

**LIST OF UPCOMING MULTILATERAL DEVELOPMENT BANK (MDB) PROJECTS
WITH POSSIBLE ENVIRONMENTAL CONCERNS**

MARCH 1995



**OFFICE OF DONOR COORDINATION
BUREAU FOR POLICY AND PROGRAM COORDINATION
U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523**

ABBREVIATIONS AND ACRONYMS USED

BANKS, LENDING INSTITUTIONS AND NGOs:

ADB -	Asian Development Bank
ALB -	Asian Wetlands Bureau
AfDB -	African Development Bank
BIC -	Bank Information Center
BITS -	Swedish Agency for Intl Technical and Economic Cooperation
DOE -	Department of Energy (USG)
EBRD -	European Bank for Reconstruction and Development
EDF -	Environmental Defense Fund
EEC -	European Economic Commission
EXIM -	Export Import Bank (U.S.)
GEF -	Global Environmental Facility
FAO -	United Nations Food and Agriculture Organization
FINNIDA -	Finnish International Development Agency
IDB -	Inter-American Development Bank
IBRD -	International Bank for Reconstruction and Dev. (WB)
IDA -	International Development Association (WB)
IFC -	International Finance Corporation (WB)
IFAD -	International Fund for Agricultural Development
IMF -	International Monetary Fund
IUCN -	World Conservation Union
KfW -	Kreditanstalt für Wiederaufbau (German Bank for Reconstruction and Development)
MDB -	Multilateral Development Bank
NRC -	Nuclear Regulatory Commission (USG)
ODA -	Overseas Development Agency (United Kingdom)
OECD -	Overseas Economic Cooperation Fund (Japan)
SIDA -	Swedish International Development Agency
USG -	United States Government
WB -	World Bank
WWF -	World Wildlife Fund
YFG -	Yganskneftegas (Russia state petroleum company)

OTHER ABBREVIATIONS:

EA -	Environmental Assessment
EIA -	Environmental Impact Assessment (used interchangeably with EA)
EDS -	Environmental Data Sheet (WB)
FAP -	Flood Action Plan (Bangladesh)
GIS -	Geographic Information System
Gwh -	Gigawatt hours
ha -	hectare(s); 1 ha = 2.47 acres, 1,000 ha (10 km ²) = 3.87 miles ²
ICDP -	Integrated conservation and development project
km -	kilometer(s); 1 km = .62 miles
kV -	kilovolts
MOS -	Monthly Operational Summary (World Bank)
MW -	Megawatts
N/A -	Not applicable
NGO -	Non-Governmental Organization
PID -	Project Information Document (WB)
USED -	U.S. Executive Director

STAGE OF WORLD BANK PROCESSING FOR A TYPICAL PROJECT:

1. Project identification
2. Project preparation
3. Preparation mission
4. Pre-appraisal mission
5. Pre-appraisal
6. Appraisal mission
7. Appraisal report preparation
8. Negotiations
9. Board date and approval

**LIST OF UPCOMING MULTILATERAL DEVELOPMENT BANK (MDB) PROJECTS
WITH POSSIBLE ENVIRONMENTAL CONCERNS**

TABLE OF CONTENTS

	PAGE
ABBREVIATIONS AND ACRONYMS USED	2
INTRODUCTION	5
REVIEW OF ENVIRONMENTAL ASSESSMENT CATEGORIES AT MDBs	8

**LIST OF UPCOMING MULTILATERAL DEVELOPMENT BANK (MDB) PROJECTS
WITH POSSIBLE ENVIRONMENTAL CONCERNS**

PROJECTS LOCATED IN AFRICA

1.	Benin/Togo:	AfDB - Adjaralla Hydroelectric	11
2.	Côte d'Ivoire:	AfDB - Gas Block 11 (Formerly Projet Gaz Foxtrot)	13
3.N	Guinea:	AFDB - Garafiri Hydroelectric	15
4.	Nigeria:	IBRD - Escravos Flared Gas Reduction	17

PROJECTS LOCATED IN ASIA AND PACIFIC

5.	Bangladesh:	IDA - River Bank Protection	19
6.	Bangladesh:	IDA - Coastal Embankment Rehabilitation	22
7.N	Indonesia:	IBRD - Biodiversity Conservation	24
8.	Nepal:	IDA/ADB - Power Generation (Hydro Power (formerly Arun III)	26
9.	Philippines:	ADB - Northern Luzon Transmission and Generation (Nineteenth) Power	30

PROJECTS LOCATED IN EUROPE AND CENTRAL ASIA

10.N	Russia:	IBRD - Petroleum Joint Venture	31
11.N	Slovak Rep.:	EBRD - Mochovce Nuclear Safety Improvement	34

PROJECTS LOCATED IN LATIN AMERICA AND THE CARIBBEAN

12.N	Regional:	IDB - Hidrovía, Paraguay-Paraná Waterway	36
13.N	Bolivia:	IDA - Rural Community Development	39
14.N	Bolivia:	IDA - Land Administration	41
15.N	Bolivia:	IDA - Hydrocarbon Sector Reform and Capitalization Technical Assistance Project	42
16.N	Brazil:	IBRD - Mato Grosso do Sul	

		Management and Conservation of Natural Resources	44
17.N	Costa Rica:	IDB - Rehabilitation, Maintenance and Construction of Rural Roads	46
18.	Dominican Republic:	IDB - Watershed Management Program DR- 0119 (formerly Management of the Mao River Basin	48
19.	Dominican Republic:	IBRD/IDB - Power II	50
20.N	El Salvador:	IBRD - Energy Sector Modernization	52
21.	Nicaragua:	IDB - Forestry Resources Management/Conservation Program	54
22.N	Paraguay:	IDB - Export Road Corridors	56
PROJECTS LOCATED IN MIDDLE EAST AND NORTH AFRICA			
23.N	Egypt:	AfDB - Kima Fertilizer Project	58
24.N	Egypt:	AfDB - Inland Container Terminal	59
25.N	Morocco:	IBRD - National Watershed Management	60
26.N	Morocco:	IBRD - Secondary Roads	61
REFERENCES			63

N = Projects marked with an N are newly listed since the December 1993 report.

INTRODUCTION

This March 1995 report to Congress lists proposed multilateral development bank (MDB) projects that could cause environmental problems. Section 537(h) of Public Law 100-202 and Section 1303(c) of Public Law 95-118 require this report. These laws direct the U.S. Agency for International Development (USAID), in consultation with the Secretaries of Treasury and State, to compile a list of proposed MDB loans likely to have adverse impacts on the environment, natural resources, public health, or indigenous peoples. The list is to be prepared and updated "in consultation with interested members of the public." This report does not prejudge the United States Government's position on the final versions of projects when they are considered by the MDB Executive Boards.

The projects in this report serve as a record of USAID monitoring of MDB projects. The report also serves as an indicator to judge the progress made by the MDBs on environmental policies and procedures since 1986 when Congress first expressed concern over these issues. The last edition of this report was issued in December 1993. Both the December 1993 and the March 1995 editions are available on the USAID's Gopher site on the Internet. A report on the status of proposed MDB projects that had been monitored by USAID since December 1993, but have been approved, dropped or put into a reserve program, is also available.

Since the above legislation was passed in 1986, USAID has monitored environmental aspects of proposed MDB projects. USAID's Office of Donor Coordination investigates and reports on environmental problems identified by USAID missions and concerned NGOs. As part of this activity, USAID cochairs "Tuesday Group," a monthly meeting of interested NGOs and U.S. agencies, to discuss loans and associated environmental policy issues related to the MDBs.

USAID works with the Department of Treasury, the State Department, the Environmental Protection Agency, and the U.S. Executive Directors' offices at the MDBs to help resolve or clarify environmental issues before the MDB Boards approve their respective loans. USAID also works with MDB staff and management while loans are in the design stage.

MDBs have made significant progress toward integrating environmental concerns into their loan criteria and sector policies in recent years. The World Bank, also the Inter-American Development Bank (IDB) and the Asian Development Bank (ADB), have been leaders in causing this improvement in MDB environmental performance. Especially important have been strengthened staff capacity for most MDBs, and new World Bank policies in forestry, energy and information access.

March 31, 1995, Page -6-

Since 1989, the World Bank, IDB, ADB, and AfDB have put in place internationally standards for comprehensive environmental assessment procedures. The procedures ensure that all proposed projects are screened for possible environmental impacts, and that full environmental assessments (EAs) are conducted when impacts are likely to be significant. (The EA classification systems differ by bank. A summary of each classification system follows this Introduction.) In addition, the World Bank has adopted procedures by which project related information is available electronically and through headquarters and field offices. The U.S. Government strongly supported this move, as it improves the process of exchange and consultation.

The current edition of this report reflects the improvements at the MDBs. Although the number of projects with potential concerns on the list is roughly the same as in previous reports, the nature of the problems has shifted since the 1980s. The report no longer documents the need for environmental procedures and policies, but serves as an indicator for how well these procedures are being carried out.

The principal mechanism for compiling the list is USAID's Early Project Notification (EPN) System. In this system, USAID notifies its field missions, also desk officers in the regional bureaus, and selected embassies of upcoming projects as each MDB publicly publishes them. The EPN System solicits comments on proposed projects' problems including environmental ones.

USAID field missions respond if there is reason to anticipate environmental concerns, and the USAID Office of Donor Coordination reviews them. Projects are then investigated further, and placed on the list based on available information and the judgment of the U.S. Government. This report specifically notes USAID field staff comments by referring to them with USAID/country name. Brackets follow the comments with the method of communication (cable number, fax, or e-mail) and date (for example, [Conakry03780 23Jun94]). Project entries in the report also incorporate comments from other governmental agencies and NGOs, mostly through the Tuesday Group meeting mentioned above. MDB staff have also been very helpful in providing additional information and addressing issues raised on projects.

Inclusion on the list indicates that the project could have serious impacts. Proper project planning and design should anticipate these impacts. Environmental assessment of the project may lead to its redesign, selection of alternative measures, or the introduction of specific mitigation measures. This does not necessarily mean that a project will pose problems when it goes to the MDBs' executive boards or afterwards during implementation. Many concerns identified in the list are being addressed through the environmental assessment and project design

process, and are noted.

The list concentrates on the World Bank, African Development Bank (AfDB), ADB, European Bank for Reconstruction and Development (EBRD) and IDB. Due to limited resources and lack of USAID presence in many countries, this list does not report on other regional and subregional MDBs.

This report is thorough with respect to the World Bank projects for which early information is readily accessible. It is much less complete for the AfDB, the International Finance Corporation and the European Bank for Reconstruction and Development. Early project information is inadequate for these MDBs.

REVIEW OF ENVIRONMENTAL ASSESSMENT CATEGORIES AT MDBs

In recent years most of the MDBs have come a long way toward integrating environmental concerns into their loan criteria and sector policies. Most have developed environmental assessment categories based on the nature, importance and sensitivity of environmental issues. Since December 1990, several banks have developed or changed their environmental assessment procedures and classification systems. They are not all the same, so a summary of their classification systems follows.

World Bank {International Bank for Reconstruction and Development (IBRD), International Development Association (IDA), & International Finance Corporation (IFC)}:

- Category A: Environmental Assessment is normally required as the project may have adverse and significant environmental impacts.
- Category B: More limited environmental analysis is appropriate, as the project may have specific environmental impacts.
- Category C: Environmental analysis is normally unnecessary.
- Category U: Unclassified is being introduced to indicate structural adjustment loans, which do not fall within one of the above three categories for purposes of the [operational] directive governing environmental assessment.
- Category T: To be determined.
- Category FI: IFC only -- relates to financial intermediaries whose subprojects may result in environmental impacts, thus requiring an environmental review by the intermediary, according to IFC procedures.

African Development Bank (AfDB)

- Category I: Projects that may have significant environmental impacts, requiring detailed field review and an Environmental Impact Assessment (EIA) study.
- Category II: Projects with limited environmental impacts that can be mitigated by applying specific measures in the project design.
- Category III: Projects not anticipated to result in adverse environmental impacts, for which environmental analysis is normally unnecessary.

Asian Development Bank (ADB)

- Category A: An EIA is undertaken for those projects for which significant adverse environmental impacts have been forecast in the initial environmental examination (IEE).
- Category B: An IEE confirms that there are no significant adverse environmental impacts requiring a detailed EIA. The IEE represents the complete

environmental assessment report. Projects in this category may have adverse environmental impact that are of a lesser degree than Category A impact; mitigation measures for these impacts are more easily prescribed.

Category C: An environmental assessment is normally not required for Category C because the project is unlikely to have adverse environmental impact.

Inter-American Development Bank (IDB)

- Category 1: Operations designed specifically to improve environmental quality.
- Category 2: Operations that have no direct or indirect environmental impact.
- Category 3: Operations that may have a moderate impact on the environment but for which there are recognized and well-defined solutions.
- Category 4: Operations that may have significant negative impacts on the environment and will require a detailed environmental assessment.

The Asian Development Bank gives illustrative examples of each environmental category of project. These are generally representative of all three basic categories used by the MDBs. They are:

Category A (WB A, AfDB I, and IDB 4):

- Forest industries (large scale)
- Irrigation (large scale with new source development)
- River basin development
- Large scale power plants
- Large scale industries
- Surface and underground mining
- Large water impoundments
- New railways/mass transit/roads (near or through sensitive areas)
- Ports and harbors
- Water supply (with impoundments and/or river intakes)

Category B (WB B, AfDB II, and IDB 3):

- Agro-industries (small scale or no wet processing)
- Renewable energy
- Aquaculture and mariculture
- Rehabilitation, maintenance and upgrading projects (small-scale)
- Industries (small-scale and without toxic/harmful pollution discharges)
- Water supply without impoundments or new river intakes

March 31, 1995, Page -10-

Category C (WB C, AfDB III, and IDB 1 & 2):

- Forestry research and extension
- Protected area establishment and management
- Marine sciences education
- Geological or mineral surveys
- Education
- Family planning
- Capital market development study
- Securities Ltd.

LIST OF UPCOMING
MULTILATERAL DEVELOPMENT BANK (MDB) PROJECTS
WITH POSSIBLE ENVIRONMENTAL CONCERNS

PROJECTS LOCATED IN AFRICA

1. Benin/Togo: AfDB - Adjaralla Hydroelectric

Projected AfDB Funding:	\$ 35.0 million
Projected Total Cost:	\$237.0 million
Tentative AfDB Board Date:	1995
Stage:	Undergoing appraisal at AFDB. Reserve program at IDA
AfDB Environmental Assessment Category:	I
Project first entered:	July 1993
Entry last updated:	March 1995

Description: The proposed 80-MW project on the Mono River, 97 km downstream of Nangbeto on the boundary between Togo and Benin, will include construction of a dam, associated equipment and transmission lines. It will also involve the resettlement and compensation of 10,000 people, and environmental and health programs. Power sector studies, technical assistance and training for host country agencies are planned.

Issues: USAID/Togo reports that it is not clear where the population will be resettled, or what the effects of resettlement will be on land, agriculture, deforestation and social customs. The downstream effects of the dam must also be analyzed. Impacts on fisheries and deforestation of the reservoir area are also issues.

In addition to these environmental concerns, USAID/Togo reports that there are unaddressed policy questions which affect energy planning in Togo. The government, one of the largest consumers of electricity in the country, is in arrears on energy payments. This means that there is no incentive for energy conservation by the government. In addition, it raises costs for private sector consumers. [#03626 20Jul92]. This indicates that the project should develop components on formulating a comprehensive governmental energy policy and on energy conservation.

Status: The project, which used to be in the World Bank's pipeline, was placed into its Reserve Program because of the political situation in Togo. However, the project remains in the AfDB portfolio. These comments have been conveyed to the World Bank and the African Development Bank.

AfDB responded that it has reviewed the EA report of this project.

March 31, 1995, Page -12-

and has raised issues similar to those mentioned above by USAID/Togo. Therefore, AfDB has requested the consultants to re-examine these issues and propose effective mitigating measures. The EA report of this project has not yet been finalized. The project appraisal report is being finalized, with Board presentation scheduled for sometime in 1995.

2. Côte d'Ivoire: AfDB - Gas Block 11 (Formerly Projet Gaz Foxtrot)

Projected AfDB Funding:	\$ 26.0 million
Projected Total Cost:	\$144.0 million
Tentative Board Date:	September 1995
Stage:	Pre-appraisal
AfDB Environmental Assessment Category:	I
Project first entered:	July 1993
Entry last updated:	February 7, 1995

Description: The proposed project will bring natural gas from an offshore well to an onshore area to be used principally to fire electricity generation plants which are now burning oil. IFC has recently approved the \$45-million CI-11 Hydro Carbon Development Project on an adjacent block (the Foxtrot Block is on CI-10, about five miles away.)

Issues: USAID/Côte d'Ivoire reports that the EA has been written, but does not adequately address certain important environmental concerns. The EA recommends that liquid wastes be collected and discharged to the municipal sewers. This solution is questioned because the sewer system of Abidjan has no treatment facility, not even primary treatment. The Foxtrot project should be required to include, at gas processing plant locations, appropriate on-site treatment for all liquid, gaseous and solid wastes.

The project requires resettlement, which the EA has downplayed, claiming the people are illegal squatters. The impacts on the environment of the resettled villagers on lands given to them in compensation has not been adequately considered, monitored or mitigated.

The EA does not quantify the waste waters proposed for discharge, nor does it adequately address SO₂ or NO_x gas emissions, acceptable discharge limits, or mitigation methods. A program for air and water quality control is needed, supported by a quality assurance program. No mention was made of either program; no accident/disaster planning process appears to have been established. The project should also be considered in the context of energy development in the region, including the IFC project mentioned above. Accordingly, the cumulative impacts of gas flaring and transport facilities need to be considered. Other concerns have also been raised about the EA by USAID/Côte d'Ivoire. [#06023 22Apr93]

Status: The above comments have been conveyed to the African Development Bank and the World Bank. AfDB responded that it has reviewed documentation on this project and found it insufficient to fully evaluate it. AfDB communicated its concerns to

March 31, 1995, Page -14-

government of Côte d'Ivoire resulting in the replacement of Foxtrot with Gas Block 11. No appraisal activity has occurred to date. The evaluation mission is scheduled for May 1995, with Board presentation scheduled for September 1995.

The World Bank recently reported that the project site has been changed to avoid resettlement of a population that did not want to be resettled. Now there is no resettlement associated with the project. Waste treatment will be on site and will not tie into the municipal system. Also, the recent EA draft suggested that discharge of platform wastes would meet or exceed industry-wide standards. WB is also a possible cofinancier of the project.

In conclusion, USAID is expecting the above concerns, aside from resettlement, to be addressed in the appraisal stage of the project.

3.N Guinea: AfDB - Garafiri Hydroelectric

Projected AfDB Funding:	\$ 21.6 million
Projected Total Cost:	\$205.0 million
Tentative Board Date:	1995
Stage:	Appraisal
AfDB Assessment Category:	I
Project first entered:	July 1994
Entry last updated:	February 1995

Description: The proposed project, which formerly was to be co-financed by the World Bank, is the first phase of the Garafiri-Kaletta Complex on the Kondoure River, located about 160 km northeast of Conakry. The capacity of this phase is 75 MW or 260 Gwh. Project components include dam, power station transmission lines, environmental protection and resettlement, as well as related engineering services, technical assistance and training.

Issues: In summary, the Garafiri dam project is the largest and most visible of Guinea's infrastructure investments this decade. Its success or failure will have a major impact on all development efforts in the country. Its success depends most critically on the electric company's ability to enforce payments by end users, a traditional achilles heel in Guinea. Currently, ENELGUI collects only about 40% of the energy generated. USAID/Guinea has no question as to the long-term importance of developing hydroelectric power in Guinea. However, USAID/Guinea underscores the importance of sequencing, and that the electricity sector should show, for some sustained period, the ability to collect fees for electricity that cover cost. This should be done before the Bank commits to a project producing a service for which most Guineans have shown fierce resistance to paying. Specifically, it is USAID/Guinea's (and the embassy's) recommendation that any World Bank board action on the Garafiri credit should be deferred until:

- a) privatization is effective (Sogel's team is in place);
- b) Guinea demonstrates a financial recovery rate equal to 75 percent of electricity produced (net of technical losses);
- c) concessional loans equal to between 80 and 90 percent of external financing requirements for the project are identified;
- d) management, environmental and social concerns are addressed.

According to documents provided by the government of Guinea, World Bank staff has identified unresolved environmental and social issues that should be addressed during the project appraisal. In particular, concerns were raised about the social and environmental impacts downstream, as well as potential health impacts. [Conakry03780 23Jun94]

March 31, 1995, Page -16-

Status: The project was removed from the World Bank (IBRD) lending program in July 1994, but is currently included in AFDB's 1995 lending program. Since the World Bank removed its support, AfDB is presently searching for a new co-financier. Its presentation to the Board will also depend on the availability of AfDF funding. The USED has been in continuous contact with USAID/Guinea on this project and has communicated all concerns to Bank management. During a February 4, 1995, meeting in Conakry, with Guinean government officials, the USED discussed the project's weaknesses and was told that the government would probably delay the project until it can demonstrate a satisfactory improvement in collecting payments from end-users.

4. Nigeria: IBRD - Escravos Flared Gas Reduction

Projected IBRD Funding:	\$100.0 million
Requested GEF funding:	\$ 25.0 million
Approved IFC Funding:	\$140.0 million
Projected Total Cost:	\$450.0 million
Tentative IBRD Board Date:	Delayed
Stage:	Negotiations delayed. Project has been deferred pending clarification on macroeconomic policy issues.
World Bank Environmental Assessment Category:	A
Project first entered:	May 1993
Information last updated:	January 1995

Description: The proposed project involves the production of methane gas, liquid petroleum gas and condensates from 167 million ft³/day of natural gas (associated with crude oil production) which is currently being flared into the atmosphere. Incremental crude production from this project would be blended into the sponsors' existing operations and exported. The project offers major environmental benefits as it will reduce carbon emissions from Nigeria, and has therefore attracted GEF consideration. The project sponsors are Chevron Nigeria Limited (40%) and the Nigerian National Petroleum Corporation (60%), who are associated in the form of an unincorporated joint venture. A full environmental assessment has been completed (7/8/93).

Project will include:

- a) an offshore gathering system;
- b) an onshore compression station;
- c) a gas pipeline;
- d) a processing plant; and
- e) a liquified petroleum gas floating storage vessel.

In addition, support will be provided for institutional and technical development within Nigerian National Petroleum Corporation and the Ministry.

Issues: Concerns include siting of onshore facilities in a mangrove swamp (approximately 100 ha permanently altered), and associated deforestation and filling, notwithstanding the project plans to keep disturbance to minimum. Potential expansion of the site is also a possibility.

IBRD (and IFC) has financed other similar gas projects as commercial operations. Therefore, the use of Global Environmental Facility grant funds has been criticized by NGOs, the Independent Evaluation of the GEF, and the US government because, in the right policy framework, this project should be

March 31, 1995, Page -18-

entirely financed as a commercial venture. Appropriate policies would help ensure that these facilities are permanently used. The GEF contribution of about five percent of the total project cost is probably not significant in completing the project financing, but is a significant amount of scarce GEF resources.

Status: The EA report is complete and is being reviewed by USAID. A consultation on the project organized by the GEF was held with NGOs on June 25, 1993, to exchange information on the project, concept and schedule. Additionally, in consultations with the U.S. private sector partner (Chevron), the World Bank has issued an advance copy of the appraisal report which is being reviewed.

In response to the above concerns, the World Bank noted that its mission to the project site included a socio-anthropologist to carry out an independent review of the sociological impact of the project on the local population, and work with the project sponsors on an appropriate Impact Mitigation Strategy. The Bank also responded that the GEF financing compensates Nigeria not for an inadequate policy framework, but for the implementation of a Gas Sector Policy that includes a fiscal incentives framework promoting investment in projects that use flared associated gas. Associated gas is more costly to produce than non-associated gas, of which Nigeria has very considerable reserves. The promotion of capturing previously flared associated-gas therefore entails foregone benefits for Nigeria, offset in part by the GEF grant.

On the issue of whether IBRD is being sufficiently firm in pressing for critical policy reforms, the World Bank responded that it has recently completed a report on the energy sector in Nigeria. This has been discussed at length during its preparation with the government of Nigeria, and the final document lays out the policy agenda in the sector for the coming years. The projects under preparation fit within this policy framework.

In conclusion, siting of the facilities in a mangrove swamp and possible expansion of them remain as concerns. Also, the issue of \$25 million in GEF funding for the project still needs to be resolved. The criticism that the project should be financed completely as a commercial venture in appropriate policy environment is still of concern.

PROJECTS LOCATED IN ASIA AND PACIFIC

5. Bangladesh: IDA - River Bank Protection

Projected IDA Funding: \$106.0 million
Projected Total Cost: \$128.0 million
Tentative Board Date: July 25, 1995
Stage: Project has been reinstated in the lending program, and consideration is subject to adequate progress on institutional issues. Appraisal report is being updated.

World Bank Environmental Assessment Category: B
Project ID Number: BD-PA-9557
Project first entered: December 1990
Entry last updated: January 1995

Description: The proposed project would improve protection against damage caused by normal bank erosion hazards at two sites (primarily towns and major infrastructure), along the Jamuna (Brahmaputra) River's west bank by construction of sustainable bank protection and river training works. One of the major subprojects will protect the town of Sirajganj (population greater than 100,000) from destruction. The Jamuna River naturally advances westward at an average rate of 50 meters per year (localized rates can average 300-800 m/yr). Cofinancing support is being sought.

The Sirajganj subproject is upstream from the Jamuna Bridge and would help protect it, though this project is economically justifiable on its own merits. The proposed measures may also temporarily help avoid a catastrophic natural realignment of the Jamuna River along the channel of the Bangali River, a small river located less than one km due west at its closest point. This imminent realignment would flood tens of thousands of hectares of farmland and necessitate the total redesign of the Jamuna Bridge, and greatly decrease its value if it were already built.

Issues: The relationship of the project to the overall Flood Action Plan (FAP) and to the FAP environmental guidelines was unclear. The FAP is a multi-donor series of studies designed to investigate the best way to prevent or mitigate severe flooding in Bangladesh. USAID has funded environmental and socioeconomic studies as part of the FAP. The World Bank serves as coordinator among the many donors participating in these studies. It is unclear how the results of the environmental studies are being applied to the overall studies and to the projects which are being designed.

March 31, 1995, Page -20-

Resettlement will be involved in the project. NGOs were concerned the resettlement issues would not have been adequately addressed by the level of environmental analysis afforded the project.

Additional concerns were raised in discussions with technical consultants to USAID, and in conversation between USAID/Bangladesh and the Bangladesh Department of the Environment. One of the most serious concerns is that the proposed project may have a "domino effect," creating the need to construct similar works (at, for example, five-year intervals) upstream and downstream from the site to protect the original installations. Also, there is controversy over the proposed training works. Although a proven technology, they are experimental in scale in the Bangladesh context because of the enormous force of these rivers. The feasibility of strengthening the erosion-prone banks of a very large shifting river is an issue of extreme complexity. [Fax 3Nov93].

Status: The U.S. Government has had extensive meetings with World Bank staff to obtain clarification and resolution of the issues raised. The U.S. Government also obtained a full briefing from USAID FAP consultants concerning the proposed project and its likely environmental impacts. As a result of these meetings, a number of concerns were clarified or resolved. First, the project was scaled back to limited and defined sites. Two subproject bank protection sites were dropped because of cost and economic justification concerns (and no other reason). There is general agreement that the proposed sites are critical and need to be protected.

The World Bank clarified that the project itself predated the FAP and is largely independent of the FAP. Notwithstanding the categorization (B), a full EA has been prepared.

As a result of the meetings with the U.S. Government and with NGOs, the Bank requested that the full EA be released to the public. The Government of Bangladesh agreed, and the report is now available. In addition, the World Bank has insisted on the receipt of a satisfactory resettlement plan as a condition of negotiations.

A resettlement plan framework has been developed. Its clearance by the World Bank depends on the agreement of satisfactory land acquisition principles for all IDA-supported projects.

The U.S. Government will continue to monitor this loan. It is important that an adequate resettlement plan be approved prior to loan approval. Also, the U.S. continues to believe that projects of this kind should be guided by an environmentally sound FAP. The U.S. urges the World Bank to continue its coordination role and to increase its environmental leadership as part of the FAP

process. This project was included in the December 1990 List of Upcoming Projects with Possible Environmental Concerns.

The project had been put on hold in 1994 until the Bangladesh's Water Development Board, a historically weak agency which is in charge of implementing this project, could demonstrate agreed upon reforms. The project was reinstated in the lending program (December 1994), subject to adequate progress on institutional issues. A July 1995 board date has tentatively been set.

6. Bangladesh: IDA - Coastal Embankment Rehabilitation

Projected IDA Funding: \$46.0 million
Projected Total Cost: \$81.3 million
Tentative Board Date: July 25, 1995
Stage: Project has been reinstated in the lending program, and consideration is subject to adequate progress on institutional issues. Appraisal report is being updated.

World Bank Environmental Assessment Category: B
Project first entered: December 1990
Entry last updated: January 1995

Description: The proposed project will seek to improve protection of reclaimed agricultural lands against tidal inundation and seasonal to medium tidal surges. The project's major purpose is to provide significant protection against cyclonic surges, reducing loss of life, damage to houses and infrastructure, and loss of crops and livestock. It will accomplish this through repair and upgrading of sea embankments and associated structures, and by appropriate structural and biological protection measures. The project emphasizes afforestation of the embankment and slopes and foreshore and improved operations and maintenance. The project will use a community participation approach, using NGO services for afforestation, routine embankment maintenance, and resettlement of families displaced by project works. The project formerly included a component to improve evacuation and relief access by construction of several hundred kilometers of all-weather, economically justifiable, feeder roads. This component has been dropped (and will be taken up, apparently, by ADB). Cofinancing interest has been expressed by the European Community for afforestation, resettlement, technical assistance and training.

Issues: USAID/Bangladesh emphasizes the need for local participation in the implementation of project. Bangladesh's Water Development Board and the Forestry Department, which will implement the project, have limited experience with participatory approaches in project implementation. Therefore, it is absolutely critical that these project components be fully monitored and tightly conditioned to achieve project success.

Resettlement and compensation are issues of major importance. Prior to loan disbursement, it is critical that a realistic and workable plan be drawn up to minimize the negative impact of resettlement and to provide compensation for both squatters and land owners.

Adequate maintenance of both embankments and drainage facilities is the most critical factor in determining the long term success of the project. Therefore, project beneficiaries must not only

be involved in the development of an operation and maintenance plan, but they must understand and accept their role in its implementation.

USAID/Bangladesh also suggests that trees should be planted as quickly as possible on embankments that are to be rebuilt or repaired. Tree seedlings should be planted as each section of embankment is completed, rather than waiting for the whole project to be done. Indigenous, multi-purpose species of trees should be considered over exotic species. Also, [#06263 3Aug92].

Status: Notwithstanding the "B" classification of the project, a complete EA was performed given the nature of many of the environmental concerns of this project. The project's EA was released some time ago by the Bank and is being reviewed by USAID. Cofinancing has been confirmed by the European Community.

The above comments have been conveyed to the World Bank. WB replied that improvements in project design introduced in Spring 1992 included the use of NGOs to organize community participation and emphasize operations and maintenance. These address some of the issues mentioned. The WB is in agreement that the essential features of the resettlement plan must be in place before a loan can be approved. Also, community participants cannot be given access to the embankments for tree planting until contractors' works are approved as having fulfilled the contract specifications. Within these limits, the World Bank is aiming to start planting tree seedlings as soon as possible.

The World Bank is essentially in agreement with the issues outlined above, and is effecting the changes to the project, which is encouraging. USAID will continue to monitor this project.

The project had been put on hold until the Bangladesh's Water Development Board, a historically weak agency which is in charge of implementing this project, could demonstrate agreed upon reforms. The project was reinstated in the lending program in December 1994, subject to adequate progress on institutional issues. (Cofinancing has been confirmed by the European Union.)

7.N Indonesia: IBRD - Biodiversity Conservation

Projected IBRD Funding:	\$ 25.0 million
Projected Total Cost:	\$ 40.0 million
Tentative Board Date:	November 1995
Stage:	Final project report completed and awaiting regional environmental report from GOI.
World Bank Environmental Assessment Category:	A
Project first entered:	July 1994
Entry last updated:	March 1995

Description: The proposed project aims to:

- a) develop a model for an Integrated Conservation Development Project (ICDP) including:
 - i) an institutional framework to manage the Kerinci-seblat National Park,
 - ii) establishing mechanisms for local community participation in conservation and development activities, and
 - iii) support for provincial governments and NGOs; and
- b) support biodiversity conservation promotion.

The project is envisioned as the first, five-year time-slice of a 25-year process to establish a sustainable park.

Issues: USAID/Indonesia believes this project is addressing an important development constraint in Indonesia, and does not anticipate major problems with the project. However, the project may, repeat, may suggest resettlement of villagers located in/near the Kerinci-Seblat National Park. Disturbances of this sort should be minimized and local people brought into the development process early so that they will become partners in better forestry management. The potential for impairment of land and other resources needed by indigenous peoples must be carefully studied. [Jakart02980 22Mar93].

Status: A Japanese grant fund of \$1 million has been used, in part, to conduct a regional environmental assessment (REA) to determine the project's impact outside the park and buffer area. The REA has been completed and is being reviewed by the Bank. Projected GEF and government of Indonesia (GOI) funding is estimated at \$15 and \$10 million respectively. This information has been forwarded to Bank staff.

In response staff reported that the project at this stage does not suggest resettlement and it appears, that GOI will, for the time being, not carry out any resettlement in Kerinci-Seblat.

Local involvement to date has consisted of:

- a) WWF and WARSI (a group of local NGOs) are both actively involved in baseline socio-economic surveys, park boundary demarcation, project design, etc.; and
- b) The ZOPP workshop on project design and action plans with representatives of local government, and village representatives have been held in the participating provinces. [ZOPP is a technique frequently used by GTZ to elicit pertinent information from fairly large groups of people in a conference. Carried out well, it is an effective means of brainstorming, issues clarification and consensus-building.]

The project preparation report and the Regional Impact Assessment have been completed. Both documents will be reviewed by GOI and the Bank shortly. The GEF Council will meet in the first week of May 1995 to discuss this project, so the project appraisal is expected to proceed soon thereafter.

In addition USAID/Indonesia has added: The IBRD Biodiversity Conservation components are defensible, but for \$40 million, it is hoped that the impact at Kerinci Seblat would be as broad and replicable as possible. What will be done to promote replicability of community and local NGO involvement in the planning and management process? The description doesn't mention much about "support for provincial governments and NGOs". We believe that environmental NGOs can play an important and much larger role in involving communities in planning and managing protected areas. Will there be human resource development and empowering activities for local NGOs and local government, or will they merely perform the "survey, design and boundary demarcation activities"? For the sustainability, effectiveness, as well as the replicability of this effort, we suggest significant resources go toward NGO and local government capability strengthening and empowerment. [E-mail USAID/Indonesia 29Mar95].

8. Nepal: IDA/ADB - Power Generation (Hydro Power (formerly Arun III))

Projected Funding Source:

IDA:	\$ 175.0 million
ADB:	\$ 127.6 million
KfW/GTZ (Germany):	\$ 124.4 million
OECF (Japan):	\$ 163.3 million
Others:	
France, Sweden, Finland:	\$ 46.3 million
Government	\$ 155.0 million
NEA	\$ 290.7 million
Total:	\$1082.3 million

Tentative WB Board Date: September 1995

Tent. ADB Board Date: Unscheduled, following WB's.

Stage: Undergoing WB inspection; WB negotiations completed. WB Board has agreed on Inspection Panel's recommendation to carry out investigations about complaints by communities. New government supports project. Awaiting results of investigations. ADB appraisal completed.

World Bank Environmental Assessment Category: A

ADB Environmental Assessment Category: A

Project first entered: December 1988

Information last updated: March 1995

Description: The proposed project will construct a 201-MW run-of-river hydropower plant (the first of two, 201-MW stages) with associated transmission facilities, and institutional strengthening of the Nepal Electricity Authority. The project includes 68-m-high dam, 11.4-km-long headrace tunnel, underground powerhouse sized for three 67-MW units, switchyard, 220-kV capacity power evacuation facilities, associated transmission facilities, and institutional strengthening of the Nepal Electricity Authority (NEA). Also, a 123-km access road along the Arun River, termed the "valley route," is included in the project. The WB financing includes the previously approved credit for the access road along the "ridge route", which in 1989 was estimated to be 177 km long. Cofinancing is included from ADB and various governments.

A Regional Action Plan (RAP) to ameliorate the hydro project's environmental impacts has been prepared and will be implemented as a part of the project.

Issues: USAID and WB staff have held a number of meetings to discuss various issues about the project. Many concerns have been allayed or addressed as a result. However, USAID has several outstanding issues which are reported on below. Both the issue and Bank response are discussed under each heading, given the complexity and history of discussion on each one.

a) **The proposed access road**, originally designed to follow a 177-km ridge route, is now planned on a more direct 123-km route along side the Arun River -- the valley route. Unless carefully executed and maintained, it could cause primary impacts (severe gully erosion and stream disturbance) and secondary effects (providing easy transport routes for illegal logging, induced development, and impacts on rare or endangered species).

The 1989 Staff Appraisal Report for the access road originally considered the valley option, but discarded it in favor of the ridge route "on grounds of cost, largely owing to the need for large numbers of structures (especially bridges)." It also stated that "the economic analysis showed there to be little choice between the four routes, but those which ran alongside the Arun were considered to be at greater risk from possible washouts and steep hillside instability as well as being less acceptable from a socio-economic standpoint because the population served would be less."

The less environmentally and socially sensitive valley route was brought back to life in 1992 "solely to provide access to the power sites as quickly as possible" (EA Addendum 1992, EA Summary 1993). Here the two routes were reportedly equal in cost, but the valley option could be completed one year earlier. The 1992 valley EA Addendum does not quantify any of the variables mentioned in its assessment of the two alignments. Furthermore, the comparison does not take into account variables for financing recurrent costs or maintenance requirements. Presumably, the risk of washouts and the cost of maintenance would be much higher for the valley. Moreover, the indirect impacts on the physical and biological environment for the valley are considered "High," compared to the ridge route's "Moderate" rating. Without a quantitative analysis of these factors there is insufficient information on which to base a decision to change the alignment. In 1993 WB reported that the new road alignment would result in a reduced risk of landslides on cultivated slopes compared to the alternative route, but an increased risk along 7 km of the river valley. Careful routing will avoid erosion prone areas and significant flora and fauna habitat.

In summary, the justification to change the road alignment appears to contradict the WB's pre-1992 analyses. That there would be cost savings or time savings in changing alignments is doubtful considering the original analyses. All roads in the Himalaya have geological stability problems. To select an alignment that has significant stability problems over an alignment with less stability problems does not make sense.

b) **The Regional Action Plan (RAP)** to ameliorate the hydro project's environmental impacts has been completed. USAID originally had been concerned with funding of the RAP. The WB stated in 1993 that it would not move forward with the project

March 31, 1995, Page -28-

until the entire RAP funding was in place. The RAP and its Secretariat are estimated to cost approximately \$21.1 million. This will be provided by the government of Nepal (\$6.1 million), GTZ (about \$3.4 million), IDA (\$4.6 million), Sweden (about \$3.8 million) and ongoing ODA activities (about \$3.4 million).

Without the Arun project, the regional EA study concluded that due to the current unsustainable practices, total deforestation would occur in the Arun valley within 10-15 years (WB emphasis). The RAP proposes conservation areas and community forestry funding to address concerns about logging and extension programs to promote sustainable agriculture in what is presently a food-deficit area.

The regional EA for the project was prepared by a local NGO, the King Mahendra Trust (KMT). The Mountain Institute (an international conservation NGO active in the region) and ODA-UK are primary candidates responsible for implementing the conservation and community forestry components of the RAP respectively. Also, KMT is the primary candidate for the overall coordination and monitoring of the RAP. Strict conditionalities have been agreed upon, including issues of general management and environmental protection, and direct and induced effects.

However, USAID/Nepal believes that WB's statement, "without the Arun Project... total deforestation would occur in the Arun Valley within 10-15 years," is very doubtful. USAID does not believe that the WB nor the EA consultants have the evidence to show that total deforestation would occur in 10-15 years. Kosi Hills community forestry activities and related natural resource activities may even stabilize forest degradation without the Arun Project. WB's statement is misleading, and USAID hopes that the RAP will effectively coordinate with existing natural resource management activities in the valley.

USAID/Nepal also remains concerned about the institutional structure to coordinate, plan and implement the RAP. The Arun project places considerable emphasis on the RAP; yet the institutional structure to implement the RAP is still not in place. The proposed Arun Project Environmental Management Unit (APEMU), to be established within NEA, should be fully staffed and operational, and the Arun Basin Operational Office should be established, well before construction begins. Also, the three-person Secretariat of the RAP should be operational. This would include being an active liaison with all potential implementors of the RAP, identifying all the programs envisaged under the RAP, and having a credible schedule for initiating the preemptive measures before construction begins. If implemented properly, the RAP could mitigate many of the impacts associated with the project. [USAID/Nepal e-mail 3Mar95].

USAID/Nepal emphasizes the need for strict adherence to the conditionalities placed by IDA and ADB on the project, such as

reforming government management capability. Also, continued progress needs to be made on WB and IMF structural adjustment agreements. [USAID/Nepal#04421 28Jul92].

c) **Economic issues** related to the project need to be re-examined, especially the question of whether the project is affordable. USAID recognizes that Nepal's hydropower resources are important to its sustainable development. However, USAID questions the financial and economic viability of the project. In light of these economic concerns and at the request of the USED's office, USAID's Global Bureau recently conducted the following study, "Alternative Analysis of Options for the Nepal Electrical Generating System" (second draft, November 1993). This study questioned the validity of WB's "least cost plans," assumptions in energy demand, and risk analysis. It also prepared alternative scenarios, suggesting the postponement of Arun III by several years, which would still meet Nepal's energy demand at a reduced cost and risk. [A summary of the WB's response to this report is pending].

Regarding cost of power, in 1993 WB reported that many reviews have shown that the Arun project is not out of line with known alternatives. WB believes that the implementation of Arun is indeed affordable for the Nepalese and complementary to developing smaller schemes. The project has also been structured to support the government's new privatization policy. USAID, however, questions whether Nepal will exercise the political and managerial capability to implement its macroeconomic strategy, thereby ensuring adequate funding of other key development sectors. While USAID is fully supportive of the program to establish improved public resource management, the political and managerial will and ability to implement and sustain this approach remains to be demonstrated. While recent progress at NEA to meet loan conditions is good, additional progress should be made prior to WB approval for Arun. For example, little progress has been made on securing financing for financing thermal power units required to firm up NEA's generation capacity. This is necessary for NEA's projected revenue earnings.

Status: At the request of Nepalese NGOs, the project is currently undergoing an independent investigation by the World WB's Inspection Panel. The Inspection Panel's work is not expected to be completed until May 1995. The purpose of the investigation is to assess possible violations of the WB's policies relating to environmental assessment, resettlement, and indigenous peoples. Given the conclusions of USAID's Global Bureau study and other outstanding issues, USAID now believes that the project should be put on hold until these are addressed.

9. Philippines: ADB - Northern Luzon Transmission and Generation (Nineteenth) Power (Formerly Power XIX, Masinloc Thermal Power {StageII})

Projected ADB Funding: \$179.9 million
Projected Total Cost: \$183.9 million
Tentative Board Date: None scheduled
Stage: Fact-finding mission in the field (July 1994).
ADB Environmental Assessment Category: A
Project first entered: June 1993
Entry last updated: August 1994

Description: The proposed project's objectives are the construction of the second 300-MW coal-fired thermal power generating unit at Masinloc and about 130 km of 230 kV double circuit transmission line.

Issues: Stage I of the Masinloc Thermal Power project has not yet been implemented. It took two years for the project to receive the required Environmental Clearance Certificate from the Philippine Department of Environmental and Natural Resources. In addition, the local population has been opposed to the project on social and environmental grounds. Environmental concerns include the potential adverse effects of the plant to fisheries and to mango trees from waste, ash and effluent.

Status: The above comments have been conveyed to the Asian Development Bank. The ADB reported in March 1995 that Land acquisition action for Stage I has been completed to the satisfaction of the Bank (on 23 December 1994). A turnkey contract for Stage I, which contains an option for a second 300-MW set under Stage II of the project, has been awarded and work has commenced on site. The resettlement site at Barangay Taltal has been completed, and the resettlement of households is underway.

Acceptance of Option for Stage II: 31 March 1995
Completion of Stage I: May 1998
Completion of Stage II: November 1988

ADB reported [in December 1993] that this project will not be processed until the hold on the Stage I project is released. Reportedly, the Stage I activity will be on hold until June 1994. Stage II of the project will not commence until Phase I is implemented.

The ADB, the government, and the local population are working to arrive at a consensus on outstanding issues, which includes resettlement and compensation. Co-financing by EXIMBANK of Japan is envisaged.

PROJECTS LOCATED IN EUROPE AND CENTRAL ASIA

10.N Russia: IBRD - Petroleum Joint Venture

Projected IBRD Funding:	\$ 500 million (up to)
Projected YNG (Russia) Funding:	\$ 100 million (at least)
Projected Amoco Funding:	\$ 600 million
Project net cash flow	\$2000 million
Projected Total Cost:	\$3200 million
Tentative Board Date:	early 1996
Stage:	Project preparation underway
IBRD Environmental Assessment Category: A	
Project first entered:	March 1995
Project information updated:	March 27, 1995

Description: The proposed project will fund part of a joint venture between Russian and an international oil companies for major new oil field development in Western Siberia. The principal objectives of the project are to:

- a) develop major new oil reserves and production for the medium to long term, with consequential beneficial impact on both the sector and the economy overall;
- b) provide support to the completion of sector reforms which are essential to attracting required international loan and equity finance;
- c) through Bank participation, catalyze international private sector commitment to the project;
- d) establish the international private sector joint venture as a model for future large-scale new field development projects; and
- e) strengthen the financial, technical and managerial capabilities of the Russian oil sector.

The proposed Project comprises the first phase of the planned joint venture development of the North Priobskoye oil field in Western Siberia by Yuganskneftegas (YNG) and Amoco. Amoco was selected to work with YNG to develop North Priobskoye as the result of an international competitive tender conducted by Russian authorities in September 1993.

The North Priobskoye field is a giant by world standards; some 5 billion barrels are believed to be commercially recoverable. Peak production from the field will be 20 million tons per year, or roughly 7 percent of national production. Production at or near peak will be maintained over a 20-year period, starting in 2005. The field will have an economic life of approximately 45 years. Overall investment costs are estimated at upwards of US\$22 billion unescalated. This makes North Priobskoye one of the largest pending investment projects in Russia today.

Issues: The Bank Information Center, and certain Russian environmental NGOs have expressed concerns on the following environmental issues. USAID is in agreement that these issues should be adequately addressed:

- a) If there were an accident (oil spill or leakage), the impacts on a broader area surrounding the Ob River need to be taken into consideration. The Ob River is enormous, during flood season it can expand to about 30 miles wide. Accidents could potentially effect a huge area. Hard field data on the impacts of oil drilling and oil spillage will be needed on the flood plain.
- b) Economic impacts of an oil accident, spill or leakage need to be taken into account. Who pays for clean up and mitigation of negative impacts?
- c) The EA should take into account cumulative impacts of oil development in the region.
- d) Is the assessment of socio-cultural impacts as a component of the EA limited to the town or area of Seliyarova? Will the EA include downstream and other potentially affected communities? The EA has apparently not yet included the informed participation of indigenous peoples and long-time indigenous inhabitants of the broader oil licensing area; or those inhabitants who might be affected in the case of an accident. One regional indigenous people's organization, Save the Yugra Association/Khanty-Mansyisk Autonomous Okrug, has apparently not been involved in the preparatory stage of the project or consulted, as of yet, in the EA process. This NGO has written a letter to the World Bank expressing its concerns.
- e) Will comprehensive studies of sacred sites be postponed until "later," as a part of mitigation studies? Will a specific study on a possible ancient (human) migratory path through the project area be conducted? The Bank's Operational Policy Note 11.03 on Management of Cultural Property in Bank-Financed Projects states: "If there is any question of cultural property in the area, a brief survey should be undertaken in the field..."
- f) The gathering system for project production through its interconnection with the Transneft Pipeline and the potential impact of this increase in production on the Transneft should also be included in the environmental assessment.

Status: USAID met with Bank staff and BIC on March 14th regarding the above issues. Bank staff involved with the project stated that not only do they share the same environmental and

social impact concerns noted above, but they have included all of these issues in the terms of reference for the environmental impact assessment and/or related memos regarding the EIA. They have informed AMOCO and YNG, who are charged with preparing the EIA, that the Bank expects the EIA to address fully these issues. Bank staff, like others outside the Bank, have not yet received any of the draft sections of the EIA and do not know whether or how well these concerns are being dealt with in the EIA. When they do receive drafts, they will assess how adequately these questions, along with others, have been addressed.

Bank staff also noted that they are in constant communication with AMOCO and are assured that the issues are currently being addressed in the studies.

The Bank has already conducted an initial social assessment in Seliyarova. Technical experts have also discussed the project with these local inhabitants, and in another local village (Nyaleo).

The Bank has discussed some of the above issues with YNG, and is in favor of having a broad participatory process in developing the project. The government of Russia is also doing its own EA of the project. The Bank remarked that regional transfer pipelines have major problems with leakage in Russia. The project will be developing its own regional gathering system. Main pipelines for transfer of oil are much less of an environmental hazard in Russia.

USAID project preparation support has already gone into the preparation of the proposed Petroleum Joint Venture project, including contributions to the preparation of the EA by YNG, the Russian joint venture partner.

11.N Slovak Rep.: EBRD - Mochovce Nuclear Safety Improvement

	Dollars	Deutsche Marks
Projected EBRD Funding:	\$ 295 million	412.5 million
Projected Total Cost:	\$1035 million	1452.1 million
Tentative Board Date:	Indefinite	
Stage:	Negotiations completed, board date postponed indefinitely.	
EBRD Environmental Assessment Category: A		
Project first entered:	March 1994	
Project information updated:	March 27, 1994	

Description: The proposed project will enable the government to:

- a) upgrade Mochovce Units 1 and 2 to international safety requirements and practices; and
- b) proceed with an early closure of two reactors (Bohunice V1) universally considered as unsafe by international nuclear experts for long-term operation.

Background: In 1981, the former Czechoslovak government launched the construction of four new reactors at Mochovce (4 x 440 MW), 100 miles southeast of Bratislava. These reactors belong the newest generation of Soviet-designed pressurized-water reactors (PWRs). Construction was interrupted in 1991 due to a lack of financial resources. Units 1 and 2 are 90% and 80% complete to original standards while Units 3 and 4 are 40% and 50% complete.

Four older PWRs have been operating in Bohunice, 50 miles east of Bratislava, since 1979 and 1980 (block VI, 880 MW), 1984 and 1985 (block V2, 880 MW). These four reactors generate more than half of the electricity consumed in the country every year.

Issues: Treasury has conducted an intensive inter-agency review of the project with State, the Department of Energy, the Nuclear Regulatory Commission, EPA, and USAID. USAID does not disagree with the stated rationale of the project, which allows for the safety upgrading of Mochovce Units 1 & 2, and an early closure of Bohunice Block VI. These would be positive achievements.

However, prior to any project approval and in addition to the EPA concerns described below, USAID expects to see greater attention given to a comparative analysis of investments in non-nuclear power sources, energy conservation programs, energy pricing adjustments, and other demand management techniques which may substitute in a more cost-effective way for a major portion of the reasonably forecast energy demands of Slovakia.

USAID is also interested in assuring that various operational issues are addressed, including the economic costs and environmental impacts of spent nuclear waste disposal, and the

costs of decommissioning. Finally, firm commitments should be made by Slovakia for periodic safety inspections of nuclear facilities by independent international organizations.

EPA concerns are summarized in following five points:

a) The Mochovce EA report lacks a discussion of consequences beyond design basis, such as severe accidents. Such analysis is a standard part of EAs and was in the original EBRD terms of reference for the EA. Moreover, the "Design Basis Accident" consequence analysis appears fundamentally incomplete. A related concern is the absence of an offsite emergency management plan.

b) Alternative analysis is fundamental to an EA and should address options for achieving project goals. The Mochovce EA's treatment of alternatives does not correspond to the basic choices involved. Alternatives, such as a safety upgrade of a well-managed Bohunice, need to be analyzed with Mochovce in comparable terms. The institutional ability to implement various alternatives needs to be examined in more detail.

c) Environmental analysis considers all relevant impacts of a project, including upstream and downstream impacts, to avoid segmented consideration of issues and facilitate informed decision making. This is particularly relevant for nuclear power plants. The EA provides broad assurances, but few specifics on basic fuel cycle issues.

d) The EA report provides no comprehensive assessment of environmental or occupational health impacts although the project summary describes the Mochovce area as having "rich and varied natural flora and fauna." Areas of concern include cumulative releases and concentrations of radionuclides in the environment and impacts on the Hron River and aquatic resources.

e) Broadly stated, EBRD policy requires a level of safety demonstrably equivalent to good Western practice. The safety of the design, which is not comparable to good Western practice, has not been demonstrated.

DOE and NRC have both reviewed the nuclear safety components of the project. Both agencies concurred that the safety upgrade efforts outline a generally good approach for raising Mochovce to Western safety standards. In discussions with EBRD, both agencies commented on areas they would like to see strengthened, and have indicated that they have no open concerns, if the proposed measures are undertaken in rigorously and thoroughly.

Status: The project's board date has been postponed indefinitely at the request of the government of Slovakia. These comments have been conveyed to EBRD staff through Treasury.

PROJECTS LOCATED IN LATIN AMERICA AND THE CARIBBEAN

12.N Regional: IDB - Hidrovia, Paraguay-Paraná Waterway

Projected IDB Funding (for studies only): \$ 7.5 million
Projected Total Cost: Unknown
Tentative Board Date: undetermined
Stage: under study
IDB Environmental Assessment Category: IV
Project first entered: March 1995
Project information updated: March 1995

Description: The proposed Hidrovia Waterway project will develop a complex navigation system throughout this huge basin in South America. Indeed, Hidrovia is seen by many to be the physical manifestation of the Mercosur free trade agreement. Hidrovia would facilitate year-round navigation in the Paraguay-Paraná River system -- a waterway for transportation of goods and raw materials. Potential modifications of the Paraná and Paraguay Rivers, including extensive engineering works, would make 3,400 kilometers navigable for ocean-going vessels from the Atlantic to Cáceres, Brazil. It will serve considerable portions of Argentina, Uruguay, Paraguay, Bolivia, and Brazil. The Paraguay-Paraná River system drains an area of 1.75 million km² and contains a population of more than 17 million people.

With Support from IDB and the United Nations Development Programme (UNDP) an engineering feasibility study and an environmental impact assessment are currently being undertaken. Financial support from IDB and UNDP for the implementation of the project has not been requested. However, IDB has already approved a \$75 million loan in 1991 for an initial part of the Hidrovia, which included studies and improvement of navigational aids along the lower Paraná River.

The proposed benefits of the project are to promote regional development and exports via cheaper transportation, including agricultural production, mining, and timber. Increasing navigation and shipping on the water could also facilitate greater regional and international trade, and encourage the economic and political integration of the region.

The potential costs of developing year-round navigation along the full 3,400 km of rivers would be high, and the construction would result in significant environmental and socio-economic impacts to the region. Costs for heavy engineering works, such as channelization, dredging, and port development, could be very high. Economic studies done thus far have not taken into account many of the social and environmental costs of the project, which when incorporated, would further reduce the already low rate of return of about six percent.

Issues: If Hidrovía is built, direct impacts would include: alteration of the hydrological regime, water quality deterioration, loss of wetlands, loss of the regulatory effect of the Pantanal wetlands with resulting increased flooding; loss of local, regional and global biodiversity, particularly fish diversity; decline in biological productivity, especially fisheries; and changes in food-chain patterns. The river will also lose landscape complexity.

Indirect impacts may include increased pressure on natural resources (*including increased agricultural production, mining, deforestation and timber extraction*), deterioration of local lifestyles, loss of recreation and tourism potential, expansion of vector borne diseases, and secondary impacts through induced development. Induced development impacts would be aggravated given the improbability that research, planning, and control mechanisms would be sufficient to effectively guide sound development, as has already been proved in other regions of Latin America. Moreover, the possibility exists that once Hidrovía becomes operational, the project will escalate and further the need for additional large-scale engineering. These proposals may include damming for flood control and to facilitate navigation.

Overall, the Pantanal clearly represents the area of highest concern, given its hydrological complexity and its outstanding biological richness. The Pantanal is widely recognized as one of the world's largest and most significant wetlands. Its wildlife is particularly important for ecotourism. The reach between Cáceres and Corumbá, which includes the Pantanal, is ecologically the most sensitive part of Hidrovía (see map). Hidrovía has the potential to trigger severe negative impacts in this area. Extreme care and thorough analyses should be required before any large-scale engineering work is implemented. A threatening situation has already arisen as the government of Paraguay is interested in moving ahead with some aspects of the project, including rock removal from the Paraguay River, which may have ecological impacts.

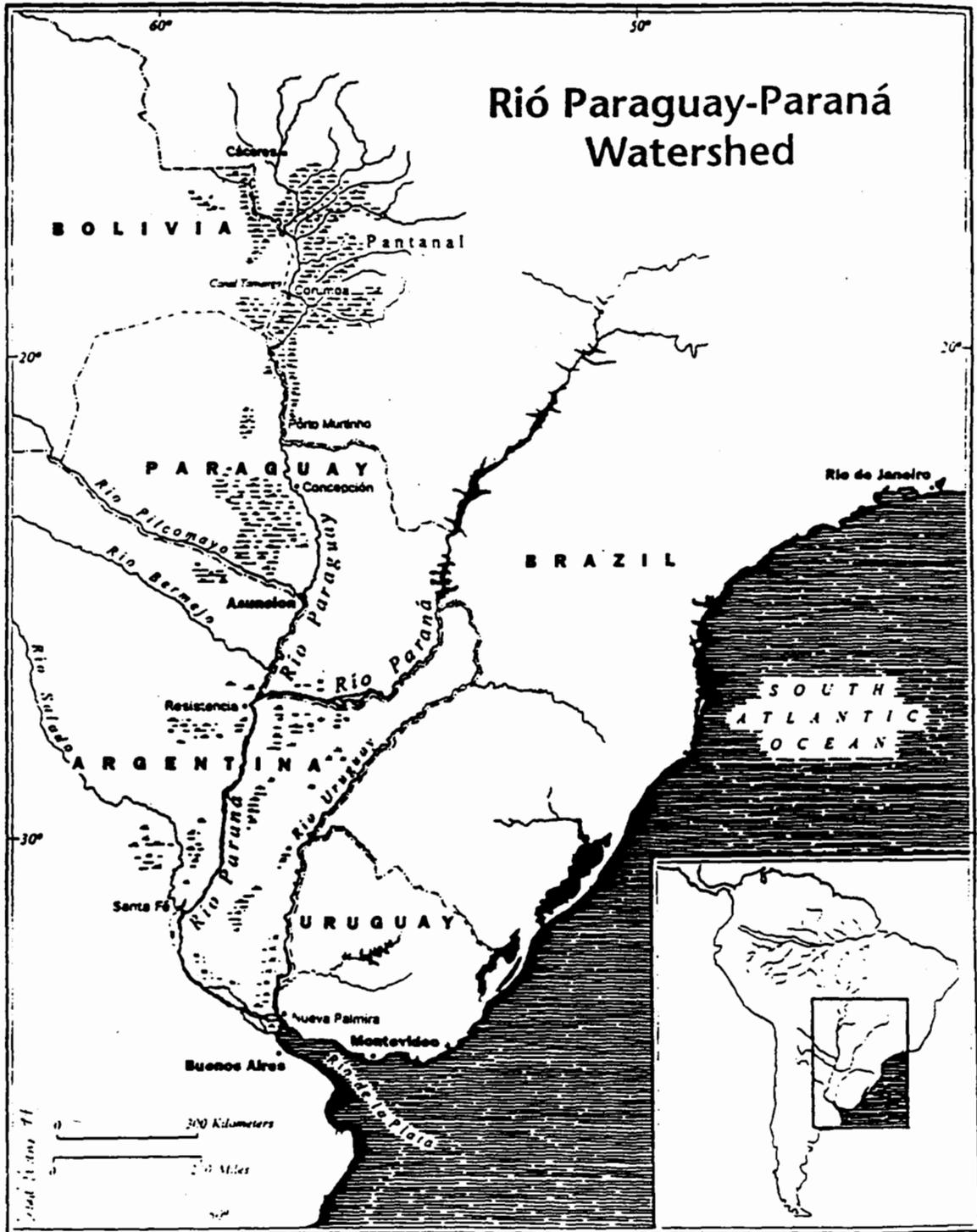
One of the Pantanal's crucial functions is to lower the risk of catastrophic floods in the Paraguay and Paraná Rivers. The Pantanal plays the key role in regulating the hydrological regime by functioning as a huge "sponge" that slows down the flow of water coming from the upper basin. Catastrophic flooding downstream becomes a real possibility as mitigation measures will be extremely difficult to design and implement on such a large scale.

In general, questions raised about Hidrovía must also be asked of alternative transportation modes if the least cost method of achieving a given level of performance is to be found. Hidrovía is not the only means of moving products to markets and of importing goods. Nor is it the only means of stimulating

regional and national economic growth. A balanced analysis, which explicitly includes environmental benefits and costs for all viable alternatives, including the identification of the alternative with the least environmental impact.

Status: IDB is currently finalizing the terms of reference and contract documents for the engineering and environmental studies. The studies should take about 18 months to complete once started. IDB has also solicited input from the NGO community on approaches for public participation in the studies.

MAP:



13.N Bolivia: IDA - Rural Community Development
(Formerly Rural Communities and
Infrastructure Development)

Projected IDA Funding: \$ 16.9 million
Projected Total Cost: \$ 40.0 million
Tentative Board Date: July 1995
Stage: Negotiations tentatively scheduled
for May 1995
World Bank Environmental Assessment Category: B
Project first entered: July 1994
Entry last updated: March 1995

Description: The main objective is to increase the standard of living and incomes of poor, rural communities. The proposed project would support small-scale investment by rural communities to support or diversify their productive activities, e.g., in road infrastructure, watershed and other natural resource management interventions, and adaptive technology and transfer.

Issues: This project would appear to warrant environmental assessment category A given the components of road infrastructure, watershed management, etc. MDB involvement is appropriate, and with the government of Bolivia's increasing emphasis on local empowerment and popular participation, it seems not only important but also timely.

Status: The above information has been conveyed to the World Bank staff. It responded that the project has been accepted as a EA category B. The rationale for this decision is as follows: The project would finance small sub-projects, such as rehabilitation and construction of small roads, small-scale irrigation, natural resource management structures, and markets. Some of these may have some localized negative environmental impacts which will need to be mitigated. It is standard practice in the Bank to classify such projects in category B.

Natural resource management sub-projects, however, will have clear positive environmental impact. As the rural investments will be selected through a participatory planning process, the Bank does not know which projects will be financed and where the sub-projects will be located. In principle, sub-projects would not exceed \$80,000. Construction of roads in environmentally sensitive areas will not be financed.

The draft Staff Appraisal Report for the project includes environmental analysis, which covers the possible environmental impact and the mitigation measures of sub-projects. The implementing agency (Fondo de Desarrollo Campesino) will decide whether a sub-project could have a negative environmental impact. In such a case, an environmental screening process and the design of mitigation measures would be part of the sub-project

feasibility or detailed engineering studies. The sub-project environmental analysis would be carried out under guidelines of the Ministry of Sustainable Development and Environment. The environmental screening criteria will be described in the project implementation manual and will be strictly enforced during implementation.

The project is not a Category A project because it will not have "a significant environmental impact" for the following reasons:

- a) most sub-projects will be small and the impact, if any, will be local;
- b) most road projects will be rehabilitation of existing roads;
- c) no roads in environmentally sensitive areas will be financed;
- d) where there is a potential negative impact, mitigation measures will be included into the sub-project design and construction or rehabilitation contracts; and
- e) the amount for infrastructure to be financed under the project is not significant as it amounts to only \$10 million, which is to be divided among different kinds of sub-projects including natural resource management sub-projects and agricultural extension.

Since the municipalities located in the Chapare region would be included in target area of project intervention, it is expected that investment in rural roads would also contribute to the diversification of the local economy, thereby reducing the importance of coca production.

The Bolivian government and rural communities would contribute \$5.7 million. The Swiss government would participate with \$2.5 million. The project needs additional co-financing to cover the rural investments. A Japanese Grant has been approved.

14.N Bolivia: IDA - Land Administration

Projected IDA Funding:	\$ 19.9 million
Projected Total Cost:	\$ Unknown
Tentative Board Date:	1995
Stage:	Negotiations tentatively scheduled for late March 1995.
World Bank Environmental Assessment Category:	B
Project first entered:	July 1994
Entry last updated:	February 1995

Description: To improve land allocation, revise the agrarian legislation, build up a national cadastre/registry system for rural land, and to implement a titling regularization program.

Issues: USAID/Bolivia did not agree with the initially proposed environmental assessment category C, and recommended instead category B. Although this project will not get directly involved in activities that alter the landscape, the planned interventions will clearly affect land allocation and agrarian legislation, and these, in turn, will clearly affect the way land is used and allocated to alternative uses (e.g., forestry, agriculture, and cattle ranching.) Looking the direct impacts of the planned activity, therefore, USAID/Bolivia considers that some degree of environmental assessment should be carried out. Environmental assessment category B might be appropriate.

MDB involvement in this activity is very appropriate. The activity will complement USAID/Bolivia's support to the Sustainable Forestry Management Program, placing emphasis on the land tenure issue.

Status: The project has already been changed from an EA category of "C" to "B," because the environmental aspects are an important consideration in reforming land legislation and administration. The new law will provide for defining land use rights of private, communal and public owned lands in accordance with land use zoning schemes. It will also lift current restrictions on land transactions and pricing fiscal (government-owned) land to achieve a more rational allocation and use of land. At the same time, traditional land tenure systems will be respected and rights of indigenous groups will be recognized.

15.N Bolivia: IDA - Hydrocarbon Sector Reform and Capitalization Technical Assistance Project (formerly Hydrocarbon Deregulation and Capitalization)

Projected IDA Funding: \$ 10.0 million
Projected Total Cost: \$ 10.0 million
Tentative Board Date: April 1995
Stage: Negotiations scheduled for late March 1995
World Bank Environmental Assessment Category: B
Project first entered: July 1994
Entry last updated: March 1995

Description: The main objective is to help the government of Bolivia open up the sector to private investment, capitalize Yacimientos Petrolíferos Fiscales Bolivianos (YPFB) with private investor participation and strengthen the Secretariat of Energy and SOHA.

Issues: USAID/Bolivia believed the initial environmental assessment category C would have been inappropriate for this activity and recommended changing it to category B. Whereas direct impacts on the environment will be minimal, the indirect impacts could be important (e.g., could deregulation encourage more small-scale producers and wildcatting of hydrocarbon reserves? will this expand exploration in biologically sensitive areas? and does the government of Bolivia have the capacity to insure that these changes will effectively monitored?) In the absence of more information, USAID/Bolivia recommended this project be re-classified as environmental assessment category B.

This planned activity is consistent with the government of Bolivia's top privatization/capitalization priorities, and World Bank involvement is highly appropriate.

Status: The project EA Category, which was originally a C, has recently been changed to a B. The World Bank responded to the above concerns with the following:

The reform is expected to attract more capital, hence more exploration and wildcatting. Consequently, this will have an impact on the indigenous population (social impacts), ecology and wildlife. To address these issues, first, the in-depth environment audits will analyze these aspects and develop draft regulation and operational guidelines. These audits are in process of being commissioned. The initial audit will be financed by the US Trade and Development Agency and will be carried out by the US firm, Dames & Moore, from Florida State for an amount of about US\$200,00. The second will be financed by CIDA and carried by a Canadian Firm, Iris Environmental Systems, for about US\$250,000. Furthermore, the project contains a Legal

and Regulatory Component, including the drafting of environmental regulations and promulgation. Additionally, the Institutional Strengthening Component includes the establishment of an Environment Unit within the National Secretary of Energy (NoSE) which will have a strong tie with the Ministry of Sustainable Development and Environment (MoSDE). It is through these institutions and with the promulgation of regulations, standards, norms and operating guidelines that the Government will enforce the regulations and monitor all hydrocarbon activities.

The Credit Agreement of this TA will include:

- a) the obligation to establish an Environment Unit in NoSE;
- b) the signing of a cooperation agreement between NoSE and MoSDE.

A PPF of \$1.0 million and a Japanese Grant Facility of Y71.0 million provided financing for project preparation.

16.N Brazil: IBRD - Mato Grosso do Sul Management and Conservation of Natural Resources {formerly Land Management IV}

Projected IBRD Funding: \$ 28.0 million (up to)
Projected Total Cost: \$ 58.0 million
Tentative Board Date: January 1996
Stage: Negotiations scheduled for August 1995.
World Bank Environmental Assessment Category: C
Project First Entered : July 1994
Entry Last Updated: March 1995

Description: The proposed project seeks to improve natural resource management in the upper Paraguay (Pantanal) and Paraná watersheds, while generating sustainable productivity gains through an integrated approach of improved soil, water and forest conservation practices planned and implemented in about 325 micro-catchment areas of the State of Mato Grosso do Sol. The project is expected to directly benefit 12,000 farmers in the State, and aims at generating sustainable productivity gains through improved land management, soil and moisture conservation, and water pollution control practices in microcatchments covering about 2.2 million ha.

The proposed project would include three major components:

- A. Integrated Use and Management of Natural Resources in Microcatchment Areas through:
- (i) rural extension;
 - (ii) agricultural research;
 - (iii) erosion control works along rural roads; and
 - (iv) a Natural Resource Management and Pollution Control Incentive Fund, consisting of grant assistance to small- and medium-scale microcatchment area farmers and farmers' associations to encourage adoption of key practices recommended in the microcatchment area plans;
- B. Policies and Strategies for the Conservation and Sustainable Use of Natural Resources through:
- (i) strengthening of the State's natural resource policy analysis, planning and enforcement capacity and monitoring system using remote sensing technology;
 - (ii) support for the creation of a system of conservation units and implementation of four units; and
 - (iii) environmental education and dissemination programs for schools and for the public at large; and
- C. Project Coordination and Management through:
- (i) general coordination, project administration, monitoring and evaluation, and
 - (ii) training of project staff and beneficiaries.

Issues: This loan follows the model of the Land Management III (São Paulo) project and would appear to be an acceptable investment. USAID/Brazil has two concerns that should be addressed by IBRD:

- 1) Mato Grosso do Sul has weaker management capacity than the southern states involved in previous loans;
- 2) the project would include the Pantanal watershed, which is prized for its tourism potential and biodiversity. Most of the Pantanal is privately owned and parts are threatened by increased ranching and agricultural development. USAID/Brazil assumes that protecting this area is one of the primary reasons for the loan and that the project is being designed with particular sensitivity to environmental concerns. [Brasilia03291 22Apr93].

Status: The above comments have been conveyed to the World Bank.

In response, the Bank felt it important to clarify that the project is an EA Category "C" and not "B" as originally stated in the USAID's draft summary. As noted, the project design is highly sensitive to environmental concerns and would promote and finance integrated conservation techniques in microcatchments of the Pantanal watershed. The proposed project thus would have a direct and positive effect on the Pantanal area and would prevent further degradation to the Pantanal stemming from poor natural resource management of the microcatchments which influence it. However, actions to improve management and protection within the Pantanal are included in the "Plan to Preserve the Upper Paraguay River Basin (PCBAP)," partially financed under the WB's "National Environment Project" (Loan 3173-BR), and, therefore, the proposed project would not finance activities directly in the Pantanal.

As also indicated by USAID, the proposed project addresses the state government's management capacity, through the financing of technical assistance and a strong training program for all implementing agencies. It also includes interchanges with [States of] Paraná and Santa Catarina to learn from the implementation experiences of previous projects.

USAID/Brazil also noted that perhaps more critical than the management capacity of the State, is the fact that the success of this loan action could be negated by the proposed IDB Hidrovia Waterway that may counteract environmental gains made under this land management action (see page 38). The US government should insist that all MDB actions in the Pantanal Watershed be effectively coordinated in order not to serve contradictory purposes. The MDBs cannot count on ephemeral local politics to make this happen. There must be Bank-level coordination for effective environmental protection. [USAID/Brazil e-mail 23Mar95].

17.N Costa Rica: IDB - Rehabilitation, Maintenance and Construction of Rural Roads (CR-0125)

Projected IDB Funding: \$ 51.7 million
Projected Total Cost: \$ 64.6 million
Tentative Board Date: 1996 or later (96-B)
Stage: Project under preparation
IDB Environmental Assessment Category: 3
Project first entered: July 1994
Entry updated: March 1995

Description: The proposed program includes:

- a) multiple works for the rehabilitation of approximately 2,500 KM of rural roads, including their maintenance, and of tertiary roads; and
- b) institutional strengthening for the Ministry of Public Works and Transportation (MOPT) to improve programming, control and follow-up of works execution.

Issues: USAID/Costa Rica agrees the rural roads of Costa Rica need urgent and thorough rehabilitation and maintenance, however it has serious concerns about the viability of the project. Concerns fall into three areas 1) The institutional and contractual arrangements to be used in implementing the project, 2) potential negative environmental impact, and 3) advisability of increasing government of Costa Rica external debt to finance this activity.

The project will have an impact on the environment given the nature of road construction activities. This is an area of concern to USAID/Costa Rica given its experience in site selection and road construction. Careful follow up is needed on the government of Costa Rica's road construction activities to insure environmental concerns are addressed. [San José04811 25Jun93].

Status: This information was conveyed to IDB. Its responded that the environmental summary for the project, approved April 26, 1994, describes progress made in addressing environmental issues. The recommendations set forth in the summary, for inclusion in the loan documentation, include:

- 1) establishment of a capable Environmental Unit within the Ministry of Public Works and Transportation;
- 2) adoption of environmental quality control procedures and guidelines; and
- 3) preparation of environmental assessments for all projects included in the program, and incorporation of environmental recommendations from the EA into project design and/or bidding documents. The project design team will review the summary when the project comes up for approval to ensure

that the environmental provisions are updated as needed. Institutional considerations will also be carefully taken into account as responsibilities of municipal and central government agencies are better defined.

18. Dominican Republic: IDB - Watershed Management Program DR-0119 (formerly Management of the Mao River Basin)

Projected IDB Funding: \$14.0 million
Projected Total Cost: \$17.0 million
Tentative Board Date: 1996 (96-A)
Stage: Project under preparation
IDB Environmental Assessment Category: 3
Project first entered: May 1993
Entry last updated: March 1995

Description: The proposed project is designed to improve community life and the situation of renewable natural resources in the Mao River Basin area:

- a) management of the remaining natural forests and reforestation;
- b) protection against erosion, and increasing peasant production through agro-forestation and conservation; and
- c) institutional strengthening through training, environmental education and the assistance of consultants.

Issues: USAID/Dominican Republic urges IDB to obtain substantial policy reform regarding sustainable use of forests. Given this concern, a complete EA should be conducted [#00043 03Jan92].

Status: Comments have been forwarded to IDB. IDB reported that an Environmental Summary for this project was approved in August 1992. The feasibility study was prepared with the participation of three experts in environment and renewable natural resources management. It complemented studies commissioned by IDB that:

- a) quantified environmental benefits and updated environmental impact information in June 1992;
- b) took into account consultations with local populations regarding social and environmental impacts in an evaluation of forest management and agroforestry activities.

The summary also recommended special attention be given to:

- a) environmental viability of pilot forest industry components;
- b) soundness of the technical design of environmentally beneficial components; and
- c) financial and economic viability of sustainable forest management and conservation in the project area.

The technical team working on the project has carried out five

missions to further develop this project from 1987 to 1992. As a result, larger investments are contemplated in the recovery of deforested areas, soil and water conservation, erosion control, and demonstration fish farming. A modest sawmill component was eliminated. Consultants have been hired to help the government of the Dominican Republic complete program design, and negotiations with Plan Sierra are ongoing regarding its participation in project execution. Specific financing is contemplated for studies to support areas of policy reform regarding sustainable use of forests, which would be directly related to the implementation of this project. An updated Environmental Summary may be prepared if the project team, the Environmental Committee, and/or the Environmental Protection Division consider it advisable.

In conclusion, USAID urges IDB to deal with policy reform issues regarding sustainable use of forests in advance of lending. Studies to support areas of policy reform after the loan has been approved are likely to receive little attention.

19. Dominican Republic: IBRD/IDB - Power II

Projected IBRD Funding: \$ 70.0 million
Projected IDB Funding: \$100.0 - 150.0 million
Proj. Private Funding: \$170.0 million
Projected Total Cost: \$400.0 million
Tentative WB Board Date: August 29, 1995
Tentative IDB Brd Date: Unknown
Stage: WB appraisal mission in the field
(March 1995). IDB in preparation.
Japanese Grant Facility is funding
project preparation studies.
World Bank Environmental Assessment Category: A
WB Project ID Number: DO-PA-7011
IDB Project ID Number: DR-080 (Electrical Development
Program for the Private Sector)
Project first entered: July 1993
Entry last updated: March 1995

Description: The proposed project includes:

- a) technical assistance to government of the Dominican Republic and the Corporación Dominicana de Electricidad (CDE) for the
 - 1) incorporation of its generation and transmission facilities,
 - 2) privatization of CDE's distribution systems,
 - 3) strengthening of the policy and regulatory institutions of the sector, and
 - 4) addressing the environmental problems caused by existing power stations;
- b) expansion of the transmission system and professional services for the management of the new transmission company and the dispatch center; and
- c) installation and operation of generating units totalling 250 MW, by independent power producers (IPP).

A Bank guarantee could be applied to private financing of the plants. The physical components are part of a least-cost generation and transmission expansion plan prepared by CDE's consultants.

Issues: USAID/Dominican Republic recommends that the project have an adequate assessment of the potential for air emissions, water and marine contamination, and landscape contamination. [#05649 06Jul93]. This project should fit into a general integrated resource planning strategy for the Dominican Republic. Serious adverse environmental impacts from the site location and possible resettlement include effects on sensitive marine and coastal ecosystems.

The government of the Dominican Republic has reportedly suggested the following sites:

- 1) the Samaná Bay, one of the largest winter breeding areas for humpback whales in the Caribbean; and
- 2) the Luperón Bay, the last known breeding area for the West Indian manatee.

The Samaná Bay, a proposed UNESCO Biosphere Reserve, is also growing in importance for nature tourism because of the whales and other marine resources. The U.S. government's expectation is that for projects involving large-scale thermal power plants, regardless of the kind of fuel being used, an adequately conducted EA should be mandatory.

Status: These comments have been conveyed to the World Bank. In response, the World Bank has stated that a detailed EA of the entire electric power sector has just recently been completed, and is being reviewed by the Bank. This study, which is being financed by USAID, also examines in detail the environmental implications of the two new thermal power plants which the Power II project would help finance. Moreover, the study will recommend specific improvements in the environmental management of the power plants, including the transportation and storage of coal and the management of ash residues. The Bank reported that project-specific EAs will be carried out for the two sites mentioned above, before any construction activities start at those sites. The EA category was changed from an B to an A since this report was last issued in December 1993.

In conclusion, USAID's comments under the issues section still hold; an adequate project-specific EA should be conducted with careful consideration being given to *site location alternatives*, local participation, marine resources and contamination. The above sectoral EA, though very valuable, will not guarantee complete coverage of the proposed Power II project sites.

20.N El Salvador: IBRD - Energy Sector Modernization

Projected IBRD Funding: \$ 60.0 million
Projected Total Cost: \$ 142.1 million
Tentative Board Date: 1995
Stage: Negotiations scheduled for March 1995
World Bank Environmental Assessment Category: B
Project first entered: August 1994
Entry last updated: March 1995

Description: The proposed project contains three parts:

- a) a *policy component*, to support the implementation of reforms embodied in the new legal and regulatory framework for the sector, including the introduction, as well as the formulation of environmental assessment guidelines;
- b) an *institutional component*, to support the new regulatory institutions in the sector, strengthen Comisión Ejecutiva Hidroeléctrica del Río Lempa's (CEL) administrative, financial and environmental management, and support the privatization of power distribution and the continued development of independent power production; and
- c) an *investment component*, which will provide for the rehabilitation of some of CEL's hydroelectric power plants, the rehabilitation of portions of the distribution network, and the development of their telecommunications systems.

Issues: USAID/El Salvador believes that MDB involvement, particularly that of the World Bank, is not only appropriate but critical for the energy sector. Electricity rates in El Salvador are about 40 percent below long run marginal costs. The World Bank is encouraged to take a more active role in policy dialogue in the sector. Specifically, conditionality requiring increases in power rates should be included in this loan.

USAID/El Salvador also believes that the hydroelectric studies will need to include a complete environmental assessment.

Status: The above comments were conveyed to the World Bank staff. Regarding tariffs, the Bank responded that the government of El Salvador (GOES) has agreed under the terms of the most recent IDB loan for the power sector, to increase tariffs to 85 percent of long run marginal costs by 1996 and to reach parity by 1999. Additionally, the institutional component of the project will support the new regulatory institution in the development of a transparent and economically rational methodology for the determination and regulation of energy prices.

As part of the project preparation, GOES is undertaking a

Sectoral Environmental Assessment for the Power Sector. This will provide for EAs for existing generating plants (those where this not already being financed under the IDB Energy Program for the Power Sector), and for the repowering of the Soyapongo plant. In addition, the project will fund detailed EAs for the two least-cost hydro schemes selected as part of the expansion program for the power sector.

21. Nicaragua: IDB - Forestry Resources
Management/Conservation Program (NI-
0025)

Projected IDB Funding: \$28.0 million
Projected Total Cost: \$31.0 million
Tentative Board Date: Unknown
Stage: Project under preparation
IDB Environmental Assessment Category: 3
Project first entered: May 1993
Entry last updated: March 1995

Description: The proposed program contemplates the execution of recommended actions included in the Forest Action Plan related to the Pacific Coast as well as the Central Zone. It consists of four components:

- a) establishment of agroforestry systems in basins in process of degradation;
- b) pine forest protection and sustainable management;
- c) management and conservation of protected areas; and
- d) institutional strengthening.

Issues: Care must be taken that the resources from this loan do not contribute to further deforestation and inappropriate forestry and plantation practices. The FAO-sponsored Tropical Forestry Action Plans have been criticized in general for being too strongly dominated by commercial timber interests and for neglecting to address issues of sustainability and the rights of forest dwellers. Recently, serious environmental concerns were raised by NGOs with regard to pine forest timber concessions in Nicaragua.

Status: Comments have been forwarded to the Inter-American Development Bank. IDB reported that an Environmental Brief was approved and made available in April 1993. The EA is being completed and will be made available in accordance with pertinent Bank procedures. As the brief indicates, project preparation activities contemplate an EA to be carried out in parallel with the general feasibility study. USAID concerns regarding pine forest timber concessions will be passed on to the project team. However, USAID should be urged to provide information in this regard with sufficient specificity to be taken into account in the environmental assessment, if not already covered.

IDB further reported (March 1995) that the project is designed to support community led watershed management activities in five areas in the Central/Pacific region, and pilot forest management projects in three or four areas of the North Atlantic region. The areas were selected on the basis of community interest that tenure conflicts between the central government, the local government and the communities have been settled. The project

will also provide some financing for field surveys that will support land registry activities being financed by IBRD and WWF. The program does not include any industrial/commercial components of the Tropical Forestry Action Plan. Although this program does not directly address question of forestry policy, IDB continues to monitor progress in that area in accordance with the provision of the Agricultural Sector Program (NI-0020).

22.N Paraguay: IDB - Export Road Corridors (PR-0035)

Projected IDB Funding: \$100.0 million
Projected Total Cost: \$190.0 million
Tentative Board Date: September 1995
Stage: Project under preparation
IDB Environmental Assessment Category: 3
Project first entered: July 1994
Entry last updated: March 1995

Description: The proposed project includes investments to improve the National road network to accommodate present and future traffic and assure all weather passage on two important export road corridors which facilitate the movement of Paraguayan products to external markets.

Issues: USAID/Paraguay has serious concerns with respect to environmental impacts of the proposed project. The northeastern region of the country, which this project aims to help develop, is on one of the last forested areas of the eastern region of Paraguay. It presently faces tremendous pressure from deforestation. Almost complete deforestation in the region of Alto Paraná and Itapúa was the indirect effect of the improvement of roads in that region and may be repeated with these new projects. Improvements in the road system will also facilitate the present, massive extraction of raw logs and their contraband over the border to Brazil. Paraguay has not been able to effectively enforce the existing laws regarding forest protection and prohibition of illegal log exports.

USAID/Paraguay agrees with the assessment that the inter-institutional commission has been able to work effectively, however, in the execution stages of projects, its successes lie largely with mitigating the direct effects of construction. The environmental assessments produce for the Santa Rosa and Concepción road projects contained very little analysis or projections regarding the potential for accelerated deforestation, increasing cash crop farming, displacement of small landowners, and other indirect affects.

This road project is based on the assumption that it will help farmers in the region get their products into export markets. The Canindeyú region is characterized by soils which should remain under forest cover. They are sandy, with little topsoil, and heavily sloped, especially right near the Brazilian border (Cordillera de Mbaracayú), making them highly erodible. Sustainable forestry and/or agro-forestry should be the activities developed in the region.

USAID/Paraguay recognizes, the implementing agency, the Ministry of Public Works and Communications (MOPC) may carry out these projects with other funds, ignoring environmental considerations.

However, Paraguay now has a law requiring the incorporation of EIAs into all development projects (public and private) to assure no adverse impact and its compatibility with other national and local programs dedicated to sustainable development.

Status: This information was conveyed to IDB. IDB reported that the EIA is currently underway. It includes consideration of indirect impacts and protection of the rights of indigenous populations. The environmental brief, approved on July 19, 1993, calls for special care to ensure the economic and institutional feasibility of proposed mitigation measures and careful follow up on the part of the project team regarding all aspects of the environmental studies.

PROJECTS LOCATED IN MIDDLE EAST AND NORTH AFRICA

23.N Egypt: AfDB - Kima Fertilizer Project

Projected AfDB Funding:	\$ 100.0 million
Projected Total Cost:	Unknown
Tentative AfDB Board Date:	1996 or later
Stage:	Unknown
AfDB Environmental Assessment Category:	Unknown
Project first entered:	July 1994
Entry last updated:	February 1995

Description: The proposed project consists of two plants, one in Suez and one in Kima, These will include an ammonia plant, nitric acid, ammonia nitrate, bagging and loading facilities, buildings, working capital, and pre-operating expenses.

Issues: USAID/Egypt is strongly opposed to the project because of lack of privatization plans, non-priority sector (Egypt is self-sufficient in this area), economic, environmental and energy supply reasons. It strongly questions the AfDB's rationale in making a sizeable loan to an inefficient public sector entity (Kima fertilizer has been labelled as one of the most inefficient fertilizer factories in Egypt).

USAID/Egypt is concerned that the proposed project may create, or exacerbate existing environmental problems. Environmental concerns include plant discharge; the project should insure that wastes are collected and properly treated before discharge. Discharge should be monitored for compliance with design parameters and with Ministry of Public Works effluent criteria. Storage and containment of all chemicals should be considered carefully in relation to liquid accidental discharge or seepage into the ground and substrata dust and winds should also be considered. A comprehensive environmental impact analysis should be conducted before the project is initiated

Access to road and rail transport systems should be assessed to prevent overloading and damage to parts of transportation systems from the factory to the market or distribution centers, and disturbance to residential areas. [Cairo14711 24Aug93, Cairo04315 20Mar94].

Status: The above information was conveyed to AfDB. AfDB reported that the project is not a high priority and it is not likely to come to the Board in 1995.

24.N Egypt: AfDB - Inland Container Terminal

Projected AfDB Funding:	BUA 30.0 million
Projected Total Cost:	Unknown
Tentative AfDB Board Date:	Unknown
Stage:	Unknown
AfDB Environmental Assessment Category:	Unknown
Project first entered:	July 1994
Entry last updated:	February 1995

Description: The proposed project will consist of:

- a) construction of container depot facilities in Cairo and in upper Egypt;
- b) supply of cargo handling facilities; and
- c) consultancy services for supervision of construction.

Issues: Depending on the project design, the construction of container depot facilities in Cairo and Upper Egypt could have major environmental impact. A comprehensive environmental impact assessment should be conducted as part of the planning process. [Cairo08555 17May93]

Status: The above information was conveyed to the World Bank. The Bank noted that it will be brought to the attention of the government. The executing agency will in particular be advised to prepare a comprehensive EA report as part of the planning process for the project.

25.N Morocco: IBRD - National Watershed Management

Projected IBRD Funding: \$ 60.0 million
Projected Total Cost: \$ Unknown
Tentative Board Date: March 1996
Stage: Project preparation under way.
World Bank Environmental Assessment Category: B
Project first entered: July 1994
Entry last updated: March 1995

Description: The proposed project's goal is to improve land use and natural resources management in mountain areas and reduce siltation in reservoirs and associated hydraulic infrastructure. The main components would include:

- a) institutional and organizational development;
- b) improvement of legal framework for land use in mountain areas;
- c) investments in selected watersheds;
- d) applied and adaptive research and extension; and
- e) technical assistance and training.

Issues: USAID/Morocco supports the project as an important element to halting deforestation and safeguarding past investments in water storage, irrigation, and hydroelectric plants. While potential for environmental benefit appears high, USAID/Morocco questioned the Bank classification of the project as environmental assessment category C. Usually, projects having any potential impact on the environment, positive or negative, should have some environmental analysis. Thus, USAID/Morocco recommended at least environmental assessment category B.
[Rabat02153 07Mar94]

Status: The above comments were communicated to the World Bank, which reported that the project has been reclassified as EA category B.

26.N Morocco: IBRD - Secondary Roads (formerly
Secondary and Tertiary Rural Roads)

Projected IBRD Funding: \$100.0 million
Projected Total Cost: \$226.0 million
Tentative Board Date: 1995
Stage: Date of negotiations to be
determined.
World Bank Environmental Assessment Category: B
Project first entered: July 1994
Entry last updated: March 1995

Description: The proposed project objectives are to:

- a) strengthen institutions in charge of road maintenance, road funding and network management;
- b) improve communication within regions and access to rural areas;
- c) reduce the maintenance backlog and widen sub-standard pavements;
- d) improve road safety; and
- e) improve road transport efficiency.

Issues: For penetration road building or road improvement projects, USAID requires an environmental assessment or environmental impact assessment, as appropriate. USAID/Morocco has neither seen a technical document on the project nor met with Bank staff involved with the project and therefore is not in a position to categorically state that either of these analyses should be done. Being an improvement project of existing road network, it would seem that the EA Category B by the Bank is sufficient. However, USAID/Morocco would recommend that, to the extent possible, priority be given to consideration of environmental impacts of the road improvement project and mitigatory actions be planned (and funded) when necessary.

A major current USAID/Morocco project supports agribusiness development, and very actively supports the provision of health care services to the poor, especially in rural areas. This rural roads project is likely to have positive impacts on both of these USAID activities. Thus, USAID/Morocco finds the proposed project appropriate to development needs, provided environmental issues are carefully addressed.

Status: The above comments were communicated to the World Bank. It responded that the environmental analysis to date (paragraphs below) should answer USAID's concern on environment. In short, the Bank is using the questionnaire approach. The first step is to collect answers to the environmental questionnaire for individual road sections. This will be followed by either a specific environmental impact assessment if any potential risk is identified (to be followed by mitigating measures); or the start

of the works in other cases. The B rating for such a project is fully consistent with established practice.

"Environmental impact"

"3.84 As road works will be limited to improvement and maintenance of existing roads with no alignment change, no serious potentially adverse environmental impact is expected. The project has environmental benefits (development of the Environment Unit, environmentally-conscious institutional improvements, improved accessibility, reduced damage/soil erosion, and improved vehicular and pedestrian safety). Special attention will be paid to providing adequate drainage, ensuring slope stability and preserving archeological materials in excavations. In accordance with established guidelines, the project has been rated B."

3.85 The roads works (widening, surfacing, strengthening) appraised have been carefully assessed with regards to their potential effects on the environment. There will be no alignment change nor any resettlement; erosion control will be incorporated into the engineering design; and materials selection will follow environment-aware technical guidelines. Before they would start, the roads works will have followed a two-step environmental screening: first, the DPTP will have filled out a specific questionnaire to identify potential environmental risks and, second, any identified potential adverse impacts will have been addressed and mitigating measures implemented."

3.86 Once completed, these works will be beneficial to the environment by reducing congestion, improving accessibility to markets, schools and medical services and improving pedestrian and vehicular safety. The highway safety, network management and institutional developments component will have a highly positive impact on the environment. The highway safety improvements will reduce human casualties and will decrease the risk of accidental pollution thus alleviating infrastructure threats to health and the natural environment (water, soils). The network management component is environmentally friendly since it is principally aimed at improving routine maintenance. The ability to assess the environmental impact of roads works will be fostered within the institutional development component. In close coordination with the Under Secretary of State for the Environment, Ministry of Interior, the DRCR has created an internal environment office to develop operational guidelines for environmental impact assessment of all the major road works, to provide guidance and coordinate actions on environment issues related to road works."

REFERENCES

In addition to USAID's Early Project Notification System, the following references were used in compiling project data and descriptions:

ADB Business Opportunities: Proposed Projects, Procurement Notices and Contract Awards. Asian Development Bank, Metro Manila, Philippines. December 1994.

Country Program Notes 1993-96. Asian Development Bank, Metro Manila, Philippines. March 1993, March 1993.

Monthly Operational Summary of Bank and IDA Proposed Projects (As of March 15, 1994). World Bank. Washington, DC. April 3, 1995.

Monthly Operations Report, July 1994. International Finance Corporation, Washington, DC. July 1994.

Monthly Report on Status of Loan Applications and Technical Cooperation and Status of Procurement, March 1995. Inter-American Development Bank, Washington, DC. March 1995.

Planned Project Activities 1993-1994. International Fund for Agricultural Development. March 9, 1993.

Project Information Documents, World Bank, various dates. These reports, available at the Bank's Public Information Center, were used extensively in describing World Bank projects.

Quarterly Operational Summary (as of 31 March 1994). African Development Bank, Central Projects Department, Abidjan, Cote D'Ivoire.