

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

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**OFFICE OF ENVIRONMENT  
BUREAU FOR POLICY AND PROGRAM COORDINATION  
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## 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
EU -	European Union
EXIM -	Export Import Bank (U.S.)
EXIMBANK-	Export Import Bank (Japan)
GEF -	Global Environmental Facility
GTZ -	German (bilateral) Technical Assistance Agency
FAO -	United Nations Food and Agriculture Organization
FINNIDA -	Finnish International Development Agency
IDB -	Inter-American Development Bank
IBRD -	International Bank for Reconstruction and Development (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)
MIGA -	Multilateral Investment Guarantee Agency (WB)
MDB -	Multilateral Development Bank
NRC -	Nuclear Regulatory Commission (USG)
ODA -	Overseas Development Agency (United Kingdom)
OECF -	Overseas Economic Cooperation Fund (Japan)
SIDA -	Swedish International Development Agency
USG -	United States Government
WB -	World Bank Group (including IBRD, IDA, IFC, and MIGA)
WWF -	World Wildlife Fund
YNG -	Yganskneftegas (Russia state petroleum company)

### OTHER ABBREVIATIONS:

EA -	Environmental Assessment
EIA -	Environmental Impact Assessment (used interchangeably with EA)
EDS -	Environmental Data Sheet (WB)
GIS -	Geographic Information System
Gwh -	Gigawatt hours
ha -	hectare(s); 1 ha = 2.47 acres, 1,000 ha (10 km <sup>2</sup> ) = 3.87 miles <sup>2</sup>
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

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N = Projects marked with an N are newly listed since the March 1995 report.

**MDB PROJECTS FORMERLY REPORTED ON BY USAID THAT WERE APPROVED,  
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<u>Country:</u>	<u>MDB - Project Name</u>	<u>Status</u>
1.	Côte d'Ivoire: AfDB - Gas Block 11 (Formerly Projet Gaz Foxtrot)	Dropped
2.	Guinea: AfDB - Garafiri Hydroelectric	Dropped
3.	Bangladesh: IDA - Coastal Embankment Rehabilitation	Approved 11/02/95
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11.	Slovak Republic: EBRD - Mochovce Nuclear Safety Improvement	Withdrawn by GOS
12.	Bolivia: IDA - Environment, Industry and Mining	Approved 12/21/95
13.	Bolivia: IDA - Rural Community Development	Approved 8/03/95
14.	Bolivia: IDA - Land Administration	Approved 6/13/95
15.	Bolivia: IDA - Hydrocarbon Sector Reform and Capitalization Technical Assistance Project	Approved 7/06/95
16.	El Salvador: IBRD - Energy Sector Modernization	Approved 7/06/95
17.	El Salvador: IBRD - Land Administration	Approved 3/05/96
18.	Costa Rica: IDB - Rehabilitation, Maintenance and Construction of Rural Roads	Dropped in 1995
19.	Nicaragua: IDB - Forestry Resources Management/ Conservation Program	Approved 1/17/96
20.	Morocco: IBRD - Secondary Roads	Approved 6/30/96

For more information on the above projects contact the USAID Bureau for Policy and Program Coordination, Office of Environment, PPC/ENV.  
N = newly listed since the March 1995 report.

## INTRODUCTION

In accordance with section 537(h) of Public Law 100-202, this March 1996 report lists proposed multilateral development bank (MDB) projects likely to have adverse impacts on the environment, natural resources, public health or indigenous peoples that could cause environmental problems. 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 report lists only proposed MDB projects -- those that have not yet been approved by their respective Executive Boards. Projects are included in the report if a USAID Mission (and sometimes other US Government (USG) agencies, or non-governmental organizations -- NGOs) identifies environmental, natural resource, public health, or indigenous peoples concerns. The list concentrates on the major MDBs, including the World Bank, the Asian Development Bank (ADB), the African Development Bank (AfDB), and the Inter-american Development Bank (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 more thorough with respect to the World Bank projects for which early information is readily accessible. It is much less complete for the AfDB, ADB, the International Finance Corporation and the European Bank for Reconstruction and Development (EBRD). Early project information from these MDBs is inadequate for a preliminary environmental review.

The principal mechanism for compiling this report is USAID's Early Project Notification (EPN) System. In this system, USAID's Office of Development Partners notifies USAID field offices, regional bureau desk officers, and selected embassies of upcoming projects as each MDB makes the information publicly available. USAID field missions respond if there is reason to anticipate environmental and other concerns, and the EPN System compiles the information. 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. Thus, inclusion on this list 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.

This report serves as a record of USAID environmental 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 March 1995. This report, as well as the March 1995, and December 1993 editions are available on USAID's homepage on the Internet (<http://www.info.usaid.gov/>). A list of MDB projects formerly monitored by USAID that were approved, dropped, or put into reserve status since the March 1995 report, appears after the Table of Contents.

Since the above legislation was passed in 1986, USAID has monitored environmental aspects of proposed MDB projects. USAID's Bureau for Policy and Program Coordination, Office of Environment, investigates and reports on environmental concerns identified by USAID missions and interested NGOs. As part of this activity, USAID co-chairs "Tuesday Group," a monthly meeting of international NGOs and U.S. government agencies, to discuss environmental issues at the MDBs.

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

MDBs have made significant progress toward integrating environmental concerns into their loan criteria and sector policies in recent years. The World Bank, followed by IDB and ADB, have been leaders in improving the MDB environmental performance. Strengthened staff capacity for most MDBs, MDB policies in forestry, and World Bank policies in energy and information access have been especially important changes.

Since 1989, the World Bank, IDB, ADB, and AfDB have put in place internationally recognized standards for comprehensive environmental assessment procedures. The procedures help ensure that 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, ADB and IDB have adopted procedures by which non-confidential project-related information is available electronically and through headquarters' and field offices. The U.S. Government was the leading advocate for this move, as it improves the process of exchange, consultation, and project performance.

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 late 1980s. The report no longer reveals a need for environmental procedures and policies, but serves as an indicator for how well these are being carried out.

USG involvement in several of the projects has enhanced them environmentally. For example, the previously listed Bangladesh Coastal Embankment and River Bank Protection Projects, which the World Bank approved in November 1995, have emphasized environment and people's participation rather than infrastructure. USAID's Irrigation Support Project for Asia and the Near East worked in collaboration with the World Bank to improve public participation in these projects, resulting in more sustainable approaches. Project components, such as NGO involvement in forestry extension services and creation of a joint verification mechanism (by local NGOs) for addressing resettlement grievances, came about as a result.

Another example of improvement includes IDB's Paraguay Export Road Corridor Project. This project proposed paving roads with potentially serious impacts on indigenous communities and some of the last extensive subtropical forests in eastern Paraguay. Based in part on USAID advice, IDB recommended dividing the project into two projects, postponing the most socially and environmentally damaging segment until the government of Paraguay can demonstrate an institutional capacity to successfully complete social and environmental mitigation measures. Because of USAID's interest in the development of the region traversed by the road, it carried out an "affirmative investigation" on this project. The project's entry in this report includes a summary of the investigation.

In another case, the regional Paraguay-Paraná Hidrovía Project, currently under study, has greatly improved its public participation performance as a result of USG -- and NGO -- involvement. IDB has also committed support for additional public participation activities related to Hidrovía. Recent USAID examination of Hidrovía, however, indicates that there is still much room for improvement in Hidrovía's public participation program.

In a final example, the World Bank, ADB, and the government of Nepal decided to drop the proposed Nepal Arun III Hydroelectric project. USAID contributed early on in the discussions on this controversial project because of environmental, social and economic concerns. Because of its economic concerns, USAID and the Department of Energy undertook a study on Arun III entitled, "Alternative Analysis of Options for the Nepal Electrical Generating System." Based on the results of this study, USG argued for a postponement and reexamination of the project. Arun III was



also featured in the previous edition of this report.

**REVIEW OF ENVIRONMENTAL ASSESSMENT CATEGORIES AT MDBs**

In recent years most of the multilateral development banks (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 1990, several banks have newly 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

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.

**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  
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PROJECTS LOCATED IN AFRICA

1. Benin/Togo: AfDB - Adjaralla Hydroelectric

Projected AfDB Funding: \$ 35 million  
Projected Total Cost: \$237 million  
Tentative AfDB Board Date: 1997  
Stage: Undergoing appraisal at AfDB.  
Reserve program at IDA  
AfDB Environmental Assessment Category: I  
Project first entered: July 1993  
Entry last updated: February 1996

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 World Bank was planning on cofinancing the project, but put it 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 recently responded that the Adjaralla Hydroelectric project is

programmed for African Development Fund financing in 1997. The project, however, has not been appraised nor has the complementary environmental study been received. A Round Table Meeting is expected to convene in May 1996 to discuss the financing of the project and all other relevant issues including the environment. AfDB had just received the consultant's report updating the economic and financial studies, and is reviewing the report.

In the previous report to Congress (March 1995), AfDB had responded that it had reviewed the EA report of this project and raised issues similar to those mentioned above by USAID/Togo. Therefore, AfDB had requested a re-examination of these issues and proposed mitigating measures. The EA report of this project had not yet been finalized at that time.

2. Nigeria: IBRD - Escravos Flared Gas Reduction

Projected IBRD Funding:	\$100 million
Requested GEF funding:	\$ 25 million
Approved IFC Funding:	\$140 million
Projected Total Cost:	\$450 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: November 1995

Description: The proposed project involves the production of methane gas, liquid petroleum gas and condensates from 167 million ft<sup>3</sup>/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 (reducing greenhouse gas emissions/global warming), 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 inshore 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 inshore 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 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 project has been deferred pending clarification on macroeconomic policy issues.*

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

3. Indonesia: IBRD/GEF - Kerinci Seblat Integrated Conservation and Development (formerly Biodiversity Conservation)

Projected IBRD Funding: \$ 19.2  
Projected GEF Funding: \$ 15.0  
Projected GOI Funding: \$ 11.5  
Projected Total Cost: \$ 35.7 million  
Tentative Board Date: June 1996  
Stage: Negotiations are scheduled for March 18, 1996. Final project report completed and awaiting regional environmental report from GOI.

World Bank Environmental Assessment Category: A  
Project ID: ID-PA-4014, ID-GE-3699  
Project first entered: July 1994  
Entry last updated: March 1996

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 nearly 1-million-ha 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.

GEF will cover buffer zones and protected area delineation and management, and an ecologically sound smallholder production system. 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].

In addition USAID/Indonesia 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". USAID/Indonesia believes 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, USAID/Indonesia suggested that significant resources go toward NGO and local government capability strengthening and empowerment. [E-mail USAID/Indonesia 29Mar95].

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.

4. Lao PDR: World Bank Group - Nam Theun II Hydropower

Projected WB Funding: undetermined  
Projected Total Cost: 1.2 billion (approximately)  
Tentative Board Date: undetermined  
Stage: under study  
WB Environmental Assessment Category: unassigned  
Project first entered: February 1996  
Project information updated: April 1996

Description: The World Bank Group does not currently include Nam Theun II in its portfolio of proposed projects, but has asked the government of Lao PDR to conduct several studies before consideration. The proposed project involves the construction of a 50-m-high dam, with a 690-MW power plant, on the Nam Theun tributary of the Mekong River. It would create a 450-km<sup>2</sup> reservoir (about one-fourth the size of Yacyretá's reservoir in Argentina and Paraguay, but both have about the same kilowatts per hectare of flooded area ratio). Nam Theun II is being developed by private developers -- a consortium of Australian, French, Italian and Thai companies. The bulk of the financing would come from the private sector, with the government of Lao PDR taking an equity stake of approximately 25%. Virtually all electricity output would be exported to Thailand under an existing memorandum of understanding (for purchase of 1,500 MW) between the two governments.

The project is expected to generate approximately \$35 million per year in revenues to Lao PDR 5 years after completion, increasing to about \$100 million per year in year 10, and leveling off at \$100 million until year 25, when the loan will finally be paid off. It is expected to generate about \$4 billion in aggregate pay out.

Issues: Key issues relate to the loss of habitat of high conservation value, economic issues, the social impacts of resettling 950 families, and the hydrological and water quality impacts on two river systems. IUCN recently identified the Nam Theun area as a high priority for conservation. Also, the Global Environmental Facility (GEF) approved a \$5 million Wildlife and Protected Areas Conservation Project in February 1994, listing the Nakai/Nam Theun area as a priority for protection.

The GEF profile of the proposed protected area stated the [Nam Theun II] hydro project would be a major threat to the area's establishment. The proposed reservoir would flood about 80 km<sup>2</sup> of pristine tropical forest and about 370 km<sup>2</sup> of degraded forest due to shifting cultivation. The Nakai/Nam Theun component was recently dropped from the GEF project because of the major infrastructure planned. According to the Bank, however, there is now a general agreement in principle among the power developers that the project will provide funds for the establishment and long-term management of the 3,500-km<sup>2</sup> Nakai Biodiversity Conservation Area (NBCA) which includes approximately 1/3 of the Nakai Plateau.

This would also include sustainable development programs for about 1000 families in the protected area.

International NGOs (such as the International Rivers Network-IRN) economic, resettlement, biodiversity issues. There is also concern about the cumulative effects of hydropower projects in the relatively undeveloped Mekong basin, which is being developed in the absence of a national energy sector strategy. An IRN-commissioned review of the hydrological data for Nam Theun II indicated that the available hydrological data "is not sufficient to fully assess the Nam Theun 2 Hydroelectric Project's viability." Apparently, much of the stream flow data are based on only a seven-year period of rainfall data. Without adequate knowledge of how much water will be available to turn the dam's turbines, investors in the project will expose themselves to a high risk less than expected energy production. The potential environmental and social impacts will also be difficult to assess with limited hydrological data.

International NGOs are not in a position to represent locals -- but Laotian NGOs are nearly non-existent. International NGOs would like the World Bank to organize local meetings and consultations including both government and citizen representatives (indeed, the World Bank has requested the Lao PDR government to hold such consultations). Regional criticism comes from Thai NGOs because all the power from the project will be sold to Thailand. UNDP has offered to hold a forum on the project. The WB has been asked to present information and coordinate with UNDP. The forum will likely be held sometime in 1996.

The project may also undermine an existing bank loan in Lao PDR, Forestry Management and Conservation Project (#Cr.2586.LA).

Status: According to the World Bank's draft Country Assistance Strategy for Lao PDR, the government of Lao PDR has asked the Bank Group to provide financial support for the project through the IFC, and partial risk guarantees from the MIGA. The Bank Group's position is that only on the basis of preparation to acceptable standards would the Bank group appraise the project and subsequently decide whether it can participate in its financing. In particular, the project would have to comply with its policies concerning the environment, resettlement and indigenous peoples.

A preliminary EIA has been undertaken, but further work is required to address the ongoing degradation in the area, mitigate adverse impacts from the project, and develop a longer range plan to maintain the ecology of the catchment area. Further work is currently ongoing in the area of aquatic biodiversity assessment, social impact assessment and indigenous people's issues, mitigation of downstream water quality impacts, and management planning for the NBCA. The most recent EIA draft is dated December 1995. This was translated into Lao, but the government of Lao PDR has not

agreed to release it. A further revision of the EIA draft is expected in May 1996.

Alternative power generation possibilities, including sites for hydropower development, need to be studied further in a manner acceptable to the Bank, so as to confirm the preliminary findings of the site's economic viability and to place the proposed project within a comprehensive power development strategy. A precondition for Bank consideration of this project is a public consultation plan, including an open, transparent, participatory process in conducting the studies to satisfy the above Bank concerns. According to the Bank, it has also asked the government to prepare a regional social action plan which would try to anticipate and shape economic and social development in the broader project impact area.

The private developers want Bank support, and have indicated that they would strive to meet the Bank's expectations. Bank staff considered the developer's support for environmental protection of the watershed as enlightened self interest, not altruism. The Bank regarded this as assurance that the developer would comply with such a condition when required by the Bank. However, to date the government of Lao PDR has not agreed to undertake these studies. If the government agrees, precondition studies will be conducted including three broad areas of concern: economic impact, analysis of alternatives, and environmental and social impact. The studies have a six-month time frame, but the consultation process may take longer than that. When the studies are completed, the Bank Group will be in a position to appraise the project.

In addition, the Bank reported that it has a very open dialogue with the NGO community so far. It has met and corresponded with the NGOs. The Bank has stated that its objective is to manage a transparent process for arriving at its decision with regard to this project.

**PROJECTS LOCATED IN EUROPE AND CENTRAL ASIA**

**5.N Lithuania: IBRD - Highway Project**

Projected IBRD Funding:	\$ 15 million
Projected EBRD Funding:	\$ 15 million
Projected GOP Funding:	\$ 8 million
Projected bilateral grants:	\$ 1 million
Projected Total Cost:	\$ 45 million
Tentative Board Date:	December 1996
Stage:	Project preparation underway
World Bank Environmental Assessment Category:	<b>B</b>
Project ID:	7LTHPA018/LTPA8551
Project first entered:	November 1995
Project information updated:	February 1996

Description: The proposed project will include:

- a) expansion of periodic road maintenance;
- b) completion of city by-passes;
- c) road improvement and maintenance for the cities of Vilnius and Kaunas;
- d) review of road-user charges;
- e) improvement of road management;
- f) encouragement of private consulting and construction industry development

Issues: In USAID's view, it is inconceivable that \$39 million of highway repair and construction would have no impacts other than fumes from the asphalt mixer (as indicated in the PID). The project should include a review of environmental resources adjacent to the new/upgraded roadways, and an assessment of both positive and negative impacts which may result from the projects. [E-mail 22Sep95]

Status: These comments were conveyed to the World Bank, which responded with the following:

The PID document is intended to be very brief and therefore only a few words on the environment, as in this project, environment is not the major issue. In this project we will use an environment expert and follow the Bank's policy giving environmental issues a very high priority.

The Bank has recently developed a handbook on Roads and the Environment as guidance when analyzing the problems and identifying mitigation measures. This handbook better than the PID reflects how concerned we are about the environment. [WB e-mail 01Nov95].

**6.N Lithuania: IBRD - Private Agriculture Development**

Projected IBRD Funding: \$ 30 million  
Projected Total Cost: \$ 55 million  
Tentative Board Date: April 2, 1996  
Stage: Negotiations substantially completed  
World Bank Environmental Assessment Category: B  
Project ID: 7LTHPA005/LTPA8538  
Project first entered: November 1995  
Project information updated: March 1996

Description: The proposed project would support reform and restructuring of the agriculture and forestry sectors through policy reforms and investments, including:

(a) farm credit for on-farm production and development through financial intermediaries with extensive rural branch networks to channel funds to individual sub-borrowers;

(b) support for privatized agro-industries and agro-service enterprises through both short- and long-term investment funds. (Priorities will be given to commercial viability, export potential, and management capacity); and

(c) development of human and institutional skills necessary for a market economy through TA support for agricultural advisory services, strengthening outlets for market, agricultural information services, land-survey, registration and titling services, and training of technicians, managers, and workers/farmers. Those TA components which would have the greatest impact on the successful implementation of the proposed project, will receive the high priority.

Issues: Experience with USAID agricultural sector projects in the region indicates that potential impacts from agricultural assistance projects can be severe. Particular attention is required for the selection and use of agricultural chemicals. In addition, environmental technical assistance should be built into the assistance program to assure that farm managers/workers are properly trained in such areas as the use of agro-chemicals, and in the disposal (or reuse) of farm production and food processing wastes. [USAID E-mail 22Sep95]

Status: These comments were conveyed to the World Bank. The Bank responded with the following comments:

The World Bank will use an environmental expert and follow the Bank's policy, giving environmental issues a very high priority. It was pleased to note the US interest in Lithuanian environmental problems. The problems noted by USAID are valid in a generic way. However, the comments do not reflect a careful

reading of the environmental annex of the project document [these were not available to USAID at the time], or an appreciation of the effort of the government of Lithuania and Lithuanian farmers to reduce the use of pesticides and better manage their risk. It is well known that environmental issues have been high on the agenda of the government since independence. Lithuania is one of the few countries where three Ministries (Public Health, Environment, and Agriculture) have been cooperating in drafting a comprehensive pesticide regulation.

Farmer training has been part of this program. The present farmer training program in sustainable pesticide management and use is a joint effort of the Plant Protection Agency, the Lithuanian Agricultural Advisory Service and the agricultural education program in the Ministry of Agriculture. Although it has certainly not prevented all problems, it has made considerable progress in a country where half of all farmers are new. Among outstanding problems is the inadequate pest management by the many home gardeners, and their necessary training, but this falls outside the scope of the above project.

USAID is in part assisting in the Lithuanian pest management program through its integrated pest management training (at Oregon State) in which Lithuanian agricultural staff is participating.

With respect to pesticide disposal, the Lithuanian government has recognized the problems of depleted stock, especially on abandoned or reorganized collective farms. It is addressing this problem with the help of the Danish government by collecting these materials and destroying depleted stocks of pesticides in a safe and internationally acceptable way. The project is also helped by the training in environmental risk management provided for loan officers through the World Bank's Enterprise and Financial Sector Restructuring Project.

These developments have all been mentioned in the Environmental Analysis (Annex 8). As such it would be more helpful if USAID's comments could specifically indicate those issues which, in their opinion or experience, are insufficiently addressed. [WB e-mail 31Oct95].



**7.N Poland: IBRD - Municipal Water Supply and Sewerage Projects**

Projected IBRD Funding: \$ 156.5 million (for four projects)  
Projected Total Cost: \$ unknown million  
Tentative Board Date: Bielsko Biala: May 1996  
Wroclaw: September 1996  
Bydgoszcz: October 1996  
Krakow: September 1997

Stage: Project preparation underway (for Bielsko Biala, negotiations substantially completed)

World Bank Environmental Assessment Category: B  
Project ID: 7POLPA032 (now four separate projects: PLPA8595, PLPA40075, PLPA43134, PLPA43137)

Project first entered: November 1995  
Project information updated: March 1996

Description: These proposed projects will develop pilot investment operations with the municipal water companies in Bielsko Biala (\$21.5 million), Wroclaw (\$60 million), Bydgoszcz (\$35 million), and Krakow (\$40 million). While the specific project components still need to be determined through appropriate studies, the projects would expect to provide financing for: (i) a comprehensive program of institutional strengthening and (ii) high priority investments in water supply, sewerage, and wastewater treatment, concentrating on the rehabilitation and modernization of existing systems and improvements in operational efficiency, with emphasis on demand management. Also the projects will assist the government in the introduction of a satisfactory enabling environment for the sector. In defining the scope of project components with external effects (wastewater treatment, for instance) care will be taken to place investments into an appropriate regional and national framework of obligations and priorities.

Issues: These projects should receive the same environmental attention as was applied to the World Bank-financed Municipal Development Project (ID 7POLPA057): "The project would have a mostly positive environmental impact through the implementation of water and sanitation investments, which currently represent over one-half of total municipal capital expenditures. However, some subprojects may require mitigation measures. Sub-borrowers should be required to present satisfactory environmental impact assessments to the lender and conform to Polish environmental legislation. Environmental screening processes and EIA check-lists should be incorporated in the lending agency's Operating Manual and agreed upon at negotiations. Prior review

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of EIAs by the Bank would be required for all subprojects above US\$5 million." [USAID E-mail 22Sep95]

Status: This project has been divided into four projects Krakow Water and Wastewater, Wroclaw Water and Wastewater, and Bydgoszcz Water and Wastewater, and Bielsko Biala. Comments have been conveyed to World Bank staff.

**8.N Poland: IBRD - Port Access and Management**

Projected IBRD Funding: \$ 83 million  
Projected Total Cost: \$ 120 million  
Tentative Board Date: May 23, 1996  
Stage: Appraisal report being prepared  
World Bank Environmental Assessment Category: B  
Project ID: PLPA36061  
Project first entered: November 1995  
Project information updated: February 1996

Description: Project focuses on improvement of land and sea access to the main Polish ports of Gdansk, Gdynia, and Szczecin-Swinoujscie. Will also include design and implementation of a port management and information system in each port authority.

Issues: Construction and/or reconstruction of major roadways [and ports] will almost certainly involve significant environmental impacts, both positive and negative. In addition to carrying out an assessment of such impacts, the project should include technical assistance for transport planners on the environmental aspects of transportation facility construction and operation. [USAID E-mail 22Sep95]

Status: These comments have been conveyed to the World Bank.

9.N Poland: IBRD - Roads II

Projected IBRD Funding:	\$ 200 million
Projected Total Cost:	\$ Approximately \$400 million
Tentative Board Date:	End 1996 (Tentative-not yet scheduled)
Stage:	Project preparation underway
World Bank Environmental Assessment Category:	To be determined

Project ID:	PLPA8593
Project first entered:	November 1995
Project information updated:	January 17, 1996

Description: The main objective of the proposed project, a continuation of the investment and policy actions initiated under the Roads I Project, is to support and speed up the transformation and modernization of the road sector along the lines described above. In particular, the project would (i) improve the road (highways, bridges, bypasses) network and its main TEN (Trans European Network) corridors, (ii) promote the competitive capacity of domestic contractors through improvement of their technical, managerial, and financial capacity, (iii) improve the road safety situation, (iv) adjust road user charges for different vehicle types to cover the economic costs incurred by each type of vehicles, and to achieve a well balanced combined transport framework, and (v) advise on the operation, management, and administration of the road agency, the GDDP. The project would entail policy, institutional, and physical infrastructure components.

Issues: Construction and/or reconstruction of major roadways will almost certainly involve significant environmental impacts, both positive and negative. In addition to carrying out an assessment of such impacts, the project should include technical assistance for transport planners on the environmental aspects of transportation facility construction and operation. [USAID E-mail 22Sep95]

Status: These comments have been conveyed to the World Bank staff.

10. Russia: IBRD - Petroleum Joint Venture

Projected IBRD Funding: \$ 500 million (about)  
Projected YNG Funding: \$ 100 million  
Projected Amoco Funding: \$ 600 million  
Project net cash flow \$2000 million  
Projected Total Cost: \$3200 million  
Tentative Board Date: End of 1996  
Stage: Project preparation underway  
World Bank Environmental Assessment Category: A  
Project ID: RUPA8807/7RUSPA006  
Project first entered: March 1995  
Project information updated: March 1996

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 seven 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 in March 1995 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 has given some financial support for preparation of the proposed Petroleum Joint Venture project, specifically for technical advise on the ecology and environment in th preparation of the EIA.

11.N Russia: IBRD - Krasnodar Power Generation

Projected IBRD Funding: \$ 500 million  
Projected Total Cost: \$ 900 million  
Tentative Board Date: September 1996  
Stage: Project preparation underway  
World Bank Environmental Assessment Category: A  
Project ID: RUPA8802  
Project first entered: November 1995  
Project information updated: February 1996

Description: The proposed project involves construction of a new power generating station in Krasnodar Krai to meet current and projected electricity supply requirements of the region. The new plant is proposed to consist of 1,350 MW of combined cycle generating capacity, and would be fueled by natural gas. The plant would include three 450-MW units, each consisting of two 150-MW gas turbines, two heat recovery steam generators, and one 150-MW turbo-generator set. The project would also include construction of a 60-km gas pipeline to supply the plant, ancillary control systems, and switchyard and transmission facilities to connect the plant to the grid. Depending on the findings of the feasibility study with regard to the least cost expansion sequence, the project could also be extended to support all, or part of, 900 MW of capacity replacement/expansion, using the same combined cycle technology, at the combined heat and power plant now owned and operated by Kubanenergo.

Issue: The proposed environmental analysis of this major project appears to be quite thorough and extensive in scope. Ancillary facilities (gas transmission line; power distribution system) must be included in the analysis, however. [e-mail 9Sep95].

Status: These comments were forwarded to World Bank staff, which responded with the following:

The USAID comments appear to imply that the environmental aspects of these components (gas transmission line; power distribution system) are not being assessed. This is not true. The transmission component is being assessed as a component under the USAID-financed feasibility study. The gas pipeline environmental assessment is being addressed by a Canadian environmental specialist who is currently in the field working with a team of Russian gas specialists. The EA report for the gas pipeline and the transmission line will be included in public discussions that are scheduled to take place next month in Krasnodar. [WB e-mail 27Oct95].



12.N Russia: IBRD - Bridge Rehabilitation

Projected IBRD Funding: \$ 350 million  
Projected Total Cost: \$ 450 million  
Tentative Board Date: March 28, 1996  
Stage: Negotiations substantially completed  
World Bank Environmental Assessment Category: B  
Project ID: RUPA35764  
Project first entered: November 1995  
Project information updated: March 1996

Description: The proposed project will help improve the condition of the public road network by rehabilitating or reconstructing high priority bridges. Investments to be financed under the project loan would comprise: (i) bridge works on federal roads of key economic importance, to be executed by contract; (ii) design of works, construction supervision, technical assistance and training to strengthen the institutions responsible for roads and bridges; and (iii) a regional program of bridge works in two or more regions and technical assistance similar to that for federal roads.

Issues: Bridge repair and reconstruction activities can have significant impacts on waterways and floodways. Pollution (silt and sediments; paint scrapings; etc.) can be carried considerable distances, and can enter food chains and water supply systems. All major bridge repair/reconstruction activities should be accompanied by site-specific impact assessments and impact mitigation plans. [e-mail 9Sep95].

Status: These comments have been conveyed to World Bank staff. Concerns appeared to have been allayed by the project's Environmental Data Sheet (EDS), however. The EDS reports:

"Specific bridge issues might include: temporary or permanent changes in the river bed and erosion pattern; water pollution and changes in sediment transport; physical and pollution impacts on ecologically important wetlands; reduction in public access to river beaches for recreation purposes, etc.

"Rehabilitation and maintenance works to be carried out in accordance with international codes of practice. If any new construction is considered for inclusion, individual EAs would be prepared acceptable to the Bank and Government prior to their inclusion. Appropriate conditions would be incorporated in the standard tender and supervision documents for civil works contracts, covering drainage and erosion, cultural property, borrowing pits, and materials disposal."

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Bank staff response to the above comments included:

The above points and other environmental concerns had been raised during preparation of the proposed Bridge Rehabilitation Project, including the project environmental review carried out in June-July 1994. These concerns have been reflected in the green cover SAR of the BRP, including appropriate text in the draft terms of reference for consultants to carry out engineering design and supervision of bridge works, which should mitigate any negative impact of this project on the environment. [WB e-mail 28Nov95].

**PROJECTS LOCATED IN LATIN AMERICA AND THE CARIBBEAN**

**13. Regional: IDB - Hidrovía, Paraguay-Paraná Waterway**

IDB Funding for studies only:	\$ 7.5 million
UNDP Funding:	\$ 0.75 million
Approximate Local Funding:	\$ 2.0 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 1996

Description: The proposed Hidrovía Waterway project will develop a complex navigation system throughout this huge basin in South America. Indeed, Hidrovía is seen by many to be the physical manifestation of the Mercosur free trade agreement. Hidrovía 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 km<sup>2</sup> and contains a population of more than 17 million people.

With Support from IDB and the United Nations Development Program (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, and there is no commitment by IDB to finance the project itself.

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: Engineering and environmental assessment studies began in April 1995 and are expected to be finalized by the end of 1996. In an encouraging development, the Brazil delegation to CIH recently announced (February 1996) that it would "avoid" channel straightening, removal of rock outcrops in channels, or dredging in the Cáceres-Corumbá section of the Paraguay River. This was to avoid severe environmental impacts in the Pantanal which corresponds to this section of the River. However, recent reports from the region indicate that work on Hidrovía, especially dredging in Argentina and removal of rock outcrops in Paraguay, will commence before the studies have been concluded.

USAID conducted an affirmative investigation of Hidrovía planning activities in August 1995, and participated in a forum on Hidrovía in Asunción, Paraguay, sponsored by Wetlands for the Americas and World Wildlife Fund. The project implementing agency, Intergovernmental Committee on Hidrovía (CIH) has made an attempt to involve local NGOs in their planning process, including them in two meetings in the latter part of 1995. USAID participated in the most recent of the two, and concluded that CIH still has far to go in developing an effective consultation process.

For example, one of the criticisms of the meeting was that no background materials were distributed beforehand. Also, little time was left in the meeting to define a timeframe, process and mechanisms of public participation. Some outstanding issues related to the public participation process remained unresolved: lack of materials, experience and ideas to guide the participation process; and lack of definition on how feedback from civil society (mainly NGOs and local groups) will be incorporated into the studies. The meeting did represent a very positive change in CIH's response to environmental concerns, to public participation issues, and to NGO concerns generally. However, much more work needs to be done on CIH's part to adequately address the valid environmental and social issues.

As of February 1996, IDB was about to give final approval to a technical assistance grant to CIH for the design and implementation of a public participation process in conjunction with the Hidrovía studies. IDB has set aside approximately \$150,000 of Norwegian Trust Fund money for this purpose.

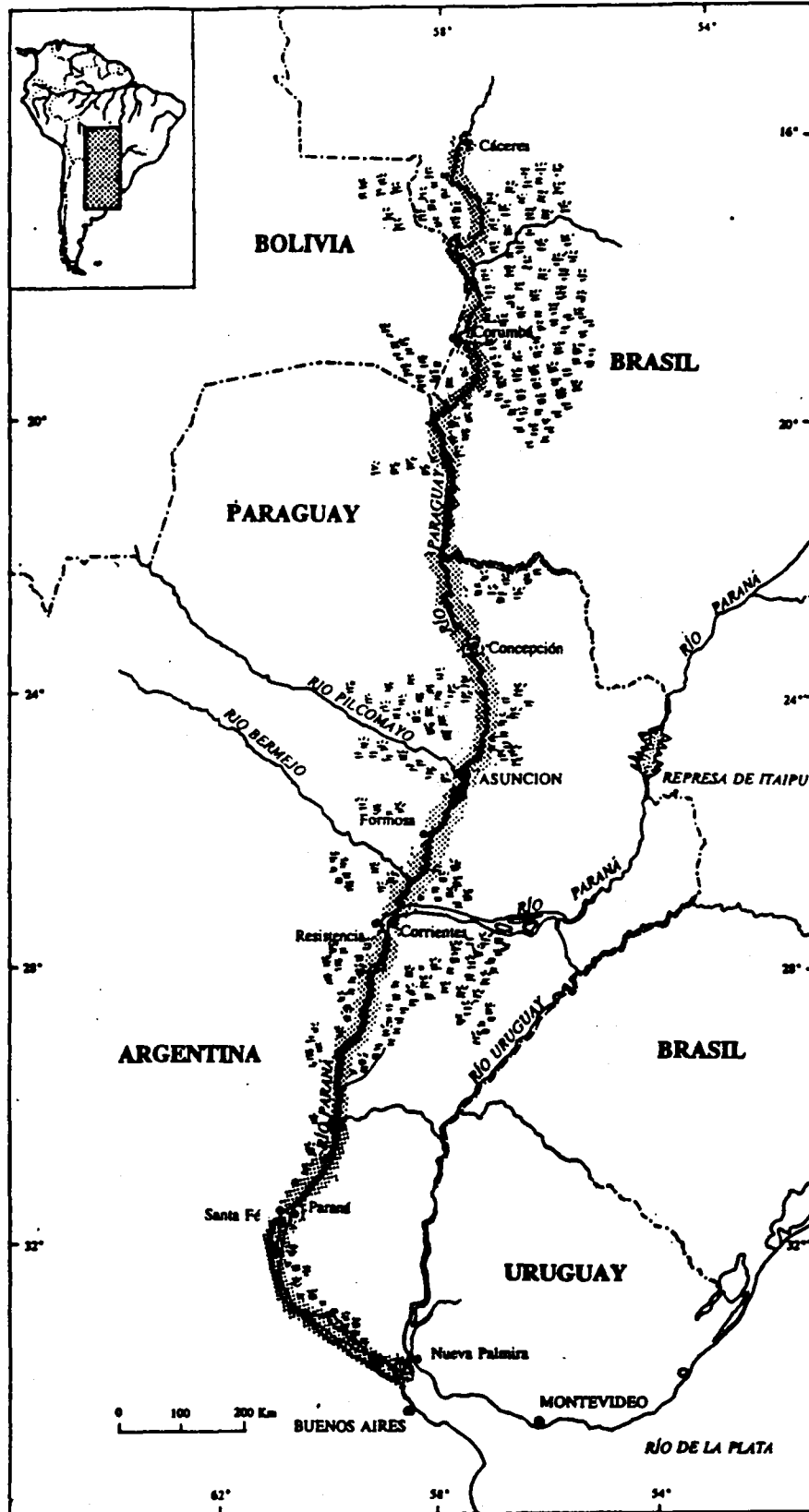


Figure 2. Map of South America showing the location of the La Plata River basin and the Paraguay-Paraná Waterway (Hidrovia). Map produced by Wetlands for the Americas.

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

Projected IBRD Funding: \$ 28 million  
Projected Total Cost: \$ 58 million  
Tentative Board Date: Undetermined  
Stage: Negotiations have been postponed and awaiting confirmation from Federal government on new date for negotiations.

World Bank Environmental Assessment Category: C  
Project ID: BRPA6527  
Project First Entered : July 1994  
Entry Last Updated: March 1996

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 Hidrovía 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 donor coordination for effective environmental protection. [USAID/Brazil e-mail 23Mar95].



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

Projected IDB Funding: \$14 million  
Projected Total Cost: \$17 million  
Tentative Board Date: 1996  
Stage: Project under identification  
IDB Environmental Assessment Category: 3  
Project ID: DR0119  
Project first entered: May 1993  
Entry last updated: January 1996

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.

16. Dominican Republic: IBRD/IDB - Power II

Projected IBRD Funding: \$ 70 million  
Projected IDB Funding: \$150 million  
Projected Private Funding: \$155 million  
Projected Total Cost: \$375 million  
Tentative WB Board Date: December 12, 1996  
Tentative IDB Board Date: July 24, 1996  
Stage: WB negotiations have been postponed until November 1996. Congressional approval of the Electricity Law is expected in 1996. IDB in analysis. Japanese Grant Facility is funding project preparation studies.

World Bank Environmental Assessment Category: A  
WB Project ID Number: DO-PAO-7011/6DOMPA035  
IDB Project ID Number: DR0080 (Power Sector Hybrid Program)  
Project first entered: July 1993  
Entry last updated: February 17, 1996

Description: The World Bank 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.

The IDB project description follows: To implement a new legal and regulatory framework for the energy subsector and help expand the installed capacity through the private sector.

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 and the Inter-american Development Bank. IDB responded in February 1996, saying that the project has been delayed, however, project-specific EIA's had been requested and are being performed. The sector analysis and some of the specific EIA [previously] prepared by Bechtel will have to be updated if the operation goes back on line. There maybe some action on the project after the [local] elections in May.

For the March 1995 report, the World Bank 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 was financed by USAID, also examined in detail the environmental implications of the two new thermal power plants which the Power II project would help finance. Moreover, the study recommended 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 emphasizes the need for project-specific EAs conducted with careful consideration 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.

World Bank recently confirmed that a project-specific EA should be carried out by the company selected to develop the proposed 250MW power plant, before starting its construction. This condition has been included in the proposed Request for Proposal for the above power plant.

**17.N Ecuador: IBRD - Environment Mitigation (formerly  
Environment Technical Assistance and Mitigation)**

Projected IBRD Funding: \$15 million  
Projected Total Cost: \$20 million  
Tentative Board Date: April 4, 1996  
Stage: Negotiations completed  
Environmental Assessment Category: B  
Project ID: ECPA7128  
Project first entered: January 1996  
Entry last updated: March 1996

Description: The project objectives are to a) support the ongoing process of implementing a national environmental strategy, and b) assist the government of Ecuador in building an environmental management capacity in three priority geographic areas identified in the National Environment Action (NEAP): urban areas, Gulf of Guayaquil, and the Amazon. Project components include the following:

- a) Policy formulation and institutional strengthening (policy studies, updating pollution control legislation and regulation, establishment of an environmental information system, establishment of a project implementation unit in the Environmental Advisory Commission -- CAAM);
- b) Environmental planning and management in the Amazon (support for CAAM and the Ecuadorian Institute for Eco-development in the Amazon Region (ECORAE) to prepare a regional environmentally sustainable development plan for the Shushufindi area, small-scale grassroots-level environmental projects, alternative development options);
- c) Municipal environmental management (support for environmental planning in Quito, Guayaquil and Cuenca,);
- d) Environmental information and management in the Gulf of Guayaquil (baseline scientific studies, resource policy analysis, study of integrated pest management in banana cultivation, institutional strengthening of resource management enforcement organizations, design of priority environmental investment projects).

Issues: In general USAID/Ecuador supports the project, but has the following comments, which correspond to each of the above four components:

Part A: Note that USAID has been working closely with CAAM over the past year. The environmental law is presently in the Congress. Support will be needed for the detailed design of CONAMA and its technical secretariat.

USAID funds have been assigned for the review and updating of the pollution control legislation. The work with these funds is supposed to be finished by December 1996.

Several national environmental information system of various kinds are presently being established. The World Bank project should avoid duplication.

Part B: Local consultation should certainly be built into the planning and implementation of the project. The Organization of American States' San-Miguel Putumayo study (Plan de Ordenamiento y Manejo de las Cuencas de los Ríos San Miguel y Putumayo) should at least be referred to by the project since OAS studied the same area intensively. Since ECORAE receives funds from a checkoff of oil money, its record should be examined before it receives additional funds.

Part C: USAID/Ecuador does not quite understand the need for four regional environmental resource centers and how they relate to the rest of the government, NGOs, and others that are already working. RHUDO has a lot of experience in Ecuador that should be examined.

Part D: Coordination with the IDB Coastal Resources Management Project and examination of its experiences would be vital to a good design. Sources of pollution should include road building and other projects in the upper watersheds of the Guayas including IDB and World Bank funded projects. CEDEGE has the legal authority for working in the Guayas Basin and has an environmental unit that has always lacked funds and therefore been unable to do much -- it might be good to strengthen that unit rather than starting up yet another governmental organization.

Project planners recently eliminated an important component from the project: Mitigation of the Impacts of Hydrocarbon Operations in the Ecuadoran Amazon. A coalition of local NGOs (Acción Ecológica and the Coalition in Defense of the Ecuadoran Amazon) has raised concerns about the project, because it sees petroleum pollution as a major limiting factor to sustainable development in the region. Since a major component of the project focuses on Shushufindi, an area heavily impacted by petroleum exploration and exploitation, these NGOs believe that the project will only have limited success.

They have also raised concerns about the lack of local public participation and consultation in relation to the project. Local municipalities in the Shushufindi region have not been contacted about the project. CAAM has not organized any regional public meetings regarding the project. The coalition has asked the World Bank to reconsider its consultative process before the project is finalized.

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Status: Representatives from Acción Ecológica and the Coalition in Defense of the Ecuadoran Amazon have recently (January 1996) met with World Bank staff regarding the project. Bank staff justified its decision to eliminate the pilot project on petroleum pollution remediation because of the lack of government interest and lack of its capacity to carry out mitigation.



**18. Paraguay: IDB - Export Road Corridors**

Projected IDB Funding: \$100 million  
Projected Total Cost: \$190 million  
Tentative Board Date: April 1996  
Stage: Project under preparation  
IDB Environmental Assessment Category: 3  
Project ID: PR0035  
Project first entered: July 1994  
Entry last updated: March 1996

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. The proposed road improvement would link the Asunción capital area with Saltos de Guairá on the Brazilian border. It includes paving a 112-km segment of Route 3 and a 220-km segment of Route 10.

Issues: USAID/Paraguay had 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 adjacent regions of Alto Paraná and Itapúa was the indirect effect of the improvement of roads there and may be repeated with this new project. 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 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 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 near the Brazilian border (Cordillera de Mbaracayú), making them highly erodible. Sustainable forestry or agro-forestry should be 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. Several meetings with IDB staff ensued, including an "affirmative investigation" (or fact finding mission) by USAID to the Route 10 area. After the EIA was completed, IDB contracted additional environmental work to fill in gaps, especially concerning environmental mitigation. As a result of the various studies, including USAID's input, IDB recently decided drop the Route 10 portion of the project. It is now considering two projects: one including only Route 3, to be negotiated in March 1996; and another with Route 10, to be developed at a later date. IDB wants to be sure that the government's institutional capacity to carry out complex environmental and social mitigation measures is fully developed before proceeding with the latter project. It is also calling for full completion of conditions on previous road projects.

Results of meetings between USAID and IDB were positive and collaborative. They included the proposal of additional mitigation measures as part of the project, including the creation of Acaray-mi Ecological Reserve (approximately 20,000 ha). USAID is exploring the possibility of parallel-financing the feasibility studies necessary for the Acaray-mi Reserve. The likelihood of creating a 20-km-long biological corridor linking the proposed Acaray-mi Reserve with the existing Mbaracayú Reserves is also under consideration. Moreover, IDB proposed developing an integrated management plan for the watershed where much of Route 10 and existing and proposed protected areas lie. The plan would be a condition of the loan and money would also be set aside to carry it out.

The following paragraphs summarize USAID's field investigation (August 9-19, 1995) of the project. They are followed by IDB staff responses to specific points:

(1) The main objective of the project is to facilitate the movement of Paraguayan products (mostly agricultural) to market and for export. However, much of the Department of Canindeyú is characterized by sandy soils inappropriate for agriculture or grazing. These highly erodible soils should remain under forest cover. The basic premise for the road improvement in this particular region is therefore flawed.

(2) Though the draft EA Summary does provide a map of the existing forest, it does not indicate deforestation trends in the region, and how the paving of the Route 3 and 10 would affect

deforestation. Almost complete deforestation in the Departments of Alto Paraná and Atop was the indirect effect of the improvement of roads in that region. The environmental brief, approved on July 19, 1993, called 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.

(3) The EA makes no mention of the National Protected Areas Strategic Plan (SINASIP) published in 1993 by the Ministry of Agriculture and Livestock. SINASIP proposes the creation of four protected areas within the area of influence of the project, including, 25,000-ha Acaray-Mí Ecological Reserve, considered the most urgent for protection. All of these protected areas are classified as Brazilian Rainforest (UDVARDY) in SINASIP.

(4) Improvements in the road system would exacerbate the present, massive extraction of raw logs and their illegal export to Brazil. Paraguay has not been able to effectively enforce the existing laws regarding forest protection and prohibition of illegal log exports. Paraguay in general has some of the highest deforestation rates in South America. The EA mitigation plan does not address this issue.

(5) The EA did not evaluate forested or natural areas for conservation significance. Proposed land purchase of areas for conservation and indigenous peoples was not spelled out or prioritized. USAID considered the proposed amount of land purchase for conservation inadequate to compensate for the road's indirect impacts on natural areas. Institutional strengthening for protected area management should be considered as part of these activities.

(6) The EA has an accurate account of the indigenous peoples in the area. However, the land tenure program for indigenous peoples would, according to anthropologists' estimates, secure only about 20 ha per family. Indigenous peoples are already legally entitled to this amount in Paraguay. It would probably not be enough to offset the road's effect on indigenous peoples and their way of life. Also, the needs of the many smaller indigenous communities have not been separated from the needs of larger communities.

The indigenous peoples' education sections of the EA and mitigation plan are well done. The health section overemphasizes infrastructure without mentioning who will run clinics or how they might become sustainable.

Sections on indigenous peoples' economic issues and mitigation need more work. The program emphasizes commercial production of cotton, which many indigenous groups have rejected. In general, non-agricultural sources of production, such as hunting, fishing,

agroforestry and production of yerba mate, have proven to be of higher value to indigenous peoples (according to Anthropologist Dr. Richard Reed).

(7) Known archeological sites, such as early Franciscan and Jesuit ruins near Lima and Corrientes on the Gag River, are not mentioned in the EA.

(8) The EA does not analyze alternatives to paving Route 3 and Route 10. Improvements to the main road from Asunción to Ciudad del Este and the "Supercarretera" to Saltos Guairá should be examined in detailed.

(9) Travel to the region has substantiated a number of problems with the proposed project:

- a) Extreme deforestation pressure in the Canindeyú region;
- b) Existence of poor soils, inappropriate for agriculture;
- c) Ongoing inappropriate establishment by the government (Instituto de Bienestar Rural) of agricultural colonies in the road corridor on poor soils.
- d) Existing and proposed protected areas appear to be in a relatively good state, but are threatened by current land practices;
- e) Lack of government support services, especially agriculture and health, and total lack of any governmental support of sustainable development activities in the region.
- f) Lack of genuine consultation and public participation regarding the EA. The complete EA was not made available to USAID/Asunción after it was announced that it was available.

The USAID investigation concluded that the EA mitigation activities would not be able to compensate for the indirect negative impacts of the road project. Promotion of non-agricultural activities appropriate in the area of Canindeyú, (such as protected area management, nature tourism, natural forest management for non-wood products and yerba mate cultivation) should be emphasized. It was suggested that the EA expand upon deforestation causes and trends in the region, and how the road might effect them. Based on SINASIP, additional studies should be done on prioritizing areas for conservation, and developing effective mitigation activities (purchase of an adequate amount of land, institutional strengthening, and training).

Mitigation activities for indigenous peoples should be re-evaluated, based on the different communities' actual needs. Indigenous peoples' land tenure programs should be specified, and an appropriate amount of land secured to be able to maintain their way of life. Proposed economic activities for indigenous peoples especially need to be reassessed. It is suggested that

public hearings on the EA be conducted in the various communities affected by the road.

The following points include IDB's response to above, and correspond to the numbered paragraphs:

(1) In response to general concerns with the project objectives: Bank staff said that the road improvement was for existing dirt roads that were built in 1972 (in the case of Route 10) or earlier. The original idea of promoting exports was no longer valid; they estimated that 81% of the benefits from road improvements will go to those living outside the area of influence of the road. The objective of the project is now to improve the main network of Paraguayan roads, and to serve all areas. Many of the benefits come from avoiding the congested corridor of Route 2 in north-south travel.

(2) Bank staff contested the assumption that the road would accelerate deforestation within its area of influence. This is subjective according to them, and the real issue is the political and institutional capacity to control deforestation and illegal logging in the region.

(3) SINASIP had been taken into account. The mitigation plan now includes the purchase of 20,000 ha of the proposed 25,000-ha Acaray-mi Ecological Reserve. This will also include funding for management planning, training, and delimitation of the area. About \$4 million all told is dedicated for this component of the mitigation plan. It will also assist in the establishment of three proposed private reserves near the road.

(4) Illegal logging was said to occur principally along the border with Brazil, and along access roads to Route 10. Paving of Route 10 would not necessarily affect this activity. One of the main causes of logging is clearing of large ranches, in part because of traditional practices of Brazilian ranchers (who own many of the ranches in this part of Paraguay. Institutional strengthening for enforcement or control of logging in the area was not considered as a mitigation measure. Bank staff argued that no effective policy options exist to control logging on private lands.

(5) SINASIP is now being used as a basis for prioritizing conservation areas within the area of influence of the road. Bank staff was amenable to considering the purchase of the full 25,000 ha for Acaray-mi Ecological Reserve and the protection of a biological corridor between it and the Mbaracayú Reserve. This might be feasible, especially if USAID could offer some technical assistance in this area.

Institutional strengthening is planned for the Environmental Unit of the Ministry of Public Works and Communications, and also for

the Interinstitutional Commission on Transportation in Paraguay.

(6) The issue of quality versus quantity of land is being revised for indigenous communities. Detailed information on all the indigenous groups and lands to be titled for each one will be available. Approximately \$1.6 million will be dedicated for titling some 8,000 ha of indigenous lands. This will also help offset loss of forest due to the paving of the road.

Completion of indigenous peoples mitigation measures for (three) other IDB-financed road projects in Paraguay will be a condition of the signing of the agreement for this particular project. Also, significant completion of conservation and indigenous peoples mitigation activities for land acquisition will be a condition for the first disbursement of the loan.

The health section will be run by a local NGO, Proyecto Guaraní, which should be able to ensure its sustainability. The mitigation plan sections on support of cotton had been cut out. Emphasis was placed on more sustainable economic activities.

(7) Bank staff appreciated the comments on archeological sites, and would contact Dr. Reed to verify the information. Other archeological sites are mentioned in the EA.

(8) Several variations to the proposed road corridor were analyzed, including the no action alternative. The economic analysis of the project reviewed the improvement of the Route 3 and 10 corridor compared with the Route 2 and the Supercarretera, however, it was not analyzed in the EA. Other routes were considered to be more environmentally destructive.

(9) Comments on participation and consultation and the suggestion for conducting public hearings on the EA were taken in a positive vein. MOPC was identified as the key institution for carrying out consultation and promoting public participation.

**PROJECTS LOCATED IN THE MIDDLE EAST AND NORTH AFRICA**

**19. Egypt: AfDB - Kima Fertilizer Project**

Projected AfDB Funding:	\$ 100 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.

20. Egypt: AfDB - Inland Container Terminal

Projected AfDB Funding:	BUA 30 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.



21. Morocco: IBRD - National Watershed Management

Projected IBRD Funding: \$ 60 million  
Projected Total Cost: \$ Unknown  
Tentative Board Date: January 1997  
Stage: Project preparation under way.  
Pre-appraisal mission scheduled for  
March 1996.  
World Bank Environmental Assessment Category: B  
Project ID: MAPA05476  
Project first entered: July 1994  
Entry last updated: January 1996

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.

## REFERENCES

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

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Monthly Operational Summary of Bank and IDA Proposed Projects (As of March 15, 1996). World Bank. Washington, DC. April 1, 1996.

Monthly Operations Report, July 1995. International Finance Corporation, Washington, DC. July 1994.

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

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Quarterly Operational Summary (as of 31 March 1995. African Development Bank, Central Projects Department, Abidjan, Cote D'Ivoire.