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**MANAGEMENT REPORT AND RECOMMENDATION
IN RESPONSE TO THE
INSPECTION PANEL INVESTIGATION REPORT**

CAMEROON

**PETROLEUM DEVELOPMENT AND PIPELINE PROJECT
(LOAN NO. 7020-CM)**

AND

**PETROLEUM ENVIRONMENT
CAPACITY ENHANCEMENT (CAPECE) PROJECT
(CREDIT NO. 3372-CM)**

May 28, 2003

**MANAGEMENT REPORT AND RECOMMENDATION
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OF THE
CAMEROON
PETROLEUM DEVELOPMENT AND PIPELINE PROJECT
(LOAN NO. 7020-CM)
AND
PETROLEUM ENVIRONMENT CAPACITY ENHANCEMENT (CAPECE)
PROJECT
(CREDIT NO. 3372-CM)**

Pursuant to paragraph 23 of the Resolution Establishing the Inspection Panel (IBRD Resolution 93-10 and IDA Resolution 93-6), attached for consideration by Executive Directors is Management's Report and Recommendation in response to the findings set out in the Investigation Report No. 25734 dated May 2, 2003, of the Inspection Panel on the captioned Projects in Cameroon—Petroleum Development and Pipeline Project (Loan No. 7020-CM) and Petroleum Environment Capacity Enhancement (CAPECE) Project (Credit No. 3372-CM).

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ABBREVIATIONS AND ACRONYMS

ASOSRP	Area Specific Oil Spill Response Plan
BP	Bank Procedure
CAPECE	Petroleum Environment Capacity Enhancement (CAPECE) Project
CED	Center for Environment and Development
CNLS	Comité National de Lutte contre le Sida (National Committee to Fight HIV/AIDS)
COTCO	Cameroon Oil Transportation Company S.A.
CPSP	Comité de Pilotage et de Suivi des Pipelines (Pipeline Steering and Monitoring Committee)
CS	Comité de Suivi
DBST	Double bitumen surface treatment
EA	Environmental Assessment
EAS	Environmental Alignment Sheet
ECMG	External Compliance Monitoring Group
EIMS	Environmental Information Management System
EMP	Environmental Management Plan
FEDEC	Foundation for Environment and Development in Cameroon
FSO	Floating Storage and Offloading Vessel
GoC	Government of Cameroon
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
IPE	Independent Panel of Experts
IP	Inspection Panel
IPP	Indigenous Peoples Plan (Indigenous Peoples Development Plan–IPDP)
LCC	Local Community Contact
MINEF	Ministry of Environment and Forests
NGO	Nongovernmental Organization
NOSRP	National Oil Spill Response Plan
OD	Operational Directive
OP	Operational Policy
PNDP	Programme National de Développement Participatif (Cameroon Community Development Program)
PSFE	Programme Sectoriel Forêts et Environnement (Forests and Environment Sector Program)
PRSP	Poverty Reduction Strategy Paper
SDR	Special Drawing Rights
SNH	Société Nationale des Hydrocarbures (National Hydrocarbons Company)
SONEL	Société Nationale d'Électricité du Cameroun
ToR	Terms of Reference
TOTCO	Tchad Oil Transportation Company S.A.
USAID	United States Agency for International Development
USD	United States Dollar
WCS	Wildlife Conservation Society
WWF	World Wide Fund for Nature

LIST OF OPERATIONAL POLICIES, OPERATIONAL DIRECTIVES, OPERATIONAL MANUAL STATEMENTS, AND OPERATIONAL POLICY NOTES

OD	4.01	Environmental Assessment, October 1991
OP/BP	4.04	Natural Habitats, September 1995
OD	4.20	Indigenous Peoples, September 1991
OD	4.30	Involuntary Resettlement, June 1990
OP	13.05	Project Supervision, July 2001
BP	17.50	Disclosure of Operational Information, September 1993

I. INTRODUCTION

1. On September 30, 2002 the Inspection Panel registered a Request for Inspection, IPN Request RQ 02/2 (hereafter referred to as “the Request”), concerning the Petroleum Development and Pipeline Project in Cameroon (the “Pipeline Project”), financed by the International Bank for Reconstruction and Development (IBRD), and the Petroleum Environment Capacity Enhancement (CAPECE) Project in Cameroon (“CAPECE”), financed by the International Development Association (IDA). The Request for Inspection was submitted by the Center for Environment and Development (CED), a local nongovernmental organization (NGO) based in Yaoundé, representing several residents who live along the pipeline route, as well as several workers or sub-contractors of Cameroon Oil Transportation Company S.A. (COTCO), who are all resident in the Republic of Cameroon (“Requestors”).

2. The Executive Directors and the President of IBRD and IDA (“the Bank”) were notified by the Panel of receipt of the Request. Management responded to the claims in the Request on October 29, 2002. Management replied to twenty-six specific claims, which concerned the Bank’s policies on Environmental Assessment, Natural Habitats, Indigenous Peoples, Involuntary Resettlement, Poverty Reduction and Supervision as well as matters related to labor relations and HIV/AIDS. Management’s response provided detailed discussion of cumulative impacts, institutional development, protected areas, the Bakola/Bagyeli people, compensation payments and processes, the Bank’s intensified supervision of the Pipeline Project and labor relations. The full response is available at www.inspectionpanel.org. In its Report to the Board, the Panel found the Request eligible and recommended that the Executive Directors authorize an investigation. The investigation was authorized by the Executive Directors on December 16, 2002.

3. On May 2, 2003, the Panel issued its Report (“Report”) outlining the findings of the investigation. Management appreciates the Panel’s clear, objective and thorough presentation of its findings. This report, responding to the findings of the Panel, is organized in five sections. Section II provides an overview of the status of the projects. Section III summarizes the findings of the Panel. Section IV presents Management’s Action Plan in response to the Panel’s findings, and Section V contains the conclusion. The Panel’s findings, along with Management’s responses, are presented in detail in Annex 1 and relevant Terms of Reference (ToRs) are included in Annex 2.

II. STATUS OF THE PROJECTS

PETROLEUM DEVELOPMENT AND PIPELINE PROJECT

4. The Pipeline Project in Chad and Cameroon is the single largest private sector investment in Sub-Saharan Africa. It is expected to cost about USD 3.7 billion, of which IBRD and the International Finance Corporation (IFC) are funding about 4 percent. The private sponsors, ExxonMobil of the United States (the operator, with 40 percent of the private equity), Petronas of Malaysia (35 percent), and Chevron of the United States (25 percent), which form a consortium (“the Consortium”), will develop three oil fields in southern Chad. The Pipeline Project will also comprise the construction of a 1,070-kilometer pipeline from the oil fields to Cameroon’s Atlantic coast at Kribi, three related pumping stations, ancillary facilities, infrastructure improvements, and installation of an offshore Floating Storage and Offloading (FSO) vessel with an 11-kilometer submarine pipeline from the coastline near Kribi to the vessel. See Map 1.

5. The Bank and IFC were originally approached to participate in the Pipeline Project in 1992. The involvement of the Bank and IFC in the Pipeline Project is predicated on: (i) the unique opportunity it presents for Chad as well as Cameroon to generate additional revenues to combat poverty; and (ii) the need to implement the Pipeline Project in a socially and environmentally sound manner in both countries. This approach to the Pipeline Project has been essential in integrating a range of relevant challenges into Project preparation, including social and environmental issues.

6. The Pipeline Project was prepared by the Consortium and the Governments of Chad and Cameroon, with the assistance of the Bank, IFC and other public and private lenders, from 1993 to 1999. The Consortium and the Government of Chad have established TOTCO (Tchad Oil Transportation Company S.A.) and the Consortium and the Governments of Chad and Cameroon have established COTCO. These two joint-venture companies own and operate the Chad and Cameroon portions of the Export System. Esso Export and Production Chad, Inc. is the Petroleum Development and Pipeline Project's manager and operator, responsible for overall coordination of the Pipeline Project, with TOTCO and COTCO, the two Governments, the Bank, IFC, and other lenders.

7. The Pipeline Project was appraised by IBRD in late June and early July 1999 and negotiated from February to April 2000. An IBRD loan of USD 53.4 million to the Republic of Cameroon, which will finance part of the equity of the GoC in COTCO, was approved by the Executive Directors on June 6, 2000. An IFC A Loan of USD 100 million, which mobilized up to USD 100 million in commercial bank lending to fund a portion of the Project costs of the Export System in Chad and Cameroon, was approved by IFC's Executive Directors on June 6, 2000. The European Investment Bank, like IBRD, provided financing to the GoC (about USD 29.6 million equivalent) to finance part of the equity investment in COTCO.

8. The Pipeline Project will provide additional revenues in Cameroon that can be used for the social sectors and other essential public expenditure needs. Cameroon's revenues expected from the pipeline are not significant enough (about 3 percent of total Government revenues) to justify a special mechanism, such as that provided under Chad's Petroleum Revenue Management Program; in addition, Cameroon's reform program, supported by the Bank, includes efforts towards budget consolidation. Through its lending program and country dialogue, the Bank is assisting Cameroon to use the benefits of the pipeline activity to support its poverty reduction strategy. Cameroon's full Poverty Reduction Strategy Paper (PRSP) was transmitted to the Bank and the International Monetary Fund in April 2003.

9. As stated in the Project Appraisal Document, the development objective of the Pipeline Project in Cameroon is to increase fiscal revenues available for financing priority development expenditures, through environmentally and socially sound private investment in the petroleum sector and in the context of the GoC's strategy for economic growth and poverty reduction. The construction and operation of the pipeline is a major project that will provide significant income to the Cameroonian economy through transit fees, the GoC's dividends from its share of COTCO, and taxes. Effective environmental and social protection will minimize the direct and indirect costs to Cameroon associated with this pipeline.

10. Before the Pipeline Project was appraised, the GoC established an interministerial committee, the Comité de Pilotage et de Suivi des Pipelines (CPSP), by Decree 97-116 of July 7, 1997. The Administrator General of the National Hydrocarbons Corporation (Société Nationale des Hydrocarbures – SNH) is the Chairman of the CPSP, which is comprised of representatives

from all ministries and agencies involved in the supervision and monitoring of pipeline construction and operation. The CPSP has two arms:

- The “Comité de Suivi” (CS) is the steering, monitoring and administrative arm, comprised of representatives of fifteen ministries involved in authorizing, overseeing, and monitoring pipeline construction and operation activities. The Chairman reports to the President of the Republic. Among its other duties, the CS is responsible for ensuring that all the parties involved comply with their obligations under the 1999 Environmental Assessment/Environmental Management Plan (EA/EMP), including the Compensation Plan; and
- The “Permanent Secretariat” is the operational arm in charge of implementing the mandates of the CPSP at field level, and reporting to the CS.

The operating rules and procedures of the CPSP and the Permanent Secretariat were defined by a Presidential Arrêté of August 24, 1999 which clarified the implementing rules of Decree 97-116. This Arrêté also established the administrative structure of the CPSP, which has six operational units to implement its mandates. They are staffed with environmental, pollution control, economic, social and health experts.

11. The Consortium and the GoC share the responsibility for implementing the Pipeline Project. The Pipeline Project was designed in such a way that COTCO is responsible for most of the implementation of the 1999 EA/EMP. The GoC is responsible for implementation of part of the compensation process, in cooperation with COTCO, and for overall supervision and monitoring of implementation of the 1999 EA/EMP, in accordance with the applicable laws and regulations of the country and procedures spelled out in the 1999 EA/EMP itself.

12. During preparation of the Pipeline Project, the institutional framework described above and Cameroon’s capacity were assessed and determined to require additional support in order to successfully supervise and monitor the 1999 EA/EMP. Bank-GoC dialogue on the capacity issue resulted in the design and implementation of a capacity-building project (CAPECE) to benefit the CPSP and the various ministries and agencies involved in the supervision and monitoring of the 1999 EA/EMP.

PETROLEUM ENVIRONMENT CAPACITY ENHANCEMENT (CAPECE) PROJECT

13. The IDA-financed CAPECE (SDR 4.30 million, equivalent to USD 5.77 million) was approved on June 6, 2000, and declared effective on March 28, 2001. The objectives of CAPECE are to: assist the GoC to develop and establish a national capacity for the environmental management and monitoring of the Pipeline Project; and on a medium- to long-term basis, to help ensure the environmental sustainability of future projects, programs and policies in the petroleum sector in Cameroon. To achieve these objectives, CAPECE was designed to: (i) support the strengthening of the institutional, legal and regulatory framework for environmental management in the petroleum sector; (ii) strengthen the Permanent Secretariat’s central units and field-based multi-disciplinary teams to monitor socio-economic, bio-physical and health impacts, including HIV/AIDS, along the pipeline route on a regular basis during the construction phase and later during operation of the pipeline; (iii) coordinate and monitor field activities including support to other ministries and agencies involved in monitoring implementation of the 1999 EA/EMP for the pipeline; (iv) enhance information, education, communication and health programs related to pipeline construction and operation; and (v) manage and monitor environmental information. Though significant delays were experienced in developing the capacity of CPSP to utilize IDA

funds, the costs of putting the central and field units in place were pre-financed by the GoC through the SNH, so that environmental monitoring field teams have been present during the pipeline construction period.

III. FINDINGS OF THE PANEL

14. The Panel noted that two distinct phases of the Pipeline Project form the basis of its analysis of compliance with OD 4.01 on Environmental Assessment. The first phase is the Evaluation and Assessment Phase (defined by the Panel to include initial stages of project preparation through Board approval in June 2000), while the second is the Implementation and Monitoring Phase (after June 2000).

15. The Panel found that the Bank is **in compliance** with its policies and procedures with regard to the following issues raised by the Requestors. In several instances where the Bank was in compliance with its policies and procedures, the Panel amplified its comments as part of its pro-active role to enhance the quality of Bank projects. These are noted, as appropriate.

Table 1. Panel Findings of Compliance	
Operational Policy	Issue
OD 4.01, Annex B	Analysis of alternatives
OD 4.01	Water quality impacts Management should continue to monitor each specific situation to ensure that a resolution amenable to all parties has been reached.
OD 4.01	Impacts on freshwater fisheries
OD 4.01, para.11	Greenhouse gas emissions
OD 4.01	Dust COTCO should continue to mitigate impacts by the continued implementation of DBST measures, or watering of the road surfaces, while ensuring that water withdrawal is within limits prescribed by the 1999 EA/EMP.
OP 4.04, para.5	Natural habitats Bank staff should work closely with the Ministry of Environment and Forests (MINEF) and the Foundation for Environment and Development in Cameroon (FEDEC) and the World Wide Fund for Nature (WWF) in devising means and procedures for cooperation and achieving sustainable land use under a variety of protective mechanisms. The Panel urges Bank staff and FEDEC to work closely with MINEF to ensure that illegal logging does not occur again within the boundaries of the Campo Ma'an protected area and that sustainable land use practices in the surrounding buffer zone areas take place. Management has the responsibility to supervise the activities of FEDEC to ensure that the recently signed contract with the WWF for Campo Ma'an and the Wildlife Conservation Society (WCS) for Mbam Djerem will result in clear objectives and management responsibilities in conjunction with MINEF.
OD 4.01 and OP 4.04	Environmental Management Plan Removal of all temporary bridges (including the Lom River Bridge) is necessary to ensure compliance with the 1999 EA/EMP (and the spirit of OD 4.01 and OP 4.04).
OD 4.01, para.19 and BP 17.50	Consultation and disclosure In the Implementation Phase, it is important that stakeholders understand the components of the projects and their effects. A renewed Project outreach effort should be initiated now that the operation phase is imminent.
OD 4.01, Annex A (o)	Occupational health and safety

OD 4.30	Compensation process
OD 4.30	Grievance mechanism While not a requirement of the 1999 EA/EMP, the External Compliance Monitoring Group (ECMG) and the International Advisory Group (IAG) both felt that an approach to get “closure” in each community was important. During the January 2003 visit, the ECMG proposed that COTCO establish a cut-off date for the submission of grievances associated with construction activities, and then tie the resolution of these grievances into a Social Closure process.
OD 4.20, paras. 2 and 6	Direct adverse impact on indigenous peoples
OD 4.20, para. 8	Consultation process with indigenous peoples
OD 4.20, paras. 13-18	Indigenous Peoples Plan (IPP) In compliance except for geographical scope of baseline data.

16. The Panel found that the Bank was **not in compliance** with its policies and procedures regarding the following issues raised in the Request for Inspection:

Table 2. Panel Findings of Non-Compliance	
Operational Policy	Issue
OD 4.01, para.13	Independent Expert Panel
OD 4.01, para. 2 of Annex C and para.7 of Annex D	Baseline data
OD 4.01, para. 5	Cumulative impact assessment
OD 4.01, para.12	Institutional capacity “Non achievement of the purpose” of this paragraph with regard to strengthening of local capacity to adequately assess construction impacts.
OD 4.01	Health Absence of regional assessment of the health risks (part of baseline data, see above).
OD 4.20	Geographical Scope of Surveys Lack of baseline surveys outside the right-of-way of the pipeline on Bakola/Bagyeli use of forest for hunting.

17. **OP 13.05 – Project Supervision.** The Panel found that adequate resources and attention continue to be given by the Bank to the supervision of the Pipeline Project. However, the Panel also noted that, regardless of how well-structured external supervision may be, it cannot serve as a substitute for in-country monitoring. The Panel further observed that there is no local supervision team in place to handle the volume and quality of supervision required by the Project and stressed that the persistence of this shortcoming will certainly frustrate an important goal of the Bank’s policy on Project Supervision. This issue is further discussed in Item 22 of Annex 1.

Key Issues

18. **Independent Panel of Experts.** The Panel found that the Bank was not in compliance with OD 4.01 (para. 13) concerning an advisory panel of independent experts, because the Independent Panel of Experts (IPE) was not fully engaged during the preparation and approval of the 1999 EA/EMP, once its participation was discontinued. Management acknowledged in its October 2002 response to the Request that compliance was partial, as a result of the termination of contractual arrangements between GoC and the IPE after its first year.

19. The Panel observed that the roles and responsibilities of an IPE need to be defined, now that the construction phase is almost completed, in conjunction with the CPSP and the SNH, in order to comply with the requirements of paragraph 13 of OD 4.01 concerning EA

implementation and development of environmental management capacity. As stated in the Investigation Report (para. 26), “Given the difficulties encountered with the first IPE over a failure to agree on its roles and responsibilities, the Panel has doubts regarding the real value of the IPE in this context. Clearly the opportunity exists to avoid the problems encountered with the first IPE.” The Panel further noted that the new IPE would need to have a credible niche that meets the institutional capacity and technical needs of the CPSP/SNH and does not duplicate the activities and functions of the IAG and ECMG.

20. The Panel observed that Bank staff must have a clear role in defining the participation and responsibilities of the new IPE in conjunction with the GoC. Some specific activities for the IPE may include reviewing and monitoring the implementation of the National Oil Spill Response Plan (NOSRP) in conjunction with the Project’s Area Specific Oil Spill Response Plans (ASOSRP), monitoring of the restoration of the pipeline right-of-way, input into the formulation of the proposed Long-Term Vision Study of the Environmental and Social Management of the Petroleum Sector and development of an effective environmental, health and social monitoring capacity within the CPSP.

21. Management shares the concerns raised by the Inspection Panel about the value of an independent panel in the specific context of EA implementation and development of environmental management capacity. Management agrees with the Panel’s observations that a credible “niche” needs to be found without duplicating the efforts of IAG and ECMG. Staff engaged in project supervision have considered two options for achieving independent review: (i) an independent panel per se; and (ii) individual independent experts engaged to review specific activities. Staff have also been especially mindful of adding value to the ongoing work of the IAG and ECMG and of not creating a situation wherein strained relationships between an IPE and the GoC could again arise. In view of these considerations and the highly technical nature of work related to the NOSRP, training, and pipeline operation monitoring, Management, in consultation with CPSP during previous supervision missions, has concluded that individual independent experts, rather than a Panel per se, would provide value-added work and not duplicate the efforts of the ECMG and the IAG. More detail is provided in Item 1, Annex 1 and Terms of Reference for the Independent Experts are contained in Annex 2.

22. In recognition of the importance of independent advice on highly risky and contentious projects with serious and multidimensional environmental concerns, Management would welcome an opportunity to discuss with the Inspection Panel what constitutes “independent” advice in the context of the Pipeline Project and CAPECE. The IAG and the ECMG report to the Bank and to the IFC for contractual purposes. Given the nature of their contractual arrangements, they do provide an independent check on the projects. They provide advice resulting from their own field reviews and their own reports. An IPE reporting to the GoC, although independent of the Bank and the IFC, could also be subject to criticism that it was not independent of government’s views.

23. **Baseline Data.** The Panel commented on lack of baseline data in three areas. Environment and public health, in particular related to HIV/AIDS prevalence, are addressed here and in Annex 1. The geographical scope of surveys for forest use by the Bakola/Bagyeli is addressed under Item 21 of Annex 1.

24. **Environment.** The Panel found that overall there was limited baseline data upon which to base approval of the Pipeline Project and greater efforts should have been made to collect at least one year’s baseline data during the Project Evaluation and Assessment Phase. The Panel noted COTCO’s extensive commitment to an ongoing collection of baseline data, but observed that this

has occurred only since the start of Project implementation. However, there is still a limited amount of information available on pre-project conditions. Many of the resource conflicts that have arisen during Project construction could have been avoided by having a full year's availability of baseline information prior to Project approval. The Panel cited the importance of collecting sufficient baseline data prior to project approval to ensure that the best information is at hand for informed decision-making and to provide an adequate background for the project to proceed.

25. Management acknowledges the Panel's finding (para. 35) that baseline surveys identified key environmental information; that the Bank attempted to incorporate this information prior to construction; and that it was found to be sufficiently detailed and well-prepared to serve as a basis for ongoing monitoring.

26. OD 4.01, Annex C (para. 2) concerns mitigation measures. Management believes that mitigation to reduce potentially significant adverse environmental impacts to acceptable levels is based on sound baseline data. The Panel acknowledges the existence and use of the series of Environmental Alignment Sheets (EAS), which plots baseline environmental data on the footprint of the selected route at a scale of 1:10,000 and was instrumental in assuring effective environmental management and mitigation during Pipeline Project implementation. The EASs were also used in each of the ASOSRPs and are available to the four Spill Response Centers in Cameroon. The Pipeline Project has also carried out a 4,000-household socio-economic baseline survey along the pipeline route in advance of construction. This survey was recently re-run to measure Project-related changes, including impacts of employment, compensation, and other developmental initiatives at the community and household levels.

27. Management's understanding of OD 4.01, Annex D (para. 7) is that it provides for the use of short-term data (less than a year) as a surrogate for annual data, while longer term data are being collected. It also notes that short-term data may be used in order to avoid delays in critical project decisions. In this case, Management concluded that there were no major baseline uncertainties that would result in systemic problems during implementation and that long-term baseline data could be collected throughout the Implementation and Monitoring Phase. Management agrees with the Panel that individual, but not systemic, resource conflicts could have been avoided had there been more baseline data. However, in Management's view, even a full year of baseline data would not have been a surrogate for the longer-term pattern. The overall benefits of the Pipeline Project, despite some individual resource conflicts (handled routinely by COTCO EMP staff), warranted the decision to proceed with the financing of the Pipeline Project.

28. In conducting EAs, the question of how much data is enough frequently arises, given the need to make case-by-case judgments on the type and amount of data to be collected. The problem is exacerbated in situations where agencies have not routinely collected baseline environmental data. Original field data collection, however detailed, cannot replace historical, multi-year data that would show trends and the extent of "normal" variation. In the early years of EA practice, EAs often presented voluminous data but lacked sufficient attention to impact analyses, design of mitigative measures and monitoring. OD 4.01, Annex D (para. 7) recognizes that trade-offs have to be made between the amount of data collected and the need to provide estimates of environmental impact, while not delaying project decisions. In the case of the pipeline, Management considered the trade-offs, because the data collected did provide a sufficient basis for mitigative measures through the EASs and for monitoring. In the context of the Pipeline Project, Management would welcome an occasion to exchange views with the Inspection Panel on what should constitute adequate data collection.

29. The Pipeline Project will undertake activities to provide additional data and access to baseline data, as suggested by the Panel.

- A third run of the household socio-economic baseline survey along the pipeline route will be carried out in the post-construction period to assess sustainability and gauge the net socio-economic impact of the Pipeline Project on affected communities.
- Based on discussions with the IAG, COTCO has developed a list of Project-related documents that would be usefully placed in universities and institutions in Cameroon. These documents are mainly environmental and socio-economic materials prepared for the pre-approval assessment of the Pipeline Project and follow-up studies that have been subsequently undertaken. COTCO's EMP Manager recently sent a letter to the Cameroon Minister for Higher Education proposing distribution in Cameroon similar to distribution that has occurred in Chad. Once the distribution of these reports is complete, the Pipeline Project will update its website to indicate where the reports have been placed for review.

30. **Health.** Health impacts were reflected in the 1999 EA/EMP but only to a limited extent. The Panel found that the omission in the 1999 EA/EMP of an up-to-date regional health assessment with particular focus on risk and impact of the Pipeline Project in Cameroon (as well as Chad), and the omission of a long-term plan aimed at risk mitigation, was a serious shortcoming at the Project preparation phase. The ECMG, which was engaged for the Pipeline Project after 2001, noted that the Project needed to consider not only a wider risk assessment of HIV/AIDS, but also a community health profile of the region in general, including maternal and child health assessments. The Panel concurred with ECMG's observations and their position on the approach to be taken regarding the public health impacts of the Pipeline Project. The Panel found that Management was aware of the need to undertake a wider regional assessment of the health risks posed by the Pipeline Project, particularly a sero-epidemiological study to assess the risk of HIV/AIDS in the pipeline construction region.

31. Management acknowledges that the 1999 EA/EMP reflected health impacts to a limited extent, with a focus on workers and not on community health issues, and that current baseline data were lacking. Having recognized this shortcoming, the Bank has emphasized the need to accelerate health activities, especially those related to HIV/AIDS. IDA, through CAPECE assisted the GoC in the selection of five health focal points along the route of the pipeline, the establishment of a health center in Dompta and planning for the opening of two additional health centers. The agreement between the National Committee on HIV/AIDS and COTCO is being implemented and provides training and health education to communities in the Project area.

32. Management acknowledges that no comprehensive sero-epidemiological study was either requested or carried out during the EA preparation. However, as part of CAPECE, it was planned to strengthen the capacity of the Borrower to collect and analyze health-related statistics through health and medical surveys and analysis in the Project area. Such a sero-epidemiological study has not been undertaken through CAPECE, as the GoC decided that the study would be done under the then proposed HIV/AIDS Project.

33. The Multisectoral HIV/AIDS Project in Cameroon ("the HIV/AIDS Project") provided for a baseline sero-epidemiological and behavioral study to be carried out during the first year of the Project (2001-2002). The Bank planned to use this study to obtain baseline information and report on information from districts in the pipeline corridor. However, implementation of the study was delayed; it was launched in early May 2003 with the assistance of the United States Agency for International Development (USAID) and IDA. The IDA share in the study is USD 0.5

million. The study will not be completed before the end of 2004. In the interim, the HIV/AIDS Project team has visited communities along the pipeline route during supervision missions and recommended to GoC to hire NGOs for community sensitization and social marketing of condoms. CAPECE has unused funds for this purpose which may be made available to the Comité National de Lutte contre le Sida (CNLS) to fund NGO activities in the pipeline corridor. The Bank and the GoC have discussed making activities in the pipeline corridor a priority in the national HIV/AIDS program. However, the GoC has preferred to take a nationwide approach without privileging any particular region of the country.

34. The Minister of Health has agreed to develop an action plan for the development of health care facilities along the pipeline route to address health in a comprehensive manner beyond the HIV/AIDS issue. Doctors and staff are being appointed for the focal points, a health care map is being developed and discussions are underway between the Minister of Health and other stakeholders, including the CPSP, on the equipment and allocation of additional resources to the planned or existing healthcare facilities. The CAPECE Mid-Term Review mission will explore further actions that may be taken by GoC with IDA support to promote public health in the Project area, including actions to address HIV/AIDS.

35. **Cumulative Impact Assessment.** The Panel believes that a cumulative impact assessment of the Pipeline Project in Cameroon should have been completed taking into account the future oil development in northern Cameroon and new oil/gas fields off the Cameroon coast, in addition to large scale regional oil and gas developments that are planned for Equatorial Guinea, Gabon and Nigeria. The Panel noted that additional projects in the vicinity of the Pipeline Project, such as the proposed Lom Pangar dam and the European Union-funded highway linking southern Chad to northern Cameroon, should have been incorporated into a cumulative effects assessment. As regards the Implementation and Monitoring Phase of the Pipeline Project, the Panel noted that the cumulative effects of an oil spill off the Cameroonian coast must be addressed in the ASOSRP for that area. The Panel also noted that the proposed Long Term Vision Study for Environmental Management of the Petroleum Sector should incorporate analysis of the Project's cumulative effects.

36. The Panel stated that it was troubled by Management's narrow interpretation of the cumulative impacts of the Pipeline Project. Management notes that since the 1999 EA/EMP was prepared, attention to cumulative effects analysis and Regional Assessment in the context of a private sector project has increased. Management believed, at the time, that the 1999 EA/EMP adequately responded to the Bank and IFC comments made on the draft 1997 EA with respect to covering cumulative effects. The Panel asked the basis for Management's response to the Request "that cumulative impacts of the Pipeline Project are expected to be below the threshold that would warrant further analysis or a formal cumulative impact assessment" (Report, para. 53). The decision not to pursue such a formal cumulative impact assessment was based on the professional judgment of staff, given the limited impacts of pipeline operation once the construction phase was completed.

37. Information about other projects—such as the proposed Lom Pangar dam and the new European Union-funded highway, or future development of upstream oil in northern Cameroon—was more limited at the time the 1999 EA/EMP was prepared. The proposed Lom Pangar dam was not considered to be a viable option, since its economic feasibility had not been confirmed, its financing was considered improbable and the pipeline had already been rerouted to avoid jeopardizing the biodiversity of the Deng Deng forest. Oil developments in northern Cameroon were also not considered likely. The European Union-funded highway improvement, which was approved prior to the Pipeline Project, links to the existing Cameroon highway network but does

not otherwise interface with the Pipeline Project; consequently, cumulative impacts were expected to be low. Since the pipeline is now in place and the proposed Lom Pangar dam and future development of oil in northern Cameroon would themselves necessitate environmental assessments, current good practice suggests that those assessments should incorporate the analysis of cumulative impacts, including the pipeline. This is especially true of the proposed Lom Pangar dam (see paras. 50-52), development of which could directly affect the pipeline. If proposals for oil development in northern Cameroon were put forth and the COTCO pipeline were to be used, the legal agreements for the Pipeline Project require the application of Bank safeguard policies. The cumulative impacts of regional oil and gas developments in neighboring countries are addressed in the context of the oil spill response plans.

38. Because the Pipeline Project is in the Implementation and Monitoring Phase, the analysis of broader cumulative effects is being incorporated into ongoing studies in Cameroon, as described below.

39. Management agrees with the Panel's observation (Report, para. 56) that the cumulative impacts of an oil spill off the Cameroonian coast need to be assessed and that the proposed Long-Term Vision Study of the Environmental and Social Management of the Petroleum Sector should incorporate analysis of the Pipeline Project's cumulative effects. The NOSRP contains analysis of potential impacts of oil spills at local, regional and national levels. The NOSRP also takes into account international and regional conventions related to the prevention of, and cooperation to, fight oil spills in the marine environment; it also suggests modes for cooperation with neighboring countries in case of an oil spill emergency. Although the pipeline does not cross any area protected under the laws of Cameroon, the NOSRP analyses potential impacts of an oil spill on protected areas close to the pipeline route and provides mitigation strategies. The NOSRP: (i) integrates the ASOSRPs developed by COTCO for four specific sensitive zones along the pipeline right-of-way; and (ii) complements their action plans and instruments to address any oil spill along the pipeline right-of-way, including beyond its strict limits.

40. Specifically, the Draft Cameroon National Oil Spill Response Plan prepared in February 2003 contains an extensive simulation of the cumulative impacts of multiple oil spills from Cameroonian sources, Cameroonian ports, oil tanker accidents in Cameroonian marine and estuarine waters, but also including oil spills originating from Nigerian and Equatorial Guinean sources. Cumulative impacts have been simulated and are presented on pages 22 to 58 of the draft NOSRP. Management believes that the cumulative effects assessment of multiple oil spills from marine and coastal risk sources was done according to best international practice.

41. The Long-Term Vision Study of the Environmental and Social Management of the Petroleum Sector will address the cumulative impact of the Pipeline Project through projection of its impacts on the overall economic and social development of Cameroon and their environmental and social consequences.

42. **Institutional Capacity.** The Panel has expressed concerns about institutional capacity in two areas: (i) the role of CAPECE in building the local institutional framework for monitoring the pipeline on behalf of GoC; and (ii) FEDEC's role in ensuring the protection of Campo Ma'an and Mbam Djerem environmental offset areas and in implementing IPP-related programs.

43. **CPSP.** The Panel expressed several concerns and conclusions about institutional capacity to monitor the pipeline:

- It was not possible for the CPSP to have a fully independent monitoring capability to assess environmental and social compliance of the 1999 EA/EMP as originally envisaged by CAPECE, since resources and personnel were not provided in a timely fashion to ensure that this was achieved.
- Management must continue to work closely with the CPSP to ensure that the monitoring capacity of the CPSP is improved during the operation phase and that the deliverables resulting from implementation of CAPECE are produced according to schedule.
- Without further guidance and direction from the Bank, the CPSP may never develop a fully functional environmental monitoring capacity, as the pressure to do so as part of project construction activities no longer exists.
- After considering the Requestors' proposal that a moratorium be imposed on the Pipeline Project during which adequate capacity within GoC could be developed, the Panel concluded that a moratorium realistically could not have been put in place.
- The Panel is troubled with the fragility of the local institutional framework which, ultimately, is in charge of monitoring the Pipeline Project on behalf of the GOC. The delays associated with the implementation of CAPECE which was specifically designed to mitigate this fragility, affected the GoC's performance during the entire construction period.

44. Management shares the Panel's concerns and has been working with the GoC over the last two years to support satisfactory implementation of activities under CAPECE, the budget of which is USD 11 million over five years. The delays associated with implementation of CAPECE are acknowledged in aide-memoires and follow-up letters shared with the GoC. Actions are being implemented and/or launched to build the needed capacity to deal with the Pipeline Project and its impacts on the surrounding human and biophysical environment. Progress has been made, although at a very slow pace, in developing the capacity of the CPSP during implementation of CAPECE. CPSP's field team has gained experience in field monitoring and supervision, organization and implementation of multi-expert field missions, better understanding of environmental, social and health issues in connection with large infrastructure projects, conflict resolution in rural areas, and communication strategy implementation. This progress needs to be strengthened with a view to sustaining the CPSP's work over the life of the Pipeline Project and beyond, to deal effectively with environmental and social impacts associated with the petroleum industry. While the Panel notes that efforts must be made to accelerate the implementation of CAPECE, realistically, the pace of CAPECE cannot be accelerated much more than it has been, given institutional and human resource constraints in the country.

45. The planned Mid-Term Review of CAPECE between May 26 and June 7, 2003 is an important opportunity to assist the GoC through the CPSP to complete ongoing actions and launch new ones to procure services and equipment and train staff to improve its capacity, particularly in the new context of operation of the pipeline. Annex 1, Item 5 lists the activities that will be a focus of the Mid-Term Review.

46. **FEDEC.** The Panel was in agreement with Management that activities of FEDEC to ensure the protection of the Camp Ma'an and Mbam Djerem environmental offset areas have begun slowly, but concluded that this in itself does not constitute non-compliance with OP 4.04. The Panel also had several suggestions regarding the building of institutional capacity to ensure proper management of these areas.

- The future of Campo Ma'an protected core and surrounding buffer zone depends upon the actions of the GoC through MINEF, the Ministry responsible for its management. Bank staff should work closely with MINEF and FEDEC-WWF in devising means and procedures for cooperation and achieving sustainable land use under a variety of protective mechanisms. (Management notes that the same applies to the future of Mbam and Djerem, which is now the subject of cooperation between FEDEC and WCS.)
- The illegal logging infraction, while small, indicates a larger systemic problem of capacity within MINEF to clearly identify logging concession boundaries and their institutional capacity for enforcement.
- The Panel hoped the relationship between FEDEC and WWF would provide FEDEC with needed technical assistance in regard to protected area management and help to develop an effective working relationship with MINEF in the protection of the Campo Ma'an protected core. The Panel suggested several key activities including: developing terms of reference and shared management responsibility between FEDEC/WWF and MINEF for the Campo Ma'an protected core; identification and removal of conflicting resource extraction activities within the protected core boundaries and developing mechanisms and procedures to prevent encroachment from outside; working with other resource users outside of the Campo Ma'an park to develop an integrated landscape management strategy; and raising additional conservation funds.

47. The Bank team is assisting in the establishment of closer working relationships between COTCO, CPSP, FEDEC and MINEF, as described in Item 12 of Annex 1. Clarification of the roles and responsibilities of each stakeholder in the implementation of the offset will be further discussed during the CAPECE Mid-Term Review Mission and within the proposed Forest and Environment Sector Program (PSFE – Programme Sectoriel Forêts et Environnement). Concerning measures to help prevent illegal logging, two complementary mechanisms are in place. The first is an addendum to the concession contract between the GoC and the logging company operating closest to the Park, which commits the company to collaborate actively with Government authorities in preventing illegal logging and commercial poaching. The second mechanism involves the services of an Independent Observer to assess compliance with logging laws and regulations (a service currently provided by the international NGO, Global Witness) and detect weaknesses by the private sector and government institutions. The activities of the proposed Cameroon Community Development Program (PNDP – Programme National de Développement Participatif), along with the community-oriented communication strategy of the CPSP and the future investment program under the PSFE, will constitute a comprehensive action plan to help sustain the protection of the two parks and achieve development objectives for neighboring communities and stakeholders.

48. With regard to implementation of the IPP, the Panel examined concerns related to delays in implementation, budgetary allocation, and types of activities programmed or implemented.

- The Panel found that while the delays in implementing FEDEC were unfortunate, they may have been unavoidable, given the capacity predicament of the GoC and the undefined and in-process nature of the specific IPP plans.
- The Panel recognized that, as a result of Bank intervention and oversight, FEDEC is now up and running and moving ahead with its programs.

- The Bank could ensure that FEDEC implements the IPP effectively and that its Board members are adequately compensated and have the necessary logistical support to function effectively.

49. Management will continue to monitor closely progress on implementation of the IPP by FEDEC and will discuss as appropriate ways and means to address indigenous peoples issues including access to wildlife. Additional information is provided in Item 21, Annex 1.

Additional Issue

50. **Lom Pangar Dam.** During its investigation, the Panel also became aware of a proposed project to construct a hydropower dam on the Lom and Pangar Rivers. The 1999 EA/EMP describes the project as follows: “*The Société Nationale d’Électricité du Cameroun (SONEL) has proposed to construct a hydroelectric dam located on the Lom River, approximately 4 kilometers downstream from the confluence of the Pangar and Lom rivers to supply energy to the eastern region of Cameroon. The proposed project would create a reservoir with an estimated 7.5 billion cubic meter capacity covering an area of approximately 65,000 hectares. The reservoir would consist of two unequal branches: the Lom branch would extend 120 kilometers, up to the falls of Bangbel, about 20 kilometers north of Betare Oya; the Pangar branch would form a crescent with a total length of 65 kilometers north of the dam. SONEL has published its environmental assessment of this project and reported that completion of the dam would take over four years.*” (EMP, Volume 2, pp. 8-18). The Panel observes that not only would this project lead to a significant loss of the Deng Deng Forest, either through prior logging or posterior flooding, it would also pose a problem for the integrity of the Pipeline Project since it would have to be re-excavated and concrete weighting provisions added. It would also possibly threaten the newly established Mbam Djerem protected area as water access [would then be possible].

51. Management recognizes the concerns raised by the Panel as to the proposed Lom-Pangar dam project. Because it shares these concerns, in February 2003, Management communicated them in writing to the GoC. This exchange of views with the GoC followed their request for the Bank’s comments on draft ToRs for an environmental impact assessment study for the proposed project, and were reiterated to the most senior authorities in May 2003, during the Africa Region Vice-President’s visit to Cameroon. It should be noted however, that the Lom Pangar project is neither funded by the Bank, nor currently under consideration for Bank funding.

52. The view of the GoC is that the potential advantages of the proposed Lom Pangar dam project argue in favor of a detailed environmental assessment. Although Management recognizes that more information is needed to arrive at a definitive judgment, it will continue to impress upon the authorities its view that the proposed project raises serious environmental issues and risks sending a contradictory message to COTCO, which incurred substantial expense to avoid the environmentally sensitive Deng Deng area. Management is well aware of the need to find cost-effective solutions to the country’s chronic and growing power shortage, which is visibly constraining economic growth. In coordination with other interested donors, it is engaged in an effort to establish a constructive working relationship with the Cameroonian authorities to assess existing and potential electrical power generation and transmission assets as well as current and future energy requirements. In this context, Management is discussing with the authorities the current high rate of dependence (about 95 percent) of electrical power generation in the country on hydropower dams, which makes for high vulnerability to seasonal and longer-term cyclical changes in rainfall and hydrology. It is also discussing with them the links between the imperative of expanding low-cost power generation capacity and the substantial requirements for aluminum smelting (which currently benefits from below-cost power), and is encouraging and offering to

assist with an in-depth assessment of the optimality of aluminum smelting operations (especially an intended expansion of such operations) as an integral part of assessing long-term options for the expansion of power generation capacity.

IV. MANAGEMENT'S ACTION PLAN IN RESPONSE TO THE FINDINGS

Table 3. Proposed Management Action Plan	
ISSUE	ACTION
Environmental Assessment and Mitigation Measures	
OD 4.01, para 13: Independent Panel of Experts (Annex 1, Item 1)	<p>Independent Panel of Experts: Management is working with the CPSP to provide for independent experts to be contracted to help with: (i) review of the NOSRP; (ii) monitoring of the implementation phase of the offshore portion of pipeline construction and the operationalization of the offloading facility; (iii) implementation of the training program; and (iv) monitoring of pipeline operation in high risk zones. The contracting process for the independent expert to assist in the review of the NOSRP is underway; ToRs are being prepared to address the other tasks. See Annex 2.</p> <p>In addition, under the ToRs for the Long-Term Vision Study of the Environmental and Social Management of the Petroleum Sector in Cameroon, it is contemplated that the GoC will develop a comprehensive approach to the subject including: (i) a survey of all planned investments in the petroleum sector; (ii) drawing lessons learned from the Chad-Cameroon Pipeline project; (iii) identification of strengths and weaknesses of the institutional framework for environmental and social management of the petroleum sector, including monitoring and supervision of pipelines and other oil-related infrastructure; and (iv) recommendations for further design and development of an institutional framework conducive to environmentally and socially sustainable management of the petroleum sector. Experts for this task will be hired during the last quarter of 2003.</p>
OD 4.01, paragraph 2, Annex C and paragraph 7 of Annex D of OD 4.01 (Annex 1, Item 2)	<p>Baseline Data.</p> <p>Survey. A third run of the household socio-economic baseline survey along the pipeline route will be carried out in the post-construction period to assess sustainability and gauge the net socio-economic impact of the Pipeline Project on affected communities.</p> <p>Access to Data. Based on discussions with the IAG, COTCO has developed a list of Project-related documents that would be usefully placed in universities and institutions in Cameroon. These documents are mainly environmental and socio-economic materials prepared for the pre-approval assessment of the Pipeline Project, together with follow-up studies that were undertaken subsequently. COTCO's EMP Manager recently sent a letter to the Cameroon Minister for Higher Education proposing distribution in Cameroon similar to that which has occurred in Chad. Once the distribution of these reports is complete, the Pipeline Project will update its website to indicate where the reports have been placed for review by students and others.</p>
OD 4.01, paragraph 5 (Annex 1, Item 4)	<p>Analysis of Cumulative Effects (and need for Regional Assessment).</p> <p>The Draft Cameroon NOSRP prepared in February 2003 contains an extensive simulation of the cumulative impacts of multiple oil spills from Cameroonian sources, Cameroonian ports, oil tanker accidents in Cameroonian marine and estuarine waters, but also including oil spills originating from Nigerian and Equatorial Guinean sources. Cumulative impacts have been simulated and are presented on pages 22 to 58 of the draft NOSRP.</p> <p>The Long-Term Vision Study of the Environmental and Social Management of the Petroleum Sector will address the cumulative impact of the Pipeline Project through projection of its impacts on the overall economic and social development of Cameroon and their environmental and social consequences.</p>

Table 3. Proposed Management Action Plan	
ISSUE	ACTION
OD 4.01, paragraph 12 (Annex 1, Item 5)	Institutional Capacity. The planned Mid-Term Review of CAPECE between May 26 and June 7, 2003 is an important opportunity to assist the GoC through the CPSP to complete ongoing actions and launch new actions to procure services and equipment and train staff to improve its capacity, particularly in the new context of operation of the pipeline. The Bank's Project team will work closely with the GoC on a number of activities. Details are provided in Annex 1, Item 5.
Environmental Management Plan (Annex 1, Item 6)	Preparation for Oil Spills. Management agrees with the Panel's observation that consultations and external review of the NOSRP should be coordinated with COTCO to ensure consistency with their review and consultation process for the four ASOSRPs in Cameroon. These latter plans were disclosed in the country and at the Bank's InfoShop. The CPSP has already received comments from stakeholders on the ASOSRPs, which are being transmitted to the Bank for information. The NOSRP will be disclosed in the country and through the Bank InfoShop. It will be reviewed by the independent expert currently being contracted by the CPSP. Workshops with NGOs and consultation with communities, government agencies and local government are planned and will take place as soon as the NOSRP is disclosed. The CAPECE Mid-Term Review mission will follow up on implementation of the review, consultation and public participation process.
OD 4.01 – in compliance but individual situations require monitoring (Annex 1, Item 7)	Water Quality. Management will continue to monitor specific situations as they arise. Details on follow-up with regard to the Panel's specific suggestions for Pembo and Kour Mintoum, as well as a more general approach to ensure communication, are provided in Annex 1, Item 6.
OD 4.01 – in compliance but need for continued monitoring (Annex 1, Item 11)	Dust. As requested by the Panel in its report, management and ECMG will continue to supervise and monitor COTCO's work on dust control measures with respect to water withdrawal constraints.

Table 3. Proposed Management Action Plan	
ISSUE	ACTION
<p>OP 4.04, paragraph 5 – in compliance, but greater vigilance requested, in particular concerning illegal logging (Annex 1, Item 12)</p>	<p>Natural Habitats. The Bank team is assisting in the establishment of closer working relationships between COTCO, CPSP, FEDEC and MINEF. Joint meetings at COTCO's headquarters in Douala and CPSP's headquarters in Yaoundé were convened in July 2002, November 2002 and March 2003. The main achievements of these meetings were the acceleration of FEDEC financing, negotiations and signing of the agreements between FEDEC and WCS, and FEDEC and WWF to begin preparation of management plans for Mbam Djerem and Campo Ma'an, respectively, with the cooperation of MINEF and CPSP. Clarification of the roles and responsibilities of each stakeholder in the implementation of the offset will be further discussed during the CAPECE Mid-Term Review Mission and within the proposed Forest and Environment Sector Program (PSFE – Programme Sectoriel Forêts et Environnement), which the Bank is helping Cameroon to prepare and which is expected to be presented to the Board in the next fiscal year.</p> <p>Concerning measures to help prevent illegal logging, two complementary mechanisms are in place. The first is an addendum to the concession contract between the GoC and the logging company operating closest to the Park. Signed in April 2002, this addendum ("cahier des charges") commits the company to collaborate actively with Government authorities in preventing illegal logging and commercial poaching. The concession contract provides for periodic external evaluations of results and penalties in case of poor or non performance. The second mechanism involves the services of an Independent Observer to assess compliance with logging laws and regulations (a service currently provided by the international NGO, Global Witness) and detect weaknesses by the private sector and government institutions. Through its dialogue with the GoC and the upcoming PSFE, the Bank will monitor closely implementation of the "cahier de charges" provisions and will ensure that the Campo Ma'an area remains a priority for MINEF and the Independent Observer.</p> <p>The proposed Cameroon Community Development Program (PNDP – Programme National de Développement Participatif) will finance community-driven investment plans; the Campo Ma'an area was designated as one of the pilot areas during project preparation. This project, along with the community-oriented communication strategy of the CPSP and the future investment program under the PSFE, will constitute a comprehensive action plan to help sustain the protection of the two parks and achieve development objectives for neighboring communities and stakeholders.</p>
<p>OD 4.01, OP 4.04, Environmental Management Plan (Annex 1, Item 13)</p>	<p>Removal of the temporary Lom River Bridge. In compliance with the 1999 EA/EMP, the Lom River bridge is scheduled to be dismantled during the week of June 8, 2003. Removal of the bridge will take from 7 to 10 days.</p>
<p>OP 17.50 – in compliance but greater outreach requested (Annex 1, Item 14)</p>	<p>Consultation and Disclosure. The Bank has been working with COTCO and the GoC to launch a national information campaign prior to first oil. Currently the CPSP is publishing a Newsletter (the Pipeline Letter) which is widely disseminated in Cameroon and abroad. A communication expert will be hired by the Bank to help design a communication strategy. The objective of this strategy is to ensure that various stakeholders are fully aware of the features of the operation phase of the pipeline. A communication firm would be recruited by the Bank prior to first oil to implement the strategy.</p>

Table 3. Proposed Management Action Plan	
ISSUE	ACTION
Occupational Health and Safety and Public Health	
OD 4.01 (Annex 1 Item 16)	<p>Public Health. The Minister of Health has agreed to develop an action plan for the development of health care facilities along the pipeline route to address health in a comprehensive manner beyond the HIV/AIDS issue. Doctors and staff are being appointed for the focal points, a health care map is being developed and discussions are underway between the Minister of Health and other stakeholders, including the CPSP, on the equipment and allocation of additional resources to the planned or existing healthcare facilities.</p> <p>The CAPECE Mid-Term Review mission will explore further actions that may be taken by GoC with Bank support to promote public health in the Project area, including actions to address HIV/AIDS.</p>
Social Impact Assessment and Mitigation Measures	
OD 4.30 – in compliance but social closure process suggested (Annex 1, Item 18)	<p>Grievance Mechanism. In accordance with the Panel's suggestion, Management notes that during the January 2003 visit, the ECMG proposed that COTCO establish a cut-off date for the submission of grievances associated with construction activities, and then tie the resolution of these grievances into a "Social Closure" process. COTCO has taken steps to put in place such a process.</p>
OD 4.20, paragraphs 13-18 – in compliance except for geographical scope of baseline data (Annex 1, Item 21)	<p>IPP Design and Implementation. Management will discuss appropriate ways to address indigenous peoples issues, including access to wildlife, during the course of its monitoring of the implementation of the IPP by FEDEC.</p>
Project Supervision	
OP 13.05 (Annex 1, Item 22)	<p>Project Supervision. During the CAPECE Mid-Term Review, the Bank team will work with the CPSP to ensure that the conditions for development and implementation of the strategy will be dealt with appropriately within the Long-Term Vision Study of the Environmental and Social Management of the Petroleum Sector in Cameroon.</p> <p>With regard to the Panel's suggestion on continued participation of the ECMG, Management wishes to note that as per the ToRs the ECMG, following the Project Completion Date, will continue to monitor Project operational compliance with the 1999 EA/EMP during each twelve month period at the discretion of the lender group and prepare a report after each visit to assess compliance by the Consortium with its obligation under the 1999 EA/EMP, up until full repayment of senior lenders to the Pipeline Project and beyond.</p>
Sustainability	
Overall Panel Conclusion	<p>Sustainability. Management will seek to ensure that relevant sectors are fully integrated in the local monitoring team. In particular, through supervision of CAPECE, Management will continue to encourage coordination across sectors, with specific focus on strengthening the active involvement of key sector ministries such as those in charge of public health and environment, in the monitoring of the Pipeline Project. On a broader scale, enhancement of cross-sectoral coordination and integration will be an underlying goal of the upcoming FY04-06 CAS, and several planned instruments of Bank assistance will help further this goal in relation to the Pipeline Project. Aside from continued supervision of CAPECE, proposed new lending instruments (e.g., a sectoral program on forestry and environment and a poverty reduction support credit) will, as appropriate, seek to further strengthen contributions from the environment and health administrations in the monitoring of activities in the Project area.</p>

V. CONCLUSION

53. Management believes that the Bank team has made every effort to apply its policies and procedures and to pursue its mission statement in the context of the Petroleum Development and Pipeline Project and the Petroleum Environmental Capacity Enhancement (CAPECE) Project in Cameroon. Management acknowledges the Panel's recommendations on the implementation and monitoring of the environmental and social aspects of the two projects and will continue its efforts to strengthen its dialogue with the GoC and other stakeholders in order to achieve fully and effectively the development objectives of the two projects, including environmental and social sustainability, in compliance with its applicable policies and procedures. Management believes that the proposed Action Plan attached to its response addresses the Panel's concerns.

**MANAGEMENT REPORT AND RECOMMENDATION
IN RESPONSE TO THE INSPECTION PANEL INVESTIGATION REPORT ON
CAMEROON PETROLEUM DEVELOPMENT AND PIPELINE PROJECT
AND CAMEROON PETROLEUM ENVIRONMENT CAPACITY ENHANCEMENT (CAPECE) PROJECT**

**ANNEX 1
FINDINGS, COMMENTS AND ACTIONS**

	Findings and Observations	Para	Policy	Comments and Actions
Environmental Assessment and Mitigation Measures				
1.	<p>Independent Panel of Experts The Independent Panel of Experts was not fully engaged during the preparation and approval of the 1999 EA/EMP, as its participation was discontinued. In addition, the IAG and the ECMG cannot be seen as a replacement for the IPE during the Project's implementation phase. Those mechanisms report to the Bank and to the IFC respectively and cannot be considered to be technically independent in the sense intended by OD 4.01. The Bank is not in compliance with paragraph 13 of OD 4.01.</p>	21-27	4.01	<p>Comment: Management shares the concerns raised by the Inspection Panel about the value of an independent panel in the specific context of EA implementation and development of environmental management capacity. Management agrees with the Panel's observations that a credible "niche" needs to be found without duplicating the efforts of the IAG and ECMG. Management, in consultation with CPSP during previous supervision missions, has concluded that individual independent experts, rather than a Panel per se, would provide value-added work and not duplicate the efforts of the ECMG and the IAG.</p> <p>Action: Management is working with the CPSP to provide for independent experts to be contracted to help with: (i) review of the NOSRP; (ii) monitoring of the implementation phase of the offshore portion of pipeline construction and the operationalization of the offloading facility; (iii) implementation of the training program; and (iv) monitoring of pipeline operation in high risk zones. The contracting process for the independent expert to assist in the review of the NOSRP is underway; ToRs are being prepared to address the other tasks. See Annex 2.</p> <p>In addition, under the ToRs for the Long-Term Vision Study of the Environmental and Social Management of the Petroleum Sector in Cameroon, it is contemplated that the GoC will develop a comprehensive approach to the subject including: (i) a survey of all planned investments in the petroleum sector; (ii) drawing lessons learned from the Chad-Cameroon Pipeline project; (iii) identification of strengths and weaknesses of the institutional framework for environmental and social management of the petroleum sector, including monitoring and supervision of pipelines and other oil-related infrastructure; and (iv) recommendations for further design and development of an institutional framework conducive to environmentally and socially sustainable management of the petroleum sector. Experts for this task will be hired during the last quarter of 2003.</p>
2.	<p>Baseline Data As noted in the Chad Investigation Report, there was a lack of linkage between baseline data collection, the assessment of project impacts and the subsequent application of mitigation and management actions. A similar comment applies to Cameroon. In addition, the Bank should have made greater efforts to ensure a full year of baseline data collection during the Project's preparation phase and prior to its approval, although current activities in this area are deemed appropriate. The Bank is not in compliance with paragraph 2 of OD 4.01, Annex C and paragraph 7 of Annex D of OD 4.01.</p>	28-37	4.01	<p>Comment: OD 4.01 Annex C (para. 2) concerns mitigation measures. Management believes that mitigation to reduce potentially significant adverse environmental impacts to acceptable levels is based on sound baseline data. The Panel acknowledges the existence and use of a series of EASs, which plots baseline environmental data on the footprint of the selected route at a scale of 1:10,000. These alignment sheets were instrumental in assuring effective environmental management and mitigation during Project implementation. The EASs were also used in each of the ASOSRPs and are available to the four Spill Response Centers in Cameroon.</p> <p>The Pipeline Project carried out a 4,000-household socio-economic baseline survey along the pipeline route in advance of construction. This survey was recently re-run to measure Project-related changes, including impacts of employment, compensation, and other developmental initiatives at the community and household levels.</p> <p>Management's understanding of OD 4.01, Annex D (para. 7) is that it provides for the use of short-term data (less than a year) as a surrogate for annual data, while longer-term data are being collected. It also notes that short-term data may be used in order to avoid delays in critical project decisions. In this case, Management concluded that there were no major baseline uncertainties that would result in systemic problems during implementation and that long-term baseline data could be collected throughout the Implementation and Monitoring Phase.</p> <p>Management acknowledges the Panel's finding (para.35) that baseline</p>

	Findings and Observations	Para	Policy	Comments and Actions
				<p>surveys identified key environmental information; that the Bank attempted to incorporate this information prior to construction; and that it was found to be sufficiently detailed and well-prepared to serve as a basis for ongoing monitoring.</p> <p>Management agrees with the Panel that individual, but not systemic, resource conflicts could have been avoided had there been more baseline data. However, in Management's view, even a full year of baseline data would not have been a surrogate for the longer-term pattern. The overall benefits of the Pipeline Project, despite some individual resource conflicts (handled routinely by COTCO EMP staff), warranted the decision to proceed with the financing of the Pipeline Project.</p> <p>Action: <i>Survey.</i> A third run of the household socio-economic baseline survey along the pipeline route will be carried out in the post-construction period to assess sustainability and gauge the net socio-economic impact of the Pipeline Project on affected communities.</p> <p><i>Access to Data.</i> Based on discussions with the IAG, COTCO has developed a list of Project-related documents that would be usefully placed in universities and institutions in Cameroon. These documents are mainly environmental and socio-economic materials prepared for the pre-approval assessment of the Pipeline Project, together with follow-up studies that were undertaken subsequently. COTCO's EMP Manager recently sent a letter to the Cameroon Minister for Higher Education proposing distribution in Cameroon similar to that which has occurred in Chad. Once the distribution of these reports is complete, the Pipeline Project will update its website to indicate where the reports have been placed for review by students and others.</p>
3.	<p>Analysis of Alternatives Analysis of possible pipeline routes was properly addressed in the context of the EA/EMP process. The Bank is in compliance with paragraph 2(f) of OD 4.01, Annex B.</p>	40-45	4.01	<p>Comment: Management acknowledges the finding of compliance by the Inspection Panel.</p> <p>Action: No action required.</p>
4.	<p>Analysis of Cumulative Effects (and need for Regional Assessment) An assessment of cumulative effects should have been conducted during the early scoping of the project's environmental effects prior to project approval and included as part of the original project environmental assessment and subsequent EMP. The Bank is not in compliance with paragraph 5 of OD 4.01.</p>	46-56	4.01	<p>Comment: Since the 1999 EA/EMP was prepared, attention to cumulative effects analysis and Regional Assessment in the context of a private sector project has increased. Management believed that the 1999 document adequately responded to the comments made on the draft 1997 EA with respect to covering cumulative effects. Because the Pipeline Project is in the Implementation and Monitoring Phase, the analysis of broader cumulative effects is being incorporated into ongoing studies in Cameroon, as described below and further explained in Section III.</p> <p>Action: Management agrees with the Panel's observation (Report, para.56) that the cumulative impacts of an oil spill off the Cameroonian coast need to be addressed and that the proposed Long-Term Vision Study should incorporate analysis of the Pipeline Project's cumulative effects.</p> <p>The NOSRP contains analysis of potential impacts of oil spills at the local, regional and national levels. The NOSRP also takes into account international and regional conventions related to the prevention of, and cooperation to fight, oil spills in the marine environment and suggest modes for cooperation with neighboring countries in case of an oil spill emergency. Although the pipeline does not cross any area protected under the laws of Cameroon, the NOSRP analyses potential impacts of an oil spill on protected areas close to the pipeline route and provides mitigation strategies. The NOSRP: (i) integrates the ASOSRPs developed by COTCO for four specific sensitive zones along the pipeline right-of-way, and (ii) complements their action plans and instruments to address any oil spill along the pipeline right-of-way, including beyond its strict limits.</p> <p>Specifically, the Draft Cameroon NOSRP prepared in February 2003</p>

	Findings and Observations	Para	Policy	Comments and Actions
				<p>contains an extensive simulation of the cumulative impacts of multiple oil spills from Cameroonian sources, Cameroonian ports, oil tanker accidents in Cameroonian marine and estuarine waters, but also including oil spills originating from Nigerian and Equatorial Guinean sources. Cumulative impacts have been simulated and are presented on pages 22 to 58 of the draft NOSRP. Management believes that the cumulative effects assessment of multiple oil spills from marine and coastal risk sources was done according to best international practice.</p> <p>The Long-Term Vision Study of the Environmental and Social Management of the Petroleum Sector will address the cumulative impact of the Pipeline Project through projection of its impacts on the overall economic and social development of Cameroon and their environmental and social consequences.</p>
5.	<p>Institutional Capacity The delays associated with the implementation of the CAPECE, affected the GoC's monitoring capabilities during the entire construction period. Efforts must be made to accelerate the implementation of CAPECE. The purpose of paragraph 12 of OD 4.01 was not achieved during Implementation and Monitoring Phase.</p>	57-68	4.01	<p>Comment: Management shares the Panel's concerns and has been working with the Government over the last two years to support satisfactory implementation of activities under CAPECE, the budget of which is USD 11 million over five years. The delays associated with implementation of CAPECE are acknowledged in aide-memoires and follow-up letters shared with the GoC. Actions are being implemented and/or launched to build the needed capacity to deal with the Pipeline Project and its impacts on the surrounding human and biophysical environment. Progress has been made, although at a very slow pace, in developing the capacity of the CPSP during the implementation of CAPECE. CPSP's field team has gained experience in field monitoring and supervision, organization and implementation of multi-expert field missions, better understanding of environmental, social and health issues in connection with large infrastructure projects, conflict resolution in rural areas, and communication strategy implementation. This progress needs to be strengthened with a view to sustaining CPSP's work over the life of the Pipeline Project and beyond, to deal effectively with environmental and social impacts associated with the petroleum industry. While the Panel notes that efforts must be made to accelerate the implementation of CAPECE, realistically, the pace of CAPECE cannot be accelerated much more than it has been, given institutional and human resource constraints in the country.</p> <p>Action: The planned Mid-Term Review of CAPECE between May 26 and June 7, 2003 is an important opportunity to assist the GoC through the CPSP to complete ongoing actions and launch new actions to procure services and equipment and train staff to improve its capacity, particularly in the new context of operation of the pipeline. The Bank's Project team will work closely with the GoC, focusing on:</p> <ul style="list-style-type: none"> (i) strengthening the existing field units and the unit that has been recently established to monitor the offshore pipeline and the offloading facility and their impacts on the bio-marine environment; (ii) accelerating the operationalization of the Environmental Information Management System (EIMS); (iii) improving mobilization of staff from sectoral ministries to strengthen field monitoring and inspection; (iv) implementing the training plan, currently being refined to take into account sectoral ministries' comments and provide more financial resources; (v) enabling closer collaboration among COTCO, the CPSP, FEDEC and the MINEF to implement the biological diversity offset program and the IPP; (vii) establishing a partnership between CPSP and relevant institutions to develop environmental analysis capacity, including laboratory work in connection with water and marine pollution and oil spills; (viii) implementing the recommendations of the NOSRP; (ix) training of civil servants, judges, lawyers, NGOs concerned with legal and regulatory issues of pipeline construction and operation and environmental protection; and (x) launching the Long-Term Vision Study of the Environmental and Social

	Findings and Observations	Para	Policy	Comments and Actions
				Management of the Petroleum Sector in Cameroon for which ToRs will be revised and agreed upon.
6.	Preparation for Oil Spills National Oil Spill Plan and Area Specific Oil Spill Plans are being prepared in accordance with EMP provisions and established international standards.	69-76		Comment: Management acknowledges the finding by the Inspection Panel. Action: Management agrees with the Panel's observation that consultations and external review of the NOSRP should be coordinated with COTCO to ensure consistency with their review and consultation process for the four ASOSRPs in Cameroon. These latter plans were disclosed in the country and at the Bank's InfoShop. The CPSP has already received comments from stakeholders on the ASOSRPs, which are being transmitted to the Bank for information. The NOSRP will be disclosed in the country and through the Bank InfoShop. It will be reviewed by the independent expert currently being contracted by the CPSP. Workshops with NGOs and consultation with communities, government agencies and local government are planned and will take place as soon as the NOSRP is disclosed. The CAPECE Mid-Term Review mission will follow up on implementation of the review, consultation and public participation process.
7.	Impacts on Water Quality There is no evidence that serious harm has resulted from the Pipeline project. Disputes exist between some local communities and COTCO over water issues. Management should continue to monitor each specific situation to ensure that a resolution amenable to all parties has been reached. The Bank is in compliance with OD 4.01.	77-81	4.01	Comment: Management acknowledges the finding of compliance by the Inspection Panel. Action: Management will continue to monitor specific situations as they arise. Follow-up on the Panel's specific suggestions for Pembo and Kour Mintoum, as well as a more general approach to ensure communication, is described below. The Inspection Panel suggested that it would be helpful for COTCO to provide evidence of reclamation of a wetland surface to its original grade level prior to pipeline construction at a Pembo River (sometimes referred to as a river, but actually a wetland/stream) location. The Panel indicated that the site should be further monitored to determine if the berm constructed by the claimant is impeding drainage. COTCO has reported that it believes that the wetland surface has been restored to its original grade/configuration, as shown in photos provided to the Inspection Panel during their site visit. The wetland/stream flows under the Kribi-Akom 2 road. After crossing the road, the stream crosses the pipeline easement unimpeded and continues flowing through culverts in the access road. At Kour Mintoum, the Panel concluded that there was a misunderstanding at this encampment regarding permitted activities on the pipeline right-of-way, which may be avoided in the future with better outreach efforts. Management concurs that a misunderstanding occurred. COTCO's indigenous peoples' specialists visited all Bakola/Bagyeli settlements to document water sources used, but the water source cited in the Request for Inspection was not included. When this source was discussed with residents during the Inspection Panel's investigation, they indicated that this source was used when walking in a particular direction, but not to obtain water for the settlement, because it is far away and across the Kienke River. Residents were under the impression that they were not allowed on the pipeline easement and felt they had lost access to this water point. This misunderstanding was corrected during the visit to the encampment by COTCO's indigenous peoples' specialists. COTCO has recently completed a village by village communication program in every community along the Cameroon portion of the Pipeline (242 communities). An important component of the communications in each village was to explain what activities are allowed on the easement and what activities are prohibited (the only prohibited activities are essentially the construction of buildings or planting of deep-rooted trees).
8.	Impacts on Freshwater Fisheries Overall procedures for building the river crossings required for the construction of the pipeline are found to be	82-86	4.01	Comment: Management acknowledges the finding of compliance by the Inspection Panel. Action: No action required.

	Findings and Observations	Para	Policy	Comments and Actions
	adequate and in compliance with the EMP. In a specific case investigated, COTCO provided the Panel with baseline data it had collected in compliance with the EMP. The Panel reviewed the data and found no long-term impact on freshwater fisheries. The Bank is in compliance with OD 4.01.			
9.	Assessment of Greenhouse Emissions The Bank is in compliance with paragraph 11 of OD 4.01 concerning consideration of global issues in the EA/EMP.	87-89	4.01	Comment: Management acknowledges the finding of compliance by the Inspection Panel. Action: No action required.
10.	Noise Disturbance No evidence of serious project-related harm noted.	90-95	4.01	Comment: Management acknowledges the finding by the Inspection Panel. Action: No action required.
11.	Dust No evidence of serious project-related harm noted.	96-101	4.01	Comment: Management acknowledges the finding by the Inspection Panel. Action: As requested by the Panel in its report, management and ECMG will continue to supervise and monitor COTCO's work on dust control measures with respect to water withdrawal constraints.
12.	Natural Habitats The Bank is in compliance with paragraph 5 of OP 4.04, but greater vigilance is required to ensure protection of the Campo Ma'an [Park].	102-118	4.04	Comment: Management acknowledges the finding of compliance by the Inspection Panel. Action: As mentioned in the response to Item 5, the Bank team is assisting in the establishment of closer working relationships between COTCO, CPSP, FEDEC and MINEF. Joint meetings at COTCO's headquarters in Douala and CPSP's headquarters in Yaoundé were convened in July 2002, November 2002 and March 2003. The main achievements of these meetings were the acceleration of FEDEC financing, negotiations and signing of the agreements between FEDEC and WCS, and FEDEC and WWF to begin preparation of management plans for Mbam Djerem and Campo Ma'an, respectively, with the cooperation of MINEF and CPSP. Clarification of the roles and responsibilities of each stakeholder in the implementation of the offset will be further discussed during the CAPECE Mid-Term Review Mission and within the proposed Forest and Environment Sector Program (PSFE – Programme Sectoriel Forêts et Environnement), which the Bank is helping Cameroon to prepare and which is expected to be presented to the Board in the next fiscal year. Concerning measures to help prevent illegal logging, two complementary mechanisms are in place. The first is an addendum to the concession contract between the GoC and the logging company operating closest to the Park. Signed in April 2002, this addendum ("cahier des charges") commits the company to collaborate actively with Government authorities in preventing illegal logging and commercial poaching. The concession contract provides for periodic external evaluations of results and penalties in case of poor or non performance. The second mechanism involves the services of an Independent Observer to assess compliance with logging laws and regulations (a service currently provided by the international NGO, Global Witness) and detect weaknesses by the private sector and government institutions. Through its dialogue with the GoC and the upcoming PSFE, the Bank will monitor closely implementation of the "cahier de charges" provisions and will ensure that the Campo Ma'an area remains a priority for MINEF and the Independent Observer. The proposed Cameroon Community Development Program (PNDP – Programme National de Développement Participatif) will finance community-driven investment plans; the Campo Ma'an area was designated as one of

	Findings and Observations	Para	Policy	Comments and Actions
				the pilot areas during project preparation. This project, along with the community-oriented communication strategy of the CPSP and the future investment program under the PSFE, will constitute a comprehensive action plan to help sustain the protection of the two parks and achieve development objectives for neighboring communities and stakeholders.
13.	<p>Removal of the (temporary) Lom River Bridge Removal of all temporary bridges (including the Lom River Bridge) is necessary to ensure compliance with the EMP (and the spirit of OD 4.01 and OP 4.04).</p>	119-123	4.01, 4.04	<p>Comment: Management acknowledges the finding by the Inspection Panel.</p> <p>Action: In compliance with the 1999 EA/EMP, the Lom River bridge is scheduled to be dismantled during the week of June 8, 2003. Removal of the bridge will take from 7 to 10 days.</p> <p>The Induced Access Management Plan identified three sensitive environmental areas in Cameroon where special protection measures would be required. One measure included the removal of all temporary bridges. With the removal of the bridge across the Lom River, all temporary bridges in these three areas will have been removed as required in the 1999 EA/EMP.</p>
14.	<p>Consultations and Disclosure of Information The consultations and disclosure of information concerning the Pipeline Project were frequent and consistent with the Bank's applicable policy requirements. In the implementation phase, it is important that stakeholders understand the components of the projects and their effects. A renewed Project outreach effort should be initiated now that the operations' phase is imminent. The Bank is in compliance with paragraph 19 of OD 4.01 and with BP 17.50.</p>	124-130	17.50	<p>Comment: Management acknowledges the finding of compliance by the Inspection Panel.</p> <p>Action: With respect to a renewed outreach program, the Bank has been working with COTCO and the GoC to launch a national information campaign prior to first oil. Currently the CPSP is publishing a Newsletter (the Pipeline Letter) which is widely disseminated in Cameroon and abroad. A communication expert will be hired by the Bank to help design a communication strategy. The objective of this strategy is to ensure that various stakeholders are fully aware of the features of the operation phase of the pipeline. A communication firm would be recruited by the Bank prior to first oil to implement the strategy.</p> <p>COTCO has very recently completed preliminary operation phase consultations in advance of first oil (this is in addition to ASOSRP consultations initiated in the last quarter of 2002 and concluded in early 2003). This ten-week consultation program involved 283 meetings, (242 in communities along the right-of-way and 41 meetings with préfets, sous - préfets, and district chiefs). Consultations entailed discussions of: land use conditions (crop types, avoidance of construction of houses, etc.); formalities for obtaining land use authorizations; demonstrations of crude oil samples; explanation and demonstrations of the functions of fiber optic cable; presentation of COTCO procedures for oil spill prevention; measures to take if oil is observed in the soil (avoidance and notification); and steps to take regarding any claims or grievances.</p> <p>Bulletin boards were placed in all communities and plastic laminated posters (one for the forest zone and one for the savannah) were posted. Six Local Community Contacts (LCCs) will be retained for the life of the pipeline. Follow-up consultations with LCCs will be carried out prior to filling the pipeline. Routine contact will be maintained by the LCCs over the life of the Pipeline Project.</p>
Occupational Health and Safety and Public Health				
15.	<p>Occupational Health and Safety The Consortium, the contractors and the sub-contractors have responded positively to the requirements of Annex A (o) of OD 4.01. There is no indication that EMP requirements on occupational health and safety have been ignored or violated. The Bank is in compliance with Annex A (o) of OD 4.01 and the EMP.</p>	133-138	4.01	<p>Comment: Management acknowledges the finding of compliance by the Inspection Panel.</p> <p>Action: No action required.</p>
16.	<p>Public Health</p>	139-	4.01	<p>Comment: IDA through CAPECE assisted the GoC in the selection of five</p>

	Findings and Observations	Para	Policy	Comments and Actions
	As part of the project preparation process, there was a need to undertake a wider regional assessment of the health risks posed by the Project, particularly a sero-epidemiological study to assess the risk of HIV/AIDS in the pipeline construction region. The Bank is not in compliance with the relevant requirements on baseline data of OD 4.01 on Environmental Assessment	149		<p>health focal points along the route of the pipeline, the establishment of a health center in Dompta and planning for the opening of two additional health centers. Also, the agreement between the National Committee on HIV/AIDS and COTCO is being implemented and provides training and health education to communities in the Project area.</p> <p>Management acknowledges that no comprehensive sero-epidemiological study was either requested or carried out during the EA preparation. However, as part of CAPECE, it was planned to strengthen the capacity of the Borrower to collect and analyze health-related statistics through health and medical surveys and analysis in the Project area. Such a sero-epidemiological study has not been undertaken through CAPECE, as the GoC decided that the study would be done under the then proposed HIV/AIDS Project.</p> <p>The Multisectoral HIV/AIDS Project in Cameroon provided for a baseline sero-epidemiological and behavioral study during the first year of the Project (2001-2002). The Bank planned to use this study and report on information from districts in the pipeline corridor. However, implementation of the study was delayed; it was launched in early May 2003 with the assistance of USAID and IDA. The IDA share in the study is USD 0.5 million. This study will not be completed before the end of 2004.</p> <p>The HIV/AIDS Project team visited communities along the pipeline route during supervision missions and recommended to the GoC to hire NGOs for community sensitization and social marketing of condoms. CAPECE has unused funds for this purpose, which may be made available to the CNLS to fund NGO activities in the pipeline corridor. HIV/AIDS Project activities complement similar activities undertaken by COTCO as part of the 1999 EA/EMP that will continue to be supported by the CPSP through CAPECE.</p> <p>Action: The Minister of Health has agreed to develop an action plan for the development of health care facilities along the pipeline route to address health in a comprehensive manner beyond the HIV/AIDS issue. Doctors and staff are being appointed for the focal points, a health care map is being developed and discussions are underway between the Minister of Health and other stakeholders, including the CPSP, on the equipment and allocation of additional resources to the planned or existing healthcare facilities.</p> <p>The CAPECE Mid-Term Review mission will explore further actions that may be taken by GoC with Bank support to promote public health in the Project area, including actions to address HIV/AIDS.</p>
Social Impact Assessment and Mitigation Measures				
17.	Compensation Process Compensation is fair and transparent and based on focused market surveys, which resulted in higher compensation rates than those paid by the GoC for most food crops. The Bank is in compliance with paragraph 3 of OD 4.30.	152-172	4.30	<p>Comment: Management acknowledges the finding of compliance by the Inspection Panel.</p> <p>Action: No action required.</p>
18.	Grievance Mechanism The mechanisms and procedures of grievances are clear-cut and accessible, although communication among the parties could have been more effective. The Bank is in compliance with the relevant provisions of OD 4.30.	173-179	4.30	<p>Comment: Management acknowledges the finding of compliance by the Inspection Panel.</p> <p>Action: In accordance with the Panel's suggestion, Management notes that during the January 2003 visit, the ECMG proposed that COTCO establish a cut-off date for the submission of grievances associated with construction activities, and then tie the resolution of these grievances into a "Social Closure" process. COTCO has taken steps to put in place such a process.</p>
19.	Direct adverse impact on indigenous peoples	184-189	4.20	<p>Comment: Management acknowledges the finding of compliance by the Inspection Panel.</p>

	Findings and Observations	Para	Policy	Comments and Actions
	<p>indigenous peoples</p> <p>The Pipeline Project appears to have little or no effect on Bakola/Bagyeli hunting habits or the utilization of the forest resources. It is difficult to see any direct harm by the pipeline construction on Bakola/Bagyeli subsistence patterns. The Bank is in compliance with paragraphs 2 and 6 of OD 4.20.</p>			<p>Inspection Panel.</p> <p>Action: No action required.</p>
20.	<p>Consultation Process</p> <p>Appropriate efforts to identify and consult with Bakola/Bagyeli communities were made. It does not appear that the presence of non-Bakola/Bagyeli inhibited the process. The Bank is in compliance with paragraph 8 of OD 4.20.</p>	190-193	4.20	<p>Comment: Management acknowledges the finding of compliance by the Inspection Panel.</p> <p>Action: No action required.</p>
21.	<p>IPP Design and Implementation</p> <p>Management's strategy to consider the IPP as a 'work-in-progress' is noted. Although under normal circumstances such 'work' would not be in compliance with the provisions of OD 4.20, the Panel, however, sees the practicality of Management's strategy because of the conditions and practices of the Bakola/Bagyeli/Bantu community within the wider Cameroonian society. Bank Management and COTCO have corrected the shortcomings in the intervening years since the EMP was written. The Panel agrees that the IPP is a long-term endeavor expected to be carried out over the 25 years of the Pipeline operation. Of necessity it must be fine-tuned in the process of implementation. The original IPP, in this special circumstance, is in compliance with paragraphs 13-18 of OD 4.20 on Indigenous Peoples, except for the geographical scope of the baseline data. Current efforts to prepare and implement a detailed IPP are</p>	194-223	4.20	<p>Comment: Management acknowledges that Pipeline Project documentation focused on issues related to the population's well-being and use of resources in the pipeline right-of-way area. It is also true that the economy and society of the Bakola/Bagyeli people covers a wide area which extends into hunting territories far from the pipeline easement. Hunting areas have been mapped and are presented in IPP Project documents.</p> <p>While baseline data were confined to studies of health, educational status, and agricultural land and resource use in the pipeline area, the consultants who prepared the IPP and related interventions did so on the basis of extensive knowledge obtained through decades of field research and publications on Bakola/Bagyeli economy and social organization. A holistic understanding of the Bakola/Bagyeli economy, including the economic and social importance of hunting and gathering in the littoral forest, was taken into full consideration in the IPP and related interventions.</p> <p>Based upon the documentation, hunting areas were considered not to be affected by the Pipeline Project. The goals of the 1999 EA/EMP were to avoid impacts on (chiefly agricultural) resources in the pipeline right-of-way and to develop an IPP, which among other things, would improve income from these resources located in proximity to the pipeline right-of-way.</p> <p>Action: Management will discuss appropriate ways to address indigenous peoples issues, including access to wildlife, during the course of its monitoring of the implementation of the IPP by FEDEC.</p>

	Findings and Observations	Para	Policy	Comments and Actions
	in place to meet the requirements of OD 4.20 on Indigenous peoples.			
Project Supervision				
22.	<p>Project Supervision: Structure and Follow-Up Management has made efforts to comply with the Bank's applicable policy requirements. However, the local supervision capacity has not been effective and needs strengthening. The persistence of this shortcoming will frustrate the purpose of the Bank's policy on Project Supervision.</p>	226-233	13.05	<p>Comment: OP/BP 13.05 does not specifically require the Bank to have in-country monitoring apart from the Borrower's own responsibility to implement and monitor project implementation. Nevertheless, Management, in addition to a very thorough supervision program that included a minimum of four field missions per year, has established and maintained a focal point in the Bank Country Office for Pipeline Project supervision purposes. The focal point, an implementation specialist working full time on the Pipeline Project, maintains regular contact with all stakeholders involved in Project implementation and has established a working dialogue with the CPSP and COTCO on implementation issues. In addition, the Bank Country Office in Yaoundé has a procurement specialist and a disbursement officer, both of whom follow up closely on Project implementation and collaborate on a regular basis with the Borrower.</p> <p>The focal point also has regular contacts with the Project team members in N'Djamena and the Bank's headquarters in Washington and is part of the overall supervision team in charge of the pipeline and CAPECE. Management believes that the flow of information needed for sound Project supervision is adequate and that the current supervision structure is appropriate for the Pipeline Project.</p> <p>Action: During the CAPECE Mid-Term Review, the Bank team will work with the CPSP to ensure that the conditions for development and implementation of the strategy will be dealt with appropriately within the Long-Term Vision Study of the Environmental and Social Management of the Petroleum Sector in Cameroon.</p> <p>With regard to the Panel's suggestion on continued participation of the ECMG, Management wishes to note that as per the ToRs the ECMG, following the Project Completion Date, will continue to monitor Project operational compliance with the 1999 EA/EMP during each twelve month period at the discretion of the lender group and prepare a report after each visit to assess compliance by the Consortium with its obligation under the 1999 EA/EMP, up until full repayment of senior lenders to the Pipeline Project and beyond.</p>
Sustainability				
23.	<p>Overall Panel Conclusion. The Panel recognizes Management's effort to comply with the Bank's applicable policy requirements. In this spirit, and in order to ensure the sustainability of the benefits of the Pipeline Project and effectively monitor its risks, the Bank should consider within its larger dialogue framework with the country, an effective incentive to help integrate important sectors, such as environment and public health, in a local monitoring team for the Pipeline Project.</p>	233	N/a	<p>Comment: Management fully expects that the benefits and risks associated with the Pipeline Project will continue to feature centrally in the dialogue with the GoC.</p> <p>Action: Management will seek to ensure that relevant sectors are fully integrated in the local monitoring team. In particular, through supervision of CAPECE, Management will continue to encourage coordination across sectors, with specific focus on strengthening the active involvement of key sector ministries such as those in charge of public health and environment, in the monitoring of the Pipeline Project. On a broader scale, enhancement of cross-sectoral coordination and integration will be an underlying goal of the upcoming FY04-06 CAS, and several planned instruments of Bank assistance will help further this goal in relation to the Pipeline Project. Aside from continued supervision of CAPECE, proposed new lending instruments (e.g., a sectoral program on forestry and environment and a poverty reduction support credit) will, as appropriate, seek to further strengthen contributions from the environment and health administrations in the monitoring of activities in the project area.</p>

**MANAGEMENT REPORT AND RECOMMENDATION
IN RESPONSE TO THE INSPECTION PANEL INVESTIGATION REPORT ON
CAMEROON PETROLEUM DEVELOPMENT AND PIPELINE PROJECT
AND CAMEROON PETROLEUM ENVIRONMENT CAPACITY ENHANCEMENT (CAPECE) PROJECT**

**ANNEX 2
TERMS OF REFERENCE FOR INDEPENDENT EXPERTS**

**RECRUITMENT OF AN INTERNATIONAL EXPERT SPECIALIZED IN THE
MANAGEMENT OF ACCIDENTAL HYDROCARBON SPILLS (DRAFT TRANSLATION)**

Context

1. The Government of Cameroon needs to prepare itself in order to play its role in the prevention of, and in the emergency intervention in case of, accidental hydrocarbon spills on its territory. The current general shortcomings of the prevention and intervention systems can in the short term prove to be serious within the context of the ongoing petroleum operations. The specific shortcoming, relative to the Chad Export Project (*Projet d'Exportation Tchadien – PET*) is in blatant contradiction with the extent and the nature of the GoC's obligations within the framework of the implementation of the Environmental Management Plan (EMP) (*Plan de Gestion Environnemental – PGE*) of this Project.

Objective of the National Plan to Combat Accidental Hydrocarbon Spills

2. The principal objective of the National Plan to Combat Accidental Hydrocarbon Spills (*Plan National de Lutte contre les Déversements Accidentels d'Hydrocarbures – PNLDAH*) is to provide the GoC's contribution to the PNLDAH proposed by the Consortium for the PET. The official recognition of the PNLDAH by an international expert will only be possible once the PNLDAH is in place. For this reason, the development of the PNLDAH is on the critical path of the PET.

3. The PNLDAH also has two other objectives at short and medium term: (i) to supply a platform of cooperation with the Chadian counterparts for on-land spills and (ii) to supply a government intervention framework for all petroleum activities in Cameroon that carry accidental spill risks.

Objective of the Mission

4. Within the framework of the PNLDAH Study, the consultant in charge of the study will prepare a preliminary report to the CPSP and a final report including comments on the preliminary report.

5. These two reports will have to be validated by the CPSP and the International Expert selected at the end of the recruitment process according to the terms of reference herein.

6. During the validation of these two reports, the Expert will have to ensure that the PNLDAH is in compliance with the World Bank Safeguards Policies and clearly describes the responsibilities of the institutions concerned, the actions to take in case of oil spills, the necessary equipment as well as the costs and the means of execution.

Timeline:

7. The mission of the Expert selected to assist the Pipeline Steering and Monitoring Committee in the validation of preliminary and final reports of the National Plan to Combat Accidental Hydrocarbon Spills (*Plan National de Lutte contre les Déversements Accidentels d'Hydrocarbures – PNLDAH*) will take place in two phases:

A. Phase I:

- Validation of the preliminary report: ten (10) days, of which three (03) travel days.

B. Phase II:

- Validation of the final report: ten (10) days, of which three (03) travel days.

Qualifications / Experience:

8. The expert must be internationally known and must have solid experience in the management of accidental hydrocarbon spills.

STUDY AND CONSULTATION FOR THE MANAGEMENT OF THE SOCIAL AND ENVIRONMENTAL IMPACTS OF THE CHAD PETROLEUM PIPELINE EXPORT PROJECT ON THE COASTAL AND MARITIME ZONE OF THE REPUBLIC OF CAMEROON (DRAFT)

Objectives of the Study

1. The study under consideration must permit the CPSP to have access to professional advice and assistance in matters of the management of environmental and social impacts of the pipeline project in the zone of Kribi and in the territorial waters of the Republic of Cameroon.

Context

2. The implementation of the Chad Petroleum Export Project includes, in a separate component, the transport and export of petroleum to international markets by a pipeline traversing Cameroon territory for approximately 900 km. This pipeline is still under construction, and will be operational by the fourth quarter of 2003. The Pipeline, whose construction is nearly complete, leads to the Atlantic Coast of the Republic of Cameroon in the Kribi zone, and extends, under Cameroonian territorial waters, to a petroleum loading platform, still within Cameroon's territorial waters. This zone is considered a risk zone, whose environmental aspects were covered by a specific environmental study (the risk zone study).

3. Within the framework of environmental protection, the GoC, with the collaboration of the Consortium in charge of the Chad Petroleum Export Project, has prepared an environmental assessment (EA). The final EA documentation delineates the GoC's responsibility with regards to environmental and social management and control of the Chad Export Project, especially in the documents: Environmental Management Plan (EMP) and the Compensation Plan (CP). In order to carry out these responsibilities, the GoC has decided to take the necessary measures through an environmental management capacity building program (CAPECE).

The Mission

4. This program (the Program), developed and implemented with the assistance and the collaboration of the World Bank, is administered by the Pipeline Steering and Monitoring Committee (*Comité de Pilotage et de Suivi des Pipelines – CPSP*). This Committee requires the assistance and the counsel of an independent expert, with experience in management of the marine environment and marine pollution, particularly with regard to hydrocarbons, to help it to:

- Evaluate the risk zone study, as concerns the zone of Kribi and the area around the offshore loading platform;
- Identify the potential pollution problems arising from the operation of the pipeline, the offshore loading platform and of the increase of activities in the zone surrounding the pipeline near Kribi;
- To propose means of cooperation, with a view to identifying the possible social, economic and environmental problems and the most appropriate solutions to resolve them, through:
 - The neighboring communities

- The local institutions, local municipal administrations and decentralized state institutions
- Private or public organizations having similar installations in neighboring countries, especially exploration, exploitation and hydrocarbon transport installations, located in the maritime space of the Gulf of Guinea.
- Make an assessment of the legal instruments pertinent to the status of coastal and marine areas with a view to identifying the responsibilities derived for the CPSP, the user of the pipeline and the various stakeholders.
- Propose to the CPSP all actions required to adequately and appropriately eliminate, reduce, minimize or compensate the environmental, social and economic impacts on:
 - The populations, especially the fishing communities and the professional and artisanal tourism operators
 - Natural habitats, especially the maritime fauna and flora, and the landscape
 - The countries on the Gulf of Guinea that could be impacted directly or indirectly from involuntary pollution.
- Assist the CPSP, and through the CPSP the relevant government organizations, to develop a specific program for the management of the marine environment in relation to the pollution risks by hydrocarbons.
- Advise the CPSP on the preparation of a system of collection and processing of information on the marine environment in the zone around Kribi in relation to the environmental management information system (EMIS) being prepared by the CPSP.

Consultant Profile

5. A consulting company having proven experience in the field of marine environment and marine pollution by hydrocarbons, or a team of consultants at PhD level, practicing at university or university research centers, with experience in research and consulting in the field of management of coastal and marine biodiversity, of marine pollution especially by hydrocarbons, proven by publication records. Any offer of services will have to be accompanied by the CVs of the proposed experts / consultants with specific reference to the assignment that will be allocated to them within the context of the mission for the CPSP.

TRAINING PROGRAM (DRAFT)

Introduction

1. The Petroleum Environment Capacity Enhancement (CAPECE) Project (*Renforcement des Capacités dans l'Environnement Pétrolier Camerounais – CAPECE*) has as its objective to develop and establish in Cameroon a national capacity for the environmental management and monitoring of the Petroleum and Pipeline Development Project (*Projet de Développement Pétrolier et de Pipeline – PDPP*), and to ensure the environmental sustainability of future projects, programs and policies in the petroleum sector. In order to attain these objectives, the project will support activities in the following fields:

- (a) Drafting and implementation of a legal and institutional regulatory framework
- (b) Building coordination capacity in matters of environmental management
- (c) Building intervention capacity to manage and monitor the impacts of petroleum projects on the territory
- (d) Management, monitoring and evaluation of the project.

2. All these activities require capacity building of personnel of the various executing agencies, through training, to direct the project. It is expected that this training will bring long-term advantages to the population of Cameroon, not only through the effective implementation of the PDPP, but also through better implementation of projects in the petroleum sector and better environmental management in general.

Activities of the Project and Associated Training Needs

(a) Drafting and implementation of a legal and institutional regulatory framework

3. This component will be carried out by a team of legal experts from Cameroon, assisted by national and international consultants. No additional training is required for the preparation and the publication of the application decrees of the Environmental Law of 1999. However, once these decrees are approved, it will be necessary to train the personnel of the organizations in charge of their application, as much on the technical aspects of these decrees as on the implementation process. Training will also be necessary for the local administrative personnel and for the participants in the legislative and judiciary process, to familiarize them with the norms and standards imposed and with the appropriate implementation process. The legal consultant team will be supplemented by a specialist in training to plan and carry out these workshops, in coordination with the information dissemination activities to be carried out under the IEC component of the project.

(b) Building coordination capacity in matters of environmental management

4. This component relates to the work required directly by the Permanent Secretariat of the CPSP and its field units. The training of the personnel of the central unit is of highest priority, to the extent that they will need to plan and manage the execution of the Project. The personnel of the Central Unit contains in particular:

- The Permanent Secretary (PS) and his/her deputy;

- A representative of the Environment, Right-of-way and Safety (ERS) Section (*Environnement, Tracé, Sécurité - ETS*);
- The field teams comprising: a bio-physicist, a socio-economist and a specialist in human health; and
- A specialist in information management.

5. The project will also benefit from the support of the personnel of the Legal Department, of the Communication Department, of the Human Resources Department and of the Financial Management of the SNH, who supply services to the corresponding units of the CPSP.

6. This personnel is in place and is immediately available for training. It is assumed that each is already technically competent to carry out his or her duties. Training must therefore concentrate on getting the staff acquainted with the Pipeline Project and its Environmental Management Plan, the CAPECE and its execution manual, specifically the administrative and financial procedures, and general management and teamwork skills. Short internal training workshops will be carried out by the consultants who work on the legal questions, on the communication strategy, and on the MIS project and on the environmental information management system. The SP/ERS personnel will also visit Chad and other neighboring states to better understand the PDPP and its potential impacts in Cameroon. These visits will be organized by the Permanent Secretariat, in collaboration with COTCO, during the first three months of implementation of the project.

7. The project team will also require the assistance of specialized short-term consultants in environmental training and in management for two months to carry out a diagnosis of the training needs of the personnel selected and to identify the appropriate training areas in Cameroon and elsewhere. The consultants will prepare draft application folders for institutions wishing to deliver this training, and will assist the SP/CPSP in the call for requests for proposals and the evaluation of the qualifications of the suppliers by shortlist of the consultants. The draft Terms of Reference for these short-term consultants is given below.

8. The personnel of the field units (see list in Annex) a large proportion of whom are already in place, will contribute specialized expertise in the biophysical, socio-economic, environmental health, engineering and marine environmental fields.

9. Their task is to ensure, in the field, liaison with COTCO personnel, local authorities, the general public and NGOs. Because they need to support themselves mutually, they share their skills among themselves and familiarize themselves with the local authorities to which they answer to help resolve the problems that may arise in the field.

10. In order to achieve this, they need to receive particular training in teamwork, in communication and in conflict resolution. Initial training will also address administrative procedures of the project (mobilization of the logistical support, acquisition of services of the local experts through the CPSP, etc...) as well as monitoring and reporting needs in environmental matters.

11. As far as is required (as defined by the work of the short-term consultant) the field personnel can also receive additional technical training in their own specializations or in other disciplines.

12. The communications strategy that a consultant must elaborate during the first three months of the project is likely to include a considerable amount for training that could be extended to SNH personnel, to other government staff, to local journalists and to NGOs. The training and management consultant and the communications consultant will work together to elaborate a training program and identify appropriate support sources.

(c) Building intervention capacity of to manage and monitor the impacts of petroleum projects on the territory

13. This component relates to capacity building within the decentralized services of the ministries that will be called to assist in the management and the monitoring of impacts of the Pipeline project. The ministries concerned are:

- *Environment*: for the preparation and the implementation of implementation decrees of the law on the environment; monitoring and reaction to biophysical impacts of the construction activities and accidental oil spills; implementation, together with COTCO, of the “Induced Access Management Plan” (*Plan de Gestion d’Accès Induit*) (to apply the rules pertaining to hunting and tree cutting, and to monitor the impacts on biodiversity in sensitive zones); and implement, together with an NGO to be recruited by the Foundation for the Environment (*Fondation pour l’Environnement*) the Environmental Improvement Program (*Programmes d’Amélioration Environnementales*) outside project sites.
- *Transport*: for the management of offshore impacts tied to the installation and the exploitation of the floating Storage and Unloading boat and of the coastal and maritime portion of the Pipeline; also to participate in the Study on the Intervention in case of Petroleum Spills, and to combat the petroleum spills on the coast or offshore.
- *Mines and Energy*: to (i) monitor the quality of the construction of the pipeline and the management of associated hazardous waste within the framework of administrative surveillance and technical controls (cf. Article 14 of the Establishment Convention between the Republic of Cameroon and COTCO); (ii) prepare the Study to Combat Petroleum Spills; (iii) and contribute to the Study on the Long Term Policy for the petroleum sector.
- *Urbanism and Habitat*: to put into operation Cameroon’s responsibilities with regard to the Compensation Plan, and to resolve all conflicts that would arise;
- *Health*: to manage public health in the zones traversed by the pipeline, paying particular attention to the spread of HIV/AIDS;
- *Social Affairs*: to monitor the execution of the Indigenous Peoples Plan;
- *Higher Education and Scientific Research*: to monitor the implementation of the Cultural Property Management Plan.

14. Detailed plans with a view to providing training in the short term to the personnel of these decentralized administrative services will be prepared by the short-term consultants, in concert with the agency authorities. This training can be divided into two phases. The first phase includes personnel from many services from sites selected along the course of the pipeline, given that a large proportion of the training will concern getting acquainted with the conception of potential impacts of the pipeline, and this personnel will have to work together at the local level

to find solutions to problems as they arise. The personnel of the local administration, traditional authorities, and local NGOs can also be associated to these familiarization workshops. The second phase includes personnel associated to specialties to describe specific impacts in greater depth and to promote inter-agency coordination. These workshops could also serve as opportunities to disseminate norms and standards set by the environmental application decrees, and the procedure to apply these norms and standards not only for the pipeline project, but also to other activities in the project zone. The personnel training program of decentralized services must take place during the second semester of the first year of the project.

(d) Management, monitoring and evaluation of the project

15. This component includes contracting the services of an International Panel of Consultants, and implementing management and control systems for the project including a Management Information System (MIS) and an Environmental Management Information System (EMIS). There are no training requirements linked to the work of the Environmental Panel. There will necessarily be a need for long-term training of the monitoring and evaluation specialists in the central unit of the Permanent Secretariat in the field of information technology and knowledge management. Short-term internships in the utilization of computers, data collection, research and report production could be necessary for personnel in the central unit as well as for field personnel. Basic training can be obtained from local commercial sources, although specialized training in the exploitation of MIS or EMIS will be provided by the conceiver of the system in concert with the consultants regarding training in management and environment.

Extent and Organization of Work

16. The Permanent Secretariat of the Pipeline Projects Steering and Monitoring Committee (SP/CPSP) in Cameroon is the principal organization assigned with the implementation of the GoC's responsibilities with regard to the Environmental Management Plan of the Project. In this respect, the project team needs the assistance of specialized short-term consultants in environmental training for a task in two distinct phases:

17. In Phase 1, lasting approximately two months, the work of the consultant will have to allow the evaluation of the training needs of the personnel selected, answer to some priority needs, elaborate a detailed training plan and identify the areas and institutions for training in Cameroon or elsewhere.

18. In Phase 2, for a total of two man-months, spread out over a period of one to two years, the consultant will periodically monitor the implementation of the training plan.

19. The transition from Phase 1 to Phase 2 will be done at the approval of the training plan, submitted to the SP/CPSP by the consultant at the end of Phase 1.

20. It is planned that the consultant be recruited for the execution of both phases. This is in principle what the SP/CPSP requests. However, the SP/CPSP reserves the right not to retain the consultant during Phase 1 according to the following criteria:

- Effective availability of expected results outlined below, in particular the training plan
- Respect of the time period set for Phase 1 (two months planned)
- Quality of training plan

- Quality of work relations with the SP/CPSP

21. If for these reasons the consultant was not retained for Phase 2, the amounts corresponding to this second phase will not be paid to the consultant.

22. In addition, the consultant hired for this contract will under no circumstances be retained as the institution in charge of providing the training planned.

Activities Anticipated and Results Expected

PHASE I – Creation of the Training Plan (Two-month period)

23. The consultants will:

- Evaluate the skills of the personnel of the SP/CPSP responsible for the implementation of the EMP in relation to the description of their work posts, and identify the short-term training needs.
- Plan and execute workshops to satisfy immediate training needs, including the familiarization with the Pipeline project and its Environmental Management Plan, familiarization with the CAPECE and its Implementation Manual, in particular the Administrative and Financial procedures, and general skills in management and teamwork. This will have to be done while avoiding redundancies with training already undertaken by COTCO.
- Assist other consultants working on legal questions, on the communication strategy and on the project MIS and the environmental information management systems, to plan and hold internal training workshops and elaborate long-term training plans covering a wider audience, including government personnel, local authorities and NGOs.
- As required, assist the SP/ERS personnel in the planning of educational visits to Chad and other neighboring countries, indicating the training objectives for these visits and the measures to evaluate their success.
- Evaluate the skills of the personnel selected for the posts within the field units with regard to their responsibilities, and plan personalized or group training programs on a case-by-case basis.
- After consultation with NGOs, identify the NGOs that will benefit from training and plan priority training to ensure that they carry out their role within the framework of the environmental monitoring of the Pipeline.
- Together with the personnel of the Ministry of the Environment, of Transport, of Mines and Energy, of Urbanism and Habitat, of Health, of Social Affairs and of Higher Education and Scientific Research, evaluate the training needs for personnel for decentralized services to carry out their responsibilities within the framework of the project, and propose a general plan for the supply of this training.
- Prepare draft proposal documents for the institutions that wish to provide training, and assist the SP/CPSP in the evaluation of the qualifications of the suppliers by consultant shortlist.

24. *Results expected from Phase I:*

- A detailed and coherent training plan including the needs identified and the actions planned (nature of training, institutions selected, dates and timeframes, beneficiaries of the training, corresponding budget) for the personnel of the central unit of the PS, the personnel of the field units of the PS, the relevant administrative personnel and the NGOs selected.
- The selection of the training institutions to implement the training plan.

Phase II – Monitoring of the Execution of the Training Plan (Duration: two months over a period of one to two years)

25. The consultant will:

- Follow the implementation of the training plan, especially ensuring the respect of the timeframe and the quality of the contents of the training given;
- Produce a summary report at the end of the Phase;
- Ensure that the persons supposed to benefit from the training actually benefit from it, and carry out monitoring after the training to ensure that the trainees apply the knowledge acquired within the framework of the environmental monitoring of the pipeline.

MONITORING OF HIGH RISK ZONES (DRAFT)

Context of the Study

1. The Chad Export Project is an enterprise that will cost US\$ 3 billion (FCFA 1800 billion) to extract and transport petroleum from the Doba basin in southern Chad to the Atlantic coast of Cameroon off the town of Kribi to allow its export to international markets.
2. To carry out this project, a consortium of petroleum companies (ExxonMobil, Petronas and Chevron) will construct, exploit and maintain during thirty years, an oil pipeline of approximately 1050 km, of which approximately 880 km will be on Cameroonian territory. A small portion of this pipeline will be placed under the surface of the sea and will extend approximately 11 km to link the terrestrial system to the maritime terminal.
3. Although an impact study was carried out and that the right-of-way of the pipeline was chosen essentially along existing road corridors or on land that was disturbed one way or the other by human activity, in order to limit the impacts on the physical and human environment as much as possible, a few critical zones were identified and require particular attention. These zones, which are of three types, concern ecological areas, human settlement, zones where the project will build permanent or temporary infrastructure, or sites of historical significance.
4. From the ecological point of view, the highly sensitive zones concerned are:
 - The coastal plain in the region of Kribi;
 - The evergreen forest of the Atlantic littoral in the south of Cameroon (region of Lolodorf-Kribi);
 - The Mbere valley.
5. From the human point of view, the areas of concern are urban, peri-urban and rural zones and centers, which will receive an increase in population from immigration of populations affected by the activities of the pipeline. It refers generally to zones with low capacity of equipment, infrastructure where the sudden increase in population could lead to socio-economic problems.
6. From the point of view of secondary infrastructure to the pipeline, it refers to permanent installations:
 - Pumping stations
 - Storage areas (during construction)
 - Pressure reduction stations
 - Oil terminals.
7. It refers, from the point of view of mobile installations, essentially to construction camps.

Objective of the Study

8. The study will have as its principal objective:
 - To ensure:
 - That the measures outlined within the framework of the Environmental Management Plan are applied effectively
 - That the measures are efficient
 - That the development indicators are achieved
 - That the integrity of these zones is conserved, notably the zones of the pygmies in association with the socio-economic indigenous peoples impact study.
 - To propose all the changes or the complementary measures necessary for the implementation by COTCO and/or the GoC.
 - To define all the critical and/or new problems and situations that could appear and were not clearly identified in the EA or the EMP or were not possible to pre-empt, and to propose or suggest appropriate corrections or adjustments.

Work Progress

9. The consultant will take great care to fully understand the Environmental Impact Assessment, to get familiarized perfectly all the elements of the Environmental Management Plan, to correctly identify all the potential or known risk zones.
10. The consultant will also have excellent knowledge of the following environmental plans:
 - Compensation plan
 - Indigenous peoples plan
 - Environmental Improvement Plan
 - Hydrocarbon Spill Intervention Plan
 - Communication Plan
 - Environmental foundation.
11. On the basis of all these documents and of the COTCO work program, the Consultant will propose to the CPSP a work plan, which will determine the procedures and methodology to follow in the analysis of impact of the Project on the risk zones as well as the expected results.

Timeframe:

12. The Consultant must plan to start the study six months after the start of the construction works of the pipeline and its secondary installations.

13. The work of the consultant will take place in three phases:
- 1st phase: during this first phase, which will last three months, the Consultant will carry out a detailed evaluation of the implementation of the mitigation measures planned in the EMP and the specific environmental plans. At the end of this period, the consultant will prepare a report for the benefit of the CPSP describing the situation in the field, the problems encountered and, if appropriate, the solutions foreseen.
 - 2nd phase: if the Consultant is authorized to continue his/her work, he/she will return after a six-month period, to carry out an analysis of a systematic evaluation of the implementation of the correction measures advocated, or, failing that, to verify the continuity of the conformity of the mitigation measures. This phase will last one to three months, depending on the severity of the problems encountered.
 - 3rd phase: this phase will be subdivided into two sub-phases:
 - Sub-phase 1: at the end of the construction phase, the Consultant will carry out a general evaluation of the status quo, and will propose, if necessary, the subsequent corrective program. This phase will last from one to three months.
 - Sub-phase 2: two years after the construction phase, the consultant will make an analysis of the capacity of the personnel in place to manage the post construction situation in the zones concerned. This phase could last between three to six months.
14. In all cases, the Consultant will work in close collaboration with the technical teams of the CPSP both at the field and central level, a collaboration will be set up with the other consultants working the other studies (socio-economic, indigenous peoples, cultural sites) for needs of cohesion as well as from the point of view of the presentation of a global view.

Qualifications:

15. The consultant should:
- Be an environmental specialist with good knowledge of the biophysical and socio-economic fields.
 - Have solid experience (5–10 years) in assessment of impacts of development projects.
 - Have full command of the French language.
 - Be able to work well in teams.

LONG-TERM VISION STUDY OF THE ENVIRONMENTAL AND SOCIAL MANAGEMENT OF THE PETROLEUM SECTOR IN CAMEROON (DRAFT)

Problem

1. Many current and future activities in the hydrocarbon sector in Cameroon are not adequately regulated by an integrated body of policies, laws, rules and organizations, which could guide and control these activities, including in the field of environmental and social impacts, within the framework of a vision aimed at the future and for the well-being of Cameroon's population.

Aim of the Study

2. The planned study must allow the GoC to be informed of all possible options to enable it select and implement the appropriate institutional option which will allow it to: (a) maximize the benefits of exploration, exploitation and management of the national hydrocarbon resources on a sustainable basis; (b) manage the environmental and social impacts of the activities of the hydrocarbon sector; and (c) create an appropriate legal, regulatory and institutional framework to put into application the institutional option chosen in the long term.

Context

3. The implementation of the Chad Petroleum Export Project includes, in another component, the transport and the exportation of petroleum towards international markets by a pipeline that goes across Cameroon territory for approximately 900 km. This pipeline is still under construction, and will be operational by the fourth quarter of 2003.

4. Within the context of environmental protection, the GoC, with the collaboration of the Consortium in charge of the Chad Petroleum Export Project, has prepared an environmental assessment (EA). The final EA documentation delineates the GoC's responsibility with regards to management and control of environmental and social matters of the Chad Export Project, especially in the following documents: Environmental Management Plan (EMP) and the Compensation Plan (CP). To fulfill these responsibilities, the GoC decided to take the necessary measures through an environmental management capacity building program (CAPECE).

5. This program (the Program), developed and implemented with the assistance and the collaboration of the World Bank, is administered by the Pipeline Steering and Monitoring Committee (*Comité de Pilotage et de Suivi des Pipelines – CPSP*). The program requires numerous sectoral and other studies, including: (i) a global evaluation of the legal and regulatory field that regulates environmental protection in relation to the hydrocarbon industry; (ii) the preparation of a national emergency plan to combat hydrocarbon pollution; (iii) a study of the risk zones to identify, among others, the safety problems of property and persons for the zone traversed by the pipeline and its zone of influence; (iv) the external environmental audits of the project; (v) studies for the management and monitoring of the archaeological heritage in the zone traversed by the pipeline, and its zone of influence; (vi) a study for the monitoring of the indigenous peoples plans and (vii) the production and the implementation of an environmental information management system relative to the transport of hydrocarbons by the pipeline.

6. In addition, through its work program, CPSP plans to carry out the following activities: (i) an economic and financial impact analysis of the pipeline construction and exploitation project

as well as the risks associated with a possible financial commitment by the Republic of Cameroon to such operations; (ii) the acquisition by the promoters of the project of the most up-to-date information on the feasibility study: the cost of the Project and its breakdown, and the financial and economic perspectives; (iii) an analysis of the risks to be associated to the participation of Cameroon in such projects, including, among others, the geological risk, the commercial risk, the political risk, the technical risk, etc., and the study of the different insurance coverage possible for these risks; (iv) a determination of the evaluation methods or the calculation of the economic and financial effect associated with such projects; (v) an examination of the economic and financial fallout for the entire length of the exploitation of the pipeline in accordance with the production profile, with the transport cost calculation and with the provisional exploitation accounts, in conformity with the conditions defined in the transport contract, the establishment convention, the project financing accord and the project proponent's transport authorization; (vi) an identification of the institutional weaknesses likely to constitute obstacles in the realization of the economic, financial, social and environmental objectives of Cameroon as well as the means of solving them.

7. Finally, the mandate of the CPSP includes the responsibility to identify and to systematically publish the lessons learnt of the project in the areas such as environmental, social and economic policies, as well as the legal and regulatory framework. The aim of this approach is to capitalize on the knowledge and the know-how that could be applied to similar activities in future.

Timeline and Mandate

8. The study will be carried out in the third year of the project so as to develop the above-mentioned Long Term Vision and should last from nine months to one year. The consultant selected for this work should:

- (i) Collect all pertinent information available in the public and government domain relative to planned or potential developments or investments in the hydrocarbon sector in Cameroon, off Cameroon's coastline in the Atlantic Ocean, or in neighboring countries;
- (ii) Refer to analyses and studies made above, and synthesize the contents and the lessons learned in the implementation of the Chad Export project, especially the experience of the CPSP in the field of technical, environmental and social monitoring and control of the pipeline project;
- (iii) Simulate the impacts that these projects or investments in the sector will have in relation to the economic and commercial development in Cameroon and in relation to the environmental and social impacts of the combination of these projects with the impacts of the Chad export pipeline;
- (iv) Propose options to develop the existing system for the management of the pipeline, including its environmental and social aspects, while taking into consideration potential development in Cameroon and in neighboring countries, especially the development of the petroleum industry in the offshore zone of the Gulf of Guinea. The consultant will take into account, for example, the need for regional cooperation to combat various sources of pollution and the possible pollution impacts from accidental oil spills in the Gulf of Guinea maritime zone; and
- (v) While proposing options under paragraph (iv) above, the consultant will refer to good practices observed in other countries for the management of hydrocarbons, for the

transport of hydrocarbons, and for their institutional, economic, financial, environmental and social aspects or to existing organizational standards. These practices and standards will have to be referenced in specific annexes and compared to the existing system in Cameroon.

Consultant Profile

9. A consulting company having proven experience in the energy, hydrocarbon and environmental fields or a team of consultants at PhD level, practicing at universities or research centers, with experience in research and consulting in the above field, proven by publication records. Any offer of services will have to be accompanied by the CVs of the proposed consultants with specific references to the assignment that will be allocated to them within the context of the study.