



<b>1. Project Data:</b>		<b>Date Posted :</b> 09/17/2003	
PROJ ID: P000528		<b>Appraisal</b>	<b>Actual</b>
<b>Project Name:</b> Chad Petroleum And Power Engineering	<b>Project Costs (US\$M)</b>	14.5	10.4
<b>Country:</b> Chad	<b>Loan/Credit (US\$M)</b>	11.0	10.1
<b>Sector(s):</b> Board: EMT - Power (50%), Oil and gas (50%)	<b>Cofinancing (US\$M)</b>	3.0	0
<b>L/C Number:</b> C2184			
	<b>Board Approval (FY)</b>		91
<b>Partners involved :</b> European Investment Bank (EIB), Consortium of oil companies	<b>Closing Date</b>	12/31/1995	12/31/2001
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**2. Project Objectives and Components**

**a. Objectives**

Per Memorandum of the President and the Development Credit Agreement, the main objective of the project (the Engineering Project) was to undertake all the preparations necessary for the construction of facilities (pipeline, refinery, and power plant) for the proposed Petroleum and Power Project (the Sedigi project), and supervision of their construction within a sound institutional, macroeconomic, and environmental framework . (The project was not formally appraised and thus, no Staff Appraisal Report was prepared . A President's Memorandum was available that outlined the scope of work for Phases 1 and 2 of the Engineering Project, and the estimated costs and financing plan.)

Societe d'Etude et d'Exploitation de la Raffinerie du Tchad (SEERAT), a Chad incorporated company, was created specifically to implement the project. At appraisal, SEERAT was jointly owned by the Republic of Chad (ROC) ( 51 percent of the share) and by three oil companies (Shell, Esso, and Chevron) (49 percent). In 2001, SEERAT was dismantled when the government decided to pursue the Sedigi project without the Bank's support .

**Revised Objective :**

The additional objective was to implement an emergency rehabilitation program for the electricity and water supply sectors, per the project's restructuring and DCA amendment in 2000.

**b. Components**

The original project components were in two phases :

**Phase I components :**(i) consulting services to revise the project configuration and project cost estimates; and prepare engineering designs, duty specifications, and drawings for tendering for three separate turnkey contract bids for refinery, pipeline, and power plant; (ii) preparation of an environmental assessment; (iii) studies related to pricing of petroleum products and power tariffs; (iv) study on the utilization of Sedigi associated gas and support for ESMAP's household energy study; (vi) management personnel for SEERAT; and (vii) office space, materials, equipment, vehicles, and other facilities .

**Phase II components :** (i) supervision of construction and commissioning of the project facilities; (ii) assistance to SEERAT in the field of operation, maintenance, finance, administration, safety and security; and (iii) training of local personnel.

Per Memorandum of the President and the DCA, Phase II funds could be released only after Phase 1 had demonstrated technical, economic, environmental, and financial viability of the Sedigi project .

**Revised Components**

As a result of the project restructuring, Phase II components were cancelled and the following six new components were added:

- 1) Rehabilitation of power and water supply facilities .

- 2) Provision of expert services for the rehabilitation of power and water supply facilities .
- 3) Acquisition of vehicles, goods, and equipment including spare parts and petroleum products .
- 4) Setting up of the basic utility management systems such as metering, billing and customer management systems, and loss detection.
- 5) Upgrading of the accounting and financial management systems .
- 6) Studies to optimize petroleum product procurement and materials management .

### c. Comments on Project Cost, Financing and Dates

Total project cost was \$ 10.4 million compared to the appraised estimates of \$ 14.5 million. The Bank provided an IDA credit of 10.1 million compared to the appraised estimate of \$ 11.0 million, including refinancing for the Project Preparation Facility (PPF). At appraisal, counterpart financing was estimated at \$ 0.30 million (no actual figures are available). At project's closing, co-financing from the European Investment Bank and the oil consortium at \$ 3.0 million and \$0.20 million, respectively, did not materialize.

With the project's restructuring, the IDA credit of \$ 11.0 million was reallocated as follows: Phase 1: \$5.9 million (from \$3.9 million at appraisal); Refinancing of the PPF: \$1.3 million (from \$1.5 million at appraisal); and emergency rehabilitation for electricity and water supply (\$3.8 million).

Financing for the household energy study was dropped and was subsequently financed from an ESMAP grant . Completion of the associated gas study was funded from a GEF grant .

The project was delayed for two years (1993-1994) because of adverse political and macroeconomic conditions and resumed full operations in 1995, and was subsequently restructured in 2000. The project's closing date was extended four times. The project closed in December 31, 2001.

### 3. Achievement of Relevant Objectives:

**1) Complete the preparation of the proposed Petroleum and Power Project** . *This objective was substantially achieved.* According to the ICR, by 1993, all the preparatory works were completed including the design work, studies on petroleum pricing and tariff policy, and the environmental assessment required for the appraisal and financing of the follow-on investment of the Sedigi project. However, political instability and the country's poor economic performance during 1993-1994, put on hold the appraisal of the follow-on project, and by 1995, with the resumption of the project to full operation, the original preparatory works and the financing plan had to be revised to reflect the changed project conditions and the Bank's decision to reduce its participation in the Sedigi project . The government, in its comments to the ICR, did not concur with the Bank's claims that all preparatory studies were completed by 1993.

**2) Implement an emergency rehabilitation program for the electricity and water supply sectors** . *This objective was partially achieved.* At project's closing, 66 percent of funds allocated to emergency components were disbursed which financed rehabilitation of some electricity generating units in the capital city, essential maintenance of key electricity generating units, purchase of critical spare parts, and purchase of petroleum products . The government noted that other components were not started at all including rehabilitation of water supply facilities and the setting up of basic utility management systems; and vehicles were not purchased .

### 4. Significant Outcomes/Impacts:

- The study on petroleum pricing and tariff policy provided the basis for an informed dialogue between the donors and the government in the electricity and downstream petroleum sectors; and for the preparation of the Critical Electricity and Water Services Rehabilitation project, which was approved by the Board in October 2002.

### 5. Significant Shortcomings (including non-compliance with safeguard policies):

- Quality-at-entry was weak. There was no formal project appraisal, and no institutional and political risk analysis was conducted despite the country's long history of political instability, and weak public sector implementation capacity.
- Political instability and poor macroeconomic performance, particularly in 1993-1994, adversely affected the timely completion of the project.
- The Bank's decision to limit its involvement in the project, and its promotion of greater private sector involvement mid-way through the project's implementation, resulted in protracted negotiations . This contributed to further delays in the implementation of the project.

6. Ratings :	ICR	OED Review	Reason for Disagreement /Comments
<b>Outcome:</b>	Satisfactory	Moderately Satisfactory	Although the ICR claims that the preparatory works were all completed by 1993, this assertion has been disputed by the government. The government did not

			also agree with the ICR's claim that the engineering studies were used in the construction of the N'Djamena-Sedigi pipeline. Moreover, the government noted that other components were not started at all, including the rehabilitation of water supply facilities, the setting up of basic utility management systems, and the purchase of vehicles.
<b>Institutional Dev .:</b>	Modest	Modest	
<b>Sustainability :</b>	Likely	Non-evaluable	The construction of the Sedigi oil field facilities and oil pipeline between Sedigi and N'Djamena is yet to be completed while financing for the construction of the refinery is being negotiated by the government with investors. (The power component of the project was dropped.)
<b>Bank Performance :</b>	Satisfactory	Unsatisfactory	Major changes in Bank's policy mid-way through the project's implementation had contributed to a six-year delay in completing the project. The country's weak implementation capacity, which was cited in the ICR as the reason for the Bank's decision not to finance the investment component of the project, could have been addressed and mitigating measures put in place, if there was a formal project appraisal. Further, the Bank's decision to transfer to the oil consortium the lead role in financing the project by linking its participation in the Sedigi project to the Doba project led to protracted negotiations that contributed to further delays in the completion of the Sedigi project. In the end, the oil consortium did not provide any counterpart funding to the project.
<b>Borrower Perf .:</b>	Satisfactory	Satisfactory	
<b>Quality of ICR :</b>		Satisfactory	

**NOTE:** ICR rating values flagged with '\*' don't comply with OP/BP 13.55, but are listed for completeness.

#### 7. Lessons of Broad Applicability:

- In difficult political and macroeconomic environments, flexibility in modifying the Credit Agreement to accommodate the country's evolving priorities enables the Bank to remain engaged in the country's reform process and to influence sector policy dialogue.
- Clear and realistic project conditions based on an objective assessment of the country's political, economic, and institutional conditions, and accepted by all parties concerned during project appraisal help to ensure timely completion of the project.
- Encouraging private sector participation by linking its involvement in one project to the approval of another project is likely to lead to protracted negotiations and to further delays in the implementation of both projects.

**8. Assessment Recommended?**  Yes  No

#### 9. Comments on Quality of ICR:

The quality of the ICR is rated as Satisfactory. The ICR covered relevant issues, and the comments from the government were candid and provided additional information to the main ICR document. The ICR's tables on chronology of key events and summary of closing date extensions were useful in capturing the lengthy (10 years) project implementation. The ICR, however, could have recognized and discussed the government's comments on the achievements of the project, particularly on the completion and use of the project's engineering studies. Further, more information should have been provided on the implementation of the rehabilitation component of the project. The ICR provides inconsistent information on the following: (i) DCA amendment (August, 2000 on p. 3; October 2000 on p.5); and (ii) the amount reallocated to the emergency component (\$3.5 million on p.3; \$3.8 million in Annex 2).

