparently restricted to the dry season and likely probably has a limited effect on the long-term health of vegetation and crops. The Panel notes, however, that the Consortium is trying to reduce the dust problem through the watering of roads in the Oilfield Development Area. The source of water is a pumping station located on the Nya River. The Consortium provided the Panel with data indicating that the highest daily withdrawal of water from November 2001 to February 2002 corresponds to a removal of 2-4% of lowest water flow.



Picture 6: Mitigating dust impacts generated by newly constructed roads for the Project



Picture 7: The rainy season makes the roads impassable

11. NATURAL HABITATS

- 109. The Requesters, in general terms, allege that the Bank's policy on Natural Habitats (OP/BP 4.04) has not been complied with. 81
- 110. According to OP 4.04, the Bank promotes and supports natural habitat conservation and improved land use. The Bank therefore "supports the protection, maintenance, and rehabilitation of natural habitats and their functions in its economic and sector work, project financing, and policy dialogue. The Bank supports, and expects borrowers to apply, a precautionary approach to natural resource management to ensure opportunities for environmentally sustainable development." OP 4.04 further states that the Bank does not support projects that "involve the significant conversion or degradation of critical natural habitats." OP 4.04 however stipulates

⁸¹ Request for Inspection, *supra* note 18, at § $4 ext{ } ext{ }$

⁸² OP 4.04, at § 1.

⁸³ Id., at § 4.

that the Bank supports projects involving the significant conversion of natural habitats if "there are no feasible alternatives for the project and its siting, and comprehensive analysis demonstrates that overall benefits from the project substantially outweigh the environmental costs." It further states that if "a project would significantly convert or degrade natural habitats, the project includes mitigation measures acceptable to the Bank."

- 111. Management maintains that the provisions of OP 4.04 pertaining to 'Natural Habitats' are addressed by the Project EA. According to Management, 'Natural Habitats' are defined as "land and water areas where (i) the ecosystems' biological communities are formed largely by native plant and animal species, and (ii) human activity has not essentially modified the area's primary ecological functions." Therefore, this policy does not apply to farmland or grazing land. In this connection, Management considers "vegetation in the Field System and the Chad portion of the Export System [to be] almost exclusively wooded savannah. Most of this has been grazed heavily or cultivated for cotton, sorghum, etc. Therefore it does not meet the criteria for a 'natural habitat'." ⁸⁷
- 112. Management however identifies a natural habitat in the existing gallery forest. According to Management "gallery forest strips are usually narrow, (...) and constitute a natural habitat. Gallery forest exists along the Nya and Loulé rivers within the Field System and along the Export System in Chad at the Lim and M'béré Rivers, but they are under heavy pressure from farming activity." Moreover, "Preliminary Project design minimized impacts to natural habitats and (...) avoid or minimize the clearing of gallery forest. (...) [T]he maximum potential loss of 0.3 hectares represents 0.06 percent of the closed gallery forest area of Chad. Also large trees would not be removed, further preserving the integrity of the gallery forest." ⁸⁹
- 113. During the site visit, the Panel noticed that most land in the Project area was subject to some form of agricultural activity and that very little, if any, 'natural habitat', as noted in the above definition of the OP/BP, is present. The Panel accepts the response of Management and the observation by Bank staff that vegetation in the Field System and the Chad portion of the pipeline is almost exclusively wooded savannah, much of which has been heavily grazed or cultivated. From the available evidence what native habitat remains largely in the form of gallery forest along watercourses may not be subject to significant conversion during the pipeline construction process. However, continued monitoring will be essential as construction progresses.
- 114. At the current stage of Project implementation, the Panel finds Management in compliance with the provisions of OP/BP 4.04.

⁸⁴ Id., at § 5.

⁸⁵ Ibid.

⁸⁶ Management Response, *supra* note 27, at § 78.

⁸⁷ Id., at § 79.

⁸⁸ Ibid.

⁸⁹ Id., at § 80.



Picture 8: A view of the vegetation during the rainy season

12. FORESTRY

- 115. The Requesters, in general terms, claim that the Bank Policy on Forestry, OP 4.36 dated September 1993, has not been complied with. 90
- 116. OP 4.36 stipulates that Bank involvement in the forestry sector aims to "reduce deforestation, [and] enhance the environmental contribution of forested areas (...)." In pursuit of these objectives, the Bank "does not finance commercial logging operations or the purchase of logging equipment for use in primary tropical moist forest." Moreover, the Bank "requires borrowers to identify and consult the interest groups involved in a particular forest area." It also requires the borrower to "adopt a comprehensive and environmentally sound forestry conservation and development plan that clearly defines the roles and rights of the government, the private sector, and local people (including forest dwellers)."
- 117. In its Response, Management observes that forestry issues were thoroughly examined and assessed during Project preparation through "technical work and repeated field visits by specialized Bank Group staff, who also surveyed the greater part of the length of the pipeline route and oil field area by low-level overflights in fixed wing aircraft, by vehicle and on foot." Field surveys conducted as part of the EA process

⁹⁰ Request for Inspection, *supra* note 18, at § 4 ¶ 13.

⁹¹ OP 4.36, at § 1.

⁹² Id., at § 1 (a).

⁹³ Id., at § 1 (c).

⁹⁴ Id., at § 1 (d) (ii).

⁹⁵ Management Response, *supra* note 27, at § 77.

indicated that "there is no primary moist tropical forest in Chad." Riverbank gallery forest exists in Chad along the Nya and Loulé rivers within the Field System and along the Export System in Chad at the Lim and M'béré Rivers. In this regard, Management observes that the preliminary Project design seeks to "avoid or minimize the clearing of gallery forest." Management added that "the maximum potential loss of 0.3 hectares represents 0.06 percent of the closed gallery forest area of Chad. Also large trees would not be removed, further preserving the integrity of the gallery forest." He gallery forest."

118. Based on the foregoing and on its own observations, the Panel is satisfied that Management is in compliance with the provisions of OP 4.36.

13. PEST MANAGEMENT

- 119. The Requesters allege that the Operational Policy on 'Pest Management', OP 4.09, dated December 1998, has "not been complied with." 99
- 120. OP 4.09 stipulates that "In assisting borrowers to manage pests that affect either agriculture or public health, the Bank supports a strategy that promotes the use of biological or environmental control methods and reduces reliance on synthetic chemical pesticides. In Bank-financed projects, the borrower addresses pest management issues in the context of the project's environmental assessment." OP 4.09 further refers to the World Health Organization's Recommended Classification of Pesticides by Hazard and Guidelines to Classification (Geneva: WHO 1994-95) for the classification of pesticides and their specific formulations. Pesticides must have "minimal effect on non-target species and the natural environment. The methods, timing, and frequency of pesticide application are aimed to minimize damage to natural enemies. Pesticides used in public health programs must be demonstrated to be safe for inhabitants and domestic animals in the treated areas, as well as for personnel applying them." Pesticides' use must also "take into account the need to prevent the development of resistance in pests."
- 121. In its Response, Management states that the Project "does not intend to finance pesticides for public use," and it further observes that "land clearance for construction of the pipeline will not involve use of herbicides, and that herbicides will not be required for pipeline maintenance." According to Management, the

⁹⁷ Id., at § 80.

⁹⁶ Ibid.

⁹⁸ Ibid.

⁹⁹ Request for Inspection, *supra* note 18, at § $4 ext{ } ext{ }$

¹⁰⁰ OP 4.09, at § 1.

¹⁰¹ Id., Criteria for Pesticide Selection and Use at § 6 (c).

¹⁰² Id., at § 6 (d).

¹⁰³ Management Response, *supra* note 27, at § 82.

¹⁰⁴ Ibid.

Consortium's Corporate Health Plan anticipates use of insecticides to protect employees from contracting diseases. The temporary use of pesticides will be mainly "for treatment of clothing, indoor application, and limited outdoor treatment in and around the premises of work camps for staff working on the construction of the pipeline." Management states that the two pesticides proposed are Permethrin ("commonly used for impregnation of bednets under WHO guided malaria control programs in Africa", and Deltamethrin, and that the health plan also includes "simple environmental measures to reduce mosquito pressure, for instance by filling puddles in tire tracks to reduce breeding possibilities." However, Management considers that since "pesticide use is of limited scope and only concerns personal protection of the work force against vector-borne diseases for the duration that the workforce is in the field, it is felt that it would not be appropriate to apply the Bank's safeguard policy to the Consortium's health plan for workers." Nevertheless, according to Management, the Bank will monitor the use of pesticides as part of regular Project supervision.

122. The Panel notes that, as indicated in Management Response, 110 pesticides will be used for the control of vector borne diseases by spraying indoor areas and allowing limited use in camp areas. Only United States Environmental Protection Agency (USEPA) approved pesticides will be used. The Panel supports the view of Bank Management staff that limited pesticide use for the purpose of worker protection does not warrant application of this safeguard policy and, furthermore, that Bank personnel will monitor use of pesticide as part of ongoing Project supervision. Based on the foregoing, the Panel finds that Management is in compliance with the relevant provisions of OP 4.09.

14. A NOTE ON THE "OGONILAND" COMPARISON

123. The Panel notes that many of the environmental concerns of the Requesters related to their knowledge of Shell Oil's projects in Ogoniland, Nigeria. It should be noted, however, that the Chad Export project utilizes a much more advanced technology for petroleum extraction such as buried pipelines, lined pits and ponds, use of non-toxic drilling muds, and the latest oil spill detectors. These same technologies are often used by the oil and gas industry as part of their clean production strategies and commitment to environmental protection. No large-scale gas flaring activities such as occurs in the oilfields of Ogoniland are expected in the Doba oilfield development area.

¹⁰⁵ Ibid.

¹⁰⁶ Ibid.

¹⁰⁷ Id., at § 83.

¹⁰⁸ Ibid.

¹⁰⁹ Id., at § 84.

¹¹⁰ Id., at § 82.

124. The Panel can fully understand the concerns of the Requesters and their apprehension about a repeat of the environmental situation in Ogoniland. Based on its field observations, however, discussion with Bank staff, and the monitoring results provided by the Consortium, the Panel concludes that the two situations are profoundly distinct. In the Panel's view, however, it is imperative that the environmental management actions in the 1999 EMP are fully implemented and that Management ensures periodic independent monitoring to assess the success of these actions.

15. CONSULTATION AND DISCLOSURE OF INFORMATION

15.1 CONSULTATION

- 125. The Requesters allege that the obligation of taking the local population's views into account in preparing and implementing the EA was never fulfilled. 111 This allegation relates specifically to paragraph 19 of OD 4.01, which states that "the Bank expects the borrower to take the views of affected groups and local NGOs fully into account in Project design and implementation, and particularly in the preparation of EAs. This process is important in order to understand both the nature and extent of any social or environmental impact and the acceptability of proposed mitigatory measures, particularly to affected groups. Consultations are a valuable way to improve decision-making, obtain feedback on the EA process and draft report, and to increase community cooperation in implementing the recommendations of the EA." 112
- 126. In its Response, Management maintains that consultation of the affected population was extensively undertaken. Consultation occurred at several levels, including Project sensitization activities, as part of market surveys to update government valuation data sheets, as part of seismic surveys and exploration drilling, and finally through the establishment of entitlements and values for compensation and resettlement at the individual and the group level. Furthermore, Management argues, the consultation process had led to concrete modifications, such as re-evaluation of mango trees in1999. A log of public meetings and consultations is provided in Volume 3, Supporting Documents of the 1999 EMP.
- 127. Management provides an extensive history of consultation efforts to both affected communities and representatives of civil society in the oil field regions. According to Management, and verified by the Panel, this occurred in three phases:

<u>Phase I: (1993-1997)</u> (a period of instability where agents of Esso were accompanied by armed security forces). During this phase initial consultations

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¹¹¹ Request for Inspection, *supra* note 18, at § $4 \P 8$.

¹¹² OD 4.01, EA Procedures, *Involvement of Affected Groups and Nongovernmental Organizations* at § 19.

between Esso and local villages, involving public information meetings as well as consultations with local NGO groups were undertaken. 113

Phase II (1997-1999) Consolidation Phase: The Draft EA was released in October. Public information and consultation was launched during the summer of 1997. The period witnessed greater involvement of national and international NGOs characterized by seminars organized by civil society, which contributed 60 revisions of the Draft EA, including the design of the pipeline routing, compensation policy, and ground rules for civil society engagement. 114

<u>Phase III</u>: (1999) included the launching of a new round of consultations. The full Project EA (including the 1999 EMP) was released in June 1999 in 13-volume sets and displayed (i) in twenty-one locations in the Project impact area and other parts of Chad, (ii) on the Consortium's website and (iii) at the Bank's InfoShop, and the public was invited to submit its comments to the Consortium and the Bank. By the time the Project was appraised by the Bank in June 1999, the consultation process was assessed by Management as meeting Bank requirements. ¹¹⁵

- 128. The Panel interviewed a large number of individuals and organizations both in Washington D.C. and Chad, including World Bank Group staff, ExxonMobil, Esso Chad, representatives of various NGOs in Chad, and CPPL in Moundou, individuals from among the Requesters as well as non-requesters, including farmers, school teachers, medical doctors, and government representatives in Chad. The Panel's questions were based on the data included in the consultations, both between the Project officials and local villages and between the Project officials and local NGOs. The Panel also examined the climate in which the consultations were undertaken. Furthermore the Panel examined written documents pertinent to the consultations, including the Project's EMP, internal communications to the Project Management, and communications from civil society representatives, including NGOs.
- 129. The Panel found that the NGOs under CPPL, who are highly organized, motivated and articulate, were highly critical of the consultation process. They described Esso Chad's public consultations as 'one-way' processes where local villages were told what was going to happen, and where free exchange of views was hampered by the presence of armed security forces, or by government representatives who would retaliate by arresting or intimidating people who spoke out against the Project. They also alleged repeated difficulties meeting with Esso Chad, where requests for meetings "must go from Komé Base to N'Djaména to Houston and back." 116
- 130. CPPL released a communication on January 24-25, 2002 reiterating its objections and raising concerns over several other issues. The Panel was unable to establish that these

¹¹³ Management Response, *supra* note 27, at §§ 24-25.

¹¹⁴ Id., at § 46.

¹¹⁵ Id., at § 51-53.

¹¹⁶ Panel interviews with NGOs in the field.

views were communicated to the Esso Chad Management. The Panel did find evidence that meetings between Esso Chad and CPPL as well as with other representatives of civil society and local villages were frequent and comprehensive, and involved communication between the parties. Management has reported, since 1999, consultations through various meetings and discussions held by the Consortium, the Bank, and the Government, in particular through regular field visits of its National Technical Committee for Monitoring and Evaluation of the Pipeline Project. Village information campaigns, participatory seminars, consultative meetings were held in 1999 and 2000. They have records of 88 meetings of Esso Chad and various NGOs, bilateral agencies, Government of Chad representatives, and local villagers during the year 2000.



Picture 9: Panel members listening to claims by a local network of NGOs, CPPL



Picture 10: Panel team consulting with the local people on the potential effect of the Project on their villages

- 131. There is evidence that as an important consequence of the consultation process there has been rapid growth of civil society organizations, particularly indigenous NGOs. Thus by 1999, the number of NGOs had grown from a couple or so (1993-1997) to several dozen in large part, in response to the developments accompanying the Pipeline Project. They include farmers' associations, women's groups, entrepreneurs, and environmental and human rights groups.
- 132. CPPL does accept that there were consultations, but draws attention to the atmosphere in which they occurred and the background of the people consulted: "There was consultation, we don't contest that, but what are people being informed? There have always been wars and rebellions in this area. The atmosphere was not helpful for peasants to talk. Furthermore, peasants are illiterate and don't speak French. First they were afraid to express themselves, and second, they were unable to speak. Between 1969 (when the oil Project was first considered) and 2000, anyone who tried to look at negative aspects (of the Project) were [labeled] enemies of the State."
- 133. In interviews with the Panel, some Bank staff showed frustration with the perception from some local leaders that consultation was not effective "[w]ell, our view is that there is never enough in terms of communication of information. You can go 10,000 times to southern Chad and ask again the question 'Do you know what the Project is about, and do you know what is the impact?' and the answer will be 'No'." Others had

a more candid view on the Project's shortcomings on consultation: "One is in continuous communication with people. I think there was communication but not sufficient. Maybe there is never sufficient communication, (...) I think if people say that there was not sufficient communication, probably they'd be right. It increased later on."

- 134. An internal Bank memorandum dated December 29, 1999 admits that "earlier consultations took place in the presence of gendarmes due to security concerns and political context at the time (1995-1997)," but it goes on to observe: "impacted communities acknowledge that Project impacts, establishment and valuation entitlements, job opportunities and other Project related activities were abundantly discussed." It is significant to note that no one the Panel spoke to in the villages could point to the presence of armed security forces during meetings or compensation visits after 1999, but did agree that local government officials including Chefs du village and Chefs du Canton were present.
- 135. In the light of the above, it is evident that, at least prior to 1997, the consultations were conducted in the presence of security forces, which is incompatible with Bank's policy requirements. As the Panel has said on previous occasions, full and informed consultation is impossible if those consulted perceive that they could be penalized for expressing their opposition to, or honest opinions about, a Bank financed project.
- 136. At the same time, the Panel recognizes that, since 1999, Management has made significant efforts to achieve compliance with paragraph 19 of OD 4.01, encouraging frequent consultations with local communities and civil society in an environment more conducive to an open exchange. In these circumstances, the Panel would commend these efforts and urge that they continue.

15.2 DISCLOSURE OF INFORMATION

- 137. The Requesters also alleged Bank violation of BP 17.50 on Disclosure of Operational Information, stating that: "OP 17.50 on disclosure of operational information has generated no more than a haphazard, uni-directional release of information, for the sole purpose of deceiving both the World Bank and international public opinion." This Bank Procedure carefully specifies when and what type of operational documents is to be made publicly available. 118
- 138. In its Response, Management denied any violation of BP17.50. Management stated that "as they became available in late 1997 and in May 1999, relevant Environmental Assessment documents and Environmental Management Plans were displayed in twenty-one locations in different parts of Chad, in particular in the Project area."

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¹¹⁷ Request for Inspection, *supra* note 18, at § 4 \P 5. In § 3 \P 2, the Requesters reiterate their rights and interest "to access to project-related information."

¹¹⁸ See BP 17.50 on Disclosure of Operational Information dated September 1993.

While not all Project documents were made available in local languages, Management observes that "the chief social scientist for Esso Chad and her team are fluent in the predominant local language, which was used in village information campaigns and consultations concerning this documentation. Graphic materials appropriate for non-readers and people with low literacy were also used. CD-ROMs and sets of documentation were distributed to groups and NGOs for dissemination." For purposes of internal compliance, Management states that project documentation was properly disclosed via websites (both of the Consortium and the Bank) with ample opportunity provided for the public to submit comments to the Consortium and the Bank. ¹²⁰

- 139. The Panel conducted a careful and detailed investigation into Management's actions concerning the requirements under the disclosure of information BP. Although there were disagreements by local NGOs concerning the content of the information made available to them, the Panel examined the question of adequacy and timeliness of the documentation that was made public and found them to be appropriate.
- 140. The Panel concludes that adequate and timely release of documents was the norm rather than the exception in the context of the Pipeline Project. In fact, key Project documents (in particular the multi-volume EMP) appear to have been made routinely available on a continuous basis to the local population through specific events and the existence of 'reading rooms'.
- 141. The Panel finds, therefore, that Management has complied with BP 17.50 on Disclosure of Operational Information.

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¹¹⁹ Management Response, *supra* note 27, at § 114.

¹²⁰ Id., at § 115.

Part Three

Social Compliance

Part Three: Social Compliance

16. RELEVANT BANK POLICIES AND PROCEDURES

142. The Panel examined several of the allegations set forth in the Request under the following "social policies" of the Bank: OD 4.30 on Involuntary Resettlement, OD 4.20 on Indigenous Peoples and OPN 11.03 on Management of Cultural Property in Bankfinanced Projects. Given the Requesters' claim on the relationship between the human rights situation in Chad and the Pipeline Project, the Panel also examined this issue in the overall context of the Bank's policy framework.

17. INVOLUNTARY RESETTLEMENT: GENERAL

- 143. The Requesters allege that the Bank "has not followed its own rules and procedures," ¹²¹ on Involuntary Resettlement (OD 4.30) and further allege that the Bank contributed to violations of these policies and procedures through actions by the Consortium and the Government.
- 144. OD 4.30 states that any operation involving "land acquisition or is screened as a Category A or B project for environmental assessment purposes should be reviewed for potential resettlement requirements early in the project cycle." OD 4.30 further states that involuntary resettlement "may cause severe long-term hardship, impoverishment, and environmental damage unless appropriate measures are carefully planned and carried out." 123
- 145. Management maintains that it is in compliance with OD 4.30. In its Response, Management correctly states that the central tenet of this policy is that involuntary resettlement should be conceived and executed as a development program, with resettlers provided sufficient investment resources and opportunities to share in Project benefits. It adds that displaced persons should be: (i) compensated for their losses at full replacement cost prior to the actual move; (ii) assisted with the move and supported during the transition period in the resettlement site; and (iii) assisted in their efforts to improve their former living standards, income earning capacity, and production levels, or at least to restore them. 124
- 146. The Panel notes that the issue of involuntary resettlement is a peculiar one in the case of the Chad Pipeline Project. The Chad situation differs widely from situations of involuntary resettlement associated with other large infrastructure projects funded by

¹²¹ Request for Inspection, *supra* note 18, at § $4 ext{ } ext{$

OD 4.30, Introduction at § 1.

¹²³ Id., at § 2.

¹²⁴ Management Response, *supra* note 27, at § 86.

the World Bank, such as the construction of dams and roads. In Chad, the number of people who have had their houses relocated to make way for oil well sites, pipeline route, or road widening is very small. The Panel notes that there is increasing population growth and pressure for agricultural land on the Pipeline region. However the small number of people displaced by the Project so far, have been successfully accommodated within existing village and lineage-based land resources.

- 147. In southern Chad, farmers live in small villages of individual houses with populations of 50 300 people. Agricultural fields are located outside the village, some at distances of several kilometers from the village. Often temporary structures are built on cultivated fields where the farmer can spend a few days and store implements. These structures are not principal dwelling units. Oil well sites and the pipeline route have not been surveyed within the boundaries of residential villages, although some villages have seen pipeline and road widening activities in surrounding fields. The total number of people who have had houses replaced and thus officially relocated is below 50 households and much lower than the 150 households anticipated in the EMP. 126
- 148. The Panel found that all villagers who lost land or field houses to the pipeline construction have willingly accepted compensation (in the form of cash payments or 'in kind' payments in the form of bicycles, plows, and water pumps). In the subsequent sections of this Part of the Report, however, the Panel discusses the applicable requirements of OD 4.30 as they stem from the particular concerns reflected in the Request for Inspection.



Picture 11: The new housing with improved facilities



Picture 12: The old housing in the Project affected areas

¹²⁶ EMP, *supra* note 38, at p. 7-20.

Environmental Assessment, February 23rd 1997, Chad Portion (hereinafter "EA"), Appendices at p. 1-3.

17.1 EXPROPRIATION

- 149. The Requesters allege that "legislation governing expropriation and uprooting [of communities]" has not been complied with, and this "failure to comply (...) have led to expropriation without compensation." ¹²⁸
- 150. According to OD 4.30, resettlement plans should review "the main land tenure and transfer systems, including common property and non-title-based usufruct systems governed by locally recognized land allocation mechanisms, the objective [being] to treat customary and formal rights as equally as possible in devising compensation rules and procedures." ¹²⁹
- 151. Management "believes that the necessary actions have been taken in the Compensation and Resettlement Plan", to ensure that Chadian law with regard to expropriation was respected, that the compensation design and implementation is in compliance with applicable Bank policies and procedures. It also believes that any future compensation will "take place in a manner commensurate with the standards set in OD 4.30 for compensation." ¹³¹
- 152. Concerning Chadian legislation, Management explains that it was the policy of Esso Chad and TOTCO to "adhere to Chadian law in all matters, including land acquisition," and that Bank Group field missions have verified that Esso Chad and TOTCO "have followed these national legal provisions and no issues related to breaches of Chadian legislation have been raised." According to Management, there is no titled land, all land being administered under a customary law regime which "creates only user rights" that are fully recognized in the context of the Project EA. Management asserts that "Esso Chad and TOTCO have followed required expropriation procedures under Chadian Law," and in accordance with Chadian Law, compensation is paid prior to expropriation.
- 153. In its Response, Management indicates that the timing of resettlement and land compensation "will be synchronized with the oil field development plan, in full compliance with the provisions of the Compensation and Resettlement Plan" and will accommodate the farming cycle and economic strategies of affected households.

¹²⁷ Request for Inspection, *supra* note 18, at § $4 \ \P \ 2$.

¹²⁸ Id., at § 4 ¶ 5.

OD 4.30, Resettlement Planning, Land Tenure, Acquisition, and Transfer, at § 17.

¹³⁰ Management Response, *supra* note 27, at § 136.

¹³¹ Ibid.

¹³² Id., at § 87.

¹³³ Ibid.

¹³⁴ Id., at § 88.

¹³⁵ Ibid.

¹³⁶ Id., at § 93.

Management explains that the compensation scheme is divided into individual entitlements and group compensation for loss of communal assets.

- 154. Management further observes that compensation for land acquisition for the Export System in Chad has been completed: "618 land acquisitions, belonging to 588 project affected persons, have been compensated. These acquisitions account for a surface area of 828 hectares of land. Of the 828 hectares, 561 hectares (68 percent) was assessed to be unoccupied territory [bush-land] and will be the subject of group compensation. The group compensation concerns sixty-six villages affected by the Project." The choices made by compensated individuals (cash or in-kind) were documented and receipts were signed for all compensation paid.
- 155. In interviews with the Panel one member of the Bank staff added, "The intent [of community compensation for fallow land] was to maintain a social structure that would not increase inequalities in society, so we tended to emphasize that you want to maintain social harmony in an area rather than come and create fissures in society, saying that this would be this case and that would be the other case (...)."
- 156. According to the literature and the Panel's observations, fallow land is formerly cultivated land that is allowed to rest and recover for a period of 1-30 years. The issue of land ownership is a complex and often contradictory one in Sahelian West Africa. Until quite recently, population densities were low and the amount of available land was high. Most of the farming populations who occupy the grasslands and forests of the Sahelian grasslands practice 'gradual shifting agriculture', where, due to declining fertility of the soil, land is cultivated for a short period of time, and new areas, on the margins of cultivated fields, are turned, planted, and cultivated in turn. The original field is allowed to rest (lie fallow) until sufficient vegetation has grown which can be slashed and burned, introducing new nutrients into the soil. 138 Under customary law in southern Chad, individuals are entitled to use local land in consultation with local chiefs, particularly lineage leaders (who are in each case the eldest in a family lineage and usually represent and speak for the whole family). National land law, however, recognizes private ownership of land only where land has been titled. Land that is vacant or unused is deemed the property of the Republic of Chad under eminent domain.
- 157. Esso Chad's policy of compensation for fallow land is to compensate a village as a whole for land taken by the Project, unless an individual is currently cultivating the land or has cultivated it in the preceding year. These village compensations, which have not yet occurred, will be made as 'in-kind' payments in the form of a new school, clinic, marketplace, or water pump, as opposed to cash or in-kind payments to individuals. Management supported such an approach. In interviews with the Panel, a member of the Bank staff stated that "the technical problem, from a practical on the

138 R.E. Downs and S.P. Reyna 1988 Land and Society in Contemporary Africa, University Press of New England.

¹³⁷ Id at 8 98

ground point of view, was that once the land starts fading back into the land bank, it becomes very hard to delineate in a formal way where that land was. And for that reason, the logic was that the community compensation will help build up the general economy of the village or the social well being of the village. This might be a better way of addressing the issue than getting into debates over where the line was, who had what at what time, because it all becomes issues of hearsay."

- 158. Another senior member of the Bank staff observed: "in that context [of fallow land], it was much more appropriate to see them as communal assets, because what people were fighting for was to have individual entitlements. In the framework for establishing of entitlements, we insisted that we don't want to create inequalities in society where the social structure did favor egalitarian principles."
- 159. It is the Panel's view that Esso's policy of compensating the community rather than the individual for fallow land is a sensible one. This policy is consistent with Bank policies and procedures on involuntary resettlement. The Panel wishes further to observe that research studies on agricultural communities in the West African Sahel confirms that customary land rules do not historically designate ownership of fallow land to any individual, but to wider groups of kin relatives, i.e. the community as a whole. In former times, West African grassland societies were small and mobile. 139 Any individual in the community had a right to use village land by virtue of their citizenship, which was based on kinship ties of descent and marriage. Among the Sara of southeastern Chad, "access to land claimed by a village but uncultivated is open only to men and women who are related paternally to inhabitants of the villages. They can clear and farm or clear and build on any land not yet put into use and need only inform the proper authority out of courtesy." Rights to land are "usufruct" rights, where the person who tills and cultivates the land has the right to use it. Once the fields have been abandoned to fallow, they are open for other members of the community to use. Free access to farmland was an important right of village membership and group identity.
- 160. The Panel found that compensation for land acquisition is currently under way. Esso's defined Phase I compensation plan for advanced infrastructure and pipeline right-of-way in the Sub-Prefecture of Bébédjia has only affected villages in the Cantons of Komé, Béro and Miandoum. The Phase I Compensation Report shows that 618 land acquisitions, belonging to 588 project-affected persons, have received compensation. These acquisitions account for a surface area of 828 hectares of land. Of the 828 hectares, 561 hectares (68 percent) was considered to be unoccupied territory ('la brousse') and will be the subject of group compensation. Sixty-six villages affected by the Project will receive this group compensation.

¹³⁹ Id. See also Goheen, Miriam. 1997. Men Own the Fields, Women own the Crops: Gender and Power in the Cameroon Grassfields. University of Wisconsin Press.

¹⁴⁰ EA, *supra* note 124, Appendix B Page 90.

¹⁴¹ Management Response, *supra* note 27, at § 98.

- 161. The Panel finds that the practice of community compensation for fallow land does follow customary law, where land that is vacant or fallow is held by the community of family groups, for use by individuals who put their labor into cultivating them. Moreover, villagers and local authorities were consulted concerning the question of compensation for village communities as a whole, rather than individuals.
- 162. The Panel finds Management in compliance with Paragraph 14 through 17 of OD 4.30 on Involuntary Resettlement with regards to valuation of, and compensation for, lost assets including land tenure issues.

17.2 EXPECTED MAGNITUDE OF INVOLUNTARY RESETTLEMENT

- 163. The Requesters raise questions about the possibility of 80,000 to 100,000 people being displaced by the siting of 300 oil wells. "Are the 80,000 100,000 people inhabiting this district (sub-Prefecture of Bébédjia and its environs) to be displaced or not? And where are they to be resettled?" ¹⁴² In this connection, the Requesters allege that OD 4.30 has not been complied with.
- 164. The objective of OD 4.30 on Involuntary Resettlement, is "to ensure that the population displaced by a project receives benefits from it." Involuntary resettlement should be dealt with from the earliest stages of project preparation, and should be avoided or minimized where feasible. However, where displacement is unavoidable, resettlers should be provided sufficient investment resources and opportunities to share in project benefits. "Displaced persons should be compensated for their losses at full replacement cost prior to the actual move" 144
- 165. As for the Bank's role, according to OD 4.30, it "supports borrowers' efforts (...) [and] may sometimes finance resettlement even though it has not financed the main investment that made displacement and resettlement necessary." OD 4.30 states as well that the resettlement components should be supervised throughout implementation, and that "Bank supervision missions should be staffed with the requisite social, economic, and technical expertise." 145
- 166. With regard to resettlement issues, Management observes that "given the large surface of the oil field, its low population density and the high degree of flexibility in siting well pads," the vast majority of residents will not be displaced. It also indicates that resettlement "could affect up to 80 households in the Cantons of Komé, Miandoum and Béro, less than 500 people or less than 2 percent of the total population of these Cantons, which was estimated at 29,100 people in 1993." 147

¹⁴² Request for Inspection, *supra* note 18, at § $4 ext{ } ext{$

OD 4.30, Policy Objectives at § 3.

¹⁴⁴ Id., at § 3 (b) (i).

¹⁴⁵ Id., Processing and Documentation, *Implementation and Supervision* at § 31.

¹⁴⁶ Management Response, *supra* note 27, at § 92.

¹⁴⁷ Ibid.

- 167. Management also states that "the oil field area is occupied by people practicing extensive rain-fed agriculture and living in scattered settlements" and that surveys had shown that the siting of well pads and routing of associated access roads and flowlines can be carried out "with minimal impacts" on people's dwellings and fields.
- 168. In connection with the construction of the pipeline itself, Management notes that no resettlement will be needed in Chad. It states that, at the time of the Response, 39 households had been affected by land acquisition for advanced oil field infrastructure, and 26 of these (185 persons) had opted for resettlement, moving back to their villages of origin (Dildo and Béro II). Nonetheless, according to Management, Esso Chad replaced the houses with better quality structures, including corrugated iron roofing in the location of their choice. The delivery of replacement housing was completed by a local NGO, Association for the Cooperation and Development Research (ACCORD), for that purpose. "ACCORD, a local NGO, was hired to deliver replacement houses." 150
- 169. The Panel could find no evidence supporting the allegation that 80,000 to 100,000 people would be displaced by the Project. The largest amount of land taken so far has been for the Operations Center at Komé Base which houses construction personnel and equipment and covers approximately 1000m² with a proposed airstrip of 3.2 km length. In the near future, several more sites including a Central Treating Facility, pump house, and maintenance camp will require land. Three hundred production wells and 20 reinjection wells are planned in three separate oil fields. These oil fields are large, ranging in length from 4 km (Miandoum) and 5 km (Bolobo) to 15 km (Komé). However, once the wells have tapped oil, the derricks will be removed, leaving small wellheads interspersed on locally owned farms in the oil fields. The oil pipeline, which will be laid underground from the oil fields to the Cameroon border, will need 30 meters right of way over its 170 km distance. However, once in place, crop cultivation (but not tree planting) will be permitted over the buried pipeline. Road widening, as well as the construction of 20 km of new roads, requires 30 meters right of way. ¹⁵¹ As of Summer 2001, thirty-nine households were affected by land acquisition for advanced oil field infrastructure (airstrip, operations base, etc.). Some twenty-six of these thirtynine households, affected either by economic or physical displacement, have opted for resettlement. The twenty-six households account for 185 persons. Most of these individuals still have homes in these villages and had only relocated to their fieldhouses during the agricultural season. Nonetheless, since these fieldhouses will be lost to the Project, Esso Chad agreed to replace them with better quality structures, including corrugated iron roofing in the location of their choice. The delivery of replacement housing was contracted out to ACCORD. As of December 2001, the replacement houses for the twenty-six households had been completed. This appears to be a

¹⁴⁸ Id., at § 94.

¹⁴⁹ Ibid.

¹⁵⁰ Id., at § 113.

¹⁵¹ EA, *supra* note 124, Section 3.2, Figures 3-1 and 3-9.

continuing situation as new properties are being surveyed for the pipeline route and new well sites.

17.3 GENERAL ISSUES OF COMPENSATION

- 170. Additionally, the Requesters allege that during the compensation process, OD 4.30 has been treated as "nothing more than an excuse for fraud." Furthermore, the Requesters consider that their rights and interest have been, or are likely to be, directly harmed as a result of Management's action and request that their rights are guaranteed. "Among other rights and interests are the rights to (...) fair and equitable compensation." ¹⁵³
- 171. The objective of the Bank's resettlement policy, OD 4.30, is "to ensure that compensation [is] provided to the adversely affected population." According to OD 4.30, "valuation of lost assets should be made at their replacement cost." 155
- 172. With reference to land acquisition, Management responds that the Project established a 12-step land acquisition procedure, from public consultations to land identification and finally payments of compensation. Management considers that it was rigorously followed "to maximize transparency and avoid fraud." ¹⁵⁶
- 173. Management points out that 248 million CFAF (approximately US\$350,000) have been paid out as compensation, 22 per cent (54 million CFAF, or approximately US\$78,000) of which have been paid in-kind. 472 articles have been distributed as part of in-kind compensation from ploughs, carts, bicycles, rickshaws, sewing machines, portable mills to a shelling machine. Even where cash compensation was paid out, a post-payment survey of 120 beneficiaries shows that 85 percent bought cattle or other material goods to facilitate agricultural production; another 10 per cent invested their cash in commerce; 4 percent invested in transport; and 1 percent invested in animal husbandry. 157
- 174. In order to obtain an accurate understanding of the Project's compensation structure and its current status, the Panel undertook a long and in-depth analysis of the relevant documentation, interviewed dozens of affected people and discussed the matter with Bank and Esso staff both in Chad and in the US, as well as government authorities.
- 175. In the Panel's view the compensation and implementation processes were fair, transparent, and efficient. It was able to confirm that a 12-step land acquisition procedure was followed. These twelve steps include: (i) Public consultation; (ii) Initial survey to identify land needs; (iii) Identification of land use; (iv) Identification of all

 $^{^{152}}$ Request for Inspection, supra note 18, at \S 4 \P 12.

¹⁵³ Id., at § 3 ¶ 2.

¹⁵⁴ OD 4.30, Policy Objectives at § 3 (e).

¹⁵⁵ Id., Valuation of and Compensation for Lost Assets at § 14.

¹⁵⁶ Management Response, *supra* note 27, at § 96.

¹⁵⁷ Id., at § 99.

resources affected and potential households to be resettled; (v) Verification/ratification of proprietorship of impacted assets; (vi) Mutual agreement on the valuation of assets between Esso Chad and beneficiary; (vii) Consultation with households eligible for resettlement to discuss the menu of options; (viii) Identification of possible resettlement sites with the beneficiaries; (ix) Consultation to review in-kind compensation with the beneficiaries; (x) Cash compensation payments; (xi) Post-payment survey of beneficiaries of cash compensation and explanation of grievance procedures; and (xii) In-kind compensation payments. The Panel found that these procedures were properly carried out.

- 176. Baseline surveys, compensation valuation, and payment receipts were complete and accessible for all individuals affected by the Project. Individuals were surveyed for their land, given a copy of the survey, and an itemized list of valuation for land, houses, and trees. Receipts for cash or in kind were signed and photographed. Records kept on a computerized database by Focus International at Komé Base showed that verification of surveys, agreement on the value of assets, and payment in cash or in-kind are accompanied by signed receipts and photographs of cash transaction. These records showed that 80% of those receiving compensation in Chad opted for in-kind compensation in the form of plows, oxcarts and other offered implements. Such a compensation structure minimizes the need for post-compensation assistance to the project-affected population.
- 177. The Panel investigated two specific cases cited by the principal Requester, as evidence of non-payment or lack of compensation and found them without merit.
- 178. The Panel did not find any specific cases of improper or inadequate compensation to individual requesters for land, houses, or trees.

17.3.1 Compensation for Wild and Mango Trees - Availability of a Grievance Mechanism

- 179. The Requesters allege that "the compensation and indemnification plan fails to take into account [the loss of] medicinal trees," and that Management has failed to comply with OD 4.30.
- 180. Concerning compensation for tree loss, Management notes that several market surveys were undertaken from 1996 to 1998 to verify the findings of the initial market survey carried out by Esso Chad. The findings concerning the valuation of mango trees, and of the three wild fruit trees: Nyéré, Karité and Tamariné, were "challenged by civil society at the Consultation Seminar held in Bébédjia during March 1999. As a result,

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¹⁵⁸ Id., at § 96. See also EMP, *supra* note 38, Volume 3, for provides greater detail on the specific requirements of, and timing for, the implementation of each of those steps. Discussions with affected people and documentary evidence available at the offices of Focus International at Komé Base suggested that the outlined process has been followed by the Esso Chad.

¹⁵⁹ Request for Inspection, *supra* note 18, at § $4 ext{ } ext{$

Supplemental valuation studies were undertaken for the valuation of mango trees." A discussion ensued with affected populations and NGOs. This, according to Management, led to a revision of the compensation structure and the valuing of the mango trees according to their age. A producing tree of over 6 years of age is now being compensated at CFAF 500,000 (about US\$700). According to Management and Esso, the same consultative procedure used in the case of mango trees, will take place for the wild fruit trees mentioned in the Request.

- 181. During interviews with the Panel, Bank staff explained that nobody received compensation on the basis of the then prevailing prices before the prices for mango trees were revised through an agreement with representatives of the local communities. Bank staff noted that "there have been no cases of mango trees, because when the earlier compensation took place, it was only for the seismic survey, when Esso was trying to map out the oil field areas. In reality, only four mango trees are along the right-of-way, so it was easy for the oil company to negotiate that. The real trick there was that people then started planting mango trees in areas they suspected would be in the right-of-way. Then, the agreement was that any tree that was less than 6 years old would not fall under this new compensation." After conducting numerous interviews with the local population, and examining the relevant documentation, the Panel was able to confirm this statement.
- 182. According to OD 4.30, development projects generally affect production systems and "productive assets and income sources are lost." As stipulated by OD 4.30, "valuation of lost assets should be made at their replacement cost." Nevertheless, OD 4.30 considers that when some types of loss cannot easily be evaluated or compensated for "attempts must therefore be made to establish access to equivalent and culturally acceptable resources and earning opportunities." 163
- 183. After reviewing the negotiations concerning compensation for mango trees, the Panel concludes that there has been no violation of paragraph 17 (c) of OD 4.30 in respect of grievance procedures.
- 184. The issue of compensation for medicinal trees, like wild trees, is also currently under negotiation between the NGOs and Esso with the involvement of Bank Management. In this regard, Management maintains that the compensation for wild trees falls under the category of 'community compensation' rather than individual compensation. The Panel has discussed the question of community compensation above in connection with fallow land. 164
- 185. During the Panel's field visits, many villagers alleged that there was no proper mechanism to follow when they needed to lodge complains with regard to the

¹⁶⁰ Management Response, *supra* note 27, at § 100.

¹⁶¹ OD 4.30, Introduction at § 2.

¹⁶² Id., Valuation of and Compensation for Lost Assets at § 14.

¹⁶³ Id., at § 15.

¹⁶⁴ See discussion on Expropriation in sub-section 17.1 of this Report.

compensation process. In addition, CPPL complained of a long-standing problem in communications among the NGOs, Esso Chad, and the World Bank, particularly in raising grievances directly to Esso Chad. These NGOs said that, on one occasion, their representative was denied entrance to Esso's headquarters at Komé Base. As indicated earlier, they also had to present requests for discussion by letter in advance. ¹⁶⁵

- 186. As noted earlier, Management stated that compensation for land acquisition for the Export System in Chad had been completed. Compensated individuals have been notified that a grievance process has been set in motion. 166
- 187. According to Management, any individual can register a complaint with the Esso Chad or TOTCO's representatives for resettlement and compensation, and with the local village chief, and they will attempt to settle the matter to the satisfaction of all concerned. Grievances are receivable if filed within a full agricultural cycle after the plaintiff surrenders assets. The representative will periodically evaluate the pattern of complaints to see if changes need to be made to the Compensation and Resettlement Plan. Management indicates its awareness "of the dynamic nature of the compensation process and of the need to ensure that adjustments can be made where they are called for if local populations raise concerns." ¹⁶⁷
- 188. Management explains that the majority of medicinal trees fall under the group compensation category. Moreover, wild productive trees belong to the community when they occur in bush-land, and will therefore be compensated for "under the umbrella of village or community compensation." According to Management, the Bébédjia seminar of April 1999 raised the issue of the inadequacy of compensation for the Nyéré, Karité and Tamariné trees. Further valuation studies are to be carried out to resolve these issues along with others related to community compensation to "collectively plan for the management and maintenance of common purpose infrastructure to be chosen by the community." 168
- 189. OD 4.30 stipulates that its "objective is to treat customary and formal rights as equally as possible in devising compensation rules and procedures." Moreover, it states that "issues raised by the different tenure systems found in a project area, including the grievance procedures" should be addressed. 169
- 190. During the Panel's visits, Esso staff in N'Djaména insisted that they had established a grievance procedure, that their "doors are always open, that every vehicle carries a grievance form, that there are many occasions in the survey/compensation process allowed time for grievances (...). We never refused to meet with the NGOs." They pointed to a series of meetings in Dounia, Bébédjia, and Moundou over the past several years where disputes and differences were discussed and resolved, such as the

¹⁶⁵ See § 129 of this Report.

¹⁶⁶ Management Response, *supra* note 27, at § 136 as complemented by Bank Staff in Panel interviews.

¹⁶⁷ Id., at § 136.

¹⁶⁸ Id., at § 90.

¹⁶⁹ OD 4.30, Resettlement Planning, Land Tenure, Acquisition, and Transfer at § 17.

compensation for mango trees. Esso also stressed the fact that, they had not received any formal complaint from any individual on the implementation / compensation / resettlement process.

- 191. The Esso Resettlement Report (Phase 1, May 2000) states: "During pre-resettlement consultation session, affected people were reminded of the process for expressing dissatisfaction and seeking redress" where "people have up to the end of the next full agricultural cycle after surrendering assets to set forth their case. Complaints must be addressed to the Esso Chad representative either in writing or in person if the individual is accompanied by the village Chief or his delegate as a witness to the individuals claim." ¹⁷¹
- 192. The Panel notes that Esso has staffed seven field representative offices in major towns along the Pipeline route to accept complaints and grievances. The Panel did encounter several individuals who had disputes with Esso over compensation rates. These cases seem to have been resolved or were in the process of resolution. However, there were not always good feelings by local people caught in these disputes. The Panel notes that such situations are normal under any involuntary resettlement operation.
- 193. After a careful review of the available evidence, the Panel is satisfied that Management is so far in compliance with the provisions of OD 4.30 concerning compensation. The Panel, however, views the monitoring of the overall resettlement process as critical to ensure continuing compliance with the requirements of this policy.

18. INDIGENOUS PEOPLES

- 194. The Requesters allege that "OD 4.20 on Notification of native inhabitants [sic] and their representatives was never complied with." 172
- 195. In OD 4.20, the term "indigenous peoples" describes "social groups with a social and cultural identity distinct from the dominant society that makes them vulnerable to being disadvantaged in the development process." The OD further explains that indigenous peoples can be identified in particular geographical areas by the presence of, among other characteristics, self-identification and identification by others as members of a distinct cultural group and primarily subsistence-oriented production. It observes that Task Managers must exercise "judgment in determining the populations to which this directive applies and should make use of specialized anthropological and sociological experts throughout the project cycle." 174

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¹⁷⁰ The Esso Resettlement Report, Phase 1, May 2000, at § 7-4 Grievance Procedure, p. 20.

¹⁷¹ Id., at § 7-4-1 Grievance for Non-Fulfillment of Contracts, p. 20.

Request for Inspection, *supra* note 18, at § 4 ¶ 4. In fact, the correct title of OD 4.20 is 'Indigenous Peoples'.

¹⁷³ OD 4.20, Definitions at § 3.

¹⁷⁴ Id., at § 5.

- 196. In its Response, Management observes that "OD 4.20 applies to groups of people who qualify as indigenous by virtue of possessing specific characteristics as set forth in paragraph 5 of OD 4.20." 175 In this connection the population of the Project area shares the same sedentary agricultural economy, and interacts economically with nomadic herders who move seasonally in and out of the Project area with their cattle. Management concludes that "after careful analysis of the OD's requirements in relation to this Project, supported by field work conducted by social scientists with the requisite qualifications, expertise and Project-related experience," 176 the ethnic groups affected by the Project are not covered by the provisions of OD 4.20.
- 197. Management observes that substantive steps were nevertheless taken to review and mitigate potential impacts to ethnic communities. Although it finds that OD 4.20 is not applicable to the affected people in the Project area, the Bank Group "endeavors to ensure that the customs of local people are respected, as well as their sacred groves and grave sites" by taking them into account in the design of the Project. Management states that through supervision, consultation, and a grievance procedure set out in the Project EA, it will monitor the process by which customary practices and sacred places are identified and respected during the implementation of the Project.
- 198. During interviews with the Panel, a member of the Bank staff observed that the local population in southern Chad "have never been excluded from the political process unlike the situation in Cameroon, where we came to the conclusion that the Bakola, the so-called pygmies, could be called indigenous because of their vulnerability. In this case, the Sara South and the Sara people could not be stated as indigenous, given the engagement. They have been in power. The Vice President came from there, and other elements contributed to the fact that you cannot see them either as marginal or vulnerable in that sense that they have been excluded from the political process."
- 199. The population affected by the Oil Pipeline Project in southern Chad does not constitute an "indigenous people" because it forms a majority found throughout the region. It belongs to a single over-arching ethnic group, the Sara, who include Ngambay, Mbaye-Doba, Kabba, and Lakka. These people share similar cultures, speak related Chadic languages, and practice similar religious customs. They share a common social structure including egalitarian and non-chiefdom polities, patrilineal kinship, and autonomous village organization. They hold similar land tenure rules and production regimes including the practice of 'shifting agriculture,' growing millet, sorghum, and cotton. This population makes up a majority group in southern Chad and shares a larger identity with southern Chad as a whole, and do not constitute a minority or indigenous population.
- 200. The Panel did hear complaints about friction between pastoralists and farmers, in particular at the village of Bam, which is near the end of the pipeline route in Chad near

¹⁷⁵ Management Response, *supra* note 27, at § 103.

¹⁷⁶ Ibid.

¹⁷⁷ Id., at § 137.

the Cameroon border. A Requester stated, "There are now more pastoralists, and we kill each other. In the past, land belonged to particular families. But Deby passed a decree that nomads can use this land. These people have their own army. Their leader is now head of Canton. He's got thirty to fifty soldiers from the Chad army loyal to him. Now there is no millet as cattle are on our fields. When we say this, they say 'we are just making political statements'."

201. Despite remarks like this, in general the Panel did not find anyone who directly experienced occupation, displacement, or harassment by cattle farmers. It should also be noted that tensions based on inter-ethnic land use between farmers and cattle herders are common in the Sahelian region. Pastoral peoples from the north do migrate through Chadian farms with their cattle herds. They belong to different ethnic groups including the Peul (Fulbe), Bororo, and Arab speakers, all of who are Muslim (except the Bororo) and do not, as a rule, intermarry with the farmers of the south. In the past, relations between herders and farmers were *symbiotic* in the Sahelian grasslands, where farmers allowed herders to graze their herds on fallow or winter lands, gaining cattle manure on their fields and having the opportunity to exchange grains, utensils, and cloth for meat, milk, and leather. Tensions between herders and farmers have increased in the past few decades due to problems of population growth and land competition throughout the Sahelian region. These tensions are long standing, however, and, do not result from Bank policy or the Pipeline Project. 178

202. On the basis of the above considerations, the Panel concludes that OD 4.20 is not applicable to the present case.

19. CULTURAL PROPERTY

- 203. The Requesters allege that OPN 11.03, on Management of Cultural Property, had not been complied with, ¹⁷⁹ that the property referred to in the directive "is not included in the categories eligible for compensation, although in the production region the property belongs to specific families who rent it, make it available free of charge to third parties who farm it or use it to pasture livestock." The Requesters also allege that non-compliance is likely to cause lack of respect for their usages and customs. ¹⁸¹
- 204. According to OPN 11.03, the United Nations sanctioned term "cultural property" includes sites having archeological, paleontological, historical, religious, and unique natural values. "Cultural property, therefore, encompasses both remains left by previous human inhabitants (...) and unique natural environmental features such as

¹⁷⁸ Zuppan, M. 1994. Need Herders and Farmers Quarrel? Rethinking Herder-Farmer Models in Africa. Rural Extension Bulletin (University of Reading UK) 4:12-16. And Barrot, P. 1992. Farmers vs. herders: conflict erupts. Club de Sahel Newsletter 12:5-6.

¹⁷⁹ Request for Inspection, *supra* note 18, at \S 4 \P 13. ¹⁸⁰ Id., at \S 4 \P 4.

¹⁸¹ Id., at § 5.

canyons and waterfalls." OPN 11.03 states that the Bank's role regarding cultural property "is to assist in their preservation, and to seek to avoid their elimination." Furthermore, it stipulates that in some cases, "the project is best relocated in order that sites and structures can be preserved, studied, and restored," and that such projects "should include the training and strengthening of institutions entrusted with safeguarding a nation's cultural patrimony." OPN 11.03 also requires that Bank staff determine "what is known about the cultural property aspects of the proposed project site. The government's attention should be drawn specifically to that aspect and appropriate agencies, NGOs or university departments should be consulted, [and] if there is any question of cultural property in the area, a brief reconnaissance survey should be undertaken in the field by a specialist."

- 205. In its Response, Management asserts that the Project EA "paid particular attention to sacred sites, graves, and other elements of cultural property." It also notes that where consultation with local people led to identification of such property, "the pipeline route was adjusted," particularly to avoid graveyards and important initiation sites. Management also adds that the EMP contains detailed provisions for the management of archeological discoveries that might occur during the construction. Accordingly, Management indicates that the Consortium has "hired an archeologist to review existing literature and secondary sources to identify possible prehistoric sites along the right-of-way and to develop procedures for avoiding or, if necessary, mitigating and/or compensating for any damage eventually done to such sites in construction activity," and a Handbook on Archeological Sites in the Chad Project Development Area was developed for Project environmental staff.
- 206. Management further states that affected communities are not only consulted before the work begins, but also that "precautions with regard to cultural property continue to be implemented." Supporting its position, Management raises the example of a road upgrade encroaching on a graveyard. "After on site verification, (...) the implementing contractor had adjusted the right-of-way plan to avoid the graveyard." Nevertheless, Management criticizes Esso Chad for neglecting to inform the affected community. According to Management, Bank Group staff "advised Esso Chad to improve communication and organization and will continue to follow Esso Chad's communication with affected populations." 192

¹⁸² OPN 11.03, Introduction at § 1.

¹⁸³ Id., Policy Guidance at § 2.

¹⁸⁴ Id., at § 2 (b).

¹⁸⁵ Ibid.

¹⁸⁶ Id., Procedural Guidance at § 3.

¹⁸⁷ Management Response, *supra* note 27, at § 110.

¹⁸⁸ Ibid.

¹⁸⁹ Ibid.

¹⁹⁰ Id., at § 111.

¹⁹¹ Ibid.

¹⁹² Ibid.

- 207. With regard to land tenure 193 Management explains that the Bank's policy OPN 11.03 on Management of Cultural Property "does not pertain to local land tenure systems or customary arrangements for land allocation." 194 However, concerning the housing of the resettlers, Management added that ACCORD "ensured that local sensitivities were taken into account in the design and that appropriate building materials were used in the construction of these structures." 195 Moreover, apart from the corrugated iron roofs, all building materials were sourced locally and local labor was employed, avoiding gross disparities in housing quality and "maintaining social cohesion" 196 in the Project area.
- 208. The Panel found that Management followed EMP procedure, conducting a preconstruction survey with a Chadian archeologist, who pointed out some areas of concern, took samples, and recommended road deviations. In addition, a 'Handbook on Archaeological Sites in the Chad Project Development Area' was developed for Project environmental staff in the field, training personnel in field and laboratory techniques and monitoring of archeological sites. Esso did find a site showing an early iron-age furnace, which was excavated. Esso followed EMP procedures, consulting affected communities before any work took place. In two cases, as verified by the Panel, the road widening upgrade was detoured around gravesites. In another case, an area used for ritual initiations was compensated and a new initiation ground was ritually purified with an animal sacrifice, which Esso paid for. In all cases of sacred sites, proper consultation occurred.
- 209. The Panel finds that Management is in compliance with OPN 11.03 on Management of Cultural Property.

20. GOVERNANCE AND HUMAN RIGHTS

- 210. The Requesters allege violation of the Bank's "[d]*irectives on proper governance*" and "[d]*irectives on respect for human rights*". Because of the intertwined nature of these two areas in the context of the projects being examined in this Report, these issues are addressed in the following paragraphs.
- 211. Concerning governance issues in Chad, Management maintains that "[i]mproving governance is one of the key objectives of the Bank's Assistance Strategy to Chad and instances of poor governance are of great concern to the Bank," and cites a series of features that both the Projects and its country-wide program in Chad include to foster "good governance" in the country, including "(i) at the level of its Country Assistance Strategy, by promoting the implementation of a variety of measures to improve

¹⁹³ See discussion on Involuntary Resettlement: General in section 17 above.

¹⁹⁴ Management Response, *supra* note 27, at § 112.

¹⁹⁵ Id., at § 113.

¹⁹⁶ Ibid.

¹⁹⁷ Request for Inspection, *supra* note 18, at § $4 \ \P \ 10$ and 11.

¹⁹⁸ Management Response, *supra* note 27, at § 139.

transparency and accountability in public financial management; and (ii) at the Pipeline Project level, by introducing a Petroleum Revenue Management Program in the Pipeline Project design and by supporting the building of public financial management capacity through the Petroleum Economy Project." 19

- 212. As for human rights, Management states in its Response to the Panel that "The Bank is concerned about violations of human rights in Chad as elsewhere while respecting the Bank's Articles of Agreement which require the Bank to focus on economic considerations and not on political or other non-economic influences as the basis for its decisions. In evaluating the economic aspects of any project, human rights issues may be relevant to the Bank's work if they may have a significant direct economic effect on the project. Having carefully considered all aspects of this issue, Management's conclusion is that the Project can achieve its developmental objectives." In other words, according to the Management Response, if human rights issues have "significant direct economic effects" on a Bank financed project, they become a matter of concern to the Bank. 200 Otherwise they don't. In this case, Management feels that the project "can achieve its development objectives," so human rights issues are of no direct concern.
- 213. The Panel has carefully considered the allegations made in the Request and the relevant responses from Management concerning proper governance and human rights in Chad (see Box 3 below, 'The Concern over Human Rights in Chad: Historical and Contemporary Background'). The Panel has also examined several reports addressing governance and human rights situation in the country, and the extensive exchange of correspondence between Bank Management and NGOs in Chad and abroad. The Panel also takes note of the fact that on more than one occasion when political repression in Chad seemed severe, the Bank's President personally intervened to help free local opposition leaders, including the representative of the Requesters, Mr. Yorongar, who was reported as being subjected to torture.

Box 3:

The Concern over Human Rights in Chad: **Historical and Contemporary Background**

Chad's history has been marked by violence, and civil war, both between the North and South, and between Muslim groups in the North. During Arab and Ottoman rule (11th-19th century), Chad was a supplier of slaves for the trans-Saharan trade route, who were taken mainly from its southern agricultural populations. Slaving did not end until 1911, and in some areas, 1918. Following the European partition of Africa after 1884, France claimed much of Saharan and Sahelian West Africa as French West Africa, including Chad. The Sahelian countries including Chad were important sources of labor for the railroads as well as plantations and mines of the coastal countries. During World War II, many southern Chadian men joined the French armed forces as a way to escape local hardships. Following Independence in 1960, civil war broke out between two Arab groups in the north. In the late 1970s, Libya lent support to one of these groups and

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¹⁹⁹ Ibid. Also, Management Response, *supra* note 27, at § 141, lists measures being undertaken by the Government of Chad with support from the Bank and the International Monetary Fund to further bolster good governance in Chad.

200 Management Response, *supra* note 27, at § 151.

attempted to annex northern Chad. French intervention halted the Libyan expansion, and relations between the two countries were restored in 1988. In 1990, General Idriss Deby overthrew President Hissen Habré, suspended the constitution, and dissolved the legislature. Presidential elections were held in 1996 and again in 2001, and although southern opposition leaders claimed voting fraud, Deby maintained his control of the government. In 1998, Ngarlejy Yorongar, the only opposition member of the parliament, was jailed after he spoke out against the ExxonMobil-led Chad-Cameroon Oil Pipeline Project, was arrested with two journalists for making "defamatory statements" against the President. He was again detained, along with all six opposition leaders, shortly after the May 28, 2001 Chadian presidential elections. Yorongar was tortured and had to seek medical attention in Paris. A month earlier in April 2001, Yorongar had filed a request with the World Bank's Inspection Panel for an investigation into allegations that people and the environment in the Project area in southern Chad have or are likely to suffer harm as a result of failures and omission in the design, appraisal, and supervision of the Project by the bank. With international pressure, Yorongar was released. (Amnesty International Report, 2001).

Amnesty International writes, "The efforts to silence Yorongar are not an isolated incident. Chad's overall human rights record is abysmal. Chadian security forces have reportedly killed more than 200 unarmed civilians in the Doba oil region, but no investigations into the massacres have taken place. Pipeline construction in southern Chad has exacerbated decades old tensions between the government and opposition movements. While skirmishes in the north recently ended with a peace treaty, the fact that President Deby diverted US\$4.5 million for weapons purchases from the US\$25 million bonus given to Chad by the consortium of companies led opposition leaders to suspect future government intentions, including the management of the petroleum revenues." (Amnesty International Annual Report 2001).

- 214. The Panel appreciates the fact that the frequently imprecise concepts of 'governance' and 'human rights' acquire special significance in the context of the Bank's mandate and operations. Nonetheless, the Panel takes issue with Management's narrow view, and draws attention in this connection to the United Nations Universal Declaration of Human Rights adopted in December 1948, ²⁰¹ three years after the Bank's Articles of Agreement cited above entered into effect. On the fiftieth anniversary of this Declaration, the Bank wrote; "The World Bank believes that creating the conditions for the attainment of human rights is a central and irreducible goal of development. By placing the dignity of every human being especially the poorest at the very foundation of its approach to development, the Bank helps people in every part of the world build lives of purpose and hope. And while the Bank has always taken measures to ensure that human rights are fully respected in connection with the projects it supports, it has been less forthcoming about articulating its role in promoting human rights within the countries in which it operates." ²⁰²
- 215. It is not within the Panel's mandate to assess the status of governance and human rights in Chad in general or in isolation, and the Panel acknowledges that there are several institutions (including UN bodies) specifically in charge of this subject. However, the Panel felt obliged to examine whether the issues of proper governance or human rights violations in Chad were such as to impede the implementation of the

See complete text at the Bank's web site: http://www.worldbank.org/html/extdr/rights/hrintro.htm.

²⁰¹ General Assembly resolution 217 A (III) of 10 December 1948.

²⁰³ In addition, please note that OP 2.30 'Development Cooperation and Conflict' issued in January 2001, outlines in detail the Bank's responsibilities and limits when dealing with these issues in conflict areas.

Project in a manner compatible with the Bank's policies.²⁰⁴ Determination of Management's compliance with these specific policy requirements can be found in the relevant sections of this Report.

- 216. It has been widely reported that the principal Requester Mr. Yorongar, an opposition member of Parliament and presidential candidate, was arrested and beaten by government forces during the election of 2001. Prior to that in April 2001, the Panel met Mr. Yorongar in Paris where he was undergoing urgent medical treatment and witnessed the scars of torture on his body. During its visit to Chad, the Panel did not seek out the other opposition leaders in N'Djaména who had been arrested. In the field, however, the Panel met one Requester who told how she was summoned by the Chef de Canton after her visit to Nigeria's oil region in Ogoniland. She stated that she was not arrested or harmed, but questioned. Several local leaders and organizations mentioned to the Panel that, while at times feeling harassed by the authorities and with NGOs operating under a deficient legal framework, 205 they have expressed their opinions about the Project without incurring physical violence. In fact, many of these leaders and organizations are currently part of the Project implementation framework. ²⁰⁶ As far as "good" or "proper" governance is concerned, the Panel recognizes that this is an evolving process in Africa and elsewhere in the developing world and that several Bank-supported Projects, including the Capacity Building Project which is the subject of this investigation, have components designed to improve the country's governance record and performance.
- 217. In the light of the above considerations, the Panel observes that the situation is far from ideal. It raises questions about compliance with Bank policies, in particular those that relate to informed and open consultation, and it warrants renewed monitoring by the Bank.

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²⁰⁴ Same views have been shared by the Bank's late Senior Vice President and General Counsel Ibrahim F.I. Shihata. See in The World Bank in a Changing World – Selected Essays, Martinus Nijhoff Publishers, 1991, at pp.84-93 and 107-108.

²⁰⁵ For example, according to local sources, the NGO EPOZOP has been prohibited by the government to operate. ²⁰⁶ For instance, the composition of the 'Collège du Pétrole' includes the following: one member of the Supreme Court, one member of the National Parliament, one Senator, the National Director of BEAC, the Director of Treasury, and four representatives from NGOs.

Part Four

Economic Evaluation and Poverty Reduction

Part Four: Economic Evaluation and Poverty Reduction

21. ECONOMIC EVALUATION

- 218. The Requesters allege that OP 10.04 on Economic Evaluation of Investment Operations²⁰⁷ has not been complied with.²⁰⁸
- 219. The Bank's Policy on Economic Evaluation of Investment Opportunities (OP10.04) states that: "For every investment project, Bank staff conduct economic analysis to determine whether the project creates more net benefits to the economy than other mutually exclusive options for the use of the resources in question." The Policy then goes on to add a number of provisions.
- 220. Concerning 'Criterion for Acceptability', it states that "to be acceptable on economic grounds, a project must meet two conditions: (a) the expected present value of the project's net benefits must not be negative; and (b) the expected present value of the project's net benefits must be higher than or equal to the expected net present value of mutually exclusive project alternatives." ²¹⁰
- 221. As regards 'Alternatives', the Policy states that "to ensure that the project maximizes expected net present value, subject to financial, institutional, and other constraints, the Bank and the borrower explore alternative, mutually exclusive, designs." Concerning 'Sustainability', the policy states that "to obtain a reasonable assurance that the project's benefits will materialize as expected and will be sustained throughout the life of the project, the Bank assesses the robustness of the project with respect to economic, financial, institutional, and environmental risks." ²¹²
- 222. 'Risk' is also mentioned: "[T]he Bank's economic evaluation considers the sources, magnitude, and effects of the risks associated with the project by taking into account the possible range in the values of the basic variables and assessing the robustness of the project's outcome with respect to changes in these values." So are 'Externalities': "The economic evaluation of Bank-financed projects takes into account any domestic and cross-border externalities." ²¹⁴

²⁰⁷ During the project preparation period, which lasted from 1993 to 1999, in September 1994 the World Bank adopted its new OP 10.04 on Economic Evaluation of Investment Operations replacing the version dated April 1994. For the purposes of the Pipeline Project, OP 10.04 refers to the September 1994 version.

Request for Inspection, *supra* note 18, at § $4 ext{ } ext$

²⁰⁹ OP 10.04, at § 1.

²¹⁰ Id., Criterion for Acceptability at § 2. It is also noted that standard practice has been to calculate the expected internal rate of economic return.

²¹¹ OP 10.04, Alternatives at § 3.

²¹² Id., Sustainability at § 5.

²¹³ Id., Risk at § 6.

²¹⁴ Id., Externalities at § 8.

- 223. The Policy requires that the economic analysis examine "(...) the project's consistency with the Bank's poverty reduction strategy" and it cross-references with the Bank's Policy on Poverty Reduction (OD 4.15). Among other things, this Policy states that: "Sustainable poverty reduction is the Bank's overarching objective. (...) there are many complementarities between poverty reduction and other operational priorities. Private sector development, for example, promotes growth and income-earning opportunities for the poor." Furthermore, it states that "the measure of the Bank's poverty reduction effort is the totality of the Bank program in the context of country efforts." 217
- 224. The poverty aspect of compliance will be considered under section 21 below 'Poverty Reduction' and the issue of the revenue "quota assigned to the production zone" is addressed in sub-section 21.1.1 'Allocations of Resources to Producing Regions'. Also, for compliance with OP 10.04, the three projects are treated in two groups, beginning with assessing the Pipeline Project.

21.1 THE PIPELINE PROJECT

- 225. In its Response, Management states that the criteria used for the economic evaluation of the Project include the "discounted present value of the Project's benefits, net of costs."²¹⁹ It also says that the "no-project alternative was examined and ultimately rejected."²²⁰ Additionally, according to Management, Bank staff "carried out a sensitivity and risk analysis to check the robustness of the Project's economic evaluation to crude oil price fluctuations and levels of oil reserves, to confirm that incentives existed for the private sector to adequately execute and operate the Project."²²¹ Moreover, according to Management, the economic analysis "confirmed that the economic returns to Chad would be significant. On the basis of oil reserves of 917 million barrels and a price of US\$15.25/bbl revenues for Chad would be US\$1.7 billion. The economic rate of return for Chad would be about 70 percent."²²²
- 226. In Bank projects, compliance with OP 10.04 is normally signaled in various key parts of the Project Appraisal Document (PAD), such as Section D: *Project Rationale*, Section E: *Summary Project Analysis*, and in a separate Annex that summarizes the Economic Analysis and includes a quantitative analysis of expected net benefits and rates of return. The Pipeline PAD's *Summary Project Analysis* has separate economic and financial subheads that report details of the cost-benefit analysis that was carried out. Thus there are estimates of expected net present values (NPVs) and internal rates of return (IRRs), including a probability/risk analysis, financial projections and a

²¹⁵ Id., Poverty at § 7.

²¹⁶ OD 4.15, Policy, Fundamental Objective at § 6.

²¹⁷ Id., Investment Lending at § 27.

Request for Inspection, *supra* note 18, at § $4 \ \P \ 2$.

²¹⁹ Management Response, *supra* note 27, at § 121.

²²⁰ Id., at § 60.

²²¹ Id., at § 121.

²²² Ibid.

sensitivity analysis, and significant Institutional, Social and Environmental subsections. Economic Analysis Summary and Financial Summary annexes (Annexes 4 and 5) augment these analyses. A sub-section on Possible Controversial Aspects in Section F: Sustainability and Risks discusses frankly but optimistically a number of major concerns that have been raised by a variety of stakeholders.

21.1.1 Project Alternatives

- 227. On the 'no-project alternative', the PAD states that design effort for the Project began in 1993 with the consideration of alternatives, and says that it was decided to proceed with the Project because estimates of costs and benefits. 223 indicated that the Project would provide net benefits to all parties (i.e. the Consortium and the two governments). Annex 4 of the PAD discusses the no project case²²⁴ and argues that without the Project Chad would forgo the expected significant net benefits presented there. It is argued that the project would dramatically alter the development prospects in Chad by generating extra fiscal revenue that would support Chad's development strategy. However, it is also acknowledged that, "Whether Chad would be better or worse-off with the project is intimately tied to the proper use of oil revenues."225
- 228. The Pipeline PAD states that Project development alternatives were considered with respect to which oil fields to develop and what transportation system (and which routes) should be used to export the oil. 226 A range of alternatives for transporting the crude oil to market was also said to have been evaluated, including: a road-rail combination (tanker trucks and tanker railway cars), a road-only alternative, river transportation, a river-rail combination, and a pipeline. The Summary of Environmental Assessments and Mitigation Plans says that the pipeline was chosen partly because it was the only alternative that could handle the peak transport requirement. Three alternative corridors were assessed before the Project option was finalized.
- 229. The Summary reviews the advantages and disadvantages of the three corridors, and says that details of the evaluation of all the corridor alternatives are provided in the Alternatives Analysis (Volume 2 of the EA supporting documentation). The Panel has earlier noted²²⁷ however, in relation to OD 4.01, that there was little evidence in the documentation of the EMP that the environmental costs and benefits of the alternatives had been quantified and valued. For further discussions, refer to this Report's

²²³ Including estimates of the value of unavoidable environmental costs and the costs of mitigating measures. Pipeline PAD, supra note 56, at p. 143.

OP 10.04, paragraph 3, "[t]he project is also compared with the alternative of not doing it at all."

²²⁵ Pipeline PAD, *supra* note 56, at p. 62.

²²⁶ Id., at p. 63. "The Private Sponsors have evaluated three main oil field development scenarios: (a) a small scale development of only the lighter oils of the Doba and Doseo basins; (b) a moderate scale project to develop the heavy and light crudes of the Doba basin only; and (c) a larger development of the heavy and light crudes for three basins: Doba, Doseo and Lake Chad. Scenario (b) (...) was found to be most profitable (...). In addition, numerous development options for the Doba basin were evaluated with a focus of defining an economically viable project."

227 See Panel observations on the Consideration of Alternatives in the EMP in section 7 at § 69 above.

examination of Alternative Analysis under section 7, Consideration of Alternatives in the EMP.

230. More generally, the discussion in the PAD's Annex 4 of alternatives for oil field development and oil transportation is limited to two key paragraphs. Moreover, they contain no quantitative economic evidence in support of the findings reported. In the Panel's view, this is inconsistent with the emphasis in paragraph 3 of OP 10.04, which states that "Consideration of alternatives is one of the most important features of proper project analysis throughout the project cycle." In this respect, therefore, the Panel finds Management not in compliance with OP 10.04.

21.1.2 Economic Rate of Return for Chad

- 231. The Summary at the beginning of Annex 4: Economic Analysis presents the following picture: "[t]he economic rate of return (IRR) for Chad is about 70% (...). The returns to Chad are sensitive to significant variations in the international price of oil and to the quantities of oil exported (...). Even assuming variations in these key factors, the returns to Chad (...) remain robust. A probability/risk analysis shows that there is a 50% chance that the rate of return to Chad will exceed 66% and the risk of it going below 40% is negligible." ²²⁸
- 232. The financial returns that are received by Chad and form part of the benefits analyzed in the economic evaluation (royalties, upstream income tax, corporate income tax on TOTCO and Chad's share of TOTCO/COTCO dividends, COTCO being the Cameroon Oil Transport Company) depend on the agreements reached between the Government and the Consortium. The Panel was struck by the estimated financial returns to Chad over a 28-year period, having regard to the magnitude of the Project, and is concerned that it was unable to find any analysis justifying the allocation of revenues between Chad and the Consortium.
- 233. Management has informed the Panel that, in addition to the study dated November 1997, cited below, simulations were carried out by C.S. First Boston for the Government of Chad: "The Bank generally is not involved in negotiations taking place between the Government and Private Sector Partners, unless we are asked for advice. In the case of both Chad and Cameroon, we were not asked for advice or our views. However, since we were keen that both countries get the best deal possible, the Bank provided them with some US\$ 6.0 million in Project Preparation Advances and Japanese Grants to secure the best legal and financial services from reputable

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²²⁸ Pipeline PAD, supra note 56, at p. 61. The Summary also says that, "The economic analysis assesses the returns of the project from the perspectives of Chad and Cameroon, as well as for the project as a whole. These returns are estimated to be significant. In the base case, which assumes 917 million barrels of developed reserves and a Brent oil price of US\$15.25/bbl, the revenues for the project as a whole are US\$ 12.0 billion (in real 1999 US dollars, undiscounted) over the life of the project (i.e., a 28-year production period), and the net revenues (net of operating and maintenance costs, but before debt service) are US\$ 9.2 billion. The Governments' revenues are US\$ 1.7 billion for Chad (...). The net present value (NPV) of these revenues, discounted at 10%, is US\$ 463 million for Chad, (...) and US\$ 1,417 million for the project as a whole."

international legal firms, investment bankers and contracts specialists. The study [dated November 1997], conducted by Bank's staff on the 'Addendum to the Convention on Exploration, Exploitation and Transport of hydrocarbons of December 19th 1988' [hereinafter the '1997 Study'], concluded that the agreements signed by Chad were reasonable, as they balanced the need for the Sponsors to achieve industry level rates of return with the need of the Government of Chad to encourage the development of the first large reserves in the country."²²⁹ The PAD's Annex 4 cited above does not specify the studies that were undertaken, nor does it fully satisfy the assertion that the agreements signed by Chad were "reasonable."²³⁰

234. In noting in its finding that the new agreements signed by Chad were 'reasonable', the 1997 Study, excluded the estimated impacts on government tax revenues of four factors: 231 (i) indexation of Brent crude reference price to the US producers' price index (PPI) for commodities; (ii) deductions of exploration costs incurred in concession areas outside the Doba fields areas; (iii) debt equity ratio limit established for purposes of what may be deducted as finance charges in calculating taxable income; and (iv) reimbursable charges for an office abroad and parent company's overhead. In particular, they indicated (para.11) the possibility of significant tax revenue losses especially in the early years, with great sensitivity to low oil prices. The report recommended that the Government of Chad should be made aware of the impact of

²²⁹ Additional Response, *supra* note 24, at p. 1.

²³⁰ The 1997 Study compared the upstream fiscal arrangements, relating to royalty and income tax payments, of the "old" and "new" Chad conventions with those arising from the exploration/production fiscal terms of a set of countries (Niger, Papua New Guinea, Uruguay, Turkey and Tunisia) selected "because, like Chad, they had little or no production of oil." (and presumably, therefore, limited experience of negotiating such agreements). In relation to the government "take" (the proportion of the project revenues going to the government), the Study concluded that, "While the government take under the new arrangement is reduced, it is still within the acceptable range offered by other "comparable" countries if we exclude Uruguay and Tunisia which correspond respectively to the most and least advantageous fiscal systems for the companies. (...) The renegotiations have provided for lower government take than under the "old" system but until oil price reach [sic] about the \$20/bbl range after which government take is larger than under the "old" system. The rate of return for the Consortium reflects a better deal under the "new" system until the \$20/bbl range after which it is lower than under the "old" system." The profile of the Chad government's take differed from the profiles of the other countries, which were relatively insensitive to oil prices: at \$15/bbl the Chad take was lower than for all the other countries except Uruguay, while by \$21/bbl it was higher than for all the others except Tunisia; correspondingly, at oil prices less than about \$20/bbl the rates of return for the Consortium ranked second only to those in the Uruguay case. The Study's sensitivity analysis showed that, of all key parameters, the government take was most sensitive to oil price variations. The Study did not discuss oil price forecasts and hence did not comment on which of the outcomes was thought most likely. The Petroleum Development and Pipeline PAD noted that, "World Bank price forecasts covering the production period (i.e. 2004 and beyond) have fluctuated over time but have remained in a range between about US\$14/bbl and US\$16/bbl in real terms." (see Pipeline PAD, supra note 56, at fn. 5, p. 64.). A constant price of \$15.25/bbl in 1999 US dollars was used for the PAD's Base Case analyses in Annex 4, while the variants used in the scenarios ranged from \$12.50 to \$18.50. Since the Bank relied on the 1997 Study for the view that the Chad agreement was reasonable, and given that the Study had suggested that oil prices of less than about \$20/bbl might place the government take at or near the bottom of the comparator countries (excluding Uruguay), it is surprising that Annex 4 of the PAD did not discuss whether the oil price forecast and ranges used in the economic evaluation carried any implications for the likely reasonableness of the agreements. The Panel feels that it would have been appropriate to do so.

The runs were shown in Annex 6 and the results were summarized in Tables 1 & 2 (Annex 5) of the 1997 Study.

- these factors on its expected revenues from the Doba operations; and that if the Government decided to limit the impacts through further discussions with the Consortium, it should be supported through further technical assistance.
- 235. In response to the Panel's enquiry, Management has stated that the Government was apprised of these impacts during a Bank mission in early February, 1998. However, while the Chadian side indicated that they needed to carefully audit the Project's financial aspects, the Government did not renegotiate the terms of the Convention. Management also notes that a 'worst case' scenario analysis of the issues raised in the 1997 Study was carried out in February 1998: "The calculations show that even in the worst case scenario the cost would not be significant; i.e. the NPV of the scenario to Chad would be reduced by US\$ 20 million from about US\$ 320 million to about US\$ 300 million" (i.e. by about 6 per cent). An internal Bank memorandum explains that: "Part of the reason the impact is this small is because under Bank price projections, Chad only begins to get income taxes on the upstream in about 2007/08." 233
- 236. While the Panel recognizes that Management sought to ensure that Chad had access to reputable legal and financial services in its negotiations with the Consortium, it remains concerned about the adequacy of the allocation of revenues to Chad.

21.1.3 Economic Analysis of the Base Case Scenario

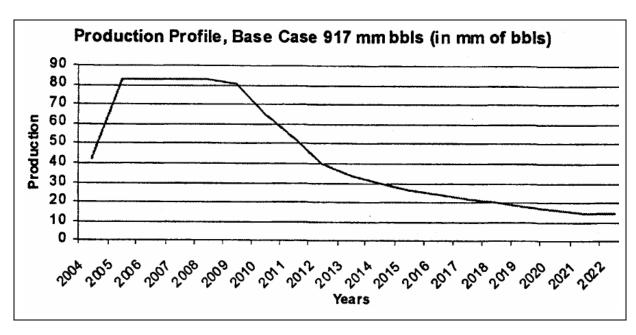
- 237. The analyses reported in Annex 4 of the PAD include: a cost-benefit analysis for the Project as a whole; an estimation of the economic returns to Chad; and an evaluation of the environmental and social costs associated with the Project. The Project benefits arise through the sale of crude oil on world markets. The 'Base case Scenario' assumes the development of 917 million barrels of reserves (the Private Sponsors' proved plus probable reserves case) over a 28-year production period, of which about 883 millions barrels will be available for sale to world markets. The sensitivity analysis also allowed for a range of oil reserve figures: a lower case, based on proved reserves, and a higher case, which equates to proved plus probable plus a portion of possible reserves. In the Base Case, revenue figures are calculated on the basis of a Brent oil price of US\$15.25/bbl in 1999 US dollars (which is said to approximate World Bank oil price forecasts in 1999 US dollars), adjusted downward to an average price of about US\$13.50/bbl to take account of quality, marketing and transportation.
- 238. The production profile for the base case for 2004-2022 is depicted below:²³⁵

²³² Additional Response, *supra* note 24, at p. 3.

²³³ Id Annex 1

After allowing for the project's own uses, particularly for a power plant in the oilfields.

²³⁵ Pipeline PAD, *supra* note 56, at p. 61.



Source: Pipeline PAD.

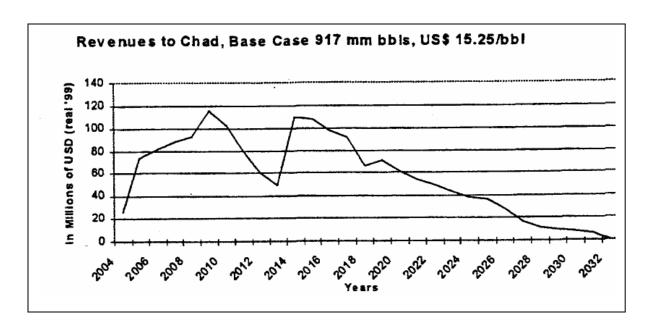
For the Project as a whole, for the base case, estimates of net present value and internal rate of return are US\$ 1,417 million, and the rate of return is 19%. ²³⁶

- 239. For the net economic benefits to Chad, it was necessary to estimate costs: Chad's equity participation in the pipeline companies, TOTCO and COTCO, which at the time of the analysis was US\$42 million, forms a large part of the relevant costs.²³⁷ The principal benefits to Chad from the project are said to come from three sources: (a) direct Project revenues; (b) infrastructure improvements that result from the Project; and (c) local economy spending generated during the construction and operation of the Project. The PAD argues that because the direct revenues are 'disproportionately large' compared to the other expected benefits, it makes sense for the economic analysis to focus on the direct revenues to Chad.
- 240. The base case estimates Chad's revenues to total US\$ 1.677 billion, and correspond to an average annual revenue of US\$ 60 million over the 2004-2032 period. The cash flow profile for Chad in the Base Case is shown in the chart below.

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²³⁶ Id., at p. 24. The PAD notes that, "The sensitivity analysis for the project as a whole demonstrates that the project is less sensitive to changes in capital costs than to oil price and reserve levels (...). The probability/risk analysis shows there is a 50% chance that the NPV will exceed US\$ 1,251 million and a 30% chance that it will exceed US\$ 1,537 million. Similarly, the estimated probability distribution of the rate of return shows a 50% chance that the IRR will exceed 18% and a 80% chance it will exceed 15%."

²³⁷ The appraisal of benefits was done without including extra expenses, such as the oversight of the EMP, helping to mitigate induced social impacts in the project area (supported by IDA under the Petroleum Capacity Project), and other incremental environmental and social costs. Their impact was examined as part of the sensitivity analysis, as discussed below.



241. In the base case, it is estimated that royalties and upstream income taxes would represent about 56% and 30%, respectively, of Chad's total expected revenues. The corporate income tax on TOTCO, would represent about 9%, and Chad's share of dividends in TOTCO and COTCO about 5% of its total revenues (see following table). Subsequent data provided by Management at the Panel's request show that these shares can be sensitive to variations in oil prices and reserves. In relation to the total expected revenues, a further analysis showed that, "the financial results to Chad are not highly sensitive to a change in project costs. An increase in project cost does not make the project unattractive to Chad."²³⁹

Chad Direct Revenues (US\$ million): Base Case²⁴⁰

	Royalty	Upstream	Corporate	Chad share of	Total
		Income	Income Tax	TOTCO/COTCO's	
		Tax	on TOTCO	Dividends	
Real (99\$)	938	510	153	75	1677

- 242. The PAD points out that the project's expected average annual revenue of US\$ 60 million (real) for Chad is nearly equivalent to 50% of Government revenues and 3% of Chad's GDP in 1998. The PAD also notes (p. 25) that given, "in part, the allocation framework under Chad's Revenue Management Program, this should translate into at least US\$ 40 million in additional annual expenditures in the priority poverty sectors over the first ten years of production."
- 243. In compliance with the requirements of OP 10.04, the PAD also reports on figures for NPV and IRR for Chad and discusses their sensitivities to variations in a number of key

²³⁸ Pipeline PAD, *supra* note 56, at p. 68.

Additional Response, *supra* note 24, at p. 5.

²⁴⁰ Pipeline PAD, *supra* note 56, at p. 68.

variables. The results of the sensitivity analysis regarding the returns to Chad demonstrate that its returns are insensitive to changes in project capital costs, but are sensitive to changes in oil price and reserve levels.²⁴¹

- 244. Although the analysis reports switching values²⁴² for four key variables (capital expenditures, operating costs, crude sales revenue (price) and crude sales revenue (quantity)) in relation to the economics of the Project as a whole, none is reported for the benefits to Chad. Although it can be reasonably argued that this is not strictly a matter of compliance with OP 10.04 (since the switching values are reported for the whole Project), in the Panel's view it would have been appropriate and valuable to supply them. The Capacity Building Project makes provision for technical assistance to place Chad in a position where it can monitor and audit both the oil produced and the revenue generated by the Pipeline Project. In the Panel's view it is essential that this be made operational before oil production **commences and revenues begin to flow.** More generally, for Chad the PAD reports on Monte Carlo simulation results from a probability analysis of the impact of uncertainties in 'some key economic variables', which appear to be the production profile (as a surrogate for sales) and the international price of oil. The PAD provides charts for the cumulative probability distributions of NPV and IRR (as referred to in paragraph 243 above), and includes the following comments: The probability/risk analysis shows that there is a 50% chance that Chad's NPV will exceed US\$ 428 million, that there is a 50% chance that Chad's rate of return will exceed 66% and that the risk of a rate of return below 40% is negligible. 243
- 245. However, Annex 4 does not provide information about the underlying probability distributions assumed for the variables, except for their general shape ('beta' or lognormal). It also does not provide any information about the sensitivity of NPV and IRR to variations in the discount rate; while OP 10.04 does not specify this as a procedure required for compliance, it is normal practice to test for this. In response to a request from the Panel, Management has supplied a table that shows the sensitivity for Chad of the key NPV results in Annex 4 to a change in the real discount rate from the 10% figure employed in the PAD to figures of 8% and 12%. Management states, "The results show that the NPV results are reasonably sensitive to a change in the discount rate. However, the results also show that a change in discount rate does not make the project unattractive to Chad." 244
- 246. The Panel finds that the analysis reported in Annex 4 (and elsewhere in the PAD) is broadly in compliance with paragraph 6 of OP 10.04 concerning risk in that it took, "into account the possible range in the values of the basic variables," assessed,

²⁴¹ Id., at pp. 24-25. The sensitivity study demonstrates: A 20% increase in project capital costs marginally reduces Chad's NPV to US\$ 443 million and its rate of return to 69%; A drop of about 20% in crude oil prices produces a reduction in the NPV to US\$ 271 million and a lowered rate of return of 56%; A drop of about 20% in reserves (to 701 million barrels) would decrease Chad's NPV to US\$ 289 million and its rate of return to 63%.

²⁴² A variable's switching value is that value at which the project's NPV becomes zero.

²⁴³ Pipeline PAD, *supra* note 56, at pp. 24-25.

²⁴⁴ Additional Response, *supra* note 24, at p. 7.

"the robustness of the project's outcome with respect to changes in these values," and also considered the sensitivity of the Project's net present value to changes in certain key variables. Nevertheless, in the Panel's view, a fuller and more systematic examination and explanation of the results for Chad (as opposed to the results for the Project as a whole), including the apportionment of the oil revenues between Chad and the Consortium, would have been desirable.

247. Annex 4 also estimates returns to the Private Sponsors, analyzed on a real basis: ²⁴⁵ "As in the case of Chad, the Private Sponsors are most vulnerable to low oil prices. They are most likely to be influenced by low price projections before they begin to make their substantial investment, but as they expend more funds over the construction period, their sensitivity to lower oil prices in making additional investments can be expected to diminish.",246

21.1.4 Other Economic Benefits

- 248. As suggested earlier, the PAD notes that other economic benefits apart from the direct project revenues included in the economic analysis will be experienced by Chad, including infrastructure improvements (e.g. upgrading of more than 100km of roads) and local employment creation (an estimated 2000 jobs for Chadian residents during the construction phase and about 350 permanent jobs during the operations phase). There will also be local procurement of goods and services.²⁴⁷ These component categories were not explored in further detail because, "Given the disproportionately large size of direct revenues compared to other expected benefits, the economic analysis focuses on the direct revenues to Chad."²⁴⁸ The Panel accepts that in this case the petroleum revenues are particularly large and that the net benefits as estimated are very substantial and positive (as paragraph 6 of OP 10.04 requires). It also accepts that some of the 'other economic benefits' might not have been easy to value. Nevertheless, OP 10.04 does not suggest that the economic evaluation of a project's benefits should only focus on the largest components of those benefits. In the Panel's view, therefore, full compliance with OP 10.04 required a more detailed examination of the 'other economic benefits' than was reported in the PAD.
- 249. Indeed, in response to the Panel's request to supply estimates of the component categories of the 'other economic benefits' for Chad, Management responded as follows: "Other economic benefits include the following: (i) upgrading of roads in Chad although a cost to the project, also directly benefits the economy of the Chad, including the road user savings generated by the project or the fact that they may open up new areas to agriculture; (ii) this is also true of the construction of a new bridge

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²⁴⁵ Rather than a financial basis, which would be most pertinent to them.

²⁴⁶ Pipeline PAD, *supra* note 56, at p. 73. The PAD also points out that while in the 917 million barrel case, the Private Sponsors would require a long-term oil price of about US\$ 14-15/bbl (nominal) to generate a positive NPV, following completion of construction, a price closer to US\$ 8/barrel (nominal) would be sufficient to generate a profit on an ongoing basis.

Pipeline PAD, supra note 56, at p. 73.

²⁴⁸ Id., at p. 67.

over the M'béré river which marks the border between the two countries. Again this is a cost to the project, but not entirely to the economy of Chad and not at all to the economy of Cameroon. The benefits of this bridge are enormous for regional traffic, which will need to be valued. The regional integration benefits are also substantial; (iii) the project currently employs over 10,000 persons and more than US\$ 1.0 million a month is paid out in wages. A large part of the work force enjoys a salary above the economic cost of labor, given the unemployment in the region. The analysis in the PAD, however, has not shadow-priced the cost of labor; and (iv) as of September 2001, spending by the Sponsors of the project and contractors in the local economy for goods and services amounted to US\$ 111 million, of which about US\$ 38 million was spent in Chad This includes supply of local furniture, food, computers, vehicle maintenance and other services." This additional information reinforces the Panel's view that these 'other economic benefits' were sufficiently substantial to warrant more detailed consideration than they received in the PAD.

21.1.5 Domestic and Cross-border Externalities

250. OP 10.04 requires the economic evaluation to take into account any domestic and cross-border externalities. The PAD acknowledges that the environmental assessment and the documentation provided by the Project sponsors identify a range of different types of environmental and social impacts, many of which will constitute negative externalities that impose social costs (if not directly compensated for by the Project). The PAD then asserts that these externalities are expected to be small compared with the Project's direct costs and benefits, in particular given the mitigation actions proposed.²⁵⁰

21.1.6 Non-use Values

251. Annex 4 records some attempts made to produce quantitative estimates of monetary damage, e.g. for the 'use' values associated with oil spills (i.e. losses suffered by those who would otherwise have used the damaged resources). However, it is said that 'non-use' values were not estimated. In response to the Panel's enquiry about this, Management stated that, "Extensive consultations were held with the populations of Chad and Cameroon during which it was not possible to elicit these non-use values from the Chadian population. Accordingly, in the analyses we estimated these costs indirectly by including in the investment and operating costs of the project, the "clean-up costs" of an oil-spill. In other words, the project includes costs that would restore an area affected by an oil-spill to a state and standards (levels) as specified in the General Oil Spill Response Plan (GOSRP) and the Environmental Management Plan

²⁴⁹ Additional Response, *supra* note 24, at pp. 8-9.

²⁵⁰ Pipeline PAD, supra note 56, at p. 74. "The main potential incremental environmental and social costs to Cameroon and to Chad are: (a) oil spill costs; (b) health costs; (c) agriculture production losses; (d) livestock fodder losses; and (e) forest and bush product losses. In addition, the project will emit a small amount of greenhouse gases. Chad and Cameroon will also incur costs regarding implementation of the Environmental Management Plans (including in overseeing performance by COTCO/TOTCO/Esso Chad)."

(EMP)."²⁵¹ The Panel accepts the difficulty of eliciting non-use values in the Chadian context.

21.1.7 Additional Health Costs

- 252. The PAD notes that there is expected an increase in STDs/AIDs, mostly in the zones near Project facilities and to a lesser extent in production areas, as well as a variety of other effects ranging from accidents to health issues associated with greater population densities. It is noted that, through the EMP and the Petroleum Capacity Project various steps are planned to mitigate these impacts, and the PAD correctly stresses the difficulties of proper quantification of such health risks. Nevertheless, it is asserted that: "While additional health costs may be associated with the implementation of the project, as indicated above, specific activities addressing health risks will be carried out by the Private Sponsors and by Chad and Cameroon and should produce net health benefits." It is not clear here whether the assertion is that the benefits produced by these activities will more than compensate for all of the health damage associated with the project, such as STDs/AIDs, or whether these activities will simply produce benefits greater than their costs. In either case, the Panel observes that in the absence of numbers, it is not possible to reach the stated conclusion.
- 253. The Panel asked for information about the estimates of costs and benefits that supported this conclusion. Management responded that: "Para 41 of Annex 4 clearly underlines that the 'proper quantification of such health risks is a very difficult task'. The choice of the word 'net' did not fully reflect this situation." The Panel accepts this clarification.

21.1.8 Global Externalities: Greenhouse Gases (GHG) Emissions

254. There is also a discussion of greenhouse gases and an estimate of US\$ 30 million for the present value of damage from extra carbon emissions associated with the oil production and transport, although this number is not factored into the analysis. In response to the Panel's enquiry about the exclusion of the estimate, Management replied that, "Bank policy requires the identification and analysis of global environmental externalities, such as GHG emissions related to a project. However, it does not require the internalization of this externality in the economic analysis." This is consistent with paragraph 8 of OP 10.04 concerning externalities, which suggests that (except in circumstances which do not apply here), global externalities are assessed as part of the environment assessment process. In this case, therefore, Management is in compliance with OP 10.04.

²⁵² Pipeline PAD, *supra* note 56, at p. 75. It also points out that the use of oil revenues in key social sectors should lead to important, yet unquantifiable, health benefits (although here there is a danger of double-counting benefits). ²⁵³ Additional Response, *supra* note 24, at p. 9. The response also states that, "*during its visit to Chad and Cameroon in October 2001, the ECMG found a good health system being operated by ExxonMobil's contractors in both Chad and Cameroon*." The response notes as well that the Sponsors have initiated a variety of other community health-related measures.

²⁵¹ Additional Response, *supra* note 24, at p. 9.

- 255. The PAD concludes that overall: "(...) although there is uncertainty in estimating incremental environmental and social costs, most of these potential costs will be mitigated and/or compensated for by the Private Sponsors, and any remaining impacts are expected to be negligible in comparison to the large benefits that both Chad and Cameroon stand to gain from the project. Over the life of the project, the net (discounted) incremental environmental and social costs to Chad (...) (i.e., those that are not financed by the Private Sponsors as part of project costs or will not be compensated directly by the project) are estimated to be less than US\$ 10 million (...). The impact of these costs, together with the estimated US\$ 15 million project implementation costs borne directly by each country, would reduce Chad's NPV in the Base Case from US\$ 463 million to US\$ 438 million (...) Consequently, even after factoring in these costs, the project remains attractive for both Chad and Cameroon."²⁵⁴
- 256. The analysis in Annex 4 shows that, consistent with the requirements of OP 10.04, and despite problems of quantification, some detailed attempts were made to take externalities into account, and in several cases to produce cost estimates. In some respects, the discussion in the PAD underplays the extent of the analysis undertaken in relation to externalities. In response to a query from the Panel, Management pointed out that: "At the request of the Bank, Exxon and its consultants, Dames and Moore, commissioned an environmental economics study of the project carried out by Scott Farrow and Susan Menkhaus in 1996. It was one of the first studies of its kind carried out on a Bank financed project." The Panel finds that Management is in compliance with OP 10.04 in respect of its treatment of externalities.

21.2 THE PETROLEUM ECONOMY PROJECT AND CAPACITY BUILDING PROJECT

- 257. The project development objective of the Petroleum Economy Project clearly states that the purpose of the Capacity Building Project is to help Chad build capacity to implement the Petroleum Revenue Management Strategy, thus enabling it to "effectively absorb and allocate expected oil revenue, and thus pursue the poverty-reduction objective of petroleum resources development." ²⁵⁵
- 258. In the Petroleum Economy Project PAD, in compliance with paragraph 3 of OP 10.04, the project alternatives are stated with an explanation of why the 'no-project' alternative was rejected. According to the PAD, after consultations with the Chadian civil society, and the review of international experience with the management of windfall oil and mineral revenue, the Bank and the Chadian Government agreed that a

²⁵⁴ Pipeline PAD, *supra* note 56, at p. 76.

²⁵⁵ Management of the Petroleum Economy PAD (Credit No. 3316-CD), Report No.19427 CD (hereinafter

[&]quot;Petroleum Management PAD"), at p. 1.

- strategy for managing oil revenues, and capacity building to implement it, would be essential in mitigating the risks associated with the pipeline project.²⁵⁶
- 259. The Economic and Financial Section of the Petroleum Economy Project PAD's Summary Project Analysis section is a brief ten lines. It states that capacity-building operations of this type do not lend themselves to a meaningful quantitative analysis of economic and financial returns. It says, however, that it can safely be assumed that successful implementation of the Capacity Building Project "would maximize the return on the much larger Doba project and mitigate the risks of windfall oil revenue. It can also be assumed that successful implementation of the project would improve Chad's overall capacity to manage public resources (...)."
- 260. However, paragraph 4 of OP 10.04 states that "If the project is expected to generate benefits that cannot be measured in monetary terms, the analysis (a) clearly defines and justifies the project objectives, reviewing broader sectoral or economywide programs to ensure that the objectives have been appropriately chosen, and (b) shows that the project represents the least-cost way of attaining the stated objectives." Also, it should be noted that OD 4.15 says that for Bank-financed poverty reduction projects in which the calculation of an economic rate of return is not practicable, such projects must, "be the least cost way of achieving project benefits." 259
- 261. Although the objectives are justified and the benefits clearly identified, the Economic and Financial Summary of the Petroleum Economy Project PAD does not attempt to explain why the project represented the least-cost way of attaining the stated objectives. This matters because the PAD does not include an explicit discussion on Economic Analysis, which would normally set out in some detail the satisfaction of the criteria and procedures covered by OP 10.04.
- 262. Similarly, the *Institutional* analysis and the *Sustainability and Risks* discussions are very brief. This is significant because of the acknowledged complexity of the project's design and the recognition that "to avoid the failure associated with development of oil or mineral resources in other Sub-Saharan African countries, Chad must put in place before 2004 the essential building blocks of its strategy for the management of the petroleum economy." This significant matter is also acknowledged in the Pipeline PAD, where it is said that: "Whether Chad would be better or worse-off with the project is intimately tied to the proper use of oil revenues (...)." In view of the foregoing, and the earlier discussion on capacity building in Section 8 of Part 2 of this Report, a more thorough appraisal of sustainability and risks would have been required in order to ensure proper compliance with paragraphs 5 and 6 of OP

²⁵⁶ Petroleum Management PAD, *supra* note 255, at p. 11.

²⁵⁷ Id., at p. 14.

²⁵⁸ OP 10.04, Nonmonetary Benefits, at § 5.

²⁵⁹ OD 4.15, Investment Lending *Economic Design*, at § 29.

²⁶⁰ Petroleum Management PAD, *supra* note 255, at p. 16.

²⁶¹ Pipeline PAD, *supra* note 56, at p. 62.

10.04. In this respect, therefore, the Panel finds that Management is not in compliance with OP 10.04.

- 263. For the Capacity Building Project, the project development objective is also clearly stated at the beginning of the PAD. 262 The no-project alternative is clearly discussed in Section D and, as with the Petroleum Economy Project, the rationale for rejecting it is convincingly argued.
- 264. However, the Summary Project Analysis says that: "The capacity building and technical assistance characteristics of this operation do not permit a meaningful quantitative economic and financial analysis." As with the Petroleum Economy Project, the PAD does not have an Economic Analysis annex and there is no explicit discussion of why the Project is expected to deliver its benefits at least cost.
- 265. The Sustainability and Risks Section presents valid reasons why the stakeholders have incentives to implement the Project successfully, but there is little discussion of factors that might hold back the development of the institutional framework necessary to ensure that the project functions as designed. As OP 10.04 notes, the main purpose of the analysis of risk is "to identify the scope for improving project design, increase the project's expected value, and reduce the risk of failure." Given the identified weakness in implementation capacity in the Ministries of Environment and of Energy and Petroleum, and the importance of timely implementation of the rapid intervention measures, the Regional Development Plan and the pilot development fund (FACIL), the Panel finds that Management is not in compliance with OP 10.04 in respect of the analysis of sustainability and risk issues.

22. POVERTY REDUCTION

"The success of the Doba project will be measured by poverty reduction rather than by barrels of oil produced or millions of dollars received by Chad from oil exports." ²⁶⁵

22.1 THE PETROLEUM REVENUE MANAGEMENT PROGRAM

266. OD 4.15 stipulates that sustainable poverty reduction is the Bank's overarching objective, and "if poverty reduction is to be sustainable, institution-building and

²⁶² Capacity Building PAD, supra note 25, at p. 2. "The development objective of the project is to strengthen the capacity of Chad to: • manage the development of its petroleum resources in an environmentally and socially sound manner, beginning with the Doba Petroleum Project in southern Chad; • minimize and mitigate the potential negative environmental and social impacts of the Doba Petroleum Project on the producing region, strengthen local capacity in the region, and provide opportunities for the region's residents to improve their living conditions; and • establish an effective framework for further sound private sector investment in the petroleum sector, and engage effectively with such investors."

²⁶³ Capacity Building PAD, *supra* note 25, at p. 13.

²⁶⁴ OP 10.04, Risk at § 6.

²⁶⁵ Petroleum Management PAD, *supra* note 255, at p. 13.

investing in local capacity to assess poverty and to analyze, design, implement, and finance programs and projects are essential." The Directive also states that risk analysis is essential for poverty reduction projects because these projects may have "important side effects for environmental and demographic outcomes, which should be carefully analyzed." ²⁶⁷

- 267. Although the Request does not explicitly mention OD 4.15 on Poverty Reduction, issues related to compliance with this policy are addressed in Management's Response. According to Management, the Bank's approach with regard to petroleum revenue management is to help Chad "target the bulk of direct oil revenues from the Project to expenditures in priority sectors for poverty alleviation." ²⁶⁸
- 268. Management notes that the Bank's rationale for supporting the Pipeline Project is based on the conviction that the Project affords Chad a "unique opportunity"²⁶⁹ to generate revenues to reduce poverty; and the conviction that the Government of Chad will allocate "these revenues to poverty reduction activities and achieving a concrete impact."²⁷⁰
- 269. As the Pipeline PAD and the Management Response make clear: "Chad is aware of the systemic transformation of the economy frequently brought about by injection of substantial petroleum resources and the need for a longer term perspective for poverty reduction (...). [T]he Government has worked closely with the Bank to delineate a petroleum revenue management program (the Revenue Management Program) and has articulated a Strategy for the Management of the Petroleum Economy."271 Management adds that "The overall objective of the Program is to set aside the petroleum revenues received by the Borrower under the Project and target their use to priority poverty sectors in the context of the Borrower's overall sectoral programs and global government expenditure patterns, in a manner consistent with sound macroeconomic management."272
- 270. According to Management, the Revenue Management Program is to be implemented and supported by the Petroleum Economy Project, whose objective is "to enable Chad to mobilize expected oil and other revenues efficiently and transparently for poverty reduction activities." Management maintains that the Pipeline Project also offers opportunities and risks at the sectoral level. Consequently, according to the PAD, the

²⁷¹ Pipeline PAD, *supra* note 56, at p. 95.

²⁶⁶ OD 4.15, Policy, Fundamental Objective at § 6.

²⁶⁷ Id., Investment Lending, Economic Design, Risk Analysis at § 30.

²⁶⁸ Management Response, *supra* note 27, at § 5.

²⁶⁹ Id., at § 18.

²⁷⁰ Ibid.

²⁷² Management Response, *supra* note 27, at § 20.

²⁷³ Pipeline PAD, supra note 56, Annex 18, at p. 174. The Petroleum Economy Project is to fund "activities to help manage macroeconomic distortions induced by oil exports, provide poverty data to underpin allocation of public resources, integrate sector expenditure programs in the priority poverty-reduction sectors in a viable budgetary framework, implement ex-post control of budget execution, associate the civil society to the oversight of oil revenues and development policy formulation, and inform it on the outcomes of public resources use."

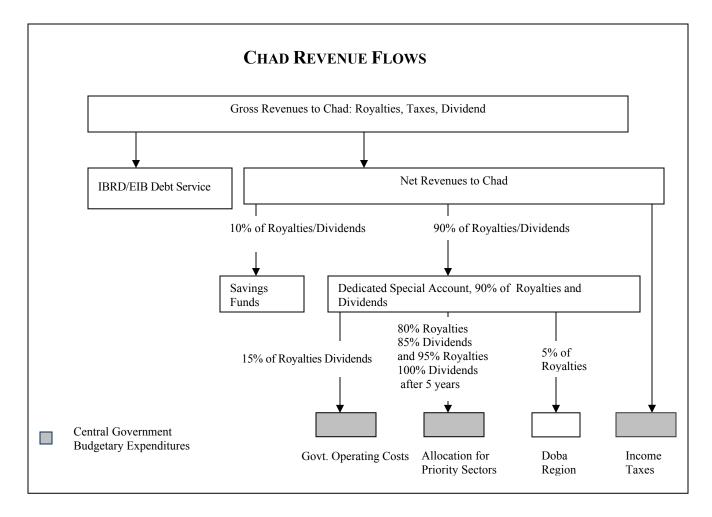
Capacity Building Project is intended to strengthen the capacity of the Government: "(a) to monitor and supervise the environmental, social, and technical aspects of petroleum projects, starting with the Doba Petroleum Project; (b) to address the induced impacts in the producing region that will be generated by the project; and (c) to manage the petroleum sector as a whole."274

- 271. The Revenue Management Program has detailed rules for the handling and allocation of the oil revenues (royalties on the sale of oil, dividends from the Government of Chad's equity investments in the project, and income taxes on the oilfield and pipeline activities), many of which are supported by the Law approved on December 30, 1998. The Pipeline PAD notes that 10% of royalties and dividends (which represent 85% of expected revenues over the first ten years of production) will be invested in long-term external investments, whose proceeds will be used to benefit poverty reduction programs in the future. The remaining 90% will pass through Special Petroleum Revenue Accounts. 275 The Panel recognizes the importance of this but, in its view, it is vital that this be the subject of continuing monitoring, review and assessment by an independent body such as the IAG.
- 272. The figure below, from the Pipeline PAD, ²⁷⁶ illustrates these revenue arrangements. A variety of control and audit mechanisms are also described, as well as links to the Bank portfolio ("Government performance (...) will be a central criterion in determining future levels of World Bank support to Chad') and there are conditions attached to the loans and credits.²⁷⁷
- 273. The Pipeline PAD, the Revenue Management Program and the Guiding Principles provided evidence that suggests an intention by Management to comply with the broad provisions of OD 4.15, along with an awareness of the challenges to effectively reduce poverty in Chad. Nevertheless, the Panel has concerns on whether some components of OD 4.15 have been fully met and whether Management has succeeded to put in place sufficient measures to ensure the sustained delivery of poverty reduction outcomes, and hence future compliance with OD 4.15.

²⁷⁷ Id., at pp. 97-98.

²⁷⁴ Capacity Building PAD, *supra* note 25, Annex 2, at p. 25. Also, please note the Panel's examination of the institutional capacity for managing adverse impacts resulting from the Pipeline Project in Part 2, Section 8 of this Report.

²⁷⁵ Pipeline PAD, *supra* note 56, Annex 11, at p. 96. The remaining 90% will pass through Special Petroleum Revenue Accounts, to be used as follows: "80 percent of royalties and 85 percent of dividends (...) will be devoted to expenditures in key poverty reduction sectors (education, health and social services, rural development, infrastructure, and environment and water resources). - Expenditures from oil revenues in these sectors will be incremental to Government spending in these sectors prior to the arrival of oil revenues. - In addition, 5 percent of royalties deposited into such accounts will be allocated as a supplement to the oilproducing region to be programmed by local authorities. - During an initial five-year period (i.e., before oilfield income taxes provide another possible source of revenues), the residual 15 percent of royalties and dividends can be used to finance general Government expenditure in the civil sectors to help meet pressing Government operational needs. - Revenues which cannot be used efficiently for the agreed objectives, or the mobilization of which would jeopardize macroeconomic stability, will be sterilized under arrangements acceptable to the Bank)." ²⁷⁶ Pipeline PAD, *supra* note 56, Annex 11, at p. 97.



274. Management's specific concerns in ensuring the Project's poverty alleviation success appear to come out of a high level of awareness of the risks associated with an oil 'windfall', and of the particular challenges they pose for Chad, a country in which capacity weakness is "all-encompassing and greater than in most sub-Saharan Africa countries, reflecting the impact of almost three decades of civil strife." While bearing in mind this demonstrated high level of awareness on the part of both Bank and Government of the challenges posed by the oil revenues, in the succeeding sections the Panel proposes to look in more detail at a number of significant issues that merit examination. These issues relate not only to the particular frameworks, rules and mechanisms to be employed to address these challenges but also to the difficult issue of

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²⁷⁸ Petroleum Management PAD, supra note 255, at p. 3. "The experience of oil and mineral exporting countries demonstrates that mismanagement of windfall revenues often leads to distortions, waste, corruption, and social tensions. Expenditures exceeding the absorptive capacity of the economy could distort relative prices, appreciate the effective exchange rate and reduce competitiveness. Hasty deployment of oil revenue could exceed the government's ability to manage public expenditure efficiently, fostering inefficiencies and waste even when goals are sound. (...) Non-transparent, inefficient or inequitable management of revenues could fuel social tensions. (...) Chad faces a particular challenge given the immaturity of its democratic institutions, the weakness of its economic management institutions and capacities, and existing social tensions."

timing – how to get the enhanced capacities in place in time, given that significant problems could be anticipated to arise well before the revenues start to flow.

- 275. A first issue relates to the allocation of royalties and dividends to expenditures on the five identified priority 'poverty reduction sectors', and to the issue of additionality. Expenditures from oil revenues in these sectors will be incremental to previous government spending in these sectors, i.e. "incremental to the general budget of the fiscal year preceding the first oil revenues." This provision for incremental spending was presumably put in place in order to forestall the possibility that oil revenue spending might be used to substitute for government spending that would otherwise have taken place. There is, however, a question about whether the use of a fixed, static baseline is appropriate in a situation where, even in the absence of oil revenues, public expenditure might be expected to increase over time. Since these are priority sectors, it would be expected that in a growing economy ("Economic growth has averaged 5 percent p.a. since 1996 (...), and fiscal revenue was projected at 9.4 percent of GDP in 1999, compared with 4.9 percent in 1994."²⁸⁰), a government would have chosen to allocate increasing funds to them - and in the Panel's interview with a Bank staff member, it was suggested that since 1994 the Government has allocated more funds every year to education, health, and infrastructure. To avoid the risk that a priority poverty reduction sector might only receive a small net increase on the budget of the fiscal year before the first oil revenues, in the Panel's view, it would have been appropriate to have an additional safeguard, such as specifying a moving baseline, at least for an initial period.²⁸¹
- 276. There is, however, a tension between a policy that ensures that oil revenues benefit poverty-connected sectors and the risk that budgets become too rigidly specified to permit sensible flexibility in dynamically changing circumstances. This is one reason why finance ministries are reluctant to 'hypothecate' tax revenues and dedicate them to particular purposes. Given the risks demonstrably associated with 'windfall' oil revenues, in the Panel's view, the decision to hypothecate is in compliance with OD 4.15.
- 277. Nevertheless, one issue which was raised in the Panel's discussions with Bank staff was the possibility that the priority sectors may have been too narrowly and rigidly defined spending on the judiciary and the functioning of the legal system provides an example which relates significantly to capacity building, to effective channeling of revenues, and to the protection of disadvantaged groups.
- 278. In relation to spending on the judiciary, the Petroleum Economy PAD indicates that this was not an oversight: a strategic choice was made. 282 It is also suggested that one of

²⁷⁹ Pipeline PAD, *supra* note 56, Annex 11, at p. 120. See also Id., at p. 106, where this is specified as fiscal year

²⁸⁰ Petroleum Management PAD, *supra* note 255, at p. 5.

For instance based on an average of the real growth rate in sectoral expenditures over a certain period of years. Petroleum Management PAD, *supra* note 255, at p. 5. "(...) project activities address mainly capacity building in the executive branch of the government and the implementation of the Law on Oil Revenue Management.

the alternative means of addressing the capacity of the judiciary could be the Capacity Building Project (although that Project's remit does not cover such areas). The Panel accepts that there have to be limits to the coverage of any project. Nevertheless, the successful translation of oil revenues into equitable, effective economic development and poverty reduction extends well beyond budget allocations and the auditing and control of public expenditure, requiring an infrastructure that extends from democratic institutions through to a growing real and financial private sector, including the provision of credit, and active markets. OD 4.15 states that, "Private sector development (...) promotes growth and income earning opportunities for the poor."

279. As noted in the earlier section on "Institutional Capacity," the Panel's investigation revealed serious concerns about the failure to develop and strengthen the institutional capabilities of the Government of Chad to a level where it could begin to monitor the Project effectively **before** the revenues start to flow. The Panel noted that the failure to achieve this objective raises questions about the ability to realize several of the other social objectives of the Project, in particular poverty reduction. In this regard, **it is vital that the operations of the dedicated special account be subject of continuing monitoring, review and assessment by an independent body such as the IAG.**

22.1.1 Allocation of Resources to Producing Regions

- 280. Due to the general nature of the Request, the Panel understood the allegations broadly to cover all possible allegations in regards to the relevant Bank policies and procedures. In that context, the Requesters' alleged that "the laughably small quota assigned to the production zone bears little or no relation to the magnitude of the needs of this region and the size of its population." This refers to the 5 per cent of royalties from oil revenues, over the life of the oil field project, earmarked for the producing region. Moreover, repeatedly during the Panel's visit to Chad several local leaders expressed deep reservations on whether Chadians would be the ultimate beneficiaries of the Project.
- 281. Management indicates that there are no Bank policies or procedures that "set standards for the direct attribution of revenues to producing regions in the context of projects supporting natural resource exploitation." Indeed there are no Bank policies and procedures that directly guide the allocation of resource revenues to producing regions. Consequently there is no question here of non-compliance with OD 4.15. It appears that the decision to make such an allocation in relation to the Pipeline project

Capacity building for the legislature, the judiciary, the private sector and the non-governmental institutions, and the media, would need to be addressed through other means (...). This choice was prompted by the need to streamline as much as possible this operation with a view to ensuring its manageability, as well as by financial considerations."

²⁸³ Request for Inspection, *supra* note 18, at § $4 \ \P 2$.

The 5% is closer to 4.5%, since it is 5% of 90%; see *Chad Revenue Flows* diagram on the Allocation of Resources to Producing Regions in sub-section 22.1.1 above.

²⁸⁵ Management Response, *supra* note 27, at § 148.

was inspired by troubled experiences in other countries, including Nigeria. However, the PADs neither suggest that any targeted studies of how to determine the appropriate share were carried out, nor do they cite any review material that underpinned the choice of 5 per cent. In the Panel's view, this is a matter of great concern.

- 282. A related question concerns whether the producing region's share might change. Management indicates that in the provisions of the Revenue Management Program, "the Borrower shall not amend or waive the Petroleum Revenue Management Law so as to materially and adversely affect the implementation of the Program, [or] set out the flow of funds generated by the Project." This is potentially important in the case of the producing region's share, since the Law on Revenue Management states, in Article 7, apparently in relation to the 5 per cent, that "this amount may be changed by decree at five-year intervals in the light of available resources and the needs and absorptive capacity of the region." It should be remembered, however, that the Bank's leverage in relation to the Project will decline significantly over time, which emphasizes the importance of growth in the capacity of democratic institutions through the Project's lifetime.
- 283. Management suggests that the earmarked 5 per cent of royalties, "only represents a small portion of the value of the expenditures which will benefit the people of the producing region," and is in addition to "the share of revenues that will serve to finance expenditures for priority sectors in the producing area through Chad's regular budget, the rapid intervention measures and community-based investments financed in the region under the Capacity Building Project."²⁸⁷ However, Management does not cite any estimates of the absolute or relative shares of royalties and of revenue-derived expenditures expected to benefit the producing region, on which the 'small portion' assertion was based.
- 284. It is not clear that Management has yet the information that would enable it to estimate regional shares of planned priority sector expenditures from expected oil revenues, although the ongoing public expenditure review process should be enabling it to assemble a clearer picture of existing regional patterns of public expenditure, and of the nature and extent of any disparities between regional shares. In the Panel's view, this kind of information is essential if the various stakeholders are to be in a position to debate and argue for appropriate shares in national income and wealth.
- 285. Evidence of beneficial expenditures and planned activities taking place in the producing region well before the oil starts to flow could be an effective way of providing reassurance that the region will not lose out. Management indicates that a number of activities and measures are intended to produce such benefits. For example, it is indicated that as a result of consultations with civil society, civil society organizations are involved "in the definition and future operation of the FACIL and in

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²⁸⁶ Id., at § 21. See also Pipeline PAD, *supra* note 56, Annex 11, at p. 105.

²⁸⁷ Management Response, *supra* note 27, at § 148.

the elaboration of the Regional Development Plan."²⁸⁸ According to Management, such Regional Development Plan "addresses issues related to in-migration, health and public hygiene and sanitation services, energy, water supply, and food and housing in the initial years of the oil field development,"²⁸⁹ while the FACIL "has been put in place under the Capacity Building Project to support local groups with development projects."²⁹⁰ Additionally, Management indicates that the Regional Development Plan is one of several "effective instruments to provide social safeguards and development benefits to the region's population."²⁹¹

22.1.2 Implementation Delays

- 286. It appears, however, that a number of these activities, ranging from Project mitigation measures to the establishment of FACIL and the participatory assembling of the Regional Development Plan, as well as the progress of the supervisory body (the Collège de Contrôle et de Surveillance des Ressources Pétrolières), have been running significantly behind schedule, at a time when the development of the oilfield and pipeline are running well ahead of schedule (the so-called 'two-speed' problem). This problem was addressed in the earlier section on "Institutional Capacity" in the context of OD 4.01.
- 287. In the Panel's view, these delays threaten to compromise the delivery of poverty reduction in the later stages of construction and in the early stages of operation of the Pipeline Project. In this context, OD 4.15 is clear: "If poverty reduction is to be sustainable, institution-building and investing in local capacity to assess poverty and to analyze, design, implement, and finance programs and projects is essential." The Third Semi-Annual Report to the Directors on the Implementation of the Petroleum Development and Pipeline Project²⁹³ suggests that the Bank is aware of the threat that these delays represent. If the problem is not addressed urgently, future compliance with OD 4.15 will also be in jeopardy. Obviously, Management must renew and invigorate its efforts to ensure that the structures created are fully operational before the expected earnings arrive.
- 288. The Capacity Building Project PAD describes the relationship between the Regional Development Plan and FACIL in this way: "The Regional Development Plan (RDP) will be elaborated in parallel with and through the operation of the FACIL. The RDP (...) represents a more detailed planning activity than the Regional Development Framework (...). The FACIL is a vehicle for creating the processes to support the preparation of the RDP."²⁹⁴ However, it was suggested during Panel interviews in January 2002 that the operations of FACIL were at least 6-9 months behind schedule,

²⁸⁸ Id., at § 55.

²⁸⁹ Id., at § 91.

²⁹⁰ Ibid.

²⁹¹ Id., at § 103.

²⁹² OD 4.15, Policy, Fundamental Objective at § 6.

²⁹³ SecM2002-0045 and IFC/SecM2002-0008, January 25, 2002.

²⁹⁴ Capacity Building PAD, *supra* note 25, Part G of Annex 2, at § 12, p. 59.

which affects the process of developing the Regional Development Plan, while some of the deliverables specified in the Regional Development Plan²⁹⁵ were running about 18 months behind schedule.

- 289. The issue has to do not only with the formal operations of FACIL but also with the formal preparation of the Regional Development Plan. As noted elsewhere in this Report, considerable emphasis has been placed on social and environmental compliance. In the Panel's view, however, much less emphasis has been placed on what it takes to deliver on the ground before the oil starts flowing and the revenues begin to come in. As the PAD noted, during various workshops local communities expressed their more immediate needs for (i) rural infrastructure (ii) credit, (iii) fertilizer and production equipment, and, (iv) training. At the present rate of progress, it seems probable that these priority needs will not be fulfilled, at least within an appropriate time frame.
- 290. On the benefits side, some activities, like road improvements and some limited local employment, are occurring as a side effect of work in progress on the Pipeline Project. However, it also appears that much of the produce and services, such as food, catering and transport, is imported. This is both because of tight specifications of what is required and because of problems of local capacity in the producing region to meet those specifications.²⁹⁶ There are also related issues of finance and credit. The Panel was not provided with evidence to suggest that the necessary capacity-building and support mechanisms are in place -- or are being put in place -- to enable entrepreneurs to take full advantage of important income-earning opportunities in the region that are likely to exist only during the initial construction phase. Early exploitation of such poverty-reducing opportunities may be important for the longer run, in terms of the foundations it lays for later growth.
- 291. Although project-related expenditures can bring benefits in the form of incremental incomes they may also impose costs.²⁹⁷ There is evidence of price rises for some commodities, such as food and housing, in the project region. On the one hand this 'excess demand' can be a positive force, since it signals potential opportunities for people to earn incomes through supplying goods and services for which demand currently outstrips supply. On the other hand, for poorer consumers competing with those who have money to spend, there can now be an affordability problem if the prices of the products on which they depend have risen. The poor are often not in a position to compensate through exploiting increased earning opportunities because they have little human, physical or financial capital with which to do so. In such circumstances it is important that the conditions are rapidly created in which output can increase, incomes can rise and prices fall or be stabilized, and if necessary a safety-net be provided.

²⁹⁵ Set out in the EMP, *supra* note 38, Volume 4.

²⁹⁶ This is more than a matter of physical production capacity – it has also to do with the possession of business skills. For example, international consortia normally determine procurement contracts on the basis of a tendering process for bids but this is neither a concept nor a process with which local entrepreneurs are familiar.

297 For example if growing demand leads to price rises that damage the welfare of those who face them.

- 292. This problem and others were foreseen in the Capacity Building Project PAD, which anticipates a wider range of possibly damaging effects associated with an estimated flow of 5,000 to 20,000 immigrants, "lured by the hope of benefiting from the oil project." The Panel asked how the economic and social impacts of potential project-related price increases had been taken into account in the economic analysis. Management's response noted that, "Price increases were anticipated in the Regional Plan Study and the issue was specifically reflected in the PAD for the Petroleum Sector Management Capacity-Building Project (Page 35, Paragraph 26). In fact, a large portion of the above project was designed to mitigate induced impacts of the Pipeline project". ²⁹⁹
- 293. It is neither obvious to the Panel that the Capacity Building Project nor the Petroleum Economy Project have made appropriate provision to identify and address the above-mentioned types of problems in the areas touched by the Pipeline Project's activities. This is despite their potential to impinge on that Project's potential to attain the poverty reduction envisaged in OD 4.15. Furthermore, it is not obvious to the Panel that there is sufficient communication and coordination between the two projects to rule out the possibility of their becoming poverty-increasing problems, which fall between two, stools and fail to be identified and addressed. In the light of this, the Panel finds that the Project is not in compliance with these aspects of OD 4.15. The Panel, therefore, reiterates its call for Management to accelerate its efforts to improve the situation on the ground.

22.1.3 Possible Variations in Oil Revenue Inflows

294. A potentially significant aspect of the Project concerns the very large variations that could arise from year to year - and within a given year - in the size of the oil revenue flows and in how they translate into the Government's budget. Dramatic fluctuations could occur because of variations in two factors over which Chad has no control. The first is the price of oil, which has a direct effect on the revenues. The second is the US dollar/euro exchange rate, since the Government receives revenues in dollars but effectively spends them in euros because the CFA is linked to the French franc, and so now to the euro. If there were large variations in the dollar/euro exchange rate, then that fluctuation would translate into the government budget. Moreover, the issue of the

²⁹⁸ Capacity Building PAD, *supra* note 25, Annex 2, p.35.

²⁹⁹ Additional Response, *supra* note 24, at p. 11. Management also pointed out that, "Recent information suggests that prices of lodging, meat and sorghum grain have increased. ExxonMobil has established an inflation monitoring system in the Moundou area and contractors are being encouraged to build housing in villages and set up company stores to provide lower priced staples. Similarly, Government plans to manage demographic and economic impacts are being accelerated."

³⁰⁰ These two sources of variability could mean, for example, that a budget that is accepted in Parliament has to be redefined and taken back for approval, possibly several times in the fiscal year, leading to undesirable uncertainty and complexity.

- growth of the economy's absorptive capacity301 underlies expressed concerns about possibilities of a 'resource curse' or 'Dutch disease'.
- 295. In relation to concerns about a possible 'resource curse', the Panel asked what studies had been undertaken of the possibilities of 'Dutch disease' type impacts on the economy of Chad, and why the economy of Chad was not expected to suffer significantly from such impacts? In relation to the 'Dutch Disease' question, Management replied that two studies had been undertaken, those of Prof. Mark Gersovitz, dated 23 March, 1996 and Marc Reynaud, prepared in August 1996. "Both studies were shared with the Government of Chad. Prof. Gersovitz had several recommendations (...), including that Chad should not borrow against its future petroleum revenues and that funds for investment be divided between investments abroad and investments in Chad. The second study by Reynaud warns of both the great opportunities and risks from petroleum revenues and provides substantial information on the experience with 'Dutch disease' and on 'stabilization funds'." The Management Response argues that the Petroleum Economy project, "was designed to support the Doba project, help the Government manage the additional revenues generated by the petroleum project and enhance Chad's capacity to absorb oil revenue efficiently." It is acknowledged, however, that if the project were successfully implemented there is still a risk that Chad could suffer from 'Dutch Disease' impacts: "This risk has been known and recognized by the Bank and for that reason we plan to monitor the impact of oil revenues through ongoing macro and sector dialogue."
- 296. The Panel also asked what analysis had been undertaken of the potential impact on the flow of government revenues and spending of exchange rate instability between the local currency (and the Euro) and the US dollar, and whether there were any provisions for any form of stabilization fund to smooth these flows. Here, Management replied that, "No analysis was undertaken of the potential impact on the flow of Government revenues and spending of exchange rate instability, largely because of the difficulty to predict revenues and spending amounts and their impact." It was also acknowledged that, "Provision was made for a 'Future Generations Fund', but not a stabilization fund, which was under discussion only recently." 303
- 297. The Revenue Management Program contains the statement that: "Revenues which cannot be used efficiently for the agreed objectives, or the mobilization of which would jeopardize macroeconomic stability, will be sterilized under arrangements acceptable to the Bank." However, there appears to be no such provision in the Law on Revenue Management or in the 'Annex to Loan Agreement on Petroleum Revenue Management Program'. As yet no explicit set of arrangements for dealing with large

Whether, for example, a rapid and sustained rise in the budget could be spent productively without stimulating inflation or other undesirable side effects.

³⁰² Additional Response, *supra* note 24, at p. 12. Management also notes that: "In addition, a seminar was held from January 6th to 8th 1997, to discuss the subject of 'windfall gains' and management of the economy, with several of Chad's principal Ministers attending." ³⁰³ Additional Response, supra note 24, at p. 13.

³⁰⁴ Pipeline PAD, *supra* note 56, Annex 11, at p. 96.

surpluses and fluctuations has been agreed that would smooth out the annual flow in the event of major fluctuations and ensure a gradual, consistent rise in spending, within the bounds of absorptive capacity. ³⁰⁵

298. In the Panel's view, in order to avoid macroeconomic risks that could jeopardize poverty reduction, Management should have addressed this serious risk to its poverty reduction objectives in a more definite manner than the statement in the Revenue Management Program that "Revenues (...) will be sterilized under arrangements acceptable to the Bank." In the light of this, the Panel finds that Management is not in compliance with the provisions of OD 4.15 concerning risk analysis and institutional design.

³⁰⁵ For example, one possibility might have been to allow the Future Generations Fund to absorb more or less, according to oil price and exchange rate variations and developments in absorptive capacity

Part Five

Monitoring and Supervision

Part Five: Monitoring and Supervision

23. RELEVANT BANK POLICIES AND PROCEDURES

- 299. The Requesters allege that the Bank has violated OD 10.70 on "Project Monitoring and Evaluation" and OD 13.05 on "Project Supervision." The Panel has decided to examine these allegations together in this section. In order to avoid repetition, the Panel has also decided not to include in this Part an examination of specific issues related to environmental and social monitoring, as these are dealt with elsewhere in this Report. 306
- 300. Issued in November 1989, OD 10.70 on Project Monitoring and Evaluation "sets out the concepts of monitoring and evaluation, specifies objectives and uses, and provides general guidelines for the design and implementation of the information systems required." Paragraphs 2 and 3 of the OD make a distinction between 'monitoring' and 'evaluation'. According to the OD, "Monitoring is the continuous assessment of project implementation" while "Evaluation is the periodic assessment of the relevance, performance, efficiency, and impact (both expected and unexpected) of the project in relation to stated objectives." Given the current status of Project implementation, the Panel has focused its analysis on project monitoring. 310
- 301. Although it is the primary obligation of the borrower to carry out day-to-day monitoring of the Project, OD 10.70 requires that, "[d]uring project preparation, the Bank should assist project management in setting and achieving monitoring and evaluation objectives by (a) helping project management and agencies concerned identify their information needs and specify monitoring objectives; (b) ensuring that appraisal documents clearly establish objectives, targets, and expected results for each component; (c) reviewing the design of the proposed information system and special studies to ensure that they are cost effective and that organizational arrangements are reasonable; (d) helping to finance the technical assistance and equipment (including data processing) required for the design and implementation of monitoring and evaluation activities; and (e) ensuring that training needs are adequately addressed." 311

³⁰⁶ Please refer to Parts 2 and 3 on respectively environmental and social compliance. Also, for a clear understanding of the Bank's responsibilities *vis-à-vis* project supervision, it should be observed that concrete Bank supervision of the Pipeline Project only started after the corresponding loan agreement was declared effective on August 10, 2001.

³⁰⁷ OD 10.70, Introduction at § 1.

³⁰⁸ Id., Definitions and Objectives, *Monitoring* at § 2.

³⁰⁹ Id., Definitions and Objectives, *Evaluation* at § 3. The OD further distinguishes among types of evaluation (i.e. interim terminal and several years final disbursement takes place)

⁽i.e., interim, terminal and several years final disbursement takes place).

310 The Pipeline Project was approved by the Board of Director of the Bank on June 6, 2000 and its legal documents "declared effective" on August 10, 2001.

³¹¹ OD 10.70, Responsibilities at § 6.

- 302. OD 13.05 on Project Supervision dated March 28th 1989,³¹² was designed to ensure that the Bank fulfills its fiduciary responsibility vis-à-vis its Articles of Agreement and the Board. It outlines a series of requirements intended to ensure that adequate attention is given to issues that may emerge during project implementation so that they do not result in any deviation from the Project's stated objectives or departure from the Bank's policies and procedures. In recent years, this supervision policy has acquired an added importance since it constitutes the Bank's primary tool for verifying project compliance with its social and environmental policies.
- 303. In its Response, Management denies any violation of OD 10.70 and OD 13.05. Management draws attention to the fact that the Project is being implemented by the private sector, which "has adopted a multi-tiered monitoring system and has every incentive to ensure that the Project is implemented on schedule." As of now, Management maintains "the Project is ahead of schedule and has not encountered any significant problems." Paragraphs 124-125 and 127-130 of the Response provides details of the number of person-days it has allocated for Project supervision (including field supervision), and observes that an amount of "US\$0.5 million is being spent to develop a Management Information System (MIS) for the Government's monitoring of the Pipeline Project." 314
- 304. Paragraph 131 of Management's Response provides the monitoring and supervision framework that Management envisions for the Project, under the following 'seven layers' of Project supervision: "(a) First, the operator, Esso Chad, monitors compliance of the implementation of the EMP by its sub-contractors and its own compliance. Quarterly reports are furnished to the Bank Group and made available by the Bank Group to the public; (b) Second, the Bank Group and the other lenders to the Project have engaged the ECMG [External Compliance Monitoring Group] to monitor implementation of the EMP. Its reports are made public; 315 (c) Third, the Bank Group directly monitors implementation of the EMP by both the private sector operator and the Governments. This includes monitoring through periodic site visits by Bank Group staff and strengthening presence in the Country Offices. Bank Group staff has conducted two supervision missions since Project approval. Quarterly missions are planned, and the frequency is regularly reviewed depending on progress made in Project implementation and issues, if any, which are uncovered. The Bank Group continues to liaise with the stakeholders (including NGOs) to assess compliance; (d) Fourth, the Government of Chad monitors implementation. The Capacity Building Project provides support to increase the Government's capacities in this area. In addition, the Government monitors its own compliance and reports to the Bank; (e) Fifth, the Government of Chad is further assisted by an international advisory panel of environmental and social experts to advise it on issues arising during implementation of the EMP. Hiring of this panel by the Government is underway; (f) Sixth, an

³¹² This OD was replaced on July 2001 (after the Panel received the Request for Inspection), by OP/BP 13.05.

³¹³ Management Response, *supra* note 27, at § 123.

³¹⁴ Capacity Building PAD, *supra* note 25, Annex 2, Part I, p. 63.

The External Compliance Monitoring Group (hereinafter "ECMG") reports are available on the Project's web site: http://www.ifc.org/enviro/ecmg.

International Advisory Group (IAG) advising the Bank and the two Governments on impacts on poverty reduction and on implementation of the Project has been set up. The Group conducted its first mission to Chad and Cameroon in April 2001 and is preparing its work program. Its reports will be made available to the public on the same day they are submitted to the President of the Bank Group; (g) and Seventh is the input and assessment provided by civil society and specifically NGOs. To date, such inputs have been a significant source to identify areas for improvement in the design of the EMP and it is expected that civil society will continue to provide important input during implementation of the Project. For this reason, continued consultation with NGOs by Bank Group staff, the ECMG and the IAG are integral parts of Project implementation. In addition, various actions under the capacity building operations and elsewhere contribute to increasing the capacity of local NGOs to play this role."

23.1 FINDINGS

- 305. The Panel has carried out a close study of the monitoring and supervision arrangements, including the distribution of supervision responsibilities, envisioned for the Pipeline Project. The Panel studied all the relevant documentation, including the anticipated multi-reporting system prepared in connection with this subject, and held discussions with Bank and Esso staff, government authorities and NGOs. The Panel held a productive session with members of the IAG and has benefited from the Group's reports. At headquarters and during its field visits, the Panel had the opportunity to verify the functioning of the various 'levels' of supervision indicated in the Management Response.
- 306. The Panel notes the differing roles of the IAG and the ECMG, as indicated in the Bank's seven layers of supervision. Both have served a valuable role in assisting the Bank with an independent supervision of both macro and microelements of the Project respectively. Both provide an independent evaluation of the monitoring and supervisory activities of the Consortium, as the independent capacity of the GOC through the CTNSC is non-functional at the present time. CTNSC staff participates in monitoring visits of the ECMG and also accompany Consortium staff in the field.
- 307. There had been criticism that the Bank's presence in Chad was not robust enough and it seems that Management was sensitive to this criticism. The IAG and the ECMG have addressed the issue and acknowledged that there have been recent improvements on the ground. In its Third Semi-Annual Report to the Executive Directors, Management took the same position. As a Bank official told the Panel "one criticism or comment was that World Bank presence in the field was not enough. We thought about this when we did it starting mid-year last year, and we are going to increase the supervision team on the ground. So that is important." During its field visits, the Panel was able to confirm the existence of an enhanced Bank field presence in Chad, with additional

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³¹⁶ The IAG Report, *supra* note 32, December 21, 2002, at p. 3; and Report of the ECMG, *supra* note 315, Third Site Visit, October 2001, at p. 33.

³¹⁷ SecM2002-0045 and IFC/SecM2002-0008, January 25th 2002, at § 16.

high-level staff being added in its N'Djaména office. A Bank official stated during an interview with the Panel "[t]he challenge of course, is going from a good design to effectively implementing it and I think that's where the recent decision to reinforce supervision is critical." Asked about the adequacy of resources made available for supervision the Bank staff added "[w]e have the budget of US\$1.5 million from the administrative budget, and every time we have asked for more, because we were in a position to justify it, we got more. Basically the message I got from [Bank Management] is that money is not the issue."

308. Earlier on, the Panel had expressed its concern about delays in establishing the local capacity required to effectively monitor the Project, which could compromise its long-term sustainability. At the same time, the Panel wishes to express its satisfaction that Management has established a strong external Project monitoring capacity in the form of the IAG and the ECMG. Under the circumstances surrounding the Project, they clearly have a very important role to play. The Panel would urge the Board to ensure that this function is sustained for as long as is necessary and certainly well beyond disbursement of the loans in question.

Health Impacts Associated with the Pipeline Project

The state of public health is poor throughout Chad, but is acute in the densely populated region of southwestern Chad where the Oil Pipeline Project is located. As with other countries in tropical Africa, Chad suffers from high mortality and morbidity due to infectious diseases, exacerbated by poor sanitation, poor quality water, and inadequate medical care. These diseases include sexually transmitted diseases (STDs), especially gonorrhea, syphilis, chlamydia; and HIV/AIDS (Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome); acute respiratory infections and tuberculosis; insect and helminthic transmitted diseases such as malaria, onchocerciasis and schistosomiasis, and waterborne diseases including typhoid, cholera, and gastroenteritis. 318

It is expected that the Pipeline Project will contribute to the spread of certain of these diseases, both in the oil fields and in the larger region of southwestern Chad. One problem is the large influx of people to the region seeking jobs either on the project or in the informal economy, aggravated by the improvement of roads to Cameroon in the south and N'Djaména in the north. Despite these increased health risks, government spending on local hospitals, clinics, doctors and nurses has not increased in the region. In Chad as a whole, there is one doctor for 32,000 people. In the area surrounding the town of Moundou, there are two doctors serving 96,000 people.

The EA discusses health risks, particularly to project workers, and mitigation efforts for construction accidents, poor quality water, and the spread of infectious diseases including HIV/AIDS. These efforts are aimed at Project personnel and not at the residents of the larger region impacted by the Oil Pipeline Project; the EA does not incorporate a regional Health Plan. However, it observes: "impacts exist in two broad categories: internal within the project facilities and directly amenable to technical and managerial control, and external to the project facilities and therefore not as amenable to direct project control, but addressed by government programs....The process of monitoring and assessing internal population effects at a community or village is quite complex for both sociological and biological reasons. If this external monitoring effort is undertaken it would be sponsored, designed, and controlled by the national government of Chad." Yet, outside of developing a Community Outreach Program (COP), 222 referred to as CHOP (Community Health Outreach Program) in later Esso publications, 223 the Project does not directly discuss how the Government health infrastructure, currently with very little resources, will achieve the level of Public Health necessary for the expected increase in health problems, particularly the spread of HIV/AIDS.

³¹⁸ Environmental Assessment, February 23rd 1997, Chad Portion (hereinafter "EA"), Appendix C, Public Health in Chad, at pp. 11-28.

³¹⁹ 1996 of the 2363 Project employees were Chadian nationals in 2001.

World Bank Report No. 20189, Project Appraisal Document, Chad Health Sector Support, at p. 5.

³²¹ EA, *supra* note 318, at section 8.7 p. 8-25.

³²² Id.

³²³ Chad Export Project Quarterly Newsletter, September 2001.

Management has also ignored the public health issue of developing clean water and sanitation for the overall project region. While this neglect may be understandable on the part of the Consortium, a private enterprise whose primary purpose is the extraction of oil, the Bank's role in assisting Chad with the mitigation of the effects of the development of the Oil Project is alleviating poverty and preventing harm.

Risk of Spread and Control Measures Related to AIDS and STDs

Although the Request for Inspection does not specifically raise the issues of HIV/AIDS, this topic was considered to some degree in the Environmental Assessment and Environmental Management Plan. Mitigation efforts for HIV/AIDS are "implemented for the project work force" including "coordination with government national AIDS program, particularly programs directed toward female commercial sex workers; surveillance and treatment of STDs, information, education and communication (IEC), aggressive distribution of condoms, and surveillance activities to monitor HIV prevalence rates." However, the Project would not directly deal with health risks including HIV/AIDS in the wider area of the pipeline project. "The Republic of Chad would implement the same strategies for the community surrounding the project area directed toward the prevention of STDs/HIV." Although the EA reports that the prevalence of STDs/AIDS is already highest in Chad's southwest, the region of the pipeline, it does not take responsibility for the further spread of HIV/STDs nor consider mitigation measures to combat these health risks outside the immediate area of oil field construction.

The Project has developed a package of measures to avoid intensifying the HIV/AIDS epidemic including (a) readily available condoms for Project workers; (b) marketing of subsidized condoms in Project area communities; (c) information, education and communication, the classic three-pronged public health tactic aimed at influencing population behavior; (d) interventions to modify high-risk behavior; (e) coordination with existing government and NGO programs, particularly those directed toward commercial sex workers. 327

Construction of the oil wells and pipeline may contribute to an increase in HIV/AIDS for residents in the wider region of the pipeline route, and not solely to Project personnel. It has been documented for some African countries that the spread of HIV/AIDS occurs during and following major construction projects including road building, where community access to roads and bars has particularly affected female infection rates through prostitution and subsequent spousal infection. Furthermore, the separation of male workers from their families coupled with their increased spending power, contribute to this prostitution. 329

According to the World Bank's Population and Aids Control Project report,³³⁰ HIV spread to Chad in the mid 1980s, with the first AIDS cases reported in hospitals in 1986, a situation paralleling the experiences of neighboring countries. Although much lower than rates in East

³²⁶ Id., Appendix C, at p. 26.

³²⁴ EA, *supra* note 318, at section 8.7.4 pp.8-28, 8-29.

³²⁵ Ibid.

³²⁷ Id., section 8.7.4, at p. 8-28.

³²⁸ Barnett and Blaikie 1992, at p. 33.

³²⁹ Rushing 1995, at pp. 71-73.

EA, supra note 318, at Appendix C, Table 48.

and southern Africa, the epidemic in Chad has increased with an adult prevalence rate of 2.9% in 1999, where 10,000 people died that year and another 92,000 adults were living with HIV/AIDS, 56% of whom are women.³³¹ The incidence of HIV and STDs is high throughout southern Chad, with rates from Logone Oriental Préfecture, where the oil fields and central pipeline are located, falling slightly below the middle of six Préfectures.³³²

HIV Data – Longone Oriental Region³³³

Logone Oriental	HIV exams	% positive	Syphilis Exams	% positive
1998	272	11.4	0	0
1999	158	18.4	82	22.0
2000	403	16.1	105	24.8

The EA looks at risk and mitigation of HIV/AIDS mainly in the region of the oil construction around Komé Base and its road building activities. Although Esso literature claims that "[t]he Chad/Cameroon oil pipeline is the first large-scale infrastructure Project supported by the World Bank to assess the potential for an adverse impact on STDs, including HIV/AIDS, and to incorporate prevention efforts in the Project design." The Project's EA focuses its mitigation efforts mainly at Project personnel, and not the larger community. The physician at St. Joseph Hospital in Bébédjia noted that although HIV/AIDS has been present in the area since before the Oil Project, it is certain to increase. The Project will bring a great many workmen and truckers to construction sites in the oilfield development area and along the pipeline, most single and unaccompanied males. In addition, some areas along the proposed pipeline already have extremely high levels of HIV such as the town of Moundou.

The Project utilizes health data obtained by the Ministry of Health, Chad, and various studies including the World Bank sponsored Population and AIDS Project in Chad (1995) in its description of Public Health in Chad in the 1997 EA Annex C. However, there is no evidence that the research, data or the program component of the Population and Aids Projects are integrated or utilized in the 1997 EA or the EMP, particularly in developing mitigation efforts to combat the increase in HIV/AIDS in the wider region affected by the pipeline. In particular, there is no program or plan to develop the Government of Chad's health care infrastructure, which is relied on to deal with the wake of infectious diseases including HIV/AIDS in the Project area. ³³⁶

³³¹ The Population and AIDS Control Project Chad - Second Population and AIDS Project, World Bank Report No: 22003-CD, July 2001.

³³² Population and Aids Program, Chad, 1995 World Bank.

The Division of Health Information System, Ministry of Public Health in Chad.

³³⁴ Chad Export Report Quarterly Newsletter 8/01/97.

³³⁵ EA, *supra* note 318, at Appendix C.

The Implementation Completion Report (ICR) prepared for the Population & Aids Control Project confirms the vulnerability of the Pipeline Project region to HIV infection, stating the following: "[t]he HIV infection rose quickly among the general population and was estimated at about 3% among adults (between the ages of 15 and 49) in 1994. The infection rates were the highest in the southwest regions of the country and were at their lowest levels in the northeastern regions." (ICR, pg. 2, Report No: 24344 of June 12, 2002).

The Inspection Panel's Field Visits to Chad

PHASE	PARTICIPANTS	Areas Visited
Eligibility Mission	Edward S. Ayensu,	N'Djaména, Komé Base,
August 24 – September 4,	Maartje van Putten,	Doba, Bébédjia, Béro (I &
2001	Alberto Ninio, Roopa	II), Miandoum and
	Sukthankar (translator)	Moundou
Investigation Mission	Elliot Fratkin, Alberto	N'Djaména, Doba,
December 10 – 19, 2001	Ninio, Serge Selwan	Moundou, Komé Base
Investigation Mission	Edward S. Ayensu, Jim	N'Djaména, Komé Base,
January 13 – 20, 2002	MacNeill, Miles Scott-	Bébédjia, Moundou,
-	Brown, Elliot Fratkin,	N'Galaba, Mikéré,
	Alberto Ninio, Roopa	Diendo, Bam, Miandoum
	Sukthankar (translator)	

CHRONOLOGY

Chad-Cameroon Petroleum Development and Pipeline Project		
March 1992	ExxonMobil and Bank of America first visit the Bank to discuss the project	
July 1993	Issues Paper sent to Regional Management	
November 1994	Issues Paper sent to Central Loan Committee which met on December 13, 1994	
April 1995	PID (Project Information Document) sent to Documentation Center	
November 1995	First Bank mission in the field	
October 1997	Environmental Assessment distributed for public review	
May 1999	Environmental documentation finalized (19 volumes)	
June 1999	Departure of Bank appraisal mission	
June 2000	Board approval	
August 2001	Loan effectiveness	
June 2003	Expected first oil	

Chad Petroleum Sector Management Capacity Building Project		
January 1998	Dounia Conference – Minutes and Declaration	
March 1998	Bank pre-appraisal mission	
May 1998	PID sent to the InfoShop	

April 1999	Bébédjia Conference – NGO Declaration
May 1999	Environmental data sheet issued
June 1999	Departure of Bank appraisal mission
July 1999	Chad Compensation and Resettlement Plan Implementation Report (Focus International)
March 2000	PAD sent to the Board
May 2000	Resettlement Phase 1 – Report (Esso Exploration and Production Chad, Inc.)
June 2000	Board approval
February 2001	Project Implementation Manual for the Petroleum Sector Management Capacity Building Project
March 2001	Credit effectiveness

Chad – Management of the Petroleum Economy Project			
January 1999	Law no. 001-PR-99 passed concerning Oil Revenue Management		
February 1999	First Bank mission		
June 1999	Departure of Bank appraisal mission		
December 1999	PAD sent to the Board		
January 2000	Board presentation		
August 2000	Amendment to Oil Revenue Management Law		
September 2000	Project Implementation Manual for the Management of the Petroleum Economy Project		
September 2000	Credit effectiveness		

Inspection Panel Activities		
March 22, 2001	Inspection Panel receives the Request for Inspection	
April 11, 2001	Panel registers the Request	
May 10, 2001	Panel receives Management's Response	
June 27, 2001	Panel asks The Board of Executive Directors to delay the issuance of the eligibility report for a period of 90 days due to civil strife which followed the elections in Chad	
August 24-September 4, 2001	Panel mission to Chad – Eligibility	
September 12, 2001	Request for Inspection is submitted to the Board of Executive Directors	
December 10-19, 2001	Panel mission to Chad – Investigation (focus on social aspects)	
January 7-11, 2002	Panel meetings with Bank staff and ExxonMobil	
January 13-20, 2002	Panel mission to Chad – Investigation	
January 25, 2002	Panel poses additional questions to ExxonMobil	
February 8, 2002	Panel poses additional questions to the Bank	
February 14, 2002	Panel sends second set of questions to ExxonMobil	
February 18, 2002	ExxonMobil responds to first set of questions from the Panel	
March 15, 2002	ExxonMobil responds to second set of questions	
March 28, 2002	Bank responds to additional questions posed by the Panel	
July 17, 2002	Panel issues its Investigation Report to the Board	

Biographies

Professor Edward S. Ayensu, Chairman, a Ghanaian national, is Chairman of the Council for Scientific and Industrial Research (CSIR) of Ghana, President of the Pan-African Union for Science and Technology, and International Vice Chairman of the International Institute for Sustainable Development (IISD). He is an international development advisor on environment, energy, mining, housing, biotechnology and agriculture. He was Senior Advisor to the President and Director for Central Projects Department of the African Development Bank. He was formerly the Vice-Chairman of the Scientific and Technical Advisory Panel (STAP) of the Global Environment Facility administered by the World Bank, UNDP and UNEP. He was also a Member of the Energy Sector Management Assistance Program Consultative Group, which is administered by the World Bank and UNDP, and member of the Senior Advisory Council of the Global Environmental Facility. He held many senior positions including Director of Biological Conservation and Senior Scientist during his 20 years at the Smithsonian Institution in Washington D.C. He was Secretary-General of the International Union of Biological Sciences for thirteen years and Founding Chairman of the African Biosciences Network. A Prolific writer and photographer, Professor Ayensu has authored 18 books and numerous scientific and technical papers. He recently co-authored a publication, HIV/AIDS: Knowledge Protects; New and Specific Approaches to Contain the Spread of HIV in Developing Countries, 2001. He obtained his doctorate degree from the University of London, and was appointed a Visiting Fellow at Wolfson College, Oxford University. He is a Distinguished Professor of the University of Ghana and, for many years, a member of the Visiting Committee at Harvard University. He is a Fellow of the Ghana Academy of Arts and Sciences, Foreign Fellow of the Indian National Science Academy, Fellow of the Linnaean Society of London, Fellow of the Third World Academy of Sciences, Founding Fellow of the African Academy of Sciences and Fellow of the New York Academy of Sciences. He was twice the recipient of the Ghana National Science Award, the recipient of the U.S. National Museum of Natural History Outstanding Award, and the Outstanding Statesman Award in Ghana during the Millennium celebrations. He was appointed as a member of the Inspection Panel on August 1, 1998 and became its Chairman on January 1, 2002.

Jim MacNeill, a Canadian National, appointed to the Panel August 1997. He is a policy advisor on the environment, energy, management, and sustainable development to international organizations, governments, and industry. He is Chairman Emeritus of the International Institute of Sustainable Development, and a member of the boards of the Woods Hole Research Center, the Wuppertal Institute on Climate and Energy Policy, and a member of the Jury of the Volvo Environmental Prize. He was Secretary General of the World Commission on the Environment and Development (the Brundtland Commission) and lead author of the Commission's world-acclaimed report, "Our Common Future." He served for seven years as Director of Environment for the Organization for Economic Cooperation and Development. Earlier, he was a Deputy Minister in the Government of Canada. Mr. MacNeill holds a graduate diploma in economics and political science from the University of Stockholm and bachelor degrees in science (math and physics) and mechanical engineering from Saskatchewan University. He is the author of many books and articles and the recipient of a number of awards, national and international, including the Order of Canada, his country's highest honor.

Maartje van Putten, a Dutch national, appointed October 1999. Ms. van Putten was a member of the European Parliament. She has been a highly active member of the Committee on Development and Cooperation for the past 10 years. Ms. van Putten has produced many outstanding reports on the effects of the GATT/Uruguay Round on the developing countries, fair trade, development aid for Asia and Latin America, the EU program for tropical forests and European policies towards indigenous peoples. She has extensive exposure to developing countries, and is active with non-governmental organizations and extremely committed to the cause of development. Ms. van Putten has closely worked with the WWF European Policy Office as a key political partner to promote better EU conservation and sustainable development policies. She was also a consistently active member of the ACP (African, Caribbean and Pacific Group)-European Union Joint Assembly. Ms. van Putten was a freelance multimedia journalist for most of her professional career, and was a Senior Fellow of the Evert Vermeer

Foundation from 1981 to 1989. She is the author of many articles and books on globalization, international division of labor and on gender issues. Currently a Vice-Chairperson of the European Center of Development Policy Management, Ms. van Putten is President of the Board of European Network of Street Children Worldwide (ENSCW). She holds a HBO (bachelor) degree in community development from Sociale Academy Amsterdam, and a master's degree in social sector management from Protestantse Voortgezette Opleiding (PVO) Amsterdam.

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Dr. Elliot Fratkin, is Professor of Anthropology at Smith College, Northampton Massachusetts, and Chair (1999-2002) of the Five Colleges African Studies Council. He received his PhD from Catholic University of America, M. Phil. from the London School of Economics and Political Science, and B.A. from the University of Pennsylvania. Dr. Fratkin is an authority on African pastoralist societies and has written 30 articles and four books on topics including drought and development policy in arid lands, health and social change in East Africa, and problems of African land tenure. Dr. Fratkin is a recipient of research awards from the National Science Foundation, Social Science Research Council, The Bill and Melinda Gates Foundation, and the Smithsonian Institution, and has served on review panels for the National Science Foundation, National Geographic Society, Fonds Pour la Formation de Chercheurs et l'Aide a la Reserche (Quebec), and the Netherlands Foundation for Tropical Research. He is an editorial board member of the journals *African Studies Review, Human Ecology*, and *Nomadic Peoples*.

Dr. Peter Pearson, BA, MSc (Econ.), PhD, is Reader in Energy & Environmental Economics and Director of the Environmental Policy and Management Research Group in the Department of Environmental Science and Technology at Imperial College of Science and Technology, London. He is a member of the Executive Committee of Imperial College Centre for Energy Policy and Technology. He has also held posts at the Universities of Glasgow and Surrey. In 1987-88 he was a Senior Visitor in Cambridge University Energy Research Group. From 1989-94, he headed Surrey University Energy Economics Centre (SEEC), and in 1993 held a UK Economic and Social Research Council Global Environmental Change Research Fellowship. He co-founded the Third World Energy Policy Study Group (1984-94) and was Secretary (1984-1991) of the Input-Output Research Association. He has been Vice President for Publications (1994-97) of the International Association for Energy Economics, Chair (1992, 2002) of the British Institute of Energy Economics and has served on the editorial boards of *Energy Economics, Energy Policy* and *The Energy Journal*. He is the author/co-author of more than 100 scholarly publications.

Mr. Miles Scott-Brown, M.E.Des., Environmental Specialist. Mr. Scott-Brown is a biologist with expertise in the resolution of environmental and social conflicts associated with large-scale energy and infrastructure development projects. He has a Master's Degree in Environmental Design from the University of Calgary (1984) and a B.Sc. (Hon.) Biology from the University of British Columbia (1976). For most of his 20-year career, Mr. Scott-Brown has been consulting to industry and governments on energy projects involving complex environmental and social issues. These projects were considered complex due to a lack of baseline data, poorly defined government regulations, lack of clearly defined public consultation processes and the incipient economic pressure to develop the energy resource. Resolution of these issues involved working closely with government, civil society and proponents in non-confrontational forums to resolve issues at an early project stage. The work has taken him to a variety of environments in North, Central and South America, Asia and Africa. Mr. Scott-Brown has served as Environmental Auditor of the World Bank, CAF and IDB funded Bolivia-Brazil gas pipeline to ensure compliance with project loan conditions and to oversee the implementation of ecological and social compensation programs. Other organizations he has worked previously with include the IUCN and the World Wildlife Fund. He currently resides in Santiago, Chile.