THE WORLD BANK INSPECTION PANEL


Alvaro Umaña, Editor
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Alvaro Umaña, Editor

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When the Board of Directors of the World Bank created the Inspection Panel five years ago, it created an unprecedented means for increasing the transparency and accountability of the Bank's operations. This was a first of its kind for an international organization—the creation of an independent mechanism to respond to claims by those whom we are most intent on helping that they have been adversely affected by the projects we finance.

By giving private citizens—and especially the poor—a new means of access to the Bank, it has empowered and given voice to those we most need to hear. At the same time, it has served the Bank itself through ensuring that we really are fulfilling our mandate of improving conditions for the world's poorest people. The Inspection Panel tells us whether we are following our own policies and procedures, which are intended to protect the interests of those affected by our projects as well as the environment. In testament to the success of this approach, other international financial institutions have seen its value and have followed suit.

This volume represents another critical feature of the Inspection Panel's mandate: to be entirely transparent in its activities. All of its reports carried out in response to claims of adverse impact from some Bank-supported project are made public following their consideration by the Bank's Board of Directors. The reports contained in this volume embody the voices we have heard—from the Brazilians concerned about the effects of the Itaparica Hydroelectric dam and reservoir to the Indians of Singrauli affected by the NTPC Power Generation Project. In these and other areas in which the Inspection Panel has responded the Bank has taken measures, together with the governments concerned, to ensure that problems are redressed and that solutions put in place are closely monitored.

The Inspection Panel breaks new ground, and as such it and the Bank's management have had to learn as we proceed how best to absorb and apply what we have found out from the Panel's reports. Yet the Inspection Panel's value both to the Bank and to the Bank's beneficiaries and stakeholders has proven itself repeatedly and cannot be overestimated. This volume presents in full the activities of a bold experiment in transparency and accountability that has worked to the benefit of all concerned.

James D. Wolfensohn
President
The World Bank
Preface

The World Bank Inspection Panel was created in September 1993 as an innovative tool to ensure accountability in Bank operations and to address harm at the grassroots level. It is an instrument of last resort for local people who feel that they have been or could potentially be harmed by World Bank–financed projects.

The existence and experience of the Inspection Panel is significant. Never before has there been a body of this kind to give voice to private citizens in an international context. Through the Inspection Panel, local communities or groups who feel that their rights and interests can be, or have been, adversely affected by World Bank–financed projects have gained access to the top levels of the organization to voice their complaints and get answers.

The perception by locally affected people that their “rights and interests” have been or could be negatively affected is what triggers a Request for Inspection to the Inspection Panel. The Panel, in turn, must verify claims of harm by:

- Evaluating whether failure of the Bank to follow its operational policies and procedures occurred, and
- Determining if this failure has resulted or could potentially lead to harm—that is, whether it could have materially adverse effects on people in the area of influence of the project.

The Resolution establishing the Inspection Panel does not provide a specific definition of harm; instead it speaks of “rights and interests affected or likely to be affected... provided they have or threaten to have material adverse effects.”

The Requests for Inspection presented to the Inspection Panel have shown that there is a broad spectrum of potentially harmful impacts that World Bank–financed projects can have on local populations. However, an abstract definition of harm may be neither possible nor desirable, precisely because it is difficult to foresee all the different potential forms and shades that actual or perceived harm can take within the context of a specific project.

The Inspection Panel considers that the question of harm, which is at the heart of the mission of the Panel, can only be properly analyzed within the context of each specific case. The reader is encouraged to analyze the spectrum of potential harm shown in the reports presented in this volume. If the intervention of the Panel has made a positive contribution to improving the situation of affected people, its mission will have been at least in part a success.

Although the Inspection Panel is not a quasi-judicial body, it has been vested with sufficient authority to have access to all files, documents, Bank staff, and consultants
needed to carry out its mandate. Government and project officials have also commended
the role of the Panel and have provided its members with valuable information and assis-
tance in each of its cases.

The Panel approved its own Operating Procedures to provide detail to operational
provisions of the Resolution. These Procedures have proven to be a very useful instru-
ment for guiding the Requesters, the Panel, and Bank staff in dealing with the different
aspects of the Panel process in a fair and transparent way.

The Inspection Panel started operations in August 1994, and in the four-year period
since then it has received a total of 12 formal Requests for Inspection, 10 of which have
been registered and processed by the Panel. This volume contains the Inspection Panel's
reports to the Board of Executive Directors for seven of the most important Requests that
were considered by the Panel during its first four years. As such it contains the real case
history of the Inspection Panel and presents the actual application of the Resolution of
the Board of Executive Directors that established the Panel during its first four years of
existence. In addition to the Panel's reports themselves, the volume contains a short sum-
mary of each of the cases, as well as some lessons from the Panel's experience. It is worth
noting that all the Inspection Panel reports have been adopted unanimously by the Panel
Members. Moreover, even though the lead Inspectors are identified for each of the
Requests for Inspection, the reports are very much a group effort. Panel Members and
staff (the Executive Secretary, Mr. Eduardo Abbott, and Assistant Executive Secretary, Ms.
Antonia M. Macedo) have worked together as a team, and Ms. Pamela Fraser provided
valuable editorial support and saw this project to conclusion.

The Panel's work could never have been carried out successfully without the active
participation and commitment of the World Bank's Presidents. Both Mr. Lewis T. Preston,
under whose mandate the Panel was established, and Mr. James Wolfensohn, the current
President, have been key supporters of the Inspection Panel.

Alvaro Umaña, Editor
Background

The Inspection Panel is a three-member body\(^1\) created in 1993 to provide an independent forum to private citizens who believe that their rights or interests have been or could be directly harmed by a project financed by the World Bank.\(^2\) Created on the eve of the 50\(^{th}\) anniversary of the World Bank by IBRD and IDA Resolutions, the Inspection Panel was an unprecedented step on the part of an international financial institution to provide a link between itself and the people affected by its projects.

The creation of the Inspection Panel was a bold Bank initiative to reform by creating an independent mechanism for monitoring operations. The Panel was conceived as the Bank's response—against the backdrop of the dissolution of communism, growing democratization, and increasing NGO influence in the early 1990s—to public pressure for more accountability. By the early 1990s the Bank clearly realized that it faced some fundamental concerns about the effects caused to third parties as a result of its project-financing and technical assistance activities. This realization played an integral part in its development of an independent monitoring mechanism.

Several internal factors also combined to influence the Bank's decision to create an inspection function. One was the concern of both the Executive Directors\(^3\) and Bank Management about the content and direction of the Bank's portfolio; the other was the external perception that the Bank was not accountable for its performance and less than transparent in its decisionmaking. As a result, an independent task force was established to examine the Bank's operations, and in November 1992 it submitted its report to the Board. The report, known in the Bank as the Wapenhans Report, found that Bank staff were often more concerned about getting as many projects as possible approved, and less concerned about project objectives and execution. It concluded that the Bank should improve the performance of its portfolio through changes to its policies and practices.

In response to the recommendations of the Wapenhans Report, Management submitted an action plan to the Board outlining the need for the Bank to have access when necessary "to a reliable source of independent judgment about specific operations that may be facing severe implementation problems." To further emphasize this point, the report noted in its conclusion that "the interests of the Bank would be best served by the establishment of an independent Inspection Panel."\(^4\)

However, the most important driving force behind the establishment of the Inspection Panel were the problems arising from the Narmada dam and water projects in India. These projects—the Narmada River Development (Gujarat) Sardar Sarovar Dam and Power Project and the Narmada River Development (Gujarat) Water Delivery and Drainage Project—on the Narmada River underscored the Bank's prevailing culture of volume lending at the expense of project execution. Each project had serious problems in
its design and implementation, in addition to a lack of environmental planning and mitigation, inadequate appraisals, lack of information disclosure, inadequate resettlement planning, and no consultation with the affected people.

Approved by the Board in 1985, the projects became the singularly defining reason for the necessity for an inspection mechanism within the Bank Group. Although the IDA credit for the water delivery and drainage project was disbursed and closed by July 1992, the IBRD loan and IDA credit for the dam and power project were still being disbursed when the projects' implementation became a matter of great international controversy and criticism because of its disregard for its environmental impact and lack of adequate resettlement and rehabilitation plans.

The ensuing controversy and intense criticism of these projects at the grassroots and international level led to the first-ever independent review of a World Bank project. The objective of the review was "to conduct an assessment of the implementation of the ongoing Sardar Sarovar projects as regards (a) the resettlement and rehabilitation of the population displaced/affected... and (b) the amelioration of the environmental impact of all aspects of the project," with reference to "existing Bank operational directives and guidelines." The review was chaired by Mr. Bradford Morse, and it was completed in June 1992. Known as the Morse Report, it highlighted the problems that occurred when people were neither consulted nor informed about their resettlement as a result of Bank-financed projects, and it underscored the need for more policy reform and the implementation and enforcement of environmental and social policies. NGOs added to the pressure on the Bank by using the findings of the Morse Report and the Wapenhans Report to launch a dual-track campaign. On the one hand they simultaneously targeted both the press and the U.S. Congress and avidly agitated for two main public accountability reforms: a new and expanded information disclosure policy, and the creation of an appeals mechanism. On the other hand they vigorously opposed funding to IDA in the U.S. Congress unless the Bank instituted the reforms.

Thus the Bank, driven by both internal and external pressures, considered a number of proposals for independent review mechanisms for its operations. In the course of 1993 this ultimately led to a proposal "for an independent, in-house 'Inspection Panel' consisting of three inspectors [who] would be appointed by the Board on the recommendation of the President." On September 23, 1993, the Bank's Board of Executive Directors established the Inspection Panel and in April 1994 appointed its members. The Panel began operation on August 1, 1994.

However, after four years of operations the Panel remains a controversial issue for the many parties who have been affected in many ways by its establishment. The Executive Directors, Bank Management, officials of borrowing countries, local and international NGOs, Bank staff, and local populations that are expected to benefit from Bank-financed projects have seen their traditional roles changed. The words transparency and accountability have gained added meaning since this new instrument came into existence to pursue both concerns. Now that they have a forum, Bank critics must substantiate their claims against the Bank. Nonetheless, the Inspection Panel was an unprecedented mechanism, and undoubtedly, it placed the Bank at the forefront in redefining paradigms for accountability and reform in international financial institutions.

The following chapters describe the Panel's first four years of operations by replicating actual Panel reports on the most relevant cases reviewed during that period, along with a short analysis of the Panel's experience over those years.
Notes

1. The first members of the Panel were Messrs. Ernst-Günther Bröder, Richard E. Bissell, and Alvaro Umana.
2. References to the World Bank or Bank include the International Bank for Reconstruction and Development (IBRD) and the International Development Association (IDA).
3. The terms the Board and the Executive Directors are used interchangeably.
The Panel Members

Members of the Panel, as provided for in the Resolution that established the Panel, are selected "on the basis of their ability to deal thoroughly and fairly with the request brought to them, their integrity and their independence from the Bank's Management, and their exposure to developmental issues and to living conditions in developing countries. Knowledge and experience of the Bank's operations will also be desirable." The first three Panel members, Messrs. Ernst-Günther Bröder (a German national), Richard E. Bissell (a U.S. national), and Alvaro Umaña (a Costa Rican national), were appointed by the Executive Directors in April 1994. The members were appointed for nonrenewable terms of five, three, and four years, respectively. Mr. Bröder was appointed by the Board to serve as the Panel's first chairman.

Every year the Panel selects one of its members as a chairperson. Mr. Bröder served as chairman for the first two years, from 1994 to July 1996, followed by Mr. Bissell who served as chairman from August 1996 to July 1997. Mr. Umaña replaced Mr. Bissell as chairman at the end of Mr. Bissell's nonrenewable three-year term in July 1997. Mr. Bröder replaced Mr. Umaña as chairman at the end of Mr. Umaña's term in July 1998. Mr. Bröder's term will end in July 1999.

Mr. Jim MacNeill (a Canadian national) joined the Panel in August 1997, replacing Mr. Bissell at the end of his term, and Prof. Edward S. Ayensu (a Ghanaian national) replaced Mr. Umaña as of August 1, 1998.

Biographies of the Members

Ernst-Günther Bröder
Mr. Bröder is a former President of the European Investment Bank (EIB), Luxembourg, from 1984 to 1993, where he also served as a director from 1980 to 1984. He held several supervisory and consultative functions in international banks and other institutions. Mr. Bröder was a Governor of the European Bank for Reconstruction and Development, London from 1991 to 1993 and a member of the special advisory group for the Asian Development Bank, Manila, from 1981 to 1982. He is a member of the Panel of Conciliators for the International Centre for Settlement of Investment Disputes, Washington, D.C. He started his professional career in the Managing Board's staff of the Bayer Corporation from 1956 to 1961 and served in the Technical Operations Department's Industry Division of the World Bank from 1961 to 1964. Before being appointed President of the EIB he served from 1964 to 1984 in the Kreditanstalt für Wiederaufbau in Frankfurt, where he was a member of the Managing
Board from 1975 to 1984 and has been its spokesman since 1980. He has written and co-authored several books and articles on financial and economic subjects. Mr. Bröder holds a doctorate in economics from the University of Freiburg and studied political and natural sciences at the Universities of Cologne, Mainz, and Paris. Under the terms of the Resolution that established the Panel, Mr. Bröder served as the Inspection Panel's first Chairperson.

Jim MacNeill
Mr. MacNeill is a policy advisor on the environment, energy, management, and sustainable development to international organizations, governments, and industry. He is Chairman of the International Institute for Sustainable Development and a member of the boards of the Woods Hole Research Center, the Wuppertal Institute on Climate and Energy Policy, the Environmental Education and Training Institute of North America, and Ontario Hydro. He was Secretary General of the World Commission on the Environment and Development (the Brundtland Commission) and a major author of the Commission's world-acclaimed report, "Our Common Future." He served for seven years as Director of Environment for the Organisation for Economic Co-operation and Development (OECD). Earlier, he was a deputy minister in the Government of Canada. Mr. MacNeill holds a graduate diploma in economics and political science from the University of Stockholm and bachelor's degrees in science (math and physics) and mechanical engineering from the University of Saskatchewan.

Edward S. Ayensu
Professor Ayensu is President of the Pan-African Union for Science and Technology and an international development advisor. He held many important positions during his 20 years at the Smithsonian Institution in Washington, D.C. He is Executive Chairman of Edward S. Ayensu Associates Ltd. – Science, Technology and Economic Consultants and Executive Chairman of Advanced Gracewell Communications Co. Ltd. and the founding Chairman of the African Biosciences Network. He is Chairman of the Ghana National Biodiversity Committee. He is also a member of the International Advisory Council on Global Scientific Communications, UNESCO and member of the Board of Directors and International Vice Chairman of the International Institute for Sustainable Development (IISD). In addition, he has held various posts in other international scientific and technical organizations. For nearly two years he was the Senior Advisor to the President and the Director of the Central Projects Department at the African Development Bank. He was the Vice-Chairman and advisor to the Scientific and Technical Advisory Panel of the Global Environment Facility, a multi-billion dollar fund administered by the World Bank, United Nations Development Programme, and United Nations Environment Programme. He is a former member of the Energy Sector Management Assistance Programme Consultative Group, which is administered by the World Bank and UNDP, and of the Senior Advisory Council of the Global Environmental Facility. Professor Ayensu became a member of the Inspection Panel in August 1998. He obtained his doctorate degree from the University of London.
Biographies of Former Panel Members

Alvaro Umaña, 1994–98
Mr. Umaña is Professor and Director of the Natural Resources Management Program at INCAE, a Latin American Graduate School of Management. He served as Costa Rica’s first Minister of Natural Resources from 1986 to 1990 under President Oscar Arias. Mr. Umaña is a member of the Board of the Rockefeller Foundation and the World Resources Institute. He has published several books and many technical articles on energy, the economics of natural resources, and the environment. Mr. Umaña is a private entrepreneur in the ecotourism and conservation areas and is involved in sustainable wildlife reproduction and export. Mr. Umaña holds a Ph.D. in environmental engineering and a master's degree in economics from Stanford University. He also holds a master's degree in environmental pollution control and a bachelor's degree in physics from Pennsylvania State University.

Richard E. Bissell, 1994–97
Mr. Bissell is a former senior official with the U.S. Agency for International Development (USAID), where he served from 1986 to 1993 as Head of Policy and later as Director of Science and Technology. Most recently a Research Fellow at the Overseas Development Council, he focuses on issues of aid policy, with a focus on Africa and Asia. He founded and served as a senior manager of a high-technology pollution monitoring company with worldwide sales. Mr. Bissell was previously a professor at several U.S. universities, including Georgetown University and the University of Pennsylvania. He was editor of The Washington Quarterly between 1984 and 1986 and managing editor of Orbs between 1976 and 1982. He has published widely, in both books and articles, on political economy in developing countries. He was educated at Stanford University, and took his Ph.D. at the Fletcher School of Law and Diplomacy, Tufts University.

Note
1. IBRD Resolution No. 93-10; IDA Resolution No. 93-6.
The Arun III Request was presented in October 1994; it was the first Request for Inspection to be received by the Inspection Panel. The Request alleged violations of IDA’s policies on environmental assessment, involuntary resettlement, and indigenous people, among others. The main effects of the proposed project were related to its overall economic impact and to the access road (necessary to build the 201 megawatt power station) in a valley where there were no roads and there were significant environmental and cultural resources, including a rich ethnic diversity.

In its Response to the Request IDA management denied any acts or omissions in violation of its policies. The Panel disagreed. IDA’s Board accepted the Panel’s recommendation for an investigation but restricted it to alleged violations of environmental assessment, involuntary resettlement, and indigenous people policies. The Panel’s review focused on the impacts of the project that were related to the access road. In June 1995, after the Panel had submitted its report, Management reassessed the project as proposed and decided to withdraw its support.

Although the Board did not authorize an investigation into the analysis of economic alternatives that had been conducted for the project, the Panel’s report noted that project alternatives had not been considered with the same level of effort and, therefore, that a “realistic comparison of the risks associated with the proposed project and its alternatives could not have been carried out.” The Panel pointed out that alternatives, such as smaller, hydroenergy-based solutions, had not been adequately analyzed.

The project would have been the largest ever undertaken by Nepal. Total investment was estimated at more than $1 billion—about the equivalent of the annual government budget—in a country with a per capita annual income of approximately $200. Given the low level of electrification, the demand for power did not justify such a large investment, and expected power sales to India, which were necessary to guarantee an adequate economic rate of return, were uncertain.

Considerable international attention was paid to this project, and nongovernmental organizations (NGOs) took an active role in questioning the project’s economic viability and its environmental and social impacts.
Ethiopia: Compensation for Expropriation of Foreign Assets and Extension of IDA Credits

In April 1995 the Panel received a Request from a Greek family alleging that IDA had violated provisions of Operational Manual Statement 1.28 by extending credits to Ethiopia and was now negotiating more financial assistance with the Transitional Government of Ethiopia, even though the government had refused to deal with the Requester's claim for compensation for a previous government's expropriation of its assets and blocking of its bank accounts. The Request also alleged failures by IDA to disclose operational information. The Panel did not accept this Request because the Requester had not exhausted local remedies and had failed to establish how the lack of compensation was a consequence of any alleged acts or omissions by IDA. The Panel found the Request not eligible.

Tanzania: Emergency Power IV Project (IDA Credit 2489-TA)

On June 16, 1995, the Panel received and registered this third Request related to the purchase and installation of an emergency power generation unit. The Requesters claimed that there was no need for IDA financing for this equipment since private sector financing was available on reasonable terms (from the firm they owned or worked for). The Panel did not recommend an investigation because it found that IDA Management had considered the alternative financing and adequately reported on it to the Executive Directors prior to their approval of IDA financing. The Requesters also alleged violation of environmental policies. The Panel found that the Requesters were not eligible to file such a claim since they could not possibly have suffered any adverse effects from the alleged violation. The Board of Executive Directors approved the Panel's recommendation on a no-objection basis.

Brazil: Rondônia Natural Resources Management Project (PLANAFLORO) (IBRD Loan 3444-BR, 1992)

On June 14, 1995, local Brazilian NGOs representing intended beneficiaries of the Rondônia Natural Resources Management Project (PLANAFLORO) filed a Request for Inspection. In essence the Requesters complained that PLANAFLORO (intended to benefit fragile communities and the natural environments they depend on for their livelihood) had not been adequately implemented since its approval by the Board three and a half years before. They claimed that the design of PLANAFLORO and the Bank's lack of enforcement of several project covenants resulted in the damage. Management's Response to the Request, delivered to the Panel in July 1995, acknowledged and explained a number of project failures to comply with policies.

The Board rejected the Panel's initial recommendation for an investigation, concluding that it could not make a decision without more factual information. The Board asked the Panel for an Additional Review, which was submitted in December 1995. The Panel, having found sufficient preliminary evidence of harm linked to policy violations, again recommended an investigation.
Later in December 1995 Management submitted to the Board a Status Report on project implementation, which included an Action Plan dealing with the principal issues listed by the Panel, including a restructuring of the project. As a consequence, the Board decided on January 25, 1996, that it was not advisable to proceed with the investigation. However, because of the project's complexity and the Bank's desire to help ensure its success, the Board decided to review Management's progress in six to nine months and invited the Panel to assist in that review. The Board formally invited the Panel to conduct the review in January 1997.

The Panel's report, which was issued to the Board in March 1997, found mixed results. Although problems remained, locally affected people considered continuing the project preferable to ending Bank involvement. The Board accepted the Panel's findings in April 1997 and instructed Bank Management to report periodically on the execution of the project. On October 24, 1997, Management submitted a proposal to the Board to amend the legal documents for the project, which entailed substantial changes to the project design and the Action Plan.

The historically high levels of deforestation in Rondônia mentioned in the Panel's reports have been confirmed by Amazonwide studies carried out by the Brazilian government. The Bank and the borrower are still working toward establishment of sustainable health programs for indigenous people.

**Chile: Pangeue/Ralco Hydroelectric Dams Complex**

In November 1995 the Panel received this Request, which alleged that the International Finance Corporation's (IFC) participation in the construction of the Pangeue/Ralco complex of hydroelectric dams in the BioBio River was in violation of a number of IFC and World Bank policies. The Panel informed the Requesters and Executive Directors of IBRD, IDA, and IFC that the Request was inadmissible because the Resolution that established the Inspection Panel restricts the Panel's mandate to the review of alleged violations of operational policies and procedures related to the design, approval, or implementation of projects financed by IBRD and IDA only.

**Bangladesh: Jamuna Bridge Project (IDA Credit 2569-BD)**

This Request for Inspection was filed on August 23, 1996, by a local NGO called the Jamuna Char Integrated Development Project, on behalf of the char dwellers who lived on the channel islands in the Jamuna River. The Requesters claimed that despite actual and potential harm to their livelihoods and to the islands where they live and work, as a result of the construction of the bridge and river training works, they were not included in the project's resettlement and rehabilitation programs.

IDA Management denied policy violations in its Response of September 1996.

The Panel found that the Project's 1993 Resettlement Action Plan neither specifically identified nor provided assistance for char dwellers as project-affected people. But it commented that the Erosion and Flood Policy, issued on September 7, 1996 (after the Request was filed), could constitute an adequate and enforceable basis for IDA to comply with its
policies and address the char dwellers' concerns. However, success would depend on full and informed participation by char dwellers. In April 1997 the Board accepted the Panel's November 1996 recommendation that an investigation was not warranted at that time and asked IDA Management to submit a progress report in April 1998 on execution of the resettlement program, including measures to compensate the char dwellers.

This was an important case because, even though the Panel did not recommend an investigation, the review process clearly brought out the fact that the char dwellers had not been included in resettlement and rehabilitation plans. As a result, IDA Management and the borrower agreed to include them in future resettlement plans and their concerns are being addressed. Furthermore, an interesting feature of the Jamuna case is that the Board agreed to have the Panel comment on the progress report to be submitted by Management on the execution of resettlement measures, including compensation.

**Argentina and Paraguay: Yacyretá Hydroelectric Project (IBRD Loans 3520/2854-AR)**

The Request was filed on October 1, 1996, by SOBREVIVENCIA (Friends of the Earth), a local NGO that represented the residents of Encarnación, Paraguay. Later, residents of Posadas, Argentina, submitted additional requests to the Panel. The Requesters claimed that their standards of living, health, and economic well-being had been, and might continue to be, directly and adversely affected as a result of filling the Yacyretá Reservoir to 76 meters above sea level (masl) and that the Bank had failed to adequately prepare and implement the project. Management's Response to the Request in November 1996 denied policy violations and challenged the validity of the Request on several grounds.

This Request was triggered by the fact that the reservoir was filled to 76 masl prior to completion of agreed environmental and resettlement measures, which resulted in negative environmental impact and placed populations in low-lying areas on both sides of the reservoir at a higher risk for a prolonged period of time. Moreover, the latrines and wells of people living between 76 and 78 masl were rendered useless because of the rise in the water table, which became a severe health threat to the residents. Further, if the dam is completed to the design level of 83 masl, it will flood more than 100,000 hectares and affect the low-lying areas of two major cities: Encarnación, the second largest city of Paraguay, and Posadas in Argentina. In December 1996 the Panel recommended an investigation of the project, but in February 1997 the Board rejected the Panel's recommendation. Instead, it authorized a review of project problems and an assessment of agreed Action Plans developed to remedy the effects of filling the reservoir to 76 masl prior to completion of environmental mitigation measures.

The Panel found that, after more than 15 years of construction and a total investment (including interest) of more than $8.5 billion, the project remained riddled with problems and its future was uncertain. The most critical problem identified by the Panel was the imbalance in the execution of the civil and electromechanical works—now almost complete—and the resettlement and environmental actions, which lagged far behind and were likely to take several years to complete.

During the Panel's May 1997 visit to Posadas, Argentina—one of the cities affected by the project—the Panel received additional Requests for Inspection from several groups
of allegedly adversely affected people and from local community leaders. The issues raised were substantially the same as those in the Paraguayan Request. In consultation with the Board the Panel decided to include the new Requests in the same process. The Response requested from Management was received in August 1997. Again, Bank Management denied the existence of policy violations. The Panel submitted its report to the Board on its review and assessment of the Actions Plans in September 1997. In December 1997 the Board considered the Panel’s September 1997 report without coming to any conclusion. Subsequently, the Board decided to postpone any decision on future Panel involvement in the project until a second review of the role of the Inspection Panel was completed. The Panel process did lead to the formulation and financing of Action Plans to solve the present problems, but the executing agency, EBY, had already fallen behind the execution schedule when the Panel issued its report. Moreover, in March 1998 there were reports of civil unrest and use of force in dispersing demonstrations about the Yacyretá project in Encarnación, Paraguay.

An identical Request for Inspection was filed with the inspection mechanism of the Inter-American Development Bank (IDB). It is interesting to note that the findings of the IDB Panel and the decision of IDB’s Board of Executive Directors were similar to those of the World Bank.

This was the first Request to involve a project in the territory of two countries, and the loans benefited a binational entity created for the project.

**Bangladesh: Jute Sector Adjustment Credit**

*(IDA Credit 2567-BD)*

This Request was filed on November 25, 1996, by private jute mill shareholders and chief executive officers, who were the intended beneficiaries of the program. The Request claimed that the shareholders and management of private jute mills felt directly and materially affected by the policies supported by the credit. The Requesters claimed that flaws in the design and delayed adjustment program implementation caused operational and financial problems for the jute mills, which were harmed rather than helped by the project. This was the first time that the Panel had to address harm of this nature.

IDA Management's Response to the Request in December 1996 claimed that the credit had been "designed, appraised, and implemented in full accordance with IDA policies and procedures," adding that delays in program implementation were the responsibility of the borrower and, as such, "are outside the jurisdiction of the Inspection Panel, which is not authorized to deal with complaints with respect to actions which are the responsibility of other parties, and not of IDA."

The Panel, after requesting a legal opinion from IDAs General Counsel, concluded that the Request met all eligibility criteria required under the Resolution, the Requesters appeared to have suffered material adverse effects during partial implementation of the reform program supported by the credit, and that it was not satisfied that Management had complied with all of IDA’s policies during design and implementation of the credit. The Panel pointed out that extension of the availability of credit funds should be based on a reevaluation with the government and the Requesters of the credit’s basic design and
the content of the policies it supported. Nonetheless, the Panel cautioned that such a measure could still be an inadequate remedy for the harm alleged by the Requesters. The Panel stated that under the circumstances, however, further review of the issues through a formal investigation would serve no useful purpose. On April 4, 1997, IDA Executive Directors accepted the Panel's recommendation not to undertake an investigation.

This Request was the first dealing with a sector adjustment program and confirmed that sector or structural adjustment loans are subject to Requests for Inspection.

**Brazil: Itaparica Resettlement and Irrigation Project (IBRD Loan 2883-1-BR)**

On March 19, 1997, the Panel received a Request from more than 120 individuals and the Pólo Sindical do Submédio São Francisco—a local organization representing people living in the project area. Dating back to 1987, this was the first World Bank–financed stand-alone resettlement project to benefit people affected by the construction of the Itaparica hydroelectric dam and reservoir located on the São Francisco River, at the border of the states of Bahia and Pernambuco. Construction of the dam was not financed by the Bank. The Requesters claimed that their standard of living, health, and economic well-being had suffered rather than improved as a result of the Bank's omissions and failures in preparation, followed by faulty project execution.

The Management's Response of April 1997 denied violations of policies. On June 24, 1997, the Panel recommended an investigation. On September 9, 1997, the Board rejected the Panel's recommendation. But given the government's Action Plan for completing the project, which included its own funding of about $290 million, and its request for continued Bank supervision for two more years, the Board decided to review progress on the Action Plan in 12 months, with the Panel's assistance. In February 1998 representatives from Pólo Sindical, at a seminar with the Board, complained that they were not consulted in preparing remedial measures and that Brazilian authorities had not informed them about the existence of an Action Plan. They also claimed that the funds allocated for the project were less than would be required for maintenance of existing project facilities.

The Itaparica project is the second highest cost-per-family resettlement project in the Bank's history. Only about one-third of the families had been resettled by the time almost all the loan funds had been disbursed.

**India: NTPC Power Generation Project in Singrauli (IBRD Loan 3632-IN)**

On May 2, 1997, the Panel accepted a Request from residents of Singrauli claiming that people living in the project area have been harmed as a result of the Bank's policy violations in the preparation and implementation of the project. Management acknowledged some policy violations in its response of June 3, 1997.

In July 1997 the Panel recommended an investigation. In September 1997 the Board—after considering a remedial Action Plan presented by Management on
September 2, 1997—approved an investigation, which was restricted to a desk study in Washington, D.C. The Panel submitted its report to the Board in December 1997.

The Action Plan included the appointment of two independent teams. First, a team was appointed to research and verify specific claims. Second, because of allegations of forceful evictions and harassment of affected families, an Independent Monitoring Panel of distinguished Indian nationals, including candidates proposed by NGOs, was appointed to investigate those incidents.

The Panel found that although the loan processing complied with formal procedural requirements, the current problems were a consequence of pressure to process the loan before the closing of the fiscal year, accompanied by lack of Bank supervision capacity and the Bank's misjudgment of the Borrower's capacity to implement appropriate environmental and resettlement actions.

One of the Panel's findings was that disposal of ash in dykes had been considered the only viable method, despite the absence of adequate analysis of alternatives such as the back-filling of mines. This led to the need for rural land, resulting in involuntary resettlement. There have been numerous reports of continuing violations of Bank policies, even after the Independent Monitoring Panel visited Singrauli in late December 1997. The Panel, however, has not been able to verify the situation on the ground.

A Board decision on the Panel's investigation Request is still pending.
Panel Reports and Recommendations
Nepal: Arun III
Proposed Hydroelectric
Project and Restructuring
of IDA Credit
2029-NEP

Report and Recommendation

December 16, 1994
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Report and Recommendation

PREFACE

This is The Inspection Panel's Report on the Request for Inspection (the "Request") relating to the proposed Nepal, Arun III Hydroelectric Project and restructuring of the Arun III Access Road Project, Credit 2029-NP, granted under Development Credit Agreement, dated August 8, 1989, between the Kingdom of Nepal ("HMG/N") and the International Development Association ("IDA") (collectively referred to as "Arun III"). The Request was filed with the Panel on November 2, 1994, and registered by the Chairman on November 3, 1994. On the same date the Notice of Registration and text of the Request were transmitted to the President of IDA. The Chairman and Panel members note that prompt registration is required by IDA Resolution 93-6 (the "Resolution").

The Panel received the Management Response (the "Response") on November 22, 1994: it addressed the substance of the Request rather than impeding and delaying an independent review of the issues by questioning formalities. The attached report likewise deals with the substance of the Request.

The Panel's initial findings are based on the information contained in the text together with a limited review of supporting or referenced documents, of the Request and the Response; and in addition, on supplementary clarifications from the Requesters, Management, the proposed borrower, and the executing entity. On the basis of this preliminary review and in accordance with the Panel's Operating Procedures of August 1994 (the "Procedures"), the Panel is satisfied that conditions required by paras. 12-14 of the Resolution have, in substance, been met.

In accordance with the Resolution the Panel consulted the proposed borrower and the Executive Director representing the Kingdom of Nepal on the subject matter of the Request.

The Panel wishes to thank all those who assisted them both in Kathmandu and in Washington, D.C.

A. BACKGROUND

Proposed Project

1. Management of IDA is planning to seek approval for an SDR 99.5 million development credit to the Kingdom of Nepal ("HMG/N" - the borrower) and the restructuring of an existing credit for SDR 24.4 million (Arun III Access Road Project - Cr. 2029-NEP) to help finance the proposed Arun III Hydroelectric Project. 1 The revised project components
include a 122 kilometer access road through the Arun Valley, construction of a 201 MW run-of-river (including a 68 meter dam) hydroelectric power scheme (the first phase of the Arun III 402 MW scheme) in the Sankhuwa-Sava District and 122 kilometers of transmission lines from there to Duhabi. The Arun basin is about 170 kilometers east of Kathmandu.

2. The proposed credit would be on standard IDA terms with a 40-year maturity. HMG/N would lend to the implementing agency, the Nepal Electricity Authority ("NEA"), the Nepalese rupee equivalent of US$136.1 million plus US$34.3 million (available under the existing Arun III Access Road Project) at a rate of 10.25 percent for a period of 30 years, including a 9-year grace period. HMG/N would bear the foreign exchange risk. The remaining US$4.6 million would be utilized by the Ministry of Water Resources to finance a Regional Action Plan ("RAP").

3. Total project costs are estimated at about US$800.0 million. The project would be cofinanced by the Asian Development Bank, Kreditanstalt für Wiederaufbau, the Government of France, the Swedish Agency for International Technical and Economic Cooperation, the Finnish International Development Agency, and other donors.

The Request

4. Summary: The Panel received a Request, dated October 24, 1994, from citizens of Nepal (the "Requesters") who claim that their rights and interests have been or are likely to be materially and adversely affected by the acts or omissions of IDA during the design and appraisal of Arun III. Two of the Requesters claim that they have been directly and adversely affected by the design and implementation of the resettlement program related to Arun III. The Requesters claim to be, or likely to be, affected by alleged violations of provisions of, inter alia, the following policies and procedures:

- The World Bank Policy on Disclosure of Information, September 1994; Bank Procedures 17.50 and 10.00, Annex A
- Operational Directive 4.01: Environmental Assessment
- Operational Directive 4.30: Involuntary Resettlement
- Operational Directive 4.20: Indigenous Peoples

5. The two Requesters from the now abandoned Hill Route asked for anonymity and, in accordance with Nepalese law, appointed Messrs. Siwakoti and Ghimire (the other two Requesters) of Kathmandu, Nepal, to represent them.

Registration

6. Eligibility Issues: para.17 of the Procedures requires the Chairman to register the Request "[i]f the Request appears to contain sufficient required information..." While recognizing that there were deficiencies in the formalities, in accordance with this paragraph, the Chairman, on November 3, 1994, registered the Request in the Panel Register; notified the Requester, the Executive Directors, and the President of IDA of the registration; and transmitted to the President a copy of the original Request together with faxed copies of the attachments and evidence of representation. Upon receipt, on November 8, 1994, of the originals of the accompanying documentation, copies were forwarded to the President of IDA.
7. The Panel judged that the serious nature of the substance of the Request as a whole and its timing in relation to the project process outweighed outright rejection of the Request on the grounds of doubts on the standing of the Requesters and incomplete compliance with formal procedures. Management apparently came to the same conclusion since, as noted before, it addressed the substance of the Request without questioning its eligibility under the applicable terms of the Resolution.

Operational Policies and Procedures

8. Given that a period of about seven years has elapsed since the inception of Arun III, the evolving nature of IDA policies and procedures and the timing of their application in relation to various stages of this proposed project is a source of disagreement between the Request and Response. These questions are referred to as necessary in the text of this Report.

B. THE REQUEST AND THE RESPONSE

9. The Request lists a number of statements of policies and procedures, which the Requesters believe IDA has failed to follow in the course of the design, appraisal, and initial implementation of Arun III. The Response provides information indicating that Management believes it has not failed to follow the relevant policies and procedures. The Request and the Response are reviewed briefly below and are followed by the Panel's initial comments.

I. Economic Analysis of Investment Operations

Alternatives

10. The Request states that IDA "has violated its operational policies regarding the Economic Evaluation of Investment Operations, as a basic criterion for acceptability. For the project to be acceptable on economic grounds, 'the expected present value of the project's net benefits must be higher than or equal to the expected net present value of mutually exclusive project alternatives.' By not undertaking the relevant studies of the alternatives ..., the World Bank has not fulfilled this very basic criteria for acceptability of the project."

11. The Request also complains that IDA violated this Directive throughout the project cycle by not considering alternative sequencing until 1993/94 and that the study is incomplete as the comparison was made with only very preliminary costs for the alternative schemes; that the earlier Least Cost Generation Expansion Plans ("LCGEP") of 1987 and 1990 failed to take into account that the same amount of power generated from Arun III could also be generated from a series of smaller alternatives in the 1 MW to 100 MW range; and that by not completing feasibility studies of the 30 or more smaller alternatives identified by HMG/N, IDA has not fulfilled the policy requirement to compute the LCGEP for additional power generation for Nepal. The Request also states that "there is every reason to believe that once the detailed studies are completed, the smaller alternatives can be built at prices lower than or competitive with Arun III."

2
12. **THE RESPONSE**, while answering the Request in line with Operational Policies/Bank Procedures ("OP/BP") 10.04, suggests, in its Annex A, that this policy was not in effect at the time of identification and appraisal: that only those instructions in this OP/BP which are identical to those in force at the time are applicable. It indicates that the basis for the LCGEP was the initial consideration of "some 3000" alternative generation and expansion plans of which 11 individual hydro investment project candidates of varying sizes were examined to the pre-feasibility level or "beyond." However, "in response to questions, additional alternative strategies were investigated in order to check the robustness of the standard least-cost analysis. This involved the consideration of project candidates that preliminary analysis had previously screened out." The Response concludes that the cost of an alternative was higher than the cost of HMG/N's proposed program.³

13. The Response also states that there are no hard and fast rules on how many alternative proposals should be investigated to the "pre-feasibility" stage; it is a question of professional judgment. The number of hydro candidates explored to the pre-feasibility level is considered to represent "a very respectable effort for a country such as Nepal"—given that the determining factors are the extra cost and associated delays. Noting that the project contains funding for further pre-feasibility and feasibility work for smaller hydro projects⁴—which, if attractive, will be accommodated periodically into the LCGEP—it is pointed out that there is no evidence that such further study would displace Arun III from the LCGEP⁵.

**Risk Analysis**

14. **THE REQUEST** complains that the risk analysis is faulty, in particular that:
   - one large natural catastrophe would virtually ruin the Nepalese economy;
   - no account has been taken of the risk of undertaking such a large project in relation to the size of the Nepalese economy;
   - while over 80 percent of the catchment area of the Arun River lies under the control of China and a proposed Changsuo Basin Irrigation Project is pending, no account of upstream developments (riparian rights) has been included; and
   - there is no bilateral agreement with India even though Phase II of Arun III and future development in the valley depend on surplus power sales to India.⁶

15. **THE RESPONSE** explains that:
   - under OP 10.04 treatment of risks associated with large projects is not mentioned and there is no explicit policy with respect to the valuation of risks—as distinguished from the analysis and/or management of risks—associated with large projects. But "recognition of Arun's magnitude and importance to the Nepalese economy was what led the Bank to undertake such comprehensive analysis of the project."⁷
   - the analysis does not consider the risks to project viability of the possible construction of the Changsuo Basin Irrigation Project because the appraisal team judged these risks to be minimal; recently the Chinese authorities have reconfirmed their non-objection to the project and that the small size of the project is likely to have no effect on downstream water users;⁸ and
   - with respect to sales to India, in the past, bilateral agreements have not been necessary; and suggests that even if no surplus sales occur, there would be only a 1 percent drop in the project's economic rate of return, which remains above the project's opportunity cost of capital.⁹
Poverty Reduction

16. The Request suggests there will be immediate and threatened long-term irreversible adverse impacts on the already poor inhabitants of the Arun Valley, as a result, in particular, of NEA's lack of capacity to implement environmental and social safeguards.

17. At the national level, the Request suggests that the large size of the project in relation to Nepal’s annual national budget will not directly benefit the poor as its high cost will crowd out investments in social services and targeted poverty interventions.

18. The Response acknowledges that 450,000 inhabitants of the Arun Valley lead a “harsh subsistence life”; it states that the primary objective of the project is to meet Nepal's growing power requirements in the medium term at least cost so that this constraint on growth and poverty reduction can be overcome. Referring to the Environmental Action Plan (“EAP”), the Response suggests that it aims to limit negative direct impacts and to maximize the valley’s prospects for sustainable growth and poverty reduction.

The Panel
Alternatives

19. With respect to examination of alternatives, the Panel notes that previous policies and procedures would appear to be applicable. A preliminary review of those policies and procedures suggests that the fundamental requirements are substantially the same as those in OP/BP 10.04. In particular it is noted that OMS 2.21, para.8, states that:

“Consideration of alternatives is the single most important feature of proper project analysis throughout the project cycle, from the development plan for the particular sector through identification to appraisal.”

It is also noted that the Response deals with the issues of alternatives and analysis of project risks in the context of the requirements of OP 10.04.

20. It is clear that Nepal's hydropower potential is considerable (estimated at 25,000 MW). However, less than 1 percent of the resource has been developed and there is no complete inventory that could be used reliably for long-term planning.

21. Out of about 107 potential hydroelectric sites that have been identified, technical and economic screening criteria yielded only 18 projects for which pre-feasibility or further engineering studies have been carried out. The latest LCGEP considered only 11 projects. It is a matter of judgment whether this is an adequate number of options that should have been considered in the 30-80 MW range.

22. The Panel notes that the MOP recognizes that:

“The only realistic alternative to the hydropower investment program proposed by the Government is a series of hydro investments in the range of 10 MW to 100 MW. While these are certainly small projects by international standards, most are similar in magnitude to the two previous major hydro investments made in Nepal; namely, Kulekhani (60 and 32 MW) and Marsyangdi (69 MW). Past pre-investment studies in Nepal’s major river systems have identified a large number of such potential investments. Pre-feasibility and feasibility work has been done on some 18 of the 93 sites identified. About half of the 18 are under 100 MW; these have already been taken into account in the least cost generation analysis. Hence, the effort to develop an alternative hydropower investment program has had to draw from among those projects, mostly in the 30 to 80 MW range, which had previously been screened out.
(on the basis of rather crude technical and economic criteria) as less attractive than those for which pre-feasibility work has been commissioned.

The alternative investment program thus identified has been labeled Plan B (SAR Annex 5.4 [paras. 41, 42]). The costs of Plan B are estimated to be about 5% higher than the Government's proposed investment program under assumptions about the future considered most likely, and 5% less in the scenario where demand growth follows the low load forecast.  

23. There is reason to believe that if a less restrictive assessment, including a wider range of hydro resources, could be undertaken, it would result in expanding the number of economically and environmentally acceptable options.

**RISK ANALYSIS**

24. IDA policies provide for evaluation of investment projects to ensure that they promote the borrower's development goals and that the economic analysis be conducted to determine whether the project creates more net benefits to the economy than other mutually exclusive options for the use of the resources in question; and state that assessing sustainability includes evaluating the project's financial impact on the implementing/sponsoring institution and estimating the direct effect on public finances of the project's capital outlays and recurrent costs. This process also includes an analysis of the sources, magnitude, and effects of the risks associated with the proposed project.  

25. The Panel notes that, with the information available, the comparison of the risks associated with the project and its alternatives is very difficult due to the large number of factors involved including:

- natural catastrophic events such as Glacial Lake Outburst Floods (GLOF) and high monsoon rains leading to high river floods which constitute a permanent risk in the project area. These risks were considered a major factor in the original decision to choose a Hill Route for the access road;
- the steep tariff rate increases that NEA must implement, likely cost overruns, lower economic growth;
- major risks associated with the economic performance of the project are associated with the rate of growth of demand, which in turn is related to the unforeseeable response to price increases and export sales. The lack of a long-term power sales agreement with India poses a potential long-term risk to the project. This risk has been highlighted by IDA, particularly in the case of Nepal, in the 1986 Project Performance Audit Report for the Kulekhani Hydroelectric Project (Cr. 600-NEP and 600-1-NEP), which concludes that:
  
  "Agreements on export would be required prior to the start of any large scale development, and because most countries are reluctant to be dependent on others for electrical energy, negotiations on such matters may last over extended periods of time."

The MOP contains a rather detailed discussion of risks and concludes that:

"Comparison of the overall risks of the alternative strategies shows that both have problems requiring careful management. There is simply no low risk way to meet Nepal's power requirements over the next decade or so."

26. All power development options require careful risk management unprecedented in Nepal, and therefore institutional capacity building is critical to the success of any strategy. Major risks associated with institutional capacity in the NEA and HMG/N emerge as significant in a variety of ways: to oversee construction, long-term O&M, reorganization of the power sec-
tor management, and ability to sustain appropriate tariff increases. Each could endanger the viability of Arun III at any time. While funding agencies can supplement institutional capacity in the short term, the strengthening of institutions will still have to develop rapidly and extensively;

27. The Request cites, as a potential risk, the fact that 80 percent of the river lies in China. The Response refers to the small size of the proposed ChangaSo Basin Irrigation Project. At the request of the Panel, Management has provided satisfactory evidence showing that the Government of China does not oppose Arun III.

28. Risk assessment must include all factors that might have a bearing on the project, and compare them with those of the alternatives. IDA has attempted to deal with those issues, but the environmental and social impacts of the alternative have not been systematically analyzed; therefore a realistic comparison of risks associated with the proposed project and its alternatives could not have been carried out.

**POVERTY ALLEVIATION**

29. OP 10.04 states that the economic analysis examines the project's consistency with IDA's poverty reduction strategy.

30. The Panel recognizes two levels of potential impacts on poverty.

- The first relates to the localized effect of Arun III on the Arun basin's poor, particularly the people whose land, like that of the Requesters on the abandoned Hill Route, was expropriated; and those on the proposed Valley Route whose land might be expropriated.

- The second relates to the likely macroeconomic impacts on the country as a whole due to the large size of the investment to be undertaken in relation to the size of the economy. These impacts on a national level might result in:

  (a) an initial increase in poverty because the opportunity cost of capital to address poverty directly and the resources needed for other targeted interventions may be consumed by Arun III;

  (b) a reduced consumption due to the effect of rising electricity tariffs on consumers as they devote a larger share of their disposable income to electricity; and

  (c) a constraint on public expenditure and investment—as noted in a recent Bank document:

  "The power sector as a whole is expected to absorb 15 percent of local resources and 40 percent of foreign resources, and AHP [Arun III] alone will absorb close to 20 percent of total development resources during the peak implementation phase in FY97-FY99."\(^{16}\)

31. The high priority of poverty alleviation in Nepal has been reiterated by the Bank. However, steps already taken by IDA and HMG/N suggest it will be more difficult to implement the policies on poverty. Future steps, such as further cancellation of "low priority projects" in social sectors, and the large fiscal demands of Arun III may contribute to the risk that policies on poverty cannot be implemented.

II. Environmental Assessment

**Alternatives**

32. The Request states that the environmental and social issues and available alternatives to Arun III were not integrated into decisions on whether to proceed with
the project. Citing the 1991 Basinwide Environmental Impacts Study ("RAP"), it states that: "the road alignment [Hill Route] and dam site were already decided and the study team did not have the mandate to change these decisions"; and the 1992 study of the Valley Route was conducted to determine whether it "might provide time and cost savings in providing access to the Arun III hydropower site. Serving the needs of the population...is a secondary consideration...and...the need for and the siting of the power project and therefore the justification for the road, is taken as a given." It is noted that, in response to pressure to investigate alternatives adequately, and after the EIA process was completed, the Bank commissioned a study known as Plan B which was conducted from the standpoint of whether Arun III is the "least cost" option for Nepal—without consideration of the environmental and social costs of either Arun III or its alternatives.

33. The Request also points out that:

"[t]he so called EIA of the Valley route of the access road fails to take into consideration and compare from environmental standpoint any alternative approach to build this road. For example, applying environmentally friendly approach in building the roads in the Himalayan foothills by employing simple and conservation-oriented techniques and labor-intensive methods have been proved successful. The pace of the proposed construction of the road and the approach adopted, thus, is a serious environmental concern that the EIA ignores."18

34. **The Response** questions the applicability of the policy on Environmental Assessment for timing reasons but then states that Management nevertheless proceeded as if it were applicable. As evidence of compliance, the Response cites the consideration of three dam sites in the Arun valley and two different access roads. The Response notes that the 1993 Environmental Assessment Executive Summary ("EA Summary") clearly states that identification of Arun III was based on least cost studies undertaken up to 1990 and that "these studies addressed environmental/social issues at the reconnaissance level for all feasible sites."20

**The Panel**

35. **The Panel notes that while the current policy was not in effect when the Credit 2029 for the Hill Access Road Project was approved, it was in effect at the time when it was decided to change the access road to the Valley Route.**21 The 1993 EA Summary states that:

"The Arun III...was identified as the best major hydropower scheme for early addition to the Nepal Interconnected System under the LCGEP completed by the NEA in 1987....

[This] choice was confirmed by an LCGEP Update Study completed in 1990....This study included estimates of resettlement costs in its comparative analysis of the various projects, but not the costs of other environmental impacts or economic benefits."22

36. **The Panel notes that the major environmental and social impacts of the Arun project are due to the construction of the access road, and not due to the hydroelectric generating facility itself.** Given the timing of the change of the choice of road alignment the social impact has been magnified and the environmental impact assessment studies dealt primarily with the original route (Hill Route).

37. **The Panel finds it necessary to look at this decision in more detail, particularly in view of the fact that almost all of the land of the families on the Hill Route had already been acquired.**
Access Road Alignment

38. In 1987 a detailed feasibility study was carried out by the Department of Roads for the so-called “Hill Route.” Detailed designs and tender documents were completed in 1988, in anticipation of an early start of construction, and further refined in the following years. The final alignment chosen, designs, and construction methods were referred to in the SAR as environmentally “state of the art” for a major road project in Nepal.

39. The SAR for the Arun III Access Road Project of May 12, 1989, refers to the selection of alignment for the access road in para.3.08:

“The route selected as being most economical in terms of construction and maintenance, consistent with sound environmental planning, is in mountainous terrain and follows the ridges wherever possible, descending only for crossings of the Piluwa Khola near Chainpur, the Sabhaya Khola at Tumlingtar and at the sites of the powerhouse, adit and dam. The streams and rivers of this area are unpredictable and can be very violent and destructive. They cause excessive steepening of the valley sides and consequent instability of the slopes. The route has therefore been chosen to avoid rivers as far as possible, and to follow the contours closely in order to minimize the quantities of cut and fill, and to reduce negative environmental impact. The contract documents for road construction also incorporate environmental conservation measures.”

40. The Panel notes that within three years of this decision, the project design for the road took the opposite approach, selecting a route where more than 50 percent runs close to the previously described unstable, steep, unpredictable, and hazardous slopes of the Arun River.

41. In 1992, according to the EA Summary, following a decision to revise Arun III’s design and reduce initial expenditure and given the sole criterion of providing access to the power sites as quickly as possible, the feasibility of a “Valley” route was investigated again. Engineering and construction planning studies had shown that although the construction costs would be similar to those of the Hill Route, there would be a time saving of one year and a total length construction of only 122 km. The EA Summary points out, however, that:

“The speed of construction of a project can have a considerable effect on its environmental impact.

- Slower construction of the access road would allow a less capital-intensive approach with a higher local labor demand (and therefore local benefits), and modified construction techniques with lower physical impact.
- Slower construction of the hydropower components of Arun III would reduce the size of the labour force required, reduce the volumes of spoil to be excavated and disposed of annually, and permit more gradual institutional development.”

42. The proposed change in routes was presented to the Panel of Experts (POE) and approved in principle by them. However, the POE pointed to the apparent disadvantages of the Valley Route:

- increase of forested land in the RoW and possibly less disturbed and higher quality forest and protected wildlife habitat in the RoW: approximately 209 ha vs. 145 ha
- closer proximity to the Makalu-Barun Conservation Area
- losses and uncertainties resulting from the circumstance that land compensation for the hill route is already 94 percent completed
The POE also concluded, inter alia, that:

"The recommendation from the environmental perspective therefore is to proceed with the design and tendering of the project using the valley route, to drop the hill route from further consideration at this time, to establish a clear and equitable policy concerning the families within the hill route who have already received compensation, and to update and amend project environmental documents, in parallel with the detailed engineering and along the following lines, to reflect the change in route.

1. It would be useful if the September 1992 Joint Venture EIA of the valley route would make a more detailed comparison of the impacts of the hill route and the valley route, including implications for associated changes in transmission line impacts, if any, and options and implications for families within the RoW of the hill route who have already received compensation.

2. Regardless of which route is adopted, the recommendations and cost estimates (about US$14 million) of the King Mahendra Trust report on "Environmental Management and Sustainable Development in the Arun Basin" should be released to the public, reviewed, screened and prioritized to facilitate the development of an action plan for implementation. Without such a plan there will be no mechanism in place for controlling off-site impacts (especially encroachment on forests and wildlife) in the vicinity of the access road and power station, south and east of the Makalu-Barun Conservation Area."

43. The decision to pursue the Valley Route led NEA to commission a study to "revise and update the existing environmental impact assessment study of the access road in accordance with World Bank guidelines" (Terms of Reference for JV Consultants). This update was supposed to be carried out in a period of four months although the road alignment had not been completed. The following clause was included in the Terms of Reference:

"In order to complete the update of the EIA within the four months of Period A, it is mandatory to have a preliminary alignment or alignment options available at the latest six weeks after the commencement of the services with respect to the access road, and in the first week of August [1992] regarding the transmission line."

Also included in the Terms of Reference is the following disclaimer:

"The time available will not allow it to perform a detailed socio-economic and ecological survey along the entire alignment. Rather, surveys will be of a qualitative nature and will concentrate on selected areas from which conclusions will have to be drawn to the total length of alignment."

44. The Environmental Impact Assessment for Arun Access Road-Valley Route, published in September 1992, concludes that the impact on biological resources is significant since the Valley Route, transverses forested areas for the major part of its length (71 km out of 124 km), and that most of the areas show high species diversity and presence of rare, endemic, and endangered species of trees and other plants. In addition, the loss of habitat will result in significant impact on vertebrates. The EIA for the access road concludes that:
"The road runs close to the Arun River for 67 km and therefore construction of the road will have direct impact on mammalian and reptilian wildlife due to direct habitat loss, severance of territory, disturbance and increased access to hunting. Quantitative data on population sizes are not available."

45. The Panel finds the process of choosing the access road has created uncertainties of a serious nature with regard to IDA's ability to follow OD 4.01 on environmental assessment. The Response cites three major components to the EAP: an Environmental Mitigation Plan, a Land Acquisition Resettlement and Compensation Plan, and a RAP. During consultations with the proposed borrower and executing entity, the Panel learned that the updated RAP will not be completed until January 1995. On the basis of the evidence reviewed, the Panel concludes that the environmental assessment and processing of the proposed loan do not appear to be consistent with the provisions of OD 4.01 and its annexes. The potential of direct, serious long-term damage is significant.

**Cumulative Effects and Inadequacies**

46. **The Request** states that cumulative impacts of all three Arun Valley hydropower schemes (Arun III, Upper Arun, and Lower Arun) have not been evaluated and that there should be a comprehensive study of the long-term effects including those of additional road construction; that other inadequacies of the EIA include no thorough assessment of the impact of the transmission lines, mitigation plans for natural disasters, effects on fish and disposal of construction spoils.

47. **The Response** refers to the 1991 basinwide environmental sustainability study as meeting the Bank's requirements. "The effects of Upper Arun which are likely to be environmentally more sensitive than Arun III were studied separately in a 1991 feasibility study." It notes that Lower Arun "is generally recognized to have less significant impacts"; it is acknowledged that further work will be undertaken in the first year of the project to verify that effects on fisheries are minimal and to identify mitigation measures as necessary.

48. Mention is also made of the approval of environmental mitigation measures by the project's POE, referring to paras 3.23 and 3.44(b) of the SAR.

**The Panel**

49. The Panel observes that, according to the SAR, the POE included a single "expert in environmental management and resettlement" and that in June 1994 a decision was made to "reconstitute the POE by the end-December 1994 for review of assistance and guidance on the critical technical and safety aspects and dam safety monitoring during construction and supervision." It is also noted that the reconstituted Panel will be "expanded to include environmental expertise to advise effectively on detailed RAP and resettlement issues." In addition, the MOP states that a POE, "both international and Nepali, will advise on, inter alia, the RAP and resettlement implementation, and propose modifications where appropriate." It is pointed out that the reconstituted Panel will "include a core of specialists in area development, resettlement, biodiversity and agriculture management"; and that other experts will be consulted as needed.

50. Applicable IDA policies provide for Regional Environmental Assessments and special provisions relating to Dam and Reservoir projects. In particular, Environmental Advisory Panels are recommended:

"For major, highly risky, or contentious projects with serious and multidimensional environmental concerns, the borrower should normally engage..."
an advisory panel of independent, internationally recognized, environmental specialists to advise on (a) the terms of reference (TORs) for the EA, (b) key issues and methods for preparing the EA, (c) recommendations and findings of the EA, (d) implementation of the EAs recommendations, and (e) development of environmental management capacity in the implementing agency."40

51. Given that OD 4.01 was applicable when the Valley Route was chosen and the Arun III Hydroelectric Project appraised, the environmental assessment should have included a comprehensive approach to the Arun basin, including a long-term perspective that also considered the Upper and Lower Arun Projects, access roads (including the Valley Route and additional spurs), as well as transmission lines. Environmental assessments should be integrated into project design from its inception and must go beyond descriptive studies, focusing on the interaction of all project components and decisions that affect the natural and social environment, including mitigation plans and the institutional capacity to develop, implement, and monitor them. It is not clear that the composition of the POE properly reflected the requirements set out by IDA policies.

52. Given the nature and complexity of the environmental and social risks of the project, IDA policy would appear to require the existence of a POE solely devoted to environmental and social issues. Instead, IDA and the borrower agreed in 1994 to consolidate planning for such an environmental panel into the existing POE.

III. Disclosure of Information

53. The World Bank Policy on Disclosure of Information, September 1993, states in part that the Bank "recognizes and endorses the fundamental importance of accountability and transparency.... Dissemination of information to local groups affected by the projects supported by the Bank, including non-governmental organizations ("NGOs"), particularly as it will facilitate the participation of those groups in Bank-financed projects, is essential for the effective implementation and sustainability of the projects.... It follows that there is a presumption in favor of disclosure."41

Project Information Document ("PID")

54. THE REQUEST complains that the PID was not prepared before January 24, 1994, and has subsequently not been updated to include all the information required by BP 10.00, Annex A.

55. THE RESPONSE states that the "content and dissemination of the Arun PID were substantially in line with Bank policy and procedures."

THE PANEL

56. IDAs Procedures for operations in which major changes are made after appraisal require preparation of a final revision of the PID following appraisal.42

57. The Panel notes that the PID is an effective means of providing timely and concise information on proposed projects. It is highly desirable, for projects that command this degree of interest at the national and international level, that this document be updated in accordance with emerging Bank policies. The September 1993 BP 17.50, Annex D, required a completed PID for all projects beyond the IEPS stage but not yet presented to the Board by January 1, 1994. The document was not available at the Public Information Center ("PIC") until March
1994; and not subsequently updated or expanded after the issuance in June 1994 of BP 10.00, Annex A.

**Environmental Assessment ("EA")**

58. The Request asserts that this provision was not followed by IDA and notes that the Environmental Impact Assessment was one of the documents for which release was requested in the lawsuit filed with the Supreme Court on December 31, 1993.43

59. The Response claims that the "dissemination of the results of the Environmental Assessment was substantially in line with Bank policies and procedures."44

**The Panel**

60. The Panel notes that the 1993 procedures on information disclosure require that "before the Bank proceeds to appraisal, the EA [Environmental Assessment] must be made available in the borrowing country at some public place accessible to affected groups and local NGOs."

61. The Panel notes that the EA for the Hill Route (the RAP in this case) was completed in 1991; that the EA Summary was published in Kathmandu in May 1993, and the "Due Process Manual" prepared in Nepali by NEA in November 1993 is restricted to information on land acquisition and compensation procedures. While the Response provides detailed information on the timing and applicability of specific IDA policies on disclosure of information, it does not refer to the relevant policies relating to Environmental Assessment.

62. Considerable efforts have been made to gather and release environmental data about the project and the IDA appears to have made substantial efforts to make it available in Washington. However, much of the relevant information was not available in Nepal.

**Factual Technical Information**

63. The Request claims that factual technical information was requested during project preparation to enable the Requesters to have an input into the design and promote alternatives but such information was received too late (after appraisal) to allow input. In particular, it is noted that the study of alternatives was not released until after appraisal and the completion of loan negotiations.43

64. The Response mentions initial delays in implementing the new disclosure policy in this respect, but notes that sections of the SAR have been available at the PIC since September 1994.

**The Panel**

65. IDA policy allows for the release, by the Country Director concerned, of additional factual technical information for projects under preparation through the PIC.46

66. The Panel notes Management's prompt disclosure of relevant parts of the SAR, but the Request suggests this is not available in Nepal. In light of the high degree of interest in the project in Nepal it appears unfortunate that delays in implementing the new policy occurred and that no mention is made in the Response of supplying such factual technical information to NEA's Arun Information Center.

67. The Panel is concerned about the serious problem of enforcing release of information in borrowing countries; and notes a gap in the availability of information in Washington, on the one hand, and in the country where the project is located on the other—in particular in the actual project area.
68. With regard to overall disclosure of information, the Panel recognizes the progress made by Management in the last two years in relation to projects such as Arun III. In the borrowing countries progress varies, as evidenced by the need to take cases to the Nepalese Supreme Court twice this year to obtain release of project information.

69. Disclosure is not an end in itself, according to Bank policy, but rather a means of enhancing the ability of affected people to participate in the design and consideration of project alternatives.

70. Meeting the requirements of Bank policy on release of information in Nepal appears to have been difficult. The Panel urges continued attention to this evolving issue.

IV. Involuntary Resettlement

71. **The Request** claims that (a) specific violations of IDA’s policies on involuntary resettlement have occurred (Hill Route), and (b) that violations of the policies are likely to occur (Valley Route).

**Hill Route**

72. With reference to the cash compensation issue raised by two of the Requesters it is claimed that the central objective of improving or at least restoring affected people to former living standards has already been violated. The Request points out that the effect of ACRP has been to inflate prices far beyond compensated value, and that in violation of para.14 of the policy, land has been undervalued. The Request also criticizes the fact that land-for-land compensation was not appropriately offered.

**Valley Route**

73. The Request notes that the proposed project benefits will be electricity but affected people will not benefit, that employment benefits will be temporary but the adverse effects of displacement are permanent—SPAFs are to be given first priority only for employment on road construction. The Request also notes that the EIA shows that cash compensation was already failing in the case of the Hill Route and that the Valley Route people will have even less ability to deal with cash because they are poorer: this raises the whole question of land-for-land compensation and actual implementation. According to the Request the law is basically limited to cash compensation and PAFs are not being informed of a land option. The Requesters are not aware that any socioeconomic survey has been done to determine the value of land. In addition, the Request notes a violation of the policy as no resettlement plan has been established before appraisal for those to be displaced by the transmission lines.

74. **The Response** explains IDA’s compliance with the Operational Directive (“OD”) on Involuntary Resettlement in relation to the Valley Route, noting that implementation arrangements have been agreed at negotiations; SPAFs are to be offered and are to choose replacement land to be purchased by NEA; PAFs will receive cash compensation; a cadastral survey of all areas expected to be affected by the project was completed prior to land acquisition.

75. Furthermore, the Response suggests that the OD contains no requirements as to how project benefits should be shared, nor does it require that permanent employment
be provided to displaced persons but in this case the ACRP provides that at least one person from every SPAF is to be offered temporary employment by NEA; full socioeconomic surveys covering all PAFs were carried out for the Hill Route in 1990 and the Valley Route in 1993; resettlement planning was timely and only eight families will be affected by transmission lines. The Response refers to preparation of a Due Process Manual in Nepali which describes the ACRP policies and procedures and is designed to inform affected people of their rights.

THE PANEL

76. The SAR for the original Access Road (Credit 2029-NEP) describes the resettlement plan: “Resettlement. To provide necessary compensation and rehabilitation measures for the population whose land, buildings and means of livelihood would be either temporarily or permanently affected by the road/dam construction, the project includes implementation of an ACRP. The ACRP contains an overall plan for the resettlement to be carried out under the project as well as details on the nature and magnitude of the operation, compensation packages offered to the affected families, development plans for relocation sites, transfer/transport arrangements, implementation timetable and costs. The legislative basis for implementing the ACRP is contained in the Land Acquisition Guidelines 2045 approved by HMG on January 5, 1989.”

77. When the Hill road was designed, IDA approved a resettlement plan regarded as a model at that time. The resettlement plan for the proposed Valley Route is based on it.

HILL ROUTE

78. A very large number of families (estimated at about 1,600) were deprived of their land for purposes of this project. After the change in access route alignment it appears that this land is not needed for project purposes. Nevertheless, the “Hill Route RoW will be retained in government ownership for future road construction purposes.”

79. The POE Report No. 7 pointed out that among the apparent disadvantages of the Valley Route were “losses and uncertainties resulting from the circumstance that land compensation for the hill route is already 94 percent completed,” and concluded that “[i]f the valley route is selected, NEA’s ‘Environmental Assessment and Management Executive Summary’ should be updated and amended to reflect the selection of the valley route, [and] address the issue of impacts on families within the RoW of the hill route who have already received compensation.”

80. A decision was made in 1992 to change the Arun access road to the Valley Route. The Panel notes that apart from the reference to completion of a socioeconomic survey, the Response does not address the issue of impacts on families within the RoW of the now abandoned Hill Route who have already received compensation. Those affected appear to have been forgotten, which gives rise to a number of issues:

• land has been purchased from those who will no longer share in any benefits the construction of an access road might confer;
• there is no systematic information on what adverse impacts the acquisition has caused except for the claims of the two Requesters;
• there does not yet appear to be any mitigation plan for the Hill Route people; and
• under Nepalese law it appears that HMG/N is supposed to return land no longer needed for the project for which it was acquired.
V. Indigenous Peoples

86. The Request claims that there are no benefits provided for the Indigenous Peoples, who will suffer only adverse impacts, and lists those impacts; there is no mitigation or Indigenous Peoples plan—it is unclear whether documents contain actual work plans or just recommendations—many recommendations in EIA are not taken into consideration; there are many issues to be resolved in bidding documents—which are secret; mitigation of negative effects on Indigenous Peoples does not constitute a development plan; land appropriation on the Hill Route started before completion of the cadastral survey; the policy on participation in the decisionmaking process was violated as stated in the 1991 EIA—"the road alignment and dam site were already decided and the study team did not have mandate to change these decisions." 62

87. The Response explains that all aspects of the policy have been met, mostly by reference to documents. It notes that the cadastral survey is nearing completion in Sankhuwasabha and acknowledges that, despite all precautions, "a close watch will be necessary throughout project implementation to ensure that the objectives of the OD are met. To this end, the project supervision plan involves careful monitoring and evaluation of the impact of project related activities on vulnerable groups in the valley." 63

88. IDA’s policy on Indigenous Peoples requires a specific “Indigenous Peoples Development Plan” that is comprehensive, that avoids or mitigates potentially adverse effects, and that ensures that Indigenous Peoples receive culturally, socially, and economically compatible benefits. 64
THE PANEL

89. The Panel notes that there are a variety of different ethnic groups along the Arun basin. The original regional action plan (RAP), which focuses on the Hill Route, reviews an extensive range of social and environmental issues including vulnerable groups, Indigenous Peoples, and women. Some of these groups are unfamiliar with a cash economy, which poses additional risks to their welfare requiring special attention.

90. IDA's policy is that an Indigenous Peoples Development Plan should be prepared. The NEA has informed the Panel that a revised RAP will be ready in January 1995: it may be that this will contain an appropriate Indigenous Peoples Development Plan and provisions for implementation. Provision for technical assistance to support the RAP Secretariat at base cost of US$2 million aimed at facilitating implementation of the RAP was introduced and agreed during June 1994 negotiations. 

NOTES

1. The President of IDA has circulated to the Board, for information, a Memorandum and Recommendation on Arun III (Report No. P-6381-NEP, dated August 29, 1994, hereinafter referred to as “MOP”), and the Staff Appraisal Report No. 12643-NEP, dated August 29, 1994 (hereinafter referred to as “SAR”).
2. Request, para.4.A.
3. Response, Chapter 3, paras 2-3: unless otherwise noted, references to paras in the Response refer to Chapter 3.
4. The Hydro Fund (base cost US$5 million) to provide funding to assist Nepal's private sector to undertake feasibility studies of micro-mini hydro schemes and to implement viable schemes was agreed to as an additional project component during negotiations in June 1994. (See Agreed Minutes para.4.)(b).)
5. Response, para.4.
6. Request, para.4.A.
8. Ibid, para.6.
9. Ibid, para.7.
10. Request, para.5.A.
11. Response, Chapter 1, paras. 8, 10, 11.
15. MOF, para. 54.
• "the high costs and financing requirements of AHP [Arun III] pose risks to the orderly management of the Nepal's overall development program, including investments in human resources and rural infrastructure." (para.3.6)
• "The simulation shows local resource availability coming under severe pressure... The local financing gap would be equivalent to 3.1 percent of GDP or approximately US$125 million a year, which would be too large to be filled by reasonable revenue effort and additional domestic borrowing, and steps would have to be taken to redress the imbalance. Inevitably, expenditures other than Arun would have to contract. It is difficult to map out the exact nature of the expenditure contraction in
the absence of a meaningful prioritization, but based on past experience, non-wage O&M activities and capital intensive programs would be the most vulnerable, and this would affect the recurrent cost financing for various sectors, such as transport, irrigation, forestry, agriculture services and drinking water, thereby limiting the productivity of these activities and the growth process. Also with the limits on local resources, aided activities and on-going programs would have longer implementation delays.” (para.3.7)

- “...a cut back in social programs would be unavoidable for accommodating the local financing gap.” (para. 3.8)

18. Request, 4.D.
20. Response, para. 15.
21. OD 4.01, Annex B, para. (f) requires a “systematic comparison of the proposed investment design, site...in terms of their potential environmental impacts; capital and recurrent costs; suitability under local conditions; and institutional, training and monitoring requirements. For each of the alternatives, the environmental costs and benefits should be quantified to the extent possible, and economic values should be attached where feasible. The basis for the selection of the alternative proposed for the project design must be stated.”
22. EA Summary, para. 6.1.
23. For details see SAR (para. 3.26).
24. EA Summary 1993, para. 6.32.
25. Ibid, 6.2.3.
26. At its seventh meeting of September 26-October 2, 1992. (See Panel of Experts Report No. 7.)
32. Request, para. 4.D.
34. Ibid, paras. 18-20.
35. Ibid, para. 19.
36. SAR, para. 3.23.
37. Ibid, para. 3.44b.
38. MOP, para. 32.
39. OD 4.01, para. 5, calls for Regional EAs “where a number of similar but significant development activities with potentially cumulative impacts are planned... [and] are particularly useful when they precede the first in a series of projects... in an undeveloped region... where cumulative impacts are anticipated...” See also OD 4.01, Annex B, Environmental Policy for Dam and Reservoir Projects: all provisions (4/89).
40. OD 4.01, para. 13; para. 15 of Annex B, "Environmental Capacity of National and Sectorial Institutions: Major dam and reservoir projects should be used to help build environmental capacity (analytical, regulatory, and enforcement) in the institutions at the national and sectorial levels through training, consultancy, and policy dialogue, and to foster coverage of dams and reservoirs by environmental legislation."
For more detail on the selection and functions of the panel, see para. 18 of OD 4.00, Annex B.

41. Section II, pp. 2-3.
42. BP 17.50 (para. 4).
43. Request, para. 4.C.
45. Request, para. 4.C.
47. Request, para. 4.E.
48. Ibid.
49. Ibid.
50. Ibid.
51. Ibid.
52. Ibid.
53. Response, paras. 22-25.
55. Ibid, para. 27.
56. Ibid, para. 28.
57. Ibid, para. 29.
58. Ibid, para. 31.
59. SAR, para. 3.11.
60. EA Summary at 6.3.2.
62. Request, para. 4.E.
63. Response, para. 36.
64. OD 4.20.
65. Agreed Minutes, para. 4.
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Investigation Report

June 21, 1995
Investigation Report

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SUMMARY

1. This report describes the process and summarizes the findings of the Inspection Panel's (the "Panel") investigation into alleged noncompliance by IDA with its Operational Directives ("ODs") 4.01 on environmental assessment, 4.20 on indigenous peoples, and 4.30 on involuntary resettlement during the preparation and appraisal of the above-mentioned proposed project and implementation of Credit No. 2029-NEP. The Inspectors' findings, which are reflected in this report, are attached as Annex 1. The investigation was conducted in two phases. In the first phase the Inspectors interviewed staff and consultants and conducted a desk study in Washington. During the second phase the Inspectors carried out a field inspection in Nepal.

2. The Panel would like to express its gratitude to His Majesty's Government of Nepal and the people of the Arun Valley for their hospitality and assistance, and to non-governmental organizations and Bank staff in Nepal for their logistical support. The Panel drew upon a vast reservoir of technical knowledge of staff in Washington whose recent work expedited the Panel's investigation.

Process

First Phase

3. The Executive Directors' Resolution authorizing an investigation (the "Authorization") stipulated that the "Panel will take into account information and studies subsequently provided by the Government of Nepal, the Bank and other Co-financiers, as well as any remedial measures agreed by Nepal and the Bank, and taking into account the complexities of the issues involved, will examine whether the requirements of the above-mentioned ODs were observed in substance." The Resolution establishing the Panel (the "Resolution") requires the Panel to conduct an investigation and then issue a report of its findings and conclusions. In response to the Panel's findings, Management is required to submit a report with its recommendations to the Executive Directors within six weeks. The following outlines the process as it has evolved to date in this case:

- The Authorization instructed the Panel to "commence field work only after the Bank receives a decision from the Government of Nepal requesting the Bank's financing of the Project and should, to the extent possible, complete its work within the three-month period suggested by the Panel. Management should facilitate the task of the Panel with a view to enabling it to complete its task early." To avoid any
delays, the Panel informed the Executive Directors and the President that it would divide the investigation into two phases.2

- In mid-March the Government of Nepal ("HMG/N") requested IDA's financing. The Panel considered the findings submitted at that time by the Inspectors and a progress report by Management, prepared at the Panel's request. It was satisfied that the relevant issues identified in its preliminary review and further discussed in joint meetings with staff were being or would be addressed. The interviews with staff and consultants and the desk study in Washington were completed in mid-March.3
- An IDA mission visited Nepal in April 1995 ("April mission"). To avoid duplication of effort, the Panel notified the Executive Directors and the President of its decision to delay the second phase (field work) of its investigation until after Management had identified and discussed remedial measures with HMG/N.
- On May 23, 1995, Management sent the Panel a memorandum attaching proposed remedial measures based on the findings and recommendations of the April mission. Management expressed the hope that with the adoption of these measures the Panel would find the project to be in compliance with relevant IDA policies. The proposed measures are included in the discussion below at paragraphs 5-24.

**Second Phase**

4. With the HMG/N's consent, Messrs. Richard E. Bissell and Alvaro Umana Quesada (the "Inspectors") conducted a field inspection in Nepal from May 27 to June 1, 1995, and the Executive Directors were so informed. Their objectives were to confirm the findings of the first phase of the investigation and to review Management's remedial proposals in terms of the requirements of the relevant ODs and the Authorization.

- The Inspectors met in Kathmandu with HMG/N officials, the Requesters, and representatives of the donor community and nongovernmental organizations ("NGOs").4
- Inspection of the project area (Arun Valley) included aerial reconnaissance of the entire valley, an expedition on foot along both hill and valley route alignments, visits to the proposed power house locations of Arun III and Lower Arun Hydroelectric Projects, and aerial reconnaissance of the Upper Arun Valley.
- The Inspectors held public consultations with people in the project area. A large public meeting was held in each of the towns of Amrang, Num, Chhyangkuti, Khandbari, Tumlingtar and Chewabesi. Seven meetings were conducted with small communities along both hill and valley route alignments. A total of more than 1,000 people participated in the meetings. In addition, the Inspectors interviewed and exchanged views with the Requesters and a wide range of other people.

**Observations**

5. The investigation was the first recommended by the Panel and the first authorized by the Executive Directors; the process as it in fact evolved was not strictly as anticipated by the Resolution. After the investigation was authorized, Management made a substantial effort to bring the project into compliance with the three ODs.
Findings

6. The findings below reflect the Panel’s analysis of the Inspectors’ report and in view of Management’s initiative and pursuant to the terms of the Authorization, this report also takes into account the proposed remedial measures in assessing compliance with the three directives.

7. After the April mission, Management pointed out in its transmittal memorandum to the Panel, that all the attached proposed remedial measures would have to be satisfactory to IDA. In addition, the memorandum stated that Management would communicate to HMG/N the criteria to be met for the measures to be satisfactory. In terms of timing, Management will require all such measures to be either completed or defined and initiated prior to Board presentation of the proposed project.

Findings on Environmental Impact Assessment (OD 4.01)

8. MANAGEMENT’S PROPOSALS. The recommended measures relate to the direct impacts of the proposed choice of road alignment. A detailed comparative analysis of the valley and hill access routes, recommended by the Panel of Experts in 1992, was prepared after the April 1995 mission. It confirms the proposal that the access road should be built along the valley alignment provided that the Environmental Impact Assessment takes into account the following:

(a) Spoils disposal;
(b) Impact on wildlife and aquatic life:
   (1) avoidance of Makalu-Barun Conservation Area or mitigatory and compensation measures;
   (2) Sal Forest Patches: measures are to be included in the Regional Action Program discussed later in this report; and
   (3) aquatic life; and
(c) Impact of increased traffic on the market town of Hile.

9. PANEL OF EXPERTS (“PoE”). The establishment of a second separate specialized PoE consisting of social and environmental experts is now proposed but has still to be created and appointed.

- The Panel notes that the original PoE has not been convened since October 1992. Therefore it could not, as required, follow up on its recommendations. Mechanisms to ensure periodic PoE meetings and follow-up are therefore needed.

10. GLACIAL LAKE OUTBURST FLOODING. In addition to the measures proposed, Management has also addressed the problem of such flooding risks referred to in the Panel’s preliminary report. In April Management convened a panel of experts which concluded that risks are real and that monitoring should commence immediately. HMG/N has arranged for financial assistance for a team of experts to carry out an investigation of the Barun glacier lakes starting toward the end of June.

11. ROAD MAINTENANCE. During their field inspection, the Inspectors verified monsoon flooding as a significant natural risk that requires attention. Uninterrupted motorized access is necessary to ensure that equipment can be brought in to the project site during construction. Without this, there is a high risk of considerable project delays and higher costs.
The Panel finds that the choice of the valley route will require provision for appropriate funding of contingencies to cover maintenance in the event of road washouts resulting from river flooding due to monsoon rains.

Findings on Involuntary Resettlement (OD 4.30)

12. CREDIT 2029-NEP (approved by the Board in 1989). The April mission found there are families seriously affected by the access road project in Tumlingtar who sought rehabilitation but received no assistance. The mission also concluded that there may well be more families in the Basantapur area who have been similarly adversely affected.

13. The mission also noted that HMG/N had paid compensation to most of the 1,635 families whose land was acquired for the hill access road project. However, the legal process of transfer of ownership had been completed for only 15-20 percent; of this percentage, the land of only 18 families was in fact physically possessed by HMG/N.

14. With respect to those who were displaced in 1989-90, Management recommends that HMG/N investigate the conditions of the families whose land was actually physically possessed and in accordance with provisions of the borrower's guidelines offer rehabilitation assistance.

15. Management's proposed remedial measures with respect to land acquired but not possessed, require that the borrower formulate a time-bound plan indicating which land is to be utilized for future road construction and which is to be returned, including measures for protecting the standard of living of those whose lands will be possessed and the procedures to enable original owners to regain their lands.

16. VALLEY ROUTE (Proposed Credit). Management proposes an update of the Acquisition, Compensation, and Rehabilitation Plan.

17. IMPLEMENTATION OF RESETTLEMENT PLANS. The Panel agrees with the 1991 consultant study of past experience in Nepal which concluded that more follow-up and much more emphasis must be placed on monitoring and evaluation of both the land acquisition process and implementation. It is worth noting that both the Operations Evaluation Department and regional reviews of the Bank's experience with resettlement stress the central importance of early attention to strengthening governmental capacity to manage such programs. The studies point out that monitoring by IDA has been chronically inadequate despite consistent findings that oversight must be exercised constantly during implementation and beyond.
Findings on Indigenous Peoples (OD 4.20)

18. Management proposes that the three actions required by OD 4.20 with respect to indigenous people should be extended to all residents of the Arun Valley. These actions are (i) informed participation through public consultations, (ii) security over land tenure, and (iii) an action program with socially and culturally appropriate components. The “action program” means the Regional Action Program discussed further below.

19. The Inspectors found that people who qualify as “indigenous” under IDA’s policy are scattered throughout the valley and live in conditions similar to those of non-indigenous people. Management’s proposal that requirements of the policy be applied to all inhabitants is appropriate and should bring the project into substantial compliance with OD 4.20 if its implementation is subject to continuous monitoring and supervision.

Findings on the Regional Action Program

20. A significant number of actions required by OD 4.01 and OD 4.20 are to be included in the Regional Action Program (“RAP”). This is an innovative approach to an environmental action plan which has the potential to become either a model for future work or, if badly implemented, a serious weakness of the entire Arun III project.

21. Described in the Staff Appraisal Report of August 1994 as being “integral” to the project, the RAP has nevertheless yet to be completed. It would be the main mechanism for dealing with indirect environmental and social impacts—an extremely ambitious undertaking which in its original form contained 21 specific recommendations and programs to deal with a variety of complex issues.

22. **FORESTRY.** Effective forestry management is expected to mitigate the increasing biomass deficit.
   - The Panel notes that preliminary actions to address this problem need to be completed. Measures to grant security of land tenure to forest user groups are now proposed. First, maps showing the boundaries of existing forests as well as those planned to be managed by forest user groups have yet to be prepared. Second, as of the date of writing, Management is still waiting for the planned review by the Bank’s Legal Department of Forestry By-Laws. Depending on the outcome, Management intends, if necessary, to propose further remedial measures. The Panel also finds that continued technical assistance to be funded by donors other than IDA is critical to this component.

23. **PROTECTION OF THE REMAINING CLOUD FOREST.** Only patches of cloud forest remain and these are located along the now abandoned hill route.
   - The Panel finds that appropriate mechanisms for their protection have not been included under the RAP.

24. **DONOR SUPPORT AND COORDINATION.** Funding of the RAP is to be provided by major bilateral donors who must be committed to continuing support throughout the life of the project. The RAP involves many different programs in many different areas, implementation by different executing agencies, and funding by a number of different donors.
   - The Panel found inadequate capacity for sustained coordination of all these different aspects.

25. **INSTITUTIONAL ASPECTS.** Management requires completion by the borrower of a redesigned and expanded RAP prior to Board presentation. The Panel notes that:
Since it is the first time such a regional action program has been designed, those involved in designing the original RAP need to continue their work to ensure that an institutional memory is established in order to interlink, in the future, all the different actions.

To implement preemptive environmental and social measures, institutional capacity needs to be strengthened now.

Responsibility for implementation appears to be fragmented. Direct mitigation measures are to be taken by one executing agency while indirect and induced ones are to be taken by another. The design does not yet provide for a single chain of command or integrated organizational structure in the Arun Valley to oversee implementation.

26. Given the complexity, scale, and scope of proposed developmental interventions in relation to the existing institutional capacity in Nepal, the Panel is doubtful that the project's mitigatory environmental and social measures can be implemented within the timeframe proposed by IDA.

- The Panel finds that the lack of institutional experience will necessitate implementation of a massive institutional capacity building plan and identification of further resources to fund it, as well as intensive IDA staff supervision throughout project execution.
- In relation to environmental measures in particular, the Panel notes that OED studies indicate that projects often suffer, or take much more time and funding than anticipated, because of an underestimation of the effort needed for building adequate institutional capacity as well as from a lack of constant supervision.  

Conclusions

- Based on its assessment of proposed remedial measures, the Panel concludes that IDA is moving toward and intends to comply in substance with the requirements of the three operational directives.
- Specific remedial measures proposed by Management on:
  - Environmental Impact Assessment
  - Involuntary Resettlement
  - Indigenous Peoples
appear to be adequate if and as long as they continue to be consistent with the applicable operational directives, and appropriate follow-up mechanisms are introduced.
- Overall remedial measures relating to implementation—institutional building, monitoring, and evaluation—require further attention throughout as well as beyond the project construction cycle.
- There is a need to assess whether the measures can be implemented within the time/cost frame proposed for project construction, taking into account:
  - existing institutional capabilities
  - the feasibility of strengthening existing institutional capacity to a level required to implement complex environmental and social measures under the Regional Action Program in the time planned.
ANNEX 1. INVESTIGATION REPORT

1. Prior IDA Experience with Hydroelectric Projects in Nepal: Resettlement

1. IDA places emphasis on its staff and its borrowers learning appropriate lessons from one project to another. Indeed, the 1994 Bank-wide review of resettlement referred to a “Bank decision that the Bank will not finance any new project involving resettlement for a borrowing agency that is not living up to its existing commitments for resettlement in an ongoing project.” For this and other reasons, the experience in Marsyangdi is an important baseline for viewing compliance with policies in energy projects in Nepal. The most recent experience before Arun III between Bank staff and the question of applying resettlement policies in Nepal occurred in the context of the Marsyangdi Hydroelectric Project (1984), Credit 1478-NEP. This project was not very extensive in impact, a 69 MW facility, with over 200 families affected by the acquisition of land. The project documents negotiated between IDA and HMG/N included very specific requirements on resettlement, particularly in Section 3.07 of the Development Credit Agreement, in order to ensure compliance of the project with IDA’s policy on resettlement as described in OMS 2.33. The most specific criteria was that the borrower adopt and implement a resettlement program satisfactory to the Bank by January 31, 1986.

2. This requirement was laid on the borrower despite the fact that the borrower’s legal code for land acquisition did not conform to IDA policies on resettlement. In a variety of ways, IDA insisted on broader application of compensation and rehabilitation than was understood by the legal framework in Nepal. And the plan for compensation went far beyond the practices for road construction then prevailing in Nepal.

3. The early supervision reports of the Bank indicated concern about the ability of the borrower to meet that requirement. Indeed, in March 1986 the borrower was already out of compliance, and was given a new deadline of June 30, 1986. By the time of the next supervision mission report, in July 1986, the mission was able to note receipt of a three-page letter from the Marsyangdi Project Manager outlining his approach to the issues, but considered insufficient by the mission experts. At that point, virtually all the land had been taken for the project. As a result, the effect of the required plan would be mitigative at best, rather than preemptive. The borrower was given a new deadline of August 31, 1986.

4. The following supervision mission, in late October 1986, found that nothing had been done. The mission brought a resettlement specialist along to conduct the review of the borrower’s planning, and to assist the borrower in improving the analysis of those being affected by the project. He provided extensive details about the creation of a viable resettlement and rehabilitation plan, for example, the existing census looked only at landowners, and not at tenants; the need to differentiate between seriously and marginally affected people; the need to identify common or public areas that were acquired; and the need to provide assistance to communities where significant numbers of the displaced choose to settle. Indeed, the conclusion of Bank staff at that time was that the general policy of the borrower on resettlement “falls short of Bank policy on resettlement.” The mission also stated that the project executing agency was not staffed to carry out the work, and urged that consultants be retained to provide strong support. The borrower chose not to pay for this additional work, and requested that the Bank provide additional funding. By February 1987 all reports indicated no progress.
5. A review by the Bank in May 1987 was rather more concerned about the project as a whole: NEA's compliance with the agreements reached in prior reviews was described as "extremely poor." This was followed by a statement to the Bank in July 1987 that "the above consultants would not be asked to develop a resettlement action plan, as the project does not envisage the resettlement of persons affected by the acquisition of their land and homes on top of the compensation paid them in accordance with the prevailing rules and regulations of HMG/N." Bank staff were clearly puzzled about how to go forward, given the lack of documentation to help in determining what exactly had transpired to date or in determining a course of action for bringing the project into compliance with covenant 3.07. Management was struck by the divergence between the technical expertise employed in the resettlement component of the project and the actual building of the dam, tunnel, and powerhouse which were far from being in compliance with Bank guidelines on resettlement. Again, the Bank urged hiring a consultant team locally to come up with a Plan, and such hiring to be done by April 1, 1988.

6. By the middle of the summer no consultant had been hired yet. By August 1988 the implementer was reported as seeking bids. In fact, the consultant firm was finally chosen in the fall, and started work. Prior to its supervision mission of May 1989, the Bank received a draft Action Plan Report to review. It needs to be recalled, however, that the hydroelectric project was due for commissioning in September 1989. It became a race as to whether the project would be completed before the resettlement plan would be approved. The draft Action Plan did need additional work according to Bank staff: a more rigorous methodology, a budget, a schedule for implementation, and a clearer definition of beneficiaries. The deadline for the Action Plan was June 30, 1989, and the borrower was requested to include costs of implementing the Action Plan in the next fiscal year budget.

7. The hydroelectric project was completed well in advance of the resettlement plan. The Action Plan was reported completed by the supervision mission of December 1989, and at this time the burden of paying for implementation was shifted to the Bank (presumably through the follow-up sectorwide Power Project). The Plan identified a significant pool of families affected by the project—indeed, already adversely affected by virtue of their remaining landholding being too small. After much negotiation, that number was reduced to 21 families as "seriously affected." The consulting firm then returned to the drawing board to establish what measures should be taken. In early 1992 the supervision mission could report that the final recommendation focused on a combination of training and employment for those 21 families.

8. The Marsyangdi project was completed without compliance on resettlement, or as one Bank assessment summarized the results of the resettlement effort: "Covenant, but not followed. Consultant plan included provisions, but never adopted under project."

2. Resettlement in the Arun III Access Road Credit

Background of the Project

9. The project, appraised in 1988 and presented to the Board in 1989, consists of the access road to the future dam site for the Arun III hydroelectric development scheme. It was presented as a separate project in order to accelerate the construction of the dam itself when the latter civil works would be ready for appraisal and approval by the Board.
The construction of the road was intended to begin in October 1989, and thus allow for transport of construction equipment to the dam site in early 1992. Together with the hydroelectric works, this project was part of the government's least cost electrical generation plan developed with Bank assistance, and was initiated prior to completion of the Marsyangdi hydroelectric scheme in order to meet Nepal's electricity needs and potential sales of surplus power to India in the late 1990s.

10. This alignment of the road was a difficult issue to resolve in the history of the project. There is no "natural" route for a road in a watershed with such steep hills and unstable topography. When the IDA credit was finalized, the Hill Route chosen actually represented a shift from the plan laid out by the feasibility study of 1987 funded by the Japanese International Cooperation Agency, which planned for the road to follow the river alignment to the powerhouse and dam site. The road funded by this credit became known as the "alignment," for the most part linking up existing towns along the ridges from the existing road head at Basantapur (a gravel road funded by Overseas Development Agency ["ODA"]) to the construction sites up the valley.

11. The borrower in this case was the Kingdom of Nepal, with the beneficiary being primarily the Department of Roads, Ministry of Works and Transport, and secondarily the Nepal Electricity Authority ("NEA"). The credit was SDR 24.4 million (US$32.8 million equivalent), the estimated cost of the road for which actual bids had not yet been received in the rush to approve the credit before the end of the fiscal year. The principal purpose of the project, justifying the cost of the road in this remote area, was to provide access for personnel, material, and equipment to the up-river construction sites of the Arun III project.

**Building Capacity for Resettlement Management**

12. The second stated objective of the project was to "strengthen HMG capabilities to administer rehabilitation of families affected by the project and manage environmental protection and conservation measures." (Staff Appraisal Report, p. 12.) As a result, it was important to the development of a satisfactory project that all provisions of OMS 2.33, Social Issues Associated with Involuntary Resettlement in Bank-Financed Projects, be fulfilled. The project included not only a Land Acquisition, Compensation, and Rehabilitation Plan (ACRP) with program elements costing $1.6 million, but also consultancy services for preparation and supervision of the ACRP to cost $1.2 million.

13. As already stated, the policy context for resettlement in this project was OMS 2.33, since the succeeding OD 4.30 on Involuntary Resettlement was not issued until June 29, 1990. At the same time, the new OD was under constant internal review at the time of design of this project, and so the Task Manager and his colleagues were aware of Management's guidance in the new OD 4.30. In the substantial core of the new OD, there was in fact little change from the OMS 2.33. In some areas of the new OD, there was an improvement in language from the OMS, and in other areas, it actually became less precise. The Bank staff and consultants offering advice to the borrower in meeting this policy requirement were helpful in guiding the borrower toward language in the new OD, thereby reducing the likelihood of criticism of a project that would take some years to complete. But in spirit and major substance, the OD and the OMS were close to each other.

14. OMS 2.33 provides a succinct statement of the purposes of the policy: "When development projects require people to be relocated, the Bank's general policy is to help
the borrower to ensure that, after a reasonable transition period, the displaced people regain at least their previous standard of living and that, so far as possible, they be economically and socially integrated into the host communities. Planning and financing the resettlement should be an integral part of the project, and the measures to be taken in this regard should be clarified before, and agreed upon during loan negotiations.” (para. 2)

15. The OD thus creates a series of tests for compliance:

- Does the project adequately recognize the range of economic, social, and environmental problems that will affect people displaced by the project?
- Does the project deal with the “long-term” nature of the hardship and damage it may cause?
- Are the measures appropriate?
- Are the measures carefully planned and likely to be carried out?

16. Implementation of the policy has required the Bank to address the question of defining a “resettled person” or “displaced person.” In this case, particular attention had to be given to the question of which families were “seriously” affected or displaced. The struggle between IDA Management and the borrower over this practical issue continues. The OD notes that “particular attention should be paid to the needs of the poorest groups to be resettled.” Later, at paragraph 16, it notes that “Vulnerable groups at particular risk are indigenous people, the landless and semilandless, and households headed by females who, though displaced, may not be protected through national land compensation legislation. The resettlement plan must include land allocation or culturally acceptable resources and earning opportunities.”

17. Does the resettlement plan adequately recognize the losses of families in the area of the project? The OD spells out the fact that “some types of loss, such as access to (a) public services; (b) customers and suppliers; and (c) fishing, grazing or forest areas, cannot easily be evaluated or compensated for in monetary terms. Attempts must therefore be made to establish access to equivalent and culturally acceptable resources and earning opportunities.” In the case of the Arun III access road, for instance, the effect upon the entire portering business and established markets is very substantial; yet the question of dealing with those effects has been entirely swept into the Regional Action Plan.

**Treatment of Seriously Affected Families**

18. Some observers have dismissed the scale of the resettlement problem in the Arun case. Relative to the Narmada experience, or most other South Asian projects, the number can seem trivial. But that is not the test for IDA policy. In OD 4.30 the question of scale is addressed in paragraph 4, where reference is made to “large-scale population displacement.” The number used is a negative reference “...a few people (for example, about 100–200 individuals).” This is substantially fewer individuals than the approximately one thousand families losing land in the Arun III project, which means the issue has to be seen as a serious compliance challenge. Indeed, in compliance with this, a formal plan was required, and has been provided by the borrower in the case of both the Hill Route credit and the proposed credit, and have been and will be examined for acceptability by IDA.

19. Underestimation of numbers affected is common in projects. As pointed out in one Bank study, “Surveys carried out in the early stages of the project usually cover only those who are directly affected by loss of property or who are ‘displaced’ and it is only
much later [that] other forms of impact [are] recognized." In the case of Arun III, the loss of jobs and traditional markets will be wide-ranging, with thousands of families "seriously-affected" without losing any land at all, since the land is only one source of income. Nevertheless, in this case the Board requested the Panel to look only at losses due to the taking of land. By specifying a focus on "seriously affected families," the Board has created a category that does not exist in OD 4.30, and indeed, is not addressed in the current principal Bank guide to the subject, *Resettlement and Development* (1994). The policy, on the other hand, appears to state that all losses are to be taken seriously; the construct of "seriously-affected" families as one category in the road projects seems to be a compromise with the borrower to limit the application of the extensive provisions for resettlement to a minority of those losing land.

**Monitoring and Evaluation**

20. These issues in the resettlement process are given extensive attention in paragraph 22 of the OD. It lays down a range of needs, such as supplementation of in-house monitoring capacity with independent experts. It states that "the borrower should be required to continue impact evaluation for a reasonable period after all resettlement and related development activities have been completed. The borrower should also be required to inform the Bank about the findings." It is a recurrent theme of memoranda from resettlement experts in the 1992–94 period that IDA needs to provide very substantial independent oversight in order to improve the likelihood of compliance with policies during implementation. Indeed, it might be reasonably argued that Nepal has been a laboratory for ACRPs in the Arun Valley that are widely admired for their design, but pay inadequate attention to solid implementation. But in the wake of the Wappenhans-led efforts, such a conclusion would not be a surprise to anyone, including people within the Bank.

22. Responsibility for resettlement, according to paragraph 6 of OD 4.30, "rests with the borrower." Nevertheless, it is also clear that IDA is responsible for assuring compliance with OD 4.30. The Staff Appraisal Report and the Memorandum and Recommendation of the President have to certify that the borrower's plan does comply with IDA policy requirements. Between those two kinds of responsibility, the reality is that "ownership" of the resettlement issue is hard to find. According to a Bank review in 1993, "few countries have demonstrated their commitment to the principles and objectives of resettlement articulated in OD 4.30. Equally few Task Managers are convinced about its importance, necessity, and viability." Against that background, it is necessary to be careful in assessing the real progress made in the Arun III project. With regard to supervising the Credit 2029-NEP, for instance, the borrower indicates that it filed three reports on the ACRP issues between 1988 and 1990, and yet there is no record yet found of those reports being scrutinized by IDA.

23. The core issue is made clear by all Bank reviews: as the 1994 Bank-wide review stated, "The ultimate test of consistency between resettlement operations and policy is income restoration and improvement." The test is not land, and it is not a short-term process. It reinforces the point that "very few projects have included sufficient measures or methods to assess whether income restoration is being achieved." The review goes on to say that "land-for-land" is central in rural areas, but in this case where crop-based income is projected to decline drastically (see the KMTNC studies), the sources of off-farm income are as important.
Women and Other Vulnerable Groups

24. The policy gives special attention to vulnerable groups, along with the importance of using the resettlement frameworks to both shelter and promote the development of those vulnerable groups. Women and children can easily suffer within the household framework when cash is monopolized by men and used for conspicuous consumption. In that sense, such vulnerable parts of the population become separate classes of "seriously-affected" people too often invisible to monitors without the survey tools to see their losses. Current state-of-the-art surveys of household welfare can disaggregate the condition of women, in order to ensure they are not silently penalized by a compensation system that does not take them into account. In the case of the Vietnam Highway Rehabilitation Project, 30 percent of training funds were reserved for women. In the case of the Arun projects, only token attention is given to women, and then in the context of the Regional Action Plan, not the ACRP.

Compensation

25. "Delays in payment of compensation leads to erosion of the value of the moneys received. ... In fact, the norm in Nepal is government taking possession of land prior to the completion of the valuation process, thus removing any incentive for government officials to promptly pay compensation due.... On the other hand, experience has shown that compensation payments received too far in advance of the actual physical move are either squandered or snatched up by money lenders." With regard to types of compensation, "Bank experience with compensation exclusively in money has been negative.... The need for forms of compensation other than cash is most apparent in the case of tribal or other minority populations whose ancestral lands are expropriated by the State." From virtually all writings, it was essential for IDA to insist on adequate noncash compensation in the Arun Valley, and yet when the land was acquired on the Hill Route, the only compensation identified so far was cash—no land, no jobs, and no training. The risk is that the same tragedy could emerge in the Valley Route as well.

26. One aspect of importance borrowed from the OD 4.30 was the scope of the policy. The OMS applied to hydropower and irrigation projects. The new OD was stated to broaden the treatment of resettlement to all types of investment projects, which had already become the de facto policy of the IDA. In one sense, this credit was a road project, and yet it had no viability except as part of a hydropower project. IDA showed good sense in recognizing that, whatever its categorization, this was a project that would require the resettlement of a substantial number of people, and that the benefits of the policy needed to be gained for the project from fair treatment of those being substantially affected by the construction. Management is ambivalent about whether they applied the OMS or the OD to this project. It could be argued that only OMS 2.33 applies, but in fact, the staff did everything possible to apply the progressive thinking of OD 4.30, and to good purpose. The Bank can take credit for having applied the substance of OD 4.30 to the design of this road project when there would have been legal shelter not to do so.

27. Road projects in Nepal were not known in the 1980s for taking a developmental interest in those displaced by construction. While a legal framework existed in Nepal for the involuntary taking of land for government projects, it was narrow in scope, and was of sufficiently little value to owners and tenants that most issues of compensation were simply settled administratively. Protests and appeals were virtually unknown.
Landowners tended to be grateful for whatever they received, as opposed to feeling they had true legal recourse to ensure fair treatment. This was particularly true in remote hill and mountainous areas where the local authorities were not operating in a democratic framework. The first Land Acquisition Act was passed in 1956, with subsequent revisions. When the legal framework was examined in the course of designing this project, Bank staff found it to be manifestly inadequate for meeting OMS 2.33 (especially with regard to informal tenants and the landless, and the determination of compensation levels across the board), and successfully pressed the borrowing government to issue special-purpose "guidelines." As we shall see below, the government argued that it could not alter its underlying framework for land acquisition without jeopardizing a host of projects funded by other donors. Instead, the Bank and the government compromised with ad hoc guidelines, unique in Nepal's history at that time. The government was careful to ensure that the guidelines did not apply to other development projects, but the Bank staff felt they had established a precedent for subsequent projects in that country.

28. Resettlement in Nepal has been both spontaneous and government-directed during recent decades. From the 1950s until the 1970s, the government's policies and its Nepal Resettlement Company relocated large numbers of farmers to the lower elevations of the country—the Terai region—and the policy of encouraging such movements was reversed only in 1985 when the adverse environmental consequences of such large-scale shifts were recognized. The history of such resettlement was not particularly happy from the farmers' point of view, either—with maladministration common and a lack of follow-through in ensuring land rights and extension services as farmers moved into new territory. These difficult precedents are cited as reasons for the farmers along the Arun road construction being reluctant to take up the offer of "land for land" instead of cash. Their experience with the government arranging such swaps was not positive. Indeed, the government's own experience was such as to discourage its senior managers from taking up an active role in resettlement in the Arun Valley. Even where landholders were seriously affected, the government's instinct was to award cash more generously than usual, rather than become involved in relocating families to new land.

29. In the light of such experiences, it is important to recognize the issues at stake in the Bank laying out as a major goal of the project to strengthen the government's capacity to manage rehabilitation of displaced families. All parties agreed that its capacity would have to be not merely improved considerably, but almost built from the ground up, to be able to carry out the Bank's objectives in resettlement; the question was whether such capacities could be established quickly enough to have impact on this project.

IDA Compliance with OMS 2.33: Appraisal Phase

30. The provisions of OMS 2.33 are quite explicit about the need for extensive early planning for resettlement issues. Whenever people are to be displaced, the borrowing government must have a resettlement plan, however brief or extended. The nub of the plan, as it would be stated similarly in the follow-on OD, is that "settlers are afforded opportunities to become established and economically self-sustaining in the shortest possible period, at living standards that at least match those before resettlement." (para. 18) IDA policy is not prescriptive about how to achieve the desired outcome, but it does demand a clear path to achieving such an outcome for those whose land is taken. The second major area of emphasis in the OMS is that of compensation—both in terms of insisting on a broad
definition of what assets deserve to be recognized in calculating compensation, and ensuring that replacement value is taken into account, as well as dictating the means: experience "tends to show that payment of cash compensation alone is often a very inadequate strategy for dealing with the displaced." (para. 19)

31. Timing is all-important for the policy. "Planning for resettlement should begin as early as possible." Indeed, "completion of detailed resettlement planning is required before the negotiation of the project loan." (para. 21) To emphasize, the OMS does not allow flexibility on this issue. The plan must be completed before negotiations can take place. The sequencing is quite clear:

- At the time of project identification, the magnitude and nature of resettlement must be identified, past experience should be reviewed, and the basic legal framework has to be reviewed "at this stage."
- At the time of preparation, resettlement components must be developed at the same pace, with involvement of many disciplines, in particular sociologist/anthropologists and resettlement specialists. Design and schedule have to be completed before the appraisal mission, in order to assess various resettlement options.

32. The Hill Route project began badly in terms of compliance with OMS 2.33. The preappraisal mission in October 1987 found that the project was moving toward appraisal without a clear understanding of how many people would be affected by the road, and without a plan from the borrowing government for dealing with the issue. Indeed, the thrust of the report of the preappraisal mission was that the government should be encouraged to move the people quickly so that they would not be in the way of construction machinery; there was no mention of rehabilitation. Indeed, the alignment of the road was not yet set, and therefore it would not be possible to determine the number of people affected until the road alignment was set at the appraisal stage. The Task Managers were warned at that time that compliance with the provisions of OMS 2.33 regarding furnishing the Bank prior to appraisal with a proposed R&R plan appeared not to be feasible. In an effort to get construction under way by November 1988, the careful steps laid out in OMS 2.33 were being telescoped into the period between appraisal and negotiations.

32. The Bank postponed further work on resettlement until the appraisal mission would examine this issue, and in the event that substantial resettlement is required, HMG/N would then be requested to formulate a plan for resettlement of displaced families and for compensations to farmers. This, then, was a project being rushed to appraisal (target February 1) that did not have a final road alignment, did not know how many people would be displaced, and where the government had not begun drafting a plan required in any case.

33. Others in the Bank expressed uneasiness over the approach being taken. There had not yet been any plans for including a resettlement expert in the preappraisal or appraisal mission despite an offer made in late January. The approach laid out in para. 22 was not acceptable to many—that measures would be taken only if "substantial resettlement is required." It was pointed out that the steps for compensation and rehabilitation have to be taken regardless of the number of families involved. Nevertheless, the Task Managers continued to attempt to minimize the issue. In March 1988 they reported that it was likely that few if any households would be physically displaced by the selection of the road alignment. This is surprising since the road alignment was not set. Later that same year, the initial estimate of the number of families to lose land would be set at 2,355 fami-
lies, certainly not within the plain meaning of "few, if any." Dissent gave rise to good sense, and it was finally agreed that an assessment of the impact of land acquisition and the development of an appropriate action plan would be conducted in conjunction with the ongoing detailed engineering financed under the TA-2 Project (Cr. 1378-NEP). This stimulated considerable discussion. The outcome was to devote greater attention to this and environmental issues. This activity was to be carried out by the engineering consultants (Scott, Wilson, and Fitzpatrick) and was due to be completed by September 1, 1988, to enable the Bank to complete the appraisal of the Access Road Project according to OMS 2.33.

34. By May 1988 the issue of resettlement was making limited progress. The Department of Roads and the Land Department had engaged local consultants to survey those living along the prospective road alignment. IDA was prepared to propose to the borrower that an Environmental Unit be set up in the Department of Roads to oversee all environmental and resettlement issues. Oddly, in Bank discussions of experience with ongoing projects with Nepal at this time, there was no citation of problems in the Marsyangdi project under construction, where the same borrowing government was resisting all efforts to implement a rehabilitation plan for resettled families.

35. For reasons already cited, however, the project was not in compliance with OMS 2.33. After much consideration, the Legal Department’s view was that safeguards were built into the conditions for going to negotiations; for that reason, Legal did not object to granting an exception to the procedures outlined in OMS 2.33.

36. The question of applying OMS 2.33 did not appear to enter active discussions with the borrowing government until IDA forced the issues in the postappraisal mission in late May 1988 to examine environmental and resettlement problems in the road project. It became clear to the IDA team that the government did not intend to depart from existing Land Acquisition Acts, and that it did not want expatriates involved in the land compensation issues. A range of issues within the resettlement agenda bubbled to the surface at that time, including the process of valuing land, whether the government anticipated providing anything beyond cash, whether they intended to offer a real land-for-land option, and whether they recognized that some families were more seriously affected than others. In the follow-up letter to the Minister of Finance, IDA Management attempted to make it clear that the issuance of regulations to conform to OMS 2.33 would be essential to move to project negotiations.

37. Compensation became a sticking issue, affirming what the Bank-wide reviews of resettlement in all projects had stated: that landholders rarely received compensation sufficient to restore their standard of living, and that governments tend to rely on outdated, understated estimates of land value. The government was deeply concerned about this, arguing that any change to "replacement value" from "fair value" would cause financial difficulties for all the other road projects in Nepal, whether locally funded or donor-funded. These represented basic disagreements between IDA and the borrower. There then ensued extended discussions over compensation to tenants (particularly informal); and with regard to families seriously affected by land loss, a clear split developed. The initial proposal from the IDA staff to the borrower was that seriously affected families would be "those losing more than 25% of their main source of income"—a fairly standard practice at that time in Bank projects, and a standard that has been strengthened since then. The borrower never accepted that proposal. IDA also argued that the provision of land should be included as part of the rehabilitation measure.
38. When the borrower finally responded in negotiations in September 1988, the idea of new regulations for land acquisition and rehabilitation (as suggested by IDA) was rejected; administrative guidelines would be sufficient. The borrower also did not intend to fund any additional assistance needed to meet IDA policies—payment for consultants, whether local or foreign, was taken from another IDA credit. In terms of actually completing the ACRP before negotiations, the borrower rejected that as well, promising only to send a draft of a “substantial part of the ACRP” to IDA for review before negotiations. IDA Management accepted these points, again postponing the day of reckoning on these issues despite guidance to the contrary in the OMS.

39. When the borrower did submit draft ACRP guidelines in October 1988, it was clear that they could not possibly conform to OMS 2.33. Besides many minor points, the guidelines attempted to set a standard for seriously project-affected families (SPAFs) as those that lost at least 50 percent of their major source of income. This standard was twice as difficult for landowners to meet as that set by IDA practice elsewhere. In a part of the world where many families already live at subsistence levels, the idea that they would not receive special rehabilitation if they lost “only” 45 percent of their major source of income was surprising. Additional problems of major importance included the way of pricing assets, the amount of the rehabilitation grants, the time period for payment, the role of tenants, and others. In the larger context, other violations of the OMS were evident: the ACRP would only cover the first year, when the policy clearly called for a complete plan; in effect, the appraisal process was never completed by Management’s own standards calling for a complete ACRP. The Bank told the borrower in July 1988 that a complete ACRP was a condition of negotiations; the Bank was already abandoning the standards of the policy.

40. Attempts to reach a common definition of a “seriously project-affected family” (SPAF) were creating serious problems. In October 1988, Management sought a compromise, where the focus was shifted to those families “left with inadequate holdings to at least maintain their standard of living before the project.” Such an approach was a means of moving toward a somewhat more qualitative definition, and at the same time emphasizing to the borrower the importance of baseline surveys of all those affected in order to provide better rehabilitation. The borrower appeared to accept that approach. Equally important, however, and particularly for SPAFs, was the view of the borrower that it did not have to pay compensation for property before actually taking it for construction. Given the practice of many governments to take property first and pay later (sometimes much later), the Bank properly insisted that compensation be provided before possession.

41. Based upon these various discussions, the borrower returned to the Bank with a full set of draft Land Acquisition Guidelines, with apparently few of the verbal agreements of October-November 1988 included. The definition of SPAF had reverted to percentages, rehabilitation was weakened, the land-for-land provision became wishful thinking, and the process of appeal became nonexistent. The legal framework for the draft Guidelines had been “de facto repealed.” Bank staff sat down with the borrower in early December and wrote out the guidelines for the project, and insisted on their acceptance if the borrower wished to proceed with the project.

Negotiations and Board Approval

42. Negotiations were held with the borrower in January 1989. Even after being negotiated, the road did not remain a fixed quantity. The road alignment was lengthened
significantly after the conclusion of negotiations in order to meet various environmental tests and the need for a less demanding road for construction vehicles. Negotiations became a continuing set of decisions, changes, and amendments to the formal documents processed. In the rush to obtain funds from a particular fiscal year, the Staff Appraisal Report and related documents had to be circulated to the Board with approval from the borrowing government still pending. To ensure that the Guidelines developed for the project would be adopted as an integral part of the project, they were included in the SAR as Annex 7, along with the ACRP as Annex 8.

43. The Staff Appraisal Report created additional conditionalities with regard to resettlement, emphasizing that "it is a condition of effectiveness that a legal opinion be provided to IDA by the Secretary of Law and Justice confirming that provisions contained in the Guidelines are enforceable in accordance with the laws of Nepal." (SAR, p. 20)

44. The project went to the Board for approval without construction bids in hand. It was a costly decision. The project also went to vote in the Board without an adequate plan to deal with indirect effects of the project. In May 1989 the King Mahendra Trust was just coming forward to address the Terms of Reference for the study of basinwide effects of the road and power project—ultimately producing valuable recommendations rendered moot on the Hill route by virtue of the borrower proceeding to land acquisition without those preemptive and mitigative measures in hand. The Board approved Credit 2029-NEP on May 30, 1989.

Oversight of Implementation

45. The Credit was signed and became effective. The question then arose as to how much involvement from IDA management was appropriate for monitoring implementation. For the most part, at this stage, Management relied upon a resettlement specialist consultant to visit the project site occasionally, in the context of reviewing all the Bank's activities in that country. The borrower was expected to file reports on acquisition, compensation, and rehabilitation: the Government states that apparently three were filed, in December 1988, November 1989, and July 1990.

46. Implementation is taken very seriously in OD 4.30. "Resettlement components should be supervised throughout implementation. Supervision that is sporadic or left until late in implementation invariably jeopardizes the success of resettlement." Paragraph 31 closes with a somber thought: "Complete recovery from resettlement can be protracted and can often make it necessary to continue Bank supervision until well after populations have been relocated, sometimes even after a project has been closed."

47. The first Bank oversight mission took place in November 1989. At that point the project had stalled with bids submitted that were too high and too few in number. All were rejected, and the borrower informed that rebidding could not take place until the economic situation was clarified. Both IDA and the borrower were preoccupied with the fact that the whole Arun III project approach had failed. Issues associated with the effective road credit took a back seat to the broader crisis of the project. Yet, in the meantime, the Department of Roads was taking measures under the existing credit. The Bank review found that survey work had continued and compensation had been disbursed under the acquisition, compensation, and resettlement plan (ACRP) for approximately one-fifth of the property required for the access road. Since construction had not actually begun, however, families neither vacated their property nor received compensation for trees,
crops, or hardship. The Panel of Experts weighed in with their view that compensation ought to be expedited so that it would not delay the eventual road construction. The borrower clearly treated Credit 2029 as one to be executed.

48. The second oversight mission took place in July 1990. It included a resettlement consultant to supervise the land acquisition/family displacement/environmental aspects of the detailed engineering for the Arun III project, as well as examine the Arun-III Access Road (Cr. 2029-NEP) ACRP work already under way. The borrower was clearly anxious to get moving on the road work, even if there was not enough money in the existing credit to pay for the whole road. The borrower proposed building the first 40 kilometers, thus avoiding further delay in the project. The IDA mission tentatively supported this initiative, “especially since the ongoing land acquisition/compensation process has already provided initial payments for upwards of 40% of the estimated 2,000 access road project affected families and undue delay would complicate the situation in the field.” Again, resettlement issues demanded little attention. The project was going through another design crisis—with a donors meeting in Katmandu at the same time, to consolidate the whole project into one bidding process. The access road continued to go forward: it was expected that disbursement of compensation for the land affected by the access road would essentially be completed by July 1991. No objections were made by the Bank.

49. By the time of the next supervision mission, in December 1990, a change in perspective was emerging in the oversight process. The attention of virtually everyone in the mission was on negotiating the design of the combined project yet to be put together and financed; tender documents were in preparation, and managers were rapidly moving toward prequalification of contractors. For IDA, the importance of Credit 2029-NEP was not in what was happening on the ground to farmers, but rather on the hurdles to be jumped in order to shift those resources into the new combined project. The borrower took a rather different perspective, and wanted again to begin spending the money, proposing that they be authorized to use some of the credit proceeds to procure camp facilities and standard construction equipment. Despite the presence of a resettlement expert on the mission, the Bank raised no issues.

50. Documentation on subsequent supervision missions have not been reviewed. Nevertheless, staff interviews have made it clear that Credit 2029-NEP was essentially forgotten, other than the legal/financial questions of how to restructure it so the money never disbursed could be devoted to the new, much larger Arun-III project.

51. It is not apparent that any problems with the implementation of the ACRP on the Hill route were identified through the supervision missions. On the other hand, independent studies by Bank consultants were increasingly raising questions about the impact of the resettlement policies of the implementing agencies. An early 1991 study by T. Ragsdale and A. Molnar, for instance, identified the sociological weakness of the Bank’s approach on the Hill route. “One outstanding problem in the Arun case as well, however, is that many families have already spent the cash compensation on debts, unnecessary purchases, or subsistence needs and have been unable to reinvest in capital assets.” The study became even harsher in its conclusions: “In light of the lack of field-level monitoring and evaluation that has characterized both the resettlement and land acquisition processes in Nepal, it is clear that the government is not learning the lessons of on-going experience with resettlement. More follow up in both of these areas in ongoing projects,
such as the Arun III Access Road and Hydroelectric Project, is needed and much more emphasis and resources need to be placed on monitoring and evaluation.”

52. Some of the most serious problems came to light only with the publication of the Environmental Impact Assessment for the Valley Route. (JV Arun III, “EIA for Arun Access Road—Valley Route,” September 1992) The engineering consultants, JV, had sent their sociologist to the Hill route some two years previously, to conduct an informal survey of what happened in the land compensation process on the ridge route. It turned out that the implementation process had definitely not enabled recipients to restore their standard of living to prior levels. Why? The largest use of cash compensation was to pay off existing debts. This was not by choice—since the land was collateral for debts, creditors demanded immediate payment when cash was received. The second-largest use of cash was for marriages, funerals, and festivals. For those who wished to buy other land, they found that land prices immediately inflated, and asking prices for land were twice as high as they had been. Finally, there was tremendous confusion about the official procedures for making appeals, complaints, or queries. (ibid, Annex 4.13, pp. A4-35-36).

53. The greatest problem for those receiving compensation or facing resettlement on the Hill route was the decision in 1992 to shift the road alignment to the river valley. The impact on former property owners was catastrophic in a number of ways: (1) they had lost title to their land to the government; (2) the cash compensation they had received for title had been largely spent in nonproductive purposes; (3) if the government were to attempt to follow the letter of the law, by offering the land to original owners at the price they were paid, they would not have the cash to regain the land, and it would be auctioned to others; and (4) the road would not go through their communities, thereby depriving them of immediate alternative income opportunities. On top of this, the attention of IDA shifted entirely to the Valley Route, leaving them forgotten in an outlying area.

54. A modest degree of attention was given to this issue by the Bank’s resettlement experts and by the project’s Panel of Experts. One idea was to encourage the Asian Development Bank to create a loan fund for farmers to buy back their land, but nothing more was heard about that. In the Seventh report of the Panel of Experts, the problem of the people on the Hill Route was taken up, and remedies urged before additional hardship was suffered by those landowners, but nothing was known to have been done at that time. Indeed, when the road alignment was shifted to the valley, and an environmental impact assessment undertaken, that report stated that “the JV’s surveys during the summer of 1992 indicate considerable local concern over the possible loss of investment values if the Hill Route is no longer chosen.” (JV Arun III, EIA, September 1992, vol. 1, para. 3.4.12)

55. The issue remained unresolved. The borrower took no action. When the joint donors’ mission visited Katmandu in May–June 1993, they made it manifest that the new combined project could not go to negotiations (scheduled for October 1993) without a clear policy regarding land already acquired along the hill access road alignment, especially with regard to land no longer required (as above Changkuti) or which HMG/N will use later. The government’s commitment was to build two limited spur roads on part of the hill road alignment, but at some distant time in the future when much of the damage to communities would already be done, and resolution of the unused areas was not accomplished. The new government, in the spring of 1995, decentralized the issue to the
local villages, providing them with block grants to cover all local needs, including presumably the resources to build the spur roads. Local village heads consulted by the Panel indicated a strong interest in following through at their own initiative with the spur roads, but also indicated that there was tremendous competition for those block grant funds from needs in health, education, water, and so forth.

56. After the Inspection Panel raised this issue in its preliminary review in December 1994, Management stated that a commitment was forthcoming from the borrower to resell the land to the original owners, as provided under the laws of Nepal.

57. Instead, the Government sent a letter to the Bank on April 5, 1995, that outlined a policy for the landholders on the Hill Route, allowing them to retain use of the land indefinitely irrespective of their title to the land, which did not satisfy the Bank's requirements laid out above. The Government offered no further assistance to those landholders.

58. As the Requesters had submitted to the Inspection Panel, the resettlement issue on the Hill Route had suffered abuse by neglect. Substantial damage to the interests of the farmers on the Hill Route had come about, first through an inadequate compensation system (cash only, and no rehabilitation) that manifestly failed to comply with the ACRP, and second through relocation of the route to the valley, thus driving down the value of the remaining land of the farmers who had lost part of their acreage. Management in their most recent mission make it clear that a time-bound plan for those farmers and landowners will have to be developed as part of the current credit.

3. Environmental Assessment in the Arun III Access Road Credit

59. Four alignments were considered with the dual objectives of providing access for personnel, material, and equipment to the hydroelectric project (dam and power house), as well as facilitating economic development in the Arun Basin by linking many of the existing towns, which are located primarily along the ridges. The hill alignment, with a total of 197 kilometers, was chosen and justified both in economic and environmental terms. At that time a two-pronged strategy was followed by HMG/N: build the road under the responsibility of the Department of Roads and undertake detailed engineering and environmental studies for the hydroelectric project under responsibility of the NEA. The initial environmental studies leading to the road alignment for Credit 2029 were carried out by the Department of Roads of HMG/N in 1987, before either OD 4.00, Annex A: Environmental Assessment (October 31, 1989), or OD 4.01: Environmental Assessment (October 3, 1991) were in effect.

60. The Staff Appraisal Report for the Arun III Access Road (May 12, 1989) refers to the design and construction methods for the proposed alignment as environmentally "state of the art" for a major road project in Nepal. Paragraph 3.08 of the SAR states that the violence, destructiveness, and unpredictability of the rivers in the area are the primary reasons for the choice of the ridge alignment: "The road has therefore been chosen to avoid rivers as far as possible, and to follow the contours closely in order to minimize the quantities of cut and fill, and to reduce negative environmental impact."

61. Procurement under this project was not successful, as already noted. In 1992, HMG/N decided to shift to a one-pronged strategy to accelerate project construction by
having both the road and the hydroelectric project under one large contract for all the civil works, and under the responsibility of a single contractor. The entire responsibility for project execution was also shifted to the NEA.

4. Resettlement in the Arun III Hydroelectric Project—Valley Route

62. The shift from a two-stage project to a one-stage project did not at first involve a change in the road alignment. From the time of the failed bids in 1989, and the initiation of planning for one-stage bidding of the entire project, until 1992, the planning appears to have been focused entirely on the Hill Route design. Nevertheless, when engineers began examining ways of reducing cost, construction time, and implementation risks, the shift toward a shorter route up the valley became almost inevitable. The proposal was developed rapidly in 1992, with a revisit of the Japanese-surveyed route from the mid-1980s, an environmental review, a submission to the Panel of Experts, and agreement between IDA and the borrower that the new route alignment should be adopted.

63. Resettlement played its role in the planning for the Valley Route. Bank resettlement experts were brought into the planning process in late 1992; fortunately, the people who had been involved and were familiar with Marsyangdi and the Arun Access Road credit ridge route, were again involved. The environmental impact assessment produced by the engineering consultants, JV Arun III, included a straightforward section on the need for revision of existing land acquisition guidelines as well as “issues arising from the hill route land acquisition and compensation process.”

64. The EIA identified a number of problems. To a degree, the authors were handicapped by the fact that the alignment of the Valley Route had not yet been laid out in the field, and so its analysis of resettlement was only an estimate. ACRP surveys had not yet begun, of course, and so their estimate of 640 families being directly affected would have to be confirmed later. However, it was generally thought “that the families affected along the Valley Route are likely to be poorer on average than families along the Hill Route.” In other words, compensation and rehabilitation issues would be even more significant in their lives. For the EIA authors, “Limited data suggest that as yet the ACRP process is not sufficiently evolved to fully protect, compensate and rehabilitate families affected.” (EIA, vol. 1, para. 4.3.3.2)

65. The analysis of the EIA drew extensively on the problems encountered already on the Hill Route. While applauding the design of the guidelines for land acquisition on the Hill Route, the EIA authors pointed out that reality had undermined their effectiveness. The guidelines were “based on the premise that resettlement of affected families to new land is impractical, mainly because, firstly, there is no new land available, and secondly, families do not wish to leave the area of their ancestral homes. Therefore, compensation is cash-based.” (EIA, vol. 1, para. 5.2.2.1) As implemented, the guidelines fell short of meeting OD 4.30, according to the EIA, for a variety of reasons: (a) the majority of cash recipients spent their compensation of non-income-producing expenditures—farmers in that area were simply not accustomed to dealing with significant amounts of cash; (b) “the effect of ACRP on the Hill Route has been to inflate land prices far beyond the compensated value, thus making the purchase of replacement land impossible for most PAFs”; (c) delays between property valuation and the payment of compensation
causes depreciation in purchasing power, aggravated on the Hill Route by the government allowing the farmers to remain on the land without title and thus able to maintain their income level temporarily; and (d) the general level of understanding of the compensation arrangements was low, especially in the case of SPAFs, for whom additional compensatory measures were envisaged. The EIA then came up with a list of 12 substantive recommendations for improvements in the land acquisition guidelines and the ACRP for the Valley Route—many of them focused particularly on SPAFs.

66. Under IDA policies, a draft ACRP was required before appraisal of the project. In December 1992 it was pointed out that the appraisal mission was scheduled for March 1993, and yet the borrower had effectively not begun to do appropriate work on an ACRP. The problems of meeting IDA policies were extensive:

(a) The legal basis for applying the Land Acquisition Guidelines to the elements of the project other than the road did not exist;
(b) There were three different ACRP teams, each operating according to different methodologies;
(c) There was no single contact point in the project for families that would be affected;
(d) There was no indication that land for land existed as an option, even though 16 percent of the families indicated a desire for such a compensation transaction;
(e) The appeals process on the Hill Route never operated appropriately, and there was no indication that the borrower intended to do better in the Valley Route;
(f) There was no suggestion that the project planned to offer seriously the other forms of rehabilitation for SPAFs, such as jobs or training, essential for restoring their standards of living according to IDA policies;
(g) It is not clear that any measures were taken to avoid ACRP implications in the siting of the road, and that input needed to be taken by the road engineers as soon as possible to avoid the same situation in the valley;
(h) The way in which the ACRP for the transmission line would be developed was not established, and no one seemed to be taking responsibility for it;
(i) There was not an adequate monitoring and evaluation institution or program for the ACRP;
(j) Confusion among landholders over compensation and rehabilitation was rampant, and needed to be sorted out through distribution of a comprehensible “due process” manual;
(k) Much more extensive community consultation was needed before determining land values.

67. By the time of the joint donors mission in May-June 1993, they had in hand a draft ACRP report dated April 1993. It did not yet conform to OD 4.30, and IDA proposed to the borrower that the report would have to be “operationalized ... into an action plan in line with the World Bank operational directive on involuntary resettlement.” The deadline for the new action plan was August 1993. The borrower was put on notice that negotiations could not take place in October without “formal adoption of the new land acquisition guidelines and the Action Plan for the ACRP, the latter in line with World Bank policies respecting informal tenure arrangements, informal land holdings, vulnerable communities, public consultation and so forth.”

68. The Bank appears to have sent an ambiguous, two-part message to the borrower at the time of the joint donors mission in September-October 1993 On the one hand,
“full agreement” was reached between NEA and the Donors on substance, implementation arrangements and financing of the ACRP. That suggests that the ACRP was a done deal. At the same time, the donors insisted on certain actions by the NEA by November 1993 for implementation of the ACRP, as shown in an annex. In fact, in that annex many more changes were proposed for the draft ACRP. As the winter dragged on, the gap between the ACRP and IDA’s policies was not closing. Even as late as February 1994 there remained 22 major areas for changes that were necessary to have an acceptable ACRP. Management was already willing to slip deadlines—at that point the draft SAR stated that an acceptable plan would be developed during negotiations, but others attempted to stick to the original commitment that receipt of a satisfactory resettlement plan should be a condition of negotiations. Another attempt was made to obtain an acceptable ACRP in May, since the ACRP was not yet in compliance for negotiations.

69. Nevertheless, on May 26 senior Management requested agreement of the Chairman of the Loan Committee to proceed to negotiations, leaving pending some key resettlement and ACRP issues to be taken up at the time of negotiations:
(a) the membership and operational details of the appeals forum, which is part of the grievance redress system;
(b) the level of compensation payable to tenants (both formal and informal); and
(c) the criteria for and level of compensation payable to people affected by transmission line right-of-way restrictions.

Negotiations were held in late June in Washington, and a mutually agreeable ACRP appeared to emerge. Even though negotiations were closed, disagreements over specific provisions continued in subsequent months. The Pre-Board Mission of September found itself renegotiating various ACRP issues, both substantive and procedural.

70. When Management sent its most recent mission to the field in April 1995, they returned with a call for still more work on the ACRP before presentation to the Board: “Because of unforeseen delays in implementation of the project, the ACRP for the valley route is in need of updating, to take into account changes in baseline data, cost and budget. As conceived in the ACRP the above updating would involve clarifications on certain related matters.”

5. Environmental Assessment in the Arun III Hydroelectric Project

Background

71. In 1987, the initial feasibility study of the Arun Hydroelectric Project, funded by the Japanese International Cooperation Agency (JICA), had planned for the access road to follow the river alignment to the power house and dam site. After the procurement failure of Credit 2029 on the hill alignment, HMG/N decided to go back to the original valley alignment. Based on NEA and consultant reports, a 122 kilometer valley route was chosen, and the decision was submitted to the project’s Panel of Experts (PoE) for endorsement.

72. The process of environmental assessment in the Arun Hydroelectric Project was affected by the existence of previous work under Credit 2029, as well as the introduction of OD 4.01 in October 1991. Although Credit 2029 had a different Task Manager and Division Chief, and the choice of hill alignment was supposed to be environmentally superior, Management took the position that the hydroelectric project could be “grandfa-
therefore” and did not need to comply fully with the new OD 4.01. Management’s response cites in annex A that OD 4.01 was applicable “where appropriate and feasible” to projects with IEPS before October 1, 1991. As the Panel stated in its Report to the Board on December 16, 1994, it “saw no merit in the allegations that these policy documents are not fully applicable to Arun III” (see Annex A, page 3).

Measuring Compliance

73. Compliance with OD 4.01 requires that project specific environmental assessments should cover: a) existing environmental baseline conditions; b) potential environmental impacts, direct and indirect, including opportunities for environmental enhancement; c) systematic environmental comparison of alternative investment, sites, technologies, and designs; d) preventive mitigative and compensatory measures in the form of an environmental mitigation or management plan; e) environmental management and training; and f) environmental monitoring. The environmental assessment for the Arun III Hydroelectric Project did not follow this comprehensive approach; instead it followed a piece-meal approach that had a recognizable sequence, but did not fully comply with OD 4.01.

The Role of Environmental Criteria

74. The environmental assessment of the Arun III Hydroelectric Project started by commissioning a number of descriptive studies by the King Mahendra Trust for Nature Conservation (KMTNC); the studies identified the main characteristics and risks in the valley, followed by project specific reports investigating probable direct impacts and appropriate mitigation measures, and finally, the analysis of indirect and induced changes and mechanisms for managing those processes. This sequence, however, was affected by considerable changes introduced during appraisal, including the splitting of the project, as well as changes in the alignment of the access road itself. Although the change in strategy and road alignment had been made in 1992, by the end of 1994 the analysis of indirect and induced impacts was not yet complete, and significant work still needed to be performed to complete an environmental management plan, including training and monitoring requirements.

Panel of Experts

75. At the time that HMG/N decided to change the road alignment to the valley, it sought the endorsement of the Panel of Experts for the project, which considered the issue at its September 30–October 2, 1992 meeting. The PoE endorsed the decision in principle, but at the same time it made clear certain reservations about the decision. Two pertinent views are cited below.

2.16 - Regardless of which access route is adopted, the recommendations and cost estimates of the King Mahendra Trust report on “Environmental Management and Sustainable Development in the Arun Basin” should be released to the public, reviewed, screened, and prioritized to facilitate the development of an action plan for implementation.

2.17 - If the valley route is selected, recommendations and cost estimates of the aforementioned Arun Basin report and environmental information and clauses in the tender documents and engineer’s terms of reference should also
be reviewed to determine if they are necessary and sufficient for the Valley Route, and amended as necessary; NEA's "Environmental Assessment and Management Executive Summary" should be updated and amended to reflect the selection of the Valley Route and the amendments to these other documents and to address the issue of impacts on families within the ROW of the Hill Route who have already been compensated for their land.

76. The qualified endorsement provided by the PoE pointed out specific disadvantages of the valley alignment:

- increase in forested land in the ROW and possibly less disturbed and higher quality forest and protected wildlife habitat in the ROW: approximately 209 ha vs. 145 ha.
- close proximity to the Makalu-Barun Conservation Area.
- losses and uncertainties resulting from the circumstance that land compensation for the hill route is 94 percent completed.
- additional impacts associated with future construction of spur roads or other connections to hill villages that would have been connected to the Hill Route.

77. The PoE provided additional recommendations at its October 2, 1992 meeting:

1. The September 1992 Joint Venture EIA of the valley route needed a more detailed comparison of the impacts of the hill route and the valley route, including implications for associated changes in transmission line impacts, if any, and options and implications for families within the ROW of the hill route who have already received compensation.

2. Without an action plan in place, the PoE believed there would be no mechanism in place for controlling off-site impacts, especially encroachment on forests and wildlife, in the vicinity of access road and power stations, south and east of the Makalu-Barun Conservation area.

For carrying out such reviews, the PoE suggested that it would be desirable to engage individuals who were previously involved in the preparation of the King Mahendra Trust reports, the NEA Executive Summary and/or the joint venture environmental reports.

78. The PoE argued that attention should be paid to the specific warning that without such an action plan for implementation, there would be no mechanism for controlling off-site impacts such as those on forests and wildlife. In spite of this warning, the plan was not developed and even at the time of writing of this report (June 1995), the NEA has not produced the operational plans that would generate confidence in the implementation of these controls.

79. The October 1992 meeting of the PoE turned out to be its final meeting. Since it did not meet again, the PoE could not follow up on its specific recommendations. At the time that the Request for Inspection was received, Management supported the concept of a single panel of experts for the project. More recently, there has been a recognition by Management that a separate, specialized panel on social and environmental issues is needed. However, this panel is yet to be appointed.

80. The loss of time since the last meeting of the PoE has had a major impact on the project. Tasks laid out at the 1992 meeting received no follow-up. The original Regional Action Plan received neither adequate attention nor serious technical review. The need for the second panel, devoted to environmental and social impacts, has been particularly clear where the specialized knowledge is needed. The new panel, for instance, has a special need for a person knowledgeable in forestry and biomass issues, in order to deal with
the long-term deficit in woody biomass resources. It is only now becoming evident that
the original scale of the mitigation measures proposed by the RAP is inadequate to deal
with this increasing deficit.

81. In too many instances, progress has been stalled by the need to complete another,
prior step. NEAs 1993 “Environmental Assessment and Management Executive
Summary” could not be updated to reflect the changes in road alignment, as recommend-
ed by the PoE, since the additional KMTNC studies were not available until February
1995. As a result, the project went through appraisal and negotiation without fulfilling
this suggestion from the PoE.

82. A specific example of time lost is the detailed comparison of alternative road
alignments (Recommendation 1 of PoE #7). A table was included in the “Environmental
Assessment and Management Executive Summary” (1993), but the detailed comparison
of the alternative alignments was not actually completed until Management sent a mis-
tion to the Arun Valley in April 1995.

Managing Direct Impacts

83. The 1993 “Environmental Executive Summary” identifies the major direct and
indirect impacts of the project. The major direct environmental impacts of the project are
carried by the access road and they include a variety of direct actions that pose risks to bio-
diversity, cultural diversity, and the livelihood of some vulnerable groups in the Arun Valley.

84. Direct impacts are best mitigated by refinements to project design, controls, and
specific responsibilities laid on the contractors. To the extent possible, such impacts are
prevented by avoiding specific areas such as towns or valuable forest patches. Experts
indicate that they can be mitigated during planning by incorporating adequate specifications
(such as spoils disposal conditions) during construction by placing strict controls
on the contractor, and during operation by adjusting operating conditions through close
monitoring. In principle, direct impacts can be handled if sufficient preparatory work,
adequate supervision, and careful monitoring are available.

Institutional Capacity (Direct Impacts)

85. In this project, a critical role is played by the Arun Project Environmental
Monitoring Unit (APEMU), to be established by the NEA and institutionalized to monitor
the mitigative measures against direct negative environmental impacts expected to be
brought about by project activities in the Arun Valley.

86. According to the NEA, the establishment and functioning of APEMU will begin with the issuance of the Letter of Acceptance (LoA) to the Civil Works
Contractor for the combined lot consisting of the access road, headrace tunnel, dam,
and desanding chamber and camp facilities. The APEMU will be institutionalized to
work with the project engineer with the purpose of promoting effective enforcement of
environmental mitigation efforts. The objectives of the APEMU are summarized by
HMG/N as follows:

- To monitor the implementation of environmental impact mitigation measures to be undertaken by contractors during the construction phase and to ensure compliance
  with contractual conditions in this regard.
- To monitor environmental conditions in the project area to determine whether fur-
  ther mitigation measures are necessary and to take necessary action.
To ensure close coordination with agencies responsible for dealing with indirect impacts and to assist them where necessary and possible.

87. The APEMU will initially consist of a core group of eight experts with expertise in different environmentally related fields and would be headed by an expatriate environmental expert. The APEMU coordinator (an expatriate engineer) would coordinate inspectors and other supporting staff to field specialists and enforce compliance on the part of the contractor. If disputes on necessary actions should arise, the APEMU coordinator will directly approach the CRE for immediate action. He/she would also handle all external communications to NGOs and the Regional Action Program (RAP) and supervise execution of the ACRP.

88. The rest of the specialist team would include: a computer engineer to deal with GIS and MIS systems, documentation, data base management, etc.; a survey cadastral engineer to collect field survey data and convert them to cadastral maps in tasks related mainly to ACRP; a civil engineer with broad responsibilities including monitoring of contractor’s compliance, vehicle emissions and dust level, spoils disposal practices, waste management in construction areas, etc.; a sociologist or socio-economist to monitor activities during implementation of the ACRP and to follow up economic impacts on affected families; a bio-engineer, environmental expert, and forester as three specialists to monitor all environmental impacts of the project; in particular, river water quality, vegetation, forest resources, and wildlife.

89. The supporting staff consists almost exclusively of field inspectors. Since the road construction strategy envisions eight simultaneous construction work fronts, it is foreseen that at least eight field inspectors should be utilized.

90. The Inspection Panel found that independent experts placed significant emphasis on appropriate training for all APEMU personnel as essential for adequate preventive and mitigation efforts. From that point of view, this training and institutional strengthening should take place well ahead of project implementation and construction schedule. Indeed, for such training to be effective, the NEA is already behind an ideal schedule for upgrading the staff of the APEMU. Since the APEMU will only be established after signing of the Contract, it is questionable whether even the hiring of personnel can take place with sufficient time for necessary preventive measures to be implemented.

91. According to the NEA, APEMU will be set up after the Order to Commence as part of the site supervision team and will stay in force until the end of all civil works, 87 months later. Then it will be transformed into part of NEA’s Maintenance and Operation Team. During project construction, the APEMU is planned as a unit separate from NEA’s Environment Division. Technical assistance for strengthening of the Environment Division of the NEA is provided by the Asian Development Bank (ADB), not by IDA, and therefore the timing of the assistance is an important issue over which IDA has little control. Unless NEA’s Environment Division is strengthened immediately, and APEMU is set up well ahead of construction, the adequacy of preventive measures and appropriate monitoring can be seriously questioned.

**Managing Indirect Impacts**

92. The indirect impacts of the project stem primarily from changes introduced and induced by the access road in the Arun Valley. The 1993 “Environmental Executive Summary” recognizes that these impacts are “more important, more far reaching, and much more difficult to deal with.”
93. The major indirect impacts of the project are related to changes in migration, deforestation, and the biomass balance of the Arun Valley, as well as modernization and changes in occupation and economic opportunities that may place specific groups at risk. Although both direct and indirect impacts were identified in general terms, the 1993 “Environmental Executive Summary” fails to identify specific impacts and preventive or corrective measures, since most of the report is based on the 13 volume KMTNC studies, commissioned for the original hill alignment scheduled to be followed under Cr.-2029.

94. The Arun III Project developed an innovative approach to coping with impacts: firstly, an “Environmental Mitigation Plan” (EMP) with impacts including land acquisition and compensation; and secondly, a “Regional Action Program” (RAP) to address indirect impacts and induced effects. Together, according to Management, these plans constitute the “Environmental Management Plan” required by OD 4.01.

Institutional Capacity (Indirect Impacts)—Regional Action Plan

95. According to the EES, NEA is fully responsible for implementation of the Environmental Management Plan, but no specific mention is made as to the responsibility for RAP implementation. The EES states that: “Regional Action program will be implemented independently but in coordination with the EMP” (page 56). Thus, direct mitigation measures are to be undertaken by the NEA, while indirect and induced ones are to be undertaken by the National Planning Commission under the RAP. There is no single chain of command to oversee implementation.

96. It is worth noting that this appears to be one of the first times that the concept of a regional action program has been introduced in a World Bank project. It should also be recognized that since indirect impacts of the project are potentially more important, far reaching, and difficult to deal with, much of the burden of compliance with OD 4.01 is placed under the RAP, which is yet to be completed in spite of the fact that it is described in the Staff Appraisal Report as being “integral” to the project. The Panel has continuing concerns regarding:

- The capability and institutional strength of NEA and other HMG/N agencies to coordinate and carry out the RAP, including monitoring.
- The scale of intervention and level of funding of the RAP.
- Issues dealing with donor coordination since the RAP is to be funded by other donors.

97. According to the 1993 “Environmental Executive Summary,” the specific purposes of the RAP include:

- To strengthen the administration of settlements to assist them to cope with the rapid expansion caused by the project.
- To implement a priority program to strengthen Government institutions.
- To undertake specific women’s programs, including education and training, establishment of cooperatives, support of micro-enterprises, health, education, and male sensitization.
- To implement a priority program to assist communities to service road construction in relation to demands for timber and firewood.
- To implement a program for the preservation of sacred rites, monuments, and folk heritage.
- To undertake conservation programs ranging from environmental education through crop genetic diversity and development of conservation areas.
To carry out biodiversity and ecological research.
To monitor nutritional levels and determine whether provision of subsidized rice to northern areas of the basin should be continued.
To take advantage of new economic opportunities, including ecotourism.
To support local administrative agencies in forming Community Development Committees.

Institutional Aspects

98. All the purposes listed in paragraph 97 above are important, but the Panel found few observers who thought resulting activities could be carried out simultaneously. Indeed, many of these purposes require pre-emptive actions ahead of the construction schedule. These activities have not been placed in clear priority order or translated into an implementable plan, including resource requirements and specific personnel to carry them out.

99. A heavy burden has been placed on the Regional Action Plan to deal with a variety of complex issues such as those outlined above. This is a matter of serious concern due to the lack of experience on the part of IDA to oversee such a plan, as well as the widely recognized lack of institutional experience in the borrowing government. In addition, the RAP relies almost exclusively on resources provided by other donors. In effect, a major burden of compliance with IDA policies falls on project components not financed by IDA; unless closer coordination is achieved quickly, it is quite likely that critical pre-emptive and remedial measures of the RAP will fail to see the light of day. Therefore, questions related to donor coordination and collaboration take on even greater relevance. The Panel believes that these measures have not been given adequate attention on the part of Management and HMG/N.

100. HMG/N has designated the National Planning Commission as the lead agency to implement the RAP, which in its original form contained 21 specific recommendations and programs. These have not yet been re-evaluated on the basis of the KMTNC update studies completed in draft form in February 1995.

Jobs for Arun Residents

101. The greatest concern among the RAP issues for inhabitants of the region is availability of jobs. Local residents see two major employment impacts from the project: the jobs they hope to fill in actual construction during the next seven years, and the jobs likely to be generated indirectly through the existence of the road thereafter.

102. The only group to be offered some assistance in the construction process is the seriously affected families, and the April 1995 Management team found that little had been done in that regard. In one sense, it is understandable, since major construction has not yet begun; at the same time, the Panel found virtually no understanding of the provision for "jobs and training" in the ACRP, and no planning underway to undertake the training so that SPAFs would be at the head of the queue. Loopholes were provided in contractor language that would easily allow for very little local hiring.

103. The issue was addressed as long ago as the 1991 KMTNC studies of the valley. The issue was raised again in the revised volumes submitted to the HMG/N in January 1995: "The overall situation is that, with an increasing population size, stagnancy in off farm employment generation and reduced portering services, the labor use situation in
both [high-impact and low impact] areas continues to deteriorate. In a situation where a large project like Arun does not substantially change labor use situation in the project area, it is easy to imagine what the effects would be if migrant laborers were allowed to work in the construction sites. Besides, migrant laborers would add to food demand in an already food deficit area, which would likely cause other negative impacts. This is not to imply that laborers from adjoining districts should not be allowed to join the labor force. The intention is to demonstrate the labor surplus situation in the district and how employment generation by a large project still does not appreciably improve the labor use situation in the project area. (Volume III, pp. 63-64.)

104. After the April 1995 mission, Management identified "training for construction-related activity" as an element of the Regional Action Plan that needed further elaboration. Earlier in the study process, a much more helpful formulation had been created that would begin to meet local needs. That approach created a system of priorities for employment, apparently already attempted successfully in Kali Ghandaki: unskilled labor would be reserved for (in priority order) SPAFs, PAFs, and other people from the Arun Valley. Only for more skilled jobs for which no Nepalis are available should foreigners be employed. Prior and on-the-job training is essential for all local people. All of these elements are stated or implied in the tender documents; the key will be the manner of implementation. Management appears to plan to give attention to the employment issue in both the ACRP and in the RAP; to be effective, it will need active oversight.

Forestry

105. Sufficient attention has yet to be given to forest conservation and management, as well as efforts to prevent deforestation because the scale of the interventions originally proposed appears to be inadequate. All evidence leads towards a long-term tendency of a growing deficit of woody biomass in the Arun Valley watershed based on the results of the KMTNC update studies. This means that efforts to create and provide adequate legal standing to the community forestry groups becomes an even more critical component of the RAP. It also requires that preventive and pre-emptive measures in the forestry sector be carefully planned and precisely executed ahead of the road construction schedules.

106. The exact locations of community forestry user groups remain to be identified with respect to the road construction schedule in such a way that they start functioning ahead of project implementation. Since over 500 forestry user groups have been established in the Arun Valley, this task is critical and involves legal transfer of the land by HMG/N, setting up the management structure and technical assistance requirements for each group. These forestry users groups have been established with ODA technical assistance, which is scheduled to terminate in two years. The continuation of ODA technical assistance in the forest sector is an essential element to prevent long-term negative indirect impacts of the project.

Glacial Lake Outburst Flood (GLOF)

107. Risks associated with natural catastrophic events such as GLOFs and road washouts due to monsoon rains were highlighted by the Panel in its earlier report to the Board. Management convened a seminar of experts in April 1995 to analyze in detail the risks associated with GLOF. The general conclusions are that the risks are real and should be monitored closely and eventually mitigated through lake drainage, if it should become
necessary. A team was dispatched to Nepal in June 1995 to undertake the necessary field work to identify threatening glacial lakes, with a report due in the fall.

Road Maintenance

108. High monsoon rains lead to devastating floods, which constitute permanent risks and inevitably lead to road washouts of variable severity. This risk has not been analyzed in sufficient detail, perhaps because the precise valley alignment is not yet decided upon. The Panel found that appropriate contingencies had not been budgeted to deal with this persistent problem.

Biodiversity—Cloud Forests

109. The Panel surveyed samples of the remaining Cloud Forests along the Hill Route, and found that even in the most valuable areas along the two road alignments, the biodiversity had been severely damaged by intrusive cultivation. Nevertheless, the Panel was concerned that interest in and measures for protecting the remaining Cloud Forest areas had largely disappeared with the shift of the road route to the valley. This issue raises more generally the problem that a revised RAP, to reflect the shift in road alignment, may choose to ignore the continuing problems along the ridge route. Since the focus of the RAP is meant to be on indirect impacts in the region, not just along the road, the Cloud Forest is an example of an issue that may be unfortunately lost.

6. Indigenous People in the Arun Project Area

110. The most recent reviews of this issue and policy by Management have both clarified and obfuscated aspects of the question originally posed by the Requesters. Because the ethnic groups of the area being impacted by the Arun III project do not fit the classic expectations associated with OD 4.30, some observers have sought to dismiss the applicability of the OD. We are not dealing, after all, with the kind of isolated tribal group untouched by modernity that some would argue is foreseen in the OD. The position is unsustainable, however, since other observers on the ground and in Bank Management have recognized the larger purposes of the OD—to ensure that groups in the population chronically vulnerable to damage from the development process, who can be identified by their ethnic affiliation, need special monitoring and programs. The fact that some of any given ethnic group have achieved some degree of integration into mainstream society does not discount the concerns of the majority of a given ethnic group, whether labeled "indigenous people" or not.

111. In this case, the Panel found in conversations among the people in the Arun Valley that some ethnic groups are clearly more prepared to deal with the changes in their lives than others. Concern was expressed particularly about the Rai communities that live north of Tumlingtar as likely to be least able to maintain their current social structures, and also most likely to face daunting pressure from outside the Valley and other Valley residents as economic opportunities explode with the construction process. Nevertheless, it cannot be generalized that all Rai people will need special assistance. Nor can it be ruled out that non-Rai will suffer particular disadvantages in particular villages in the midst of rapid change.
112. As a result, the Panel found that a sensible approach had been discussed: to ensure that adequate anthropological surveys are undertaken well in advance of construction, with clear measures of well-being, and then close monitoring of their condition as the project progresses, and as an integral part of IDA oversight. Contingency plans for remediation in the context of the Regional Action Plan can be established to meet challenges as they emerge.

113. There are particular reasons in the Arun Valley to err on the side of caution with regard to vulnerable ethnic minorities. Virtually the entire population of the three districts touched by this project already live in a highly vulnerable status: for example, it is estimated that only one in ten farming families can support themselves from the land. Casual employment then becomes crucial to ensure that people do not starve. Where there is a propensity for any disadvantage among particular groups of people, it will be crucial for a working monitoring system to pick up distress signals quickly, before communities disintegrate and there is additional flow of the homeless and impoverished into the cities. The background work of the King Mahendra Trust, particularly in its volume on "Sustainability and Economic Growth," makes clear that certain parts of the population will suffer declines in income with the opening of the road, through the short- and medium-term. OD 4.30 would require that the Bank ensure that ethnic communities not be generally harmed in this process. Management has indicated in the past that they expect the OD to be addressed directly when the Regional Action Plan is given operational details.

7. Findings

114. The findings below reflect the Panel's analysis of the foregoing Inspectors' report, its field inspection in Nepal (May 27-June 1, 1995), and in view of Management's initiative and pursuant to the terms of the Executive Directors Authorization of the Investigation (IDASecM95-36), these findings also take into account Management's proposed remedial measures in assessing compliance with the three policies. The initiative referred to means that after the investigation was authorized Management made a substantial effort to bring the project into compliance with the three policies. To this end an IDA staff mission visited Nepal in April 1995 ("April mission"). On May 23, Management sent the Panel a memorandum attaching proposed remedial measures based on the findings and recommendations of the April mission.

115. After the April mission Management pointed out in its transmittal memorandum to the Panel, that all the attached proposed remedial measures (Annex 2) would have to be satisfactory to IDA. In addition, the memorandum stated that Management would communicate to HMG/N the criteria to be met for the measures to be satisfactory. In terms of timing Management will require all such measures to be either completed or defined and initiated prior to Board presentation of the proposed project.

Findings on Environmental Impact Assessment (OD 4.01)

116. Management's Proposals. The recommended measures relate to the direct impacts of the proposed choice of road alignment. A detailed comparative analysis of the valley and hill access routes, recommended by the Panel of Experts in 1992, was prepared after the April 1995 mission. It confirms the proposal that the access road should
be built along the valley alignment provided that the Environmental Impact Assessment takes into account the following:

(a) Spoils disposal;
(b) Impact on wildlife and aquatic Life:
   (1) avoidance of Makalu-Barun Conservation Area or mitigatory and compensation measures;
   (2) Sal Forest Patches: measures are to be included in the Regional Action Program discussed later in this report; and
   (3) aquatic life; and
(c) Impact of increased traffic on the market town of Hile.

117. PANEL OF EXPERTS ("PoE"). The establishment of a second separate specialized PoE consisting of social and environmental experts is now proposed but has still to be created and appointed.

- The Panel notes that the original PoE has not been convened since October 1992. Therefore it could not, as required, follow up on its recommendations. Mechanisms to ensure periodic PoE meetings and follow-up are therefore needed.

118. GLACIAL LAKE OUTBURST FLOODING. In addition to the measures proposed in Annex 2, Management has also addressed the problem of such flooding risks referred to in the Panel's preliminary report. In April Management convened a panel of experts which concluded that risks are real and that monitoring should commence immediately. HMG/N has arranged for financial assistance for a team of experts to carry out an investigation of the Barun glacier lakes starting toward the end of June.

119. ROAD MAINTENANCE. During their field inspection, the Inspectors' verified monsoon flooding as a significant natural risk that requires attention. Uninterrupted motorized access is necessary to ensure that equipment can be brought in to the project site during construction. Without this, there is a high risk of considerable project delays and higher costs.

- The Panel finds that the choice of the valley route will require provision for appropriate funding of contingencies to cover maintenance in the event of road washouts resulting from river flooding due to monsoon rains.

Findings on Involuntary Resettlement (OD 4.30)

120. CREDIT 2029-NEP (approved by the Board in 1989). The April mission found there are families seriously affected by the access road project in Tumlingtar who sought rehabilitation but received no assistance. The mission also concluded that there may well be more families in the Basantapur area who have been similarly adversely affected.

121. The mission also noted that HMG/N had paid compensation to most of the 1,635 families whose land was acquired for the hill access road project. However, the legal process of transfer of ownership had been completed for only 15–20 percent; of this percentage, the land of only 18 families was in fact physically possessed by HMG/N.

122. With respect to those who were displaced in 1989–90, Management recommends that HMG/N investigate the conditions of the families whose land was actually physically possessed and in accordance with provisions of the borrower's guidelines offer rehabilitation assistance.

- The Panel notes that, although necessary both for those displaced and for a large portion of the Arun Valley population, provision for access to jobs/training is not adequately addressed.
The Inspectors found that the land of those who filed the Request for Inspection had been acquired but not physically possessed. They have been adversely affected by uncertainties over the last half decade as the result of the change in access road alignment. Their future is still uncertain. (See paragraph 52 of Annex 1) Approximately 1,400 other families are in a similar situation.

The Panel finds that IDA failed to observe in substance the policy requirements for supervision of resettlement components and consequently failed to enforce covenants in the Credit Agreement.

Management's proposed remedial measures with respect to land acquired but not possessed, as outlined in Annex 2, require that the borrower formulate a time-bound plan indicating which land is to be utilized for future road construction and which is to be returned, including measures for protecting the standard of living of those whose lands will be possessed and the procedures to enable original owners to regain their lands.

VALLEY ROUTE (Proposed Credit). Management proposes an update of the Acquisition, Compensation, and Rehabilitation Plan.

IMPLEMENTATION OF RESETTLEMENT PLANS. The Panel agrees with the 1991 consultant study of past experience in Nepal which concluded that more follow-up and much more emphasis must be placed on monitoring and evaluation of both the land acquisition process and implementation. It is worth noting that both the Operations Evaluation Department and regional reviews of the Bank's experience with resettlement stress the central importance of early attention to strengthening governmental capacity to manage such programs. The studies point out that monitoring by IDA has been chronically inadequate despite consistent findings that oversight must be exercised constantly during implementation and beyond.

Findings on Indigenous Peoples (OD 4.20)

Management proposes that the three actions required by OD 4.20 with respect to indigenous people should be extended to all residents of the Arun Valley. These actions are (i) informed participation through public consultations, (ii) security over land tenure, and (iii) an action program with socially and culturally appropriate components. The "action program" means the Regional Action Program discussed further below.

The Inspectors found that people who qualify as "indigenous" under IDA's policy are scattered throughout the valley and live in conditions similar to those of non-indigenous people. Management's proposal that requirements of the policy be applied to all inhabitants is appropriate and should bring the project into substantial compliance with OD 4.20 if its implementation is subject to continuous monitoring and supervision.

Findings on the Regional Action Program

A significant number of actions required by OD 4.01 and OD 4.20 are to be included in the Regional Action Program ("RAP"). This is an innovative approach to an environmental action plan which has the potential to become either a model for future work or, if badly implemented, a serious weakness of the entire Arun III project.

Described in the Staff Appraisal Report of August 1994 as being "integral" to the project, the RAP has nevertheless yet to be completed. It would be the main mecha-
nism for dealing with indirect environmental and social impacts, an extremely ambitious undertaking which in its original form contained 21 specific recommendations and programs to deal with a variety of complex issues.

130. FORESTRY. Effective forestry management is expected to mitigate the increasing biomass deficit.

- The Panel notes that preliminary actions to address this problem need to be completed. Measures to grant security of land tenure to forest user groups are now proposed. First, maps showing the boundaries existing forests as well as those planned to be managed by forest user groups have yet to be prepared. Second, as of the date of writing, Management is still waiting for the planned review by the Bank’s Legal Department of Forestry By-Laws. Depending on the outcome, Management intends, if necessary, to propose further remedial measures. The Panel also finds that continued technical assistance to be funded by donors other than IDA is critical to this component.

131. PROTECTION OF THE REMAINING CLOUD FOREST. Only patches of cloud forest remain and these are located along the now abandoned hill route.

- The Panel finds that appropriate mechanisms for their protection have not been included under the RAP.

132. DONOR SUPPORT AND COORDINATION. Funding of the RAP is to be provided by major bilateral donors who must be committed to continuing support throughout the life of the project. The RAP involves many different programs in many different areas, implementation by different executing agencies, and funding by a number of different donors.

- The Panel found inadequate capacity for sustained coordination of all these different aspects.

133. INSTITUTIONAL ASPECTS. Management requires that the borrower complete a redesigned and expanded RAP prior to Board presentation. (Annex 2 at p. 3). The Panel notes that:

- Since it is the first time such a regional action program has been designed, those involved in designing the original RAP need to continue their work to ensure that an institutional memory is established in order to interlink in the future, all the different actions.

- To implement preemptive environmental and social measures, institutional capacity needs to be strengthened now.

- Responsibility for implementation appears to be fragmented. Direct mitigation measures are to be taken by one executing agency while indirect and induced ones are to be taken by another. The design does not yet provide for a single chain of command or integrated organizational structure in the Arun Valley to oversee implementation.

134. Given the complexity, scale, and scope of proposed developmental interventions in relation to the existing institutional capacity in Nepal, the Panel is doubtful that the project’s mitigatory environmental and social measures can be implemented within the timeframe proposed by IDA.

- The Panel finds that the lack of institutional experience will necessitate implementation of a massive institutional capacity building plan and identification of further resources to fund it, as well as intensive IDA staff supervision throughout project execution.

- In relation to environmental measures in particular, the Panel notes that OED studies indicate that projects often suffer, or take much more time and funding than
anticipated, because of an underestimation of the effort needed for building adequate institutional capacity as well as from a lack of constant supervision.\textsuperscript{12}

\section*{NOTES}

1. The Panel recommended (IDASecM94-378, Memorandum, December 16, 1994; informal note of January 9, 1995; and IDASecM94-378/1, January 20, 1995) and the Executive Directors authorized (IDASecM95-36, February 2, 1995) an investigation into these three areas. The Request for Inspection which triggered the process (filed in October 1994) also alleged non-compliance with policies on disclosure of information and economic analysis. In its preliminary review the Panel stated that although there was a formal non-compliance with the provisions of BP 17.50, the disclosure policy was evolving so rapidly during the later phases of project preparation that full compliance seemed difficult. On compliance with various policy directives on the economic analysis of project alternatives, including environmental and social aspects, the Panel expressed concern about the “lack of equivalent levels of effort ... devoted to alternative economic analysis,” particularly in view of the size and sequencing of the proposed project in relation to the overall economic and institutional framework. In the former area the Panel concluded that an investigation by the Panel was not warranted as it would not add to the facts established in its preliminary review. In the latter case, given the lack of comprehensive alternative analysis, the Panel could do no more than point out the shortcoming: an investigation was inappropriate since it would have resulted in the Panel undertaking activities outside its mandate.


3. For notification of completion of the first phase, see IDASecM95-119, April 3, 1995.

4. The Inspectors met with the following HMG/N officials: the Prime Minister, Minister of Finance, Minister of Water Resources, National Electricity Authority officials, and the Vice-Chairman of the Planning Commission.

5. See OD 4.30, paras 22 and 31. See also para. 30, which requires that the resettlement plan and the borrower's obligation to carry it out be reflected in the legal documents. Other necessary resettlement-related actions must be covenanted.


7. The original studies conducted by the King Mahendra Trust (“KMTNC”), a local NGO that provides an excellent basis for the RAP, were completed in 1991 based on the Hill Route alignment. Additional and updated KMTNC studies were completed recently in February 1995. Due to the change in road alignment in 1992 the borrower has to redesign rather than update the RAP.


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Brazil: Rondônia
Natural Resources
Management Project
(Loan 3444-BR)

Report and
Recommendation

August 17, 1995
Report and Recommendation

CONTENTS

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Below is (A) Background information, (B) a Process note, and (C) the Inspection Panels ("Panel") recommendation on whether or not there should be an investigation ("Recommendation") into allegations made in the Request for Inspection ("Request").

A. Background

1. On June 16, 1995, the Panel received a Request which alleged violations by Management of policies and procedures of the International Bank for Reconstruction and Development ("Bank") in relation to the Rondônia Natural Resources Management Project ("PLANAFLORO"). Financing of US$167.0 million equivalent for PLANAFLORO was approved in March 1992. Legal documents for this project were signed in September 1992 and declared effective in January 1993; disbursements began in June 1993.

2. The Request, filed by 24 nongovernmental organizations ("NGOs") claiming representation of groups of Rondônia residents, alleges that the Bank has failed to enforce various covenants under the Loan and Project Agreements, which has resulted in direct and material adverse effects on intended project beneficiaries and residents of Rondônia. In this regard, the Requesters allege violations of the following Bank policies:

- Indigenous Peoples (OD 4.20)
- Forestry Policy (OP 4.36)
- Investment Lending: Identification to Board Presentation (BP 10.00)
- Accounting, Financial Reporting, and Auditing (OD 10.60)
- Project Monitoring and Evaluation (OD 10.70)
- Procurement (OD 11.00)
- Wildlands Policy (OPN 11.02)
- Use of Consultants (OD 11.10)
- Project supervision (OD 13.05)
- Borrower Compliance with Audit Convenants (OD 13.10)
- Suspension of Disbursements (OD 13.40)
- Involvement of NGOs in Bank-supported Activities (OD 14.70)
B. Process

3. On June 19, 1995, the Panel notified the Executive Directors and Bank President of receipt of the Request (meaning "Registration" under the Panel's Operating Procedures). On July 19, 1995, the Panel received Management's reply to the Request.

4. At this stage the Panel must satisfy itself that Management has dealt with the subject matter of the Request (resolution paragraph 13). The subject matter of a Management Response is restricted by the Resolution to "evidence that it has complied or intends to comply with the Bank's relevant policies and procedures" (paragraph 18). The Panel found that Management's "Response" did not deal with the subject matter of the Request. As with a previous Request, Management addressed the eligibility criteria of the Request, and set forth its own "judgment" concluding that the Request was not eligible. However, comments on the subject matter were provided for the Panel's "information" in Annex B of the Response. Avoiding a formalistic approach, the Panel has treated Annex B of Management's reply as the required "Response" and is therefore satisfied that Management has dealt with the subject matter of the Request.

5. The Panel's function after receiving a Management Response is dictated by paragraph 19 of the Resolution, which mandates that "the Panel shall determine whether the Request meets the eligibility criteria set out in paragraphs 12 to 14 [of the Resolution] and shall make a recommendation to the Executive Directors as to whether the matter should be investigated." Such determination is subject only to a final decision by the Executive Directors. It is not clear why Management suggests that the "Panel may wish to assess the eligibility of the Request."

6. In the Panel's view, its preliminary conclusion on eligibility and assessment of the adequacy of Management's reply could only be reached through an initial field study. The Panel considered information obtained during Mr. Alvaro Umaña Quesada's review conducted in the project area from August 9-12, 1995. The Inspector consulted with the Government of Brazil, federal entities involved in PLANAFLORO, Rondônia State authorities and institutions, and people in the project area and their organizations. In accordance with paragraph 21 of the Resolution, the Panel also consulted with the Bank Executive Director representing Brazil.

C. Recommendation

7. The recommendation below is based on the Panel's preliminary assessment of the Request and takes into account the information provided by federal and state authorities, the executing agencies, the Requesters and intended project beneficiaries, and Management.

The Requesters

8. During the field visit, the Inspector identified NGOs among the Requesters, which represent parties or groups who may be directly and adversely affected by the alleged Bank actions or omissions. In addition, the Inspector interviewed a number of people—including groups of rubber tappers and indigenous peoples represented by such organizations—who claim to be directly affected by failures and delays in the execution, and omissions in
supervision or monitoring of PLANAFLORO, for which they feel the Bank is responsible due to its failure to follow its own operational policies and procedures.

9. The Panel is satisfied that at least eight local NGOs signing the Request properly represent members who meet the eligibility criteria set out in paragraph 12 of the Resolution. As intended beneficiaries of PLANAFLORO, their rights and interests may have been or are likely to be directly and adversely affected in a material way as a result of the alleged serious violations by the Bank of the relevant policies and procedures.

Alleged Violations

10. **OUTSIDE SCOPE.** As stated in the Notice of Registration, procurement matters (OD 11.00), including regulations governing the hiring of consultants (OD 11.10), are outside the Panel's mandate.

11. The Panel acknowledges Management's effort in providing extensive information and a fair and realistic assessment of most of the project's difficulties and delays. Nevertheless, the Panel has concluded that such information is not adequate to obviate the need for an investigation. Even though Management has addressed the complaints, the Panel is not convinced that there has been full compliance with the relevant policies and procedures. It is also not convinced, in the instances where Management admits failures, that proposed remedial measures will be adequate for compliance with the relevant policies and procedures. It would be necessary to conduct an investigation in order to determine whether the allegations of serious violations of policy are well founded.

12. Since the Panel's function is limited to investigating the alleged failure of the Bank to follow its own policies and procedures, it cannot comment on actions which are the responsibility of other parties, such as the borrower or project executing entities. In this instance, however, the Panel would like to record the fact that it is impressed with the federal and state authorities' and agencies' renewed commitment to the objectives and execution of PLANAFLORO. This commitment was conveyed to the Inspector during his visit to Brazil and has been demonstrated through a number of recent actions aimed at removing some of the obstacles to the timely execution of PLANAFLORO and the achievement of its objectives.

13. The recommendation for investigation represents the Panel's preliminary conclusion that the Request is eligible for investigation.

14. **Based on the foregoing, the Panel recommends that the Executive Directors authorize an investigation into the violations of Bank policies and procedures alleged in the Request, except those noted in paragraph 9 above.**

Notes

4. See Management Response to the Request for Inspection and its Annex A. See also "Recommendation of the Inspection Panel: Request for Inspection: Tanzania: Power VI Project (Credit No. 2489-TA)," August 15, 1995 (INSP/SecM95-6), and Management Response.
5. The Panel wishes to thank the Bank Executive Director for Brazil for arranging meetings in Brasilia, and Rondônia State and project authorities, local NGOs, and the Bank department responsible for Brazil (LA1) for providing logistical support during the field visit.

6. Including, inter alia, at the federal level: the Secretary of the Secretariat of International Affairs (the Bank's official contact in Brasilia); the President of INCRA (National Institute for Colonization and Agrarian Reform); the Federal Coordinator of PLANAFLORO; and officials of FUNAI (National Indian Foundation); and at the state level: the Governor of the State of Rondônia, the Secretary of Planning, the Superintendent of INCRA, Rondônia; the General Coordinator of PLANAFLORO; and the former Coordinator of PLANAFLORO, who is now a UNDP consultant working on the project.
Brazil: Rondônia
Natural Resources
Management Project
(Loan 3444-BR)

Additional Review

December 12, 1995
Additional Review

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Introduction

1. The World Bank ("Bank") approved the Loan to support the Rondônia Natural Resources Management Project, known as PLANAFLORO, in March 1992. Implementation of the social and environmental components of a series of Bank-financed projects of the 1980s, known as POLONOROESTE, had been neither adequate nor implemented. PLANAFLORO, intended to redress this failure, was designed in accordance with the Bank's strengthened environmental and social policies and procedures introduced in the late 1980s/early 1990s. The Staff Appraisal Report ("SAR") and President's Memorandum for PLANAFLORO convey Management's belief that investments in the environment could pay off in economic terms. This was meant to be a showcase project for a new era in Bank lending for sustainable development.

The Request

2. By creating the Inspection Panel ("Panel"), the Executive Directors acknowledged the need for an independent mechanism to receive complaints from groups who believe they have been or will be directly and adversely affected by a Bank-financed project. In the case of this Request, communities previously adversely affected in Rondônia by the POLONOROESTE program expected beneficial effects from the implementation of PLANAFLORO according to the standards and timetable promised by the Bank, but expectations were not met. Therefore, on June 14, 1995, the intended beneficiaries, represented by local nongovernmental organizations ("NGOs"), requested the Panel to investigate ("Request for Inspection") the reasons for the Bank's failure to carry out its commitment to prevent further damage to their land. The Requesters' fundamental complaint is that the Project, intended to be beneficial to fragile communities and the natural environments they depend on for their livelihood, has not been adequately implemented since Board approval three and a half years ago. Since the Closing Date of the Loan is December 31, 1996, it appears that just one year remains for such objectives to be achieved. Nevertheless, the Requesters fully supported such project objectives.

Management Response

3. The Management Response ("Response") to the Request for Inspection ("Request"), submitted to the Panel on July 19, 1995, acknowledged a number of instances of lack of compliance with policies.
Panel Recommendation and Executive Directors' Decision

4. On September 12, 1995, the Executive Directors considered the Panel's recommendation ("Recommendation") relating to the Request. The Panel recommended that "the Executive Directors authorize an investigation into the violations of Bank policies and procedures alleged in the Request...."

5. The Executive Directors "agreed that before a decision could be made by the Board on the Panel's recommendation..., the Panel should conduct an additional review to further substantiate the materiality of the damages and to establish whether such damages were caused by a deviation from Bank policies and procedures."

6. At the same time the Executive Directors "welcomed the project implementation and supervision mission planned to take place shortly, as well as Management's commitment to provide periodic progress reports on the project."


Additional Review

8. This additional review responds to the Executive Directors' request and takes into account subsequent information obtained by the Panel, including several Aide-Mémoire and Back-to-Office Reports ("BTO") and the Draft Report. In this case the Panel has been asked to further review the past, meaning the period from inception of the project until the filing of the Request.

9. The Panel is presenting this additional review based on available data at this time because:
   - Sufficient information is available to illustrate how the rights and interests of groups have been adversely affected and that they have suffered substantial, possibly irreversible, material damage.
   - Damage continues and in some areas is worsening, but it could be mitigated in the future if Management takes steps to remedy the situation in high-priority vulnerable areas—quickly.
   - If authorized, an investigation to obtain specific data indicating and evidence quantifying monetary and other damage that occurred between 1992 and 1995 in all other relevant areas of the State of Rondônia would take about six months.
   - It is imperative to set project priorities now to accelerate implementation of feasible remedial measures for this beneficial ongoing project. This may involve reorientation of goals and a revision of specific targets.

Materiality of Damages

Current Situation in Rondônia

10. The Requesters base their Request on perceived continuing damage to their livelihood, environment, and cultural heritage. The Panel has confirmed this through local
sources, including intended project beneficiaries, news reports, satellite imagery, and other sources of information. However, information on the material impact of, for example, selective illegal logging of valuable trees, seasonal incursions, and physical intimidation can only be provided by court, police, and other records, and firsthand accounts through conduct of an investigation.

11. Local sources confirm damage claimed by the Requesters, and this includes information from interviews conducted by the Inspector who visited the project area in August 1995. Photographs of damage in the reserves taken by the Inspector and others are available to the Executive Directors upon request.

12. Widespread public awareness of the situation in the Amazon, and in particular, Rondônia, has been the result of the many reports at the local, national, and international levels from 1993 onward. Repeated claims of increasing damage and a worsening situation in the areas that are supposed to be properly established, demarcated, and protected under PLANAFLORO have appeared in a number of publications.

13. Material harm to affected parties in Rondônia is basically caused by four different activities:
- Illegal logging
- Illegal settlements accepted and promoted by INCRA
- Invasions of protected areas
- Burning

**Illegal Logging**

14. By definition there is no authoritative data available at this stage but there is abundant evidence of illegal logging activities contained in many news items and in NGO reports. The Management Response to the Request and its current Draft Report recognize its widespread existence (see, for example, Draft Report, Annex A, paras. 14 and 29).

**Illegal Settlements Accepted and Promoted by INCRA**

15. Illegal settlements have been widely reported by NGOs and inhabitants in Rondônia. Management also acknowledges that INCRA has allowed illegal settlement in areas that were supposed to be protected by the project. For example, the Report states:

"In spite of the Agreement signed between Rondônia and INCRA in November 1992\(^1\) (condition of effectiveness), during the first two years of project implementation INCRA tended to pursue an independent path, often in contradiction to the requirements of Zoning. The State, for political reasons, was not able to obtain INCRA's compliance with project objectives nor was it able to define the rules for joint State-INCRRA action to ensure full compliance with Zoning in the implementation of the State's land tenure policy. The result was that from 1992 to April 1995, INCRA attempted to establish seven land settlement in Zones 3, 4, and 5, and about 5% of land titles issued during that period were for land holdings in those Zones in direct conflict with provisions of the Zoning Law." (Draft Report, Annex A, para. 4)

However, interview sources suggest that the figure of 5 percent appears conservative and indicates neither how many titles were issued nor the total size of the area illegally settled.
INVASIONS OF PROTECTED AREAS

16. The Request, local NGOs, and eyewitnesses interviewed by the Inspector have reported incidents of invasions of protected areas. Management corroborates several widespread invasions:

“One of the CUs [Conservation Units], the Candeias State Park (covering about 9,000 ha.) has been degraded and is being substituted by an expansion (of more than 55,000 ha.) of the Samuel Ecological Station.”

“Most of the [State Forest Reserves] to be maintained under the Project present serious land tenure problems as they were created either on private land or have been seriously invaded and are currently highly degraded.”

[Emphasis added]

“INCRRA is taking steps to resettle some 97 squatter families living on the demarcated reserves of Uru-eu-wau-wau and Mequens.” (“Draft Report,” Annex A, paras. 9, 18, 28)

BURNING

17. The substantial increase in fires in the Amazon, and in Rondônia in particular, has been widely reported at local, national, and international levels. The indicator most utilized is the report of the Brazilian Space Research Institute (INPE). Based on weather satellite information, 39,000 fires in July 1995 alone were reported, five times the number in July 1994. According to this source there were record levels of set fires during the entire dry season of 1995. Other data seem to confirm this report. An article in VEJA, a respected Brazilian weekly publication, provides a compelling description of the level of burning and deforestation in the Amazon region and their undeniable consequences for the livelihood of its inhabitants. The burning, whether done to clear land for agricultural purposes (generally without legal permits) or to destroy forests in order to claim title to land, disrupts zoning and damages the natural resource base—the resource PLANAFLORO was intended to conserve.

Impact of Activities

DEFORESTATION

18. All the above four activities result in deforestation.

19. In the absence of the project, PLANAFLORO forecasted deforestation to be around 850,000 ha per year (SAR, Annex 3). This figure is obviously exaggerated, given INPE’s estimate of cumulative deforestation in Rondônia since 1960 of 2,000,000 ha. A recent study by FAO (Forest Resources Assessment, 1990), on the other hand, estimates deforestation in Rondônia during the 1980s at 231,000 ha per year, equivalent to 1.1 percent of the total land area per year. Therefore, the PLANAFLORO original forecast is off by a factor of four. Based on unrealistic data, project actions were supposed to lower this rate to below 300,000 ha per year during the first three years, 200,000 ha in the fourth year, and 100,000 ha in the fifth.

20. In the absence of yearly deforestation rates from satellite data—which should have been, but have not been provided by the project—it is necessary to rely on literature data to estimate deforestation rates from 1992 to 1995.

21. Deforestation rates for recent years have been estimated to range between 200,000 and 400,000 ha per year. Moreover, the problem appears to have worsened con-
Box 1. Estimate of Material Damage through Forest Loss in Rondônia

Methodology
* As a first approximation, material damage is estimated on the basis of forest loss alone, measured by commercial values for wood. It does not include other values, such as water, fish, soils, or biological diversity which are also affected.
* Annex 3 of the SAR provides an estimate of the values lost by forest destruction in Rondônia. This estimate includes only the value of trees lost to “rational highgrading,” a process where only the most commercially viable trees are removed from the forest. Therefore, it does not include the value of the remaining wood (about 75 cubic meters), long-term sustainable wood production, soils, water, or biodiversity losses. Annex 3 of the SAR estimates that one hectare of forest yields about 80 cubic meters, out of which 5 cubic meters would be high-quality commercial species with a value of $50 per cubic meter.
* The methodology utilized here, which is more comprehensive and was developed to correct national income accounts to take into consideration the depreciation of natural assets, has been accepted by UNDP and the UN Statistical Office (see “Integrated Environmental and Economic Accounting,” United Nations, New York, 1993; Sales No. E. 93. XVII. 12).

considerably this year—in particular with respect to fires, which more than double last year’s figures (see para. 17 above).

22. Satellite imagery. This is now available and can be analyzed to provide statewide deforestation rates during the life of the project. Although statewide analysis of deforestation trends in Rondônia based on satellite imagery will not be available until early 1996, the trend is illustrated by analysis of the Uru-eu-wau-wau indigenous reserve, where in that one reserve alone, the deforested area rose from 2,700 ha to 15,500 ha between 1992 and 1995, almost a 600 percent increase. For further discussion see Box 3.

Losses through deforestation

23. Estimates are required to assess losses and wasted resources. Deforestation eats away the state’s natural capital and contributes to the loss of forest reserves. There are

Box 2. Estimate of Material Damage through Forest Loss Statewide

* Cumulative forest loss in Rondônia has been estimated by INPE to be approximately 20,000 square km, equivalent to 2 million ha or 5 million acres. Annual deforestation has been estimated to range between 2,000 and 4,000 square km. For purposes of this preliminary calculation, the most conservative figure (2,000 square km, equivalent to 200,000 ha or 500,000 acres) will be used.
* Considering an average price for wood of about $20-$25 per cubic meter and a yield of 80 cubic meters, the material damage caused by loss of wood is on the order of $1,600-$2,000 per ha.
* Using the conservative estimate of $1,600, as well as the conservative deforestation estimate of 200,000 ha/year, the annual loss of wood is on the order of $320 million, while the cumulative loss reaches $3.2 billion.
* If the PLANAFLORO project had been able to reduce deforestation by 10 percent, the loss of value avoided is on the order of $32 million/year. For each additional 10 percent reduction, an equivalent amount ($32 million) of loss would have been avoided.
Box 3. Estimate of Material Damage through Forest Loss in the Uru-Eu-Wau-Wau Reserve

- In the specific case of the Uru-eu-wau-wau Reserve, the total area cleared, based on 1992 satellite data, was 27.22 square kilometers and this area increased to 153.93 square kilometers by 1995, according to the analysis performed by Institute for the Study of Earth, Oceans and Space of the University of New Hampshire. Therefore, the deforestation that took place in the Uru-eu-wau-wau Reserve between 1992 and 1995 was 126.71 square kilometers, equivalent to 12,671 hectares.

- The value of the wood lost or extracted, which in this case can be considered as a damage to the indigenous peoples, is equivalent to 12,671 hectares multiplied by the low estimate of the value of the wood ($1,600/hectare). This results in a loss of forest valued at over $2 million in the three-year period. The figure does not include the considerable damages caused by erosion, loss of biodiversity, or loss of other products that can be extracted from the forest in a sustainable way.

well-established methods to calculate the loss of forest reserves and correct national income accounts to take into consideration the depreciation of natural assets. These methods rely on the calculation of different types of losses produced by deforestation, including loss of wood, soils, etc. The three boxes below contain: (1) a note on methodology; (2) an estimate of material damage by forest loss statewide; and (3) an estimate of material damage by forest loss in the Uru-eu-wau-wau reserve from 1992 to 1995. The estimates of damage are calculated from the value of wood alone.

24. In addition to the resulting monetary losses illustrated with reference to one of the many tribes represented in the Request, additional major losses, of a social and environmental nature not calculated here, could be verified through an investigation.

LOSS OF SUSTAINABLE INCOME

25. Estimation of the damage by loss of wood alone is not appropriate. It does not capture other indirect impacts on income. Rubber tappers and indigenous people live mostly in a subsistence economy, many of them at the marginal level.

26. Deforestation impacts these groups because it reduces the size of their reserves and destroys forest resources. It also forces them to devote time, which would otherwise be devoted to productive activities, to policing, controlling, and reporting on deforestation to the authorities, many times with disappointing results. For example, rubber tappers interviewed by the Panel in the Rio Cautario extractive reserve claimed that they had to spend about 10 percent of their productive time in activities related to deforestation control and that this loss of time had a proportional impact on their income. Recent reports from the Rio Cautario area claim that since the decree in August 1995, and pending implementation and enforcement of the borders, one-third of their time is now being spent on surveillance (see para. 64 below). Considering that the average income was estimated at about $100 per month per family, a loss of one-third of income further underlines the extent and materiality of immediate damage caused by delays.

27. Due to delays in establishment of the Rio Cautario reserve, its area had to be reduced because squatters settled there pending demarcation. The reduction of the reserve area has also resulted in the loss of income: the loss of sustainable cashew nut production of about 200 barrels per year, for which the community of about 50 families would obtain about $3,000, again a considerable damage in relative terms.
28. De Facto Zoning Changes. These examples illustrate a typical problem which inevitably arises when restrictive agro-ecological zoning plans are publicly announced but planning and execution are not synchronized. In other words, achievement of the objectives of a project such as PLANAFLORO depend heavily on timely execution. Otherwise, as has occurred before, there is a rush to occupy land or extract wood from targeted areas before it becomes prohibited. Therefore Staff's repeated acceptance of expanded time periods for implementation of critical components enabled the inevitable to continue.

Armed Conflicts

29. Illegal logging activities cause harm or threatened harm to both indigenous people and rubber tappers. Both groups face constant threats to their lives by loggers or the armed groups they hire to protect their illegal deforestation operations. Since many reserves were not legally declared or physically demarcated, the Forest Police have been, at best, reluctant to intervene: rubber tappers or indigenous people must deal with such threats themselves. Rubber tappers interviewed by the Inspector in the Rio Cautario extractive reserve highlighted the fact that they must continuously risk their lives patrolling their reserve in an attempt to control illegal logging operations. Both the rubber tappers and leaders of their statewide organizations informed the Panel that the situation in Rio Cautario prevails in most, if not all, of the extractive reserves throughout the state. A 1993 BTO and independent observers have confirmed these statements.

30. Another example, relating to isolated tribes, is provided in the Aide-Mémoire of the October 1995 Bank mission to Rondonia. A contact group for isolated indigenous people, along with some members of the isolated groups, were chased away by armed loggers.

Health

31. The Requesters claim they have suffered material damage through lack of basic health delivery mechanisms, in particular, to indigenous people. This has been compounded by the fact that federal agencies withdrew their support for Amerindian health services since they were supposed to be funded by PLANAFLORO. Management, on the other hand, recognized that provision of health services was “precarious” and “intermittent” until mobile medical teams visited every indigenous reserve “on a regular basis starting in February 1995” (Draft Report, Annex A, paras. 31 and 32). In August 1995, however, provision of only intermittent health services and many cases of malaria (35 in one month) were reported in one indigenous peoples reserve visited by the Panel. Others interviewed reported that statewide infant mortality due to malaria is unacceptably high. Although there are further indications of material damage, the Panel cannot assess its extent at this stage since no reliable data are currently available. Such data could only be obtained on the ground during an investigation.

Finding

32. This additional review conducted since September 12, 1995, confirms the Panel’s initial finding that illegal burning, logging, and encroachment in areas reserved for indigenous people and rubber tappers constitute a substantial material damage since these populations rely basically on the trees, flora, and fauna of these areas to survive as distinct groups and to carry out their economic activities. Avoidance of such damage was one of the main objectives of the project, which, as agreed in legal documents, is to “pro-
tect and enforce the borders of all Conservation Units, Indigenous Areas, public forests and extractive reserves, and control and prevent deforestation, wood transport and forest fires in Rondônia contrary to Brazilian laws and regulations.²

**Bank Policies and Procedures**

33. The Panel's task is to establish whether the design and/or implementation of the project has been consistent with Bank policies and procedures; and if not, whether the Bank, through its actions or omissions, has contributed to the harm suffered by affected parties, and if so, whether it has failed to remedy the situation.

34. The Requesters claim that the Bank violated a number of its own policies and procedures in relation to the design and implementation of the project. The adverse effects of such violations were compounded, according to the Requesters, by the inability or unwillingness of the Bank to follow up on the obligations of the federal and state governments under the loan and project agreements.

35. The Management Response acknowledged delays in the project and cited a number of implementation problems. Indeed, supervision missions constantly rated project implementation as "unsatisfactory" without apparently triggering any urgent measures to enforce applicable loan covenants. Instead, the problem was dealt with by repeated informal revision of deadlines.

36. After a review of the Request and Management Response, the Panel reached the preliminary conclusion that, as explained in its Recommendation to the Executive Directors, there appeared to be several possible Bank violations of its own policies and procedures that may be linked to the material harm alleged in the Request. This expanded review requested by the Executive Directors further substantiates the Panel's preliminary conclusions. What follows is a brief discussion of the main areas where such violations may have occurred.

**Design**

**Lessons of Experience (OMS 2.12 and OD 13.40)**

37. According to the Operational Directive ("OD") 13.60, "one of the central ways in which the Bank improves its performance is by utilizing the findings of the Operations Evaluation Department ("OED"). The failed POLONOROESTE program³ was extensively reviewed by OED in a special Report No. 10039 ("OED Report"). It comprehensively chronicled and analyzed implementation failures of the social and environmental components of the program. Based on this, the OED Report spelled out what the Bank needed to do to design and implement any follow-up projects in Rondônia. The SAR should have provided a complete accounting of how the follow-up project, PLANAFLORO, had taken into consideration the OED Report's "key findings and recommendations."

38. It is worth noting that, while not circulated to the Executive Directors until April 1992—two months after approval of the PLANAFLORO loan—the OED Report was initially circulated for comment in 1990. Therefore, in addition to the Region's Project Completion Reports ("PCRs"), lessons of experience were available to Staff and Management during the design and appraisal of PLANAFLORO.
39. Fundamental problems in implementation essentially resulted from design failures which did not adequately take into account the lessons of the POLONOROESTE experience. Although the Staff Appraisal Report ("SAR," pp. 13-14) cites the "main lessons" learned from implementing agricultural projects under the POLONOROESTE program, the project design and SAR failed, in reality, to draw upon the environmental and supervisory lessons. As a result, the Panel considers that the Bank failed to anticipate most of the existing major implementation problems at the design phase.

**INSTITUTIONAL CAPACITY BUILDING (OMS 2.12)**

40. The Bank’s policy is categorical with regard to the importance of the project institutions, noting the centrality of "the relationship between institutional and output objectives so that the institutional and physical components can be made mutually supporting and the priority and strategy of institutional efforts clarified." The policy further identifies a key issue in Rondônia: "knowledge of local traditions and attitudes is likewise essential in the design of workable institutional arrangements." The Panel considers that the Bank failed to anticipate most of the existing major implementation problems at the design phase.

41. **LESSON OF EXPERIENCE.** Staff also received invaluable advice from the OED Report, which stated that before embarking on any further work in Rondônia, the Bank must be satisfied that there are: "Sufficient legal, technical, institutional and, above all, enforcement capabilities to adequately anticipate, monitor and control the direct and indirect adverse environmental impacts of on-going development processes at the local, state, and/or regional levels." The OED was deeply concerned about this issue, and went on to say, "An obvious lesson for the future is the need to give particular attention to the judicious selection of the coordinating agency, as well as to the design of inter-institutional and implementing arrangements, in programs of similar complexity. More generally, this implies the need for the Bank to give much greater attention to institutional analysis and assessment during project appraisal and to institutional strengthening and development in project design and supervision."

42. Sufficient institutional capacity building to handle the ambitious, complicated PLANAFLORO program was not incorporated in the design phase. High standards, tight timetables/deadlines, and multiple tasks spread among a large number of state-level implementing agencies were built into the program. In view of past experience, the Bank’s expectations of the borrower were unrealistic given the then existing or foreseeable capacity for implementation. Basic implementation problems and delays stem from this fundamental flaw in the design of the institutional infrastructure.

**AGRO-ECOLOGICAL ZONING: DEMARCATION AND ENFORCEMENT (OPN 11.02)**

43. Bank policy on wildlands requires protection of remaining natural habitats, especially when the areas are coterminous with indigenous populations whose social and cultural traditions are respected. The Amazon has long been identified by the Bank as a priority area for this approach. The directive in Annex III of Operational Note ("OPN") 11.02 is highly relevant to the issues that arose in design and in implementation of PLANAFLORO—"Implementation of important wildland components should, as a general principle, be well underway before a project’s major land clearing or construction works are allowed to proceed." The infrastructure component of the PLANAFLORO project includes rehabilitation of 3,900 kms of state and municipal roads and pavement of 81 kms, as well as other transport and maintenance activities, utilizing about a quarter of
the total project financing. In Rondônia there has always been a central tension between the need to demarcate and support reserves and the popular demand for more construction and rehabilitation of roads and other infrastructure.

44. For that reason, the PLANAFLORO project was designed to address, as a stated priority, the inappropriate exploitation of fragile areas due to absence of zoning and land use controls by providing a conceptual and institutional framework to introduce agro-ecological zoning based on a map more precise than the one produced by the POLONOROESTE project at a scale of 1:1,000,000, which was the “first approximation” to agro-ecological zoning.

45. PLANAFLORO's implementation of agro-ecological zoning depended on the existence of detailed zoning and soil maps at a scale of 1:50,000 in Zone 1 (1.1), 1:100,000 in Zone 1 (1.2), 1:250,000 in Zone 1 (1.3 and 1.4), and 1:500,000 in Zones 4, 5, and 6. These maps were essential for the so-called “second approximation,” which was to be the basis for all legal demarcation of reserved areas and their enforcement, according to the SAR (para. 3.12), which states:

“The available maps of Rondônia are at a scale of 1:1,000,000, except for a soil map of 1:500,000. While these have been adequate for general planning purposes, smaller scale maps are now needed for detailed planning and implementation (e.g., for proper border control of zones and reserves; agro-forestry planning for specific areas within Zone 1 and 2). The project would finance the preparation and distribution by ITERON of statewide agro-ecological, climatological, soil and topographical maps. During negotiations, the State of Rondônia provided assurances that these statewide maps, all satisfactory to the Bank, would be completed no later than December 31, 1993 and subsequently distributed (para. 4.01 (b)).”

“The project would also support the cartographic work necessary for the creation, management and protection of conservation units, public forests, extractive reserves and Amerindian reserves, and the border demarcation of approximately 9,900 kms and re-demarcation of another 1,600 kms…” (para. 3.13).

It is not clear why the Management Response characterized the second approximation as mere “initial refinements” of existing statewide maps (Response 3.48).

46. LESSON OF EXPERIENCE. A basic recommendation of the OED Report was that much better and more extensive data gathering had to occur before launching follow-on efforts, with particular criticism leveled at the state of knowledge about agro-ecological and socio-economic realities in Rondônia. According to OMS 2.12, “it is essential to prepare the project as far as possible in light of the available information, to specify clearly the project objectives and ensure the commitment of the Borrower (and the beneficiaries) to them, and to outline in some detail the essential inputs and arrangements with respect to organization, institutions and procedures that are expected to be necessary for achieving the objectives.”

If, as acknowledged by Management, the second approximation was crucial to the project, it should have been included in the design phase of the project or made a condition of loan effectiveness. As in the case of POLONOROESTE, the Bank again failed at the design stage to ensure that the protection of natural habitats and the homes of indigenous people would have the highest priority. Instead, the requirement for the contracting and completion of the second approximation was included as a dated obligation in the Project Agreement (Sec. 2.04), due to be completed early, no later than December 31, 1993. As discussed below at
para. 62, nearly two years later, the Draft Report indicates that the contract for this fundamental component of the project has still not been signed.

**AMERINDIAN COMPONENT (OMS 2.34)**

47. The design of the Amerindian component appears to have complied with much of Operational Manual Statement ("OMS") 2.34 except for the central problem that no forum was created for direct participation of Amerindians in the project planning, design, and implementation.

48. Management failed to take adequately into account the well-known coordination problems among key agencies in Rondônia (FUNAI, ITERON, INCRA, and SEDAM), despite OED's explicit warning that no single agency was able to carry the institutional burden of programming to the Amerindian populations.

49. **LESSON OF EXPERIENCE.** One important lesson from POLONOROESTE was that demarcation alone was not enough:

"The physical demarcation of environmental conservation units and Amerindian reserves is a necessary, but not sufficient, condition for their protection. Financial disincentives, such as the absence of public physical and social infrastructure in the surrounding areas and strong enforcement capacity to prevent and punish invasions are also required for ensuring the protection of such areas." 9

**Project Implementation**

**GENERAL OBSERVATIONS**

**INSTITUTIONAL CAPACITY**

50. The particular weaknesses of state environmental institutions were recognized in the 1994 Management "Status of Implementation Report" for the Executive Directors. Paragraph 60, Annex A, of the Draft Report recognizes that coordination of project activities has been weak and that fragility of key implementing agencies has been detrimental to project execution (see also para. 52, below). In terms of strengthening state institutional capabilities, the Report shows that after almost three years there remains weak coordination among state and federal agencies and ambitious statewide execution plans are now mostly restricted to 15 "priority" municipalities (Draft Report, Annex A, para. 63).

**INFRASTRUCTURE EXPENDITURES**

51. An objective of the project was to remedy the adverse effects of implementation of infrastructure components of the POLONOROESTE program. The OED Report documents the adverse effects of an imbalance between expenditures for the infrastructure and environmental components. Under this project the imbalance, as noted by the Staff, continues. A recent supervision mission pointed out that over half of the 1995 program expenditures have been on infrastructure, and that a redress of that imbalance would allow greater emphasis on the credit component.

52. At the end of 1992 Staff predicted there would be delays in the environmental component due to the underdeveloped nature of implementing institutions. To this end, a BTO memorandum (which also dealt with a related project in Mato Grosso) suggested that disbursements on infrastructure should be tied to progress in implementing the environmental components after observing as follows:
"In both states institutions responsible for implementing the environmental components are extremely weak. The elements of the environmental components and the steps necessary to implement them were not understood at the implementation level in either state.

In both states implementing agencies attribute problems of preparation to a high Staff turnover (poor wages and morale), the long delays in project preparation, changes in Bank personnel (lack of continuity) during Bank preparation, and limited access to project documentation at the implementation level.

Significantly, infrastructure components of the projects do not suffer from the same delay-causing preparation problems.

Given the relative preparation of environmental and infrastructure components of the projects (in an all-too-familiar scenario) the Bank will retain little leverage (disbursements) by the time the states are required to show their commitment to the environmental components." [Emphasis added]

53. The April 1995 supervision mission acknowledged the potentially damaging environmental impact of continuing road construction long recognized to have adverse environmental effects. The letter sent to ratify the findings of the mission indicates how difficult it was to stop construction of a road even though it was three years after the beginning of PLANAFLORO:

"We would also like to highlight your personal commitment to ensure that the construction of the highway BR-421 will be discontinued as it contradicts the recommendations of the first approximation of the agro-ecological socio-economic zoning and threatens the integrity of indigenous and extractive reserves and conservation units." [Emphasis added]

Project Administration

SUPERVISION (OD 13.05)

54. Despite design failures Management should have identified implementation problems and moved expeditiously to solve them, through adequate supervision and monitoring. Failure to enforce loan obligations in violation of policies and procedures has undoubtedly contributed to the above-noted material damage.

SUSPENSION OF DISBURSEMENTS (OD 13.40)

55. LESSON OF EXPERIENCE. History repeats itself in Rondonia's treatment of the indigenous people. In the POLONOROESTE program, major problems were addressed only after major external protests and the completion of the mid-term review in early 1985. Some progress was made on the Amerindian component of POLONOROESTE after the Bank finally suspended disbursements in March 1985—the first time ever on environmental and social grounds. Funding was resumed in August 1985 after federal authorities moved to protect several vulnerable Amerindian areas and agreement was reached on an agenda for redirecting the program.

56. OED recommended early use of this remedy to ensure compliance in any future project of this type in Rondonia. The records examined by the Panel show that suspension of disbursements was never considered for PLANAFLORO until after the Request for Inspection was filed with the Panel.
Supervision (OD 13.05); Monitoring and Evaluation (OD 10.70)

57. PLANAFLORO was needed because the social and environmental components of POLONOROESTE were neither adequate nor implemented. Yet to date very little of what was planned under PLANAFLORO has materialized. Year after year, as in POLONOROESTE, new target dates were set for completion of various actions. Had the Bank insisted on the timetable set out in the project documents, intended beneficiaries and their environment would have been better rather than worse off.

Delays and Lack of Enforcement

58. A review of selected Aide-Mémoire from November 1992 through October 1995 shows how deadlines set for implementation of various tasks were repeatedly unmet. The solution, in some cases still continuing, was to agree to another deadline in the next supervision mission’s Aide-Mémoire. In other cases dates for completion of activities were set but, based on a review of selected internal documents, there appears to have been no follow-up in many cases. In any event, the lack of commitment of both parties to such deadlines is evidenced by the fact that they neglected to update the specific deadlines set forth in the loan and project agreements. Indeed, as a result, through these repeated informal extensions their enforcement became increasingly unlikely.

Implementation and Supervision of Credit Component

59. Part B.3 of the project described in Schedule 2 of the Loan Agreement lays out the requirements for the development of rural credit including, inter alia, formal establishment of a denominated in-kind credit system, administration of such a system by BERON, and gradual provision of such in-kind credit. The institutional weakness and strained financial condition of BERON was apparent from the outset, yet insufficient attention was given to the Credit component in the various Aide-Mémoire. The component appears to have been introduced very late: only a small portion of funding for agroforestry has been released so far. Lack of supervision and proper auditing procedures casts serious doubts about the effectiveness and proper execution of this component.

Supervision of Accounting and Auditing

60. Section 4.01 of the Loan Agreement and section 3.01 of the Project Agreement lay out normal requirements for financial reporting, including maintenance of separate accounts and annual audits. After almost three years of project execution, no appropriate accounting and audit reports have been received. A Bank expert noted a number of irregularities in the accounting of loan funds. In spite of this the Bank continues disbursing on the basis of statements of expenditure. Now the Bank appears to have agreed to a “quick fix” to pending audit reports (Annex B, Draft Report). The Panel is most concerned that the necessary remedies, should the auditors discover any misapplication of funds since 1993, may be either impossible to implement or damaging to the overall potential of the project.

Monitoring and Evaluation

61. The Bank did not succeed in making the project monitoring operational. The Independent Evaluation Committee (“IEC”), required under Project Agreement 2.08(a), submitted only a draft of its first annual report, six months late, and no final or other
reports since. The IEC represented an innovative effort at joint monitoring involving the borrower, the Bank, and NGOs. It did not work out (Report, Annex A, para. 31). Instead, the monitoring and evaluation work has been contracted out to a consulting firm.

**SPECIFIC OBSERVATIONS**

**LAND TENURE REGULARIZATION**

62. **ILLEGAL SETTLEMENTS (INCRA).** The Management Response characterized INCRA as "a Federal entity whose commitment to Project goals both in word and deed is a sine qua non for success." No new settlements were supposed to be created and no titling of lands undertaken in areas that do not have sustainable development potential as identified by the agro-ecological zoning. The fundamental importance of this was recognized by requiring existence of an Agreement between INCRA and the State, as condition of effectiveness of the Loan. The following notes the history and adverse effects acknowledged by Staff:

* Section 2.12(a) of the Project Agreement required Rondônia to "enter into an agreement with INCRA concerning land regularization policies and practices to be observed in the State, which shall be consistent with the objectives of sound forestry protection and management, on terms and conditions satisfactory to the Bank." This requirement was made a condition of effectiveness (Loan Agreement Section 6.01(b)).

* The Management Response and Draft Report assert that this condition of effectiveness was complied with in November 1992.

* An Agreement, apparently "satisfactory to the Bank," was signed in November 1992. However, this Agreement, as correctly stated by the Requesters, did not cover land regularization activities by INCRA. Such activities, as recognized by Staff (see below), have resulted in material adverse effects for intended project beneficiaries.

* A 1994 Aide-Mémoire indicates that neither the borrower nor Management believed that the appropriate agreement existed:

  "The mission was not able to discuss with the Regional INCRA Staff the problems related to land regulation, which are one of the main obstacles to the project's outcome. It was noted that the lack of an agreement between the State of Rondônia and INCRA has inhibited resolution of the land problems in areas 4, 5 and 6, and consolidation of the land situation in zones 1 and 2. Although it was previously agreed with Bank missions to prepare and implement a detailed work plan to carry out these tasks, this was not done."  [Emphasis added]

* A letter sent to ratify the findings of the April 1995 supervision mission addresses the issue directly and indicates that the Bank may finally have been willing to exercise its remedies under the Loan Agreement:

  "...the Bank is also highly concerned with the inter-institutional collaboration required first, to ensure an orderly occupation of land in Rondônia based on the socio-economic agro-ecological zoning and second, to create and maintain the conservation, extractive, and Indigenous reserves envisaged under the referenced project and stipulated in the Loan Agreement 3444-BR, signed between the Federal Govt. and the Bank on September 19, 1992. To that end, and as I am sure you are aware, it is essential for INCRA to enter into an agreement with the State of Rondônia on the lines dis-
cussed in Brasilia, on April 10 and 11, 1995, among the mission, INCRA and the State Government. The Bank, as one of the contracting parties of the referenced Loan Agreement, needs to have a definition of INCRA’s ability and willingness to sign the agreement with the State to fulfill the obligations stipulated in Loan 3444-BR by a definite date. We have been informed by INCRA’s President that the institution is currently analyzing the text of the Loan Agreement before it signs the agreement with the State. We would like to take this opportunity to reiterate that if a satisfactory solution were not found in the course of this month, the Bank will have no alternative but to consider the exercise of its rights along the terms of the Loan Agreement.” [Emphasis added]

- The need for an appropriate agreement with INCRA was so self-evident that the head of INCRA-Rondônia later informed the Inspector during his visit that before its signature INCRA’s participation in PLANAFLOOR was mostly “de-facto.”
- The required Agreement was finally signed after the Request for Inspection was filed—on July 4, 1995. The signing of this Agreement prompted the head of INCRA-Rondônia to issue a set of instructions, long overdue, instructing regional offices to respect the zoning and other provisions of PLANAFLOOR.

SECOND APPROXIMATION

63. As noted above, mapping of the entire state in greater detail through the second approximation was included in the legal documents as a dated obligation to be completed by December 31, 1993. That deadline was missed. In subsequent supervision missions, Staff asserted the growing importance of awarding the contract for mapping as soon as possible. It was not done at the time of the Request, and as noted in the Draft Report, has not yet been signed. Thus, there has been a violation of a major covenant for almost two years with significant adverse consequences for the protection of the areas where the Requesters live and work.

LEGAL ESTABLISHMENT OF RESERVES AND PHYSICAL DEMARCATION

64. Part B6 of the Project Agreement and provisions of the Loan and Project Agreements provide for the redemarcation, protection, and maintenance of conservation units and indigenous areas. The table in Annex E indicates that the list of areas to be redemarcated is repeated year after year. Redemarcation of the Uru-eu-wau-wau reservation, for example, is a repeated priority in all three 1995 Aide-Mémoire. However, whether this will be achieved in 1995 remains uncertain.

65. The establishment of extractive reserves called for under the Project Agreement has been even more delayed. Early monitoring revealed that planned extractive reserves had been so damaged by unmanaged logging that it would not be worthwhile to establish them as reserves.

ENFORCEMENT OF ZONING

66. Part A of the Project Agreement, entitled “Environmental Conservation, Management and Enforcement,” calls for safeguard and protection of indigenous areas and conservation units, as well as construction of civil works and infrastructure to make enforcement possible. Continuous enforcement of zoning was supposed to be carried out by all agencies, including INCRA, ITERON, IBAMA, and SEDAM.
67. **Monitoring of Compliance with Zoning.** Numerous violations of zoning have been documented with respect to the first approximation and they include INCRA settlements in zones 4, 5, and 6, reduction in the size of protected areas and extractive reserves, and illegal deforestation. Where these shortcomings have been recognized, the response has been to defer the solution to area compensation mechanisms to be included in the second approximation. Since the initiation of the second approximation has been delayed considerably, effective compliance and monitoring of zoning have not been a priority. It is necessary to ascertain the specific level of effort that has been devoted to compliance with zoning as well as to establish a complete list of zoning violations.

68. One particularly difficult area has been control and monitoring of illegal deforestation, where efforts appear to have been lax due to inadequate resource allocation and lack of coordination between different institutions.

69. To evaluate the extent of deforestation monitoring, it is necessary to evaluate the number of illegal deforestation claims vis-a-vis the number and distribution of control efforts, in particular in protected areas such as Amerindian reserves and extractive reserves.

70. Yearly satellite images were supposed to be utilized to monitor deforestation, new roads, and new settlements. At the present time, no yearly deforestation studies have been completed using satellite imagery. Recently, 1994 was substituted as the year to be used for baseline data to measure project progress. This choice of year is disturbing, given the fact that the Loan was approved in March 1992. Since no baseline had been chosen prior to this, no deforestation rates have been calculated since 1992. Delays in project implementation clearly contributed to forest reserve losses that, as indicated in Box 2, could reach hundreds of millions of dollars over the life of the project.

**Popular Participation: Involvement of NGOs (OD 14.70)**

71. The innovative PLANAFLORO design for participation of beneficiaries, both through the five regulatory commissions and the Independent Evaluation Committee, was a challenging task that should have received significant Staff support. It quickly became apparent, however, that some groups of beneficiaries were not represented by the NGOs. Relations between the NGO Forum and the borrower broke down in 1994, were patched up briefly by a Bank supervisory mission, and in the words of Bank Staff, “deteriorated again during the last months of 1994.” As of the last supervision mission, attempts were still under way to bring in special consultants to reestablish trust among the borrower, the NGOs, and the Bank.

72. The Panel notes with concern that the Management proposal to bring private business organizations into project management (Draft Report, para. 11) may result in the inclusion of representatives of the parties behind illegal logging, burning, and other antizoning activities. The less sophisticated and poor representatives of the project’s intended beneficiaries could be outmaneuvered, lose their trust in the Bank, and further distance themselves from the project.

**Amerindian Component (OMS 2.34, OD 4.20)**

73. Part A.6 of the Project Agreement lists five major requirements for assistance to the Amerindians. Section 3.06 places particular emphasis on registration of the reserves and provision of health care to all indigenous areas. In internal reports it is acknowledged
that illegal logging in their reserves is still not under control. Furthermore, the Uru-eu-
wau-wau reserve is still not fully registered. There is widespread recognition that this
component is poorly managed and has so far failed to attain its objectives. Provisional
health measures for example, are not sustainable without Bank financing of recurrent
expenditures.

Remedial Measures

74. Since the Request was filed, Management has agreed to some measures to bring
the project into compliance with policies and to enforce obligations under the legal agree-
ments. The last three Bank missions looked at possible remedial measures and agreed, as
in the past, on a chronology of specific actions. Now the past-due obligations in the legal
documents are pushed even further into the future and as in the past, the timetable is not
realistic. Noncompliance continues. The October mission indicated that, given realities, a
new approach to implementation might be needed.

forward dates of compliance through actions and plans to be defined and agreed upon in
the near/medium future, rather than attempting to restructure the project around a com-
prehensive and realistic assessment of available remedies and attainable objectives. To do
so would necessarily entail taking into account OED lessons of experience and the past
flaws and shortcomings of PLANAFLORO.

76. An open and fruitful discussion with Management and Staff took place during a
meeting on December 4, 1995. The agreed remedial measures contained in the Plan
attached to the Draft Report were explained. Panel members took the opportunity to
express their underlying concerns, in particular with the proposed timeframe for the final
definition and execution of the Plan of Action.

The Panel would like to thank Management and Staff for all additional information
they provided and for the frank, realistic assessment of the status of the project at this
point in time.

Findings

- Although originally conceived in part to address adverse effects of earlier projects,
  lessons from the shortcomings of the POLONOROESTE program were too often
  ignored in the preparation, design and implementation of PLANAFLORO.
  Therefore, similar problems have occurred that threaten to perpetuate social and
  environmental damage.
- Failure of the project's design to take into account the borrower's limited institution-
  al capacity is forcing a belated focus on a limited set of achievable priorities.
- Critical delays occurred for three years between approval of the Loan and filing of
  the Request because:
  - The Bank did not supervise PLANAFLORO effectively and failed to enforce
    implementation of key actions that were to be the basis of successful execution
    of the project.
• Supervision of implementation has been weak due to the lack of a permanent presence of Bank Staff in the project area and a rather complacent reaction to repeated defaults on covenants under the Loan.

• Supervision was inadequate, as evidenced by the fact that long delayed actions have suddenly become possible since the Request was filed.

• Delays in the project have contributed to a breakdown of trust between NGOs and the Bank, making the direct involvement of civil society in any reorientation of the project important. Some of the remedial measures proposed in the Report regarding NGO participation may, however, result in future alienation of intended project beneficiaries.

• Postponement of a timely reorientation of the project has substantially delayed achievement of many of PLANAFLORO's objectives and caused continuing damage to the interests of intended beneficiaries.

• The situation for many intended beneficiaries is, by and large, worse now than two years ago.

Conclusion

77. This additional review further substantiates the materiality of the damages and establishes the link between such damages and deviations from Bank policies and procedures in the design, appraisal and implementation phases. There is also no evidence that the Bank considered a possible enforcement of the borrower's and the state's obligations under the loan documents, as provided in ODs 13.05 and 13.40. Such actions and omissions must, in the Panel's opinion, be regarded as contributing to the material losses suffered by the Requesters.

78. To establish a comprehensive inventory of material damage throughout all project areas, and to detail the link between such damage and specific policy deviations, would take about six months.

Notes

1. For a discussion of the nature—shortcomings—of this Agreement, see para. 62, below.

2. Loan Agreement, Schedule 2.

3. The POLONOROESTE program was launched by the President of Brazil on May 27, 1981, and was carried out with primary external financial support from six separate loans from the Bank totaling US$434.4 million approved in 1981–1983. The primary objective was to pave the existing BR-364 highway from Cuiaba to Porto Velho, and to provide related investments for “harmonious socio-economic development” of the region. The last Bank loan (New Settlements Credit) was closed on March 31, 1992.

4. Paragraph 17(b).

5. Paragraph 21(d).

6. P. 250.

7. OPN 11.02, Annex II.

8. Paragraph 31, emphasis added.

Brazil: Rondônia
Natural Resources
Management Project
(Loan 3444-BR)

Review of Progress in
Implementation

March 26, 1997
# Review of Progress in Implementation

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Executive Summary

As requested by the Board of Executive Directors on January 21, 1997, the Inspection Panel conducted a review of progress in the execution to date of the Rondônia Natural Resources Management Project. This review is based on the Agreed Plan of Action submitted by Management to the Board in December 1995. Management presented the Plan as a practical response to the many problems encountered in the execution of the project, which were the basis for the Request for Inspection received by the Panel. The Plan includes details of all the project's objectives and components as well as a set of "Monitorable Actions" to measure its progress.

Following years of uneven progress in execution, Management has proposed important project restructuring which substantially amends the Plan of Action and is currently being discussed with federal and state authorities and agencies, as well as with representatives of project beneficiaries.

There has been significant progress in the supervision and administration of the project. The essential "Second Approximation of Zoning" component, although late in starting, now seems to be progressing satisfactorily. This should provide a better basis for the execution of the zoning and land regularization components under a restructured project. At the same time, deforestation and invasions of protected conservation, indigenous, and extractive areas continue to be a major problem.

In spite of short-term efforts and the active participation of indigenous peoples organizations, the health component for indigenous people continues without a sustainable solution.

The restructured project should contain safeguards—including assurances in the legal documents, strengthening of key state agencies (for example, SEDAM and ITERON), and, for example, reconstitution of the Independent Evaluation Committee—to provide for a balanced execution of all project components, and remedies in case of continued violation of zoning provisions.

Introduction

1. This report responds to the World Bank Executive Directors' ("Board") decision to ask the Inspection Panel ("Panel"), on January 21, 1997, to assist them in a review of progress to date in the above-mentioned project (locally known as PLANAFLORO). This decision arose as a result of the Board's consideration on January 25, 1996, of the Panel's
second recommendation to them to authorize an investigation into the Request for Inspection related to the project ("Request"). Background information is provided in Attachment 1 to this report, and the findings of the Panel’s “Additional Review of the Request” of December 1995 are in Attachment 2.

2. In its “Status Report” submitted to the Board on December 20, 1995, the Management included in Annex D an “Agreed Plan of Action” ("Plan"), which was aimed at improving project implementation and addressing the concerns raised in the Request. This Plan had been agreed with federal and state authorities responsible for the project. The Plan was the standard against which Management reported its progress to the Board in March, August, and December of 1996. A mid-term evaluation was carried out in May 1996. At this time Management decided to start the process of project restructuring, which is not yet finalized.

3. This report is in two parts. Part 1 reviews progress under the Plan, which covers components of the original project approved in 1992. Part 2 reviews elements in the restructuring proposal, which, inter alia, converts several components of the project into possible community action plans to be financed through grants.

4. The Panel met with federal authorities in Brasilia on March 6–7, 1997, and in Rondônia, on March 8–11, with state authorities, the entire PLANAFLORO Project Coordinating Unit staff, and representatives of the NGO community. The Panel would like to acknowledge the full cooperation of and thank both federal and state authorities as well as the PLANAFLORO staff for facilitating the Panel’s task. The Panel benefited from a number of frank dialogues with NGOs and would like to express its thanks to

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**Box 1. Project Objectives**

“The principal objective of the proposed project would be to implement an improved approach—shaped by difficult past experience—to natural resource management, conservation and development in one state (Rondônia) of the environmentally fragile Amazon Basin. The project would assist the Government to:

(a) institute a series of changes in key policies, regulations and public investment programs in order to provide a coherent incentive framework for sustainable development in Rondônia;

(b) conserve the rich biodiversity of the State, while creating the basis for the sustainable utilization of its natural resources for the direct economic benefit of the local population;

(c) protect and enforce the borders of all conservation units, Amerindian reserves, public forests and extractive reserves, and control and prevent illegal deforestation, wood transport and forest fires;

(d) develop intensive and integrated farming systems in areas suitable for permanent agriculture and agro-forestry, and systems for sustainable forest management and extraction of non-wood forest products in other areas which should remain under natural forest cover;

(e) support priority investments in socio-economic infrastructure and services needed to implement the State’s agro-ecological zoning in already occupied and deforested areas; and

(f) consolidate the technical and operational capacity of State institutions, particularly those responsible for agricultural and forestry support services, and the protection and management of State and Federal conservation units and Amerindian reserves.” (para. 3.04 of Staff Appraisal Report)
them for their assistance. Finally, the Panel acknowledges logistical help from Bank Management, and in particular the assistance provided by the current Task Manager, Mr. Francesco Vita.

**Project Objectives and Indicators of Success**

5. With the benefit of hindsight, it is evident that PLANAFILORO objectives were too ambitious and that the project had perhaps a too large and widely diverse number of components. These included, inter alia, infrastructure—primarily road rehabilitation and construction—agro-ecological zoning, agro-forestry research, agricultural credit and technical assistance, as well as an entirely new participation mechanism, which was one of PLANAFILORO's most innovative characteristics.

6. Appropriate measurable indicators for the progress of each of the diverse project components were not included in the project design. For example, the project should have included indicators for land regularization and zoning—such as the number of legally created protected areas and the transfer of those protected areas to the state. Benchmarks should have been developed for the progress of the zoning component. Specific indicators for environmental monitoring and law enforcement—including level of activity and results (for example, volume of illegal wood captured and results of legal action against violators)—should have been included from the outset.

**Part A: Progress under Action Plan**

7. Management presented to the Panel an updated status of implementation report on March 13, 1997. This report is based on that Management update, discussions with relevant staff and Management, and the Panel's observations and discussions in the field.

**Environmental Conservation, Management, and Protection**

**LAND ZONING AND MAPPING**

8. PLANAFILORO was designed to address, as a stated priority, the inappropriate exploitation of fragile areas due to absence of zoning and land use controls. The project was to provide a conceptual and institutional framework to introduce agro-ecological zoning based on a map more precise than the one produced by the POLONOROESTE project at a scale of 1:1,000,000, which was the “first approximation” to agro-ecological zoning. PLANAFILORO's implementation of agro-ecological zoning was to depend on the existence of detailed zoning and soil maps at a scale of 1:50,000 in Zone 1, 1:100,000 in Zone 1 (1.2), 1:250,000 in Zone 1 (1.3 and 1.4), and 1:500,000 in Zones 4, 5, and 6. These maps were essential for the Second Approximation of Zoning (“SAZ”)—which was to be the basis for all legal demarcation of reserved areas and their enforcement. As acknowledged by Management, the SAZ was crucial to the project. It should have been included in the design phase or made a condition of loan effectiveness. Instead, it was included as a project component and was to be completed four years ago—by the end of 1993.

9. During the period under review the award of bids and hiring of consultants for preparation of the SAZ finally took place. Progress under the first year of the contract has
been reported by Management as satisfactory. The Panel met with SAZ contractors and verified that progress has been made in execution of SAZ components. The decision to complete the zoning maps by April 1998 appears to be realistic.

10. Public discussion of the zoning will follow completion of the maps after which the SAZ may be implemented. The Panel did not observe much current effort being made to prepare local institutions to use this new technology and information for the eventual effective implementation and enforcement of SAZ.

**Land Regularization**

11. Land tenure regularization, including the creation of protected areas, has been one of the most difficult components to implement due to persistent coordination problems at the federal and state levels. Due to the slow demarcation process there has been a significant reduction in the size of the protected areas estimated at the time of project appraisal in 1992. However, significant progress has recently been made: legal documents for the transfer of ownership of 20 protected areas from the federal to the state government have been sent from INCRA-RO to INCRA Brasilia for final approval and processing.

12. NGOs have questioned the INCRA 1997 settlement plan especially in the Machadinho and Buruti areas, where over 1,000 families expect to be settled. NGOs doubt that proper environmental impact assessments have been undertaken for these settlements.

**Environmental Conservation and Enforcement**

13. The Panel reviewed the progress made on statewide analysis of deforestation during the 1993-1995 period. The Panel was able to obtain satellite imagery for the entire State of Rondonia for the year 1995. Table 1 below summarizes the deforestation analysis undertaken by staff of both PLANAFLORO and state agencies as well as consultants. The Panel visited the state's screening laboratory and reviewed priority areas established under the project.

14. Illegal deforestation has been one of the most persistent problems and evidence generated by the project supports the fact that deforestation has increased, not decreased, during the execution of PLANAFLORO. This is one of the most critical areas of concern since, in the absence of specific indicators for the progress of this project component,

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<td>1991</td>
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<td>110,000</td>
</tr>
<tr>
<td>1992</td>
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<td>3,981,312</td>
<td>294,812</td>
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<tr>
<td>1995</td>
<td>4,873,143</td>
<td>445,916**</td>
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<tr>
<td>1996*</td>
<td>5,226,429</td>
<td>353,286</td>
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</tbody>
</table>

Source: INPE and SEDAM (* = estimated; ** = between 1993 and 1995).
reduction or increase of statewide deforestation rates becomes “de facto” an indicator of project success or failure.

**Support to Indigenous Communities**

15. One of the fundamental design challenges of the Amerindian component was the well-known coordination problem among key agencies in Rondônia (FUNAI, ITERON, INCRA, and SEDAM). OED explicitly cautioned that no single agency would be able to carry the institutional burden of coordinating the Amerindian component and that appropriate measures would have to be designed to address this deficiency.

16. One important lesson from POLONOROESTE was that the “physical demarcation of environmental conservation units and Amerindian reserves is a necessary, but not sufficient, condition for their protection. Financial disincentives, such as the absence of public physical and social infrastructure in the surrounding areas, and strong enforcement capacity to prevent and punish invasions are also required for ensuring the protection of such areas.” The suggested disincentives were not included in the project with the result that invasions and illegal settlements have continued to be one of the most persistent problems.

17. Originally PLANAFLORO was intended to provide health services to indigenous communities in the state. This project component was difficult to execute and its failure was alleged in the original Request for Inspection. Recently an indigenous NGO, CUNPIR, was awarded a short-term contract to provide health services to indigenous populations. According to the Plan sustainable health care services were to start being implemented by February 28, 1996. No progress has been made to date. Planned long-term solutions remain in the design phase. It is critical that implementation of a realistic sustainable health plan should be part of the restructured project.

**Institutional Strengthening**

18. The OED Report stated that before embarking on any further work in Rondônia, the Bank had to be satisfied that there were: “[s]ufficient legal, technical, institutional and, above all, enforcement capabilities to adequately anticipate, monitor and control the direct and indirect adverse environmental impacts of on-going development processes at the local, state, and/or regional levels.” OED pointed out, “[a]n obvious lesson for the future is the need to give particular attention to the judicious selection of the coordinating agency, as well as to the design of inter-institutional and implementing arrangements, in programs of similar complexity. More generally, this implies the need for the Bank to give much greater attention to institutional analysis and assessment during project appraisal and to institutional strengthening and development in project design and supervision.”

19. Sufficient institutional capacity building to allow local entities to handle the ambitious, complicated PLANAFLORO program was not successfully incorporated in the design or execution phase. High standards, tight timetables/deadlines, and multiple tasks spread among a large number of state-level implementing agencies were built into the program. The Bank’s expectations of these agencies were unrealistic given past experience and the then existing or foreseeable capacity for implementation. Implementation problems and delays stem from the failure to recognize this problem.

20. Two specific state agencies were targeted by PLANAFLORO as needing considerable capacity building strengthening: ITERON and SEDAM. In the case of ITERON the
strategic plan for institutional strengthening was developed but never implemented due to the federal hiring freeze. In SEDAM's case the plan was not even developed. This is a cause of considerable concern. SEDAM's institutional capacity is very limited in relation to the responsibilities it has been assigned under the project, which include mapping and satellite image interpretation, park management, water quality assessment, and environmental protection and deforestation control.

**Project Administration, Monitoring and Evaluation, Technical Assistance**

**Management and Participation**

21. Bank Management was apparently not adequately prepared to deal with the multiplicity of objectives and the complexities of executing such an ambitious and complicated project in a young developing state, and initially attempted to apply its traditional management style. This included centralized project management and supervision and assumed the existence of adequate local institutional infrastructure. PLANAFLORO has the characteristics of a development program rather than an investment project and, as such, required a much higher level of planning and necessary preparatory capacity building activities. An internal complicating factor has been that four task managers have in turn been responsible for the project during its four-year implementation period.

22. The Bank's traditional approach to management and supervision has changed during the course of the project in response to the need for a much more intensive and decentralized style. It will be important that the Task Manager—who now heads the Field Office in Cuiaba and is in charge of another difficult project—receives adequate support from both Brasilia and Washington. The Panel recognizes that Management has taken steps in decentralizing project supervision and management.

23. PLANAFLORO presented serious administrative challenges because of the large number of executing agencies and the incipient institutional capacity of many of them. Combined with the uneven rate of project implementation, this led to growing problems such as lack of proper financial and auditing controls. Administrative coordination among project authorities, state agencies, and federal agencies has been and continues to be problematic. At times disbursements have been delayed by lack of timely presentation of statements of expenses or by late approval of the federal budget.

24. Another challenging aspect was the highly participatory style of execution, which presented the Bank with new problems that required innovative approaches. Management efforts to include broader participation through the inclusion of NGO representatives for several areas of monitoring and decision-making has been inconsistent. As envisaged by the Panel in its 1995 “Additional Review” (para. 72), the inclusion of FIERO (Federation of Industries of Rondonia) on the fiscalization committee led to a breakdown in trust in this decisionmaking mechanism among key NGO representatives. As a result, on February 28, 1997, state, FUNAI, and Bank officials agreed with NGOs representing indigenous peoples to substitute FIERO membership in that committee with CUNPIR and OSR.

**Independent Evaluation Committee**

25. The Bank did not succeed in making independent project monitoring operational in some critical components. An innovative aspect of project design was to have an
Independent Evaluation Committee ("IEC") monitor: (a) the implementation of environmental policy and regulatory reforms undertaken in connection with the project; (b) the compatibility of annual federal and state programs in Rondonia with the recommendations of the agro-ecological zoning; and (c) the performance of the various project components.

26. The IEC was convened only during the first year of the project and the Bank claims that the IEC was unable to produce a final report at that time. However, while in Rondonia, a member of the IEC showed the Panel a copy of what he claimed was the IEC final report. The IEC was substituted in 1996 by the mid-term evaluation report team—a group of consultants employed by the Bank. The IEC was a joint effort at monitoring involving the borrower, the Bank, and local NGOs. The project would undoubtedly have benefited if the composition of the IEC had been chosen with an appropriate balance between local and independent expertise and if it had met, as required by the Project Agreement.

AUDIT

27. During the first three years of project execution, no appropriate accounting records were established nor audit reports received. Both the external auditors and a Bank expert noted a number of irregularities in the accounting of loan funds. In spite of this, disbursements on the basis of statements of expenditures (SOEs) continued uninterrupted until late 1996 when they were suspended for a brief period. There are positive indications that financial management problems are being resolved. Management paid closer attention to this problem in 1996 and finally provided direct technical assistance in accounting and auditing. Management has informed the Panel that the external auditors conducted audits for the first three years of the project in about six months. The initial audit report was qualified: over US$11 million in disbursements were not properly accounted for. Management now informs the Panel that all missing funds have been substantially accounted for and that the auditors are now prepared to issue an unqualified audit report on all project accounts. A representative of the external auditors confirmed these statements to the Panel during its field visit to Rondonia. Given the lack of proper accounting procedures in the first years of project execution, this latter development is noteworthy. As provided in paragraph 21 of the Resolution establishing the Panel, the Chairman consulted with the Bank's Internal Auditor, who informed him that his office will carry out an internal audit of this project. Therefore, the Panel has undertaken no further review of this issue.

Part B: Proposed Restructuring

Problems with Implementation

28. As stated before, PLANAFLORO's most serious problems during implementation are uneven project execution and the imbalance between the execution of infrastructure and environmental components. This has been caused, inter alia, by difficulties in obtaining counterpart financing. The "Additional Information Report" presented to the Board by Management in 1996 summarizes the issue: "[w]hile the Federal Government has committed itself to give priority to PLANAFLORO, the availability of counterpart
funds continues to be a problem. Fiscal austerity measures have resulted in serious budgetary constraints which continue to affect both the Federal and State Governments. Moreover, funding for agencies whose participation is critical for project success has been curtailed. These financial constraints may reduce the effectiveness of key public Federal and State institutions. Bank staff are currently discussing with Federal and State authorities modifications of the Loan Agreement to permit greater flexibility in financing operating costs for relevant activities of key public institutions.”

29. The uneven disbursement pattern for PLANAFLORO reflects some of these project problems and difficulties. The OED Report cited above documented the potential adverse effects of an imbalance between expenditures for infrastructure and environmental components. A 1995 supervision mission pointed out that over 50 percent of project expenditures for 1995 were for infrastructure. This category represented only 18 percent of total loan funding.

30. The potential imbalance in implementation of project components had been foreseen. At the end of 1992—in a Back-to-Office Memorandum (which also dealt with a related project in Mato Grosso)—Staff predicted there would be delays in the environmental component due to the underdeveloped nature of implementing institutions and suggested that disbursements on infrastructure should be tied to progress in implementing the environmental components after observing that:

“In both states institutions responsible for implementing the environmental components are extremely weak. The elements of the environmental components and the steps necessary to implement them were not understood at the implementation level in either state. ...Significantly, infrastructure components of the projects do not suffer from the same delay-causing preparation problems. Given the relative preparation of environmental and infrastructure components of the projects (in an all-too-familiar scenario) the Bank will retain little leverage (disbursements) by the time the states are required to show their commitment to the environmental components.” [Emphasis added]

31. An April 1995 supervision mission acknowledged the potentially damaging environmental impact of continuing road construction, long recognized to have adverse environmental effects. The letter sent to ratify the findings of the mission indicates how difficult it was to stop construction of a road even three years after the beginning of PLANAFLORO:

“We would also like to highlight your personal commitment to ensure that the construction of the highway BR-421 will be discontinued as it contradicts the recommendations of the first approximation of the agro-ecological socio-economic zoning and threatens the integrity of indigenous and extractive reserves and conservation units.” [Emphasis added]

32. Another major implementation problem has been the persistent difficulty of the legal establishment, demarcation, and transfer of the protected areas. Although most of the protected areas were scheduled for establishment by the end of 1993, this did not happen and all the protected areas that have been legally created have yet to be transferred to the state.

33. According to OMS 2.12: “it is essential to prepare the project as far as possible in light of the available information, to specify clearly the project objectives and ensure the commitment of the Borrower (and the beneficiaries) to them, and to outline in some
detail the essential inputs and arrangements with respect to organization, institutions and procedures that are expected to be necessary for achieving the objectives.\textsuperscript{55} If, as acknowledged by Management, the SAZ was crucial to the project it should have been included in the design phase of the project or made a condition of loan effectiveness. As in POLONOROESTE the Bank failed to recognize this at the design stage. The Bank also failed to deal with the fact that some critical institutions, INCRA in particular, either did not share full commitment to project objectives or wavered in their support.

34. Although a satisfactory agreement between the state government and INCRA was a condition of loan effectiveness, the agreement accepted at the time by the Bank turned out to be inadequate for project purposes. As a result INCRA's commitment to the project was seriously undermined. For example, during its August 1995 visit to Rondônia, the Panel met with the superintendent of INCRA-Rondônia and was given guarantees of the agency's renewed commitment to the project. However, that superintendent was removed from his post in early 1996. He was reappointed later that year. In the interim the agency made limited contributions to the project.

Elements of Management's Proposal

35. The "Report on the Status of Implementation" submitted to the Board by Management on December 2, 1996 (SecM96-1159), outlines the proposals for restructuring the project (pp. 13-20) and includes a table of "Restructured Project: Expense Categories" (p. 37). The Panel has met with Bank staff, project authorities, and NGOs involved in restructuring proposals and received draft legal documents. While full project restructuring has not been negotiated and submitted to the Board for approval, the Panel has been given assurance as to what the major outcomes will be.

The Panel in its November 1995 "Additional Review," stated that "the 'Agreed Plan of Action' presented in Annex D of the [Management's December 1995] Draft Report pushes forward dates of compliance through actions and plans to be defined and agreed upon in the near/medium future, rather than an attempt to restructure the Project around a comprehensive and realistic assessment of available remedies and attainable objectives. To do so would necessarily entail taking into account OED lessons of experience and the past flaws and shortcomings of PLANAFLORO." (paragraph 75).

The decision to restructure the project was taken by Management during or after the Mid-term Review of 1996.

37. Funding for certain elements of the project has been increased under the restructuring: land zoning and regularization, road paving and repair, and technical assistance. Funding has decreased for management, protection and conservation of the environment, and indigenous population support. The remaining categories, including agroforestry research, rural extension, rural credit, input supply, and health, education, and water supply, have all been reduced in funding and combined into a new "Program to support Community Initiatives" ("PAICs").

38. Three illustrative components are discussed below: rural credit, which represented 12.7 percent of the original project and no longer exists as a separate category; PAICs, which is the most innovative component of the restructured project and will account for 30 percent of the loan; and the infrastructure component—particularly the rehabilitation of roads, which historically has been a controversial issue in the Amazon region.
RURAL CREDIT

39. According to Annex 2 of Management’s December 1996 Report on the Status of Implementation, the rural credit component was supposed to finance 40,700 ha of permanent and 44,000 ha of annual crops. By June 30, 1996, only 4,049 ha of permanent crops and 5,330 of annual crops had been financed.

40. Part B.3 of the Project Agreement described in Schedule 2 to the Loan Agreement provides for the development of rural credit including, inter alia, an in-kind credit system, its administration by the State Bank of Rondonia (“BERON”), and gradual provision of such in-kind credit. The institutional weakness and strained financial condition of BERON was apparent from the outset and contributed to the failure of this component. Today there is uncertainty about the future of the institution itself, and the credit component has been discarded.

PAICs

41. The decision to go from individual credits to community-based grants reportedly received widespread acceptance in the state. Proper implementation of this component, however, will require (a) increased institutional capacity; (b) assistance to local community groups in subproject formulation and evaluation; and (c) objective and transparent criteria for selecting beneficiaries. In designing these criteria an important challenge will be maintaining a balance among the many original project components and the objectives to be addressed by the PAIC program (see para. 37, above). The lack of any criteria for allocation of resources among components may result in an imbalance in project financing and a failure to meet fully the objectives of the project as originally approved by the Board. A related risk is that a very high number of subprojects under the PAICs could strain the administrative resources of PLANAFLORO and make supervision very difficult.

42. It is a generally agreed principle that communities surrounding protected areas should receive some benefit from the project. A set of criteria extending the benefits to these areas should be developed with participation of potential beneficiaries. Such criteria could include, for example, types of subprojects to be supported and the characteristic of beneficiaries. Extensive publicity through the media and other means would be required to make this part of the program accessible to all potential beneficiaries.

43. A PAIC operating manual is presently under final review and should include appropriate selection criteria. It would also be important for the PAIC manual to guarantee that indigenous communities and other disenfranchised groups have technical assistance in subproject formulation—otherwise, potential beneficiaries might be limited to those with technical capacity and current access to funds.

44. The PAIC initiative is an important breakthrough in the participatory approach of PLANAFLORO. It is therefore important that the criteria, implementation, and results of this initiative are closely monitored, not only by NGOs and outside groups but, most important, by the communities themselves.

INFRASTRUCTURE

45. The infrastructure component of PLANAFLORO included rehabilitation of 3,900 kms of state and municipal roads and paving of 81 kms, as well as other transport and maintenance activities.
46. In Rondônia there has always been a basic tension between the need to demarcate and support reserves and the demand for more road construction, rehabilitation, and other infrastructure. As discussed above in paragraphs 28–31, imbalance and sequencing of components has been a problem and continues into the restructuring phase. The loan proceeds allocated to the Management, Protection and Conservation of the Environment Component are reduced from 20.7 percent in the original loan to 17 percent in the proposed restructured loan whereas funds for the road component are increased from 17.7 percent to 21.9 percent. It is critical to maintain balanced execution in the future and to watch closely the execution of infrastructure components, whether or not they are directly financed by the loan.

Findings

- Analysis of satellite imagery for the State of Rondônia done under the project demonstrates that contrary to project objectives deforestation during the period 1993–1996 has increased considerably as shown in Table 1. This is the only data available on the rate of deforestation during PLANAFLORO execution. Continuous monitoring of deforestation and utilization of other methods to control deforestation on real-time should be a priority under a restructured phase.

- Due to the inherent difficulties in achieving most of the environmental goals of the project, a potential restructuring should include conditions that provide for long-term solutions to existing problems, including legal safeguards against changing the characteristics and reducing the size of the protected areas. The state, Bank Management, and NGOs have worked together to avoid adverse effects of legislation viewed by some as contrary to project objectives. Both local and international NGOs closely monitor this aspect.

- Persistent invasions of indigenous and extractive areas have continued. The Panel found that there are illegal settlements and that legal problems remain with respect to the demarcations. Unless these border problems are addressed effectively, the long-term sustainability of protected areas is in question. In those cases where settlements have been found illegal, the invaders must be removed. This is unlikely to be possible unless SEDAM and ITERON capabilities are strengthened. The Panel has been informed that in the proposed project restructuring a number of conditions in relation to indigenous people will be included, for example:
  - Announcement by FUNAI of its position on the legal dispute regarding the Burareiro settlements.
  - Removal of invaders from the Mequens reserve by October 30, 1997.
  - Demarcation of the Massaco indigenous reserve by November 30, 1997.

- In the absence of criteria for allocation of PAIC resources, special efforts should be made to ensure that indigenous and other disenfranchised groups participate and have technical assistance in the development of economic alternatives and preparation of subprojects; otherwise, potential beneficiaries of this project component may be limited to those with technical capacity and current access to funds.

- It is critical that implementation of a realistic sustainable health plan for indigenous people be part of the restructured project.
Management supervision of this multifaceted project has improved. Progress has been made during the past year to decentralize oversight to meet the serious supervision challenges. Management should be encouraged to continue with initiatives to achieve effective project management and supervision.

With Bank assistance significant improvements have taken place in PLANAFLORO administration at the technical and accounting as well as the managerial level. The Bank and the restructured project should build on this increased implementation capacity.

In spite of all project delays and difficulties, most critics recognize PLANAFLORO’s potential to make a contribution to sustainable development. It is acknowledged that every effort should be made to achieve even the more modest objectives of the restructured project with respect to agro-ecological zoning and social/environmental objectives. Proper guarantees and conditionalities for critical missing or delayed actions should be established in amended legal documents.

Attachment 1: Background Information

The Loan

The World Bank (“Bank”) approved a Loan to support the Rondônia Natural Resources Management Project, known as PLANAFLORO, in March 1992. Implementation of the social and environmental components of a series of Bank-financed projects of the 1980s, known as POLONOROESTE, had been neither adequate nor implemented. PLANAFLORO, intended to redress this failure, was designed in accordance with Bank-strengthened environmental and social policies and procedures introduced in the late 1980s/early 1990s. The Staff Appraisal Report (“SAR”) and President's Memorandum for PLANAFLORO conveyed Management's belief that investments in the environment could pay off in economic terms. This was meant to be a showcase project for a new era in Bank lending for sustainable development.

The Request

In the case of this Request, communities previously adversely affected in Rondônia by the POLONOROESTE program expected beneficial effects from the implementation of PLANAFLORO according to the standards and timetable promised by the Bank, but expectations were not met. Therefore, on June 14, 1995, the intended beneficiaries represented by local nongovernmental organizations (“NGOs”) requested the Panel to investigate (“Request for Inspection”) the reasons for the Bank’s failure to carry out its commitment to prevent further damage to their land. The Requesters’ fundamental complaint was that the Project, intended to be beneficial to fragile communities and the natural environments they depend on for their livelihood, had not been adequately implemented since Board approval three and a half years prior to June 1995. Since the Closing Date of the Loan was December 31, 1996, it appeared that just one year remained for such objectives to be achieved. The Requesters emphasized their full support for the project objectives.

Management Response

The Management Response (“Response”) to the Request for Inspection (“Request”), submitted to the Panel on July 19, 1995, acknowledged a number of instances of lack of
compliance with policies. The Management Response acknowledged delays in the project and cited a number of implementation problems. Supervision missions constantly rated project implementation as "unsatisfactory." There are a number of key areas in which this situation still continues.

**Panel Recommendation**

On September 12, 1995, the Executive Directors considered the Panel's recommendation ("Recommendation") relating to the Request. The Panel recommended that: "the Executive Directors authorize an investigation into the violations of Bank policies and procedures alleged in the Request."

**Executive Directors' Decision**

**CONDUCT AN ADDITIONAL REVIEW.** The Executive Directors "agreed that before a decision could be made by the Board on the Panel's recommendation..., the Panel should conduct an additional review to further substantiate the materiality of the damages and to establish whether such damages were caused by a deviation from Bank policies and procedures."

**PROGRESS REPORTS ON IMPLEMENTATION:** At the same time the Executive Directors "welcomed the project implementation and supervision mission planned to take place shortly, as well as Management's commitment to provide periodic progress reports on the project."

**Additional Review**

The "Additional Review" was presented to the Board on December 8, 1995. Prior to this Management provided the Panel with a Draft Report entitled: "Brazil: Rondônia Natural Resources Management Project (Loan 3444-BR)—Report on the Status of Implementation," dated November 29, 1995 ("Draft Report"). The Draft Report was discussed in a meeting with Management on December 4, 1995. The Panel's "Additional Review" took into account subsequent information including several Aide-Mémoire and Back-to-Office Reports ("BTO") and the above-mentioned Draft Report. In this case the Panel had been asked to further review the past, meaning the period from inception of the project until the filing of the Request.

The Panel again recommended an investigation. (See findings of the "Additional Review" in Attachment 2 to this Report.) After this the Management produced a progress report for the Board to consider simultaneously. The progress report included an "Action Plan" for the future of the project.

**Board Decision**

On the basis of the Panel's report and recommendation as well as the Management progress report, the Board on February 25, 1996, thanked the Panel for its: "invaluable insight and thorough assessment of the issues, which allowed staff and Management to critically examine responses to the difficulties faced in the implementation of this complex operation. The Executive Directors noted Management's plan of action dealing with the principal issues raised by the Panel. In light of this action plan and the follow-up [then] underway," the Executive Directors concluded "that an investigation should not be approved
at the time, but in view of the complexity of the project and the desire of the Bank to help assure its success, the Executive Directors agreed to review Management's progress report in six to nine months and will invite the Inspection Panel to assist in that review."

Attachment 2: Findings of “Additional Review”

- Although originally conceived in part to address adverse effects of earlier projects, lessons from the shortcomings of the POLONOROESTE program were too often ignored in the preparation, design, and implementation of PLANAFLORO. Therefore, similar problems have occurred and threaten to perpetuate social and environmental damage.
- Failure of the project's design to take into account the borrower's limited institutional capacity is forcing a belated focus on a limited set of achievable priorities.
- Critical delays occurred for three years between approval of the Loan and filing of the Request because:
  - The Bank did not supervise PLANAFLORO effectively and failed to enforce implementation of key actions that were to be the basis of successful execution of the project.
  - Supervision of implementation has been weak due to the lack of a permanent presence of Bank Staff in the project area and a rather complacent reaction to repeated defaults on covenants under the Loan.
  - Shortcomings in supervision are evidenced by the fact that long delayed actions have suddenly become possible since the Request was filed.
- Delays in the project have contributed to a breakdown of trust between NGOs and the Bank, making the direct involvement of civil society in any reorientation of the project important. Some of the remedial measures proposed in the Report regarding NGO participation may, however, result in future alienation of intended project beneficiaries.
- Postponement of a timely reorientation of the project has substantially delayed achievement of many of PLANAFLORO's objectives and caused continuing damage to the interests of intended beneficiaries.

The situation for many intended beneficiaries is, by and large, worse now than two years ago. (Paragraph 76 of Report on Additional Review, December 8, 1995, INSP/R95-4, December 12, 1995.)

Fundamental problems in implementation essentially resulted from a number of design failures which did not take into account the lessons of the earlier POLONOROESTE project. The POLONOROESTE program was extensively reviewed by OED in a special Report No. 10039 ("OED Report"). It comprehensively chronicled and analyzed implementation failures of the social and environmental components of the program. Based on this the OED Report spelled out what the Bank needed to do to design and implement in any follow-up projects in Rondônia. The SAR provided a complete accounting of how the follow-up project, PLANAFLORO, had taken into consideration the OED Report's "key findings and recommendations."
The Staff Appraisal Report ("SAR," pp. 13–14) cites the "main lessons" learned from implementing agricultural projects under the POLONOROESTE program. However, the project design and SAR failed, in reality, to draw upon the environmental and supervisory lessons. As a result, the Panel considers that the Bank failed to anticipate most of the existing major implementation problems at the design phase.

Notes

1. In Brasilia, the Panel met with the following Federal officials: Mr. V. Castelo Branco, National Coordinator of PLANAFLORO (MPO/SEPRE); Mr. R. Jaguaribe, Secretary of International Affairs (SEAIN); Mr. J. Geiger, President of FUNAI; Mr. E. Martins, President of IBAMA; and Mr. S. Azevedo, General Counsel of INCRA, and their assistants in charge of PLANAFLORO. In Rondonia, the Panel met with Ms. J. Vasconcelos de Melo, State Secretary of Planning; Mr. E. Texeira, State Secretary of Environment; Mr. P. Costa Beber, General Coordinator of PLANAFLORO; and with the entire staff of the PLANAFLORO Coordinating Unit, the UNDP team of consultants, a representative of the project's independent auditors, local officials of FUNAI and INCRA, as well as with staff and officials of SEDAM and ITERON, the members of the Fiscalization Committee and representatives of the NGO Forum, CUNPIR, KANINDE, and indigenous peoples leaders, OSR, FETAGRO, FAERON, and other local organizations.
2. According to the SAR (para. 3.12).
5. Paragraph 31, emphasis added.
6. For example: Presidential Decree No. 1775 of January 8, 1996; State Law No. 152 of June 24, 1996; State Decree No. 7583 of September 16, 1996; and State Decree No. 7636 of November 11, 1996.
7. The POLONOROESTE program was launched by the President of Brazil on May 27, 1981, and was carried out with primary external financial support from six separate loans from the Bank totaling US$434.4 million approved in 1981–1983. The primary objective was to pave the existing BR-364 highway from Cuiaba to Porto Velho, and to provide related investments for "harmonious socio-economic development" of the region. The last Bank loan (New Settlements Credit) was closed on March 31, 1992.
Bangladesh: Jamuna Bridge Project
(Credit 2569-BD)

Report and Recommendation

November 26, 1996
# Report and Recommendation

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Report and Recommendation

Introduction

1. On August 23, 1996, the Inspection Panel ("Panel") received a Request for Inspection ("Request") which alleged violations by Management of policies and procedures of the International Development Association ("IDA") in relation to the Jamuna Bridge Project (Credit 2569-BD).

2. On August 26, 1996, the Chairman notified the Executive Directors and IDA's President of receipt of the Request (meaning "Registration" under the Panel's Operating Procedures ("OP"). On September 23, 1996, the Panel received Management's Response to the Request ("Response").

3. The Panel initiated the preliminary review provided under paragraph 19 of the Resolution that established the Panel ("Resolution") and paragraph 34 of its OP. It concluded that the Request appeared to meet in principle the eligibility criteria set forth in paragraphs 12 to 14 of the Resolution, but that more work was needed before making a recommendation to the Executive Directors as to whether the Request should be investigated. To this end the Chairman requested and the Executive Directors agreed on a no objection basis to an extension of the initial review period until December 11, 1996.

4. This report summarizes: first, salient points of project background; second, principal concerns of the Requesters; third, actions undertaken by the Executing Entity and Management after the Request was filed; fourth, the Response; and fifth, the Panel process for this Request. Finally, the Report outlines the findings of this initial review. The Report concludes that the Request meets the eligibility criteria under paragraphs 12–14 of the Resolution and makes a recommendation to the Executive Directors on whether the Request should be investigated pursuant to paragraph 19 thereof.

Project Background

5. Project planning began many years ago. The first feasibility study was carried out in 1971, followed by an additional study in 1976 to install a gas pipeline. A multipurpose bridge study in 1986—phase 1—a second in 1987—phase 2—and a draft feasibility report in 1988 was followed by meetings between IDA, the United Nations Development Program ("UNDP"), the Government of Bangladesh ("GOB"), the Jamuna Multipurpose Bridge Authority ("JMBA"), the Asian Development Bank ("ADB"), the Government of Japan ("OECF"), the United Kingdom Overseas Development Administration ("ODA") and the High Commission of Canada. In 1988 an Environmental Impact Assessment
6. A development credit of SDR 143,600,000 (about US$200 million equivalent) for the project was approved by the Board of Executive Directors on February 25, 1994 which became effective on August 12, 1994. ADB and OECF are each providing $200 million of financing. As of October 31, 1996, $130,261,530 of IDA financing has been disbursed. Completion of the bridge construction is now expected by mid-June 1998.

7. According to the Development Credit Agreement (Schedule 2), “the objectives of the Project is to connect the eastern and western part of the country through the construction, operation and maintenance of a bridge over the Jamuna River, thereby stimulating economic growth by facilitating cross-river transport of passengers, freight and transmission of power.”

The project’s civil works include:
“Construction of a bridge, about 4.8 km long, 18.5 meters wide across the Jamuna River, with a foundation to carry a railway and capable of supporting an electric interconnector, a gas pipeline and telecommunications facilities.”
“Construction of viaducts, about 1.28 meters each, connecting the bridge to the approach roads,” and
“Construction of two guidebunds, of about 2.2 km each and a flood protection bund on the east bank to regulate the river at the bridge construction site.”

8. Pursuant to IDA policies adopted in the late 1980s a project must include measures to mitigate the adverse effects on people involuntarily displaced or whose livelihood and environment is affected. Such measures are included in a resettlement plan, in this case known as the Revised Resettlement Action Plan (“RRAP”) adopted in October 1993. To mitigate adverse environmental effects, an Environmental Action Plan (“EMAP”) was prepared in January 1995. Both plans have been supplemented later by an Erosion and Flood Policy (“EFP”), adopted on September 7, 1996.

Request for Inspection

9. There are thousands of mid-channel islands, known as chars, in the Jamuna river “that periodically emerge from the river-bed as a result of accretion. Chars may be seasonal or survive for several decades.” Choura, or char people—now estimated at more than 2 million—live on and/or derive their income from the chars, depending on the ever-changing cycle of erosion and accretion in the Jamuna. Some 75 chars with over 70,000 inhabitants are said to be located in the project area.

10. The Request was prepared and filed solely by a local nongovernmental organization—the Jamuna Char Integrated Development Project (“JCIDP”)—that represents char people in the project area (Annex 1). About 3,000 signatures are attached to the Request.

11. The Request alleges in substance that IDA failed to include char people in the process of planning, designing, and implementing resettlement and environmental measures that are both preventive and mitigative. The Requesters claim that project execution
and their omission from the process has resulted in specific damages in some chars for which they have not been appropriately compensated, and will potentially lead to additional direct and material adverse effects on the chars, char people and their livelihood. In this regard, the Requesters allege violations relating to the following IDA policies:

- Environmental Assessment (OD 4.00 and Annexes)
- Involuntary Resettlement (OD 4.30)
- Involvement of NGOs in Bank-supported Activities (OD 14.70)

Nevertheless, it should be noted that the Requesters reiterated to the Panel their strong support for the bridge project as beneficial to the country.

**Involuntary Resettlement**

13. The fundamental complaint is that IDA did not include the char people in the RRAP:

> “the people whose land has been submerged due to the construction have not been incorporated in the mitigation plan. Even the people of the acquired land have not received proper compensation yet in many cases. The inundation of the agricultural land and homestead, intensified scouring in the char, the increased water level in the river Jamuna as result of the closure of the northern intake of the Dhaleswari [November 1994] and above all, the changes in the river morphology will substantially be detrimental to the char people and consequently these people would be plunged into a situation of being evicted from their ancestor’s land. (Request, p. 5)

The land acquisition is not the problem for the vast majority of the char people. People expressed their worry about erosion and distraction [sic] of the char. The compensation package developed by JMBA only includes the people whose land will be acquired for the construction of the bridge. It does not deal with the char people as [their] lands have not been acquired.” (Request, p. 7)

**Consultations/Participation**

14. The Requesters allege that the rights and interests of char people were not included in the RRAP because the existence of charland and char people was not dealt with in the EIA and therefore they were never consulted. They point out that:

> “The environmental impact assessment (EIA) of Jamuna Bridge has not followed the sequence and synchronization of the events necessary for EIA...

One of the basic parameters of the EIA is to ensure the participation of the people. The project is lacking the participation of the people. So, the existence and the interest of the char people have not been reflected in the EIA and subsequent mitigation plan devised on the basis of EIA...

[Reference to chars] is mostly based on secondary data. We only find existence of the charland while the questions relating to wildlife action plan and fisheries mitigation plan come up.” (Request p. 7)

Based on interviews conducted by the JCIDP, the Request goes on to illustrate the concerns and worries of people on several chars about the potential threat of the impact of the project on their land and livelihood, noting that 74 percent of those interviewed said there had been no official attempt to inform them about plans having a direct impact on them. “They came across the issues through hearsay.”
15. The Request then itemizes examples of harm already suffered on a number of chars allegedly due to bridge construction.

16. Attached to the Request (as Annex 04) is a table entitled “Basis for Assessment of Damages.” Prepared by the JCIDP, it identifies 75 chars by name and indicates for each its settlement pattern, main agricultural products, nature of vegetation, type of housing, and economic activities of char people other than agriculture, and provides a brief socio-economic assessment.

**Additional Information**

17. Subsequently, the Panel received additional material from the Requesters—a report entitled “The Jamuna Multipurpose Bridge: The Other View” ("JCIDP"), May 1996. The JCIDP acknowledges that the report is not a “complete document of what we have intended to bring to light... As usual, we have focused chiefly on the char people and their interests.” The report notes that:

"After a preliminary review of the Bridge project we undertook a field-based study in order to shed light on the people's view—what they think, how they measure the losses and the damages etc. This report is the outcome of our humble effort to highlight the social, environmental and other pertinent issues from the people's point of view..."

and that:

"A study was initiated to look into the catastrophic scenario. The study covered a total of 75 chars, within a span of 10 kilometers of the Bridge site both up and down stream, covering more than 70,000 people spread over some 13,000 households..."

Relevant pages (pp.10-19) of this study which show the results in table form are attached to this report as Annex 4.

**Management Response**

18. IDA Management’s response is accompanied by letters from the cofinanciers, ADB and OECE

**Box 1. Events following Filing of Request**

*August 28, 1996.* Staff asked an Independent Review Panel (IRP)—a group of consultants appointed in June 1996 by the cofinanciers—to expand their work to cover concerns of the char people as set forth in the Request for Inspection (see paras. 39-41 of this report).

*August 29, 1996.* The IRP met with representatives of the Requesters.

*September 2, 1996.* The IRP’s initial analysis and record of the meeting with representatives of the Requesters was faxed to the staff (see Attachment 21 to the Response).

*September 7, 1996.* An Erosion and Flood Policy (EFP), “Guidelines for Compensating Erosion and Flood Affected Persons,” was accepted by JMBA.

*September 30, 1996.* Drafts of an “Entitlement Matrix for Erosion and Flood Affected Persons (EFAPs) under the Jamuna Bridge Project” and a “Timetable for Implementation of the EFP: September 1996 to June 1997” were prepared by JMBA and a Joint IDA/OECF/ADB Mission.
19. In its response, Management maintains that it complied with all applicable IDA policies and procedures, adding that “IDA has shared for some time the concerns of the Requesters.” The Response (attached as Annex 2), after providing a general description of the project and answering the main concerns raised by the Requesters, refers in detail to each of the Requesters allegations in a matrix. The thrust of the Response is that, consistent with OD 4.30, char people were intended to be covered by the RRAP of October 1993.

20. The Response explains that the RRAP provides for a phased approach. It includes a comprehensive and detailed program only for the first phase of land acquisition in the eastern bund area. The Requesters were intended to be covered by category 14 of the matrix of losses and entitlements set forth in the RRAP, which mentions the likelihood of possible losses occurring as a result of project-induced flooding or erosion. In September 1994, IDA and its cofinancers requested the GOB to “prepare and adopt a suitable policy providing for compensation for project induced erosion and flooding.” The Response points out that the EFP was approved by the Jamuna Multipurpose Bridge Authority (JUMA) Board on September 7, 1996, and that compensation for char people will be based on it (para. 10).

21. The EFP is described as “generous and simple,” representing a new era in environmental legislation and practice in Bangladesh, covering compensation for all erosion as well as increased flooding that adversely affects crops in the bridge impact areas. “The EFP defines the bridge area of impact on erosion to include 10 kms downstream and 8 kms upstream. For flooding effects, the EFP defines 12 kms upstream of the bridge as the possible impact distance. The EFP is time-bound for 5 years after construction of the closure dam on the west in 1995, based on expert estimates of the time required for morphological changes in the river to stabilize. This means that erosion and/or flooding impacts could occur for up to 5 years after construction starts, and that affected people would be correspondingly compensated. IDA would request that this time span be reviewed in light of actual data, as needed, in the future. The EFP provides for compensation of affected char dwellers and flood plain occupants, as soon as they are identified” (Response, para. 11).

22. According to the Response, char people likely to be affected by the project could not be identified until after the final location of the bridge was decided. Due to the ever-changing behavior of the Jamuna River, the location of the bridge structure and guide bunds could only be finalized during construction. The Response states that although the Jamuna Bridge project studies indicate that “some erosion is a likely result,” the river training is also likely to contribute to stabilizing some of the chars.

23. The policy defining the impact area and compensation modalities was adopted on September 7, 1996. This being done, the Response explains that more specific guidelines have to be worked out before the policy is made operational; and that the socioeconomic survey of affected persons will begin in November 1996, and after this year’s monsoon, effects can be identified.

24. As far as participation of the char people goes, the Response points out that: “Until now, specific groups of char dwellers have not been identified as PADs… Until a clear erosion policy was approved, the design and location of the bridge finalized, and information available about impacts, consultation with large numbers of people would have caused confusion, raised unrealistic expectations, and possibly caused exaggerated or false claims for compensa-
tion, as occurred in other parts of the project. On the west bank, thousands of structures were erected in attempt to obtain unlawful gains in 1994/95. A special law had to be enacted to deal with this issue and set out criteria to distinguish between genuine and unlawful structures. As an example, out of 2,600 houses surveyed by the District Commissioner in July 1995, and after applying the new law, only about 600 were judged genuine structures. Unfortunately, the people with unlawful intentions were well organized and powerfully connected, which meant that considerable Government and IDA effort and time was required to resolve the issue. It would be prudent to avoid similar episodes. For these reasons, it was agreed to defer consultations with char dwellers.” (para. 23)

Panel Process

25. The Panel's task was to ascertain whether Management had complied with IDA's policies and procedures applicable to the claims of the Requesters, and/or whether the actions and policies, agreed upon between the Borrower, JMBA, and IDA after the Request was submitted to the Panel, could be regarded as evidence that Management intends to comply with such policies and procedures and meet the Requesters' concerns.

26. In accordance with paragraph 19 of the Resolution, the Panel examined the Request and the Response. The Response in substance appeared to contradict to some extent the Requesters' allegations.

27. The Panel decided that it could not undertake—within 21 days following receipt of the Management's response to the Panel—consultations with the Borrower, JMBA, and the Requesters and carry out the analysis necessary to make a recommendation to the Board of Executive Directors, as provided in paragraph 19 of the Resolution. Estimating that it would require up to an additional thirty-day period to prepare its recommendation, the Panel requested an extension of the initial processing period until December 11, 1996. The Executive Directors approved this on a no objection basis on October 30, 1996.

28. As explained to IDA's Executive Directors in the Panel's request for extension of the preliminary review period:

“Management and the Requesters disagree on basic issues such as which are 'permanent chars' in the area, and the extent or likelihood of harm caused by the project to people living or working on the chars. Also, the numbers of possibly affected people vary widely in the estimation of the Requesters and Management, and a census as an integral part of a socioeconomic survey of the affected area has yet to be carried out. Detailed implementation plans for mitigation measures are still under preparation, and basic information about the effects of this year's monsoon season is not yet available. In addition, Management, together with other co-financiers, has retained a group of consultants called the 'Independent Review Panel' which was to report on several relevant aspects of project implementation by the end of October, 1996. Finally, the reference to the broadly defined category 14—concerning losses and entitlements of people adversely affected by the bridge through changes in water
levels or ‘in unforeseeable ways’—which will make assistance available to them only after they are identified as already affected—obviously has caused doubts among the Requesters about the applicability and enforceability of the RRAP with regard to their interests, and the matter requires further clarification.”

Meetings with Staff and IRP Members in Washington

29. Before, during, and after the field visit, Panel members met with a number of staff involved with the project, and requested and were provided with more documentary information and field observations. Prior to its site visit, the Panel had the opportunity to meet with two members of the IRP (see para. 41, below) who were in Washington, D.C., to consult with IDA’s Management on the finalization of their Report on aspects of the project.

Field Visit

30. In preparing this report, the Panel considered information obtained during Mr. Ernst-Günther Bröder’s review conducted in the project area between October 21 and 25, 1996. The Inspector met with the Requesters during a site visit to a number of chars—including Dorata, Boro Koir, Madhurbari, and Goila Hosain—in the project area, representatives of the Requesters, and members of civil society. He also met with members of the Bank’s Resident Mission in Dhaka, GOB and JMBA officials and members of the POE (Panel of Experts), representatives of the Danish Hydraulic Institute, and management and engineering consultants. In accordance with para. 21 of the Resolution, the Panel also consulted the IDA Executive Director representing Bangladesh. His advice, as well as the particularly extensive support and arrangements set by the Bank resident mission in Dhaka, were invaluable in the successful mission of the Panel to the project site.

Panel Report

31. The Management Response notes that:

“Although the Request states many allegations, all of which are addressed in the attached matrix, the thrust of JCIDP’s concern is that by failing to address the project’s effects on char people, OD 4.30 (Involuntary Resettlement) is not being complied with.”

32. The Panel notes that the ADB’s letter of support for IDA Management’s Response to the Request cites as the four main issues raised by the Requesters: (i) impact of the project on char people; (ii) degree of participation in the resettlement process; (iii) eligibility for compensation; and (iv) adequacy of resettlement sites.

33. In addition, the Request contains specific allegations of damage caused by the construction process and char people opinions on the most likely outcome of events and their impact on the chars. While the Inspector observed widespread erosion to chars, the Inspection Panel had not planned to address the technical question of quantifying past specific damage. In this respect, it is important to point out that, as far as allegations of past damage are concerned, Management has reiterated that char people already affected will be adequately compensated regardless of the cause.

34. This report addresses the broad thrust of the Requesters’ concerns in relation to IDA’s policies on resettlement, the environment, and participation, and concludes with an
assessment of whether IDA Management's past actions and proposed remedial measures meet the concerns of the Requesters.

1. Resettlement of Char People

35. The Requesters claim they were forgotten. Indeed, project documents reviewed by the Panel seem to indicate that IDA did not single out char people as a separate and distinct particularly vulnerable group of potentially affected people during project and EIA preparation. The Panel has not received satisfactory evidence that the potential threat to char people was taken into account early in the project cycle, as required under OD 4.00 and Annexes, and OD 4.30.

36. Although IDA files show that staff initially thought that char people warranted special attention, they seem to have been forgotten thereafter. The first TOR of October 24, 1989, for a Resettlement and Rehabilitation Consultant stated that:

“The construction and operation phases of the Jamuna Bridge project are expected to entail acquisition of land or impacts on land upon which families or entire communities depend for livelihood, which requires preparation of an involuntary resettlement plan designed to restore the economic and social productivity of the affected people.”

and singled out char land for special attention. The consultant was to:

“Determine the numbers of people affected by all project works, including construction site, contractor camps, borrow areas, quarries, laydown areas, access roads, spoil disposal area, etc. Special attention should be paid to ‘char’ land or depositional land in the Jamuna River itself, which may be affected by dredging, changed water flows and so forth” [emphasis added].

37. However, the RRAP was prepared in October 1993 without specific reference to the chars and char people. In February 1994, prior to the project being presented to the Executive Directors for approval, an Executive Director raised the issue of displacement of the char people. An internal staff memorandum answered as follows:

“This eventuality is covered by the resettlement policy (No. 14: People adversely affected by bridge, i.e., change in water levels upstream or downstream, or in unforeseeable ways). In the budget, there is an allocation of 50 million Tk under this item. Affected people will be compensated according to approved resettlement policy for other PAPs... Compensation and resettlement under the project will take place in different phases. The Revised Resettlement Action Plan (RRAP) details the actions only for the first two phases (on the East bank—in 1994). Later actions will be planned and prepared in the course of 1994. (See RRAP) As for char settlers, JMBA will have to determine the criteria for determining hydrological impacts caused by the project, and carry out a census of the population on the potentially affected chars” [emphasis added]. (See full text in Attachment 6 to the Management Response.)

38. Later, in September 1994, the Joint Supervision Mission of cofinanciers, without mentioning the chars, requested the preparation of compensation plans for erosion and other damages as follows:

“The [Construction Supervision Consultants] CSC should liaise with the JMBA-EU in the preparation of plans for compensation of persons affected by erosion, situation drainage congestion or any damage resulting from
Bridge construction (and any mitigation measures possible) where not covered by existing Plans or the responsibilities of the CSC following the Additional Studies (Irrigation and Drainage, Overland Flow). The linkage between the Additional Studies and the budget of Taka 20 million set against the Erosion and Drainage sub-component of the Monitoring and Management of Water Resources EAP, should be clarified and protocols for the disbursement of these funds agreed by JMB, CSC, [Management Consultant] MC."

Further, on April 8, 1996, the Task Manager of the project sent a fax to JMBA stating that: "It is important that the effect of the bridge on char land be finalized. We propose that you ask the CSC/MC with cooperation from the POE and possibly DHI to determine:

(i) the positive/negative effects of the bridge on the char (particularly on the West Side);
(ii) the distance US [upstream] and DS [downstream] of the bridge that are under such positive or negative effect.

We realize, however, that the char lands are unstable and they change considerably with the magnitude of the flood. Please request the experts to advise on ways to distinguish between the effect of the bridge and that which results from the natural magnitude of the flood, if possible.

We also suggest that you create a Public Information Center (PIC) at JMBA (HQ) and at site, which should be accessible to the interested public. The PIC should contain all pertinent information about the project."

JMBA replied by fax, dated May 14, 1996, that:

"...a Physical Model Study by RRI and a Mathematical Model Study by DHI is now in progress to determine the effects of the bridge during and after construction. We hope that the points raised by you could be well addressed from the findings of the above studies.

Under the circumstances, we do not feel any need to conduct a separate study by CSC/MC for this purpose."

No specific study other than the physical and mathematical models was therefore carried out.

**The Independent Review Panel**

39. The terms of reference of the group of consultants retained by Management and the cofinanciers to act as an independent review panel (IRP) directed them to:

"(a) evaluate the GOBs EMAP and RRAP and their implementation; and
(b) propose revisions to the content and schedule for the EMAP and RRAP to improve their effectiveness through the life of the project and the capacity to achieve their intended objectives."

The TOR did not include any explicit reference to an evaluation of the situation of the chars or char people.

40. A few days after the Request was filed, the IRP was asked by Management to look into the question of the chars as an addition to their other tasks.

41. On October 9, 1996, Panel members met with two members of the IRP who were in Washington to discuss and finalize the IRP draft report with Management.
According to the TOR, the IRP's Final Report was due October 15, 1996. The Panel was told that the Report would be final by the end of October. As stated in the Chairman's Memorandum to the Executive Directors of October 10, 1996, the Panel requested an extension of the initial review period in part because it was thought necessary to consider the final report of the IRP before making a recommendation to the Board. Now the Panel has been informed by the Region that the IRP's “draft final report” is being reviewed by IDA and the other relevant parties and “will be discussed and decided upon during the 7th Milestone Meeting, December 9-11, 1996 and that the Report will be finalized immediately thereafter.” Nevertheless, the Panel has decided not to delay submission of its recommendation to the Executive Directors—especially since members of the IRP shared their views with the Panel earlier, in particular with regard to their view that implementation will be complex and will require careful monitoring. There was also a consensus that chars would be adversely affected by the project and that the char people had not been singled out as a particularly affected group.

2. Adverse Effects

42. The Requesters allege specific past damage due to construction including river training. The Response claims that it was impossible to identify damage until after the 1996 monsoon since bridge construction did not begin until 1995.

Identification of Impact Area

43. The available data and experts interviewed stressed the possibility that there would be erosion caused by the project but it could not be quantified with certainty in advance. In addition, water could be expected to rise and adversely affect the char structure and their inhabitants. This should have been considered with as much precision as possible during project design and appraisal.

44. There appears to be agreement among the experts that project-induced erosion or flooding cannot easily be distinguished from the natural. Therefore, the GOB and IDA have taken a practical approach by recently adopting a policy to compensate all adversely affected people, regardless of the cause, by erosion, within the following geographical boundaries:

“Northern Boundary: A straight line drawn between the southern end of the Serajganj hardpoint on the West Bank and the northern end of the Bhuapur hardpoint on the East Bank. Southern Boundary: An East-West line drawn across the River Jamuna at a distance of 10 km due south of the East End Pier of the Bridge” (EFP 4.1).

or by flooding:

“Northern Boundary: An East-West line drawn across the River Jamuna at a distance of 12 km due north of the East End Pier of the Bridge being the upstream limit of increased flooding due to the bridge. Southern Boundary: An East-West line drawn across the River Jamuna through the East Pier of Bridge being the downstream limit of increased flooding due to the bridge” (EFP 4.2).

Such compensation is to be provided until “3 years from the date of completion of the east guide bunds.”
LACK OF PARTICIPATION

45. Once a project area has been identified, the environmental assessment resettlement guidelines (OD 4.00 and Annexes, and OD 4.30) call for identification of irreversible impacts and consultation with potentially affected parties. The policy guidance is clear and unambiguous:

"The Bank expects the borrower to take the views of affected groups and local NGOs fully into account in project design and implementation, and in particular, in the preparation of EAs. This is important in order to understand both the nature and extent of any social or environmental impact, and the acceptability of proposed mitigation measures... Similar consultations after the EA report is completed are also a valuable way to obtain feedback on the report and to increase community cooperation in implementing the recommendations."5

OD 4.30 requires participation of affected people on similar terms.

The Panel does not regard as satisfactory the explanation provided by Management for the exclusion of char people, and NGOs representing them, from the process (see para. 24 of this Report). In fact, to accept such an explanation would constitute a precedent that could render this policy inapplicable in most projects, since everywhere exaggerated or false claims for compensation could be expected.

Although in this particular project the impacts of erosion could not be quantified with certainty in advance, erosion of chars was almost certain to happen and the char people should have been consulted in this process. The Panel has not received evidence that this kind of consultation ever took place.

46. Even if specific damage caused by construction and river training could only be determined ex post, the environmental assessment guidelines call for identification of impacts in the project area, in particular irreversible changes and potentially affected parties. The char people should have been singled out early in the assessment process and participated in the formulation of adequate mitigation measures.

47. The char people were neither informed about nor participated in the course of preparing the EIA in 1989, the RRAP in 1993, the EMAP in 1995, nor in the course of preparation of the EFP and subsequent implementation plans during the past months—even though these latter efforts are said to be designed with the chars in mind. As stated below, the substance and spirit of OD 4.00 and Annexes, and OD 4.30 seem to require the active participation of people likely to be affected.

REPERCUSSIONS OF LACK OF PARTICIPATION

48. In the first place, the very filing of the Request and its contents in large part must be attributed to the fact that char people were not included in the planning process, nor informed about what was being considered for their benefit. Paragraph 41 of the Request, for example, shows that these people had no information on the possible adverse effects on them. Lack of information appears to have led char people to believe that everything adverse to their land is caused by the project. As originally stated in the Request and confirmed during interviews with the POE, technical consultants, the IRP members, and others, the char people have a genuine fear and concern about unknown potential impacts of the project on them.
PRELIMINARY FINDING

49. Based on this initial review, it appears that IDA omitted to identify and incorporate char people specifically during design and appraisal of the project. The lack of their early participation resulted in increased misinformation, which in turn caused alarming perceptions about likely effects on the chars during river training, construction of civil works, and operation of the bridge (and its facilities). Although the overall time schedule had to be extended, because of administrative and technical difficulties involved in finalizing the precise bridge site and delays during the bidding procedure, only “very recently the World Bank has insisted that the people living on chars (within the boundary) be also compensated for any loss of land due to erosion or by increased flooding because of the physical intervention in the river Jamuna by JMBP” (GOB/JMBA, “A Short Note on Jamuna Multipurpose Bridge,” October 1996, para. 6.6).

50. By the time the EIA was completed in 1989, the general location of the bridge project had been established (see Staff Appraisal Report, p. 64) and the precise location fixed within a range of 5 kms. At this time, the nature of the impacts could also be established in general terms, and morphological models, such as those commissioned in 1995, could have been utilized to estimate the area of influence. Independent of the final location, if commissioned earlier in the assessment process, the models would have shown the impacted area of more than 10km where erosion could take place and where populations could be at risk. Char people should have been identified ex ante as a particularly vulnerable group.

3. Adequacy of Remedial Measures

ENFORCEABILITY OF EFP

51. During the site visit, the Requesters raised concerns about the possibility of unilateral changes to the EFP and its enforceability by IDA. Therefore, the Chairman of the Panel requested an opinion from the Legal Department. The Senior Vice President and General Counsel of IDA responded. Based on this opinion, the Panel understands that the EFP provides a legally suitable framework for the compensation of char people, especially since JMBA cannot unilaterally change the system of compensation, geographical boundaries, time periods, or other terms of the EFP, and IDA has the right to enforce the EFP in accordance with its present terms.

CONTENTS AND IMPLEMENTATION OF THE EFP

52. A troublesome question arising out of lack of participation or consultation with the char people is whether the proposed compensation policy and entitlements matrix would meet the Requesters' concerns and are adequate to meet the needs of potentially affected char people in the future.

53. The EFP essentially provides that:

"In the case of permanent loss of bank or char land by erosion or increased flooding as determined under these guidelines each of the current occupier/user of the land and the current owner of the land, as identified by the Socio-economic Survey, shall be entitled to a one-time cash grant or 50% of the market value of the land as determined by JMBA. Owner-occupiers shall be entitled to a one-time cash grant of 100% of the market value of the land." (11.1)
The Panel is particularly concerned about the following aspects of the policy and its application:

a) The Entitlement Matrix states that cash entitlements will be:
   "100% of the assessed value of the loss to be determined by JMB considering the MARV (for land acquired under the project), productivity of the land and categories such as: new char, medium char, old char, erosion prone river bank land."

This assessment may be difficult to administer equitably and objectively.

b) The plan requires affected char people to come forward at their own initiative to take advantage of the compensation program. This presupposes that they are informed about when and how to apply for compensation.

c) The Response lists as one of the EFP implementation actions to be completed by March 1997, the following:
   to devise a “plan to assist char dwellers in the affected area, in education, health, agriculture, based on workshop with char dwellers and its recommendations.”

The EFP and Implementation and Entitlements Matrixes do not provide any detail for this type of activity. Without proper education and assistance, the char people may not know how to invest suitably a one-time relatively large lump sum payment.

d) The EFP deals with erosion and flooding at the policy level. However, the Entitlement Matrix states that “[t]he matrix covers the impact of erosion only... Losses due to flooding are to be mitigated through a Flood Preparedness and Relief Programme sponsored by JMBA.” This is not consistent with the EFP, except in promising yet another plan/program to be drafted in the future.

e) The compensation is described by IDA as a pathbreaking plan for the GOB. This will thus require strong unprecedented institutional capacity on the part of JMBD and GOB.

Recommendation

54. The Panel is satisfied that the Request meets the eligibility criteria set forth in paragraphs 12 to 14 of the Resolution and reflects the legitimate concerns of people that have or may be adversely affected by the project. The fact that about 3,000 people signed the Request cannot go unnoticed. These people have been left uninformed and out of the design and appraisal stages of the project, including the environmental and resettlement plans aimed at mitigating adverse effects on people and nature.

55. Pursuant to the Resolution, the Panel has reviewed the Request and the evidence submitted by Management that it has complied or intends to comply with the relevant policies and procedures. The Panel is not satisfied that the policies and procedures on Resettlement (OD 4.30), and Environmental Assessment (OD 4.00, Annexes) have been fully complied with regarding the chars and the char people in the Jamuna River, because the plans to mitigate or compensate any adverse effects on their lands or source of work and livelihood have been either incomplete or late in development. More important—because
so far they have not been appropriately informed about the project and invited or allowed to participate in the design and implementation of mitigation and compensation activities—the policies on participation appear to have been and continue to be violated.

56. Notwithstanding the concerns noted in paragraph 53, above, the Panel is aware of the unique and complex challenges posed by this project, and acknowledges the efforts of staff and Management to ensure its success. The Panel believes the EFP issued after the Request was filed could constitute an adequate and enforceable framework that would allow—and show the intentions of—Management to comply with the policies and procedures relevant to the Requesters' concerns. This framework, however, would have to be revised and expanded to meet policy requirements and a full and informed participation of affected people would be needed to ensure its success. Also a balanced supervision and constant monitoring should help overcome existing institutional weaknesses and assure timely remedies for emerging problems.

In this context, the Panel feels that an investigation of the matters alleged in the Request is not warranted at this time.

Notes

3. See INSP/R96-1 “Bangladesh: Jamuna Bridge Project (Credit 2569-BD) Extension of Initial Review Period.”
4. Email dated November 19, 1996, from Mrs. M. Robinson, Chief, SAIIN, to Mr. E. Abbott, Executive Secretary of the Panel.
5. OD 4.00, Annex A, para. 12.
Argentina/Paraguay: Yacyretá Hydroelectric Project (Lns. 3520/2854-AR)

Report and Recommendation

November 26, 1996
Report and Recommendation

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Report and Recommendation

Below is (A) Background information, (B) Discussion, and (C) Recommendation of the Inspection Panel (“Panel”) on whether or not there should be an investigation (“Recommendation”) into allegations made in the Request for Inspection (“Request”).

A. Background

1. On September 30, 1996, the Panel received a Request which alleged violations by Management of policies and procedures of the International Bank for Reconstruction and Development (“Bank”) in relation to the Yacyretá Hydroelectric Project (“Yacyretá” or “Project”). The Bank has been involved in the design and implementation of Yacyretá since the mid-1970s. A number of agreements and amendments between the Bank and the Republics of Argentina and Paraguay, a bi-national entity established by both governments, and other entities, relate fully or in part to Yacyretá: Loans 1761-AR for $2,101 million (Yacyretá Hydroelectric Project approved in FY80), 2998-AR for $252 million (Electric Power Sector Project approved in FY89), 3281-AR for $100 million (Water Supply and Sewerage Project approved in FY91), 3521-AR for $20 million (Flood Rehabilitation Project approved in FY93). Financing of $300 million under Loan 3520-AR (Second Yacyretá Hydroelectric Project) was approved in September 1992 and subsequently in August 1994 an additional amount of $146.6 million was reallocated from the uncommitted balance of Loan 2854-AR (SEGBA V Power Distribution Project 2) to finance Yacyretá components including the resettlement and environmental protection plan for the Project. This reallocation brought the total amount of Bank financing for Yacyretá to $895.1 million. In addition, in February 1995 the Board approved a loan for $46.5 million to the Republic of Paraguay (Ln. 3842-PA), of which $1.2 million is to finance civil works related to the resettlement activities under the Yacyretá Project.

The Request for Inspection

2. The Request was filed by an organization called SOBREVIVENCIA—located in Asunción, Paraguay—representing persons who live in Encarnación, Paraguay (the “Requesters”). The Request claims that the environment as well as the standards of living, health, and economic well-being of people in the Yacyretá area have been, and may potentially be, directly and adversely affected as a result of the filling of the Yacyretá reservoir to 76 meters above sea level (“masl”) and the failure of the Bank to ensure—
through supervision and enforcement of legal covenants—the adequate execution of the environmental mitigation and resettlement activities included in the Project.

3. The Requesters allege that filling the reservoir has, inter alia:
   - caused the water to become stagnant and polluted, which has contaminated the groundwater supplies used for drinking water;
   - affected sanitation systems through discharge of untreated sewage into now stagnant waters, which creates health hazards;
   - destroyed crops;
   - inundated and destroyed island communities and ecosystems;
   - flooded farmlands and wildlands;
   - displaced local people and wildlife; and
   - disrupted fish migration through damming the river, with dramatic impact on subsistence diets and biodiversity.

4. Alleged adverse socioeconomic impacts include:
   - loss of jobs, loss of livelihood, and forced resettlement to low-quality homes;
   - for those involved in fishing, ceramics, bakery, and laundry services, loss of jobs or greatly diminished earning capacity through loss of fish, lack of top-quality clay, and loss of customers due to concerns over the poor water quality; and
   - because of distances of resettlement areas from former job sites or sources of income, additional economic losses due to remoteness and the relatively high cost of transportation.

5. The Requesters claim that the direct and material adverse effects described above result from the Bank's omissions and failures in the preparation and implementation of the Project, which violate its policies and procedures, including, inter alia, the following:
   - Environmental Aspects of Bank Work (OMS 2.36)
   - Environmental Policy for Dam and Reservoir Projects (OD 4.00, Annex B)
   - Environmental Assessment (OD 4.01)
   - Indigenous Peoples (OD 4.20)
   - Involuntary Resettlement (OD 4.30)
   - Project Monitoring and Evaluation (OD 10.70)
   - Wildlands Policy (OPN 11.02)
   - Cultural Property (OPN 11.03)
   - Project Supervision (OD 13.05)
   - Suspension of Disbursements (OD 13.40)

6. The Requesters also claim that procedural aspects incorporated in many of such policies, such as basic rights of participation and access to information, have been denied or ignored in the preparation and execution of Yacyreta.

7. In addition, the Requesters claim that:
   - the Environmental Trust Fund referred to in para. 2.16 of the Staff Appraisal Report ("SAR") for Loan 3520-AR3 has neither been established nor properly funded;
   - the Bank has been lax in supervising the Project; and
   - the Bank has failed to enforce its rights under the several agreements that it has entered into with the Government of Argentina ("GOA"), the Government of Paraguay ("GOP"), and the Yacyreta Binational Authority (Entidad Binacional Yacyretá ["EBY"]).
8. On October 1, 1996, the Panel notified the Executive Directors and Bank President of receipt of the Request (meaning “Registration,” under the Panel’s Operating Procedures). On November 1, 1996, the Panel received the Management response (“Response”) to the Request.

Management Response
9. The substance of the Response is summarized in paragraph 1.8, which reads as follows:

“We do not agree that the problems which have occurred and their possible consequences for the local population are the result of any alleged Management violation of the Bank’s policies and procedures. The salient features of the Management Response are:

• Yacyretá made economic sense when conceived and, even though the economic realities have since changed, it still makes more sense to complete Yacyretá than to stop it.
• all resettlement and environmental mitigation activities required prior to reaching the current reservoir of 76 masl have been met (except some pending matters which are being addressed through appropriate financing and supervision).
• the impacts of increasing the operating level of the reservoir above 76 masl have not yet occurred and are covered by sufficient legal covenants in full compliance with Bank policies.
• although counterpart funding shortfalls have delayed Project implementation, they have not caused harmful impacts, precisely because the reservoir has not been raised beyond its initial operating level.
• the delay in increasing the operating level of the reservoir is, in part, attributable to the Bank’s supervision efforts to ensure compliance with resettlement and environmental management activities, supporting the essential principle of Bank operations that the exercise of available legal remedies is not a requirement but a discretionary tool, to be applied only after other reasonable means of persuasion have failed.”

Panel: Initial Study
10. After receipt of the Response the Panel decided that an initial field study was needed both to verify the eligibility of the Request and assess the adequacy of the Response.

11. The Panel considered information obtained during Mr. Alvaro Umaña Quesada’s (“Inspector”) review conducted in the Project area from December 2-6, 1996. The Inspector consulted with the Governments of Argentina and Paraguay, EBY, people in the Project area, and their representatives from SOBREVIVENCIA. The Panel consulted with the Bank Executive Director representing Argentina and Paraguay.

12. As provided in the recent review of the Resolution, the Panel indicated to the Board that it would evaluate the Inspector’s findings and would then submit its recommendation as to the need, if any, for an investigation. Subsequently, the Panel again interviewed Regional Management, staff, and others.
B. Discussion

13. The discussion below is based on the Panel's preliminary review of the Request and Response and takes into account the information provided through subsequent interviews in the field and in Washington, D.C.

14. Pursuant to para. 19 of the Resolution it is the responsibility of the Panel to "determine whether the request meets the eligibility criteria set out in paragraphs 12 to 14" after it has received the Response, and the Executive Directors have expressed the hope that the Panel process will not focus on "narrow technical grounds" with regard to eligibility. To avoid future possible misunderstandings, some comments on the views expressed on eligibility in the Management Response are contained in Attachment 1 to this Report.

15. The Panel is satisfied that the Request meets the eligibility criteria set out in paragraph 12 of the Resolution and that those signing the Request (i) represent communities that feel negatively affected by the design and implementation of the Yacyretá Project; and (ii) properly authorized SOBREVIVENCIA as their legitimate representative. The Inspector verified the identity of the "anonymous" Requesters and obtained firsthand knowledge of some of the alleged material harm on the spot during his field visit.

Preliminary Evidence of Material Harm

16. The Response maintains that the Requesters have not suffered the material harm they allege but the Panel notes that the following statements, for example, appear to indicate otherwise:

"there is little evidence of harm having been done to the affected parties" (para. 2 of Cover Memorandum from Mr. Wolfensohn to Mr. Bissell); and that

"Socio-economic outcomes of the relocation of the population affected by operation of the reservoir at level 76 masl are mostly satisfactory." (para. 2.8) [emphases added]

17. During his field visit the Inspector interviewed groups of people in the Project area. These discussions and his initial observations prima facie confirm some of the allegations of harm made in the Request. For example:

- Quality clay resources seem to be under water now, which has an impact on the brick and tile industry. In addition, the 1,200 ceramic workers—unlike other affected people—have not been regarded as eligible for compensation.
- Discharges of raw sewage and slaughterhouse waste into streams that used to flow freely have exposed nearby populations to health risks associated with deteriorating sanitary conditions caused by the rise in reservoir level to 76 masl.
- Rise in groundwater levels has contaminated drinking water wells and caused latrines to back up, rendering them useless and potentially a health risk.
- People interviewed in one housing resettlement area claim that they have not been fully compensated and that commercial structures to replace their shops or businesses have not been built.
- In the Barrio San Pedro resettlement the Inspector observed leaky roofs and inferior construction materials.

18. A review of these and many other allegations of harm—including damage to wildlife and fisheries—in the Request would require investigation.
Alleged Acts or Omissions

19. **The Request** claims in substance that the act of filling the reservoir to 76 masl but at the same time failing to implement adequately the required resettlement, environmental, and social mitigation measures has harmed them and their environment. In addition, they express their deep concern about future damage that may occur if the water level is raised to the 78 masl and 83 masl as envisaged in the Project.

20. **Management Response** admits to delays in resettlement and environmental actions required prior to filling the reservoir to the 76 masl level and provides various explanations for the Project's difficulties and delays.

21. **The Panel** notes that:

- the SAR for Yacyretá II explains that Loan 3520-AR is supporting the resettlement program required for raising the level to 76 masl because “It was expected that the resettlement program would have been completed under the Electric Power Sector Project (Loan 2998-AR)” (Annex 2.7, Attachment 1, para. 2)
- The SAR emphasizes the proper sequencing of project components: “It is particularly important that the resettlement and environment mitigation measures needed to protect the affected population be executed prior to the reservoir rise, and in compliance with defined standards. It would be appropriate to determine whether these have been accomplished in the first semester of 1994 when the Bank would conduct with EBY a mid-term review of the Project. Consequently, the Bank plans to monitor carefully EBY’s performance in this area before the level is raised to 76m, and again to 78m. (para. 2.11) [emphases added]

22. The Panel observes that the Resettlement and Environmental Management Plans (“REMP”) included a specific sequence of actions for a variety of critical areas such as relocation, compensation, wildlife, compensatory reserves, environmental health, and fisheries. At the time the reservoir was filled to 76 masl in 1994, a number of key environmental and resettlement actions had not been completed and many of them still await completion at the end of 1996.

23. Quoting the SAR, the Response notes that among the three major risks associated with Yacyretá were “failure to implement the resettlement and environmental mitigation activities satisfactorily” (para. 1.3). Despite the occurrence of such failures Management does not seem to have regarded it as a “major risk” since it agreed to let the reservoir be filled to 76 masl. Much later an internal memorandum from staff working on environmental aspects warned Regional Management of the deteriorating situation:

“The situation is serious, in that the Bank “no objection” to filling the reservoir to elevation 76 meters was conditioned upon the agreement that all pending environmental and resettlement actions, which were not complete at the time of the reservoir filling, would be completed in the course of 1995. The necessary resources to complete the resettlement and environmental pending actions for elevation 76 m have not been provided, despite repeated Bank reiteration of the same request and repeated borrower representations of an intention to do so.”

This memorandum was prepared in June 1996—nearly two years after filling the reservoir to 76 masl. Without a more detailed study—which is only possible in the context of
an investigation—it is difficult to understand how the imbalance developed between progress in civil works and the REMP was allowed to grow without an effective response from Management. This is one of the very actions and omission which the Requesters claim has adversely affected them.

Alleged Policy Violations

24. The Request claims that the Bank's act of authorizing the filling of the reservoir to 76 masl and omission in not insisting on completion of the resettlement, environmental, and social mitigation measures are violations of various Bank policies and procedures: as a result of this failure groups of local people have suffered material harm.

25. Management Response appears to suggest that even if there has been harm, it is not the result of any policy violations. It refers to “problems which have occurred and their possible consequences for the local population” but does not agree that they are “the result of any alleged Management violation of the Bank’s policies and procedures” (para. 1.8)

26. The Panel observes that both the Resettlement and Environmental policies require an appropriate sequence of actions to prevent harm to both potentially affected populations and the environment. The sequence of actions in this Project—designed for masl levels 76, 78, and 83—was allowed to slip badly when counterpart funding became unavailable and when an eventual privatization became an option to fund Yacyreta.

27. The Panel notes all the other policy violations alleged by the Requesters. However, given this large and complex Request, the Panel has focused only on what appear to be two serious and initially verifiable policy allegations. Even though Management has addressed the complaints, the Panel is not convinced that there has been substantial compliance with the relevant policies and procedures.

Supervision

28. The Request also alleges that Management has failed to supervise adequately the Project and to enforce several covenants related to environmental mitigation and resettlement activities.

29. The Response argues that the exercise of available legal remedies is not a requirement, but a discretionary tool, to be applied only after other reasonable means of persuasion have failed. (paras. 1.8, 3.61–67)

30. The Panel, knowing that Management has flexibility in deciding whether to exercise available legal remedies, must note that the Resolution itself defines as an instance of failure in the compliance of Bank policies and procedures situations where the Bank has “failed in its follow-up on the borrower's obligations under loan agreements with respect to such policies or procedures” (para. 12). In other words, according to Bank policy, compliance is not achieved by merely including covenants in Loan Agreements but rather by ensuring that their provisions are implemented in a timely fashion by the borrower and executing entities.

31. The attention of the Panel was drawn to the discretionary use of legal remedies by an excellent OED analysis. The recent OED Performance Audit Report for two of the loans providing financing for Yacyreta \(^8\) states that:

"the Bank accepted repeated violations of major covenants" (para. 31); and adds that:
“[c]ovenanted actions are a precarious way to ensure the viability of a financing plan in light of the Bank’s willingness to ‘accommodate’ non-compliance and the added difficulty of stopping a large unitary project once it has reached a certain stage of implementation” (para. 39).

32. The Response denies that the provision of funds for the implementation of pending actions has constituted a problem. The evidence reviewed so far by the Panel suggests otherwise. Damage related to noncompliance with covenants appears to have occurred. A more detailed analysis—which is only possible under an investigation—would be required to ascertain whether there has been a violation of Bank policy through failure to enforce legal covenants, as stated by the Requesters, or compliance thereof has been achieved through “other reasonable means of persuasion,” as claimed by Management.

**Remedial Actions**

33. The Management Response includes “Pending Actions” as Attachment A and states that:

> “With respect to compliance with pending actions related to elevating the reservoir to the current operating level of 76 masl, a time-bound Action Plan, supported by a Special Account, has been put in place to complete all pending actions no later than December 1997.”

The Response states that “These activities will be completed by the end of 1997, thus concluding the resettlement and environmental mitigation measures required for raising the operating level of the reservoir to 76 masl” (para. 2.9).

34. The Request as noted above at para. 7 complains that the Environmental Trust Fund to finance the REMP has neither been established nor properly funded.

35. The Response states that the claim is incorrect: that the Trust Fund (to finance all REMP activities) was established by EBY in November 1994 and that while “amounts deposited in this Fund were not precisely those agreed with the Bank, the Borrower has funded the required REMP activities up to elevation 76 masl through the Fund and otherwise” (para. 3.16).

36. Further clarifications by the staff explain that the Trust Fund referred to in the SAR was never established but rather an account for receiving funds for the execution of the REMP was opened and an initial deposit of about $3 million was made on January 13, 1995: this is in reality the “Trust Fund” referred to in the Response. This account was used during 1995 but as the GOA contributions to EBY were reduced and later on ceased, the account “lost its purpose.”

37. Two other accounts have since been established for similar purposes:

- a so-called “special account” opened in August 1996 with an initial deposit of $4 million (for which the Panel has been unable to obtain operating documentation); and
- an “escrow account” just opened on December 10, 1996, with an initial deposit of $5.4 million and with further deposits expected to reach a total of $8.2 million to finance certain specified REMP activities that were supposed to be carried out before the reservoir reached the 76 masl level. (The Panel has received documents relating to this account.)

38. **The Panel** notes the importance attached to funding the Environmental Trust Fund for this component in the SAR for Loan 3520-AR:
“Given the underlying importance of satisfactorily completing the Resettlement and Environmental Management Programs required for different reservoir operation levels, during negotiations EBY agreed to establish by November 1994, and, thereafter maintain an Environmental Trust Fund on terms and conditions satisfactory to the Bank by depositing therein the amounts necessary to finance in a timely manner all activities under these programs and for the Arroyos protection works, such amounts to be derived from the sales of electricity or any other resource and be at least US $18.3 million in 1995, US $60.9 million in 1996, US $101.6 million in 1997, and US $2.7 million in 1998... withdrawals from such account would be made exclusively to finance these activities.” (2.16) [emphases added]

39. As evidenced by the above SAR data, neither the $8 million already deposited, nor the $16 million in funding anticipated by the Management Response appear to be adequate to implement pending activities of the REMP that may be necessary to meet the policy requirements and the Requesters’ concerns. The December 20, 1996, Back-to-Office Report confirms the seriousness of the financial gap facing the Project at any operating level.

C. Recommendation

40. The Yacyretá Hydroelectric Project has represented a massive effort spanning over 20 years, exceeding $8 billion in cost, and including a large number of highly complex issues and uncertainties. It is now uncertain whether or when the Project will reach its original design level and generating capacity and what would be the sources of the funding to complete the Project, including the REMP. The Panel has been informed that, to date, while the main civil work infrastructure components are almost complete, only about a fifth of the housing in the resettlement component has been completed and other activities and social mitigation measures lag far behind. This is an unusual imbalance.

41. Based on the preliminary review, the Panel is satisfied that there have been material adverse effects which may have resulted from policy violations of a serious nature.

42. The recommendation below for an investigation represents the Panel’s preliminary conclusion that the Request is eligible for investigation. It will be necessary to conduct an investigation in order to determine whether the harm claimed or likely to occur and the allegations of serious violations of policy are well founded.

43. Based on the foregoing the Panel recommends that the Executive Directors authorize an investigation into the violations of Bank policies and procedures alleged in the Request.

Notes

2. Loan Agreement between IBRD and SEGBA and Guarantee Agreement between the Republic of Argentina and IBRD, June 30, 1988 (Ln. 2854-AR), later amended by Argentina-IBRD-SEGBA Loan
Assumption Agreement, August 19, 1994, to incorporate provisions relating to Loan 3520-AR project activities, including in part the environmental mitigation and resettlement plans.

5. Information under the last three bullets would appear to refer to raising the level to 78 or 83 masl.
6. The Panel wishes to thank the office of the Bank Executive Director for Argentina and Paraguay for his comments and guidance and the members of SOBREVIVENCIA and the Bank department responsible for Argentina and Paraguay (LAI) for arranging Mr. Umaña’s interviews in both countries and particularly the management and staff of EBY for providing logistical support in the project area.
7. INSP/SecM96-15, December 10, 1996.
Argentina/Paraguay: Yacyretá Hydroelectric Project (Lns. 3520/2854-AR)

Review of Present Project Problems and Assessment of Action Plans

September 16, 1995
Review of Present Project Problems and Assessment of Action Plans

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INTRODUCTION

1. This Report responds to the World Bank ("Bank") Executive Directors' ("Board") decision to ask the Inspection Panel ("Panel"), on February 28, 1997, "to undertake a review of the existing problems of the Yacyretá Hydroelectric Project in the areas of environment and resettlement and provide an assessment of the adequacy of the Action Plans as agreed between the Bank and the two countries within the next four months."

2. At the same time, the Executive Directors decided that "independent of the above decision, the Inspection Panel [was] expected to look at the extent to which the Bank staff had followed Bank procedures with respect to this project." As explained in Part 4 of this Report, the precise extent and scope of this latter decision was not determined by the Executive Directors.

3. This decision arose as a result of the Board's consideration of the Panel's recommendation to them to authorize an investigation into the Request for Inspection related to the Project ("Request").

The Request

4. On September 30, 1996, the Panel received a Request for Inspection from SOBREVIVENCIA—Friends of the Earth Paraguay, representing people who live in Encarnación, Paraguay, who claim that their rights/interest had been affected by acts and omissions in the implementation of the Bank-financed Yacyretá Project. The Requesters claimed that they had been, and may potentially be, directly and adversely affected in their standards of living, health, and economic well-being as a result of the filling of the Yacyretá Reservoir and the Bank's omissions and failures in the preparation and implementation of the project. The Chairman of the Panel registered the Request on October 1, 1996.

Management Response

5. The Management Response ("Response") to the Request was submitted to the Panel on November 1, 1996. In its Response the Management included a description of "Pending Actions" as Attachment A.
Panel Recommendation

6. The Panel, on December 24, 1996, recommended to the IBRD's Executive Directors that they authorize an investigation.

Executive Directors' Decision

7. On February 28, 1997, the Executive Directors considered the Panel's recommendation. During the meeting, Management presented Action Plans A and B. Action Plan A dealt with actions that should have been completed, but were not, before the reservoir was filled in 1995 to 76 masl. Action Plan B proposed activities aimed at permitting the "continued operation of the reservoir at 76 masl in an environmental sound manner." These Plans had been agreed with authorities responsible for the Project but at the time a number of elements had to be further defined and certain actions taken by March 15, 1997. In light of this the Executive Directors decided to ask the Panel to conduct this review—the scope of which is in their decision quoted in paragraphs 1 and 2, above.

Panel Review and Assessment

8. The then Chairman of the Panel had designated Mr. Alvaro Umaña Quesada—lead inspector in charge of the initial review of the Request—as leader of this review and assessment authorized by the Board. Mr. Umaña, who had visited the Project area in December 1996 for the initial review, returned there twice (May and July 1997), conducting consultations with Argentine and EBY officials and with local authorities, and with affected people on the Argentine and Paraguayan sides of the Project.

Additional Requests for Inspection from Affected People in Argentina

9. During his second visit, Mr. Umaña was approached in the city of Posadas, Argentina, by several groups of people who allegedly were adversely affected by the Project and also by local political and community leaders, as well as local government officials. They submitted oral and written Requests asking the Panel to review several aspects of Project execution which, according to them, are detrimental to the people, communities, and the environment on the Argentine side of the Project.

10. After a careful review of these Requests, the Panel concluded that—while some of the Requests could be regarded as new Requests for Inspection—in substance the issues they raised are substantially the same as in the original Request related to the same project. In the Panel's view, the matters raised in the additional Requests could be regarded as falling within the scope of the Board's February 28, 1997, mandated review.

11. As a result the Panel informed that Board that it proposed to proceed as follows: a) provide copies of the written Requests received to Management and ask for comments within the usual 21 business day period; b) include references to such Requests and
Management's comments—as well as the Panel's specific findings thereon—in this Report; c) advise these new Requesters accordingly. The Board's approval was given on a no objection basis on June 23, 1997. Management Comments were received August 4, 1997. Attachment 1 contains Management Comments on the Additional Requests. The Additional Requests themselves are not attached, since they were submitted in Spanish and the Panel is satisfied that these Requests are adequately summarized in Management Comments.

12. The Panel met with Argentine authorities in Buenos Aires and Posadas during July and in Encarnación with Paraguayan authorities, the binational executing agency EBY, and the NGO community. The Panel would like to acknowledge the full cooperation of and thank both the GOA and GOP and provincial and local authorities, EBY staff, as well as SOBREVIVENCIA for facilitating the Panel's task. The Panel benefited from a number of frank dialogues with Government and EBY officials and with people living in the project area and would like to express its thanks to them for their assistance. Finally, the Panel acknowledges the cooperative logistical help from Bank Management, and in particular the assistance provided by a consultant to the Panel for this review, Mr. Francis V. Fragano.

13. This Report is in four parts. Part 1 reviews the Project's present problems. Part 2 provides an assessment of the adequacy of Action Plans A and B. Part 3 covers the Additional Requests for Inspection and Management Comments on them. Part 4 addresses Bank compliance with its procedures.

14. The Request, Management Response, and Panel Report and Recommendation to the Board can be found in a separate volume which has been available to the public since February 28, 1997.

EXECUTIVE SUMMARY

Findings

- After more than 14 years under construction, with investments (including interest) surpassing $8.5 billion, the Yacyreta Hydroelectric Project remains riddled with problems, delays, and uncertainties that cast serious doubts about the Project's future and its continued adverse effects on adjacent populations.
- Imbalance in execution between civil/electromechanical works on the one hand and resettlement and environmental measures on the other has been one of the fundamental problems of the Yacyreta Project. This imbalance has been exacerbated by the usual Bank practice of financing the former while leaving the latter for counterpart funding. The Panel believes that this practice should be reconsidered.
- This imbalance is dramatically illustrated by the fact that the reservoir was filled prior to completion of the agreed environmental and resettlement measures which resulted in negative environmental impacts and placed populations living in low-lying areas on both sides of the reservoir at higher risk for a prolonged period of time. This action—to which Bank Management gave its non-objection triggering the Request for Inspection and the Panel's intervention—has caused risks of serious health hazards through exposure to unsani-
tary conditions and poor water quality. Other risks include potential loss of sustainable livelihood through loss of high-quality clay and fish resources.

- Such imbalance, leading as it has to rising social and environmental liabilities, now has a financial cost at least equivalent to the costs of Plans A and B ($132 million) if the Project operates at 76 masl. To address the imbalance will take until at least the year 2000.

- Substantial issues raised by additional Requests for Inspection need to be addressed by Management, including cost of replacement housing on the Argentine side; quality of housing and community infrastructure on both sides of the reservoir; economic situation of oleros and workers in the brickmaking industry and of fishermen.

- Despite extensive but inconsistent supervision efforts, the Bank has failed to bring the Project into compliance with relevant Bank policies and procedures due to poorly conceived Project design in the first place, compounded by changing standards and regulations over time, EBY bureaucratic procedures, and lack of financial resources.

- Bank environmental and resettlement procedures call for continued participation of potentially affected people from the outset. The Panel has found that the process has been neglected and now is all but discontinued. Bank supervision will be essential to ensure resumption of the participatory process.

- Institutional strengthening of executing agencies in the areas of resettlement and environmental protection continues to be an issue that needs to be addressed by the Bank.

- Although the macro and financial environment is highly uncertain, solution to the problems depends on implementation of Plans A and B strictly in accordance with the timetables proposed. However, there are components of these Plans that are already lagging behind (for example, creation and maintenance of biodiversity reserves) and the Project history of delays and noncompliance previously tolerated by the Bank does not allow the Panel to assess potential performance with any degree of confidence. For example:

  - Some fundamental studies critical to Plans A and B are either incomplete or have not been conducted, such as hydrogeological studies and the Aña Cua environmental assessment. These studies must be completed immediately. But the conduct of the studies (and the resulting designs) must follow Bank procedures on environmental assessment and participation. This is likely to result in delays in completion of aspects of Plans A and B.

- Due to the significant long-term involvement that both the Bank and IDB have in the Project, the two institutions should continue providing financial and technical assistance to correct the harms that have been identified and must remain committed to implementation of the REMP, independent of formal ownership of Project.

- Presently operating at 76 masl, the lowest possible elevation, the Project's annual net cash flow is about $50 million, which is insufficient to cover the social/environmental liabilities and meet the investments required to raise the reservoir above its present elevation. If the Project were to stay at the present operating level, the debt would never be repaid.

- Given the Government of Argentina decision to suspend allocation of additional investment resources to the Project during the last three years, privatization was supposed to provide the capital required to reach elevation 83 masl. However, both
the Government of Argentina and the Government of Paraguay have failed to obtain approval from their respective Congresses for the legislation that would authorize privatization. Present plans are unclear. The investment required to reach elevation 83 masl has been estimated by Management to be at least $700 million beyond [that required for execution of] Plans A and B. This, however, does not take into account the actual costs of remaining expropriations (including thousands of hectares of land), resettlement of urban populations on both sides of the reservoir, and replacement of infrastructure (railroads, ports, airport), which would render Management's estimate wholly inaccurate.

**Review**

15. The Yacyretá Hydroelectric Project ("Project") is a unique and complex undertaking, with many singular features that have an important bearing on the problems that the Project has experienced. Among the Project's most salient features are its massive proportions and impacts, its complex institutional basis, the long lead-time and persistent implementation problems that it has suffered, and considerable uncertainties with respect to the availability of financial resources required for its completion. All these interrelated factors, which contribute to a highly problematic present situation, are analyzed individually below.

**Massive Nature of the Project**

16. The Project consists of a 65 km earth dam in the main channel of the Paraná River about 80 km from the cities of Posadas, Argentina, and Encarnación, Paraguay. The project is a low-head hydroelectric facility with 20 Kaplan turbines of 155 MW each for a total generating capacity of 3,100 MW. In addition, the project also includes a navigation lock, fish-passage and other support facilities as well as a large program of infrastructure relocation, population resettlement, and mitigation of environmental impacts. The earth dam, with a uniform height of 86 masl, creates a reservoir of 1,065 square kilometers and, if filled to its design level of 83m, would flood over 107,000 hectares and affect over 13,000 families, including a major impact on the urban areas of Encarnación and Posadas. Most of the impacts of the project cannot be avoided and stem from the location of the large reservoir, huge areas to be inundated, and the large numbers of people affected, including the second largest city in Paraguay and, to a lesser degree, the city of Posadas.

**Institutional Basis**

17. The Project was started by a 1973 binational treaty between the Republics of Argentina and Paraguay. The Treaty of Yacyretá proposed to develop the hydroelectric potential of the Paraná River, improve navigation in the area, mitigate the effect of severe river floods, and promote irrigation. The Treaty also created the "Entidad Binacional Yacyretá" (EBY), an autonomous binational entity formed between an Argentine and Paraguayan utility, having equal rights and duties, as well as full legal, financial, administrative, and technical capacity. Despite its equally shared ownership, Argentina agreed in the Treaty to secure total financing for the Project.
18. As stated in the 1992 SAR for the Yacyretá II Hydroelectric Project, "Yacyretá has suffered from instability in the management of the project entity, lapses in technical direction, constant uncertainties of assurances and levels of future funding, excessive EBY Board interference, strains between the owners and in their dealings with international contractors, and a not fully satisfactory design of the resettlement and environmental protection plan, as well as its slow implementation." Unfortunately, five years later the same problems still persist, and some may have deteriorated. For example, throughout its existence EBY has had 18 directors, the last 3 within the period after filing the Request.

**Long Delays and Implementation Problems**

19. The Project has been under design or construction for over 20 years, and the Bank's involvement goes back to the mid-1970s. Since the project has taken such a long time to complete, many standards have changed in both the environment and resettlement areas. For example, the Operational Directives on Environmental Assessment and Involuntary Resettlement were adopted after the two initial Bank loans had been approved, but before the last two loans were in place. At the time of the original design, some impacts, like drying up a major river, were considered acceptable. Today, this is no longer the case. At the same time, there is considerably more appreciation today of the problems of resettling large numbers of people or the effects on urban centers.

20. From its inception, the Project has suffered major implementation problems which have led to significant delays in completion and large financial problems. The Bank President's Memorandum to the Board for the Yacyretá II Project (August 1992) states that the "unforeseen political (initially the Southern Atlantic war) and macroeconomic instability since the Project works began, discontinuity in the Ministry of Economy oversight of the project and sector finances, recurrent difficulties with contractors over payment arrears, inadequate management of the project and differences between the Argentine and Paraguayan owners have led to extended delays, and form an enormous financial burden." Again, this assessment characterizes many of the Project's present problems. Unfortunately, some of them have deteriorated considerably during the past five years.

21. One of the areas of rapid deterioration deals with the impacts on the population to be affected due to the uncertain timing of the impacts and the low level of credibility that the Bank and EBY has among the population. The specific problems that triggered the Panel's intervention are derived from the filling of the reservoir to 76 masl. The Request claims that this action, carried out without having adequately implemented the required resettlement, environmental, and social mitigation measures, has harmed specific groups, such as the clay workers and urban populations living between 76 and 78 masl. The Bank's "no objection" to filling the reservoir was conditioned upon the agreement that all pending environmental and resettlement actions which were not complete at the time of the reservoir filling would be completed in the course of 1995. The premise that these pending actions would be completed shortly turned out to be tragically wrong, and by the end of August 1997, a significant number of them remain to be carried out.

**Insufficient Financial Resources for Completion**

22. The original cost of the Project was estimated by the Staff Appraisal Report ("SAR") in 1979, including physical and price contingencies, at $3.7 billion. By 1992 the
SAR for the Yacyretá II Project estimated the investment at $5.5 billion. At the present
time, estimated costs to date, including interest on the debt, surpass $8.5 billion.

23. Although the civil and electromechanical works are almost complete, most of
the "complementary works," particularly those related to resettlement and environmental
management plans, remain to be done. In addition to the $4.7 million undisbursed from
Plan A, $116.7 million are required for prolonged stay at 76 masl (Plan B), and at least an
additional $700 million for completion to 83 masl. However, this latter figure carries a
high level of uncertainty because it includes expropriation of lands to be flooded—where
costs could be considerably higher once expropriation is actually carried out—and other
problems such as:
  - the waste treatment plant for Encarnación
  - the environmental protection works for the Brazo de Ano Cua for which alternative
    solutions are still under study, and
  - the results of hydrogeological studies which have yet to be carried out in spite of the
    fact that they are fundamental to the future development of complementary works.

24. In late 1994, just months after the reservoir had been filled, the Government of
Argentina ("GOA"), facing difficult macroeconomic conditions in the aftermath of the
Mexican crisis, decided that it could no longer allocate additional resources to the
Project, and that it would seek private capital to complete and operate the facility.
Management's Response to the Request, on October 29, 1996, claimed that the "...imple-
mentation of the REMP has been delayed for more than two years and is currently nearly
halted, mainly because of the Government's decision to hold implementation until the
privatization scheme for Yacyretá is approved by the Argentine and Paraguayan
Congresses." The legislation required for privatization of the facility failed to obtain
approval in either Congress, and the most recent plans include the privatization of the
management of the facility while retaining binational ownership. This alternative would
not require Congressional approval. Bank Management informed the Panel that as of late
August 1997 there were "no plans for the privatization of Yacyretá."

25. The Panel requested Management to provide it with an analysis of scenarios of
investment repayment periods for the different reservoir elevations. Management's
response illustrates the Panel's concerns:

"Assuming that the total investment at elevation 76m would amount to about
US$5.5 billion, of which US$0.3 billion are being financed by EBY from elec-
tricity sales, the net total investment amounts to US$5.2 billion. It is estimated
that the annual net cash flow, starting after completing Plan B, would be about
US$50 million. Under this scenario, it would take about 100 years to repay
the investment. The US$50 million were calculated as the difference between
EBY's revenues and the sum of operating and maintenance expenses and the
following deductions: (a) reduction from the tariff stated in the Treaty
(US$32/MW) to the spot price of electricity (currently around US$20/MWh); (b)
compensation to Paraguay; and (c) payments of transmission cost and
provincial allowances.

In the case of elevation 83m, it would take about 23 years to repay the
investment, with an annual net cash flow of US$240 million.

However, it should be taken into consideration that most of EBY's invest-
ment requirements have been financed by government loans and supplier's
credits and commercial bank loans, the repayment period is much longer, because the repayment of the debt service should be added. 6% of the total investment at elevation 76m, and 11% at elevation 83m would be financed by EBY's own resources.

In this case, it would take 42 years to repay the total debt at elevation 83m, assuming that the works required to reach elevation 83m are completed by the year 2003. At elevation 76m, EBY's debt would never be repaid. It should be noted the government debt has an interest rate of 6% per annum.

Finally, it is necessary to take into account, that the privatization scheme proposed by Government assumes that the debt service payment obligation would remain with the Government, and would not be transferred to the Concessionaire.”

26. Management assumes an investment of US$5.5 billion would be required to reach 83 masl. It is evident that this is not the case. At 83 masl the reservoir would flood a much larger amount of land (as indicated in the attached map), basic infrastructure such as railways and the airport, and the heart of improved urban areas of Encarnación and Posadas (including homes, businesses, commerce), all of which would have to be replaced or compensated at substantial cost. The range of incremental costs of going to 83 masl is reported to be from US$800 million to around $2 billion. The Memorandum suggests that at elevation 76 masl EBY's debt could never be repaid. Given the facts just noted one has to question seriously whether the debt would ever be repaid at 83 masl once the full costs are taken into account.

**Action Plans**

27. The panel was asked by the Executive Directors to assess the Action Plans presented to them by Management at the February 28th, 1997, meeting of the Board.

28. Plan A, with a projected cost of $16 million and a completion date of December 1997, is intended to remedy actions that should have carried out prior to filling the reservoir in 1994. At this time, while some elements are completed, it is also clear that important commitments, such as the hydrogeological studies, cannot be completed by the end of the year.

29. Plan B, with a projected cost of $117 million and a completion date in the year 2000, includes complementary works needed to permit prolonged operation of the project at 76 masl, now a likely scenario. Given the early stage of this Plan, it is difficult to assess progress. The Panel does note, however, that major decisions have not yet been finalized with regard to wastewater treatment plants in Posadas and Encarnación, mitigating the effects of the dam on fisheries and on long-term supplies of clay to that major regional industry.

**Additional Requests**

30. In May 1997, the Panel received additional Requests from Argentine citizens alleging damage from the Project. The principal issues raised were the cost of replacement housing, quality of the housing and community infrastructure, and the economic plight of the brick-makers and fishermen.

31. Management provided a Response to these new Requests—included as Attachment A—and the Panel, recognizing the organic linkages between the original
Request and these new Requests, recommended to the Executive Directors that they be treated in the same Report. As a result, the present Report covers all pending issues on the Argentine and Paraguayan sides of the reservoir.

Compliance with Procedures

32. Bank environmental and resettlement procedures call for continued participation of potentially affected people from the outset. The Panel has found that the process has been neglected and now is all but discontinued. Bank supervision will be essential to ensure resumption of the participatory process.

33. Despite extensive but inconsistent supervision efforts, the Bank has failed to bring the Project into compliance with relevant Bank policies and procedures due to an ill-conceived Project design in the first place, compounded by changing standards and regulations over time, EBY bureaucratic procedures, and lack of financial resources.

34. Institutional strengthening of executing agencies in the areas of resettlement and environmental protection continues to be an issue that needs to be addressed by the Bank.

PART 1: PRESENT PROJECT PROBLEMS

1. Resettlement

Overview

35. Resettlement constitutes the largest and most complex of the actions required to address the impacts caused by the Yacyretá Project. To date, only a fraction (25 percent) of the total population to be affected has been resettled. The Request and Management’s Response regarding resettlement reflect considerably different views on the issues of: lack of institutional capacity of EBY and Government agencies to undertake a resettlement program; ineffective compensation systems; failure to maintain the productivity and standards-of-living of those relocated; and inadequate resettlement of the Mbya indigenous people.

36. This section of the Report is based on interviews with people in the Project area conducted by the Inspector and a consultant employed by the Panel.

37. People in areas to be resettled were questioned on their status prior to EBY involvement and what information they had been given about their rights or benefits. A chronology of their cases was compiled to determine the average length of time they had been waiting to be relocated and what negative effects the uncertainties about relocation has had on them. They were also asked to provide information on their relationship with EBY and with whom they interacted. Other questions included their level of satisfaction with proposed compensation.

38. The experience of the resettled population was further assessed through extensive interviews. Resettled individuals are divided into broad categories of urban residential, rural inhabitants, and brick-makers, which reflects the groupings used for the EBY programs of assistance. People from all categories on both sides of the reservoir were interviewed. The resettled communities in Posadas called Villa Lanús (A-32) and Villa Yacyretá (A-1) and the Buena Vista and San Pedro neighborhoods on the Encarnación side were visited. The rural settlement of Caraguata, indigenous resettlement Pindo, and
brick-maker resettlements of Nemesio Parma and El Porvenir (AR) and San Pedro (PY) were observed and relocated individuals interviewed.

39. There exists a large population not within the EBY 1990 census—called “adiciones” or “extra-censales”—which has been or is being relocated in the community of Ita Paso on the Paraguayan side. This settlement was also visited, as was a settlement of EBY-compensated but self-relocated bricklayers in the area of El Porvenir in the vicinity of Posadas.

40. The resettled communities were observed to determine the quality of the infrastructure and services, access to cities, and relative location with respect to previous locations. Questions followed similar lines as those for nonrelocated individuals: on the quality and level of satisfaction with compensation; from what area they had been relocated; what kind of ongoing assistance, if any, they had received; and what relationship they had at present with EBY. EBY officials responsible for relocation were also contacted for details on the process and their relationship with the communities.

41. The 1992 Resettlement and Environmental Mitigation Program (“REMP”) was reviewed to compare activities included in the present Action Plan with the policy and planning established in the REMP. The most recent Panel of Experts (“OP”) summary (VII Panel), which provided a status report of the implementation of the REMP programs, was also reviewed.

1.2 Resettled Population

42. The resettled population affected by the Yacyretá Dam Project encompasses several categories of people which are provided assistance by EBY programs based on their presence in the planned flood areas when a census was taken in 1990, land tenure, and occupation. Those individuals that were part of the 1990 comprehensive census, those with title to land, and those people who were counted and work as brick-makers are considered for, or entitled to, some level of compensation from EBY. These are people who are the targets of the Plan for Resettlement and Rehabilitation (PARR). The Plan was prepared in 1992 with the assistance of the Bank and is one of the guiding documents for the Plan of Action (Programa Base) presently in place to consolidate the 76–78 masl.

43. In addition to the resettled population recognized by EBY as their responsibility, there are additional families that have moved into the areas. These families have been attended to by the government agencies of the two countries involved in the project. The problem of additional families is serious because the numbers continue to increase and it is now estimated that the additional population is of the same order of magnitude as the original population to be resettled according to the 1990 census.

Paraguayan Side

44. The main resettlement communities on the Paraguayan side of the Paraná River are the neighborhoods of Buena Vista and San Pedro. These are urban neighborhoods where families were relocated in houses built by EBY. These houses were provided at no cost to the present occupants.

Buena Vista

45. Complaints center around the quality of some aspects of the houses (electrical, plumbing, etc.) and the amount of time EBY took to respond to their needs. Most took
possession approximately 4 years ago after waiting many years. Some did not receive prompt compensation for their productive infrastructure (store, workshop, etc.) and lost money due to the time lag while replacements were constructed (Request, paras. 32, 33). The owners interviewed did have title to their property and were to a large degree satisfied with their houses. Houses have one architectural style but come in several different sizes that are distributed according to beneficiary family size.

46. The relationship with EBY was regarded as very inadequate. Most of the information they receive is by television or radio or visits to EBY offices, given the proximity. Several were unsure of why they had been compensated first while others stayed behind, including family members who were not title holders.

47. EBY confirmed that there are 170 unoccupied houses in the Buena Vista neighborhood. It was explained that to avoid creating social conflicts the houses are being reserved for similarly higher income property owners who will be affected when the reservoir is filled to higher masl levels. A large piece of property exists adjacent to the Buena Vista neighborhood also owned by EBY. The school appears large and relatively well cared for. Most urban services seemed to be provided.

**SAN PEDRO**

48. The poor quality of the houses was singled out as one of the primary concerns of lower-income occupants. Field visits to the neighborhood confirmed the poor quality of the infrastructure. After 3 years of occupancy houses showed serious signs of deterioration and most of the inhabitants compared their houses with the ones in Buena Vista neighborhood. Some houses were abandoned and had been vandalized. Several people complained about the high costs of services after moving to the new neighborhood. The school seemed large but showed some of the same construction problems as some of the houses (roofing tiles falling off). Community infrastructure such as plazas and soccer fields appear unfinished.

49. With regard to the relationship of the community with EBY, people expressed concerns with the length of time they have been waiting to receive all of the promised infrastructure and support. They regard the EBY with suspicion based on having received little response to their requests and on promises not being met. Neighbors have now organized themselves into a community group to present petitions and improve the quality of their life. Among their requests is a bridge that would link them directly to the city (as they were prior to resettlement) since they presently have only one access to the main highway and those who walk across the Mboi-cae bridge are in serious danger of being hit by heavy traffic.

50. Many of the interviewed said that their immediate material situation had improved substantially. But they found difficulty in reentering productive economic activities (Request, paras. 29, 32, 33). Several small shop owners and other service providers indicated that they had lost many clients who were left behind and had a hard time making ends meet. They stated that they do not receive support from EBY for recomposing their productive workspace. Most felt that the brick-makers were privileged and received significant support from EBY for their economic activities and that they should receive the same treatment.

**SAN PEDRO BRICK-MAKERS**

51. In the area for relocated brick-makers there appeared to be satisfaction with compensation. Main concerns were related to long-term availability of raw material. The
present location of the brick-makers is on land without clay deposits and EBY transports clay from deposits. Based on suggestions by the Bank, there seems to be a move toward organizing the brick-makers and providing them with equipment to transport raw material to their factories. They are unsure of how this will work out.

52. Each beneficiary will receive an allotted amount of clay based on their previous production levels. The general view was that those who had received cash compensation for their production were in worse shape since many did not have the capacity to manage or invest their money prudently.

CARAGUA RURAL RESETTLEMENT

53. The roads to the Caraguata rural resettlement community are rocky but adequate. The roads within the community, however, seem poorly finished and narrow. The agricultural land is of mixed quality, with some families settled on sandy areas more suitable for pasture than agriculture. Inhabitants acknowledge having received food assistance and technical assistance for about 20 months but feel that conditions are very different and that it is difficult to make a living out of agriculture under the new conditions. The new lots are large (7 ha without house or 4 ha with house) and owners expect to get title.

54. Concerns are that on the islands where these people previously lived many animals could be maintained on large open expanses, which settlers now no longer have; land was exceedingly fertile and the humid climate was ideal for fruit growing; and incomes were typically supplemented by hunting, fishing, and honey collection. This diversity of possibilities does not exist in the new resettlements. Several also mentioned that the inhabitants of the community of San Miguel Potrero (also relocated islanders) were much worse off since they were about 30 km inland from the river, although they have a good outlet for their agricultural production in the town of Coronel Bogado.

55. The extent of EBY support at present seems limited to technical assistance for production of traditional crops for family consumption and some small sales of excess production if possible. EBY social workers indicated that they are working on aspects of health, education, community organization, and relations between neighbors (a problem has arisen from the transition of living on a sparsely populated islands to living now in close proximity).

SAN COSME

56. Houses seemed well built and most lots had small vegetable gardens in a small village of relocated fishermen in the town of San Cosme. Those interviewed said that their titles were being processed. They generally had problems finding work. On the island they could collect honey and wild animals, and that input into their incomes was lost now. They denounced illegal fishing by outsiders. They feel that islanders should have special access to fisheries but they are harassed by the authorities.

ITA PASO

57. Ita Paso is a resettlement neighborhood located approximately 8 km outside of the city of Encarnación. This area was purchased by the Government of Paraguay (GOP) through the Ministry of Public Works and Communication to fulfill the commitment to settle additional families who are not listed in the 1990 census performed by EBY.
58. The settlement is somewhat distant and surrounded by rural/semi-rural property. No housing is provided by EBY or the GOP. Services available include water tanks at several corners of the neighborhood which are filled approximately three times per week. Housing consists generally of small, wood plank houses constructed by the settlers and outdoor latrines. Most of the lots are about 12 x 30 meters in size and there appear to be many vegetable gardens. Bus services are available. A school was established in a small two-room house outside the neighborhood. Tent awnings have been added to the school to add space. Recently, Paraguayan news publications have highlighted the poor conditions of this school for educating the large number of children in the Ita Paso community.

59. The people interviewed appeared satisfied to be owning a piece of property no matter what the conditions. They are able to make improvements to their housing and have security of tenure, which they did not have in the Barril Paso neighborhood. Most indicated that they had been small farmers who had come from Itapua to the city seeking to improve their economic conditions. Lack of work nearby was a problem. The need for improved school and health services was highlighted as was the need for running water because the water tanks typically run out of water on the weekends.

PINDO

60. The Mbya indigenous settlement of Pindo is home to approximately 20 families settled there after leaving Yacyretá Island in the 1970s. The property was obtained from the National Electric Administration (ANDE) by EBY, which explains the presence of high tension wires crossing the property and questioned in the Request (para. 35).

61. A consultant anthropologist has recently been hired by EBY to provide a full assessment of this settlement and propose solutions to be funded under the Action Plan. In the past, EBY support has ranged from food donations to agricultural extension services under different Bank loans. A few of the members of the group have been supported in their high school and university studies by EBY.

62. The present plan will analyze the capacity of the agricultural soils this community is settled on. The anthropologist intends to seek alternatives for long-term sustenance through diversification of crops and possibly arts, crafts, and herbal medicines.

63. The issue of ancestral territories and ethnohistory of this Mbya group is to be included in the EBY review. The traditional uses of the forest resources of the region will also be analyzed and the results may indicate the adequacy or not of the present solution to support certain aspects of their culture, referred to in the Request.

ARGENTINA SIDE

AREA A-1

64. The main problem with this community, known as Villa Yacyretá, lies in the cost of the houses. The owners allege that the costs have been readjusted and the monthly payment is quite high given their income levels. EBY professional staff confirmed that the costs seemed to be high and the owners are being offered a deferred payment schedule that allows them to lower the monthly cost to a more acceptable level.

65. Owners are now being asked to title their land at the offices of the EBY notaries. The people do not want to sign, however, for fear of entering into a mortgage that they cannot pay and of having their houses foreclosed on in the future. This option also
requires people to begin paying municipal taxes and payment for several services that
EBY now covers. Little or no information has been provided to them and EBY officials do
not seem to have an official plan to ameliorate this situation.

66. This situation is exacerbated by the fact that the future houses to be provided by
EBY will be at no cost to those relocated and will be one basic model. It is expected that
this will cause friction with the paying population of homeowners and at the same time
that the newly relocated may have higher expectations for their housing after seeing the
quality of the previous resettlements. It is not clear at present how this situation will be
addressed. However, EBY seems to be analyzing alternatives.

**Area A3-2**

67. This neighborhood is a newer settlement which has not been fully finished for a
variety of reasons. Infrastructure such as the school and recreational center have not been
completed due to what seem to be contractual problems with the construction firm.

68. Water services are said to be insufficient for the number of people living there
and a police station is not available yet. The neighborhood does have sewage collection
and treatment in large settling ponds east of the city of Posadas. Houses have different
layouts and the occupants pay for their houses at rates set by EBY but with options based
on their payment capacity.

69. Several people here mentioned that they relied on day jobs to survive and the
distance from the city and cost of transportation were burdens that they did not have to
bear previously. Many jobs in the brick-making industry were said to be lost. Payment for
the houses was becoming difficult because the houses were reappraised recently, and peo-
ple were being pressured to sign titles with mortgage clauses, causing some fear.

70. EBY has announced publicly that it is in the process of solving the problem of
unfinished infrastructure. The Action Plan includes the construction of new housing
(approximately 500 units) to resettle the remaining population located between 76 and
78 masl.

**El Porvenir Brick-makers**

71. The settlement of El Porvenir is comprised of brick-makers from the Zaiman
Stream area who received compensation in cash from EBY and relocated themselves on
an area with clay to the southeast of Posadas. EBY is supposed to provide some infra-
structure such as access roads and water, but these have not been received yet.

72. These brick-makers indicated that the Nemesio-Parma brick-maker settlement
has a problem with access to clay. Only some of those relocated at that settlement have
clay on their property. They prefer El Porvenir since all properties have clay—even
though the clay is not as good in quality—and it is closer to the city.

73. This settlement seems to have adapted best to resettlement, possibly because
they picked the area themselves and also received cash at the same time to begin their
activities. Some complained that the time before they received their compensation was
extended and caused delays and hardships during their resettlement. It has taken two
years to regain prior levels of production.

74. Biologists at UNAM highlighted this site as containing many important plant
species, including some endemic ones, and were worried about the impacts of the
settlement.


NEMESIO PARMA BRICK-MAKERS

75. The Nemesio-Parma settlement is located several kilometers outside of Posadas, to the West of the city. The settlement was established for a large group of brick-makers (94) relocated from different areas. The brick-makers are in the process of creating and consolidating an Association with the support of EBY social workers and programs. The Association was formed partially as a result of Bank oversight. The Association is needed to help solve the issue of unequal access to clay deposits in the settlement. Only 45 percent of those resettled have direct access to clay deposits.

76. The *oleros* (brick-makers) indicated that they were originally unhappy with the choice of property for the settlement. EBY followed the recommendations of the Mines and Geology Ministry, which indicated that the clay was adequate for brick-making. The *oleros* have specific requirements for their clay because of the rudimentary techniques they use. They indicated that the clay on this settlement was known by the *oleros* to be inadequate and they protested but eventually moved because no other options were available to them. Areas west of the zone of Nemesio are more adequate for their needs and they hope that in the future, when the Association is financially stronger, they may buy other clay deposits.

77. The *oleros* would like to modernize their production. However, many factors conspire against this such as the high cost of production relative to Paraguayan brick, and the need for a factory, which would be quite costly. EBY intends to provide machinery to the Association to distribute clay to the *oleros*. It is not clear what will happen if certain *oleros* are not a part of the Association or if internal political issues break down an equitable clay distribution system. The Bank anticipates that at least 70 percent of the *oleros* will join the Association. There may be no other choice for those without clay deposits.

78. The Action Plan has programs to continue assisting the Nemesio-Parma *oleros* with a $250,000 budget for 1997. It is unclear if the assistance will continue over a longer period of time if necessary to ensure the economic sustainability of this settlement. Several activities were under implementation such as installation of a water system and construction of houses for extra-census *oleros*. The assistance by the social workers seems to emphasize strengthening of the Association and appeared quite participatory. Approximately five to six general assemblies of the Association were scheduled for the year. Participation of *oleros* in the assembly taking place at the time of the visit was high.

1.3 Future Resettlements

The number of people included in the 1990 census is far below the total number of people in the areas. EBY personnel estimate that the number on the Argentina side not counted in the census is larger than the number counted. Problems have also arisen now that many of the EBY beneficiary families have grown children that have families of their own living on their parents' property. These people are not counted as beneficiaries and can be expected to become a growing problem as resettlement activities advance with the Action Plan and peoples' expectations rise. Several complaints were heard about the inaccuracies of the census in 1990, particularly from people who had moved out of the areas canvassed because of floods that year and had not moved back in time to be counted. EBY social workers agreed that the census has errors and that areas were even left out.

79 In general, the people interviewed about future relocation said that relocation delays have been most damaging, particularly for those in the 76-78 masl interval. These
people do not move out because they understand that if they do they lose their rights to be compensated; therefore, they continue to live in very unsanitary conditions. On both sides of the river the lack of support and investment by city and provincial services was evident in areas to be flooded.

80. Most of those interviewed did not have much knowledge about the resettlement process, though they generally knew what rights they had. They could not mention any particular mechanism of communication that the EBY had set up for consultation on the places to which they would be relocated or the conditions they were to expect in the new areas. Several described situations in which their (now) grown children who were included in the earlier EBY census will not be able to move with them since they have subsequently married. This is a special category of people who are part of the census but get no compensation for their loss of housing.

81. It is evident that confidence among the people to be relocated has deteriorated completely. EBY social workers acknowledge this. The type of work these social workers can do is largely limited to informing people of whether they have a right to compensation. On the Posadas side there has been some work by EBY in trying to ensure community organization which would allow people to petition services from the government offices in the face of uncertain timeframes for relocation. On the Paraguayan side the social workers’ efforts in urban areas seem to be limited to providing information about the status of beneficiaries.

82. Data is collected monthly on the Argentina side and reviewed to provide modifications in the programs carried out by the social work team. People on the Posadas side also seemed to be more aware of the location of neighborhood offices and could identify the social workers. On the Paraguayan side this was not the case. No similar quantitative data was provided for that side and the general feeling of EBY personnel was that the work was somewhat less flexible and adaptable, relying strictly on the PARR. Most affected people could identify only the head of the resettlement program or the Director of EBY in Encarnación.

83. EBY social workers did feel that they would need to increase personnel and resources once people began to be shifted. Presently they have approximately 28 people on each side, one vehicle, and three computers at their disposal—which they feel is insufficient for the number of people they serve.

1.4 Review of EBY Consultant Report

84. The independent consultant report that evaluates the PARR—mentioned in the Management Response to the Request—was prepared in 1995 by two consultants who now are members of the Expert Panel on Resettlement. They provided a five-volume evaluation which covers the rural, brick-maker, and urban resettlements on both sides of the Parana River.

85. The objective of the study is to evaluate the “pertinence, efficiency, efficacy, and impacts” of the PARR. With respect to the objectives of the PARR and the programs adopted to deal with them the study indicates a relatively good correlation in the urban programs. However, the rural and peri-urban methods and programs do not adequately respond to the stated objectives of the PARR.

86. The report states that the group of peri-urban (mostly islanders and oleros) and rural inhabitants was not well analyzed before the rise in water level to 76 masl, possibly
because, among other reasons, EBY was restructuring its Social Welfare Department. The population was not studied well and alternatives based on the aspirations and profile of the affected families before the flooding were not analyzed in depth. These groups, unlike the urban inhabitants, are also characterized by weak or nonexistent community organizations. This meant that their needs were relegated to second place as the approach of the reservoir flooding prompted protests and waves of negotiations in the urban areas.

87. Conclusions regarding the urban resettlements indicate that the “product” is adequate based on the objectives of the REMP. However, the study criticizes the process through which the solutions were reached. The results in terms of physical infrastructure are satisfactory and recuperation of economic activities is progressing favorably. It points out, though, that those groups that were most affected are the ones least able to cope with loss of income. Problems include restructuring and relocation of the brick-making industry, inflation, and declines in small commercial activity in the port area of the city.

88. The San Pedro resettlement was particularly impacted in this respect, according to the study. The costs of transportation and improved infrastructure have caused a significant increase in expenses for household maintenance and food.

89. Another impact criticized was the mode of compensation implemented in Posadas. The fact that payments have been made by those relocated has changed the compensatory nature of the relocations. For newly resettled families a standard-size house will be provided at no cost. The study predicted conflicts based on these inequalities in solutions and recommended that EBY forgive the debts of the already relocated families. The experts recognized that this does not solve the conflicts but levels the playing field by making all those relocated nonpaying.

90. The study’s major conclusion on brick-makers indicates that the relocation and resumption of productive activities were seriously delayed, especially in Argentina. At the time of the study in 1995 the preconditions for production had not yet been achieved. The major positive aspect observed by the study was in the high level of housing infrastructure that has been provided for those relocated (including “extra-censales”).

1.5 Other Resettlement Issues

PARTICIPATION

91. The levels of participation identified and confirmed by affected parties varies significantly on each side of the Paraná and within the relocation programs themselves.

92. The REMP calls for a continual process of participation throughout the design and implementation of the relocation activities. This process was observed being implemented by EBY only with the Nemesio-Parma bricklayers—although other instances may exist. Solutions appear to be negotiated to a degree but primarily in the rush of completion or fulfillment of deadlines rather than in a well thought out participatory approach. The Action Plan calls for mainly “informational” types of activities with regard to future resettlement.

INCOME-GENERATING ACTIVITIES

93. Although the independent consultants study indicates successful recovery of income generation in resettled urban communities, to maintain the material improvements for most of those relocated requires an increase in income for others as well. This aspect does not seem to have been contemplated by any particular EBY program (except
for brick-makers and restricted to owners) and is an important limiting factor affecting many already relocated as well as those to be relocated in the future. This is particularly evident in the San Pedro neighborhood in Paraguay and in A3-2 in Argentina. Future relocations should take this issue into consideration.

**Outreach**

94. There appears to be an intensive public relations campaign on TV and radio. This campaign emphasizes the benefits that the Yacyretá Dam Project is having on communities, the environment, fishermen, and bricklayers in the zone of influence.

95. Most people interviewed reacted negatively to these campaigns, particularly the ones affected by the dam and who had been waiting for some time to receive compensation. The REMP indicated in 1992, in its "lessons learned" section, the need to avoid creating false expectations in the population through propaganda and institutional messages. It specifically recommended avoiding these messages in the future. Outreach and public relations are not discussed in the recent reviews of the REMP.

**1.6 Findings**

96. Information gathered shows that monitoring and oversight of the programs have been implemented, primarily through POE visits and the presence of a Resettlement Coordinator working closely with the social workers on both sides of the Paraná. Review of the original 1992 REMP (previously known as the PARR/PMMA) revealed that it addressed most of the issues included in the Request, including the need for ongoing participation, the dynamic nature of the population to be resettled and the need to reevaluate the beneficiary population, and the negative impacts of prolonging resettlement.

97. The main issues of concern revolve around the length of time taken for the implementation of the REMP programs, which has led to a significant breakdown in community relations. Compounding this is a weak program of social communication caused to a great extent by the lack of information available to EBY ground teams to provide to the populace. Fragmentation of the community framework by transferring people according to successive flood levels rather than seeking to maintain social structure has also caused significant stress to and hardship on the resettled communities. This fact was particularly emphasized by EBY resettlement workers and officials as a major obstacle to successfully carrying out their tasks. This fact was also highlighted by the most recent POE meeting, in May 1997. A clearer identification of all communities that are to be affected (78 masl and above) is required, if they are ultimately to be moved.

98. The fragility of the models selected for rehabilitation of certain groups is also of concern. The fishermen and island inhabitants seem to have a particular vulnerability given the radical change in lifestyle and the assumption that they can be productive in other environments. Previously they benefited from a diversity of wildlife, crops, and good soils that are not available to them in their present situation. Now the reality seems to be that they were placed into an urban commerce environment around Encarnación, San Cosme, Carmen del Parana, and Ayolas, on the Paraguayan side.

99. The impact of the relocation on certain segments of the San Pedro neighborhood (Encarnación), as highlighted in the Request, seems to be confirmed by this review and the independent consultant studies. Adverse effects on their incomes from the increased cost of transportation and changes in the brick-making industry have not been
analyzed; nor have programs based on such analyses been developed to consolidate this relocation effort.

100. In Posadas there are no plans for the solution of conflicts that may arise due to the differentiated housing made available to future as against former resettled communities (that is, new houses come in one size while older houses come in various sizes). Bid documents have already been distributed for the unique style housing solution to be constructed, which negates the possibility of substantially altering this type of solution as alluded to in the Independent study. However, as outlined in Part 3 of this review, considerable progress has been made with the decision to reduce the cost of housing to all Argentine beneficiaries, and to reduce it by 90 percent for those who cannot pay.

101. On both sides of the river, the solution of organizing the brick-makers into associations and cooperatives will need a long period of support by EBY or other groups. These types of organizations have significant internal political issues to overcome in many instances and, without support programs such as the ones EBY is providing, lack strong administrations. Longer-term support for the brick-maker settlements of Nemesio-Parma and San Pedro is needed to consolidate their organizations and promote self-sufficiency.

2. Water Quality

2.1 Overview

Specific issues raised in the Request include the presence of submerged vegetation that was not removed, which could negatively affect water quality (paras. 38, 43, 44, 45) and movement of water in the lake (para. 44); effects on the water table and hydrogeology (para. 46); and water quality as a factor in the increase of water-borne diseases (para. 34).

102. A survey of the sanitary conditions of lateral bays of the cities of Encarnación and Posadas was carried out to assess the present and potential effects on the populations of these cities. Meetings were also held with personnel of the EBY Environmental Department to clarify issues raised by the Requesters and to inquire about the water quality monitoring system presently in place, or if such a program existed.

103. The areas visited included the major streams affected near the cities of Encarnación and Posadas, the Quiteria and Mboi-cae on the Paraguayan side, and the Zaiman and Martires in Argentina. Other smaller streams crossing the city, particularly in Posadas, were also observed. Field visits to the west of Encarnación in the cities of Carmen del Paraná and San Cosme provided information on the Tacuary Stream and Aguapey Stream.

104. After a visual inspection, water samples were taken at the larger streams in Encarnación and Posadas. Six samples were taken, including one blank sample as a lab control. These samples, which were taken only to provide confirmation of complaints by neighbors and of EBY's own water quality analyses, provide a "snapshot" of the overall conditions of the streams. Finally, a review of documents and sample data provided by EBY were analyzed and reviewed for adequacy and comprehensiveness.

2.2 Vegetation

105. The Request makes specific references to the impact of emergent and submerged vegetation that was not removed prior to filling at 76 masl. Specific concerns are
that the vegetation would provide conditions for growth of aquatic weeds, decrease water circulation, and inhibit oxygen distribution among others (paras. 38, 43, 44, 45).

106. The 1992 Environmental Assessment (“EA”) states, regarding vegetation removal, the need for studies to determine the priority areas for deforestation or clearing for the purpose of preventing anaerobic conditions caused by decomposition of rotting organic matter. “Given the cost of the deforestation, it is necessary to perform in-depth studies that permit the definition of specific areas for biomass removal.” Problem areas were identified in the EA including the areas around the floodplain of Ombu Stream, Yacarey Stream, and Rincon Santa Maria, Isla Talavera, and the center of Yacyretá Island.

107. Review of documentation provided by EBY indicates that there were unforeseen problems with organic matter from wetlands on the flooded island of Yacyretá that loosened from the sandy substrate of the island and floated toward the dam, causing problems for the generation of electricity in December 1994. These large floating mats of vegetation are being diverted by a private contractor to the Aña Cua branch spillway. There is some concern that this method of disposal could pose problems with the quality of potable water in the Paraguayan city of Ayolas. Interviews with members of the contractor team indicated that they were towing the islands in the direction of the right side of the Parana, in small inlets, and allowing the wind and waves to break them up. This is a recurring problem of considerable magnitude that should be included specifically in operating costs as well as with respect to environmental impacts and the Aña Cua branch solution.

**Paraguay Side**

108. General conditions on the coast near the city of Encarnación indicated that vegetation had been removed prior to the filling to a large extent. Some small patches of emergent or rotting vegetation along the Paraná River coast were observed from the area between the Mboi-cae and Quiteria streams and the area up to Isla del Medio. Local fisherman indicated that the vegetation had been cleared up roughly to the Tacuary Stream. No large stagnant water areas or masses of floating vegetation were observed growing on the Paraná River. Many recreational and professional fisherman were noted along the coast and in canoes.

**Arroyo Mboi-cae**

109. An important area where submerged vegetation was observed was at the entrance of the Mboi-cae. Rotting vegetation, some slightly higher areas with live vegetation, and areas of attached macrophytes have created some miniature bays or enclosures of water around the mouth of this stream. In these bays along the side of the stream are large quantities of floating aquatic weeds. Movement of the water was observed superficially to be inland from the river with little removal of weeds and floating matter on the bay. Heavy rains produced some flushing of floating vegetation and solids and some accumulation in sides of enclosed areas of baylets.

**Arroyo Quiteria**

110. This stream presented no major areas of submerged vegetation. This stream has a wider low-lying grassy floodplain used as animal pasture and some evidence of rice growing. Some smaller areas of floating aquatic vegetation are dominated primarily by “camalotes” (water hyacinth). There appeared to be no dying or dead fish to indicate
anoxic conditions in the bay. The areas immediately surrounding this stream are somewhat more uninhabited than other urban streams observed.

CARMEN del PARANÁ, and SAN COSME and DAMIAN

111. The margins of the town of Carmen del Paraná showed signs of having vegetation removed. Ybycui island in the Paraná River had large areas of emergent rotted vegetation. The port area of this town had some vegetation impeding easy access to Paraná River. From the town of San Cosme vegetation around the Yacyretá Island was clearly visible.

112. Representatives of the local government and a rural inhabitant of Carmen del Paraná alleged that EBY showed Bank teams a site specifically prepared for the occasion which did not reflect the true extent of vegetation removal, which was far less than scheduled. These representatives also indicated that the town of Coronel Bogado had already spent substantial resources of their own budget on removing vegetation which had been adversely affecting their tourist sport-fishing industry. They feel that there is an increase in the mosquito and bat population since the reservoir was filled.

113. The Mayor and City Council of San Cosme allege that the vegetation removal process is incomplete and that large tires had been burned by EBY on the Island of Yacyreta and the banks to make it look to the Bank representatives over-flying the area as though vegetation removal activities were being carried out.

ARGENTINA SIDE

114. The coast along the Argentina side of the Paraná River has a steeper drop than along the Paraguay side and less vegetation was noted there. This bank also presents more human alteration and ongoing development of the waterfront from Posadas moving west to the mouth of the Martires stream, as evidenced by the many recreational clubs and housing developments.

ARROYO MARTIRES

115. This stream has a long parallel line of submerged and semi-submerged vegetation along the entire mouth of the bay. Significant quantities of attached and floating aquatic vegetation are growing in the more stagnant areas. The area was also visited for sampling after a heavy rainstorm and did not present the flushing phenomenon observed in some of the other streams and bays. Significant amounts of floating vegetation remained even after the rainstorms. Little water movement was noted.

RINCON SANTA MARIA

116. From the coast of the Santa Maria Reserve, general observations were made of the water quality and presence of aquatic vegetation. No extensive areas of submerged vegetation were noted, nor extensive floating masses of vegetation. No dead fish, foul odors, or other indicators of anaerobic conditions were detected.

2.3 EBY Monitoring Program

117. A summary of EBY's water quality monitoring results indicate that there are three major impacts on water quality as a result of Yacyretá Dam. The first is the gas supersaturation phenomenon which caused large fish kills in August and October of 1994. The second is the appearance of large floating masses of vegetation coming from the wetlands
on the submerged island of Yacyretá, posing a threat to the dam turbines and water quality for the city of Ayolas downstream. The third impact is the decline in quality of water in the urban stagnant areas created in the floodplains of streams such as the Martires Stream.

118. The program carried out by EBY is a joint program between the Paraguay and Argentina side. Activities of the Environment Department are coordinated primarily out of the offices in the towns of Ayolas and Ituzaingo.

119. The watershed above Yacyretá Dam is over 1 million km² and over 50 dams exist within the Paraná basin. Yacyretá is not the only factor affecting hydrology downstream and in the reservoir. Data on historical levels of the river indicate that floods of up to the 80 masl level have occurred with some frequency. The new EBY budgets and programming (Plan Base) provide mathematical models capable of indicating problem areas in the reservoir and assisting in the management of water quality.

120. EBY indicates that removal of vegetation in the area was carried out based on mathematical modeling done by EBY to indicate areas of water movement, thermal stratification, and oxygen response to the filling of the reservoir. The Department has prepared a table of average flow and retention times in the reservoir which indicates that average flow is more similar to a lotic (flowing) system rather than a lentic (lake) system. It was not clear if the flow continued to be monitored in the field as part of their normal data collection. It was indicated, however, that the present water quality monitoring stations had been located in important areas they thought could be problematic due to lower water flows.

121. Water quality has been monitored since 1993 through agreements with the University of Misiones, CERIDE of Cordoba, and the National University of Asunció (FACEN). These higher education institutions were asked to perform the studies because they are considered capable of providing an independent assessment of water quality and permit training of qualified local human resources.

122. A baseline study performed in 1993 indicated high levels of contamination of bacterial origin around the cities of Posadas and Encarnación, which exceeded PAHO health standards. Measurements have been made continuously since that time. Water quality is monitored along the river above Posadas from the city of Puerto Yguazu. A map was presented to indicate the number of monitoring stations and data provided as evidence from a number of these stations on oxygen concentrations and other parameters. Sampling is performed monthly for physical/chemical/bacteriological parameters and every three months for pesticides and heavy metals. A more refined monitoring program is included within the Master Plan for Encarnación to be implemented under the Action Plan. This is necessary because present monitoring systems were designed to address overall quality in the reservoir and not for the purpose of assessing risks to the urban population.

123. EBY believes that water quality has not declined significantly thanks primarily to the significant flow of water through the reservoir. Problems exist, however, in regard to the people in contact with the rising waters and water tables, which will be improved through the relocation efforts and the implementation of the complementary works to be constructed in the cities adjacent to the reservoirs. They do expect problems such as eutrophication in the bays in the future due to heavy phosphorous loads and higher retention times. Water table changes have also been anticipated in the preparation of Terms of References for these studies (see 2.5, below).

124. EBY professionals highlighted the fact that they have the capacity to respond to impacts not contemplated in the EA and other studies. They feel they have been able to
effectively alter the operations of the dam spillways to solve the fish-kill problem and have contracted for the removal of floating vegetation. Ongoing experiments and studies are being carried out with the Universidad Nacional del Nordeste of Corrientes, on the effects of gas super-saturation. These studies will provide monitoring methods to detect problems and guide dam operations in the future.

2.4 Sample Analyses

125. Samples were taken in the main streams of Encarnación and Posadas to confirm data presented by EBY. Five samples were taken in total. Sampling was performed in areas with easy access and which would demonstrate to the greatest extent, the impact of urban/suburban discharges to the system. Samples were taken on May 20, 1997, as indicated below:

<table>
<thead>
<tr>
<th>Number</th>
<th>Location</th>
</tr>
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<tbody>
<tr>
<td>Q-1</td>
<td>Arroyo Quiteria</td>
</tr>
<tr>
<td>MC-1</td>
<td>Arroyo Mboi-cae</td>
</tr>
<tr>
<td>QC-1</td>
<td>Blank sample</td>
</tr>
<tr>
<td>Z-1</td>
<td>Arroyo Zaiman</td>
</tr>
<tr>
<td>M-1</td>
<td>Arroyo Martires (side stream)</td>
</tr>
<tr>
<td>M-2</td>
<td>Arroyo Martires</td>
</tr>
</tbody>
</table>

Samples were sent to Asunción for analysis at a local private laboratory. Parameters analyzed for are BOD, COD, pH, and phosphorous. Labs were not able to provide fecal coliform analysis; however, they indicate that ammonia analysis is a good surrogate measure. The analyses performed confirm findings of previous analyses in these urban streams and follow patterns expected given the contaminant loading they receive from each watershed.

126. The Paraguayan bank streams indicate higher levels overall for biochemical oxygen demand, ammonia, phosphorous, and suspended solids. These streams receive high loads of contaminants from urban settlements, a garbage dump, and a slaughterhouse. Ammonia levels are particularly high in the Mboi-cae Stream adjacent to the slaughterhouse. The continued operation of the Encarnación slaughterhouse, with raw discharge into the reservoir, is one of the most flagrant violations to environmental and health standards; yet there is still no plan for its relocation or other permanent solution.

127. On the Argentina side the highest values are in the Zaiman Stream, which also receives slaughterhouse effluents and has the Posadas municipal garbage dump located in its watershed (as indicated by EBY technical staff). The Martires Stream, located on the Western side of Posadas, indicates higher values at the Rowing Club (near its confluence with the Paraná), after it receives substantial contaminant loading from large housing settlements.

2.5 Water Table

128. The Request highlights the impacts of the dam on the hydrogeology within its zone of influence (paras. 30 and 46). These sections call for studies on the effects on the water table in the urban areas and along the right bank (potentially produced by the bentonite wall under the dam).
129. The EA of the Yacyretá II Hydroelectric Project (1992) mentions groundwater only briefly (three paragraphs), in general terms. The study highlights that the increase in the reservoir can impact underground waters by connecting aquifers and cause the water table to rise. Problems may occur in urban and rural areas, causing the formation of swamps and salinization of soils and providing conditions for disease vectors to spread. However, no comprehensive studies have been carried out to measure long-term impacts and changes in soil characteristics.

130. The issue of groundwater quality and the rising water table was brought up on both sides of the river by inhabitants, representatives of local groups, and EBY social workers. Inhabitants pointed out that their latrines have been flooded in large part with the rise of waters to the 76 masl. Absorptive capacity of the land has also decreased and post-flood drying of the areas takes much longer.

131. In the town of Carmen del Parana the rising water table is of particular concern to the Mayor and individuals interviewed, since the water table is very shallow there even at the highest levels (avg. 1 to 3 meters below surface). They feel that even raising the level to 78 masl could create a great problem.

132. The situation of underground water flow and water table levels in the area of influence of the Yacyretá Dam has to date not been the subject of an objective scientific study, according to EBY officials.

133. EBY officials indicated that they have distributed the bid documents for the initial hydrogeological studies. At the time of this Report the final bids should have been received. However, these studies seem to be limited to the urban areas and have a budget of $534,840 in accordance with the Action Plan funded under Bank Loan 2854. This is clearly insufficient and Management is urged to develop a GIS-based monitoring system to correlate all data on a reservoirwide scale.

2.6 Water Quality and Disease

134. The issue of water quality as a factor in increasing the incidence of water-borne diseases is included in the Request (para. 34). It is analyzed from an epidemiological point of view in section 3, below.

135. The analyses performed, in addition to the reports reviewed at EBY, indicate that a contamination problem existed in the urban areas of Posadas and Encarnación before the reservoir. Water quality monitoring has been performed by different consulting firms contracted by EBY since 1980. The information shows high levels (above acceptable limits for potable water use) of fecal coliforms around the Posadas coastline and somewhat lower levels in the Encarnación area (with the exception of the Mboi-cae Stream areas). The human settlements in proximity or direct contact with the banks of the Paraná river and adjacent urban streams are presently (and have been for some time) at high risk for water-borne disease.

136. The EBY summary of water quality effects of the reservoir indicates that one of its impacts is the formation of stagnant bays in the floodplains of urban streams and a subsequent decline in water quality, especially the dissolved oxygen and pH levels, resulting in more unfavorable conditions for humans in these areas than had already existed due to urban contamination.

137. The Action Plan presently being implemented by EBY includes several actions to address the existing and potential problems that may arise due to these conditions. Among the actions being carried out under this plan are:
• Closure of the Municipal Slaughterhouse of Encarnación
• Wastewater collection and treatment systems for Encarnación and Posadas
• Cleaning and de-populating the coastline and closure of latrines up to the 78 masl
• Continuing the Ministry of Health cooperative agreements to support public health
• Preparation of an Emergency Action Plan for floods
• Preparation of industrial waste guidelines
• Disease vector monitoring

Each of these actions should be monitored closely.

2.7 Aña Cua Branch

138. The effects of the Yacyretá dam on the Aña Cua Branch of the Paraná River include issues related to biodiversity, water quality, and fisheries. The Request makes specific allegations regarding this part of the river in paragraphs 38, 40-42. Specifically, it refers to effects of the drying of the branch for long periods during lower flows in the Paraná and to statements the Requesters have received from the Inter-American Development Bank (“IDB”) and EBY that the mitigation programs would not be implemented.

139. Management Response to these claims states that programs exist to:
• construct mini-dams downstream from the spillway;
• monitor water quality and effects on flora and fauna;
• design “ecological” operating guidelines;
• relocate water and sanitation infrastructure for Ayolas;
• control illegal fishing; and
• provide for community fisheries programs.

140. The POE in its most recent review analyzes the possible alternatives for the Aña Cua Branch and agrees with the implementation of the mini-dams. It indicates that this solution presents some problems regarding commercial and sport fishing, fish migration, and possible increase in vegetation growth and presence of disease vectors. This appears to be correct based on interviews, analysis of the Action Plan, and discussion with Bank staff. Presently $14 million is budgeted for the construction of the mini-dams and complementary works. It is not clear how the mitigation measures are to be carried out, or whether they are being planned with participation of the affected parties, especially the fishermen of the Ayolas area.

141. The proposed mini-dam solution to the Aña Cua Branch requires proper environmental assessment and close coordination with operation of the reservoir. It is bound to have significant ecological impacts since it would change a free-flowing river with three mini-reservoirs. Impacts on fishing are also likely to be significant.

2.8 Encarnación Treatment Plant

142. A review of the proposed wastewater treatment plant was requested by the Panel because of allegations in the Request (para. 34) of detrimental environmental health conditions presently prevailing in several riverside communities of Encarnación as well as specific claims made by these neighborhoods directly to the Panel.

143. The Master Plan for Encarnación, prepared by EBY as part of the mitigation measures for filling of the reservoir creation, includes the expansion of the sewage collection system of the city and the treatment of wastes in a plant planned for construction in the vicinity of the Quiteria Stream.
144. The planned treatment for the wastewater involves a series of anaerobic and facultative lagoons to degrade the organic wastes. The system was originally proposed in 1993 and the final plan impact statement was presented in 1996 for approval by the MAG authorities. Final approval of the EIA was granted in October 1996. In the approval decree, the MAG requires EBY to minimize the impacts on human settlements and provide for a 200 meter buffer zone around the plant.

145. Beginning in 1995 the neighborhood commission of Barrio Nueva Esperanza has campaigned actively against the establishment of this treatment plant. The commission alleges potential impacts on health, tourism, environment, and recreation and has requested revisions of these plans including the relocation of the proposed plant.

146. The EBY coordinator for the urban sanitation works and IDB officials indicated that the final design of the proposed treatment plant was going to be fully reviewed and alternatives presented by an independent consultant chosen by the Municipality and community groups. The final options for design and relocation will be decided based on consultation with the Municipality and public hearings.

2.9 Findings

147. Based on the information gathered, review of existing documentation, and interviews with professionals in EBY, universities, and private consulting firms, the Water Quality Monitoring Program being implemented is providing adequate data on the evolution of the reservoir, information for the actual management of the Yacyretá Dam, and guidance for implementation of the mitigation programs. However, more specifically targeted data is required to assess risks to the population living near the stagnant lateral bays in urban areas.

148. Areas that may be strengthened or could benefit from further evaluation (especially to determine if the magnitude of the efforts proposed in the Action Plan are enough) include:

- **Hydrogeology:** The present scope of the hydrogeological studies, which are about two years overdue, seems to be limited to the urban areas around Encarnación and Posadas and does not provide a regional overview of the effects of the reservoir to permit mitigation of negative effects where necessary.

- **Vegetation removal:** The Mboi-cae and Martires Stream subreservoirs may benefit from improved vegetation monitoring/removal programs. Even with the improvements in wastewater treatment, there will still be significant nutrient loading from urban runoff and retention times will increase as water level rises. It was unclear from the interviews and EBY documentation to what extent vegetation removal in these areas is contemplated in the Action Plan.

- **Reservoir Management:** EBY personnel seem to be promoting a more integrated approach to water quality management (and fisheries use) and this has been demonstrated through efforts in establishing watershed management guidelines and legislation. EBY is reluctant, though, to take a leadership role in this process and is looking to entities such as the Comisión Mixta Paraguay-Paraná (COMIP) to do so. However, given the reality that the Entity is the largest water user and one of the financially strongest in terms of environmental funding (as compared to local and national government agencies located within the watersheds), it is seen as the leader in this respect and might inevitably activate more discussion and implementation of policy for sustainable management of the dam zone of influence.
• **Aña Cua Branch:** Provision for participatory planning mechanisms—needed to mitigate some of the social impacts highlighted in the POE review and other analyses—should be included in the design and implementation of the Aña Cua Branch mini-dam projects.

### 3. Epidemiology

#### 3.1 Overview

149. The Request refers to health and epidemiology issues in paragraphs 30, 34, and 51. The impacts stated are: effects from contaminated wells and filled latrines; potential for increase in water-borne diseases such as diarrhea, anemia, and parasitic diseases; complaints by affected population of fevers; inadequate health center attention; and impoverished nutrition due to adverse impacts on fish resources.

150. The EA indicates the presence of numerous water-borne diseases in the area prior to filling the reservoir. These include diarrhea, cholera, parasites, malaria, and typhoid. At the 76 masl the EA does not predict major impacts on human health. Potential impacts include schistosomiasis and malaria. Maximum potential for health impacts is predicted for higher levels of the reservoir, especially in the urban and suburban areas.

151. Epidemiological information was gathered, on the Paraguayan side, through interviews with Ministry of Health officials; and on the Posadas side, interviews with EBY representatives from the Social and Environmental Departments along with professionals in epidemiology from the Ministry of Health of the Province of Misiones.

#### 3.2 Paraguay

152. The Ministry of Health of Paraguay (MHP) collaborates with EBY through a cooperative agreement with the objective of monitoring health and epidemiological data and to introduce specific programs to stem the increase of water-related diseases such as diarrhea, parasitic infections, and malaria.

153. MHP statistics indicate no cases of dengue fever, yellow fever, or malaria since 1992. Schistosomiasis has not been detected in the reservoir area. However, the snail which is a vector has been detected and, in coordination with Argentina, the snails are collected weekly for analysis. Statistics for diarrhea apparently show an increase since 1993 but the number of people included in the sample population has increased from 23,000 to 139,000.

154. The data indicate an increase in respiratory illnesses which are primarily attributed to poor living conditions in the marginal areas and the length of time people now are in contact with contaminated water and poor nutrition in those communities. Statistics are taken in a global context and populations affected or closest to the reservoir are not sampled independently or analyzed separately to determine changes in their specific situation at new water levels. Therefore, since there is no specifically targeted data for the population at risk, it is not possible to draw any conclusion with respect to the impact of increased water levels on health conditions.

155. The incidence of canine rabies also seems to have increased because of vampire bats that have come to the mainland from flooded islands as well as a poor animal
vaccination program. A new program started in 1996 aims to stem this problem through massive vaccination.

156. The MHP emphasizes education as one of the most important aspects and this is carried out with some support for salaries from EBY. They did emphasize that the amount received from EBY was somewhat small and did not provide funds to increase staffing in response to needs created by the reservoir. The funds have allowed them to improve the salaries of employees and extend their working hours, to strengthen some clinics, and to provide medicine. EBY will provide approximately US$150,000 in 1997 for health programs on the Paraguayan side.

157. Monitoring of vectors is deemed to be very good. The Servicio Nacional para Erradicación del Paludismo (SENEPA) is responsible for vector monitoring and community control and education. Larval mosquito levels are said to be low.

3.3 Argentina

158. EBY has started its own program to support health education and extension in the neighborhoods in the face of diminished services from the Ministry. The objective is to organize groups that can channel some of the needs and requests to government services. Some traditional medicine practitioners have also been incorporated into training programs to help cover needs.

159. Vector monitoring is done periodically through agreements with the University of La Plata for identification of entomological samples. Data was not available at EBY for basic health or vector statistics.

160. Information available was compiled from specific health centers around the city. Social workers in the neighborhoods known as “efectores” provide information to the centers based on their knowledge of the health of individuals in each sector of the city. Statistics are compiled by disease and reporting from the local health clinics is spotty. The best data came from the regional or larger health centers, making it difficult to determine the exact location specific cases of disease came from.

161. Malaria and yellow fever have been tracked for many years in the Province and are not found even though the Aedes mosquito has been detected. Monitoring for schistosomiasis is also done but it has not been detected.

162. Regarding the agreement with EBY, the representatives felt it was adequate. The greatest problem stemmed from the slow pace at which counterpart funds were made available by the Government of Misiones to implement the programs. These delays slowed implementation even though EBY was ready to provide support. Presently, an expedited mechanism has been found to circumvent the need to transfer funds from the Ministry of Finance and allow shorter reaction times.

163. As in Paraguay, the funding available from EBY goes in great part to supplement salaries of personnel already working for the Ministry and to fund existing programs. Specific programs in the areas of Health Extension/Education are enthusiastically welcomed by the Ministry, but they have few materials to work with.

3.4 Findings

164. Based on the information gathered it is not possible to distinguish the effects of the reservoir on affected or at-risk populations, from the rest of the population in Posadas, Encarnación, and the neighboring areas. The data presented, however, shows
little or no presence of the more serious diseases associated with epidemics such as malaria and schistosomiasis.

165. The counterpart agencies on both sides of the Paraná River seem to have the capacity for data collection and monitoring of diseases. The programs implemented by EBY are significant in terms of the financial support to the regional and provincial health agencies but do not specifically address the needs of people in the riverside neighborhoods most affected by the reservoir. The funding is general in its support of the Ministries and does not provide specific personnel to support the impacted areas and populations. More specifically:

- There is insufficient support for neighborhood extension and the supply of doctors is inadequate, especially for those waiting to relocate and those who are between the 76 and 78 masl.
- Disaggregated data is not available for the at-risk population to allow accurate monitoring of health impacts and direct assistance.

4. Biodiversity and Reserves

4.1 Overview

166. A major emphasis of the Request is on the issue of biodiversity conservation and reserves (paras. 26, 37, 38, 52–63). The Request criticizes the Environmental Assessment (“EA”) for not having been prepared with local participation and having left out many important environmental issues. The lack of an Environmental Trust Fund, inadequate biodiversity baselines and compensatory reserves programs, and the undermining of international environmental treaties are alleged. Criticism is also aimed at the animal rescue program and the fact that most of the reserves established are in Argentina.

167. The EA provides baseline biological information based on studies of the Centro de Datos para la Conservación (Ministry of Agriculture—Paraguay), the Ministerio de Ecologia y Recursos Renovables Naturales de Misiones, EBY professionals, and consulting firms. The study indicates 107,600 ha of different ecosystems to be flooded at 83 masl.

168. Mitigation measures are included in the REMP. Three major themes are emphasized to rehabilitate and protect natural resources: ecosystem rehabilitation, delineation and management of reserves, reforestation and re-population of species of flora and fauna affected by the reservoir.

169. In addition to a documentation review, visits were made to reserves and EBY personnel responsible for reserve management and implementation were interviewed. Biologists, representatives of NGOs, and government officials were interviewed in Paraguay and Argentina regarding the protected areas programs established by EBY.

4.2 Paraguay

170. Ecosystems that belonged to Paraguay constitute the largest portion of territory flooded by the creation of the Yacyretá Dam reservoir. Approximately 80,000 ha of Paraguayan ecosystems are to be affected at 83 masl.

171. According to the latest documentation regarding EBY’s implementation of the REMP, in Paraguay the scope of the Action Plan (76 masl) includes protection of the Yacyretá Island Protected Area (9,000 ha) and continued support of the zoological collection in the Atinguy refuge. Approximately US$550,000 are budgeted in the Action
Plan to consolidate tenure of the area and US$180,000 over three years to create the reserve. In 1999 implementation is planned for the Yabebyry Reserve (30,000 ha).

**FUNDACION MOISES BERTONI**

172. The areas of greatest biological importance are Yabebyry and the western tip of Yacyretá Island. The first is a mosaic of habitats adequate for the Marsh Deer and containing some tall forests. Downstream islands were assessed for their conservation potential. However, they are subject to periodic flooding and if other dams were to be constructed in the future any efforts would be negated.

173. Yacyretá Island is seriously degraded by human presence and the impacts of dam construction but it presents important examples of ecosystems that were lost on the east end of the island. Ecological studies conducted prior to the flooding were general, providing information primarily on structure and not on function of the systems.

174. The Paraguayan System of Protected Areas lost a great deal in the flooding that has not been compensated. Paraguay lost a unique protected area that was not subject to intense human pressure. The reliance of EBY on the decree establishing Yabebyry may be inadequate. The creation of Yabebyry and Yacyretá Island reserves would be a good start to the protected areas system of Yacyretá but EBY may need better trained staff to establish and manage the system.

175. During the public consultation on the design of the REMP and evaluation of the EA, knowledgeable NGOs had only two days to review the documentation provided for the meeting.

**DIRECCION DE PARQUES NACIONALES Y VIDA SILVESTRE**

176. DPNVS and EBY had a cooperative agreement regarding fauna (during the rescue program), which has now expired. EBY had made a commitment to purchase the area but later said that the funds were not available for the purchase. The cadastre has been prepared for the purchase.

177. The DPNVS feels that, as in the case of Itaipu Dam, the EBY should also have its system of protected compensatory areas. The expectation is that a large entity such as EBY will provide the funds for purchase, similar to the Itaipu experience. The resources EBY is providing for Yacyretá Island would be better used in the implementation of Yabebyry, in EBY's view. The tip of the island is subject to intense population pressure that will grow in time and there are doubts about EBY's capacity to manage the area. Animals relocated from the rescue operation are being hunted.

178. The priority for investments in land purchase at this time for the DPNVS is in areas of the SINASIP such as Ypoa Lake (proposed Ramsar site) and San Rafael (Interior Atlantic Forest). These areas are subject to greater pressures and are a higher priority for conservation. The limited funding for land purchases and the presence of a large Bank-financed project practically negate the possibility of receiving funds for investing heavily in the Yabebyry Reserve.

179. Inquiries about the animal rescue program, which DPNVS collaborated on through a cooperative agreement with EBY and the Japanese Cooperation Agency (JICA), were made with responsible personnel. They indicated that the most recent telemetry data on relocated Marsh Deer had positive and negative results. The Marsh Deer seemed to have adapted well to their new environment; however, up to 50 percent of them had
been hunted in the area of Yabebyry. Confirmation was also obtained from CITES personnel that sites used to release monkeys on Yacyretá Island had been cleared recently.

180. It was not clear why the implementation of Yabebyry was delayed until the flooding to 83 masl. Implementation of the reserves up to this point has been carried out by EBY without an agreement with the Sub-Secretariat of Natural Resources and Environment of Paraguay (SSRNMA).

181. Implementation is presently advanced for Yacyretá Island Reserve. The TORs for infrastructure (including fencing and lookouts) and equipment for park guards have been prepared. The dumps on the Island have been closed and an agreement is being prepared to sign with the Paraguayan Air Force to cooperate in protecting the reserve.

182. Biodiversity studies being contemplated under the Action Plan—at a cost of $27,000—appear to be for a Rapid Ecological Assessment by the SSRNMA of one of the Paraguayan reserves.

4.3 Argentina

183. The majority of the protected areas proposed for the compensation and mitigation activities are in Argentina, largely in the Province of Corrientes, west of Yacyretá Dam. Approximately 120,000 ha are contemplated for protection under 10 reserves with implementation dates ranging from 1997 to the year 2002. The immediate plan is the protection of 52,500 ha in the reserves of Galarza, Apipe, and Santa Maria. The development of these reserves is included in the Action Plan with estimated budgets of $450,000.

184. The establishment of the reserves in the Corrientes Province responds primarily to an urgent need before the filling of the reservoir. This fact is confirmed in the Management Response, paragraph 3.55 (public land available, more favorable expropriation law). Implementation of the declared areas has been delayed for several years since declaration for lack of funds. In 1996, when money began flowing, implementation began with Santa Maria Reserve, which now has one park guard and one new pickup truck.

185. The specialists recognize that Santa Maria Reserve is ecologically poor but has some interesting grasslands and is a good environmental education medium, which they hope to emphasize in the implementation. Galarza and Apipe Reserves are to be managed by the Sub-Secretaria de Recursos Naturales (SSRN) of Corrientes Province. EBY will be funding the implementation of these areas under the Action Plan, including the hiring of park guards and the construction of guard posts. One guard is planned for Galarza and two for Apipe Reserve. Money restrictions limited guards to this number. The SSRN requested four Guards for Apipe and two or three for each unit in the Ibera wetlands.

186. The configuration of the Ibera wetlands reserves could not be explained clearly. The four reserves are disseminated throughout the wetlands area. Three are square and one is a narrow L-shape. According to the EBY, the wetland reserve design conforms to the need to conserve certain core areas. The Galarza reserve appears to cut a large lake in two portions.

187. The capacity of the SSRN to manage the conservation units was viewed as weak. Corrientes Province is not managing any parks outside of the ones being implemented with EBY and therefore has little experience. The technicians are trained primarily as hunting and fishing wardens. Only one person presently acts as a liaison between EBY and the SSRN.
Biodiversity studies were performed on the Argentina side primarily after funds became available in 1992. The Paraguayan side had begun somewhat earlier with the CDC studies of 1987. Areas which were highlighted for further studies include the floodplain of the Garupa Stream in Misiones Province. These studies are not contemplated in the present Action Plan.

In the Santa Maria Reserve the guard post is well constructed and has an adjacent storage shed. The facilities are not well configured to receive visitors at present. There do not seem to be significant pressures from human settlements, and the reserve's proximity to the dam and border crossing offers some measure of protection. The area seems to be covered to a large degree with pine trees and the grasslands have been used for rice planting. Plans are being made to slowly eliminate the foreign tree species while keeping the disturbance to the Marsh Deer at a minimum, if possible.

According to the Universidad Nacional de Misiones, botanical surveys were done prior to the flooding and were focused primarily on determining the presence of endangered species. Thorough surveys were not possible. Important areas for biodiversity conservation have been lost in Misiones, including Nemesio Parma and El Porvenir, where EBY settlements were established.

Extensive surveys of fish have been done over the years in the Parana from Yacyretá Dam to the Yguazu River in the North. Approximately 214 species have been identified to date. The floodplains of the streams to be flooded at future levels, especially the Yabebyry (AR), appear to be important for fish spawning in the region and require further studies. The presence of birds such as Xanthospar flavus and the endemic Aylacosioma mollusk are indicators for the scientists that important species were very likely lost in the region and therefore studies on biodiversity must be deepened before higher dam elevations.

### 4.4 Findings

The issue of compensatory reserves within the context of the Yacyretá Dam has two dimensions, an ecosystem dimension and a political dimension. Presently the arguments between the Requesters and EBY/Bank Management revolve around these two dimensions. The EBY/Bank Management (and the Panel of Experts) Response to the Request is that the number of hectares compensated for and the ecosystem types are roughly equal or greater. The political dimension of conservation is ignored, however, by this approach. Given the fact that the ecosystems lost cannot be replaced, the reserves program largely lies in the realm of political and financial constraints.

A participatory planning approach would have prevented this unequal situation to arise between two cooperating countries. All the Paraguayan official agencies, scientists, and NGOs interviewed regarding the reserve system of Yacyretá have asserted that compensation for Paraguay's lost natural patrimony should be the responsibility of EBY through the creation (that is, purchase) and implementation of areas on the Paraguayan side. This expectation is heightened by the existence of another large dam project in Paraguay—the Itaipu Dam—that manages a large reserve program of its own. Few of those interviewed, including several Argentine nationals, felt that the present configuration of
reserves adequately addresses the principle of “repayment” (resarcimiento, as the Panel of Experts has referred to it).

194. The reliance in both countries on weak government conservation agencies with little funding—and in the case of Argentina, a reliance on provincial government—to carry out the protection of large expanses of territory was a decision made with little analysis of the institutional capacities of these agencies to take on the responsibility of purchasing and managing these areas.

195. The budgets established for the reserves to be implemented provide only minimal protection and much investment will go to infrastructure in the beginning. Recurrent costs of protection, a needed increase in patrolling capacity, and effective outreach (especially in Ibera) will require larger investments not presently contemplated judging from the information available in the Action Plan and other reports.

196. The EA information on biodiversity was found to be general and focuses mainly on mammals, birds, fish, and to a lesser degree, reptiles. Based on the preliminary findings available at the time, one would expect the main examples of endemcity, on the Yacyretá Island in particular, to be found among reptiles, amphibians, and invertebrates. Management Response regarding the lack of biodiversity studies is that the surveys would have taken years and the information would not be used to change project design or operation in any case. This comment is a fatalistic one that downplays the role of biodiversity conservation. Even though the dam could not be relocated at the time of the surveys, programs are established and modified based on the information collected and seek to maximize protection of biodiversity. Examples of such programs at EBY include rescue efforts, such as programs presently in place for the endemic mollusk; and operation of a dam modified to protect fish species affected by the gas super-saturation. Biological surveys (and resettlement programs) are largely limited by the funding available to carry them out.

197. Biodiversity studies by EBY, with the exception of fisheries, do not appear to be directed in a meaningful way or done with the depth needed to understand what will be lost at higher dam elevations. This knowledge can be used to provide valuable inputs when determining environmental costs and future mitigation investments (as demonstrated by the EBY investment in zoos, rescue programs, and captive breeding). A coherent program needs to be developed in this regard. The Panel of Experts, in its most recent review, highlighted the need for:

- Increased investments in implementation of proposed reserves on the Paraguayan side, including (at a minimum) a phased plan for purchase of Yabebyry and a stronger presence of DPNVS. Alternatively, there is a need for firmer commitments by the GOP to purchase the area (although, not to the detriment of investments in other conservation areas of higher priority in the SINASIP).
- Greater support for institutional capacity building of conservation agencies in both countries and incorporation of more conservation personnel with technical expertise into EBY management.
- In-depth biodiversity studies in areas programmed for future flooding—particularly within ecosystems, such as the Interior Atlantic Forest, of global importance and large floodplains of streams adjacent to the Paraná.
- Increased numbers of park guards for areas more vulnerable to human pressure, such as Yacyretá Island and Galarza; and more funding for outreach programs, private reserve programs, and the like.
5. Fisheries

5.1 Overview

198. The Request alleges that there have been significant effects of the Yacyretá Dam Project on the commercial fisheries and biodiversity of the Paraná River (paras. 38, 47–50, and 52). Most concerns relate to the interruption of migration patterns of fish, but the impact on the income and livelihood of fishermen in the vicinity of the dam is also addressed.

199. The EA specifically addresses the issue of impact to fish populations. At the time of the EA, the river had already been affected by the civil works, and the movement of fish had been impeded in large part since 1990. Major impacts cited included blockage of migratory patterns of fish, alteration of coastal habitats, water quality changes, hydrological changes, and possible increases in illegal fishing.

200. Mitigation actions called for in the EA include scientific monitoring of fish transfer facilities, water flow management, fish repopulation, and control of illegal fishing. Presently EBY has ongoing programs for the study of fish populations and commercial fishing upstream, gas super-saturation monitoring, fish elevator efficiency, watershed management, and fish populations downstream of the dam. These programs are carried out with the support of the UNNE, UNAM, CERIDE, and COMIP in Argentina, and by UNA in Paraguay.

5.2 Paraguay

201. The UNA Veterinary Sciences Department is the counterpart institution studying fish population and composition, side-stream monitoring, and fisherman survey programs for EBY through a cooperative agreement. Sampling activities started under this agreement in 1997 and will continue through 1998.

202. The University expects that at least five years of data collection will be needed to provide good stock assessments. Information gathered will be processed in computer models developed by the FAO. It is hoped that the studies of the commercial fisheries will provide a basic understanding of the dynamics and pressures of this sector and provide management tools in relation to the productivity of the reservoir.

203. The University's recommendation, based on the Itaipu Dam experience, is to implement some form of biological research program of aquatic life forms. This program is deemed necessary, not to repopulate the reservoir at present, but to understand captive breeding of the most important species in case the population studies or management of commercial stocks require it.

204. The Action Plan includes a budget of $52,000 to maintain the aquaculture facilities in Ayolas. These facilities presently allow only the most basic research and have been established with materials and infrastructure readily available at EBY. Budgets are also included to continue funding the studies with the UNA. Funding from EBY budgets will continue at this low level. The Bank did not consider the research station a priority and stated that the Bank would not be funding it.

205. Fishermen believe that there have been changes in the river and in fish populations. Fish species captured are mainly Carimbata (P. Scrofa) and Boga (Leporinus spp.), of inferior commercial value as compared to Surubi (P. Corruscans) and Dorado (S. Maxilosus) species. Relocated fishermen were said to be returning or planned to return to the riverside, particularly those located in San Miguel Potrero.
5.3 Argentina

206. Most of the research activities on fisheries are carried out by universities and research institutes in Argentina. The UNAM is studying the fish populations in the reservoir and upstream while the UNNE is studying them downstream. UNNE is also involved in research on the gas bubble phenomenon and its physiological effects on fish. The CERIDE, a research institute in the city of Santa Fe, is studying the efficiency of the fish elevator, which is cited in the Request (paras. 48–50).

207. UNAM Department of Exact and Natural Sciences (FACEN), with COMIP, carried out the first ichthyology studies in 1982, for the Corpus Dam Project, and the collection campaigns have continued with several interruptions to this day.

208. The Yacyreta Dam effectively became a barrier in 1990. The closure was done at a bad time because it was done after the fish migration downstream, leaving only a small remnant population upstream to continue reproduction, if viable. Sports and commercial fisheries have since moved down river and the FACEN has been working with EBY since 1990 to determine the impacts and monitor the recovery. Commercial fishing dropped off strongly in 1990 but is growing back slowly.

209. The general feeling is that fish are showing up and reproducing. Large older fish (6–8 years) and very young ones (1–2 years) are being found, indicating some reproduction is happening. The reproduction of species has to surmount not only the dam problem but also the fact that adjacent streams are being severely degraded by human intervention and contamination. The elevator is viewed as useful for maintaining the genetic exchange between fishery stocks.

210. Fishing is not controlled effectively by the Ministry of Ecology in Misiones and needs to improve. Estimates made by acoustic methods will assist in determining biomass, which can be used in the implementation of fisheries management programs. More emphasis on this type of estimation would be worthwhile.

211. UNNE feels that the studies are valuable and a great deal of data is being acquired with modest resources. The studies are unique for this region. The Parana is a huge and very complex system, which makes it difficult to cover completely. The level of effort in data collection is adequate for present needs but insufficient for future requirements.

212. Important information on the effects of gas super-saturation has been collected, which has helped management of the spillways. The fish now present fewer signs of parasites and no evidence of gas bubbles. The studies are also providing information on fish movements and reproduction, and now that the reservoir is well known, the sampling area is to be expanded. Biomass and the productivity of fisheries will be studied in the future. Three years of data should provide enough information for biomass estimates.

5.4 Findings

213. The monitoring programs appear to be comprehensive in their coverage of the zone of influence, and the implementing organizations seem professional and well qualified for the data collection and analysis. In the case of gas super-saturation, the information gathered is being used satisfactorily for modification of spillway management and reduction of the fish-kills experienced in previous years.

214. Aspects that may be improved are the intensity of sampling and overall compilation, analysis, and use of data gathered. The fish sampling agreements with UNAM, UNNE, and UNA use fixed points to collect fish. Generally, two to four points are being
sampled from the margins of the Parana. This type of sampling provides good information at those points but does not indicate what is happening in the rest of the reservoir at that same point in time.

215. The reservoir is very large and the potential for missing important parts of the fish population may exist with few data points. Presently the EBY fisheries personnel plan to have the sampling stations moved to different locations. Over time this will permit the viewing of a “snapshot” of the reservoir (from the coast at least) by superimposing data from different locations at similar times of the year.

216. EBY officials mentioned that they are also assisted by the use of advanced sonar equipment to determine fish locations and densities. There seem to be some problems using this technique at some locations because of noise from turbines and bubbles from gas super-saturation but the problems are being studied for resolution.

216. Data is being worked on by different groups with coordination in the methods used. There does not appear to be at EBY a central collection point or technical person overseeing the compilation and analysis of the data or its presentation in a usable form to those charged with managing fisheries.

217. The issue of the fish elevators, raised in the Request, seems to be under study by the EBY. Although the number of fish transferred seems low, most of those interviewed consider it important to allow a flow of genetic material across the dam barrier.

### 6. Archeological and Cultural Sites

#### 6.1 Overview

218. The Request addresses the issue of archeological and cultural sites in paragraph 54, alleging that cultural property was not properly assessed and protected before the flooding to 76 masl. The Request asks the Panel to determine to what extent the Bank complied with its policy on protection and enhancement of cultural properties.

219. The EA of 1992 briefly mentions the issue of impacts on cultural patrimony. Background information at the time indicated the existence of pre-Colombian settlements of the Umbu and Tupi-Guarani Indigenous Peoples. At the time most of the investigation had been limited to the Argentina side of the Parana; however, it was assumed that the Paraguayan side also contained similar archeological sites.

220. In the area of influence the six Jesuit Reductions of the 1600s the remains of several battles of the nineteenth century, and Spanish colonial and early twentieth century historic buildings in Posadas and Encarnación were also cited as culturally relevant.

221. The EA called for the following mitigation programs to offset the impacts of the flooding:
- Archeological rescue programs
- Establishment of museums and presentation of representative artifacts
- Environmental research

222. The REMP also calls for archeological rescue programs and indicates the need to coordinate with municipal agencies to seek alternatives for preservation of historical buildings.
6.2 Paraguay

223. The REMP lists more Argentinean cultural sites than Paraguayan sites, particularly regarding indigenous settlements. This seems to be a result of the existence of better information on the Argentine side.

224. On the Paraguayan side, EBY has an archeologist on staff who is presently reviewing areas above 76 masl, with emphasis on the important islands that are not submerged. There are several areas of interest to be prospected before final elevation of the reservoir, such as the battlegrounds of Tacuary in the vicinity of the stream of the same name, the historic center of Encarnación (especially the train station), and the civil war of 1922 area near Coronel Bogado.

225. The Jesuit World Heritage sites are above the flood levels and are managed under the Tourism Directorship of Paraguay. EBY does not have any program for these areas.

226. Regarding the sites on the islands and below the 76 masl, the deadline for flooding was the determinant for the investigations. Many sites were flooded even as they were being dug. Most of the important sites were explored and many artifacts extracted. Locations of items were mapped on the islands and laboratory analysis needs to be performed on the extracted items to accurately date and catalogue them.

227. The Catholic University was contracted by EBY to implement the archeological rescue program before the filling of the reservoir. The program was not well implemented, according to those interviewed, and the construction of museums and certain historical aspects were emphasized rather than the systematic study and rescue of sites. Delays in design and planning delayed the rescue activities up to the time of flooding.

228. Although studies of pre-Colombian sites were concentrated in Argentina, the Paraguayan side seems to show a stronger indigenous presence and is richer in archeological sites. The reasons for this are unclear or were only speculated upon at the time individuals were interviewed.

229. A museum in Ayolas was built by the EBY to house the artifacts extracted. Presently there is no evidence of ongoing systematic analysis of the materials collected. The Action Plan does not contain archeological programs for this analysis. The significance of the archeological findings in terms of the ancestral rights of the Mbya, mentioned in the Request (paras. 35, 36, and 58) has not been analyzed yet. These issues may be included in the Action Plan program for support and evaluation of the Pindo Mbya Indigenous resettlement but are not specified.

230. The railroad station of Encarnación is a historically important structure for the city. It is unclear what the final solution, if any, for this structure will be. There is interest in the community in the station’s protection or relocation; however, the issue still appears under negotiation between the city and EBY.

6.3 Argentina

231. As mentioned in the previous sections, Argentina has been investigating archeological sites for several decades. Investigation and rescue of artifacts was done primarily in the 1980s.

232. Most of the material has been rescued for the pre-Colombian and some colonial sites in the town of Posadas. A map and guide of the archeological sites in Misiones were published in 1995 with EBY support. Activities that need more support would
include finishing the analyses on the materials excavated and systematizing the information. Presently the Action Plan does not contemplate a program for this.

233. The World Heritage Sites (Jesuit Reductions) on both sides will not be affected. In Argentina these sites have museums and have been studied by the University of La Plata.

234. Colonial and recent urban historically and culturally important buildings will be affected by the reservoir at higher water levels. Studies of the railroad stations and similar buildings have been done in the past; however, it is not clear what the final status of these structures will be. Documents presented by members of the Posadas City Council indicate EBY complementary works, including the preservation of the Posadas railroad station. The Action Plan does not have a program for the relocation or protection of these structures at present.

6.4 Findings

235. Aspects of cultural and historical property alleged in the Request appear to have been carried out to a significant extent on the Argentina side of the Parana River.

236. The delays in the design and implementation of salvage and research programs on the Paraguayan side seem to have resulted in incomplete or rushed surveys being performed before rising water levels. Weak institutional capacity of counterpart entities that were to assist in the rescue also seem to be partly responsible for this outcome. More emphasis seems to have been placed on the rescue and exhibition of artifacts than on systematic scientific analysis and study (hence the existence of a complete museum but incomplete publication and cataloguing of information).

237. The Management Response to the Request indicates that additional surveys (and salvage) will be done as required by the REMP before higher reservoir elevations. However, there do not appear to be plans for consolidation of the information already collected and participation in the programs by communities involved. Specifically lacking are:

- Support to finalize the systematic analysis, publication, and conservation of artifacts salvaged on both sides of the Paraná.
- Disclosure and discussion with municipalities and communities of the proposals and plans for conservation of historically significant buildings in Posadas and Encarnación that will be affected by the reservoir.
- Determination of the significance of the archeological information collected on the flooded islands with respect to the culture of indigenous Mbya-Guarani communities in the region and regarding claims to ancestral territories, if any.

PART 2: ASSESSMENT OF ACTION PLANS

General

238. At the February 28, 1997, Board Meeting of the Bank's Executive Directors, Management introduced the categories of Plan A and Plan B to distinguish those remaining actions that should have been but were not carried out before filling the reservoir (Plan A) from those related to the prolonged operation of Yacyretá at 76 masl.
Plan A

239. Plan A includes actions on both the Argentine and Paraguayan sides of the reservoir. On the Argentine side the Plan includes potable water supply for resettled populations, urban and rural housing, and issuing property titles for the resettled population. On the Paraguayan side, the main actions in the Plan include expropriations, biodiversity reserves, urban and rural housing, indemnification to tile-makers, and titling for the resettled population. The total cost of Plan A is approximately $16 million and an initial deposit of $8.1 million was made in an escrow account at Banco Corrientes to provide the financial resources to support the Plan.

240. According to the Bank Task Manager, implementation of Plan A is now expected to be completed by December 1997. As of mid-June 1997, total undisbursed amounts are $4.7 million (about 29 percent of total cost). Even if completed according to the present schedule, these actions will have been delayed by over three years and these delays have resulted in additional risks to the population. The most important pending actions deal with investments for the compensatory reserves of Apipe Grande, Galarza, and Isla Yacyretá as well as with issuing property titles to the resettled population. Another critical pending action is the hydrogeological studies to assess the macro impacts of the reservoir on adjacent soils and lands.

241. Although disbursement is often a useful indicator of overall progress, since Plan A has many different components, disbursement alone does not constitute a sufficient measure of progress in the execution of individual components. According to the June 1997 Progress Report, the latest available data, the most important pending actions on the Argentine side are the provision of potable water and construction of an elevated tank for the resettled population, communal infrastructure for urban settlements, and over 1,700 titles for the resettled population. The most important pending actions on the Paraguayan side are expropriations, equipment for the Yacyretá Island Reserve, communal infrastructure for rural settlements, clay supplies and infrastructure replacement for brick-makers, indemnification for tile-makers, and titling for resettled population in the Barrio San Pedro.

Plan B

242. Plan B is based on the actions required for prolonged operation of the reservoir at 76 masl elevation. This includes resettlement of the population living between 76 and 78 masl, and it implicitly recognizes that the people living in this band have suffered the effects of prolonged reservoir operation at this elevation. The cost of the program is approximately $117 million, $46 million for the Argentine side, $48 million for the Paraguayan side, and $23 million to actions related to both sides. This Plan is presently scheduled for completion by the end of 1999, over five years after filling the reservoir.

243. More specifically, Plan B includes approximately $30 million for expropriations and indemnification ($14.3 million in Argentina and $12.5 in Paraguay), $10 million for resettlement, $9 million for environment and sanitation, and $8.5 million for consulting, civil works, and equipment ($8.3 for equipment). In addition, there is $12 million in Bank loan funds that has not been assigned, most likely to be utilized for contingencies.

244. The financial resources to carry out Plan B are primarily $52.9 million from Bank Loan 2854, $3.63 million from Bank Loan 3520, $50 million from a commercial loan obtained by EBY, and close to $2 million from the Inter-American Development
Bank ("IDB"). Funds from the commercial loan obtained by EBY will be deposited in an escrow account specifically designated to meet the objectives of Plan B. EBY will prepare bimonthly reports on the implementation of the Plan, and in June 1997 it agreed with the Bank on the format of these reports.

245. During the first semester of 1997, the Bank disbursed approximately $2 million, equivalent to 1.73 percent of the total cost of Plan B. This is the latest report available to the Panel with regard to the implementation of Plan B. Given the early stages in the implementation of the Plan and the low level of disbursements, it is difficult to assess progress.

246. While the Bank considers completion of Plan B essential to the future Project, its scope is limited since it deals only with environmental and social liabilities that the Project has incurred, and according to many people interviewed, including some local and federal authorities, the treatment of existing problems under Plan B is by no means complete.

247. Among the contentious issues related to Plan B are the questions of wastewater treatment for the cities of Encarnación and Posadas, the level and effectiveness of coastal treatment, and the compensation and resettlement of highly heterogeneous groups ranging from merchants to indigenous people. Design, construction, and operation of sewerage systems and wastewater treatment plants for the cities of Encarnación and Posadas are essential to sustainable solutions to health and sanitation near both cities, and particularly to affected groups living in low-lying areas. The original design of the wastewater treatment plant for the city of Encarnación is undergoing revision: both the technology chosen and the site are being opposed by local neighborhoods.

248. An additional contentious issue is the impact on fisheries and the economic losses suffered by fishermen due to the presence of the dam on the Paraná River. Although it is too early to be able to establish statistically significant conclusions, there appears to be some impact on commercial quality resources such as the Surubi and Dorado species.

249. Another critical area for specific target groups, such as the clay workers, is the loss of high-quality clay resources. Although EBY has attempted to locate alternative deposits, and has made commitments to supply displaced clay cottage-industries with up to five years' supply, the low level of technology utilized somewhat limits the alternatives for some people. The workers of the clay industry, identified already by the Panel in its earlier report, constitute one of these groups.

250. Reporting schedules and formats appear adequate to guarantee successful monitoring of implementation of Plan A and Plan B. Full and timely completion of both Plans are critical elements in the deployment of a permanent solution at 76 masl for the people affected by the Yacyreta Project, as well as for rebuilding the credibility of the Bank and EBY with the entire population. Although the main elements of the Plans, including identification of the detailed actions to be carried out, as well as the financial resources for their respective implementation, appear to be in place for timely completion of the Project, a long history of delays and noncompliance tolerated by the Bank does not allow the Panel to provide a realistic assessment of future Project performance with any degree of confidence.

**Review of Resettlement and Environmental Issues**

251. The adequacy of Plans A and B can only be properly analyzed in the context of the overall resettlement and environment problems of the Yacyreta Project. For example,
although over 13,000 people have been resettled so far, this represents about one-quarter of the total population of approximately 50,000 people that it was originally envisaged would be involuntarily resettled once the Project reached its design elevation of 83 masl. However, given the long delays and persistent invasions of people to low-lying areas, present estimates of the total population to be resettled are 70,000 people, with an annual growth rate of about 1,500 people per year.

Resettlement

252. The resettlement activities carried out under the REMP include housing communities for the relocated population on both sides of the Paraná River, support for the rehabilitation of productive economic activities of affected groups such as the clay workers, and rural resettlement programs. Overall performance of these programs is mixed and has been considered in detail by the Panel of Experts on Environment and Resettlement ("POE"). Infrastructure and access to services for those relocated have generally improved in urban areas, although there are specific groups who do not share this view. Among these are the inhabitants of Barrio San Pedro, in Encarnación.

253. There is general agreement that the length of time and the process of implementing the solutions have not been adequate. Brick-makers, for example, are only now beginning to organize and consolidate their production once again. However, their long-term future is uncertain. Rural resettlements and indigenous groups need longer-term support to diversify crops and provide sustainable sources of income.

254. Resettlement in the Yacyreta Project has been a particularly difficult task due to the large numbers of people affected, the heterogeneous nature of the specific groups (urban and rural poor, merchants, clay industries and workers, indigenous people), and the long delays that they have experienced. In addition, resettlement standards have changed during this period, lack of resources have paralyzed the programs, and weak programs of social communication characterized by absence of information have led to a significant breakdown in community relations.

255. Given all these conditions, it is not surprising that there have been problems and that there are people who feel that they are not better off after resettlement. In particular, the Panel received many complaints on the Argentine side of people who felt that they could not afford to pay for the houses, and therefore they were refusing to accept title (which would make them liable for repayment and taxes). The POE has reviewed the situation and has concluded that, in general, the housing and infrastructure are considerably superior than existing ones and that agricultural lands could support sustainable solutions for these groups. The longer-term survival of the clay industries is constrained by the raw material supply after the five years of EBY commitment to supply them with clay.

256. Information gathered by the Panel shows that there has been monitoring and oversight of the programs, primarily through the POE and the Resettlement Coordinator. The original 1992 REMP for the Yacyreta Project addressed most of the issues raised by the Request, namely the need for ongoing participation, the diverse nature of the population to be resettled, the need to reevaluate beneficiaries, and the negative impacts of prolonging resettlement. However, the original document, which was intended to be flexible and subject to ongoing reviews and participation by affected groups, became rigid in some basic aspects such as resettling people according to flood levels. This has led to a
fragmentation of community networks and social structure that has caused significant stress and hardship on the resettled population.

257. Another important issue raised by the POE is the lack of adequate identification of vulnerable groups who required special assistance, among them indigenous people, island inhabitants, and fishermen. These groups have particular vulnerabilities due to the dramatic changes in lifestyle that they have undergone. All these groups were supposed to be resettled in agriculture-based occupations, which represents a radical departure from former lifestyles. Other groups, like indigenous people and brick-makers (in particular, those of Barrio San Pedro in Paraguay and Nemesio-Parma in Argentina), require prolonged assistance and special attention to consolidate their organizations and promote self-sufficiency.

258. Despite the many difficulties encountered, the experience of resettlement so far, and the capacity building that has been developed by EBY, pose important lessons for the future. As noted earlier, today there is a much deeper appreciation for the problems of displacing and resettling very large numbers of people than there was when the Project was designed over a quarter century ago. Resettlement under Bank standards introduced further complexities, in particular due to the heterogeneous nature of the groups affected. One essential element for any future solution must include preventing the inflow of new people to the areas.

Environment

259. The basic framework for the present environmental management efforts was the Environmental Assessment ("EA") for the Yacyretá II Hydroelectric Project carried out in 1992 under the new OD on Environmental Assessment. This process introduced important changes in project design, the most important of which dealt with the proposed long-term solution for the so-called Aña Cua Branch of the Paraná River (which carries approximately one-third of total river flow). Under the original design of earlier decades, a 23 kilometer segment of the Aña Cua would have been dry 80 percent of the year. This solution was no longer acceptable and a satisfactory solution has yet to be found. There are alternatives under consideration but their respective impacts have not been analyzed. The present solution of maintaining a minimum flow of 1,500 cubic meters per second is considered acceptable on environmental grounds, but is very costly in terms of forgone generation, equivalent to two turbines or 10 percent of total capacity.

260. Implementation of environmental management plans was difficult from the outset, due primarily to bureaucratic procedures and lack of institutional support in EBY, as well as to the lack of financial resources to carry out agreed programs. One important example of this problem is the fact that EBY has not had an Environmental Coordinator (equivalent to its Resettlement counterpart) for the past two years, without any effective remedy from the Bank. Overall, the collection of environmental data does not yet respond to a coherent set of goals established within a regional context with participation of government agencies, nongovernmental organizations, and affected communities. Much of the information generated could be utilized to provide key inputs for management of water quality, fisheries, waste, and the like. However, EBY has not been able to exert leadership in these areas due to its own weak internal structure. This role is particularly needed with respect to water and biological resources due to the large impact that the project has had on these resources.
261. Water quality monitoring programs seemed adequate and comprehensive, except for specific programs targeted for the population at risk, namely those living in low-lying areas and near stagnant bays or pools in both sides. One of the fundamental shortcomings of the environmental assessment process is the lack of hydrogeological studies to analyze the impact of rising water levels on regional lands surrounding the 1,000 square kilometer reservoir, not only in the urban areas of Encarnación and Posadas, but also including other cities, among them Carmen del Parana. So far the impact of the reservoir on adjacent lands is not well understood and should be closely monitored by satellite imagery and GIS systems. Although the basic hydrogeological studies were part of Plan A, they still remain to be carried out.

262. The reserves and biodiversity programs are deficient, and their implementation has been particularly difficult. Plans for many of these reserves do not yet exist, and the strategy for Yacyreta Island Reserve, one of the most important, has yet to be finalized. There are ongoing sporadic biodiversity assessments. The reserve system in Argentina is larger than that in Paraguay. However, most of the reserves were legally established before raising the level of the reservoir and lacked a strategy for community involvement or management plans.

263. Fisheries monitoring programs are numerous and starting to provide valuable management information for dam operations to reduce fish-kills. Better compilation of data is needed and more intensive sampling campaigns should be undertaken. At the present time, not enough data is available to make statistically significant conclusions about the impact of the dam on fish populations or the effectiveness of the fish elevator.

264. The linkages between environmental impacts and health effects are not well established and specific data for the population at risk is needed to address this issue on both sides of the reservoir. In 1994, sharp increases in diarrhea coincided with filling of the reservoirs to 76 masl. Health officials considered that this phenomenon might be caused by increased monitoring and service coverage; however, there is no data to support this claim. Improved data collection and analysis for target communities is required.

265. Communities outside Posadas and Encarnación, such as Carmen del Paraná, conveyed to the Panel their dissatisfaction with EBY’s lack of concern about potential impacts of the reservoir on their towns—particularly with respect to water supply and soils. EBY has not included this town in its mitigation plans.

266. During his second visit to the city of Posadas, Argentina, in May 1997, the Lead Inspector, Mr. Alvaro Umaña Quesada, received several oral and written Requests for Inspection from local people who were allegedly affected by the design and execution of the Project and related activities. He also received Requests from local community leaders and government officials.

267. As stated in the introduction to this Report, the Panel—after seeking guidance from the Executive Directors—decided to ask Management to comment on the allega-
tions made in these Additional Requests and to include its findings on them in this Report.

268. The Additional Requests were submitted by people living in the A.1 and A3.2 neighborhoods of Posadas; by brick-makers, members of the Asociación de Oleros Unidos de Misiones (the Association of United Brick-makers of the Province of Misiones); by members of the Honorable Concejo Deliberante (Municipal Council) of the City of Posadas; and by members of the Honorable Cámara de Representantes (House of Representatives) of the Province of Misiones. In addition, the Mayor of the city of Posadas submitted a detailed study of the effects of the Project in urban areas.

269. Management Comments, received by the Panel on August 4, 1997 (Management Comments), provide a description, as well as specific comments on the main issues raised by the Additional Requests.

270. After a detailed review of the Additional Requests and Management Comments thereon, the Panel has concluded that a number of issues raised should have been dealt with by Management earlier on during project execution. The lack of participation of affected people and local authorities in Project-related activities and a tendency by Bank supervision missions to ignore or take lightly the concerns of area people may be at the root of these problems.

Review of the Additional Requests

271. (a) The main allegations in the Requests by people living in the A.1 and A3.2 neighborhoods (see also Annex 1 of Management Comments):

(i) That the housing provided under the project was being sold to relocatees under unacceptable terms including unfairly high prices—determined in an inconsistent manner among different areas of the neighborhoods—high interest rates, and property titles encumbered by the mortgages in favor of EBY.

Management Comments were candid and straightforward. Originally EBY applied a resettlement policy whereby the relocatees were expected to pay the difference between the value of their previous house and the new one provided by EBY, with the proviso that such payment would not exceed 35 percent of the value of the new house. Under this proposal the differences in price would be repaid to EBY in 30 years, at an annual interest rate of 6 percent, and the debt would be secured by a mortgage on the new house.

Under loan 3520-AR, the Borrower and the Bank agreed on a new Resettlement Policy in line with Bank OD 4.30, whereby all families affected by the Yacyretá Project should be "given replacement houses in exchange for those affected by the Project, at no cost to the relocatees" [emphasis added]. Only two exceptions were allowed under this policy: (a) people already relocated at the time the loan was made (1992) who were already paying the differential in value between the old and new houses, and (b) people that requested a more expensive house and agreed to pay for the difference. According to Management, "During project supervision, in particular, after the raising of the reservoir to elevation 76m, the issue of delays in the processing and issuing of property titled was discussed by every Bank supervision mission. EBY's explanations were that delays were due to slow and complicated legal/administrative procedures at the provincial agencies responsible for these matters, and to the shortage of personnel in EBY's legal department."
Since no contact was made with the affected people, the Bank believed that the old resettlement policy was no longer being applied. Only in June 1997, that is after the additional Requests were submitted to the Panel, Bank staff learned that “the major obstacle for issuing those titles was the refusal of the affected population to sign the required documentation, because of the debt imposed by EBY.”

A dispute between the Bank and EBY over the interpretation of existing legal agreements on resettlement policy ensued. The Bank believes that the housing should be provided at no cost and EBY contends that it has the right to change a price for the housing and is not willing to “forgive the totality of the debts” in cases which in its view are not covered by the Bank’s resettlement policy. To the date of this Report, the Panel is not aware of a satisfactory solution to this issue. However, EBY has made an offer to relocatees that reduces the price of houses by 90 percent to low-income families and 50 percent to the others. Also, the interest rate on debt has been reduced to 3 percent per year and all penalty interest due to date would be forgiven by EBY. In addition, the Province of Misiones and the City of Posadas have agreed to forgive all property tax debts that the relocatees may have up to this date with regard to housing provided by EBY.

The Bank has stated that according to Bank policy, new housing has to be provided at no cost and consequently property titles issued to relocatees should not be encumbered by mortgages. The Panel has been informed that both “EBY and the Bank are currently exchanging views in an effort to resolve this disagreement.” However, until this issue is resolved, the Bank is not in compliance with its policies.

(ii) Lack of adequate communal infrastructure (schools, health and policy posts) and water supply in neighborhoods, especially A3.2 (see also Annex 2 of Management Comments).

Management Comments provide a good insight on how the resettlement part of the Project is being monitored and evaluated by the Bank.

Since the refusal by relocatees to sign purchase agreements is based not only on the price and payments conditions but also on the claims in paragraph (i), above, the Bank states that it is “the Bank’s understanding that the charges levied by EBY are not to recover the cost of public services” and that “moreover, the issuance of the property title does not depend on the completion of communal infrastructure (school, health post, police post, kindergarten, etc.), some of which did not even exist in the affected neighborhoods located near the river.”

After explaining the cost and equipment on the new housing and the reasons that, in its view, justify the delays in the construction of communal infrastructure, the Bank seems content with the following situations:

“Despite the delays, the majority of relocated children (64%) have been attending classes at nearby schools located less than 2 km away from their homes, while 34% attend classes in more distant neighborhoods located more than 4 km away. The latter group usually takes a public bus at a cost of $0.40 per day. According to EBY, 18% of the children do not attend classes due to capacity limitations in nearby schools or due to economic difficulties of their families.”

For the affected people, without proper school transportation available, this situation implies a lot of difficulties and sacrifices, and for nearly one-fifth of the school-age children, no school at all. Management expects that the school will be “fully operational for the next academic year.”
As for the health post, its construction is also expected to be completed by December 1997 and its operation would be the responsibility of the Ministry of Public Health. No reference is made to a police post in Management Comments.

(iii) The A3.2 settlement is located 10 kms from downtown Posadas and this implies extra time and transportation costs to sources of work and food and supplies.

Management Comments highlights the better sanitary conditions and absence of floods in the resettled area, the absence of better alternatives in the Posadas area for the location of this neighborhood, and the fact that the city has grown during the past decade "to the point where the A3.2 settlement is connected to the urban transport net." Adding that those living in A3.2 "can shop in the small family businesses existing in the new settlement, which were relocated with EBY assistance. There were also supermarkets and commercial areas located within a 3 km distance." No information is provided about prices in the area of small businesses or how accessible the supermarkets 3 kms away really are.

Finally, it acknowledges that "because of the new urban transportation needs family expenditures for this item have slightly increased (5% to 7%)" stating that this increment has been documented by the Independent Evaluators of the Resettlement Plan and concluding that "the trade-offs for such an increment are better sanitary and living conditions and the avoidance of floods."

The Requesters believe that the incremental costs in monetary, time, and human terms are much higher. The Panel did not have the time or means necessary to ascertain the facts regarding this contention and whether the settlers in this area have the same or better overall living conditions in the resettled area, as required by Bank policy.

272. b) Main allegations by brick-makers (oleros). (See Annex 3 of Management Comments.)

i) That many brick-makers were not included in the censuses carried out by EBY and have, therefore, been excluded from the resettlement programs.

According to Management "EBY's census carried out in 1989/1990 was updated in 1993 by the Mines and Geology division of the Provincial Government" and "areas not previously included were incorporated in the revised census." In fact, "all oleros affected by reservoir elevation 76 m, with the exception of one olero who had not accepted any solution proposed by EBY, have been either relocated or been compensated in cash."

During his field visit, the Lead Inspector met with several people who claimed to have been excluded from the resettlement programs and several oleros who claimed to be their witnesses. Ultimately only an independent survey can ascertain the accuracy of their allegations. It is suggested that in the meantime, Bank resettlement specialists visit the area and personally interview these people.

(ii) That the compensation received by the oleros was too low and was accepted by the oleros exclusively because of their desperate economic situation.

Management Comments note that the compensation paid by EBY ranges from $6,500 for small units to $16,500 for larger units producing more than 30,000 bricks per month and that these amounts were "considered adequate to reestablish their lost productive unit and house" [emphasis added].

Management also notes that for the "oleros who selected relocation instead of cash, the average investment made by EBY per relocated family was about $27,500 (land and house and serviced lot for production). These figures do not include the cost of the technical and social assistance program carried out during the last two years."
Nevertheless, Management believes that there is no justification for the oleros’ Request since they freely opted for a cash compensation.

Although the Panel understands that there may be other factors in the consideration of this Request, as a matter of equity, it is difficult to regard as equivalent the compensations received by the different groups of oleros, when the one in kind (housing, lot, etc.) is equivalent on the average to almost double the highest value of the cash compensation.

(iii) That the oleros in the areas of Garupa and Candelaria must be relocated under the same conditions of those relocated in the Posadas area.

According to Management Comments these oleros have opted for cash compensation, which has been paid in full as of July 31, 1997—that is, about two months after the additional Request was signed.

Since payment of compensation was made recently, the Panel has not been able to ascertain whether such payment meets the concerns of the Requesters. It should be noted, however, that a) the minutes of the meeting between EBY, provincial authorities, and the oleros of June 2, 1995 (where the amounts of compensation to oleros were agreed upon), state that oleros receiving cash compensation may opt for land, in which case the value of land will be deducted from their compensation. The Panel was unable to establish whether the land option was offered to the Requesters; and b) that the amount of compensation apparently has not been adjusted for inflation since that date.

(iv) That the workers of the brick industries lost their jobs but have not been compensated under the Project.

Management Comments state that the Resettlement Plan envisaged the relocation and economic recovery of the small brick industries affected by the project. “However, 99% of the oleros to be affected by further reservoir elevations requested cash compensation instead of relocation assisted by EBY. Once compensation was paid, owners of the olerias were free to exercise their discretion as to whether or not to continue with their manufacturing activity. Many of them opted to continue...[while] others in exercise of their entrepreneurial rights decided not to continue with the oleria and shifted to new economic activities,” and conclude that: “In conformity with the Bank’s resettlement policy, the loss of employment due to the personal choice of the affected owners falls beyond the preview [sic] of EBY and the Bank.”

It is a fact that clay deposits of the quality and amount of the deposits lost because of the reservoir elevation have not been found (see Productive Activities under the Claim of the Municipal Council of Posadas, paragraph (ii) below), and therefore it is difficult to accept that the workers lost their jobs because of a simple decision of owners of olerias to change economic activities. There seems to be enough prima facie evidence that the loss of jobs by brick factory workers has been caused mainly—if not directly—by the filling of the reservoir. If this is the case, the workers should be compensated according to Bank policy.

The Panel urges Bank Management to undertake an independent technical review of this matter on the Argentine and Paraguayan sides to determine to what extent brick factory workers have lost their sources of income as a consequence of loss of high-quality clay resources.

v) That the oleros have been unemployed and with no land or means of production and should be compensated for the damage suffered and provided with houses and land.

Management Comments reiterate that no further compensation is required for those oleros that opted for cash compensation, and state that in addition to that EBY has assisted some of them after they invaded public lands.
In the Panel's view, Management argues from a mere legalistic point of view with an assumption that the oleros freely opted for cash compensation and may have given up all other rights to rehabilitation. From a policy point of view, however, the Panel believes that Management should carry out an independent assessment on whether the requirements of OD 4.30 that "the population displaced by a project receives benefits from it" and that people should be "assisted in their efforts to improve their former living standards, income earning capacity, and production levels, or at least to restore them" are being met with regard to the oleros in Argentina and Paraguay.

Finally, Management has indicated that the relocation/compensation of families who may have settled in the Project areas after the 1993 census would be the responsibility of the Governments of Argentina and Paraguay according to a proposed amendment to the Third Owners' Agreement. The Panel has been unable to verify whether these additional obligations have been accepted by the respective governments. Management estimates that the number of additional families is growing by some 1,500 per year, which further complicates any resettlement solution.

273. c) Main allegations by members of the Municipal Council of Posadas (see Annex 4 of Management Comments).

The members of the Municipal Inter-Institutional Council for the Yacyretá Project—which includes representatives of Posadas' professional associations (doctors, lawyers, architects, engineers, economists, etc.), provincial representatives, NGOs, unions, and municipality officials, among others—submitted a Request containing several complaints mainly in the following areas: environment, productive activities, and social activities. The subject matters of these complaints have been dealt with in other parts of this Report and the Panel has been informed unofficially that the Municipality of Posadas and EBY have entered into agreements dealing with several of these complaints. The following summarizes this additional Request and the Management Comments in response.

Environment

(i) No studies have been carried out regarding behavior of underground water or for the preparation of coastal treatment.

Management Comments state that coastal treatment studies and project designs are not yet required since major coastal works are not envisaged until the reservoir is operating at 83 masl level. As for the hydrogeological study, it should start after the consultants are appointed in September 1997.

The Panel has reiterated the importance and urgency of the hydrogeological studies.

ii) Urban creeks are not receiving treatment, resulting in the continuous growing of unhealthy vegetable mass.

Management states that pollution of urban streams is caused by untreated sewage disposal, not by reservoir levels.

The Panel has noted that reservoir levels do affect the flowing of the creeks into the river, thereby causing the accumulation of untreated sewage in urban areas, primarily through the formation of stagnant bays along the streams.

iii) The improvement and extension of the overall sewerage system of the city of Posadas has been delayed because of EBY's failure to complete the main collectors and treatment plant.
According to Management delays in the sewerage collection works in Posadas are the responsibility of APOS, the local water and sewerage company, and not EBY (or the Yacyretá Project).

**Productive Activities**

(i) *The fishing activity downstream of the dam has been substantially impacted because of reduced fish migration through the fish transfer facilities at the Yacyretá Dam.*

Management Comments state that it is true that the dam (as any other large dam of its kind) serves as a barrier to natural fish migration patterns but that "monitoring being carried out under the Yacyretá project indicates that many commercially valuable fish species remain abundant, both above and below the dam."

The Panel has noted that the fish monitoring studies look adequate but could be improved. At the same time, the Panel heard dramatic testimonies of fishermen who claim that they have lost their source of income because there are no commercially valuable fish (that is, surubi, dorado) left.

(ii) *That because of the Yacyretá Project, the brick-makers' production has been reduced.* The situation is aggravated by the fact that the new clay deposits given to the relocated oleros do not have enough clay and, if they do, they are of poor quality.

Management Comments state that:

"...based on the recommendations of the Technical Report prepared by the Mines and Geology Division of the Province of Misiones, EBY bought land with clay deposits in Nemesio Parma and relocated oleros affected by elevation 76m. According to the mentioned report, clay deposits had adequate and sufficient clay for ten years' production. For efficiency purposes in clay exploitation and because of the characteristics of the material (not as good as the river clay deposits), the report recommended technological adaptations, technical assistance, and communal exploitation of the clay deposits. In 1994, ninety three productive units were relocated by EBY. The oleros rejected communal exploitation, and decided instead on a division of plots, individually owned and exploited, taking the risk that some of them might not necessarily have clay in their property (see records of the meeting dated 20/07/94). In July 29, 1997, EBY received 6 offers in response to the bidding for provision of the equipment (truck and excavation equipment). EBY is currently assessing the offers in order to adjudicate the contract.

EBY provided technical assistance to recover previous production levels but has encountered an unforeseen difficulty. Contrary to the findings of the Technical Report, the replacement clay deposits do not have the quantity and quality required for the brickmaking production. This was confirmed by an EBY study carried out in 1996, one and a half years after the relocation. To solve this problem, EBY has developed several complementary alternatives including access to river clay deposits still available in the zone already acquired by EBY, technical assistance to those using the available material (non-river clay), productive programs for developing complementary income sources, such as gardening and domestic animals, and organization of a coop-
erative to help in solving production problems. During a supervision mission in March 1997, EBY and the Bank agreed, additionally, to provide the oleros with equipment (trucks and excavation equipment) for transport and gathering of material from river clay deposits and other clay sources. This agreement is currently under implementation." [emphasis added]

The Panel has reproduced in its entirety the Management Comments on this claim because they provide a glimpse of the problems that the resettled oleros have faced. Similar problems, but without the technical and material support of EBY, may well have been faced by the oleros who received cash compensation and tried to restore their productive activities.

(iii) That some oleros have not been resettled and that the compensation received by them was in any event not sufficient and was accepted by the oleros purely because of their desperate economic condition.

Management Comments and the Panel's observation are already set forth above under (ii).

Social Activities

Management Comments provide a good summary of these claims and its specific comments provide a good example of how the Bank has viewed the problems of affected people in the Project area. For these reasons, they are reproduced below:

THE REQUEST CLAIMS: "Under Argentine law, the fact that realty in the Yacyretá area has been declared subject to expropriation since 1980 means that owners of affected land are restricted in their ability to improve their properties because improvements made after the declaration of expropriability will not be compensated by the expropriating party. Also as a result of this legal situation, areas to be flooded by the Yacyretá reservoir do not receive basic services (water supply, transportation and others) from the municipal or provincial authorities."

MANAGEMENT COMMENTS:

"Argentina's expropriation law (No. 21499, first published on January 21, 1977) applies in the Yacyretá case and indeed does specify in its Article 11 that "compensation will not be awarded for improvements, except necessary ones, that are made to the property after the property was officially declared to be subject to expropriation" ("no se indemnizaran las mejoras realizadas en el bien con posterioridad al acto que lo declaró afectado a expropiación, salvo las mejoras necesarias"). This is no way means that owners cannot improve their properties; in fact, owners who made improvements soon after the Yacyretá area was declared subject to expropriation in 1980 have had almost twenty years during which to enjoy such improvements. It does mean, however, that such owners may find a legal bar to compensation for such improvements when actual expropriation does take place (prior to the actual expropriation of their properties), unless they can demonstrate that the improvements were "necessary" (building an addition to a house to accommodate a growing family is an example of a necessary improvement).

Legal provisions such as those contained in the cited Article 11 have a sound basis in that they are designed to discourage speculation improvements which can result in an unwarranted drain on the resources of the expropriat-
ing authorities and can thus harm the interests of the tax-paying citizenry at large. Only when, as in the Yacyretá case, actual expropriation of properties affected by such provisions is unduly postponed (because of, for example, construction delays) does the impact of such provisions become larger. However, it is possible that, in the face of such delays, \textit{Argentine courts may be persuaded to adopt an interpretation of the term “necessary improvements” that takes appropriate account of the effect of time.}

“As for the claim that the local authorities, because of the impact of the expropriation law, do not provide adequate infrastructure in the areas to be flooded by the reservoir, the key point is whether: (a) as a result of the Yacyretá project, services already present were removed from those areas by the authorities and not replaced; or (b) whether it was reasonable to expect, in the absence of the Yacyretá project, that additional services now missing in the areas would have in fact been provided by the authorities. As for point (a), we are not aware of any elimination of previously existing services. As for point (b), our understanding is that at least a portion of the areas in question would probably have remained marginalized since the area is on a flood plain subject to annual inundations. Furthermore, now that the project is underway, a portion of such areas is also subject to illegal invasion by settlers and extending public services to the areas would only encourage even more illegal settlers.” [emphases added]

Again, the Panel believes that closer contact with, and participation of, affected people and local authorities would have provided the Bank a better understanding of the problems caused by the Project.

\textbf{List of Urban Projects}

274. Finally, the Additional Requests present a list of priority urban projects related to the filling of the reservoir. \textit{Management Comments} state that:

“The reconstruction of affected urban infrastructure is one of the most serious challenges for raising the reservoir to its highest operating level. The list presented in the Council's letter represents a best preliminary estimate of the total works that will be required for elevation 83m. The necessary design, implementation chronograms and budgets for carrying out the construction of urban infrastructure will be part of the tasks of an engineering consulting firm to be hired in September 1997. Minor protection works are envisioned for intermediate operating levels. Any urban area flooded at these intermediate levels will be subject to standard clean up operations (sealing of latrines, and the removal of fences, trees, construction wastes, trash, etc.). Water quality and vector monitoring systems have been in place since prior to reservoir filling. EBY, through a Convenio with the University of Misiones, has prepared a proposal for the implementation of an industrial pollution control system for the uppershed (up to Itaipú) of the Parana River.”

The Panel has commented extensively on these issues elsewhere in this Report. (See, for example, Executive Summary, the section on Water Quality, and part on Assessment of Action Plans.)
275. (d) Main allegations in the Request presented by members of the Honorable Chamber of Representatives of the Province of Misiones (see Annex 5 of the Management Comments):

(i) The Government of Argentina (GOA) and EBY have failed to implement the resettlement and environmental works (defined as complementary works) required by the project, as agreed with the Bank, and the Bank has failed to exercise its leverage to press the Borrower to comply with agreed commitments. The Chamber requests the Bank to use all of its resources to ensure that all pending works are completed as planned.

Although this issue has been dealt with by Management and the Panel in the past, Management Comments are reproduced below:

"...the Bank urged (on April 13, 1996) the GOA to agree on a plan of action to complete by December 1997 all pending action to complete by December 1997 all pending actions related to elevation 76m, and to establish an escrow account for ensuring financing of these works. On May 1996 the plan of action was agreed. On July 1996 a special account was opened to start implementation of the most urgent works, and in October 1996 the escrow account was established. As of June 30, 1997, 74% of the plan has been executed and is expected to be completed as scheduled.

Because of the macroeconomic crisis faced by Argentina, the GOA decided to reduce by half in 1995 and to eliminate in 1996 its budget contributions to the project, which delayed and almost stopped implementation of environmental and resettlement works required for reservoir elevations 78m and 83m. In addition, because of the failure of the Governments of Argentina and Paraguay to complete these works through a privatization scheme (rejected by both Congresses), the GOA decided to keep operating the reservoir at elevation 76m until further decisions are taken to complete the project. On December 1996, the Bank urged the GOA to agree on a Plan of Action to address the adverse resettlement and environmental impacts resulting from the prolonged operation of the reservoir at elevation 76m. On January 1997, a Plan of Action satisfactory to the Bank was received, and by April 30, 1997, the GOA and EBY satisfied the major institutional, administrative, and financial requirements to permit implementation of this plan. Implementation of this plan, to be completed by December 1999, started in May 1997, and is progressing as planned. An amendment to Bank Loans 3520-AR and 2854-AR to support partial financing of the above plan is under discussion and is expected to be signed in late August 1997."

As far as the Panel can ascertain, the proposed amendments to loans 2854-AR and 3520-AR have yet to be agreed upon and signed. Specific comments on the Action Plans are provided in Part 2 of this Report.

(ii) The Bank failed by approving a plan to raise the reservoir level by stages, first to elevation 76m and later to elevations 78m and 83m (final design level). Consequently, investments for key resettlement and infrastructure works were postponed, in favor of completing major civil works and electromechanical installations for the power house.

Management Comments state that:

"The GOA's plan to raise the reservoir level to 76m was accepted by the Bank on the basis that: (i) reservoir elevation to 76m would take place in September
1994, after completing all of the minimum strictly needed resettlement and environmental works; and (ii) reservoir elevation to 78m would take place on September 1995, after completion of all agreed resettlement and environmental works needed for that phase; and then continue to elevation 83m once the remaining resettlement works were done. Construction schedules for major civil works and commissioning of generating units were to continue as planned, along with the implementation of the environmental, resettlement and other complementary works. Revenues from the GOA and from sales of electricity were to assist EBY in meeting its counterpart funds obligations to the project. According to the plan, all works were to be done in sequence, and it is not correct to say that the plan for elevation 76m included a reprogramming and postponement of other resettlement and environmental activities required for elevation 78m and 83m.

In fact, reservoir elevation to 78m did not take place in September 1995, as planned, because of the financial crisis explained. Although the Bank did not foresee, at that time, the adverse impacts because of the prolonged operation at elevation 76m, the Bank took a very strong position with the GOA, immediately after the GOA informed the Bank of its decision to remain at elevation 76m for an unconfirmed period of time. The outcome of the Bank’s position is precisely the base program (Plan B) that EBY is implementing today.”

The Findings section of this Report summarizes the Panel’s position on this issue.

**PART 4: COMPLIANCE WITH BANK PROCEDURES**

276. As noted at the beginning of this Report, the Executive Directors decided that the Panel—aside from its review and assessment of existing environmental and resettlement problems of the Yacyretá Project and the remedial Action Plans agreed upon between Argentina and Paraguay and the Bank—was “expected to look at the extent to which the Bank staff had followed Bank procedures with respect to this project.”

277. The precise extent and scope of this decision was not subsequently determined by the Board. Paragraph 12 of the Resolution establishing the Panel refers to the “operational policies and procedures.” Procedures are included in operational statements and other documents containing Bank policies. Such procedural rules ensure that Bank policies are followed by staff. As stated by Mr. I.Fi. Shihata in his book on the Inspection Panel:

“Operational policies and procedures are defined in the Resolution to include the policies and procedures stated in the Bank’s documents, known as “Operational Policies,” “Bank Procedures,” “Operational Directives” and earlier similar documents. The practice of the Bank has seen several series of operational statements as well as ad hoc circulars embodying its policies and procedures... Prior to the Bank’s reorganization in 1987, its operational policies were contained mainly in “Operational Manual Statements” known in the Bank as “OMSs” and “Operations Policy Notes” known as “OPNs,” which
were both issued, under the authority of the President, by the then existing office of the Senior Vice President, Operations, in the form of general instructions, supplemented occasionally by "Operational Circulars" or less formal notes from the Senior Vice President, Operations. Following the 1987 reorganization, OMSs were gradually reflected in new documents called "Operational Directives" or "ODs," some of which included changes from earlier OMSs and some of which were completely new...Some ODs were seen to be too detailed or reflecting at times what should be sought and not necessarily what could be done in each project. The limits of flexibility in the application of the ODs were not always clear either, especially those written before their drafters were aware of the controversy regarding the nature of these documents. Differences on this issue and the desire of the Bank's Management to streamline and simplify the Bank's business practices led, after an informal discussion by the Executive Directors, to the Management's decision in late 1992 to gradually replace the ODs by statements termed "Operational Policies" (OPs) and "Bank Procedures" (BPs), which would be binding on the staff, as well as by "Good Practices" (GPs), which would disseminate knowledge and indicate successful examples without being binding...At the time of writing (June 1994), not all OMSs and OPNs have been converted to ODs and not all ODs have been converted to these instruments. This could lead to controversies before the Panel on whether certain details in a specific OMS, OPN or OD are provided as technical advice to the staff or are meant to be strictly complied with, an issue which will require a careful reading of these documents in the context in which they were issued and in the light of their objective in building the staff's work...

278. To date not all ODs, OMSs, and OPNs—including those applicable to this Request, listed below—have been separated out into OPs, BPs, and GPs:

- Environmental Policy for Dam and Reservoir Projects (OD 4.00, Annex B)
- Environmental Assessment (OD 4.01)
- Involuntary Resettlement (OD 4.30)
- Indigenous Peoples (OD 4.20)
- Wildlands (OPN 11.02)
- Supervision (OD 13.05)
- Project Monitoring and Evaluation (OD 10.70)
- Suspension of Disbursements (OD 13.40)
- Cultural Property (OPN 11.03)
- Environmental Aspects of Bank Work (OMS 2.36)

279. In other words, the policy statements in force at the time the different loans for this project were prepared and approved, and therefore subject to the Panel's review, do not distinguish between what is meant to be a policy and what should be regarded as a "procedure" or just a guidance to staff (or "good practice"). Also, in the words of the Bank's General Counsel, the "limits of flexibility" in their application is "not always clear either." For example, OD 4.01 on "Environmental Assessment" defines it as "a flexible procedure...which should vary in breadth, depth, and type of analysis depending on the project."
280. In view of the foregoing, the Panel decided to highlight the major areas where staff performance could or should have better followed operational statements rather than prepare an encyclopedic review of all possible violations. The following are the three main areas of concern:

**Participation of Affected Groups and Local NGOs**

281. Both OD 4.01 on Environmental Assessment (previously OD 4.00, Annex A) and 4.30 on Involuntary Resettlement provide policy and procedural rules on the participation of affected people and local NGOs in the design and implementation of the different aspects of environmental assessments and resettlement and environmental protection and management plans. The lack of appropriate local participation is evidenced by not only the submission of the original Request for Inspection and subsequent additional Requests but also by the inadequacies of the assessment and plans noted elsewhere in this Report. This is indeed one of the major flaws in the operational handling of the Project by Bank staff noted by the Panel.

**Supervision**

282. While OD 13.05 (Project Supervision) contains general provisions on supervision and monitoring, ODs 4.01 (especially Annex D on Environmental Assessment), 4.20 on Indigenous People and 4.30 on Involuntary Resettlement contain specific supervision procedures applicable to each of the matters they regulate. Had these general and specific procedures been followed more strictly, perhaps the claims about the bad quality of housing and community infrastructure—verified in certain instances by the Panel—would not have arisen and the issue of pricing of housing on the Argentine side could have been avoided. The inability or unwillingness to exercise available legal remedies is best summarized by quoting a recent supervision report:

“No Legal Covenant Report is attached to this form, because we are negotiating and finalizing with the Borrower and [sic] amendment, which will change most of the covenants and conditionalities under the existing legal documents. It would make no sense to report now non-compliance, when we are reaching an agreement on new covenants and conditionalities under the loan.”

**Institutional Strengthening**

283. Several provisions in the operational directives dealing with environmental protection, indigenous people, and resettlement identify strengthening the capabilities of borrowers and executing entities as a key step in the preparation and implementation of assessments, plans, and activities in these areas. Although great efforts were made by the Bank, the fact is that even at the time of writing this Report, there is no independent environmental coordinator in EBY and the position has been vacant for over two years. At
the same time, the independent evaluation of the environmental management plan scheduled since 1994 has yet to be carried out.

**FINDINGS**

284. The Yacyretá Hydroelectric Project was conceived and designed over 25 years ago under very different circumstances and standards from those of today, in particular with respect to environment and resettlement. The selection of the site locked the Project into a series of inevitable and irreversible impacts, including flooding of over 100,000 hectares and affecting over 50,000 people in two major urban areas. Today, there are considerably stricter environmental and resettlement standards, as well as a much deeper appreciation of the social costs and difficulties to communities posed by involuntary resettlement of large numbers of people. Nevertheless, integrated watershed modeling of the Paraná River Basin could have exposed alternative generation sites with potentially lower impacts.

285. The Project has been under construction for over 14 years and has been affected by numerous and persistent delays and uncertainties. One of the basic problems analyzed by the Panel was the imbalance that developed, and that persists until today, between the completion of the civil and electromechanical works vis-à-vis the “complementary works,” which include environment and resettlement plans. While the former are 99.8 percent complete, less than a third of environmental and resettlement plans have been completed. The Yacyretá Project has incurred important environmental and social liabilities that are causing increasing friction with affected populations which could have been foreseen and avoided.

286. The chain of events that led to the Request and to the Panel review started with the filling of the reservoir to 76 masl in September 1994: it started prior to completion of all agreed actions on environment and resettlement as required by Bank policies. The Bank and the IDB jointly signed the “no objection” based on the premise that no irreversible damage would take place and that completion of remaining actions was proceeding satisfactorily. However, shortly after the reservoir was filled, an unfortunate turn in macroeconomic conditions in the aftermath of the Mexico crisis caused Argentina to suspend all financial support for the Project, which led to a complete paralysis of complementary works for close to two years.

287. Imbalance in execution between civil/electromechanical works on the one hand and resettlement and environmental measures on the other has been one of the fundamental problems of the Yacyretá Project. This imbalance has been exacerbated by the usual Bank practice of financing the former while leaving the latter for counterpart funding. Given that this phenomenon has been observed in other cases, the Panel believes that this practice should be reconsidered.

288. Prolonged operation of the reservoir at 76 masl had not been foreseen and resulted in predictable impacts caused by raising groundwater levels, which impacted the population who were living in low-lying areas above 76 masl and who had not been resettled. This situation is aggravated in poor urban neighborhoods of Encarnación and Posadas. Plans to correct this situation, including both actions required prior to filling the reservoir (Plan A) and those required due to prolonged operation at this elevation (Plan...
B), are an implicit recognition of noncompliance with environment and resettlement covenants. There are a number of additional examples of noncompliance, including the lack of complete hydrogeological studies and monitoring of the impact of the reservoir on lands and soils, problems with creation and management of compensatory reserves, lack of outside review of environmental management plans, and the inability to appoint an environmental coordinator for two years.

289. During the appraisal of the Yacyretá II Hydroelectric Project in 1992, now under the new ODs on Environment and Resettlement (4.01 and 4.30), the Bank made considerable efforts to bring the Project into compliance with the relevant ODs and introduced important changes in the design, such as declaring unacceptable the original solution proposed for the Aña Cua Branch of the river. These efforts met with institutional resistance and it was difficult to get EBY to make progress on these issues, primarily due to bureaucratic problems and lack of financial resources. In spite of extensive supervision efforts, exemplified by the large number of missions, and the fact that Yacyretá environmental actions have been cited as a “model” by the Bank’s Environment Department, the Panel has found that the Bank has not been able to bring the Project into compliance with the ODs and is not likely to do so until after the year 2000. Timely completion of both Plans A and B are the first critical steps in this process, but they do not represent all the actions that are required. For example:

- Due to the absence of sewage treatment in all cities surrounding the reservoir (Encarnación, Carmen del Parana in Paraguay, and Posadas in Argentina) unsanitary conditions prevail in many of the stagnant bays created by the reservoir. These conditions pose health risks to poor people living in low-lying urban areas. Deployment of effective solutions to these problems will require several years. Design and construction of wastewater treatment plants and sewerage systems for Encarnación and Posadas are part of IDB and Bank loans, respectively, but they are not expected to be operational until after the year 2000. More specific schedules are not available at this time, but the process should be monitored closely.

290. The Panel’s review has been complicated by the fact that critical studies included in Plans A and B—essential to assess the adequacy of these Plans—either have not been carried out or were incomplete during the period of this review. Among them are the hydrogeological study to analyze the impact of the reservoir on adjacent soils, the proposed solutions to the Aña Cua Branch and related environmental assessment, and the final site and design of the Encarnación wastewater treatment plant. These studies should be completed immediately because they constitute the basis for permanent solution.

291. The Panel reviewed the evolving position of Bank Management with regard to the future of the Project. A central factor in such a position has been and will remain the strategy adopted by the borrower for the Project. The Panel has identified, irrespective of the changing circumstances of the Project, a set of criteria essential to a successful completion of the Project in terms of Bank policies and procedures:

- continuing all pending environmental and resettlement actions;
- involving the affected population to a greater extent in planning and execution of complementary works;
- guaranteeing that Bank policies have to be respected regardless of formal ownership and management of the Yacyretá Project in the future; and
- continuing Bank supervision of current and future actions.
Bank Management has stated that it will not abandon its commitment to the affected people, and that it has an important role to play in supervision of current and future actions. Those actions cannot occur too soon, and Bank assistance will be vital to sustainable outcomes.

NOTE

Bangladesh: Jute Sector
Adjustment Credit
(Cr. 2567-BD)

Report and
Recommendation

March 14, 1997
Report and Recommendation

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Report and Recommendation

Below is (A) Introduction, (B) Eligibility of the Request, (C) The JSAC, (D) Discussion, and (E) Recommendation of the Inspection Panel ("Panel") on whether or not there should be an investigation ("Recommendation") into allegations made in the Request for Inspection ("Request").

A. Introduction

1. On February 17, 1994, the Board of Executive Directors ("Board") of the International Development Association ("IDA") approved a SDR 175 million (US$247 million equivalent) Jute Sector Adjustment Credit (Cr. 2567-BD) ("JSAC") to support the Government of Bangladesh ("GOB") in carrying out its reform program in the jute sector. It was anticipated that at the completion of the JSAC most of the jute sector would be in private hands.

2. The JSAC was designed to be disbursed in four tranches. Release of each tranche was conditional on the completion by GOB of various actions in support of its reform program. The first tranche of SDR 35 million (US$51,991,725 equivalent) was released on April 5, 1994. It was anticipated that actions required for release of the second tranche of SDR 50 million and a floating tranche of SDR 40 million would be completed by March 1995 and for the third tranche of SDR 50 million, September 1996. No further disbursements have been made since the conditions for release of the subsequent tranches have never been met. The closing date of the credit, was originally December 31, 1996. At that time, Management notified the Executive Directors of a six-month extension of the closing date.

The Request for Inspection

3. The Request was filed in August 1996 by a group of Bangladesh citizens who are intended beneficiaries of the project (the "Requesters"). The Request was resubmitted in November 1996. The Requesters claim, in substance, that they and the jute private sector have been harmed rather than helped through some flaws in the design of the reform program and then by the increasingly adverse effects of the three-year delay in implementation of the JSAC: as a result, the private sector is now worse off than before the JSAC.

4. Harm claimed includes closure of private jute manufacturing mills, loss of jobs for thousands of private mill employees, and loss to the nation's economy.

5. The Requesters claim that the harm has occurred as a result of acts and omissions by IDA Management ("Management") which violate IDA's policies and procedures. The
Request does not identify relevant policies and procedures, but the Panel observed in its Notice of Registration that the Allegations seem to relate to Operational Directives ("ODs"):  
- Adjustment Lending Policy (OD 8.60)
- Project Supervision (OD 13.05)
- Suspension of Disbursements (OD 13.40)

6. The Requesters also claim that the private sector was not adequately consulted during the design and implementation of the JSAC, particularly in the formal decisionmaking process.

7. On December 26, 1996, the Panel received the Management Response ("Response") to the Request.

**Management Response**

8. The Response asserts that:
   - All relevant policies and procedures were and are being followed in the design and implementation of the JSAC.
   - The actions and omissions of which the Requesters complain in relation to implementation are the responsibility of the GOB and do not involve any relevant actions or omissions on the part of IDA.
   - Since acts and omissions in relation to implementation of adjustment credits—in contrast to investment credits—are the sole responsibility of the borrower, the Request is not within the Panel’s mandate.

Nevertheless, Management deals with the substance of the Request and “makes clear the forceful and continuous efforts by Management to persuade the Government to implement promptly and effectively its Jute Sector Reform Program.”

**B. Eligibility of the Request**

9. Pursuant to paragraph 19 of the Resolution it is the responsibility of the Panel to “determine whether the request meets the eligibility criteria set out in paragraphs 12 to 14” after it has received the Response. The Panel is satisfied that the Request meets the relevant criteria and that those signing the Request represent a sector that feels negatively affected by the design and implementation of the JSAC.

**Preliminary Evidence of Material Harm**

10. The Requesters allege both past and potential material harm if the JSAC remains in place with no improvement in performance and without restructuring. They claim the JSAC has caused:
   - A decline in operating loomage in the private sector mills.
   - A fall in actual production and exports.
   - A fall in the market value of private sector mills.
   - Temporary closure or reduction in capacity of 11 private mills.

11. The Requesters allege that the JSAC is responsible for the reduction of private sector capacity. Operating loomage for the private sector has dropped from 5,955 looms in FY 1992–93 to 3,969 looms in December 1996. The Panel has examined closely two case studies of declining production and net income provided by the Requesters as documentation of the damaging process.
12. Without significant changes in the direction and performance of the program, the Requesters foresee major additional damage:

- Permanent closure of private sector mills, with related loss of security, income, and dislocation of careers.
- Job loss for thousands of employees.
- Loss to Bangladesh’s economy and social welfare.

13. Management appears to agree with many of the Requesters’ assertions. In its mid-term review of September 18, 1996, “the mission concluded that the cost of not implementing the program had been very high... It also found that since subsidies for public jute mills were high and provided for a longer period of time than for private mills, these were able to operate at full capacity, while private mills performed less well due to liquidity problems, since subsidies were not only lower for the latter but were also provided with delays. A substantial increase in wages for public sector mills, compensated by Government subsidies aggravated this situation and created labor unrest in private mills.” [emphasis added]

14. Management itself laid out the argument for what has happened: “BJMAs capacity utilization is understandably low because of the following reasons: (a) GOB is not financing losses; (b) MOF has de-linked itself to give any guarantee to the banks on the financial transactions that the mills will have with the banks—bank-client relationship has been established since July, 1992; (c) if the mills remain open, they have to service the outstanding debt; and most importantly, (e) jute goods manufacturing is not profitable unless there is a significant increase in productivity. As the GOB is no more financing losses, the costs of uneconomically producing jute goods have to be borne by the owners, which, obviously, they do not want.” The Requesters made much the same point.

15. Panel consultations with the Requesters confirmed Management’s observations, and indicated that the cost has not only been “very high,” but also pervasive enough in the private sector to cause long-term damage to the prospects for the industry. The Panel wants to point out, in addition, that consultations in Bangladesh revealed that all parts of the industry have been damaged by the postponement of reforms during the last three years. The public sector mills, facing an uncertain future, have had no access to investment capital. The workers in the jute mills have uncertain employment prospects in both public and private mills. And GOB finances have faced an ever-increasing draw on the public treasury to finance the losses of public mills.

Cause of Harm

16. The fact that performance of the Requesters’ mills has deteriorated since the Executive Directors approved the JSAC is not in dispute. However, responsibility for harm is. Management does not deny responsibility for flaws that have emerged in the design phase but does disclaim responsibility for acts or omissions in the implementation phase.

Responsibility for Implementation of the JSAC

17. The Requesters and Management agree that harm has occurred as a result of failure to implement the JSAC but they have different views as to who is responsible. This is important, since the Panel is not authorized to deal with Requests “with respect to actions which are the responsibility of other parties, such as the borrower ... and which do not involve any action or omission on the part of the Bank.” (Resolution ¶ 14(a)).
18. For all the reasons outlined above, the Panel concludes that Requests relating to implementation of Sector Adjustment Loans and, in particular, the JSAC, are within its mandate.

Panel Process
19. The Panel's preliminary review of the Request and Response takes into account subsequent written and verbal information provided by the Requesters, Management, and staff and consultations with the GOB in Dhaka and with the Executive Director representing Bangladesh in Washington.

20. The recent clarification of the Resolution allows the Panel to extend the 21-day period before submitting its recommendation as to the need, if any, for an investigation.\(^2\) Since the Panel required more information from the Requesters and Management, this period was extended until February 17, 1997, and the Executive Directors so informed.\(^3\) On February 11, 1997, the Panel was satisfied that it had received sufficient additional information and then requested an extension of time until March 14, 1997, to consult with the borrower and Executive Director representing Bangladesh and prepare its recommendation in light of those consultations and the new information.\(^4\)

SUBSEQUENT INFORMATION FROM THE REQUESTERS
21. The Panel interviewed a representative of the Requesters and subsequently received further information and case studies.\(^5\) The Chairman further discussed with the Requesters, as a group, the matters raised in their documents during his time in Dhaka.

SUBSEQUENT INFORMATION FROM THE MANAGEMENT
22. A number of meetings were held with Management and staff involved in preparation and implementation of the program. The Panel requested and received a number of useful documents.\(^6\) The Panel thanks the staff for their cooperation.

CONSULTATIONS WITH GOB
23. Pursuant to paragraph 21 of the Resolution, the Chairman of the Panel—in his capacity as Lead Inspector for this Request—spent February 24–28, 1997, in Dhaka meeting with current and former GOB officials.\(^7\) These consultations were most constructive and enabled the Panel to get a firsthand view of GOB's approach to the problems with the JSAC. The Panel wishes to extend its thanks to the GOB for making so much time available and to the World Bank field office for logistical support.

24. Both prior to and after his consultations in Dhaka, the Inspector had extensive fruitful discussions on and relating to the Request with the Alternate Executive Director representing Bangladesh.

C. The JSAC

Report and Recommendation of the President

OBJECTIVES
25. The main benefits of the credit, as described in the Report and Recommendation of the President of IDA to the Board of Executive Directors in January 1994 ("MOP"), were to:
Box 1. Scope of Panel Mandate

Once more Management alleges that a Request should be dismissed on formal grounds. The Panel notes with concern Management’s allegation that “complaints in respect of delays in implementation are outside the jurisdiction of the Inspection Panel, which is not authorized to deal with complaints with respect to actions which are the responsibility of other parties, not IDA.”

Since all projects and programs financed by the Bank/IDA are carried out by the borrower or executing entity and never by the Bank/IDA itself, if Management’s allegation is to be accepted, then the Panel would lack jurisdiction in all cases where delays in the execution of a project or program have caused material and adverse effects to third parties.

The intent of the Resolution, and all precedents relating to its application by the Board of Executive Directors to date, seem to indicate that Management cannot disclaim responsibility for adverse effects of Bank/IDA-financed projects simply because it is not the executor of the activities included therein.

There are a number of specific policies and procedures regulating the design, appraisal, and execution of projects that must be followed by Management, and, if failure to do so results in harm to third parties, they can ask the Panel to recommend to the Board of Executive Directors an investigation of the matter.

Although the legal structure of an adjustment operation is different from that of an investment operation, there is no basis to allege that the Panel would not have jurisdiction over the former since a) such jurisdiction has been expressly recognized by the Board of Executive Directors, Senior Management, and the Panel;1 and b) there are substantial remedies available to Management in case of failure by the borrower to comply with the conditions related to the release of one or more tranches. With respect to the latter, the Panel requested a legal opinion from the Senior Vice President and General Counsel on what remedies—aside from withholding the release of outstanding tranches—are available to IDA under sector adjustment credits in certain situations.2 The opinion makes it clear that IDA has legal remedies beyond the mere withholding of tranche disbursement in circumstances such as those of the JSAC discussed below. However, it also points out that any responsibility for exercise of these remedies—as in investment operations—lies in Management and is a matter of judgment that must take into account all the circumstances of each case.

Taken together, the Response views on implementation and remedies appear to argue that IDA does not have responsibility for the outcome of an adjustment operation. In that case, this Request would appear to fall outside the mandate of the Panel. The notion that IDA is not responsible for application of its policies in the implementation of adjustment credits (in contrast to investment credits), and therefore is not subject to the jurisdiction of the Panel, in effect contradicts the General Counsel’s opinion referred to above. In addition, such a view could give rise to doubts on the rationale for IDA financing of adjustment operations.

Notes
1. See Memorandum of Mr. T. T. Thahane to IDA’s Executive Directors and Alternates dated June 16, 1995, which expressly acknowledges this fact and attaches Memoranda from the Senior Vice President and General Counsel and the Panel’s Chairman that refer to a meeting between Senior Management and the Panel where the Panel’s jurisdiction over SALs and SECALs was reviewed and agreed upon.
2. See Memorandum of the Acting Vice President and General Counsel to the Chairman of the Inspection Panel dated January 29, 1997, especially paragraph 3(a).

- help turn the loss-making jute manufacturing sector into a smaller, but viable industry;
- eliminate the burden of jute sector financial subsidies on the economy;
- establish a market-based credit system and financial discipline in the jute industry; and
- initiate a strong privatization program of almost all government-owned mills that
would demonstrate Bangladesh's commitment to a vigorous private sector development process.

REFORM PROGRAM

26. To these ends the credit was to support the implementation of a program of reforms designed to restructure the jute manufacturing industry. The program involved:

- elimination of excess capacity in the jute industry by closing 9 of the 29 public mills and downsizing two large public mills;
- retrenchment of about 20,000 employees in the public sector;
- provision of social safety net program for retrenched workers;
- restructuring of jute sector debt of about Tk 35 billion (US$900 million);
- privatization of at least 18 of the remaining 20 public mills; and
- training/retraining of redundant workers.

MACROECONOMIC FRAMEWORK

27. The MOP noted that the macroeconomic framework necessary for successful implementation of the reform program was described in the annual Policy Framework Papers and the recent Country Economic Memorandum.

RISKS

28. The MOP predicted that the program, which involved mill closures and retrenchment, was politically sensitive.

"The principal risks are labor related and political in nature. The Government will implement a comprehensive safety-net program which includes retrenchment benefits and retraining, particularly for self-employment, to support the affected employees."

DESIGN

29. At the GOB's request, IDA undertook a comprehensive study of problems of the jute industry. The reform strategy to be supported by JSAC was developed jointly with the GOB in the preparation of this report, which concluded that fundamental changes were needed to restore the industry to commercial viability. The GOB then initiated a series of reforms. Implementation of these specific actions were the condition for IDA support of the program and release of the first and subsequent tranches. Ownership and commitment to the program were reflected in the GOB's Letter of Sector Policy of December 23, 1993. The Letter outlines the actions the GOB would undertake as conditions precedent for release of further tranches of the credit proceeds.

RATIONALE FOR IDA SUPPORT

30. The MOP reviewed, inter alia, IDAs:

- past experience with adjustment lending to Bangladesh
- earlier projects in the jute industry
- social impact
- projected benefits, and
- risks
and concluded that: “While the proposed operation entails considerable risks, **particularly if there is slippage under the program**, the benefits associated with successful outcome justify IDAs strong support.” [emphasis added]

**BOARD APPROVAL**

31. On the basis of the information contained in the MOP, the Executive Directors of IDA approved the JSAC.

**Subsequent Events**

**Loan Effectiveness: April 1994**

32. The first tranche was released upon loan effectiveness since actions required for its release had been completed prior to the IDA Board of Executive Directors’ approval of the JSAC.

**Tranches**

33. The estimated date for release of the second tranche was March 1995. The conditions for its release are/were:

- maintain macroeconomic framework including wage policy in jute industry satisfactory to IDA;
- reduce excess capacity in public mills by taking the following actions:
  - dispose of equipment of four closed mills and equipment not required for operation of the one downsized mill;
  - close five identified public mills and downsize one other to reduce capacity in the public sector by 2,700 looms;
- reduce permanent employees in the public mills by an additional 8,000;
- introduce mandatory retirement age for workers in the public sector;
- restructure the jute sector debt;
- reduce GOB’s share in the total loom capacity to at most 7,000 looms by privatization or other means of disposal of at least nine mills; and
- complete liquidation of the BJC.

and for a “floating” tranche:

- offer a public mill for sale with necessary measures to make it attractive to the private sector; and
- maintain a macroeconomic framework including a wage policy satisfactory to IDA.

**Political Instability: May 1994–June 1996**

34. Shortly after credit effectiveness, progress in the JSAC reforms—as in other structural reforms—was stalled because of severe political turmoil and instability, along with the change of senior officials in the key ministries.

35. According to a recent supervision mission, during this period actions meant to allow for a smooth transition period—debt restructuring and provision of loss financing, and reductions in the labor force—had been implemented, but the main actions of closure and privatization of jute mills had not.

36. During this period, the JSAC was identified by Management as a problem. The Executive Directors were notified of the delay in releasing the second tranche on a quar-
terly basis, and once the delay exceeded the estimated tranche release date by six months, an explanation for the delay was provided. In November 1995, the Board was informed that: "After the March 1996 elections we expect that the new government will take the needed actions, leading to the second tranche release by September 1996."

37. In February 1996, the Executive Directors were informed that:
"The Government had indicated before the elections that if it returns to power it will resume project implementation and try to get it back on track. Although most of the preparatory work for the above has already been done, the current political situation and commitment does not permit us to have a firm estimate of second tranche release date. The situation would be reassessed after the new Government resumes project implementation."

38. The June 1996 report was identical on progress but informed the Executive Directors that a mid-term review was planned for shortly after the new GOB assumed power.

39. The October 1996 report informed the Executive Directors that the new GOB's request for an extension of the Closing Date was under discussion.

40. The March 1997 report summarized the background and situation as follows:
"In August 1996 a mid-term review mission agreed with the new Government on a revised implementation timetable for JSAC, since political instability had caused substantial delays in program implementation. The main cause for delay in releasing the second tranche has been the failure of the previous Government to privatize or close 14 public jute mills as required. The new Government has already tendered 9 public jute mills and will tender 5 more mills during the first quarter of 1997. Second tranche release is expected by June 1997 since the whole process of transferring or closing 14 mills would require time."

RENEWED COMMITMENT: JULY 1996–MID-TERM REVIEW

41. The GOB elected in June 1996 indicated its interest in continuing the JSAC and requested an IDA mission to discuss extending the Closing Date beyond December 31, 1996. IDA sent a mid-term review mission in July 1996. The review acknowledged that:
"during the JSAC period, there has been an unintended perverse shift of production from the relatively more efficient private mills to less efficient public mills, and closure of a few more efficient private mills because:
(i) the public mills had generous and longer availability of loss financing and easy access to working capital, compared to the private sector;
(ii) public mills have been realizing lower sale prices, compared to the pre-JSAC period when export prices were generally similar for private and public mills; and
(iii) delay in closing the worst performing public mills, and privatizing the other mills; and some public mills are deferring payments to traders to sustain their operations. This debt may have to be borne by GOB, as has happened in the past."

42. More specifically, the same mission reported the problems quoted in paragraph 13 above. And moreover, that "Under the original closure and privatization schedule for second tranche, it was expected that public mill losses would have been reduced by
US$26.5 million in FY94/95, US$18.3 million in FY95/96 and an additional US$8.8 million in FY96/97. However the lack of progress in privatization/closure of mills, together with wage increases and other factors, resulted in public mills losses of US$64.5 million in FY94/95 and an expected US$84.1 million for FY95/96."

**Extension of Closing Date**

43. Management decided on December 30, 1996, to extend the closing date for another six months to allow time for the Borrower to bring the program back on track. An additional extension of one year was offered if, and only if, the Borrower could undertake a set of actions with regard to privatization, disposal of assets of previously closed mills, disposal of BJC assets, and imposition of discipline of banks providing working capital to government-owned jute mills.

**D. Discussion**

**Adjustment Lending Policy**

44. OD 8.60 on Adjustment Lending Policy sets out the prerequisites for adjustment lending.

**Commitment to Adjustment Program**

45. As acknowledged by the Response, OD 8.60 emphasizes the need for "strong political commitment" to reform. The OD also highlights Management responsibility for evaluating the Borrower's commitment:

"Adjustment programs require strong political commitment, and the government concerned needs to generate broad-based support if the program is to be sustainable" (¶ 38); and continues with:

"The strongest influences on borrower 'ownership' are political stability, support (or at least lack of opposition) from the principal constituencies affected by adjustment programs, and the attitudes of government officials and technicians towards the various reforms... Adjustment lending is not advisable when the political commitment to adjustment is weak or highly uncertain. While there are no general rules for ascertaining the strength of ownership, experience suggests that a simple indicator is the capacity and willingness of country authorities to prepare acceptable Letters of Development Policy." (¶ 39) These three requirements are discussed in turn below.

46. **Political Stability.** This appears to be the first and fundamental requirement for supporting a successful adjustment operation. The MOP, while recognizing that the government in power at the time had been elected in 1991 following escalating political disturbances, provided no analysis of the prospects for political stability as of the beginning of 1994. As noted above, Management has pointed out that political turmoil reemerged early in the life of this program as well.

47. **Support for Restructuring and Privatization.** The MOP was nearly silent about support of key affected constituencies for the program. The MOP did identify a major risk, pointing out that the "program, which involves mill closures and retrenchment, is politically very sensitive. The principal risks are labor related and political in nature."
48. The RESPONSE explains that the GOB's commitment was demonstrated by its taking the actions necessary for the release of the first tranche upon loan effectiveness.

49. The MOP noted that "although the current Government has clearly demonstrated its ability to reduce excess employment and close unprofitable mills, the political difficulty of sustaining this effort is considerable" (¶ 110), and explained the measures undertaken by the GOB:

"The Government has sought to manage the risks by explaining the program to the public and extensively debating the program in Parliament. The Government has tried to make the costs of industry more transparent by identifying the costs to society, specifically in the context of the jute write-off and interim financing arrangements. In order to garner support for the program from labor groups, the Government has offered generous severance payments to retrenched workers. Moreover, the Government has agreed to pay benefits to workers who do not wish to accept new employment conditions in privatized plants..." (¶ 111).

50. A year into the program, an IDA private sector development specialist provided more detailed analysis. Privatization, as anticipated, was proving particularly difficult for a variety of reasons:

- "Jute has been Bangladesh's most important agricultural and manufacturing product for years. While world demand has declined, Bangladesh's official approach has been to continue to prop up the industry through a variety of subsidies which in sum now total about US$1 billion equivalent. No Government has really had the courage to back away from this public support which has become to some extent, a 'matter of pride', and a 'way of life' in the country, and thus self perpetuating.
- Although there is considerable private activity in the sector, private jute manufacturers are not politically or financially strong enough to play a major role in the necessary sector restructuring.
- As in many countries, privatization in general is not viewed very favorably by the public at large, and certainly not by the significant part of the population which earns its living through jute (in fact through Government subsidies to the jute sector).
- With elections in the not-too-distant future, politicians of all stripes are exploiting the unrest in the jute sector by encouraging labor unions and other groups to believe that if they can only delay the process a little while, maybe it will never happen. All political parties apparently give public support to the privatization program but in many cases, apparently, also give support to opponents of the process.
- The tender process of privatization may not be particularly well-suited to disposing of obsolete assets in a 'sunset' industry, particularly when assets are sold encumbered with significant labor-related obligations, and restrictions on how the assets may be used."

The memorandum goes on to explain that "as a result of all these factors, most parts of the Government appear to accept that jute restructuring and privatization will be slow. There is no obvious resistance to the program among officials charged with implementing it, but nor, in most quarters, is there much real energy being displayed in trying to overcome manifest obstacles."

51. While the analysis in the MOP was broader than the simple indicator used to ascertain political commitment provided in the Response, perhaps a more detailed
description of risks in this respect might have been useful for the Executive Directors. In retrospect, Management argues that there existed a narrow time window of Borrower commitment upon which Management attempted to capitalize. The window closed quite quickly and suddenly, and yet no strategy existed for the program in case of a collapse of an important component. In particular, an analysis of borrower ownership in terms of the attitudes or commitment to privatization of key constituencies and players—such as that provided in the 1995 staff review outlined above—may have raised questions on the readiness to implement the reforms on the scale and in the time frame proposed for the JSAC.

52. Finally, macroeconomic policy measures—specifically wage policy which will be discussed below—in the context of indicators of borrower commitment or likely political ability to implement adjustment, may have deserved more detailed treatment in the MOP.

**MACROECONOMIC POLICIES**

53. A further prerequisite in OD 8.60 is:

> "The set of policy measures to be supported by an adjustment program has to be evaluated as part of the overall program. A clear understanding with the government on the overall stabilization and structural programs is a prerequisite for putting the conditions for tranche releases in the proper context. ...the Letter of Sector Policy (in the case of SECALs), and the corresponding policy matrices, spell out the macroeconomic targets to be monitored so as to avoid misunderstandings." (§ 40)

54. The JSAC Letter has just one macroeconomic action: wage policy. This is reflected in the "Matrix of Policy Actions" attached to the MOP, where as a condition for release of the second tranche, the GOB was required to "Maintain macroeconomic framework including wage policy in jute industry satisfactory to IDA."

55. With respect to macroeconomic policies, the MOP stated that the "viability of the industry critically depends on a flexible exchange rate and prudent wage policies. During the period of the Credit, the Government would be expected to maintain and implement the macroeconomic framework agreed as part of the IMF's Enhanced Surveillance Program. Actions of particular importance are flexible exchange rate Management to maintain external competitiveness, and restraint on wages in the jute industry until the profitability of the industry is restored. By this time, the majority of the mills will be in the private sector and wages for both the private and remaining public sector workers would be linked to labor productivity at the mill level." (§ 65)

56. The Requesters cite two macroeconomic issues as impacting on the viability of a privatized jute industry:

- sustainable wage levels that keep jute products competitive internationally, and
- a realistic exchange rate, since 90 percent of jute production goes into export markets.

**Wage Policy**

57. The Response—as already noted—argues that the Borrower's "commitment was demonstrated by the GOB's taking the actions necessary for the release of the first tranche upon effectiveness." However a principal action taken by the Borrower months before this credit was presented to the Board, was to raise wages in the public sector (including jute mills). This action clearly undermined prospects of financing the reform program under negotiation.
58. The MOP outlined the circumstances of the 1993 “moderate” increase in public sector wages. (¶ 92) It implies that the original demand for an increase of 40 percent was reduced to 17 percent. An earlier August 1993 staff analysis showed that the 40 percent increase in the basic wage was awarded, but when blended into the overall pay and benefit package, the net increase was about 14 percent. The MOP also acknowledged that the GOB recognized the fundamental importance of wage policy to success of the JSAC: “unless the wage increases in the jute industry are restrained and the wage bill is substantially reduced, the industry cannot be viable even if all the structural reforms outlined above are fully and effectively implemented.” [emphasis added] (¶ 93)

59. In the discussion on privatization the MOP noted generally that:
“Given that labor and wage issues are highly politicized in the industry, it will be a major challenge to reduce jute sector wages to levels prevailing in most private sector activities (which are currently less than one-third of those in the jute sector”). (¶ 84)

60. The MOP also expressed the hope that “the restructuring of the jute industry to be supported with the proposed credit will set an example for other industries by linking future wage increases in both the public and private sectors to productivity.” (¶ 9)

1993 Wage Increase

61. The Requesters state that the impact of the wage increase in the summer of 1993 was in “setting a new reference point for wages in the jute industry while directly pushing up costs for the BJMC mills, making them less viable and less easily privatized.” In addition, the wage increases caused strikes among private mill workers for comparable increases, and the migration of skilled workers to the higher wage scales in public mills.

62. Regional Management recognized the damaging effect of the July 1993 wage increase. It responded by a letter of October 8, 1993, which insisted that the Borrower accelerate the planned privatization process.

“Clearly IDA cannot move forward in support of the JSAC until it is in a position to satisfy the Board that any wage settlement is fully consistent with the objective of achieving viability for the public mills and that the agreed interim financing and debt relief package will be sufficient to ensure that the privatization plan can be implemented smoothly.” By implication, the wage issue was important for establishing the Borrower’s commitment to reform. The commitment was to be demonstrated by the GOB’s taking the actions necessary for the release of the first tranche upon effectiveness of the credit.

63. It might have been useful to include in the MOP (a) an analysis of the difference between wages at public and private mills within the jute sector, and (b) a clearer analysis of the impact of the 17 percent increase on the viability of the private sector mills and on the prospects for privatization of the public mills under the program. Such a detailed analysis might have indicated the financial damage of the 1993 increase, seen in staff documents, as delaying profitability in both the private and public mills for another two years. That conclusion was never reconciled with the requirement that GOB financing to the private mills was to terminate at the end of 1994 (later extended to mid-1995). Ultimately, the real damage of the wage hike was to reduce the attractiveness of the mills for privatization—a situation only recently rectified by sacking the workers before trans-
fer of mills to new owners. That solution probably creates additional political hurdles for any government wishing to privatize the mills.

**1996 Wage Increases**

64. Referring to the already mentioned Letter of Sector Policy, the MOP stated that “The Government’s Statement of Jute Sector Policies makes it clear that further wage increases in public sector mills will be granted on a mill-by-mill basis and only when profitability permits.” (¶ 93) However, across-the-board wage increases (10 percent) were introduced in the public mills again in 1996.

65. Management later reported, “The increases in wages for public jute mills, in addition to furthering the industry’s problems and resulting in higher subsidy requirement, are in contravention with this condition and would therefore need to be reviewed in the context of a possible rescheduling of the project.” At the same point, “the mission recommended that the Government abstain from any further increase in wages that would aggravate the situation of the industry and further violate JSAC conditions.” [emphasis added]

**Exchange Rate Policy**

66. The MOP emphasized the need for flexible exchange rate Management. The Panel in January 1997 asked Management the following question:

“With regard to flexible exchange rate Management, the question does not appear to be included in the matrix of policy actions in the President’s Report. Was it considered unimportant? Did a target exist for the exchange rate that would have caused significant benefits or damage to the jute industry?”

Management explained that “IDA does not set targets on exchange rate policies, since this is an area of the Fund’s expertise. In designing JSAC tranche release actions, IDA took into account that the Fund was satisfied with the exchange rate policy, as reflected in the Fund’s mid-term review of March 25, 1994, which covered September and December 1993. In such review, the Fund noted that external reserves of Bangladesh were very strong and that the GOB remained committed to pursuing an exchange rate policy in line with its agreements with the Fund. IDA Management does not consider appropriate that exchange rate policies be used to compensate for particular sector competitiveness of lack thereof, and we believe Fund Management agrees.”

67. The importance of the exchange rate issue was raised by the Requesters. They spoke of an “understanding” in the negotiation of the program that the Taka would gradually decline to Taka 50 = $1 within the life of the JSAC. Since it has currently reached only Taka 42 = $1, the industry believes that they are suffering from an effective 15–20 percent penalty in exports, which account for 90 percent of jute production.

**Loss Financing**

68. The initial attempt to deal with prior losses stated that financing would be provided for only 18 months—actually 12 months given the delay of project effectiveness—which for the private mills meant that they could be disadvantaged vis-à-vis the public mills if privatization were delayed. Management asserts that this problem is unavoidable, owing to their working “on the assumption that privatization of public mills would be fairly advanced at the end of that period.” Management failed to note that privatization efforts in Bangladesh had consistently been characterized by delays. Any project design might have included mechanisms
reflecting that reality, as it was likely that the private sector would suffer. The fixed deadline—created for the obvious objective of reducing government deficits—provided an incentive for those resisting privatization to attempt to drive the private mills out of business.

69. The Requesters allege that the JSAC failed to include a “mechanism of ensuring effective and quick implementation of the program.” Financing of current losses is one example. Management accepted a standard, with regard to future loss financing, that the GOB would provide no more funding to any banks for mill losses (public or private) after June 1996. The Requesters have explained how that gives an advantage to the public mills: “WB must recognize that under any loss making situation, public sector losses must be funded in one way or the other by the Government... For example, the banks have already been asked by the Government to provide working capital finance to public mills to the extent of 50% of last year's loan amount, as an interim measure, allowing the public mills to purchase jute and keep their mills running despite higher costs than most private mills. It goes without saying that these amounts are non-refundable (and are effectively loan finance) and therefore already violate the WB conditions for FY 1996-97.” The Requesters later say, “To expect that BJMC losses will remain somehow unfunded is to wish the problem away. Such recommendations only serve to act as an impediment to GOB for providing similar help to private mills.”

70. Management has noted the problem of establishing discipline over provision of working capital. “Working capital financing has also not followed the JSAC agreement, under which the GOB was to ensure that those mills that were not offered for sale according to the agreed timetable and those that failed to reduce their losses were to be denied bank financing.”

71. While the Borrower may no longer be directing credit to the public mills, it is evident that public mills can obtain working capital from the banking sector, with the banks confident that the GOB will eventually cover the bad debts of the public mills. Private mills, however, lack comparable access. The debt restructuring of 1993-94 under the JSAC left the private mills “uncreditworthy,” and thus disadvantaged.

72. Following on these difficult issues, Management chose to change in an important way the condition related to financing. Recently Management and the GOB agreed to extend the closing date of the credit on the basis of, inter alia, “abstention from requiring banks to provide additional financing to loss-making public or private mills beyond June 1996.” The word “requiring” changed the approach. Previously, Management had required that no new financing be provided or as stated in the mission’s recommendation in the mid-term aide-mémoire of July 1996, “abstain from considering any additional requests for loss financing to public or private mills beyond the original date." The new language has changed the burden of proof, allowing the banking system to provide credit to the public mills, confident from past practice that reimbursement would later arrive from the GOB.

73. In response to a question on the status of this conditionality, Management explained that it recommended in a letter of September 1996 that, in addition to the concept of abstention, “working capital financing by Nationalized Commercial Banks be provided based on performance criteria in order to ensure that private mills are treated equally with public mills and that those public and private mills that are not creditworthy be denied credit.” Access to credit has been a contentious issue: Requesters allege that they are inherently disadvantaged in this regard by the original debt restructuring.
Training

74. Finally, the MOP laid out a two-track training program: upgrading of the skills of workers remaining in the jute mills, and a retraining program for retrenched workers. The Requesters say that the BJMA was denied representation on the planning group—not verifiable by the Panel—and according to the BJMA, the resulting training program favors the public sector over the private. The first workshop was not held until April 1996, when over 20,000 workers had already been dismissed and scattered to their villages. In effect, a major opportunity for retraining workers in the promised "social safety net program" of the MOP was lost. Nevertheless, it may be available if future privatizations occur with accompanying large-scale redundancies.

Participation

75. The Requesters cited, as a violation of policies, the unwillingness of Management "to involve, or to take seriously the concerns of, the private sector as an affected party in the design and implementation of Bank-financed projects." Since the end result of the adjustment credit was supposed to be a viable private sector, it appears to be essential to have a constructive relationship with the industry being fostered. Management maintains that consultation has been extensive from the beginning, while the Requesters maintain that they forewarned Management, during design and execution, about the kind of damage IDAs acts and omissions were causing the private mills, without getting a positive response.

76. For example, when the private mill owners were presented with the decision to carry out the JSAC program at the end of 1993 by the GOB, BJMA felt they had no choice other than to join the program, but registered their "reservations" in a letter dated January 5, 1994, to Management and to the GOB. These concerns covered: (1) short time frame of interim loss financing; (2) attitude of banks; (3) no arrangement for funds to undertake cost saving measures; (4) no effective or real exit mechanism; (5) restriction on mills rights to manufacture yarn/twine and other diversified products; (6) blatant discrimination against private mills affecting our competitiveness." The BJMA described their concerns as "strong enough for the Association to officially put on record that without the necessary amendments which satisfactorily addresses the above issues, the private sector jute industry in Bangladesh will not be able to deliver the desired results and JSRP will be doomed to failure."

77. The reluctant agreement of the private mill owners appears to be a participation process in which they were present, but where their views were not incorporated into the final design. Whether or not their prediction was true—that their difficulties have been instrumental in the breakdown of the project—it is at least clear that their prediction of the areas of potential damage to their interests was accurate.

78. The Requesters argue that, even with the weak support for the reform at the outset, the JSAC has done nothing to build any more internal support for the project. Even worse, the Requesters express concern that the entire spirit of the credit has been reversed: "We understand now that the Government has requested formally that the Bank agree to eliminate or postpone the privatization and public mill closing provisions from the JSAC agreement." There is substantial evidence in Management documentation to support this allegation. The Inspector found, in consultations with some senior GOB officials, a strong inclination to expect a further decline in private sector capacity and a related rationalization that, therefore, public sector capacity had to remain open in order to maintain Bangladesh's share of world jute markets. They recognized that such a view was contrary to the JSAC
approach, but that it might be more important to maintain the volume of an industry that employs, directly and indirectly, a reported one-quarter of the country's work force.

**Supervision**

79. The request also alleges that Management has failed to supervise the Program adequately. While the Requesters do not quote directly from IDA policy, their concern appears to derive from the unbalanced nature of progress in various elements of the Program. As OD 13.05, Annex A, states, “Supervision should not lose sight of the intended results of the agreed actions (which should be consistent with the program's objectives) and the general macroeconomic framework within which program implementation takes place. Supervision of adjustment loans must, therefore, be broader than the review of agreed actions and procedures related to procurement and loan disbursement.” In effect, the concern of the Requesters is that the private sector was perishing under the discipline of a credit that was succeeding, through only partial implementation, in fostering the public sector that was supposed to be privatized. As the Requesters allege, “The actions and omissions of the Bank in the design and implementation of JSAC provisions have resulted in the exact opposite of the intended JSAC objectives.”

80. Management maintains that supervision of program implementation has been strong. But the documents also show that pressure from Management was not applied consistently to all project elements. In that situation, some constituencies were forced to reform more than others, for example, the private sector has lost more access to credit than has the public sector. The nature of political forces in Bangladesh led to a gradual distortion of the “reform package,” and several people consulted in the GOB maintained, rightly or wrongly, that only tighter supervision by IDA could have maintained the balance of the package.

**Suspension of Disbursements Policy**

81. The request expresses concern about IDA adherence to policies, in the context of “failing to enforce JSAC agreement conditionalities which would adversely affect implementation of JSAC’s key components and attainment of its objectives.” Enforcement could imply the application of OD 13.40, Suspension of Disbursements. The Response argues that the tranching of adjustment disbursements makes it impossible to withhold funds except at the time of release, and that Management had done so after release of the first tranche. The difference between covenants in investment operations and conditions precedent in adjustment operations is also explained. As stated above (Box 1), the Panel sought clarification on this issue by asking the Senior Vice President and General Counsel for his opinion on remedies (Attachment 3). That opinion elaborates on the range of remedies noted in the Response. It appears, from discussion with Management, that the option of cancellation discussed in the above-referenced Opinion has never moved beyond the informal discussion stage.

**Remedial Actions**

82. The Requesters believe that some of the damage caused to them arose from Management’s “apparent willingness to reconsider and modify significantly to the detriment of JSAC the content, scope and timing of the implementation plans for: public sector mill closures; downsizing of two large public sector mills; privatization of remaining public sector mills; working capital availability for private sector mills; wage policy
reform and wage-level containment in the sector; and technical assistance and training to attain viable machine efficiency and labor productivity levels in the sector." In effect, the Requesters are noting the attempts of Management to deal with a program that has encountered delays.

83. The question of tendering public mills is one example. An aide-mémoire from August 1996 says that "Any possible rescheduling of the Program would require upfront action in the closure program as an indication of Government commitment." The goal was to close five mills, downsize one more, and reduce total public mill capacity by 2,700 looms. The mission had recommended closure of at least three mills by the fall of 1996; it was stated that "the sale transaction—whether privatization or closure—of at least three of the mills, slotted for closure, would need to be completed before we would consider extending the Credit closing date." However, Management then retrenched further, with the final agreement requiring, inter alia, "tender or closure of nine public mills," but not the actual completion of transactions.

84. Privatization has a limited track record in the GOB. The Privatization Board was created during negotiation of the JSAC and, according to multiple sources, was improperly staffed and never given adequate policy independence. Over the life of this program, multiple tenders have resulted in virtually no successful sales. The current issuance of tenders for nine mills is a test of the process. Consultations with the Borrower revealed that none of the tenders in recent months has been successful, and that the mills will all be tendered again, rather than being closed immediately.

85. In response to a question from the Panel, Management explained that "Target dates have been established for mill privatizations and for closure of those mills in respect of which tenders have been unsuccessful. These target dates were agreed with the Government during the mid-term review of the JSAC. The supervision missions from headquarters will evaluate the Government's progress in achieving the privatizations and/or closures against these agreed target dates. If such evaluation concludes that the progress achieved in respect of this or any other component of the reform program supported by the JSAC is not substantial, the Closing Date (currently June 30, 1997) will not be extended. If the evaluation concludes that the progress achieved justifies a further extension of the Closing Date, this extension would only be granted against a tight schedule—possibly one year—for completing the reform program."

86. In terms of the concerns of the Requesters, the most important element of the loan extension conditions relates to the "continued financial discipline on private and public mills." To date, the Requesters argue that discipline has been applied only to the private mills. If Management is able to obtain equal treatment for the mills across the board, such a remedy will respond to many of the Requesters' concerns.

E. Recommendation

87. Based on this preliminary review, the Panel is satisfied that:

- the Request meets all eligibility criteria required under the Resolution and is within the Panel's mandate; and, more specifically,

- the Requesters appear to have suffered material adverse effects during the execution of the JSAC; and
• the Panel is not satisfied that Management complied with all policies during the design and implementation of the JSAC.

88. Based on experiences of JSAC during the past three years, emerging political forces, and earlier lessons pointed out by OED, an extension of the closing date of the credit without revisiting basic design concepts with the GOB and Requesters may not be an adequate solution. Close supervision during this extension with regard to financial discipline might at least meet some of the Requesters’ concerns. The closing of the program without a new approach in place, however, would presumably meet none of their expectations from the reform program. In this context an investigation would serve no useful purpose.

89. Based on the foregoing, the Panel does not recommend that the Executive Directors authorize an investigation into violations of IDA policies and procedures alleged in the Request.

Notes

1. In Memorandum from the Vice President and Secretary of IDA to the Executive Directors, June 16, 1995.
2. INSP/SecM96-15, December 10, 1996.
4. INSP/R97-2, February 13, 1997. Agreed to by the Executive Directors on a no objection basis.
6. Memoranda dated: December 5, 1996, providing Quarterly Reports on Pending Tranche Releases of Adjustment Operations submitted to the Executive Directors between May 24, 1995, and October 22, 1996; January 6, 1997, concerning Extension of Closing Date; January 24, 1997, providing information on (1) Closed Mills under the First Tranche, (2) Retrenchment of Workers under the First Tranche, (3) Total Retrenchment under JSAC, (4) Retraining Program, and (5) IDAs Measures Taken; February 6, 1997, follow-up letter explaining to GOB the decision and conditions for extension of the Closing Date; February 11, 1997, on (1) Macroeconomic Policies (restraint on wages and flexible exchange rate Management), (2) Loss Financing, and (3) Privatization.
7. Current officials included the Secretary of Finance and the Secretary of the Economic Relations Division, both of the Finance Ministry; the Secretary of Jute/Chairman of the Steering Committee; the Chairman of Bangladesh Jute Mills Corporation; the Chairman of the Privatization Board; and the Secretary of the Industries Ministry.
Brazil: Itaparica
Resettlement and
Irrigation Project (Loan
2883-1BR)

Report and
Recommendation

June 24, 1997
# Report and Recommendation

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Report and Recommendation

Below is (A) Background information, (B) Discussion, and (C) Recommendation of the Inspection Panel ("Panel") on whether or not there should be an investigation ("Recommendation") into allegations made in the Request for Inspection ("Request").

A. Background

1. On March 12, 1997, the Panel received a Request which alleged violations by Management of policies and procedures of the International Bank for Reconstruction and Development ("Bank") in relation to the Itaparica Resettlement and Irrigation Project ("Itaparica" or "Project"). On March 19, 1997, the Panel notified the Executive Directors and Bank President of receipt of the Request (meaning "Registration" under the Panel's Operating Procedures). On April 28, 1997, the Panel received Bank Management response ("Response") to the Request.

2. Itaparica is the first Bank-financed stand-alone resettlement project. It was designed specifically to benefit the population affected by construction, beginning in 1979, of the Itaparica dam and reservoir. Construction of the dam was not financed by the Bank. Seven years later and two years before flooding of the reservoir was scheduled (1986), the Government of Brazil ("GOB") requested Bank financing to take care of affected people. The Itaparica loan was approved by the Bank's Board of Executive Directors in 1987 for an amount of US$132 million equivalent. Under an amending agreement in 1990 a supplemental loan of US$100 million equivalent was approved mainly to cover cost overruns. The Bank has been involved in the design of the Project since the early 1980s and in its implementation since 1987. In 1996 the GOB requested a fourth extension of the loan's closing date—until the end of 1997—and it has also requested the Bank to continue supervision through December 1999. The Response notes that approximately US$100 million additional financing will be required to satisfactorily complete the Project.

The Request for Inspection

3. The Request was filed by a group of about 121 individuals and a local organization called Pólo Sindical do Submédio São Francisco representing people who live in the Project area (the "Requesters"). The Request claims that the standards of living, health, and economic well-being of people living in the Project area have been directly and adversely affected as a result of construction of the Itaparica hydroelectric dam—located on the São Francisco River, at the border of the Bahia and Pernambuco states—the faulty execution of
the above-referenced Project, and the Bank's omissions and failures in the preparation and implementation of the Project. In general, it is alleged that a significant proportion of the about 40,000 beneficiaries (6,000 families) of the resettlement Project are in worse social and economic conditions than before the construction of the Itaparica dam.

4. Specifically they claim, inter alia, that after 10 years of involuntary resettlement of the Project area population:
   - only 35 percent of the Project's six irrigation systems have been completed (6,800 hectares), 34 percent are under construction (6,000 hectares) and 31 percent (6,000 hectares) are still in the design phase;
   - the Tuxá indigenous community has been resettled in the Municipality of Rodelas but is unable to grow crops, since the irrigation system promised is still under design;
   - several of the irrigation systems already constructed have serious operational and maintenance problems which owners cannot afford to repair;
   - serious ecological problems have emerged during project implementation, including soil erosion and salinization;
   - there is an evident deterioration—because of the poor quality of the materials utilized in construction—of some of the Project's 110 agricultural settlements (Agrovilas), which include health and education infrastructure, and less than half of them have been repaired;

5. Alleged adverse effects resulting from the delays in the installation and commissioning of the irrigation projects include a lack of sustainable sources of income and a related increase of violence in the resettled communities, alcoholism, and family breakdown.

6. The Requesters claim that harm suffered is a result of violations of various provisions of Bank policies and procedures set forth, inter alia, in the following:
   - Environmental Policy for Dam and Reservoir Projects (OD 4.00, Annex B)
   - Environmental Assessment (OD 4.01)
   - Involuntary Resettlement (OD 4.30)
   - Indigenous Peoples (OD 4.20)
   - Supervision (OD 13.05)

Management Response

7. The Response admits that the “current situation is far from ideal” but claims that the “shortcomings to which the Request points do not arise from the Bank’s failures to follow its policies.”

8. The Response cites as the “main problem” the completion of irrigation infrastructure for the “5,800 families affected by the dam” and notes that the “scope of the agreed project to be financed by the Bank is limited to rural housing, urban infrastructure and five major irrigation subprojects encompassing about 4,500 irrigated plots. The Bank’s accountability should not be extended to non-Bank financed irrigation subproject encompassing some 1,300 plots.”

Additional Information

9. The Panel continued to receive additional information from both the Requesters and the Management after the Response was received. As provided in the 1996 review of
the Resolution, the Panel indicated to the Board that it would evaluate the additional information and would then submit its recommendation as to the need, if any, for an investigation.\(^3\)

10. In addition, the Panel considered information obtained during Mr. Richard Bissell’s ("Inspector") later review conducted in the Project area from June 16-20, 1997.\(^4\) Prior to this visit the Inspector consulted with the Executive Director representing Brazil. In the field the Inspector consulted with the GOB—including officials of SEAIN, FUNAI, CHESF, CODEVASF, and ELETROBRAS, and the Chairperson of the Interministerial Committee in the Ministry of Mines and Energy—people in the Project area, and their representatives from Pôlo Sindicale do Submêdio São Francisco. After his visit the Inspector consulted again with the Bank Executive Director representing Brazil.

### B. Discussion

11. The discussion below is based on the Panel’s preliminary review of the Request, Response, and the additional information either delivered or provided through subsequent interviews in the field and in Washington, D.C. Consultations with Brazilian authorities were conducted in Washington, D.C., through the Executive Director for Brazil, in Brasilia, in Recife, and in the Project area.

**Eligibility of the Request**

12. Pursuant to paragraph 19 of the Resolution it is the responsibility of the Panel to “determine whether the request meets the eligibility criteria set out in paragraphs 12 to 14” after it has received the Response, and the Executive Directors have expressed the hope that the Panel process will not focus on “narrow technical grounds” with regard to eligibility.

13. The Request was filed with the Panel on the basis of the one undisbursed loan in this Project, 2883-1BR, and in subsequent discussions the Requesters insisted that their Request relates only to the one loan.

14. Management’s Response states that “[u]nder the Board Resolution establishing the Inspection Panel (Resolution 93-10, 9/22/93) this Request is ineligible for consideration because more than 95 percent of the Loan Proceeds had been disbursed as of the date the Request was received. However, in the interest of transparency, the following detailed response has been prepared.”

15. Since the Resolution that established the Panel does not refer specifically to the cases where the Bank has provided an original and one or more supplemental loans for the same project and given the fact that the requesters claim that their Request refers exclusively to Loan 2883-1-BR, the Panel requested Management to further elaborate on its claim that the Request was ineligible.

16. On May 22, 1997, Management sent a Memorandum to the Panel which stated the following in relation to this matter:

> "The Requesters’ claim that their Request ‘refers exclusively to Loan 2883-1-BR’ is based on a misunderstanding of the nature of the additional financing made available to the Borrower. The original loan amount of $132.0 million was increased, under an amending agreement in 1991, by the amount of $100.0 million, to cover part of a cost overrun."
From the legal and operational standpoints, the original and supplemental loans constitute one single loan. There is one amortization schedule with two tranches (payments ending in 2003), and the project objectives, project description, and the list of disbursement categories were not altered by the amendment. The Closing Date was extended through the amending agreement, as it has been successively extended since then. The fact that the additional financing received an additional suffix-number (2883-1) reflects a practice of the Loan Department and it serves for housekeeping purposes only.

According to the Loan Department, $5,857,453.09 remained undisbursed as of the Request date. Since this amount represents approximately 2.5% of the total amount of the loan ($232.0 million) the request in question does not meet the eligibility criteria set forth in paragraph 14(c) of the Board Resolution.\(^5\)

95% Limitation

17. In view of the stated position of the Requesters, the Panel believes that the above-mentioned 95% limitation is not as clearly applicable to this case as Management claims, for the following reasons.

18. First, the mere fact that there is a single project, with the same objectives and features, does not necessarily mean that separate financing provided in successive stages—years apart—constitute legally or practically a single loan.

19. Second, the records indicate that the Executive Directors intended the 95% disbursement figure to be an indicator of completion of the project financed by the loan.\(^6\) In this case all parties agree that the Project is far from completion. Indeed, less than 50 percent of the irrigation works are completed, and it is clear that the Bank intends to retain at least a supervisory role in the Project possibly until December 1999 in order to ensure full compliance with the policies and procedures on involuntary resettlement.

Number of Loans

20. As far as the discussion on whether there were one or two loans for this project, the record appears rather confusing.

21. First, it is not quite clear that loans 2883 and 2883-1 BR constitute a single loan, as stated by Management: the amortization schedule provided in the amending agreement that granted the supplemental loan clearly shows two different amortization tables for each of the so-called “tranches,” with different grace periods and amounts of principal payments. Furthermore, the customary 60-day grace period for commitment charges was granted for the second loan as of the date of the amending agreement. Finally, the Loan Department's records show Loan 2883 BR as closed on December 31, 1994. (See Attachment.)

22. In addition, the reference to loan 2883-1 seems to reflect more than a mere “practice of the Loan Department ...[that] ...serves for housekeeping purposes only” since the amending agreement of November 1, 1991, which provided for the supplemental loan, is identified as “Loan Number 2883-1 BR” and an amendment to the Loan Agreement entered into between the Federative Republic of Brazil, ELETROBRAS, and CHESF and the Bank on July 20, 1992, refers to “Loans 2883 and 2883-1 BR.” Other documents signed by the Bank relating to this Project, however, refer either to Loan 2883 or Loan 2883-1 BR. It is difficult to imagine that this distinction between both loans in many Bank official documents would exist if they were a single loan.
23. The records of the Borrower and Guarantor are also inconsistent. The authorizations for borrowing and guaranteeing the supplemental loan issued by the Federal Senate, the Ministry of Economy, Finance and Planning, and the Central Bank referred to a separate loan of US$100 million equivalent that would supplement the original loan for this Project. The legal opinions issued on behalf of the borrower (ELETROBRAS) and the guarantor (the Federative Republic of Brazil) are consistent with this description of the transaction. However, the Central Bank subsequently amended the Certificate of Registry of both loans to refer to a single amount equivalent to US$232 million, and so does an amendment to the Subsidiary Loan Agreement between ELETROBRAS and CHESF; the executing entity.

24. As stated above, the 95% limitation seems to have been intended to exclude projects which are substantially completed. There are two issues which were not clarified during discussions on creation of the Panel: whether the limitation of paragraph 14(c) of the Resolution refers only to the percentage of disbursement of the loan proceeds regardless of the status of execution of the project, and the issue of how to calculate the 95% when there are two or more loans financing one project. The Panel requests the guidance of the Executive Directors on this aspect of the eligibility of this Request. The Panel is satisfied that all other eligibility requirements established by the Resolution have been met by the Requesters and the Request.

25. Given the fact that the Executive Directors have instructed the Panel to “focus less on technical eligibility criteria and more on actual or potential damage...”, and in fairness to the Requesters, who seem genuinely affected by the current project status, and Management, which has provided a detailed Response, the Panel has proceeded as though the Request were eligible in order to be able to present the substantive issues to the Executive Directors.

**Preliminary Evidence of Material Harm**

26. The harm alleged by the Requesters originates in the involuntary resettlement associated with the construction of the Itaparica hydroelectric project in the São Francisco valley. The Requesters argue that the Bank has been involved in the entire power sector development in northeastern Brazil through a variety of loans, and that this particular project, the Itaparica Resettlement and Irrigation Project, has resulted in substantial damage of an economic, environmental, and social nature. The principal problems raised, and confirmed by Management as well as the Panel, include:

1. Almost 10 years after the compulsory removal and relocation of the population, less than half of the irrigation projects have been installed, with the remainder either under construction or still in the design stage.

2. Among the installed irrigation systems, many suffer from technical problems in operation and maintenance (O&M). There are several views as to the source of these O&M problems. One allegation from Polo Sindical, as related to the Inspector, is that the design was mistaken from the beginning, with the irrigation systems too expensive as capital investments and in consuming electricity for operation; from that point of view, the Bank’s effort to ensure “state of the art irrigation systems” has been a costly misadventure. This view seems to have some implicit support from the implementing agencies. CHESF management informed the Inspector that it expects to have to provide subsidized power to the farmers for at least 20 years, and others say indefinitely.
Management portrays the problems differently but very concretely: "occasional vandalism resulting in damage to irrigation equipment," and a "reluctance on the part of the farmers to assume responsibility for the operation and maintenance." Management is working hard to assist in the establishment of various institutional arrangements—particularly water users associations—to solve these problems for the farmers on a sustainable basis. Management has argued that this is not a design problem, since the identical agricultural techniques have been used in similar irrigation projects in Brazil with great success. If that is true, and it appears to be so, and the soils are suitable for farming, then there is a major implementation problem.

Indeed, other issues appear to have made it difficult to make the irrigation systems operational. The availability of counterpart funding on the part of the borrower has been one limiting factor. A second and perhaps more important issue has been the lack of extension services to convince the farmers that there will be viable income flows once the land is irrigated and producing crops. In this regard, the technical assistance provided with Bank funding was criticized, in conversations with the Inspector, as either too little, too late, or wrong. Only now, after a number of years, are the Bank and CHESF considering a radical restructuring of the system of providing technical assistance in order to make the farms viable in a manner that would give confidence to the farmers. This entails a substantial departure from the crop patterns and commercialization strategies envisaged in the SAR.

It is now also understood that the original design concept of resettling families that had been subsistence farmers with traditional, river-bottom farming methods on new dryland areas with intensive irrigation and artificial input needs might have been mistaken. Crop yields of annual vegetables are declining substantially year to year, even on the better soils. Many of the families will simply not adapt to the very different agricultural requirements, and that explains why many of the farmers are unwilling to take on the responsibilities associated with self-management of the irrigation systems. The chairman of one of the farmers associations explained to the Inspector that some of the farmers were never suited for the complexity of irrigation agricultural, despite the optimism of the original design, and that they should be allowed to leave the settlements with compensation, a move that seems not currently permitted. The Brazilian experts consulted by the Inspector conveyed a clear understanding of the issues, and a rather different approach to these situations. They argue for mixed settlements (with large, medium, and small-scale farms) so that the larger farms ensure adequate marketing systems from which the small farmers can draw confidence. The various Brazilian agencies involved with the Project are considering the restructuring of individual resettlement areas in that direction.

(3) the Tuxá indigenous community (in the municipality of Rodelas) has been resettled, but is unable to grow commercial crops, since the irrigation system promised has still not left the drawing board. Management is clearly frustrated with this situation as well, with an alleged degree of bureaucratic gridlock in the borrowing government that has defied solution to date. The latest formal proposal from FUNAI, on behalf of the Tuxá, was for an irrigation project that would have cost US$37.5 million, or about US$272,000 per family. This was clearly unacceptable to CHESF, which would have to finance whatever solution is negotiated. The Response portrays the supervisory role of the Bank in this issue as a "mediator," but evidently with limited success. In interviews with CHESF and FUNAI, the Inspector was informed that an offer is on the table for cov-
average of Tuxá needs for US$12 million, and with senior level government support it may be possible to reach closure on this long-standing issue shortly.

27. With regard to four other problem areas, there are disagreements about the facts between the Requesters and Management. The Panel has explored these issues on a preliminary basis, but would be unable to clearly reconcile these disagreements without a full investigation:

(1) Serious ecological problems have been cited during project implementation: (a) soil erosion; (b) soil quality; and (c) salinization and drainage.

Soil erosion is an obvious problem in some of the areas. In a number of cases, the land was cleared of vegetation in the first year, with the expectation that all of the irrigation systems would be operational within 12 months. Now, in Barreiras, Block 2, with 600 lots, CHESF is preparing to abandon much of the proposed settlement even though people have been living in the nearby agrovilas since 1987. The damage in Block 2 is sufficiently severe that many of the residents may have to be resettled elsewhere once again.

The soil quality issue is such that, even with irrigation, the productivity of the soils in many settlements will depend upon large and regular doses of artificial inputs. At the time of project design, there appears to have been inadequate analysis of the soils, or, according to another explanation, it is said that some resettled families insisted on having their agrovilas and farms located along the lake, even though it was known that the soil was not good. One of the reasons for the constantly rising total cost of the Project is that new investments have to be made to compensate for the weak soils. At this point, the most popular solution is to abandon the horticultural approach that has prevailed for the last eight years as was envisaged in the SAR, and instead convert generally to fruit farms. Such a shift will require provision of credit, new farming techniques, a big effort in packaging, storage and commercialization in domestic markets and abroad, and at least another five years before farmers can hope to be self-sufficient.

Examples of poor drainage and possible associated salinization were shown to the Inspector in the field. From Management's point of view, if such problems exist, they are rare and isolated examples. In any case, from the viewpoint of Management and CHESF, any known salinization is in agricultural areas not part of the Bank-financed resettlement areas. (Several of the Itaparica resettlement areas were excluded from Bank financing.) The issue is a sensitive one for the Project, since the risk was recognized in the design of the Project, and CHESF agreed during negotiations that "should problems of salinity occur within five years of settlement which are not a result of farmer negligence, CHESF would provide the affected farmers with a new plot of irrigated land." Two points of ambiguity could be a source of future disagreement in terms of timing and responsibility: (a) What is the starting point for five years: from resettlement or from operation of the irrigation system? (b) What constitutes "farmer negligence?" Neither issue has been fully tested yet, even though the SAR foresaw all work being completed in 1988.

(2) In terms of the houses provided by the resettlement authority in the agrovilas, 1,200 houses have already shown structural problems, and some of them have not been repaired. The Requesters cite problems in about 1,200 houses, and indeed, Management uses the number 1,200 in a supervision mission aide-mémoire dated February 16, 1994, which also mentioned repair of 500 houses by CHESF. In addition, according to the aide-mémoire, the entire agrovila R1 of Borda do Lago was so deteriorated in 1994 that all the residents of the village were going to have to be moved. The Inspector visited agrovila R1,
where people still live, and the houses were not only cracked in many places, but also quite a few had collapsed into rubble. Management appears to believe that all of the complaints have been addressed, all attributed to the houses being built on expansible soils that were not detected prior to construction. The supervision mission's aide-mémoire signed since 1994 do not discuss repair of housing, and so the problem does not appear to have been addressed further by the Bank supervision teams. Discussions with people in the resettlements with damaged housing revealed strong sentiments on the part of many not to be resettled again. While the people are disappointed and angry about receiving as compensation houses that do not remain standing, many are reluctant to be uprooted again and sent to another new settlement. CHESF is currently negotiating a resolution to this problem, with the Pólo Sindical as the intermediary.

(3) The delay in the installation and commissioning of the irrigation projects has contributed to an increase of violence in the communities, to alcoholism, and to family breakdown. In short, the fact that the families are living on welfare instead of being employed is unleashing severe social tensions. Management indicates that it is aware of reports of these social problems, but argues in the Response that “such occurrences also occur in many populations in this region including those unaffected by Itaparica.” It believes that it would need baseline data to determine the effect of the lack of jobs in causing these social crises. Since that baseline data was never collected, it is now too late to obtain it. Management does not appear to see the present project structure as a mechanism that could address such issues. In fact, the observation by the Inspector was that social problems are grave throughout the region, with a degree of lawlessness that would undermine community cohesion in any case. Nevertheless, the fact that many families are not yet engaging in productive activities does nothing to dispel the social ills of the area, and successful projects—of which there are a number in both Bank-financed resettlements as well as non-Bank-financed resettlement areas—have shown a reduction in the incidence of violence and other social pathologies. The Inspector visited several agrovilas where virtually all of the families had been without work, and living mostly on safety net payments, for nearly a decade.

(4) The results of the resettlement Project, from the Requesters' point of view, have been that a significant proportion of the beneficiary population is in worse conditions of production and social reproduction than before the construction of the Itaparica hydroelectric scheme. Management takes exception to this argument, since the maintenance payments to resettled farmers (VMT) were not included as a measure of welfare of the population. Management believes that “the maintenance payments, while palliative, have been sufficient to maintain a level of living substantially higher than previous levels for a large majority of cases.” Purely in terms of household income, Management is undoubtedly correct. But temporary income is not the test of the Bank's resettlement policy. The test is the sustainable income being greater than, or at least equal to, the family's income before resettlement, and on that score, welfare payments do not count, and the variability of income from highly perishable crops such as tomatoes should be understood. The general experience has been that income is only temporarily higher for a number of reasons. In surveys of resettlement areas currently irrigated, crop yields have fallen substantially year to year, normally by 10–20 percent each year. Indeed, the long-term impact of VMT can be damaging for the work ethic where people are given a choice. The impact of such welfare payments over so many years on the issues raised in (3) would then need to be considered.
Another way to approach the issue of standard of living is to examine the question of public services in the new agrovilas. The Requesters did not make a major complaint about the issue of health and education services, but Management was concerned about their availability in several aide-mémoire. There appears to have been problems recruiting teachers for the local schools, and it was hard to attract health professionals to health posts. According to residents interviewed by the Inspector, schoolchildren are now being bused by CHESF as far as 25 kilometers daily to school owing to a shortage of teachers. The state governments appear reluctant to pick up their responsibility for staffing, and nothing seems to have been included in Project design to ensure such actions by the state governments. This is not an unusual problem in Brazil, but nevertheless, the improvement in the standard of living of the resettled families should eventually take this into account, as was expected in the SAR. The Project was intended to finance construction and equipping of 59 schools and 8 health posts, training of teachers and health professionals, and the cost of salaries for those personnel during the Project period. Many of these posts and schools were built, but remain idle for lack of staffing.

28. During his field visit, the Inspector visited numerous sites and interviewed various settlers. He was able to determine that, on those four issues where the Requesters and Management largely agreed, there was indeed substantial evidence of material harm. On the remaining four issues, the Inspector witnessed some actual evidence of the harm alleged in the Request. The question of how pervasive such harm is throughout the Project areas would have to be investigated at length in an investigation.

**Alleged Acts of Omission**

29. The Requesters claim that the Bank failed to provide adequate supervision of the Project, and thus the principal omission relates to carrying out the terms of the resettlement plan envisioned in the Project. The Requesters also suggest that basic flaws must have existed in the design of the Project, given the enormous delays and cost overruns in the budgeted funds for the Project, resulting in the Bank providing an additional US$100 million in 1990 (over the original US$132 million), and now reaching Project completion date with only 35–44 percent of the irrigation systems in operation. The Requesters are particularly concerned, now that the Project is nearing closing date, that the Bank may cease supervision of the Project with less than half of the irrigation systems completed and financed.

30. Management disagrees, stating that they "have provided ordinary and, in many cases, extraordinary levels of supervision due to the complexity of the Project." The Response cites 21 supervision missions between 1988 and 1997. As additional evidence, Management states that it suspended disbursements in 1990 in dissatisfaction over progress in the Project, and extended the closing date of the loan four times. The Bank also attempted to achieve compliance by providing 100 percent of the costs of the Project in 1992, in an attempt to speed up implementation. At the same time, Management acknowledges that the completion of the Project is likely to cost another US$100 million, and in its Response, Management does not identify a possible source of this financing.

31. The Panel is prima facie concerned about a project that was originally projected to cost US $304 million, and is now estimated to cost at least US$774 million, after 10 years' effort. The Inspector consulted with Government authorities about the future funding for this Project. It is a matter taken up by the Inter-Ministerial Committee as part of the future strategy for the larger Itaparica project. It should be noted that the Federal
Government of Brazil includes the settlements financed by the Bank as well as those not financed by the Bank in the overall project, and for the Government, it is necessary to find about $300 million to close out the resettlement issues. In the draft report of the Inter-Ministerial Committee, the Government makes clear its commitment to find the funds for the entire project, and it is expected that a large share will be provided by ELETROBRAS. The Panel is reassured by the seriousness of the Government's commitment, but would expect that the Bank would be confident of Project completion only with formal adoption of the report of the Inter-Ministerial Committee.

32. At a more human level, even if there were another commitment made to complete the Project, one can understand the skepticism and concern on the part of beneficiaries who have not yet seen successful resettlement as promised 10 years ago in a formal agreement. They could easily expect the pattern of omissions of the last 10 years to continue into the indefinite future, especially if the Bank were to close out its presence in the Project.

Alleged Policy Violations

33. The Requesters believe that Management has violated OMS 2.33, relating to Involuntary Resettlement; OMS 2.34, relating to Indigenous Peoples; OD 4.01, relating to Environmental Assessment; and OD 13.05, relating to Project Supervision.

34. Management disputes the application of OD 4.01, since it was not in force until October 1991, and otherwise maintains that it has complied with all relevant policies in the design and implementation of the Itaparica Resettlement Project. Management goes on to say that “the current situation is far from ideal, but the shortcomings to which the Request points did not arise from the Bank's failure to follow its policies.”

35. The Panel is not convinced that Management has complied with all the relevant policies and procedures. The Panel acknowledges that the antecedents of OD 4.01 would have limited application. The issues of soil fertility and potential soil salinity are much more relevant to questions of productivity and the related economic assessments of likely returns to the investment. In that context, there are serious questions to be raised about the quality of design and project preparation with regard to the soils where settlements have been placed.

36. The more important potential policy lapses, however, deal with implementation of OMS 2.33, Involuntary Resettlement and OD 13.05, Project Supervision. Management has clearly attempted to comply with these policies. Nevertheless, the tests posed in OMS 2.33, Social Issues Associated with Involuntary Resettlement in Bank-Financed Projects, are useful to assess in this regard: “that, after a reasonable transition period, the displaced people regain at least their previous standard of living and that, so far as possible, they be economically and socially integrated into the host communities.” (para. 2) The policy also raises issues especially pertinent for this Project, such as with regard to the welfare payments: “People subjected to relocation are prone to develop the syndrome of settler dependency if paternalistic help policies are applied.” “Action should be taken from the outset to prepare the transfer of the responsibilities of management to the resettled.” (paras. 8 and 16) Finally, “during implementation, Bank supervision missions should pay careful attention to the sociological and technical aspects of resettlement as a whole. Project management should monitor, with Bank assistance if required, the timely completion of resettlement activities, and the general social and economic condition of the resett-
tled people.” (para.27) On the face of it, the Project has not met such policy tests, especially on timeliness, and the details of compliance with other aspects would have to be assessed in the context of an investigation.

**Supervision**

37. The Request states recurring concern about the nature of Bank supervision of Project implementation. It is also concerned about the prospects of future supervision in light of the impending closing date for the latest loan in this Project.

38. Management attempts to rebut all accusations of faulty supervision. The Response cites the number of supervision missions (21) since 1988, yet among those many missions, only five had a resettlement specialist included. Management also cites the fact that disbursements were suspended for a period of time in 1990, and that in 1992, the Bank agreed to cover 100 percent of the Project’s costs in order to get it back on track.

39. The Panel is impressed by the variety of efforts undertaken in supervision to get the Project on track, but in many measures they still seem to have failed. By any ordinary test of OD 13.05—the accomplishments of the Project in meeting targets—supervision was inadequate. With hindsight, it appears that Management viewed this primarily as an irrigation project, and broader issues raised in OMS 2.33 with regard to resettlement compliance appear to have taken a back seat. The Panel is skeptical that Management could have maintained compliance with all covenants and aspects of resettlement policies without the addition of a resettlement specialist in missions since 1993. Lately, supervision of the irrigation work has been impressive, and against extraordinary odds, nearly half of the works have been put into operation. Nevertheless, the original impetus for the Project was supposed to be successful resettlement.

40. The many complaints about the inadequacy of the technical assistance (fully financed by the Bank) on matters of irrigation, soil management, crop selection, and commercialization received by the Inspector from the settlers seem to indicate a failure to supervise the consultants providing those services.

41. The focus of Bank supervision was not consistent through the life of the Project. It began in Brazil (1987–90), was then shifted to Washington (1990–96), and as of August 1996, supervision appears to have been moved de facto back to Brazil. A project with implementation now over 10 years suffers from changing personnel and institutions weary of the tasks.

**Remedial Actions**

42. The Management Response includes as Section V an “Action Plan” to deal with the many unfinished aspects of the Project. The Plan is divided into two parts. The first part elaborates benchmarks established for an agreement between the Bank and the Government of Brazil to extend the closing date to the end of 1997 (Response, page 21). Among the benchmarks that meet concerns of the Requesters most clearly is the agreement on the Tuxá program and stepped-up issuance of land titles. Interviews by the Inspector revealed substantial progress. The most important change in emphasis that could impact some issues of the Requesters would be to transfer resources and effort from welfare payments to water users associations. This remedy makes the Requesters very nervous, since the bottom line of waters users associations is cost recovery. With many of the Requesters not yet showing sus-
tainable levels in agricultural income, it seems a recipe for disaster from their point of view to increase their costs before their income is assured. Some have been reassured by the decision of Project managers in many settlements to begin shifting from annual crops (vegetables) to fruit trees, now that the weakness of the soils has become evident. In other words, this remedy to focus on water users association may be unacceptable to many farmers until comparable effort is expended on production and marketing.

43. The second part of the Action Plan relates to a proposal from the borrower that the Bank remain in a supervision mode for two years after loan closing, that is, until December 1999. That Plan essentially restates the goals of the Project, so that the original design would be completed by the end of 1999.

44. The Panel has now reviewed the draft report of the Inter-Ministerial Committee. It calls for an institutional transformation of the Project that, with adequate high-level support, could achieve the accelerated completion of the Project. The report calls for a new agency to be created by the Government to take over the resettlement and agricultural responsibilities of CHESF in the Itaparica area. The new agency would be created to work closely with P61o Sindical and farmers associations in the area, which would gradually take on greater operational, civic, and economic responsibilities. This proposal should not be seen as a rejection of the work of CHESF. Indeed, in recent years, CHESF has shown remarkable adaptability and commitment in pursuing the original goals of the Project. Rather, the Government and others recognize that it is time for the devolution of authority in the valley, and that CHESF should get back to the business of generating and distributing electricity. The Requesters seem to be in general agreement with the thrust of the report, even though detailed consultations are still to be held, but the long-term viability of the solution will depend upon fostering an atmosphere of trust between the new agency and the farmers (and their representatives) in the Itaparica area.

45. The Panel concludes that the success of the Action Plan depends upon the willingness of the Government to coordinate all agencies involved. The Inter-Ministerial Committee created by the Government in January 1997 is valuable in its own right, but it must agree upon and put support behind the benchmarks of December 1997 for the Plan to be in compliance with loan covenants. Secondly, adequate financing will be essential to Management's expectations. Management refers generally to the need for an additional US$100 million to complete the Project. The Government is seeking US$300 million to finish the broader Itaparica project. That funding has not yet been guaranteed.

C. Recommendation

46. Paragraph 19 of the Resolution requires the Panel to “make a recommendation to the Executive Directors as to whether the matter should be investigated.” In this context, and subject to the guidance on eligibility requested from the Executive Directors in paragraph 24 above, the Panel recommends that the Executive Directors authorize an investigation of the Itaparica Resettlement and Irrigation Project. In the Panel's opinion, there clearly have been direct adverse effects upon the Requesters. It is entirely possible that serious violations of Bank policies have occurred, particularly OMS 2.33, OMS 2.34, and OD 13.05. And the remedial actions proposed by Management, while promising in character, have not been formalized yet in Bank discussions with the Government and
executing agencies. In the absence of formal commitments, concrete measures, and funding to carry out the promises to those involuntarily resettled, the Panel does not believe that the concerns of the Requesters will be met.

Notes

2. At this point the Panel initiated its review of both documents. On May 28, 1997, the Panel informed the Bank’s Board of Executive Directors that it would deliver its report and recommendation to them by June 24, 1997.
4. The Panel wishes to thank SEAIN and the office of the Bank Executive Director for Brazil for comments and guidance and the members of Pôlo Sindical do Submédio São Francisco and the Bank department responsible for Brazil (LA1) for arranging Mr. Bissell’s interviews and particularly the management and staff of CHESF for providing information, some exchange of views, and logistical support in the project area.
5. Paragraph 14(c) of the Resolution states the following: “In considering requests under paragraph 12 above, the following requests shall not be heard by the Panel: (...) (c) Requests filed after the Closing Date of the loan financing the project with respect to which the request is filed or after the loan financing the project has been substantially disbursed.” A footnote to this provision clarifies that “it will be deemed to be the case when at least ninety five percent of the loan proceeds have been disbursed.”
6. The Executive Directors had varying views on how long a project (as opposed to a loan) should remain open to inspection. The records show that some Executive Directors agreed with the concept of excluding projects that were “substantially” completed. One Executive Director felt that this should be applied to projects 80–90 percent completed. However, others felt that 95% disbursement was a reasonable benchmark for substantially completed.
7. Another issue that could not have been anticipated by the Board was how to deal with deposits into special accounts. Although these deposits are regarded technically as disbursements, in fact a) they have no relation to actual project execution since they constitute a mechanism to facilitate and speed payments or reimbursement of eligible project expenditures as they are incurred. Given the new trends on disbursement recently announced by Management, the 95% limit could be reached quite early in project execution; and b) the Borrower must refund to the Bank all amounts that the Bank determines will not be necessary to cover further payments for eligible expenditures. Such refunds are credited to the Loan Account. In other words, because of this feature, if the amounts on deposit in special accounts or similar mechanisms are counted against the 95% limitation, a peculiar situation could develop where a project which is not eligible for Panel review because of this limitation may become subsequently eligible because of the refund of loan amounts to the Bank. Of course, it would be very difficult for potential Requesters to learn about this refund.
9. Given the many problems affecting the Itaparica Resettlement and Irrigation program, the Federal Government established an Interministerial Committee in January 1997 with the objective of reviewing the program and making recommendations to ensure its prompt and satisfactory completion.
India: NTPC Power Generation Project
(Loan 3632-IN)

Report and Recommendation

July 24, 1997
Report and Recommendation

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Report and Recommendation

Below is (1) Background information, (2) Discussion, and (3) Recommendation of the Inspection Panel ("Panel") on whether or not there should be an investigation ("Recommendation") into allegations made in the Request for Inspection ("Request").

**Background**

1. On May 1, 1997, the Panel received a Request dated April 25 which alleged violations by Management of policies and procedures of the International Bank for Reconstruction and Development ("Bank") in relation to the National Thermal Power Corporation ("NTPC") Power Generation Project in Singrauli, India, financed by Loan 3632-IN (the "Project"). On May 2, 1997, the Panel notified the Executive Directors and Bank President of receipt of the Request (meaning "Registration" under the Panel's Operating Procedures). On June 3, 1997, the Panel received the Management Response to the Request.

2. A loan supporting the Project was approved by the Bank's Board of Executive Directors in 1993 for an amount of US$400 million equivalent. The Loan was declared effective in June 1994. The Project was designed to take account of lessons learned from earlier NTPC operations in this area.

3. The Project is located in the Singrauli region of India about 1,000 km southeast of Delhi. Singrauli covers some 2,200 square kilometers spread over two states—Madhya Pradesh and Uttar Pradesh. The area includes part of the reservoir created by the Rihand dam which provides for irrigation and a hydro plant generating capacity of 400 MW. Thermal power plants based on major coal reserves near the reservoir have a total generating capacity currently at 6,360 MW. Studies suggest that estimated coal reserves would be sufficient to generate 20,000 MW of power for the next 130 years.

4. In the Singrauli area NTPC operates several thermal power plants—Singrauli (2,000 MW), Rihand (1,000 MW), and Vindhyachal (1,260 MW). The 1993 Project was designed to increase the capacity of Vindhyachal and Rihand by 1,000 MW each. The fly ash from the coal used for operating the plants is disposed of in ash dykes. Most of the land needed for the ash dykes had already been acquired by NTPC prior to 1993. An additional 300 ha was to be acquired for new ash dykes. The sites identified entailed the involuntary resettlement of about 370 families—project affected people ("PAPs"). For this reason, and to remedy the environmental situation of those already displaced by the earlier acquisitions, the Project included an Environmental Action Plan (EAP), two
Resettlement Action Plans (RAPs), and provision for three Remedial Action Plans (ReAPs).

5. The objectives of the Project are to "(i) help improve commercial discipline in the power system through the implementation of new commercial and investment policies; (ii) help NTPC meet its targets for capacity additions through increased mobilization of resources from internal resources, domestic and foreign capital markets as well as from the private sector through joint venture operations; (iii) upgrade environmental performance of NTPC power stations and make its new power stations environmentally more sustainable; and (iv) strengthen environmental management and resettlement and rehabilitation management capability." (¶3, pg. 4 Response)

6. The Project comprises: "(i) support of a five year time-slice of NTPC's least cost investment program of new coal and gas based power; (ii) support of NTPC's program to undertake joint venture operations; and (iii) implementation of an environmental action plan ("EAP") which includes upgrading of existing power stations, training and technical assistance for the strengthening of NTPC environmental and Resettlement & Rehabilitation ("R&R") management." The objectives of the EAP are, inter alia, to "address outstanding R&R issues (within the context of the new corporate R&R policy); and to upgrade NTPC's capability to prepare and execute R&R programs." (¶3, pg. 4 Response)

The Request for Inspection

7. The Request was filed by Ms. Madhu Kohli for 33 signatories who live in the Project area (the "Requesters"). The Request claims that the people living in the project area have been, and may potentially be, directly, materially, and adversely harmed as a result of the execution of the Project and the Bank's omissions and failures in the preparation and implementation of the Project. The Requesters complain specifically that they are being compelled to move from their present rural location without any alternative livelihood like jobs or land or adequate housing.7

8. The Requesters believe that such acts and omissions violate various provisions of Bank policies and procedures included in, inter alia, the following:
   - Economic Evaluation of Investment Operations (OD 10.04)
   - Environmental Assessment (OD 4.01)
   - Involuntary Resettlement (OD 4.30)
   - Indigenous Peoples (OD 4.20)
   - Bank Project Supervision (OD 13.05)

Confidentiality

9. Ms. Kohli submitted original authorization of representation signed by the Requesters, who have requested that their names be made available only to the Panel members, but otherwise remain confidential.

Allegations

10. In short, the Requesters ask for an investigation into their claims in order to resolve the problems of people of Singrauli affected by the Project. They believe that the "actions of the borrower and omissions of the WB" were contrary to its policies and procedures. They also seek the Panel's "intervention for advising the Bank on remedies" to compensate the people affected by the Project for the adverse impacts they have suffered.
and will suffer due to alleged inadequate social and environmental mitigation measures. The Requesters summarize the main actions they seek as follows:

- The most critical issue to be remedied is the provision of alternative livelihoods acceptable to the people of past and present NTPC projects.\(^4\)
- Another priority is the provision and upgrade of basic infrastructure in existing resettlement sites with involvement and participation of the affected people.
- The Panel is asked to "further advise the Bank on provision of adequate financial and institutional arrangements to enable the borrower to carry out its commitments in conformity with WB guidelines."
- The Panel should "pressurize the Bank" to make resolution of existing social and environmental impacts a condition for continuing disbursements under the Project. (¶67, pg. 22)

11. The Panel will not deal with some of the Requesters' demands. The Resolution establishing the Panel does not allow it to:

- review actions of the borrower: as expressly stipulated in the Resolution only actions of the Bank in violation of its policies and procedures are the subject of this review;
- give "advice" on remedies: this is the role of Management.
- "Pressurize" the Bank to take actions or decisions.

**Supplementary Information**

12. A submission entitled "The Singrauli Experience: A Report of an International NGO Fact-Finding Tour to the World Bank Projects of Singrauli/India" was delivered to the Panel on May 1, 1997.\(^5\) The report looks at social and environmental impacts of the interlinked coal and thermal power operations in the Singrauli region. Offered as a background document to the Request, the report states that during the authors' 1996 visit they\(^6\) "encountered disturbing evidence of lacking compensation and economic livelihood, missing participation, lacking infrastructure services, unchecked environmental degradation, and a pervasive atmosphere of intimidation and repression." It concludes that the social and environmental measures of the Project are not being implemented. (Annex 2 of this Report)

**Management Response**

13. Management considers that it:

(a) has *complied fully* with OD 10.04 on Economic Evaluation of Investment Operations and with OD 4.20 on Indigenous Peoples;
(b) has *complied substantially* with OD 4.30 on Involuntary Resettlement and with OD 13.05 on Bank Supervision;
(c) has *complied partially* with OD 4.01 on Environmental Assessment; and
(d) will implement an Action Program (attached to the Response as Annex A) which is intended to improve substantially the implementation of the Project and consequent results on the ground and so bring the Bank into full compliance with ODs 4.30, 13.05, and 4.01. (See also parts of the text quoted in ¶62 of this Report.)

**Recent Allegations**

14. After the Management Response was received, the representative of the Requesters claimed that PAPs were forcibly removed from the villages of Judi, Amratali,
and Churchuria to allow construction of the ash dyke for Vindhyachal. These allegations were countered by reports from NTPC describing the peaceful relocation of PAPs in accordance with a recent court order that provided for their eviction within 15 days of receiving relevant compensation and other allowances. Bank staff later visited the area and reported the conflicting views of those interviewed. (Annex 4 of this Report)

15. More correspondence from the representative of the Requesters alleged that further, and if necessary forcible, evictions from the village of Mithini—to make way for construction of the ash dyke for Rihand II—were planned for June 20, 1997. The Panel informed Management of the allegations. Just prior to June 20 the Bank was informed by NTPC that further relocation from Mithini village would be postponed. The Chairman of NTPC visited the area on June 20, 1997. He informed Bank Management and gave assurances that the situation was calm; that people will not be given a deadline; that shifting will be voluntary; and that he has informed the state authorities that police will not be needed in the area.

16. On June 19, 1997, NTPC sent Management written declarations from 92 PAPs who shifted from the ash dyke area of Vindhyachal II (villages of Judi, Uska, Amratali, Churchuria) after May 25, 1997. The translation states that the signatories declare that they “have received the necessary grant/assistance and that they have shifted voluntarily without any pressure whatsoever.”

Discussion

Basis

17. The discussion below is based on the Request, the Response, supplemental information furnished by NGOs, and additional information provided by the Requesters, Management, and NTPC.

18. In addition, the Panel considered information obtained during Mr. Ernst-Güntner Bröder’s (“Inspector”) visit to New Delhi and the Project area during July 6–13, 1997. Prior to this the Inspector consulted with the Executive Director representing the Government of India (“GOI”). During his visit the Inspector consulted in New Delhi with officials of the GOI—including the Cabinet Secretary, the Additional Secretary of the Ministry of Finance, the Joint Secretary of the Ministry of Power, and the Chairman and Managing Director of NTPC. In the Project area the Inspector met with Executive Directors, Senior Management, and officials of NTPC; the representative of the Requesters; and—through an independent Hindi language interpreter hired in Delhi—with numerous PAPs in the Project area and local NGO representatives, activists, and community leaders. After his visit the Inspector consulted again with the Bank Executive Director representing India.8

Scope

19. The Request raises the question of whether the Bank has complied with its policy (OD 4.20) on Indigenous Peoples, alleging that no special consideration was given to tribal and ethnic groups in the Singrauli area. The Management Response considers that it has complied with the policy “because the socio-economic surveys carried out before appraisal found that no indigenous people were affected by the new investments in the
ash dykes of Rihand II and Vindhyachal II." (pg. 11) The Response further points out
that since some NGOs questioned this result at the time, further follow-up socioecono-
ic surveys were carried out. According to Management "some of the confusion arose,
because about 10% of the PAPs of Vindhyachal I, which is not a Bank financed project,
are classified as indigenous people," that is, tribals. (Response, footnote 25) The Inspector
raised the question in the field and in discussions with GOI representatives. They con-
firmed the information provided in the Management Response. Since the Inspector
received no contradictory information during his field visit, the Panel will not address
this allegation further.

20. Regarding the other claims, there are contradictory allegations between the
Request, Response, and other information provided to the Panel, as well as observations
in the field. This report will address the claims of harm suffered—allegedly as a result of
Bank acts or omissions in violation of its policies and procedures—in relation to invol-
untary resettlement and associated environmental issues. Broad questions related to OD
10.04 on Economic Evaluation of Investment Operations cannot be addressed realisti-
cally at this late date and will not be discussed, except as they relate to the choice of ash
disposal options.

21. The environmental and resettlement aspects of the Project are closely tied
together by the technical choice for ash disposal. To build the ash dykes, land had to be
acquired and people involuntarily resettled. In addition, the dykes themselves constitute
a potential environmental hazard to the population.

22. The extent of authentic local resident participation in relation to resettlement
and rehabilitation (R&R) will be addressed first. In addition, the question of Bank super-
vision will be reviewed. Finally, the adequacy of the remedies proposed by Management
in the “Action Program” will be discussed.

Preliminary Evidence of Material Harm and Application of Bank Policies

23. Since the Bank has admitted "shortcomings" in application of the policies on
Involuntary Resettlement, Supervision, and Environmental Assessment, the questions
that remain are:

(a) Is there preliminary evidence of alleged material harm?
(b) If so, is such harm prima facie a result of the Bank's admitted shortcomings in
the application of Bank policies and procedures?

PARTICIPATION

24. Environmental Assessments (“EA”) “...provide a formal mechanism...for
addressing the concerns of affected groups and local non-governmental organizations
(NGOs).” (OD 4.01, ¶ 2) particularly where involuntary resettlement is to take place. This
is made more explicit in OD 4.30 where paragraphs 7-8 require “community participa-
tion.” The Requesters claim that the RAPs were prepared without consultation with affect-
ed people. The Management Response considers that “meaningful consultation with PAPs
took place during the preparation of the RAPs.” This issue is of key importance because:

(i) Lack of local consultations and participation in both preparation and
implementation of the R&R component of the Project appears, prima facie, to
be the root cause of past and current problems and complaints, including a
reluctance or resistance to relocation.
(ii) The Inspector found the question of what constitutes "local" representation to be an important issue on the ground.

25. As far as the preparation phase is concerned, the Response speaks for itself. As for the implementation phase, the Panel considers that a Bank R&R mission report best describes the situation in 1995. The mission—asked, inter alia, to report on why PAPs were unwilling to avail themselves of various options available under the R&R policy—warned that as far as "consultation and participation are concerned, they are very much an NTPC controlled-process... and not representative of the affected community."

Suggesting that the credibility of and the communication between NTPC and the community would improve if meetings were organized in affected villages and resettlement sites with adequate public notice, the report noted that:

"Lack of participative process, communication, sharing of information regarding NTPC policy, entitlements, compensation, the use of petty contracts to influence 'PAP representatives' etc. would mean that it is going to be extremely difficult for NTPC to convince the PAPs in the ash dyke villages of Vindhyachal and Rihand to move out to be resettled and rehabilitated within NTPC policy framework. This is particularly so when some aspects of the policy such as land-for land are difficult to implement, as the PAPs do not have funds to pay for the land." (J120)

MEETINGS WITH LOCAL NGOs, ACTIVISTS, COMMUNITY LEADERS

26. All local representatives/activists with whom the Inspector had the opportunity to consult complained that the R&R process was not a participative one. The Inspector's experience was that little had changed since the 1995 observations quoted above. The NTPC organized, in advance of his visit, meetings with local NGOs/activists in Rihand and Vindhyachal. The Panel is concerned that invitees to these meetings were limited to a few local NGOs/activists who appeared to be closely linked to NTPC and that—despite express requests to the contrary—an NTPC official was present.9

27. In addition to the above meetings, the Inspector was invited by the representative of the Requesters to a meeting with local NGO representatives/activists in the Singrauli resettlement colony of Chilkadand.

28. At the Vindhyachal meeting several present informed the Inspector they had not been forewarned of his visit; this meant they did not have the chance to organize community meetings with PAPs.10 In their view this indicated that the Bank was not serious about its policy on local participation.

29. Another perception voiced by several NGOs or activists reflected, as stated in the 1995 R&R mission report, "a very strong feeling among the NGOs...that the NTPC is not serious about R&R and that it acts only when it is under pressure from the Bank as a reaction to pressure on it from international NGOs." They still feel that their role as local leaders, representatives, or activists is not effective because they do not have international NGO support or direct contact with the Bank, as does the representative of the Requesters. While not in disagreement with the substance of the Request, they appeared to resent the fact that the representative was not from Singrauli. The Inspector explained who could file a Request, drawing their attention to the Panel documentation he had distributed. He pointed out that there were bound to be different groups, differently affected, in different locations, with different interests in any given project area; and that any
such group of people may choose to appoint any individual/s or organization to represent
them. The Panel observes that there has clearly been a great deal of local tension, miscon-
formation, and misunderstanding surrounding the filing of this Request.

30. Despite reduced trust in the application of the Bank's policy on local participa-
tion, those present at the Vindhyachal meeting were hopeful that this would change. This
underlines the importance they place on continued Bank involvement and the expecta-
tions they have of the Bank's intensified commitment to local consultation and participa-
tion. NTPC freely admitted that it does not have expertise in this area, that it is learning
and is as determined as the Bank to institutionalize this new approach to R&R speedily
and effectively into its corporate culture. To illustrate this, in Rihand NTPC invited the
Inspector to a presentation by Village Development and Advisory Committee (“VDAC”)
representatives. The VDACs were formed in an effort to enable "meaningful and effective
communication with the affected population and also to involve them in the decisions
affecting them." (NTPC documentation)

**OD 4.30 on INVOLUNTARY RESETTLEMENT**

**OD 4.01 on ENVIRONMENTAL ASSESSMENT**

31. The fundamental objective of OD 4.30 is to ensure that those to be involuntarily
resettled are restored at least to their former standard of living or have their living stan-
dard improved. (¶ 3 (b)) To achieve this, the borrower is required to prepare a resettle-
ment action plan acceptable to the Bank (RAP). In the case of this Project, the situation is
complex. First, there are two RAPs prepared in 1993 which apply to those being involun-
tarily resettled to allow for construction of ash dykes to meet the expanded capacity of
the Rihand and Vindhyachal thermal power plants—known as Phase II. Second, as noted
earlier in this report, the Bank loan is supporting a time-slice of NTPC's power expansion
plans. The initial investment in the Rihand and Vindhyachal power plants, as well as the
Singrauli one, were made without Bank financing. Therefore there were no RAPs. Under
this Project it was agreed to improve the situation of the many people displaced during
this first phase. (Phase I) Thus the Project required the preparation and implementation
of three Remedial Action Plans (“ReAPs”).

32. The Requesters claim that the options for resettlement and restoration of liveli-
hood under the RAPs and ReAPs are inadequate.

33. RAPs for the Project were accepted by the Bank in 1993 as "broadly" in compli-
ance with the Bank policy.

34. Management Response agrees that design and implementation of the RAPs have
not been satisfactory, explaining that it “had underestimated the practicability of implement-
ing the land for land options and difficulties in carrying out income generating schemes.
Accordingly, in the implementation of these RAPs by NTPC significant problems and delays
have arisen, reflecting certain shortcomings in design.” However, the Response notes that
land tenure rights and the R&R options to restore livelihood are in line with OD 4.30.

35. As far as the status of relocation goes, the Response notes that “more than 60%
of the PAPs of Vindhyachal II and Rihand II have been resettled and received their com-
ensation package.” (pg. 16) At the time the Response was written, that left 40 percent
who have not been resettled, some of whom were apparently resisting resettlement.

36. PAPs living in the area deemed necessary for construction of ash dykes for Phase
II of Rihand and Vindhyachal fall broadly into two categories: farmers with small hold-
ings who have been in the area for generations and laborers working for them. To meet the objective of OD 4.30, the RAPs provided PAPs with the options of land for land or cash compensation and provision of economic livelihood; for nonlandowners, a plot of land for a house and employment. Such options were to be provided to each family member age 18 and over.

37. Of those displaced prior to Bank involvement, through acquisition of land for construction of ash dykes for Phase I of Rihand and Vindhyachal as well as the Singrauli thermal plant, by 1993 some had relocated to other areas, most had been moved to resettlement colonies (Chilkadand for Singrauli, Punarwas I for Rihand, and Najveevan Vihar I for Vindhyachal), and some continued to farm the acquired land (and employ laborers) as permitted by NTPC until such time as the land was actually needed. There is an important difference between the ReAPs and the Phase II RAPs: compensation and rehabilitation for pre-1993 affected people was offered on a family basis, or to Project Affected Families (“PAFs”).

38. While in the field, the Inspector observed the very real practical complications—both in terms of understanding and acceptance by PAPs and management of the process—of implementing Bank R&R policies introduced during a later phase of an ongoing project. The substance of R&R issues raised by the various local NGOs, activists, or community leaders appeared to reflect the difference between treatment of PAPs from Vindhyachal Stages I and II, differences in predisplacement standards of living, occupations, etc.—but, perhaps most important, differences in expectations based on alleged promises.

40. The Bank “encourages ‘land for land’ approaches, [to resettlement] providing replacement land at least equivalent to the land lost.” (OD 4.30, ¶13) Management states
that “in practice, NTPC has not been able to implement the land for land option in the Singrauli area and the main groups of PAPs still resisting resettlement are landowners.” (pg. 16) It is understandable that there is resistance from PAPs who feel their lives and livelihoods are disrupted when they have relied on promises of receiving land for land and then been told that is not possible.

41. The Inspector learned from NTPC and the District Collector that no equivalent public land suitable for agriculture was available in 1993 in Madya Pradesh for resettlement of Vindhyachal II oustees. If this was so, the Panel believes the Bank should have examined the availability of land before insisting on having this option included in the RAPs. This raised expectations and contributes in large part to the resistance to shifting by remaining landowners.

**Resettlement and Rehabilitation Conditions**

**Resettlement Colonies**

42. The Inspector visited two of the remaining households in the Rihand ash dyke area, and what is left of the four remaining villages in the Vindhyachal ash dyke area. To compare conditions he visited the Chilkadand, Punarwas I and II, and Najveevan Vihar resettlement colonies. The contrast is dramatic. Those used to rural space and security in making their livelihood from agriculture are shifted into crowded “colonies” on small plots, many without any income and others with, at best, short or uncertain contract jobs. One Bank mission reports a respected local NGO leader as describing the colonies as neither villages nor townships, but transit camps. Nothing has changed. The Inspector was told that farm laborers were generally better off than before, since they had been, in effect, bonded labor. No PAPs at the sites visited expressly supported or denied this general proposition. To ascertain this would require an investigation.

43. Basic infrastructure in the resettlement colonies appears to have been provided but not maintained. The Inspector was told that this was a state responsibility and that in fact where there has been lack of action, the NTPC has gone beyond what is required of it by providing such facilities in some instances. In the meantime, the Inspector noticed that drains are filled with garbage and mud, water pumps are not working, and so on. Residents complained of a lack of electricity and water. The health center at Najveevan Vihar sports a sign of services offered—in English only! There was no evidence of medical supplies, and a temporary doctor was appointed just two months ago. The community center is filled with what looks like construction junk and occupied by an old crippled woman and her son who have not received a plot/house yet. Residents said that the communal facilities had been cleaned just prior to the Inspector's visit and some facilities freshly painted.

44. Chilkadand, the resettlement colony for those displaced by the Singrauli power plant, appeared to be in the worst shape. It is located right beside an NCL mining operation and transportation facilities. Housing appears to be deteriorating already primarily because of blasting in the NCL mine; some of the hand pumps did not work and some are surrounded by blocked drains; water pipes are defective; most of the open drains are filled, as are some streets, with garbage, mud, or other debris; street lighting was in need of repair. In this colony land plots were given to families as opposed to each eligible adult, resulting in overcrowding. Residents claimed that they would like to get out of this
unbearable environment but were afraid that they would not be rehabilitated any better than the last time.

45. The Inspector was invited to visit villages of unaffected people so as to compare conditions in those sites with the colonies. There are certainly far worse conditions in India and elsewhere in the world than those in the colonies and there is no doubt that there are villages in the area where people are worse off. However, the yardstick the Panel is asked to use is whether people involuntarily displaced appear, at first instance, and without further investigation, to be adversely affected or harmed by the Project, as measured by the standards of the Bank's resettlement policy.

**Restoration of Livelihood**

46. Apart from complaints about the obvious lack of working infrastructure and maintenance in the colonies, the main individual or group complaints about the resettlement and rehabilitation packages, received by the Inspector either orally or in writing, included, inter alia:

- inducement to shift on promise of work contracts—the promise was not honored or was honored for only a few days to a couple of months;
- expectation of permanent jobs with NTPC—the jobs did not materialize;
- inducement to shift on promise of a plot of land for a house—the promise was not honored; and
- lack of money to build a house.

** Income Generation Schemes**

47. Management admits it "underestimated the difficulties in carrying out income generating schemes and recognizes that initial design and implementation record needs further evaluation." (pg. 16) In the absence of jobs or a viable land for land choice this was the only approach considered. The Inspector observed that existing schemes did not appear to form a basis for successful future income generation. The Panel agrees that further evaluation is needed, but is concerned that this will still not meet the needs of those Requesters who have agreed to relocate on the grounds that a job would be offered and sustainable income provided but have found themselves deprived of income or livelihood.

**Preliminary Evidence of Harm**

48. The preliminary impression is that harm has occurred because many PAPs have not been, and may not expect to be, restored to at least their previous standard of living whereas OD 4.30 (¶ 4) in fact calls for "a package aimed at improving ... the economic base for those relocated." In addition, most of the displaced population does not appear to be receiving benefits from the Project (for example, electricity) despite this being the express objective of the Bank's resettlement policy. (OD 4.30, ¶ 3) As for those who have not yet shifted, given the experience and dashed expectations they see among many who have already shifted, their reluctance to move can be well understood. The Panel notes that these PAPs are subject to eviction once court-ordered R&R benefits (which appear to go beyond those in the RAPs) are provided. In relation to this it is worth stressing again that this review is restricted to the actions or omissions taken of Bank Management. The single and only question for the Panel in this context is whether the
PAPs who have shifted appear to have the equivalent standard of living, or better, as required by the Bank R&R policy and whether those who have not yet moved are likely to have the same. To ascertain the facts of the diverse case-specific complaints received by the Panel would require an investigation.

**Local Remedies**

49. A number of PAPs have taken their R&R problems to the local courts. Local dispute resolution is a purely sovereign matter beyond the scrutiny of an international mechanism such as the Panel. India's democratic system, with its respected independent judiciary, allows PAPs to question their R&R treatment. 12

**Supervision of R&R**

50. OD 4.30 requires that "arrangements for monitoring implementation of resettlement and evaluating its impact would be developed by the borrower during preparation and used during supervision. Monitoring provides both a warning system for project managers and a channel for the resettlers to [make known their needs] and their reactions to resettlement execution.... In-house-monitoring by the implementing agency may need to be supplemented by independent monitors to ensure complete and objective information." (§22) The Inspector's observations and other information available provided preliminary evidence that in supervising the Project, the Bank has:

- Relied on NTPC for information when the implementing agency itself admits that it is a new area for the Corporation and that it is in the process of learning.
- Conducted an insufficient number (every six months) of rather brief R&R field visits.
- Relied during field missions on NTPC staff—who might obviously have a conflict of interest—for interpretation from Hindi into English.
- Not set up independent monitors.

51. The recommendations of the 1995 R&R mission report referred to above do not appear to have been acted on by Bank Management. The Inspector's impression is that the situation on the ground has not changed much from the quite bleak picture of events painted in the 1995 report and in the subsequent Berne Declaration report, the June 1997 Bank field report, and the submission by the Delhi Forum.

52. It may be noted that PAPs in the Vindhyachal area had to resort to the local courts to obtain an order restraining NTPC from evicting villagers before R&R benefits were provided. The Panel found no evidence of any Bank actions to ensure that required RAP measures were implemented prior to shifting people.

53. Management recognizes problems with the effectiveness of its Project supervision, as reflected in difficulties in having appropriate remedial action taken to overcome Project implementation problems. Had the supervision been effective, some of the harm alleged to be suffered by the Requesters may have been avoided.

**Conclusion on R&R**

54. Involuntary resettlement is inherently painful under the best of circumstances. In this instance, the Panel believes it is prima facie self-evident that many of the involuntary displaces affected by this Project have, or are likely to have, suffered as a result of an alleged failure by the Bank to comply with OD 4.30.
Ash Disposal

55. OD 4.30 (¶ 3(a)) states that: "Involuntary resettlement should be avoided or minimized where feasible, exploring all viable alternative project designs...." The Requesters question the choice of ash disposal methods: they allege that involuntary resettlement in Vindhyachal and Rihand could have been avoided through upgrading of existing ash dykes and backfilling of ash in existing mines. The Response (pg. 2) states that backfilling of ash in existing open cast mines in the Singrauli was not found to be feasible by Northern Coalfields Ltd. (NCL). It is not stated if the option was technically or economically non-viable, and if the social costs associated with the chosen option were properly accounted for. The decision, however, to adopt the building of more dykes as an acceptable ash disposal technology was approved by the Bank and this decision did create the need for a large resettlement program with considerable management problems and environmental risks. Under the circumstances it is not quite clear whether there was interagency coordination—that is, between NTPC and NCL—as provided for by OD 4.01 (¶ 18).

56. Based on an initial overview of documents, the Panel has reason to doubt that all possible or feasible ash disposal technologies were considered seriously until recently. The Management Response reports that upgrading of "existing ash dikes has been considered and new ash dike management techniques have been introduced." However, a full analysis of alternatives, as required, does not appear to have been carried out and the issue is not addressed in the SAR.

ASH DYKES SITE SELECTION

57. As far as site selection for both the thermal power plants and ash dykes are concerned, the Requesters claim that the "inhabitation" and agricultural use of sites was not a criterion. Management states that it is unaware of the criteria used and could not influence site selection for Rihand I and Vindhyachal I since these decisions were made in the early 1980s long before the Bank was involved. Expansion of these existing power stations—for Phase II, which is supported by Bank financing—required selection of additional sites for the construction of further ash dykes: Noting that acquisition of additional land could not be entirely avoided, Management states it was satisfied with the site selection criteria. According to the Response, the decision to change the location of the Rihand II ash dyke to the Mithini site was an attempt to further minimize resettlement and the impact on agricultural land. (pg. 10) The Panel is unable to comment on this aspect at this point.

HEALTH

58. The ash dykes can create health hazards to the population because of airborne or aqueous emissions of hazardous substances, including trace metals. To assess these risks it is necessary to conduct both studies of trace metal contaminants as well as health impacts on the population at risk. However, there is no health data base for the population that could be potentially at risk, which makes it impossible to estimate whether the risks are high or damage has taken place.

Supervision of Environmental Aspects

59. The Requesters claim that the Bank has failed to supervise the implementation of the EAP approved in 1993. The Response recognizes that implementation needs to be
improved for "some of the environmental projects which have fallen behind schedule.” Examples of important environmental impacts that have not been studied, or have been analyzed only recently, include the fate of heavy metals (other than mercury) such as chromium, arsenic, and selenium and others which could be considered potential ecological or health hazards.

60. In addition, the Requesters claim poor management of disposal systems, including unattended ash pipe leakages which contaminate drinking water wells, soils, and crops. The Response does not deal specifically with any of these issues but in the specific Action Program proposes to reinforce field-based supervision to expedite implementation of the EAP. An update of the status of NTPC’s environmental actions, commitments, and conditions carried out by the field-based supervision team is expected by the end of July 1997. It is important that the issues raised by the Requesters be considered during this exercise, in particular those that have serious delays.

Remedial Actions

61. Management’s remedial actions are laid out in the Action Program attached as Annex A to the Response. There are two parts to the Action Program. One is a "broader action program" for the future; the other is a Project Specific Action Program.

Broader Action Program

62. In the cover memorandum to the Response, Management outlines some lessons learned (pp. 1–3), which are quoted here in full:

- "Management shares many of the project specific and more general concerns raised in the Request and has learned several valuable lessons as a result of the intensive reflection undertaken in responding to the Request. Foremost among these lessons is a fuller appreciation of the need for robust processes and associated staff capabilities to ensure early, up-front and meaningful participation of all project affected communities and their leaders in the design of Bank-assisted projects. Our experience with the Project reinforces the concept that “ownership” at the earliest stage, is a prerequisite for successful implementation, and that it must emanate from all stakeholders including the government, executing agency, and the beneficiaries."

- "Second, Management is committed to the principle that it is the results on the ground which ultimately count. Project preparation and implementation plans are a means to that end, and not the end itself. We take very seriously the allegations of the “adequacy” of participatory consultation in preparation and design, and the social cost of delays in the implementation of the Environmental Action Plan (EAP) and the Resettlement Action Plans (RAPs). Our problematic experience under the Project with income-generation schemes as a core element of a strategy for the restoration of incomes, especially when land for land and permanent jobs with executing agencies are not practicable, has been instructive. We now understand better that several conditions must be satisfied for these plans to be successful. There must be meaningful consultations with beneficiaries and social mobilization of communities; there must be a thorough appreciation of the historical and cultural context in which the plans are to be executed; and there must be solid capacity in place in appropriate agencies to closely monitor, to implement in a timely and coherent manner, and to ensure that the content of the plans are relevant. Therefore, a central
feature of the Supervision Strategy for the Project under the Action Program\textsuperscript{14} is to bring the Bank into full compliance with the relevant ODs."

- "Third, while not diminishing the import of the shortcoming identified in the design and implementation of the Project, in preparing this Response, Management has renewed its conviction that the broader relationship with NTPC must be kept in the fore. The Project is a time-slice operation; NTPC agreed to a retrofit perspective for environmental and social impacts. In the Request, as well as implementation record for the Project, many of the issues which have surfaced relate to broader business and corporate standards of NTPC. Accordingly, our interaction with NTPC, as with other major corporate partners, has to be managed more with a corporation-wide relationship in view. Given the depth and length of our relationship with NTPC, we should be more active in dialogue with NTPC on issues across the board; the long-term business strategy and plan in a changing fiscal and financial environment for power generation, notably the entry of private sponsors; the long-term prospects for thermal and alternative technologies; and the environmental and social capabilities which a modern corporation needs to manage effectively in a national and even global context."\textsuperscript{15} [emphases added]

The Cover Memorandum ((17, pg. 3) adds General Lessons, which are also quoted below:

- "...we have been concerned for some time about the human cost in terms of social dislocation and environmental degradation of rapid and somewhat uncontrolled development of the Singrauli area where three major NTPC power stations are located, i.e. Singrauli, Rihand and Vindhyachal. Singrauli is a region which is the responsibility of the governments of the States of Madhya Pradesh and Uttar Pradesh, and therefore above and beyond the jurisdiction of NTPC. While previous attempts to engage the Government of India and the two state governments in developing a comprehensive approach to development of the area has not met with success, we intend to restart the dialogue with all stakeholders in the Singrauli area to identify 'win-win' strategies and programs as part of the Action Program" [Annex A, para. 4(a), of Response; 16 of Cover Memorandum]

- "In the area of environmental management, we know that India, like many countries, has not addressed the environmental consequences of rapid growth and development. Mitigating the environmental impacts of coal-based thermal power generation in Singrauli and other areas in India is a long-term proposition which will require both resources for technological improvements as well as sustained institutional commitment and capacities to implement required policies and programs. The proposed Action Program includes a series of activities which will ensure that we fully comply with O.D. 4.01 as well as activity involving a range of stakeholders in finding solutions to the nexus of issues related to the environment and power generation, mining technologies, hazardous waste generation, and the development of institutional management capacity" [Annex A, paras. 4 (d), (e), (f), and (g); emphases added]

63. The Action Program indicates Management's serious effort to mitigate the overall problems in the Singrauli energy sector plus all projects with resettlement components in India. The proposed actions reflect Management's desire to introduce a prudent social and environmental development Program for the future. The Program addresses problems going well beyond those experienced with this particular Project. The Panel assumes
that appropriate local participation as well as intensive on-the-spot Bank supervision will contribute to its prospects of successful implementation.

64. The broader Action Program proposes a review of all environmental assessments and all resettlement components in the India portfolio. (See Response, Annex A, ¶4 (a)–(g).) It consists of studies and reviews, some with deadlines, others without. The Panel understands that the past studies to be revisited might also be updated and translated into practical measures.

65. In conclusion, the broader Action Program for the future is a comprehensive approach to rectify very complex and difficult problems. In general, if the studies and reviews result in actions to be carried out in close cooperation with directly affected PAPs and NGOs, they should help answer the Requesters' concerns regarding the overall past and present situation in Singrauli.

**PROJECT SPECIFIC ACTION PROGRAM**

66. To address the Requesters' specific concerns regarding the current Project, Management states that with respect to "supervision strategy," within the next 12 months the main Bank and NTPC activities are to be, inter alia:

- implementation of the EAP, with improvements in implementation of some of the environmental projects which have fallen behind schedule; (¶2 (b))
- implementation of the ongoing institutional strengthening, training, and resettlement and rehabilitation programs in accordance with agreed schedules. (¶2 (c))

67. The above activities do not reflect the fact that the RAPs were developed without authentic local participation and therefore may still not be acceptable to local people. They also envisage compliance with agreed schedules, lack provision for review, or do not propose initiating actions to alleviate the situation of those PAPs who find they do not have the land for land option or who have been induced to shift but find there is no job at the other end.

68. Management recognized that there was no consultation with PAPs on the design of the EAs and that RAPs and that none is expressly proposed here. The Request and current events suggest dissatisfaction among some PAPs with the original RAP. Some, it appears, are resisting attempts to be relocated. It is apparent that they have never been consulted and still are not participating in decisions about their future.

69. The next set of proposals envisages the use of Bank resources for an across-the-board review of NTPC's corporate operations and business plan, including to "effectively re-appraise" NTPC implementation of the current Project. More specifically, such review is designed to, inter alia:

- determine whether Management would agree to an extension of the Closing Date—September 30, 1997—of the current loan; (¶3 (1))
- pursue a framework for remedial actions with particular reference to social and environmental issues as a basis for future operations.

70. The first proposal is time-bound and while not specifically stated would presumably measure performance of the current Project-related obligations to bring the operations into full compliance with R&R and environmental policies. The second proposal appears to envisage remedial actions in future operations only.

71. To summarize, the project-specific Action Program does not address the fundamental question of whether there are current serious problems in the R&R and environ-
mental operations—as alleged by the Requesters and supported by others during the Inspector's field visit.

**CONCLUSIONS ON PROPOSED REMEDIAL ACTIONS**

72. The Response and Action Programs fail to address current problems on the ground. None of the conflicting reports on the situation deny outright the allegations of the Requesters. The numerous problems raised should be mitigated or prevented now instead of waiting for retrospective identification through future reviews/studies and future mitigation activities or remedial actions. This would require identifying the factual source of current R&R problems now so that Management can propose remedial actions based on local solutions as a matter of urgency. The Panel considers that resolution of discrepancies in resettlement and other issues—both past and present—is a prerequisite to implementation of the Action Programs. For this reason the Panel believes it is imperative to conduct an immediate independent investigation of the facts. This is necessary in order to see if there is evidence of the Requesters' allegations of harm, and if so, to identify whether such harm stems—as the Requesters allege—from acts or omissions of the Bank in violation of ODs 4.30, 13.05, and 4.01.

73. Any actions need to be taken in the context of the current and inevitable development of large-scale open pit coal mining to fuel thermal power plants and consequent ash processing in this area: they are at present vital for India's fight to alleviate poverty and future development. In light of the objectives of OD 4.30 and 4.01, this calls also for close cooperation between NTPC and coal mining activities in the Singrauli area to avoid involuntary resettlement or, where this is not possible, to achieve a harmonized resettlement and rehabilitation strategy including practical job opportunities. As emphasized by the President of the Bank, the poor and disadvantaged everywhere do not want charity; they want opportunity. They want partnership. As one local PAP representative privately told the Inspector, he felt very worried about rumors that some NGOs were determined to stop not only Bank involvement, but the Project itself. According to him, and it was also the Inspector's impression, local NGOs/activists and PAPs supported continuation of the Project and considered Bank involvement essential. The representative of the Requesters likewise informed the Inspector that Bank support was necessary. The GOI has expressed its desire to support any measures the Bank might propose to achieve better immediate results for those adversely affected in the Singrauli area. The NTPC told the Inspector it hopes to improve R&R for the Singrauli area and make it a model for the country.

**Recommendation**

74. The Panel rejects some of the Requesters' demands, noted in paragraph 11 of this Report, as outside its mandate. In addition, there would appear to be no grounds for an investigation into the allegation of failure to observe OD 4.20 on Indigenous Peoples. However, the Panel believes there is prima facie evidence of harm. It is possible that serious violations by the Bank of its policies and procedures may have occurred to a degree beyond those identified by Management in its Response. Therefore the Panel recommends that the Executive Directors authorize—as a matter of urgency—an investigation into the involuntary resettlement and associated aspects of the Project.
Notes

2. For a list of earlier NTPC operations, see Response, pg. 4, footnote 1.
3. Subsequent to receiving the Response, the Panel received several specific claims in support of the Request (May 27 and June 12, 1997). As these Requests do not raise new issues but provide rather specific examples of the claims made in the Request, the Panel—pursuant to para. 14 (d) of the Resolution—did not transmit them to Management for a formal separate Response since the issues were already covered in the original Request. On July 18, 1997, the Panel received a “Statement in Support of the Panel Claim Filed on Behalf of People Singrauli” from the Delhi Forum, which reiterates the urgency of the matter.
4. Remedial actions for the social and environmental effects of earlier projects are in fact part of the NTPC 1993 Project.
5. In accordance with paras. 50 and 51 of the Panel’s Operating Procedures, “any member of the public may provide the Inspector(s), either directly or through the Executive Secretary, with supplemental information that they believe is relevant to evaluating the Request.” The Berne Declaration, an NGO based in Switzerland, submitted supplementary information to the Panel (copied to the Executive Directors); the Panel forwarded it to Bank Management for their information prior to preparing their Response to the Request.
6. Peter Bossard of The Berne Declaration and Dana Clark of the Center for International Environmental Law, Washington, D.C.
7. In addition, on June 12 the Panel received a submission in support of the Request from some PAPs. The submission complained that the “project authorities are now anxious to move us out with use of force without any guarantee of an alternative livelihood.” These Requesters “urge our situation to be spot checked by the Panel.” “Supportive Claim - Request Registration No. RQ/97/2,” June 3, 1997, from eight PAPs from the villages of Amratali and Judi.
8. The Panel wishes to thank the Executive Director and his office for comments and guidance and for arranging the Inspector’s meetings with officials of the GOI, Task Manager Mr. Tjaarda Storm Van Leeuwen and staff of the Bank Delhi office for assistance and logistical support in Delhi; the management and staff of NTPC for providing logistical support for the Inspector’s trip to and during his visit to the Project Area as well as for providing further background information; project affected people or their representatives for their cooperation and openness; and the many individual PAPs who gave the Inspector written statements.
9. The Inspector took the liberty of inviting to such meetings other NGOs/activists whom he encountered. In Rihand invitees included representatives of five local NGOs. The Inspector invited Ms. Kohli to attend. Invitees at the meeting in Vindhyachal included three representatives of local area NGOs and/or activists. The Inspector invited 11 others encountered earlier in the day as he was driving to villages in the ash dyke area. In addition, the Inspector met privately in Vindhyachal with NGO representatives, at their request.
10. They claimed that despite assurances from the Bank New Delhi Office (“NDO”) they had not been informed in advance of recent World Bank field visits. Staff of the NDO later informed the Inspector that they rely on NTPC to inform local NGOs of missions to the area.
11. PAPs gave to the Inspector some 30 letters with over 100 signatures.
12. In addition, India has a National Human Rights Commission to which one group of PAPs—represented by Ms. Kohli—submitted a complaint over their treatment by local authorities. The Commission found those particular complaints lacking in merit.
13. The Action Program in the Response, Annex A, paras. 3(c)(d) and 4(c), is intended to deal with this.
14. Ibid, paras. 3(a) and (b).
15. Ibid, para. 3(a).
India: NTPC Power Generation Project
(Loan 3632-IN)

Report on Desk Investigation

December 22, 1997
Report on Desk Investigation

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INTRODUCTION

1. This Report responds to the World Bank ("Bank") Executive Directors' ("Board") decision on September 11, 1997, to authorize the Inspection Panel ("Panel") to conduct a limited investigation. The Board decided that "in light of the conclusions and recommendation by the Panel, bearing in mind the preliminary review already undertaken by the Panel, an investigation should be conducted at the Bank's Headquarters in Washington to further determine the extent to which the Bank adhered to its own policies and procedures under the project."

The Request for Inspection

2. On May 1, 1997, the Panel received a Request for Inspection ("Request") from a representative of people living in the Project area. The claims in the Request focus on allegations of harm suffered as a result of noncompliance by the Bank with its policy on involuntary resettlement. The Chairman of the Panel registered the Request on May 2, 1997.

Management Response

3. The Management Response ("Response") to the Request was submitted to the Panel on June 3, 1997. In its Response the Management included corrective actions in the form of both a specific and broader action program.

Supplementary Submissions

4. Supplementary information was submitted to the Panel by two concerned NGOs: on May 1, 1997 from The Berne Declaration; and later, on July 18, 1997, a "Statement in Support of the Panel Claim Filed on Behalf of People Singrauli," from the Delhi Forum, which reiterated the urgency of the matter.

Additional Requests

5. Subsequent to receiving the Response, the Panel received several specific claims in support of allegations in the Request (May 27 and June 12, 1997). As these Requests did not raise new issues but rather provided specific examples of the claims made in the original Request, the Panel—pursuant to paragraph 14(d) of the Resolution—did not transmit them to Management for a formal separate Response.

Further Allegations

6. The representative of the Requesters during May 1997 claimed that PAPs were forcibly removed from the villages of Judi, Amratali, and Churchuria to allow construc-
tion of the ash dyke for Vindhyachal. These allegations were countered by reports from NTPC describing the peaceful relocation of PAPs in accordance with a recent court order which provided for their eviction within 15 days of receiving relevant compensation and other allowances. Bank staff later visited the area and reported the conflicting views of those interviewed. In June 1997, the representative of the Requesters alleged that further, if necessary forcible, evictions from the village of Mithini—to make way for construction of the ash dyke for Rihand II—were threatened. NTPC assured that further relocation from Mithini village would be postponed. On the other hand, on June 19, 1997, NTPC sent Management affidavits from 92 PAPs stating they had relocated voluntarily.

Panel Recommendation

7. On July 24, 1997, the Panel submitted its report to the Board. The Panel found prima facie evidence of harm and believed it was possible that serious violations by the Bank of its policies and procedures may have occurred to a degree beyond those identified by Management in its Response. Therefore, the Panel recommended that the Board authorize—as a matter of urgency—an investigation into the involuntary resettlement and associated aspects of the Project.

Updated Action Program

8. On September 2, 1997, Management, in response to the Panel report and recommendation for an investigation, submitted an “Update of the Action Program,” agreed with the Government of India and NTPC. This Updated Action Program was submitted directly to the Board not only after the Panel’s “Report and Recommendation” of July 24, 1997 (“Panel’s July Report”), but also just five days prior to the Board decision on an investigation. The Panel therefore did not have the opportunity to review the “Action Program” to determine whether its proposals, if implemented, might correct the policy violations acknowledged by Management as well as meet the Requesters’ concerns.

Board Decision

9. The Board meeting to act on the Panel recommendation was initially scheduled for August 29, 1997, but was postponed to September 9, 1997. At this meeting the Board did not reach a decision. A compromise solution was reached at its next meeting on September 11, 1997.

10. This decision—quoted in paragraph 1 above—restricts the Panel investigation to a desk study in Washington, D.C. (“Desk Study”). Preventing the Panel from undertaking a field investigation reflected the views of some Executive Directors who pointed out that it was unavoidable that the public would see it as an investigation—with all that word’s connotations of wrongdoing—of Borrower actions. The Panel, however, is not intended to investigate Borrower actions. Its role is to investigate allegations that the World Bank itself has failed to observe its own policies and procedures and whether this has resulted in the damage claimed by Requesters.

Panel Investigation

11. The Chairman of the Panel designated Panel member Mr. Ernst Günther Bröder (“the Inspector”)—who had been in charge of the preliminary review—to lead
the investigation. In this case the Management had acknowledged certain policy violations in its Response and the Panel's July Report indicated that harm appeared to have occurred. The Bank undertook a Supervision Mission from September 12–28, 1997, immediately after the Board Decision on the Panel's recommendation for an investigation. Specific plans for implementation of the Updated Action Program are contained in the October 20, 1997, Back-to-Office Report ("September Bank Supervision Report"). Because the corrective actions in the Updated Action Program and the subsequent more detailed proposal for its implementation contained in the Bank's September Supervision Report both respond to the Panel's July Report and in themselves evidence the extent of policy violations, these two documents have been reviewed by the Panel for this investigation.

**Fact-Finding Assignment**

12. The September Bank Supervision Report includes the Terms of Reference for a Resettlement and Rehabilitation impact assessment to be undertaken for NTPC by an "independent" development institution—the Xavier Institute of Development Action and Studies ("XIDAS"). This entity is to examine the issues raised by the Panel's July Report and the Requester and the Terms of Reference state that further revisions would be made of the Resettlement Action Plans and Remedial Action Plans of the Project as required.

**Subsequent Developments**

13. On November 24, 1997, two NGOs—the Washington-based Center for Environmental Law and the Swiss-based Berne Declaration—reported to the President of the Bank, with copy to the Panel, that affected people were being forcibly induced to move. This occurred despite an agreed moratorium.

14. This Report deals with the extent of each of the policy violations in turn and within that context with (I) the Panel's July Report and (II) the Desk Study.²

**SUMMARY OF FINDINGS**

15. The findings of the Panel's desk investigation confirm the preliminary conclusions reached in the Panel's July 24, 1997, "Report and Recommendation to the Executive Directors" (the "Panel's July Report"), which relied heavily on the Inspector's observations in the field. Since information gathered in Washington is largely from secondary sources and not from field work on the ground, the Panel had to compare this information with its earlier findings on the spot in an attempt to ascertain the facts.

- The Terms of Reference for Xavier Institute of Development Action and Studies respond to the Panel's initial finding that the correct facts regarding Resettlement and Rehabilitation claims by Project Affected People must be established before any action program for this component could be effective.
- Since the Board decision, an alleged attempt to force PAPs to move completely out of one area, by destroying their crops, has been reported to Management. The Panel was informed by Management that the Independent Monitoring Panel, constituted recently in consultation with NGOs and consisting of three eminent Indian nationals, will investigate this allegation through a site visit from December 23–27, 1997.
16. A major new finding of this desk investigation is that violations of policies and procedures can be attributed to pressure to accelerate the process of loan approval and to not granting the same relevance to Resettlement and Rehabilitation and Environmental matters as to other project components.

- The record shows clearly that staff was under pressure to process the loan just before the end of FY93.
- Senior Regional Management did not raise the issue of resettlement and rehabilitation for consideration by the Regional Loan Committee until staff members from the Legal Department and ASTHR pointed out this omission on March 30, 1993. In response the issue was added as a question on the Agenda dated March 31, 1993 for the Regional Loan Committee Meeting on April 1, 1993. After the April 1 meeting, however, the then Regional Vice President instructed follow-up meetings to be held on R&R issues.
- NTPC was pressured by the Bank to adopt hastily a corporate Resettlement and Rehabilitation policy. The Bank failed to assure itself that the Borrower fully understood the implications of the new commitments it was undertaking.
- Regional Management's request to make preparation of Resettlement Action Plans a condition of effectiveness of the loan agreement, despite clear policy to the contrary, was rejected by the Legal Department. The policy requires Resettlement Action Plans to be prepared as a condition of appraisal. The Resettlement Action Plans were then completed during a two-week visit by two specialist staff members in May 1993, one from ASTHR and one from NDO, and signed off by Management just in time for the project to be presented to the Bank's Board of Executive Directors before the end of the 1993 Fiscal Year (June 30, 1993).
- The Borrower did not sign the Loan Agreement until December 9, 1993 and the loan was not declared effective until 6 months later on June 6, 1994. Another 8 months elapsed before the first disbursement was made in March 1995.

17. In line with its policies, the Bank introduced a project component dealing with the implementation of Resettlement and Rehabilitation and Environmental Action Plans. The Panel finds that the Bank did not assure itself that the Borrower had the necessary initial capacity to carry out these tasks. The Panel also finds that the Bank did not have the necessary capacity to support the Borrower in carrying out these tasks. This appears to be a serious violation of Bank policies on Environmental Assessment (Operational Directive 4.01) and Involuntary Resettlement (Operational Directive 4.30). This is confirmed by the Terms of Reference for the Xavier Institute for Development Action and Studies and the Independent Monitoring Panel, which were established in response to the Inspection Panel's earlier Report of July 1997.

18. The preliminary findings in the Panel's July Report, which indicated serious violations by the Bank of policies and procedures on participation of and consultation with affected people as required by ODs 4.01 and 4.30, are confirmed. The Bank's failure to observe policies and procedures in the design phase, however, appears more serious than previously assumed because of the Bank's admitted inexperience in applying the policy back in 1993, and its failure to follow required loan processing procedures.

19. The NTPC's Resettlement and Rehabilitation policy and the Resettlement Action Plans appear to have complied, at least on paper, with the Bank's Operational Directive
(OD 4.30) and were cleared by the Bank's Legal Department and Environmental Specialists. However, the loan was processed so rapidly—with the RAPs completed immediately before the Project was presented to the Bank's Board—that there was no time to ensure that essential mechanisms and preconditions, such as state government commitment, capacity of implementing agency, etc., were in place or adequate. The resulting implementation problems can be attributed largely to the failure of the Bank to follow the process of R&Rs preparation as required in OD 4.30. In turn, Project Affected People expected to receive the benefits of the RAPs to be applied. The fact that these RAPs could not, or were not, implemented gave rise to dashed expectations, which, as the Panel noted in its July Report, also appear to be the root of current problems.

20. The Bank's failure to observe its policies and procedures concerning Environmental Assessment (OD 4.01) in the preparation phase appear to be even more grave than observed in the Panel's July Report.

* The investigation confirms that, contrary to Bank policy, serious alternatives for fly ash disposal were not considered during the design phase. Coal India's rejection of disposal by backfilling or consideration of other ash disposal/utilization was accepted apparently without further discussion of alternative measures.

* The Bank failed to promote and to give support for critically needed interagency coordination. This has now been requested by Bank Management.

21. Supervision of the Resettlement and Rehabilitation component and of the measures to strengthen NTPC's capacity to monitor have effectively failed. Here again the documents reviewed indicate that the Bank's failure to observe policies and procedures, as required under OD 4.30 and OD 13.05 on Bank supervision, is more serious than described in the Panel's July Report. During the design phase, the Bank misjudged the Borrower's ability to implement the R&Rs component and the Bank's capacity to supervise it. As a result, mostly negative outcomes were inevitable.

22. The review of Bank R&R supervision (1993–March 1997) reveals a vicious circle of negative events which led to violations of policies and procedures for Resettlement and Rehabilitation and Environmental Assessment:

* Throughout this period, the Bank did not succeed in providing the necessary support to strengthen the Borrower's environmental and resettlement and rehabilitation capacity (para. 6, OD 4.30). The reason was a lack of staff to make a proper assessment of the requirements and the qualifications of a Borrower who had confirmed that it had no experience in that field.

* Throughout this period, there were few qualified Bank staff available, either at Bank Headquarters or in Delhi or Singrauli, to initiate and supervise implementation of required measures. Monitoring therefore relied basically on secondary source information. There was little meaningful direct consultation with PAPs.

* Under current Senior Regional Management a new approach has developed. The actions which they now have proposed confirm the previous shortcomings and might give affected people the hope of a better future, provided the remedial actions are implemented and monitored in an open-ended way with effective participation of affected people assured. As stated above, interagency coordination has been a big problem and appears to be a crucial prerequisite to implementing any effective Singrauli area social and environmental development program. Management has now indicated that it will support any such effort.
REPORT ON INVESTIGATION

Overview

23. The NTPC Thermal Power Generation Project—supported by Bank Loan 3240, approved in 1993—is located in the Singrauli region of India about 1,000 km southeast of Delhi. Singrauli covers some 2,200 square kilometers spread over two states—Madhya Pradesh and Uttar Pradesh. The area includes part of the reservoir created by the Rihand dam, which provides for irrigation and a hydro plant generating capacity of 400 MW. Thermal power plants based on major coal reserves near the reservoir have a total operating generating capacity currently at 6,360 MW. Studies suggest that estimated coal reserves would be sufficient to generate 20,000 MW of power for the next 130 years. In the Singrauli area, NTPC operates several thermal power plants—Singrauli (2,000 MW), Rihand (1,000 MW), and Vindhyachal (1,260 MW). The 1993 Project was designed to increase the capacity of Vindhyachal and Rihand by 1,000 MW each.

24. The objectives of the project are to “(i) help improve commercial discipline in the power system through the implementation of new commercial and investment policies; (ii) help NTPC meet its targets for capacity additions through increased mobilization of resources from internal resources, domestic and foreign capital markets as well as from the private sector through joint venture operations; (iii) upgrade environmental performance of NTPC power stations and make its new power stations environmentally more sustainable; and (iv) strengthen environmental management and resettlement and rehabilitation management capability.”

25. The project comprises: “(i) support of a five year time-slice of NTPC’s least cost investment program of new coal and gas based power; (ii) support of NTPC’s program to undertake joint venture operations; and (iii) implementation of an environmental action plan (‘EAP’) which includes upgrading of existing power stations, training and technical assistance for the strengthening of NTPC environmental and Resettlement & Rehabilitation (‘R&R’) management.”

26. A major problem stems from the fact that the fly ash from the coal used for operating the plants is disposed of in ash dykes. Most of the land needed for the ash dykes had already been acquired by NTPC prior to 1993. An additional 300 ha was to be acquired for new ash dykes. The sites identified entailed the involuntary resettlement of about 370 families—Project Affected People (“PAPs”). For this reason, and to remedy the environmental situation of those already displaced by the earlier acquisitions, the project included an Environmental Action Plan (‘EAP”), two Resettlement Action Plans (“RAPs”), and provision for three Remedial Action Plans (“ReAPs”).

27. The objectives of the EAP are, inter alia, to “address outstanding R&R issues (within the context of the new corporate R&R policy); and to upgrade NTPC’s capability to prepare and execute R&R programs.”

Scope

28. Background information on the processing of the Request is contained in the introduction to this investigation report. This report deals with the following Bank policies:
Strengthening of the Borrower's environmental and resettlement and rehabilitation capacity (ODs 4.30 & 4.01 and Objective (d) of the Project)

Participation of and consultation with affected people in relation to involuntary resettlement and environmental assessment.

Involuntary Resettlement (OD 4.30), which Management claims to have complied with "substantially."

Environmental Assessment (OD 4.01), which Management claims to have complied with "partially."

Bank Supervision (OD 13.05), which Management claims to have complied with "substantially."

Indigenous Peoples (OD 4.20), which Management claims to have complied with "fully."

29. Within the restrictions of the Board decision, the Panel further analyzed the findings set out in its July 24, 1997; “Report and Recommendation to the Executive Directors” (“Panel’s July Report”). Relevant files and subsequent information provided were reviewed and discussions were conducted with Bank staff in Washington and with others to further determine to what extent the Bank had failed to comply with policies and procedures. It should be noted here that this Desk Study had to rely on the Panel’s July Report—and repeat therefrom—because the investigation as authorized by the Board demands scrutiny of the preliminary findings of that Report and an evaluation of their validity. This is of particular importance because:

(a) The Board did not have the opportunity to discuss the substance of the Panel’s findings during its meetings on September 9 and 11, 1997; and

(b) It is necessary to base the Desk Study on the Inspector’s observations in the field since some documentation in Bank files supports the findings on the spot while other information confirms the contradictions. This is not surprising because the Bank’s knowledge was largely based on secondary data, that is, progress reports and other data provided by NTPC.

30. The Panel’s findings in its July Report were based on the information obtained during the Inspector’s visit to Delhi and the Project area in addition to information contained in the Request, the Response, supplemental information furnished by NGOs, and additional information provided by the Requesters, Management, and NTPC.

31. The Panel’s July Report addressed the Request’s claims of harm suffered—allegedly as a result of Bank acts or omissions in violation of its policies and procedures—in relation to involuntary resettlement and associated environmental issues. The extent of authentic local resident participation in relation to Resettlement and Rehabilitation ("R&R") was addressed first. Bank supervision then was reviewed, and lastly, the adequacy of the remedies proposed by Management in the “Action Program” in the Management Response were discussed.

32. The Request raised the question of whether the Bank had complied with its policy (OD 4.20) on Indigenous Peoples. The Management Response claimed full compliance. Since the Inspector received no contradictory information from local sources during his field visit, the Panel did not further address this allegation at that time.

33. The Panel’s July Report pointed out that the environmental and resettlement aspects of the project are closely tied together by the technical choice for ash disposal.
build the ash dykes, land had to be acquired and people involuntarily resettled. In addition, the dykes themselves constitute a serious potential environmental hazard to the population.

34. The Bank in its Response admitted “shortcomings” in application of the policies on Involuntary Resettlement, Supervision, and Environmental Assessment. The Panel found:

(a) preliminary evidence of material harm; and
(b) prima facie evidence that such harm was a result of the Bank's admitted shortcomings in the application of Bank policies and procedures.

35. The Panel's investigation takes into account Management's Updated Action Program, proposed after the Panel recommended an investigation, and the Bank Supervision Mission Report, undertaken from September 12–28, 1997, immediately after the Board Decision on the Panel's recommendation for an investigation. The Supervision Report includes the Terms of Reference (“TOR”) for the Social Impact Assessment assignment being undertaken by a consultant, the Xavier Institute of Development Action and Studies (“XIDAS”). Those TOR include investigation into the R&R status of individual Project Affected People (“PAP”) and Project Affected Families (“PAF”), which the Panel had already highlighted as an essential prerequisite for resolving the tense situation and conflicts on the ground and for the implementation of any remedial action plans.

36. Until the completion of the XIDAS assessment there was an agreement that further forcible evictions would be suspended. Since the Board decision, an alleged attempt to force PAPs to move completely out of one area, by destroying their crops, has been reported to Management. As stated above, the Panel was informed by Management that an Independent Monitoring Panel, constituted recently in consultation with NGOs, will investigate this allegation through a site visit.

37. In this Report, first, the relevant text of the applicable policy or procedure is quoted; then (I) the findings of the Panel's July Report are noted; and (II) results of the Desk Study—which includes responsiveness of the September 2, 1997, Management “Update of the Action Program” (“Updated Action Program”) to the Panel's July Report, and any additional information from this investigation phase—are discussed; and lastly, the Panel's findings are presented.  

A. Strengthening the Borrower's Environmental and Resettlement and Rehabilitation Capacity: ODs 4.30 and 4.01

Policies and Procedures

STRENGTHENING OF ENVIRONMENTAL CAPABILITIES

38. “The ultimate success of EA depends upon the capability and understanding of environmental matters of the governmental agencies concerned. Therefore, as part of the EA process, it is necessary to identify relevant environmental agencies and their capability for carrying out required EA activities...projects with potentially major impact normally require the strengthening of several environmental functions...” (OD 4.01, ¶ 12)
INVOLUNTARY RESETTLEMENT IN PARTICULAR

“The organizational framework for managing resettlement must be developed during preparation… The organization responsible for resettlement should be strengthened when entities executing infrastructure or other sector-specific projects lack the experience and outlook needed to design and implement resettlement. One alternative is to create a special resettlement unit within the project entity …” (OD 4.30, ¶ 6)

“The Bank supports borrowers' efforts through (b) financing technical assistance to strengthen the capacity of agencies responsible for resettlement.” (OD 4.30, ¶ 23)

“For countries with a series of operations requiring resettlement, efforts to improve the policy, institutional, and legal framework for resettlement should form part of the Bank's ongoing dialogue with the government.” (OD 4.30, ¶ 26)

I. Panel's July Report

39. Years after starting the project, representatives of the implementing agency, NTPC, freely admitted to the Inspector that the Corporation did not have expertise in the R&R area. NTPC maintains that it is learning and is determined to institutionalize this new approach to R&R speedily and effectively into its corporate culture.

40. The Management Response contained a Proposed Broader Action Program which acknowledged that “there must be solid capacity in place in appropriate agencies to closely monitor, to implement in a timely and coherent manner, and to ensure that the content of the plans are relevant.”

41. The Management Response also contained a Proposed Specific Action Program. That Program envisaged institutional strengthening and training in accordance with agreed schedules. The Panel noted that there was no proposal for the Bank to evaluate the adequacy of its assistance in this area.

42. At the Board meeting, the Lead Inspector stressed the Bank's failure to assist in the strengthening of NTPC's capacity and the importance of doing so.

II. Desk Study

UPDATED ACTION PROGRAM

43. The Management Updated Action Program stated that XIDAS will:

“advise NTPC on how to improve their information strategies and grievance mechanisms, and how to ensure more meaningful participation in decision making by project-affected people and other key stakeholders.” (¶ 9(e))

“...provide inputs into improving Income-Generating Schemes on the basis of which NTPC would prepare a more effective program through the assistance of local NGOs, Community-Based Organizations, especially of women and youth, and the local business communities. NTPC will explore the possibility of contracting to NGOs, a business group or consulting company, the implementation of the income-generating program. Management would assist and advise NTPC on this program.” (¶ 10)

44. Rather than “focus” on isolated reviews, the Updated Action Program envisages, inter alia:

“strengthening of NTPC's internal monitoring and analytical capacity related to environmental and social impacts. Consideration will be given to recruitment
of specialists who can assist NTPC in building up this capacity. Management will provide technical assistance and training towards this purpose…” (¶ 13 (a))

In addition to training in this, the Bank's Economic Development Institute will assist NTPC in development of a custom-made program for R&R staff to receive training on “social skills, including communications with project-affected people, participatory methodologies and strategies of restoration of livelihood.” (¶ 16)

45. Importantly, the Program proposes the establishment of an “independent” body to act as a monitoring panel to “systematically review and advise on implementation of the R&R program.” (¶ 13 (c))

**ADDITIONAL INFORMATION**

46. Objective (d) of the NTPC Project, as described in the Loan Agreement, was to strengthen the Borrower's environmental and resettlement and rehabilitation capacity.

**R&R**

47. The “Aide-Mémoire of the September Bank supervision mission” notes that “it was agreed that NTPC would prepare a proposal for strengthening their capacity to implement R&R, in particular the strengthening of their monitoring capacity. This proposal would be provided to the Bank for discussion by November 15, 1997.” In addition, it appears to have been decided that consultants will be employed to assist NTPC in the implementation of the RAPs and ReAPs starting March 1, 1998.

48. Management has indicated to the Panel that the Independent Monitoring Panel mentioned in the Updated Action Program was established and began to function recently.

**ENVIRONMENTAL**

49. The September Bank Supervision Report (Form 590) rated the Environmental management status as “satisfactory,” stating that:

“Institutional improvements have been made in the way environmental issues are being managed within NTPC. However, further improvements are necessary, including training of staff to ensure that internal environmental guidelines are respected and remedial actions are taken. Recommendations have been made for further consolidation of various environmental functions within NTPC, to help overcome some of the delays in the implementation of environmental Projects. NTPC will present a proposal to the Bank by February 1998.”

50. This objective is fundamental because the Borrower has responsibility under the Loan Agreement (Section 3.03) to implement the R&R component. The very fact that one of the Project's four objectives was to strengthen the Borrower's capacity to perform this role acknowledges that suitable capacity was not there at the beginning of the loan's negotiations.

**FINDINGS**

51. In line with its policies, the Bank introduced a Project component dealing with the implementation of Resettlement and Rehabilitation and the Environmental Action Plans. The Panel finds that the Bank did not assure itself that the Borrower had the nec-
necessary initial capacity to carry out these tasks. The Panel also finds that the Bank itself did not have the necessary capacity at the Regional level to support the Borrower in carrying out these tasks. This appears to be a serious violation of Bank policies on Environmental Assessment (OD 4.1) and Involuntary Resettlement (OD 4.30). This is confirmed by the content of the TOR for XIDAS and the Independent Monitoring Panel. In summary:

- The Bank misjudged the Borrower's limited ability at the outset of the loan processing and the extent of strengthening required.
- The Bank back then, through 1993–96, had no appropriate concept of how to support improving the Borrower's capacity.
- The Borrower itself clearly acknowledged that it did not know what it needed to do and relied on the Bank's knowledge and expertise.
- It turned out that the Region itself obviously did not have the capacity to assist the Borrower in effectively achieving this objective.
- The Panel's July Report findings on the failure to carry out institutional strengthening to enable NTPC to carry out R&Rs is demonstrated by the content and scope of the Terms of Reference for both XIDAS and the Independent Monitoring Panel.
- The Panel finds that the Bank's failure to assist and supervise institutional strengthening to meet this part of the objectives of the loan is a serious violation of its policy on institutional strengthening.
- Management initiated in September 1997 actions to monitor, supervise, and evaluate the Borrower's capacity to deal with current R&Rs problems and address basic issues that hampered the Project.
- Management proposals for strengthening NTPC environmental management capacity are expected in February 1998.

B. Participation of Affected People: ODs 4.01 and 4.30

Policies and Procedures

52. Environmental Assessments ("EAs") "provide a formal mechanism...for addressing the concerns of affected groups and local nongovernmental organizations (NGOs)") (OD 4.01, ¶ 2), particularly where involuntary resettlement is to take place. This is made more explicit in OD 4.30 where paragraphs 7–8 require "community participation."

Involvement of Affected Groups and NGOs

"The Bank expects the borrower to take the views of affected groups and local NGOs fully into account in Project design and implementation, and in particular in the preparation of EAs. This process is important in order to understand both the nature and extent of any social or environmental impact and the acceptability of any proposed mitigatory measures, particularly to affected groups." (OD 4.01, ¶ 19)

53. The Requesters claim that the RAPs were prepared without consultation with affected people. The Management Response considered that "meaningful consultation with PAPs took place during the preparation of the RAPs."
I. Panel's July Report

54. The Panel found, prima facie, that:

- Lack of local consultations and participation in both preparation and implementation of the R&R component of the Project appeared to be the root cause of past and current problems and complaints, including a reluctance or resistance to relocate.
- As a March 1995 Bank field mission report rightly pointed out, the participative process—communication and sharing of information regarding NTPC policy, entitlements, and compensation—was lacking. Furthermore, the reported use of petty contracts to influence "PAP representatives" meant it would be extremely difficult for NTPC to convince the PAPs in the ash dyke villages of Vindhyachal and Rihand to move out to be resettled and rehabilitated within NTPC policy framework. This was particularly so in that some aspects of the policy, such as land for land, are difficult to implement as the PAPs do not have sufficient funds available to pay for new land.
- During his visit in the field the Inspector himself found that NTPC did not facilitate his meetings with all local NGOs or PAPs. His request for NTPC not to be present was only reluctantly honored, and indeed some NTPC officials tried to silence PAPs in his presence. In one instance, an official wrote an account for NTPC of a meeting with a collection of local NGOs and PAPs that did not reflect the questions posed by the Inspector, the answers, or the discussion as simultaneously translated by the Panel's independent interpreter.
- PAPs had not received advance notice of the Inspector's visit though they had been promised by Bank officials that sufficient notice would be given to them so they could organize any community meetings necessary for a Bank visit. This failure resulted in a loss of PAP's confidence in the Bank's intensified commitment to participation/consultation.

55. The Management Response proposed a Project Specific Action Program. The Panel found that while Management recognized that there was no consultation with PAPs in the design of the EAs and RAPs, none was expressly proposed in the Action Program even though the Request and recent events suggested dissatisfaction among some PAPs with the original RAPs.

56. Lessons Learned: Management Response also acknowledged generally the need for robust processes and associated staff capabilities to ensure early, up-front, and meaningful participation of all project-affected communities and their leaders in the design of Bank-assisted projects:

   "We take very seriously the allegations of the 'adequacy' of participatory consultation in preparation and design, and the social cost of delays in the implementation of the Environmental Action Plan (EAP) and the Resettlement Action Plans (RAPs)."

57. The Management Response also proposed a Broader Action Program consisting largely of proposed studies. The Panel considered that appropriate local participation as well as intensive on-the-spot Bank supervision would contribute to its prospects of successful implementation. If the studies and reviews resulted in actions to be carried out in close cooperation with directly affected PAPs and NGOs, then they should help answer the Requesters' concerns regarding the overall past and present situation in Singrauli.

58. The Panel found generally that the activities proposed in both the specific and broader action programs did not reflect the fact that the RAPs were developed without authentic local participation and therefore may still not be acceptable to local people.
II. Desk Study

**Updated Action Program**

59. After interviews with Management and analysis of additional available information, the Panel concluded that the Updated Action Program did not include local participation in preparation of the Program itself though the Country Director visited the field.

60. However, the Updated Action Program states that XIDAS' tasks would be done “using participatory methodologies such as Rapid Rural Appraisal and focus group discussions” to:

(a) assess the current status of those project-affected people or project-affected families who have not yet received full assistance under the policies in the ReAPs or RAPs;

(b) identify obstacles to successful implementation of the plans;

(c) advise NTPC and Management on corrective action required;

(d) liaise and consult with other relevant stakeholders in the area, in particular concerned NGOs, in an attempt to build consensus towards the proposed courses of action; and

(e) [as noted above] advise NTPC “…on how to ensure more meaningful participation in decision making by project affected people and other key stakeholders” (¶ 9)) “and provide inputs into improving Income-Generating Schemes.” (¶ 10)

61. XIDAS will also conduct an Impact Assessment Study of the R&R to assess how effectively PAPs and Project Affected Families (“PAFs”) have been resettled and recommend remedial action to be considered by the Bank and “other stakeholders.” According to Management, the results of this study will be an input into the modification of the ReAPs and RAPs.

**Additional Information**

**Project Design**

62. Because Management decided that the loan had to go to the Board before the end of FY 1993, it was necessary to accelerate the entire process. The result was that the NTPC R&R policy was negotiated in Washington in about two weeks, and that one senior anthropologist went to Singrauli for approximately two weeks in May 1993 to assist in the preparation of the two RAPs. Therefore, meaningful consultations or participation by PAPs in any sense of the word were obviously impossible.

**September Bank Supervision Report**

63. The Aide-Mémoire of the September Bank supervision mission confirms that XIDAS would be responsible for discussing the scope of its TOR with stakeholders in the Project area and indicates that time will be spent on public consultations. After six months it is expected that workshops on their final draft report will be carried out on site. According to the Aide-Mémoire, the report is expected to contain advice on corrective actions and proposals for revisions to the RAPs and ReAPs:

“XIDAS will scope out the Terms of Reference and detailed work program following discussions with affected population, concerned NGOs and other stakeholders and [there] will be submitted to the Bank and NTPC by October
31, 1997. The first draft report will be completed by February 28, 1998, and the final report will be completed by May 15, 1998. A fortnightly progress report will be submitted to NTPC as input for making necessary revisions in the RAPs and ReAPs. The preliminary results of the studies will be shared with the various stakeholders at workshops to be held in the Singrauli region on various dates in the first week of March 1998.” (¶4,1)

64. At the time this report was prepared the final draft of the XIDAS “Inception Report” was not available to the Panel.

**Findings**

65. The preliminary findings in the Panel’s July Report, which indicated prima facie evidence of serious violations of policies and procedures on participation and consultation of affected people as required by ODs 4.01 and 4.30, are confirmed. The Bank’s failure to observe policies and procedures in the design phase, however, appears more serious than previously assumed because of the Bank’s admitted inexperience in applying the policy back in 1993.

* The investigation indicates that, despite reluctance by staff members, Senior Regional Management decided to proceed with presenting the proposed loan for approval by the Bank’s Board by the end of FY1993 (June 30, 1993). The RAPs were then completed in late May–early June 1993. The Loan Agreement was signed December 9, 1993, and became effective on June 6, 1994; the first disbursement, however, was not made until March 1995.

* In its July 1997 Report, the Panel found that the Bank’s failure to insist on participation and consultation with PAPs, as required by its policies, was at the root of current problems. There is no evidence that NTPC received appropriate assistance from the Bank to handle the participatory and consultative processes demanded by the Bank’s policies and procedures.

* It should now be obvious that no remedial Action Plans can succeed without authentic local participation.

* Given its limited mandate restricting its investigation to Washington, the Panel now cannot establish on the ground whether local NGOs or PAPs are satisfied that they are being consulted adequately on: the Updated Action Program, XIDAS’ TOR and Inception Report, the Proposed Regional Action Plan which the Bank might support with a new loan, and any revised RAPs and ReAPs.

* If the plans resulting from the TOR for XIDAS are implemented independently, then future revisions to the RAPs and ReAPs should be based on local participation, with inputs coming from the ground up rather than the reverse.

### C. Involuntary Resettlement: OD 4.30

#### Policies and Procedures

**Objectives**

66. “The objective of the Bank’s resettlement policy is to ensure that the population displaced by a project receives benefits from it. … All involuntary resettlement should be conceived
and executed as development programs with resettlers provided [with] sufficient investment resources and opportunities to share in project benefits. Displaced persons should be (1) compensated for their losses at full replacement costs prior to the actual move; (ii) assisted with the move and supported during the transition period in the resettlement site; and (iii) assisted in their efforts to improve their former living standards, income earning capacity, and production level, or at least to restore them. Particular attention should be paid to the poorest groups to be resettled." (OD 4.30, ¶ 3)

"Resettlement plans should be built around a development strategy and package aimed at improving or at least restoring the economic base for those relocated. Experience suggests that cash compensation alone is normally inadequate. ... Preference should be given to land-based resettlement strategies for people dislocated from agricultural settings. If suitable land is not unavailable, non land-based strategies built around opportunities for employment or self-employment may be used." (OD 4.30, ¶ 4) Later the OD states that in rural settings "The Bank encourages 'land for land' approaches, [to resettlement] providing replacement land at least equivalent to the land lost." (¶ 13)

BANK PROCESSING

"Involuntary resettlement is an integral part of project design and should be dealt with from the earliest stages of project preparation." (¶ 3) "The possibility of involuntary resettlement should be determined as early as possible and described in all project documents. The TM should (a) briefly summarize in the Initial Executive project Summary (Initial EPS) the magnitude, strategy, and timing of the resettlement..." (OD 4.30, ¶ 28)

"The Bank supports borrowers' efforts through (a) assistance in designing and assessing resettlement policy, strategies, laws, regulations, and specific plans..." (¶ 23)

"Submission of a time-bound resettlement plan and budget that conforms to Bank policy is a condition of appraisal... except for sector investment loans..." (¶ 30) or for projects causing involuntary resettlement of less than 100-200 people. (¶ 4, footnote 8)

OD 4.30 also requires that "arrangements for monitoring implementation of resettlement and evaluating its impact would be developed by the borrower during preparation and used during supervision. Monitoring provides both a warning system for project managers and a channel for the resettlers to make their needs known and their reactions to resettlement execution." (¶ 22)

I. Panel’s July Report

67. The Requesters claimed that the options for resettlement and restoration of livelihood under the RAPs and ReAPs are inadequate. 6

68. Management Response stated that it complied "substantially" with this policy directive. The Response noted that land tenure rights and the R&R options to restore livelihood were in line with OD 4.30. But it agreed that design and implementation of the RAPs have not been satisfactory.

PROJECT DESIGN

ADOPTION OF NTPC CORPORATE R&R POLICY

69. After negotiations in Washington during March/April 1993, the NTPC adopted for the first time an R&R corporate policy which the Bank found conformed basically
with OD 4.30. The Preamble of the policy states that "NTPC will take measures to resettle and rehabilitate Project Affected Persons (PAPs) with the objective that the PAPs will improve or at least regain their previous standard of living. Thus, NTPC's effort is complementary to the Government's efforts in rural development."

"LAND FOR LAND"

70. As far as inclusion of "land for land" goes, the Panel found that:

- RAPs for the project were accepted by the Bank in 1993 to be in compliance with Bank policy.
- The Bank should have examined the actual availability of land before insisting on having this option included in the RAPs. This policy raised expectations and contributes in large part to the resistance to shifting by remaining landowners. Moreover, it is understandable that there is resistance from PAPs who feel their lives and livelihoods are disrupted when they have relied on promises of receiving "land for land" and then are disappointed when told that is not possible.
- Management explained in its Response that it "had underestimated the practicability of implementing the land for land options."

INCOME GENERATION SCHEMES

71. The Panel found that the current income generation schemes are inadequate and will not meet the needs of Requesters. The Requesters had agreed to relocate on the grounds that a job would be offered and sustainable income provided, only to find themselves deprived of income or livelihood.

CATEGORIES OF AFFECTED PEOPLE

72. PAPs living in the area deemed necessary for construction of ash dykes for Phase II of Rihand and Vindhyachal fall broadly into two categories:

- farmers with small holdings who have been in the area for generations, and
- laborers working for them.

To meet the objective of OD 4.30, the RAPs provided PAPs with the options of "land for land" or cash compensation and provision of economic livelihood; for non-landowners, a plot of land for a house and employment. Such options were to be provided to each family member age 18 and over.

73. There is an important difference in treatment between the ReAPs and the Phase II RAPs: Compensation and rehabilitation for pre-1993 affected people was offered on a family basis, or to Project Affected Families, while benefits under the 1993 RAPs are to be applied to all eligible family members 18 and over. The result is that:

- PAPs' expectations of what they would receive were naturally raised by the introduction of new standards, which caused divisions and tensions through what appears to them as arbitrary eligibility for better benefits. Furthermore, the expectations of those eligible were frustrated when promises were not met.
- Most of the land needed for future expansion of the plants was acquired and compensation partly paid in the 1980s. However, NTPC granted PAFs adverse possession—in other words, NTPC did not require the families to shift (though some did) but allowed them to remain living on and cultivating the land until such time as it was actually needed for construction.
• Those who were involuntarily resettled before 1993 only received one benefit per family despite their children having turned 18 or over. As a result, they feel shortchanged.
• Those who actually chose to shift in accordance with the law at the time of acquisition (rather than remain as allowed in adverse possession) feel penalized because those who stayed now receive extra benefits.
• For those who remained on the land, NTPC's intended humanitarian approach created severe difficulties once the time came for eviction:
  • Compensation money was spent.
  • Availability of alternate land had diminished.
  • Replacement land prices had risen.
  • Family sizes had increased.
  • A generation of children had come of age.

**Restoration of Livelihood**

74. Apart from complaints about the obvious lack of working infrastructure and maintenance in the colonies, the main individual or group complaints about the resettlement and rehabilitation packages received by the Inspector either orally or in writing included, inter alia:

(a) inducement to shift upon promise of work as contractors—the promise was often either ignored or honored for only a few days to a couple of months;
(b) expectation of permanent jobs with NTPC—the jobs did not materialize;
(c) inducement to shift on promise of a plot of land for a house—the promise was not honored;
(d) insufficient means to build a house; and
(e) bad living conditions in the resettlement colonies.

75. The Panel could not verify complaints (a)–(d) without a factual field investigation, but the Inspector could confirm by observation that (e) was a serious and bonafide complaint.

**Relative Standards of Living in Resettlement Colonies**

76. The Inspector observed obvious shifts in lifestyle when confronted with conditions in the Resettlement colonies:
• Those used to rural space and security in making their livelihood from agriculture have been shifted into crowded “colonies” on small plots, many without any income or, at best, with short or uncertain contract jobs. One Bank mission reports a respected local NGO leader as describing the colonies as neither villages nor townships, but transit camps. Nothing has changed.
• Farm laborers were generally better off than before, since they had been, in effect, bonded labor. No PAPs at the sites visited expressly supported or denied this general proposition. To ascertain the actual effects of the situation would require a field investigation.
• Basic infrastructure in the resettlement colonies appears to have been provided but is definitely not maintained: drains filled with garbage and mud, water pumps not working, a lack of electricity and water, a health center with no medical supplies or services, an unusable community center, etc. The Inspector was told that this was a state responsibility and that in fact where there has been a lack of
action, the NTPC has gone beyond what is required of it by, in some instances, providing such facilities.

Chilkadand, the resettlement colony for those displaced by the Singrauli power plant, appeared to be in the worst shape. It is located right beside an NCL mining operation where, in addition to the problems enumerated just above, housing appears to be deteriorating, handpumps are not working, water pipes are defective, and street lighting is in disrepair. Residents claimed that they would like to get out of this unbearable environment but were afraid that they would not be rehabilitated any better than the last time. It should be noted that this colony is for those displaced before Bank involvement, so land plots were given to families as opposed to each eligible adult, resulting in overcrowding.

DECISIONS OF INDIAN COURTS IMPROVE ON RAPs

77. A number of PAPs have taken their R&R problems to the local courts. The Panel noted that court-ordered R&R benefits appear to go beyond those in the RAPs.

LOCAL VIEWS

78. In summary, the substance of R&R problems raised by the various local NGOs, activists, or community leaders with the Inspector appeared to reflect a number of complex issues such as:

* differences between treatment of PAPs from Vindhyachal Stages I and II
* differences in predisplacement standards of living, occupations, etc.
* perhaps most important, differences in expectations based on unfulfilled promises.

Underlying these problems is the fact that the 1993 RAPs contained elements, or held out promises to PAPs, that the Management Response, as already mentioned, admits that it "had underestimated the practicability of implementing the 'land for land' options and difficulties in carrying out income generating schemes." This admission raises the question of whether there are in fact practical alternatives to achieving the Bank's policy objective of ensuring that the Project does not leave the PAPs worse off than they were before; and if so, what are they?

79. The Management response included a Project Specific Action Program. Because the Panel found the remedial actions proposed inadequate, it considered that:

* The numerous problems raised should be mitigated or prevented now instead of waiting for retrospective identification through future reviews/studies and future mitigation activities or remedial actions (as proposed in the Broader Action Program).
* This would require identifying the factual source of current R&R problems now so that Management can propose remedial actions based on local solutions as a matter of urgency.
* Resolution of discrepancies in resettlement and other issues—both past and present—is a prerequisite to implementation of the Action Programs.
* For this reason, the Panel believed it was imperative to conduct an immediate independent investigation of the facts to see if there is further evidence of the Requesters' allegations of harm; and, if so, to identify whether such harm stems—as the Requesters allege—from acts or omissions of the Bank in violation of ODs 4.01, 4.30, and 13.05.
80. The Management response also included a Broader Action Program. The Panel concluded that the Action Program indicated Management's serious effort to mitigate the overall problems in the Singrauli energy sector plus all projects with resettlement components in India. The proposed actions reflected Management's desire to introduce a prudent social and environmental development program for the future. The program also addressed problems going well beyond those experienced with this particular project. The Panel noted that it assumed that appropriate local participation as well as intensive on-the-spot Bank supervision would contribute to its prospects of successful implementation.

**PANEL CONCLUSION ON R&R**

81. Based on the Inspector's observations in the field, which confirmed earlier reports from various sources, the Panel found it apparent that there were and are very real practical complications—both in terms of understanding and acceptance of the RAPs by the PAPs/PAFs and of the process by NTPC management—in implementing Bank R&R policies introduced during a later phase of an ongoing project. As the Panel has already stated, it is prima facie self-evident that many of the involuntary actual or potential displacees affected by this Project have or are likely to have suffered as a result of an alleged failure by the Bank to comply with OD 4.30.

**II. Desk Study**

**UPDATED ACTION PROGRAM**

82. The September 2, 1997, “Update of the Action Program” responded to the above Panel findings by proposing a new Project Specific Action Program composed of the following components, which answer the Panel's concerns. It states:

“I. Actions to address current R&R problems
II. Actions relating to the environmental aspects
III. Actions to address wider social [and] environmental problems of the Singrauli region
IV. Proposed Extension of the Project (Loan 3632-IN)” (¶ 4)

83. In interviews with the Panel, Management represented that the RAPs will be modified to ensure that they would represent realistic and implementable plans.

**ADDITIONAL INFORMATION**

**BANK LOAN PROCESSING AND PREPARATION OF R&R COMPONENT**

84. The records and interviews with Staff show clearly that Senior Regional Management pressured staff to accelerate processing of the loan in order to meet fiscal year 1993 lending targets. Memoranda illustrating expert staff concerns that loan processing before June 30, 1993, would not allow sufficient time to prepare the R&R component in accordance with the requirements of OD 4.30 are attached as Appendix 1 to this Report. R&R was not even put on the agenda as an issue for the Regional Loan Committee Meeting in March 1993, despite specific requests from staff. At the time, the Chief Counsel for the South Asia Region in the Legal Department wrote to the Regional Senior Operations adviser as follows:
"I remain concerned, however, about the R&R aspects. Without burdening the agenda with numerous questions which arise from my reading of the various documents submitted, can the RLC consider what would prevent us from requiring all R&R matters/plans/etc being sorted out as a condition of appraisal. Learning from the lessons of Narmada and heeding the Wappenhans 'quality at entry' prescriptions, would it not be appropriate to reinforce our seriousness about R&R by asking for all the necessary R&R actions/plans documents etc to be available at appraisal so that they can be properly appraised?

In this respect, I was especially taken by the fact that NTPC's current R&R policy does not yet fully meet Bank guidelines. This (and other related matters) should not be left as conditions for negotiation. In my view, they are matters which form part of the appraisal process."

85. After much negotiation, in late March/early April Bank staff approved NTPC's adoption of a corporate R&R policy as generally conforming to the Bank's OD 4.30. This was regarded by staff as a significant achievement since India does not have a national R&R policy. However, there was no assurance that the policy could actually be implemented. For this, the Bank's OD 4.30 clearly calls for specific Resettlement Action Plans.

86. It appears that Senior Regional Management had argued that the loan should be considered as a Sector loan and for this reason NTPC's new R&R policy was sufficient, even though two specific subprojects had been identified and formed part of the proposed loan. This prompted them to request that preparation of RAPs for Rihand and Singrauli be made a condition of effectiveness. This was rejected by the Legal Department as clearly in violation of Bank policy, which requires that the RAPs be approved by the Bank as a condition of appraisal. However, the loan had been accelerated and R&R measures which should have been accomplished before appraisal and during negotiations were only accomplished after full negotiations. At the Legal Department's insistence, preparation of RAPs satisfactory to the Bank were to be a condition for Board presentation.

87. The RAPs were then largely prepared during a two-week field visit by one staff specialist in late May–early June 1993. The RAPs were found to be in compliance with OD 4.30 by the specialist and Legal Departments and on this basis those Departments cleared the package for Board presentation a day prior to its circulation in time to be considered before the end of FY 1993. The Board meeting to approve the loan was postponed from June 24 to June 29 at the request of two Executive Directors who were concerned about reports of NTPC's poor track record involving R&R.

88. The file study does not indicate that the Borrower gave any priority to receiving this particular loan in 1993. Subsequent actions indicate that the Borrower was in no hurry to go ahead with the Project. The Borrower did not sign the Loan Agreement until December 9, 1993, and the loan was not declared effective until six months later, on June 6, 1994. Staff indicated to the Panel that this was an unusually long period. Furthermore, another eight months elapsed before the first disbursement was made in March 1995.

89. The Panel considers that, while in the end the RAPs were accepted as complying with OD 4.30, the Bank's processing of the loan violated the Bank policy and furthermore set the stage for the Bank continuing to violate policies during implementation.

90. Staff interviews and files reveal that regional technical experts, following the advice of the Bank's central Environment Department, insisted on inclusion of 'land for
land” and “promise of jobs” in order to comply with the letter of OD 4.30. This inclusion was made even though, in practical terms, it was known to be unrealistic because NTPC had a policy of not buying private land; and because, unlike the coal industry, had few jobs, other than ancillary support ones, for other than skilled workers. This raises the question of whether it is reasonable for the Bank to expect the NTPC to implement programs consistent with Bank policy.

**IMPLEMENTATION**

91. In April 1995, the staff of the New Delhi Office (“NDO”) visited the Singrauli area on a fact-finding mission and reported “[t]he potential for this case to be used as a trigger for inspection is great—it could easily be argued that the Bank has failed to ensure that the conditions of the R&R policy have been complied with.” [emphasis added] (Back-to-Office Memorandum, NDO). Details from the Back-to-Office Memorandum are in Appendix 2 of this Report.

**CAPACITY STRENGTHENING**

92. The main objective was strengthening the implementing agency’s ability to deal with R&R. NTPC officials themselves readily acknowledged, staff members informed the Panel, and the files show that it should have been understood even in 1993 that NTPC did not have the necessary expertise to undertake implementation of their new R&R policy and the RAPs—designed according to the Bank’s high standards. It seems unrealistic to expect NTPC, a company whose primary function is to produce power, to begin implementing the challenging social and environmental measures outlined in the program without adequate time to both gain the expertise and acquire the experienced manpower to carry out these measures, which are outside its normal functions.

**COMPENSATION PROBLEMS**

93. The factual basis of conflicting individual claims concerning involuntary resettlement and rehabilitation could not be dealt with by the Panel from Washington. However, as provided in the Updated Action Program, NTPC has now employed XIDAS to identify the factual source of the current problems as well as remedial actions. It is understood that this basic urgent task will be completed no later than May 15, 1998.

**SEPTEMBER 1997 BANK SUPERVISION REPORT**

94. **Fact Finding.** The Terms of Reference for XIDAS confirm the findings in the Panel’s July Report and reflect proposals of the Updated Action Program.

“1. Fact-finding to sort out contradictory claims for PAPs who remain to be resettled or rehabilitated; and for PAFs who have not yet received the assistance or facilities identified under ReAP will be undertaken. Immediately an initial assessment will be made of the status and problems, and facilitation of dialogue with stakeholders and recommendation of corrective actions for all the persons who remain to be resettled or rehabilitated under the Resettlement and Rehabilitation Plan for Mithini ash dyke at Rihand and V-II ash dyke at Vindhya (Stage II estimated at 119 persons) will be undertaken, together with an assessment of the status and problems of all the families affected by earlier projects at all three plant sites who have not yet received
the assistance or facilities identified under ReAP Stage I (Stage I estimated at 155 families). (¶ 2.5)

2. Contradictory claims of those already moved. An impact assessment [will be done] covering the PAPs affected [by] Mithini ash dyke at the Rihand and V-II ash dyke at Vindhyachal to determine the current status of the process of implementation of the RAPs for these two sites. This will determine for each individual PAP whether entitlement packages and compensation amounts have been given and received. The base line social economic data already available, land records and other relevant documents on which the RAPs were constructed will be used as a basis for this impact assessment, together with the quarterly progress reports produced by NTPC. Any conflicting accounts as to eligibility and receipt of entitlement, will be assessed through consultations with the various stakeholders involved (NTPC, local NGOs and CBOs, PAPs, local leaders, the District Collectors Office and relevant documents).11 (¶ 2.6)

95. Most important, the TOR point out that the Bank project is “covered by a policy with the objective of restoring standard of living”—meaning PHASE II PAPs are included in the RAPs. For those covered by ReAPs for all three of NTPCs Singrauli plants, the objective is “to improve conditions for those affected by earlier investments in power generation.” To determine whether the resettlement standard has been met for those involuntarily resettled due to construction of ash dykes for Rihand and Vindhyachal Phase II, XIDAS' TOR state that:

“An Impact Assessment will be undertaken to determine the changes in the living standard of PAPs affected by Mithini ash dyke at Rihand and V-2 ash dyke at Vindhyachal. Such an impact assessment will, inter alia, determine the extent of changes, both positive and negative, that have accompanied their resettlement, the sustainability of the rehabilitation measures extended to or adopted by them independently and will ascertain the extent to which standards of living have improved or declined. This includes an assessment of impact on the social structure of the villages, and of the changing fortunes of particular groups within the villages. In addition to the production of a rigorous assessment of impact, the consultants should support their finding with a representative sample of detailed case studies which provide individual histories of family changes that have occurred. Information collected will provide a basis for determining whether the PAPs displaced by NTPC's activities have been provided with the means to restore their former living standards, earning capacity and production levels, thereby providing an understanding of whether vulnerability has increased or decreased and whether the degree of sustainability has improved or not.” (¶ 2.8)

To determine whether the objective of improving the standard of living of those resettled earlier has been met, XIDAS' TOR state that:

“A study shall be prepared of the adequacy, implementation and outcome of the ReAPs (covering “Stage 1”) in the resettlement colonies and the clusters in pursuit of the provisions of the Remedial Action Plans. These plans focus on: i) development and enhancing community facilities for benefits of said PAFs; ii) training and other facilities to upgrade skills and improve opportunities; and
iii) assist PAPs' access to Government Development Programs.
This study will be done focusing on those identified by NTPC as beneficiaries under the ReAPs.” (¶2.7)

FINDINGS

96. The NTPC's Resettlement and Rehabilitation policy and the Resettlement Action Plans appear to have complied, at least on paper, with the Bank's Operational Directive (OD 4.30) and were cleared by the Bank's Legal Department and Environmental Specialists. However, the loan was processed so rapidly—with the RAPs completed immediately before the Project was presented to the Bank's Board—that there was no time to ensure that essential mechanisms and preconditions, such as state government commitment, capacity of implementing agency, etc., were in place or adequate. The resulting implementation problems can be attributed largely to the failure of the Bank to follow the process of R&R preparation as required in OD 4.30. In turn, Project Affected People expected the benefits of the RAPs to be applied. The fact that these RAPs could not be, or were not, implemented gave rise to dashed expectations, which, as the Panel noted in its July Report, appear to be the root of current problems.

97. The Inspector, during his July visit, was invited to visit villages of unaffected people so as to compare conditions in the colonies with them. As stated in the Panel's July Report:

"There are certainly conditions far worse in India and elsewhere in the world than those in the colonies and there is no doubt that there are villages in the area where people are worse off, but it has to be remembered that the one and only yardstick the Panel is asked to use is whether people involuntarily displaced appear to have been restored, at least, to their previous standard of living."
The Panel's impression was that this had not happened, and so it asked to investigate.

98. It must also be pointed out that, in terms of the Bank's Operational Directives, resettlement in this area had a long and sad history, creating a set of very complex social problems. It was hoped that Bank involvement could at least improve the situation. However, since it was not an isolated project in the region, the introduction of Bank standards created discrimination between past and future displacees.

99. In this case, the files and interviews with Management show that the Bank appears, within a short timeframe, to have demanded of the Borrower commitments to a general policy and to specific RAPs without proper knowledge of the intricacies of the local situation. In addition, this appears to have been done without appropriate analysis or planning of the future availability of expert Bank staff resources necessary to give technical advice and to supervise implementation by the Borrower.

100. The recent September Bank Supervision Report rated implementation of the RAPs as "unsatisfactory." It claimed that implementation "of the RAPs for Vindhyachal II and for Rihand II remain stalled because of the pending Inspection Panel limited investigation approved by the Board on September 12, 1997. A specific action program with a set of agreed remedial actions is now under implementation."

101. Also rated as "unsatisfactory" was the implementation of Retrofit Rehabilitation Action Plans (ReAPs). The Aide-Mémoire stemming from the Bank's September supervision mission noted that ReAPs have now been prepared for all NTPC sites except in Vindhyachal, where the RAP covers the PAPs of Vindhyachal I as well.
102. In accordance with Bank policy, the RAPs contained provisions for income-generating schemes to enable PAPs who were dislocated from their traditional agricultural jobs to earn a living. The Panel finds that:

- These schemes have failed.
- Bank staff has acknowledged that it has little expertise and experience with advising on income restoration schemes.
- Failure to address the situation has resulted in some PAPs becoming victims rather than beneficiaries of the Project.

**Evictions**

103. It had been agreed that there will be no further evictions pending the outcome of XIDAS' findings (which are due May 1998). According to reports sent to Bank Management, this agreement was allegedly violated on November 24, 1997, when the President of the Bank received letters claiming that some affected people were being induced to move because bulldozers were sent in to destroy their crops. It is alleged that when the PAPs tried to block this action, their resistance was met with physical force. This incident increases concern that actions initiated have not yet had any remedial effect and highlights the difficulty of Bank supervision from outside Singrauli.

**Evidence of Harm**

104. Nothing in the Desk Study was found to contradict the preliminary findings of the Panel's July Report, restated below:

- Harm has occurred because many PAPs have not been, and may not expect to be, restored to at least their previous standard of living, whereas OD 4.30 (¶ 4) in fact calls for "a package aimed at improving... the economic base for those relocated."
- Most of the displaced population does not appear to be receiving benefits from the Project (for example, electricity) despite this being the express objective of the Bank's resettlement policy. (OD 4.30, ¶ 3)
- The reluctance to move by those who have not yet relocated can be well understood given the experience and dashed expectations of many who have already shifted. The Panel notes that these PAPs are subject to eviction.
- In relation to this it is worth stressing again that both the July Report and this investigation restrict themselves solely to actions or omissions by Bank Management. The single and only question for the Panel in this context is whether the PAPs who have shifted appear to have an equivalent or better standard of living, as required by Bank R&R policy, and whether those who have not yet moved are likely to have the same.
- The Panel's July Report considered that: "To ascertain the facts of the diverse case-specific complaints received by the Panel would require an investigation." Subsequent conflicting reports of alleged attempts at eviction on the ground appear to reinforce the necessity for an assessment by an independent body reporting directly to the Board. Management informed the Panel in the Updated Action Program that an independent assessment of the facts is indeed being undertaken by XIDAS. However, this entity will submit a draft report to both the Bank and NTPC before finalization. This welcome initiative, though, does not appear to have arrested continuing conflicting reports of activities on the ground.
D. Bank Supervision of Involuntary Resettlement: ODs 4.30 and 13.05

Policies and Procedures

105. Paragraph 31 of OD 4.30 states that:

"Resettlement components should be supervised throughout implementation. Supervision that is sporadic or left until late in implementation invariably jeopardizes the success of resettlement. Bank supervision missions should be staffed with the requisite social, economic, and technical expertise...."

106. The first part of this provision refers to activities under OD 13.05 on Project Supervision, particularly paragraphs 44–47 which deal with the preparation and discussion of a supervision plan with the Borrower during project appraisal and advises, among other things, that it should include "aspects of the project that require special Bank attention during supervision, (e.g. environmental concerns, impact on the poor); and the borrower's contribution to supervision." (¶ 44) "Supervision planning and the preparation and updating of the Plan must be based on the factors determining the requirements for each project... The level of institutional strength, especially inter-agency co-ordination" (¶ 46(e)).

107. Paragraph 48 of OD 13.05 on Mission Planning states that "Projects under implementation should be visited at least once a year, up to three or four times a year for those with special problems, or where other factors demand greater supervision effort."

108. In addition, OD 4.30 requires that "arrangements for monitoring implementation of resettlement and evaluating its impact should be developed by the borrower during project preparation and used during supervision. Monitoring provides both a warning system for project managers and a channel for the resettlers to make their needs known and their reactions to resettlement execution... Monitoring and evaluation units should be adequately funded and staffed by specialists in resettlement. In-house monitoring by the implementing agency may need to be supplemented by independent monitors to ensure complete and objective information." (¶ 22)

I. Panel's July Report

109. The Panel found that:

- Recommendations of the March 1995 NDO staff field visit report referred to in the Panel's July Report—which recommended a number of specific actions—did not appear to have been acted on by Bank Management. The Inspector's impression was that the situation on the ground had not changed much from the quite bleak picture of events painted in the 1995 report and in the subsequent Berne Declaration report, the June 1997 Bank field report, and the submission by the Delhi Forum. (All three documents were attached to the Panel's July Report.)
- PAPs in the Vindhyachal area had to resort to the local courts to obtain an order restraining NTPC from evicting villagers before R&R benefits were provided. The Panel found no evidence of any Bank actions to ensure that required RAP measures were implemented prior to shifting people.
- Management recognized problems with the effectiveness of its Project supervision, as reflected in difficulties in having appropriate remedial action taken to overcome Project implementation problems. Had the supervision been effective, some of the harm suffered in the Project area may have been avoided.
110. The Panel considered that intensive on-the-spot Bank supervision would contribute to the prospects of successful implementation of any remedial action plan.

111. The proposed Project Specific Action Program noted that “since 1995, most of the supervision responsibility for R&I under the project was delegated to the Social Development Unit (SDU) in the Resident Mission in Delhi. Notwithstanding these adjustments on the part of the Bank, supervision has not been fully effective in resolving the difficulties in implementation.”

II. Desk Study

**UPDATED ACTION PROGRAM**

112. In response to the Panel’s July Report, the Updated Action Program included the following actions:

113. **Improving the Bank’s Supervision.** Supervision will be done on the basis of key indicators and benchmarks agreed upon. Consideration will also be given to focused external evaluations on key issues;” (¶13 (b))

114. **Establishment of an independent body to act as monitoring panel,** consisting of eminent persons in India, representatives of NGOs, supreme court advocates, retired justices, and individuals with professional backgrounds in R&R. Their role would be to systematically and regularly review and advise on implementation of the R&R program. They will be fully independent, with the right to investigate any elements of the R&R action plans they deem appropriate.” (¶13 (c) )

115. **Strengthening of the Bank’s Delhi Office.** Management states that it has already initiated action to further strengthen the capacity of the SDU and its role in the supervision of the R&R and other environmental components of the project (¶ 14). “As part of the South Asia Regional Renewal Program, the Country Director for India has been located in Delhi, effective July 1, 1997. In addition, the NDO’s SDU will be strengthened by the assignment of an experienced R&R specialist to head of the SDU effective September 15, 1997, and the recruitment of additional Indian specialists. The Head of SDU will have full authority in assessing implementation of the R&R, as well as the other environmental components of the project and advising Management on actions that may be necessary in light of the implementation of this component.” (¶14-15)

**ADDITIONAL INFORMATION**

**NDO STAFF SUPERVISION**

116. In some 1995 reports—which were available to the Panel—of visits to the field by NDO expert staff, the complex problems associated with implementation of the R&R component for these two projects were observed and reported. In one instance, the staff, noting the lack of any progress, suggested that if some specific progress was not forthcoming then “serious consideration should be given to sanctions by the Bank for non-compliance with the conditions of the loan.” (See Appendix 2.)

**NTPC INDEPENDENT MONITORING PANEL**

117. The NTPC “Independent Monitoring Panel” has been established in consultation with local and international NGOs, and its TOR are attached as Appendix 3. Their
first assignment will be a field visit (December 21-23) to investigate an alleged attempt to forcibly induce PAPs to move from one area.

**INSTITUTIONAL CAPACITY OF NTPC TO MONITOR**

118. The September 1997 Aide-Mémoire announced that, in addition to the actions in the Project Specific Action Plan, “it was agreed that NTPC would prepare a proposal for strengthening their capacity to implement R&R, in particular the strengthening of their monitoring capacity.” (19) This proposal was due by November 15th for discussion with the Bank.

**FINDINGS**

119. Supervision of the Resettlement & Rehabilitation component and of the measures to strengthen NTPC’s capacity to monitor have effectively failed.

120. Here again the documents reviewed indicate that the Bank’s failure to observe policies and procedures as required under OD 4.30 and OD 13.05 on Bank supervision is more serious than described in the Panel’s July Report. During the design phase, the Bank misjudged the Borrower’s ability to implement the R&R component and the Bank’s capacity to supervise it. As a result, mostly negative outcomes were inevitable.

121. The files show that on the ground, site “missions” by Bank experts to supervise R&R implementation amounted to a few days each year and were sporadic and insufficient.

- As a result, the Bank relied heavily on NTPC staff—who might obviously have conflicts of interest—for information it required for supervision, when NTPC itself admits that this was a new area in which it had no expertise.
- NTPC hired sociologists, but whether and the extent to which Bank experts provided guidance and supervision cannot be established.
- The Bank’s Regional staff, who were neither sociologists nor environmental experts, were not provided with the support needed to supervise effectively the implementation of this component.
- The establishment of the new “Independent Monitoring Panel,” which will function at minimum for one year from November 1997, may—for as long as it is in existence—be a useful tool to support the Bank’s future supervision efforts.

**E. Environmental Assessment: OD 4.01**

**Policies and Procedures**

122. OD 4.01 on Environmental Assessment states that:

“EAs provide a formal mechanism for interagency coordination on environmental issues and for addressing the concerns of affected groups and local nongovernmental organizations (NGOs).” (¶ 2)

“Project specific EAs should normally cover (a) existing baseline conditions; (b) potential environmental impacts, direct and indirect, including opportunities for environmental enhancement; (c) systematic environmental comparisons of alternative investments, sites, technologies, and designs; (d) preventive, mitigatory, and com-
pensatory measures, generally in the form of an environmental mitigation or management plan; (e) environmental management and training; and (f) environmental monitoring.” (¶ 4)

“Because environmental issues generally involve national, provincial and local government agencies and cover a broad range of responsibilities ... coordination among governmental agencies is crucial. Coordination is best achieved through interagency meetings convened by the proponent agency at key points, i.e. once the decision has been reached to carry out a full EA, and once the draft EA report has been completed. The meetings provide an opportunity to identify the issues, types of analysis to be required, sources of relevant expertise, responsibilities and schedule for the EA, mitigatory measures to be considered, and other recommendations.” (¶ 18)

OD 4.30 (¶ 3(a)) states that: “Involuntary resettlement should be avoided or minimized where feasible, exploring all viable alternative project designs....”

I. Panel's July Report

ASH DISPOSAL

123. The Requesters question the choice of ash disposal methods. They allege that involuntary resettlement in Vindhyachal and Rihand could have been partly avoided through upgrading of existing ash dykes and backfilling of ash in existing mines. The Management Response (pg. 2) stated that backfilling of ash in existing open cast mines in the Singrauli were not found to be feasible by Northern Coalfields Ltd. (NCL). It is not stated if the option was technically or economically non-viable or if the social costs associated with the chosen option were properly accounted for. It should be noted that this decision was recommended by Management without the benefit of full analysis of alternatives in the Environmental Assessment. The decision to adopt the building of more dykes as an acceptable ash disposal technology, however, was approved by Management and this decision did create the need for a large resettlement program with considerable management problems and environmental risks. Under the circumstances it is clear that there was a lack of adequate interagency coordination—that is, between NTPC and NCL—as required by paragraph 18 of OD 4.01.

124. The Panel doubted that all possible or feasible ash disposal technologies were considered seriously until recently. The Management Response reported that upgrading of “existing ash dykes has been considered and new ash dyke management techniques have been introduced.” However, a full analysis of alternatives, as required, does not appear to have been carried out and the issue was not addressed in the Staff Appraisal Report.

ASH DYKES SITE SELECTION

125. As far as site selection for both the thermal power plants and ash dykes are concerned, the Requesters claim that the “inhabitation” and agricultural use of sites was not a criterion. The Management Response states that it is unaware of the criteria used and could not influence site selection for Rihand I and Vindhyachal I since these decisions were made in the early 1980s long before the Bank was involved. Expansion of these existing power stations—for Phase II, which is supported by Bank financing—
required selection of additional sites for the construction of further ash dykes. Noting that acquisition of additional land could not be entirely avoided, Management states it was satisfied with the site selection criteria. According to the Response, the decision to change the location of the Rihand II ash dyke to the Mithini site was an attempt to further minimize resettlement and the impact on agricultural land. (pg. 10) The Panel was unable to comment on this aspect.

**Health**

126. The ash dykes can create health hazards to the population because of airborne or aqueous emissions of hazardous substances, including trace metals. To assess these risks, it is necessary to conduct studies both of trace metal contaminants as well as of the health impacts on the population at risk. However, there is no health database for the population that could be potentially at risk, which made it impossible to estimate whether the risks are high or damage has taken place.

**II. Desk Study**

**Updated Action Program**

**Ash Disposal**

127. In response to the Panel's July Report on the need to reduce or even eliminate the necessity for land acquisition through backfilling and improved ash disposal, the Updated Action Program states: "Backfilling of ash in existing open cast mines in the Singrauli area was not found feasible by Northern Coalfields Ltd. A study sponsored by USAID (1996) on proposed development and demonstration projects to enhance large volume uses of coal combustion by-products as a structural fill in India, concluded that most of the mines in this region are relatively young with limited reclamation activities, and swell factor for overburden requires space beyond what is currently available. Management, however, plans to continue to pursue the backfilling option with Northern Coalfields Limited and Coal India Limited. Therefore, a study to identify potential mines for backfilling and develop environmentally acceptable and sustainable options for ash disposal will be carried out in the context of the ongoing Bank-assisted Coal Sector Environmental and Social Mitigation Project." (¶ 20)

**Ash Dykes: Health Hazard**

128. In response to the Panel's concerns on health hazards caused by ash dykes, the Updated Action Program states that:

"Contamination of soil and crops from frequent leakages of ash slurry and protests from local farmers were reported in Vindhyachal. Site visits confirm that leakages are either due to mechanical failure of couplings or deliberate breakage of couplings by farmers for irrigation purposes. NTPC is addressing this issue through a series of measures which include: (i) routine inspection of pipelines, replacement of couplings with welded joints where necessary, and replacement of pipes at regular intervals; (ii) a recently started four year project at Vindhyachal costing about $10 million to reroute its pipes. The new route is shorter by 1.5 km, is mostly within NTPC premises, and is away from
the agricultural fields; (iii) installation of ash slurry recycling plants for new ash ponds. For Vindhyachal II and Rihand II they were planned to be built as part of the EAP, but implementation has been delayed because of the R&R problems; and (iv) proposed establishment of regular communication with the farmers to disseminate information on long term adverse impacts of using ash slurry for irrigation and seek their participation in timely detection and repair of leaks.” (¶19)

**INTERAGENCY COORDINATION**

129. As noted in the Panel’s July Report, there was a clear lack of interagency coordination, which is required by OD 4.01. The Updated Action Program addresses this concern in the context of its section on “Actions to Address Broader Social and Environmental Problems of the Singrauli Region.” Interagency coordination appears finally to have begun at the initiative of the Cabinet Secretary. The Updated Action Program reports that a committee to enable integrated management of development of the entire Singrauli region has already met. The committee consists of high-level representatives of the States of Uttar Pradesh and Madhya Pradesh governments; Ministries of Coal, Power, and Environment and Forest; NTPC; Coal India; and the Bank. The two state governments would be responsible for drawing up specific proposals, which were expected to draw on the Singrauli Development and Environmental Strategy. The Bank Management stated that it has agreed to consider the GOI request for IDA financing of such a program. (¶ 25–29)

**ADDITIONAL INFORMATION**

**SEPTEMBER BANK SUPERVISION REPORT**

130. Supervision reports throughout the years noted lack of progress in many areas of implementation of the EAP for the Singrauli area. They also noted that shortcomings in NTPC's environmental performance were due to institutional difficulties. In relation to the implementation of the EAP, the Bank September 1997 Supervision Report (Form 590) rated it as only partially satisfactory: a “number of environmental projects are being implemented as part of the Environmental Action plan but there are some substantial delays on the implementation of some of the agreed environmental projects. A program to complete the balance of activities of the EAP was agreed in September 1997.”

131. More specifically, the September report also noted that in “spite of delays in the implementation of the EAP, the mission sees a positive trend in NTPC. ...At Singrauli and Vindhyachal the current ash disposal areas are inadequate due to delays amounting to years in construction of new areas; discharge of ash pond effluent continues to violate MOEF standards; at Rihand ash is being dumped in 'low lying areas,' without an evaluation of the long term environmental consequences or requirements for clearances for such activity.” (Aide-Mémoire, ¶ 13)

132. “Mercury concentration in coal was analyzed as part of the EAP and again in each of the hydrogeologic studies of the ashponds. The results obtained in those reports differ markedly from previous data reported by NTPC Corporate, and results of analysis conducted at some of the NTPC power stations, and examined by previous missions. The
EAP mercury analysis in coal reported levels of 0.11 ppm and 0.14 ppm in Singrauli and Vindhyachal respectively; while the hydrogeologic studies report levels of 1.8 to 6.5 ppm. NTPC should conduct a quality control-quality assurance investigation and verify the accuracy of the mercury concentration measured in coal supplies.” (ibid, ¶ 13)

INTERAGENCY COORDINATION
133. The September supervision mission “requested NTPC to develop a dialogue at the top management levels between Coal India and NTPC concerning the issue of ash backfill]. The Bank has requested NTPC to provide meeting schedules, contacts, agendas, and conclusions. A report on the first meeting will be forwarded to the Bank in January, 1998.”

FINDINGS
134. The Bank’s failure to observe its policies and procedures concerning Environmental Assessment (OD 4.01) in the preparation phase appears to be even more grave than observed in the Panel’s July Report.
- The investigation confirms that, contrary to Bank policy, serious alternatives for fly ash disposal were not considered during the design phase. Coal India’s rejection of disposal by backfilling or consideration of other ash disposal/utilization was accepted apparently without further discussion of alternative measures.
- Information available to the Panel indicates that one option, that is, backfilling of ashes, is now being considered by Coal India. If adopted, this option would considerably reduce future involuntary resettlement.
- As noted in the Panel’s July Report, Bank support for close cooperation between NTPC and Coal India is indispensable. Such cooperation could facilitate measures which might lead to avoiding further resettlement, to improving schemes for job creation and sustainable income, and to reducing further health risks. Under its own policies, the Bank is required to foster and support this cooperation.
- The Panel notes that although measurements of mercury levels in the coal have been reported, there is no information regarding other trace metals. In addition, the relevant points to analyze trace metal levels are the ash, the slurry, and the groundwaters because these are the likely points of contact with the population and surrounding environment. There is no information available to the Panel regarding the fate and the transport of trace metals other than mercury.

F. Supervision of Environmental Aspects:
ODs 4.01 and 13.05

Policies and Procedures
135. OD 4.01, Annex D, on “EA Procedures: Internal” states that “EA recommendations provide the basis for supervising the environmental aspects of the project during implementation. Compliance with environmental measures, and the findings of monitoring programs are part of borrower reporting requirements and project supervision. When major issues arise, special supervision missions with adequate environmental expertise are programmed and budgeted in advance, where possible.” (¶ 13)
OD 13.05 on Compliance with Legal Covenants: “One of the major tasks of supervision is to monitor compliance with the legal agreements and, where conditions are not being fulfilled, to determine the causes and the best means for remedying the situation. Since supervision staff follow a project closely, they are in a position to recognize problem areas before they result in default. In case of default, the Bank seeks to exhaust all methods of persuasion before exercising contractual remedies.” (¶ 30)

I. Panel's July Report

136. To address the Requesters' specific concerns regarding the current Project, Management states in its Response that with respect to “supervision strategy” in the next 12 months the main Bank and NTPC activities are to focus on:

- implementation of the EAP, with improvements in implementation of some of the environmental projects which have fallen behind schedule; (¶ (b))
- implementation of the ongoing institutional strengthening, training, and resettlement and rehabilitation programs in accordance with agreed schedules. (¶ (c))

II. Desk Study

UPDATED ACTION PROGRAM

137. In response to the Panel's July Report, the Management proposed that in “order to reinforce field-based supervision of the environmental aspects of the project, a team of environmental specialists was assembled in the NDO of the Bank. After initial discussions with NTPC commencing on August 6, the Team was deployed to the field to prepare a comprehensive Update of the Environmental Action Plan (EAP).” (¶ 17). The Vindhyachal, Singrauli, and Rihand NTPC power stations were visited first (August 6-22) and it was noted that based on this (and later visits to other power stations) the “Bank team will seek agreement with NTPC on a specific set of time bound actions arising from recommendations of the field reports.”

138. Full authority for assessing the implementation of environmental components and advising Bank management on actions that may be necessary in light of the implementation of this component will now shift to the Head of the Social Development Unit in the NDO. (¶ 15)

ADDITIONAL INFORMATION

139. A review of supervision reports for this component confirms the approach reported in the Management Response about the treatment of noncompliance with the agreed covenants under the loan on timely implementation of the EAP. Bank staff pointed out delays in implementation and recommended remedial actions. In the Management Response it was noted that the Bank had chosen to exhaust all possible methods of persuasion before resorting to suspension of disbursements. Several warnings that the Bank might exercise its available remedies were issued through a number of Bank Supervision Aide-Mémoire.

140. The Aide-Mémoire of the September supervision mission repeats the comments of all earlier supervision missions, that is, that there are shortcomings in NTPC's environmental performance due to organizational difficulties.

141. The same Aide-Mémoire lists as key actions to be implemented by the Bank:
"Monitor agreed plan for the balance of activities of the EAP on a monthly basis with NTPC's corporate staff in Delhi.

- When necessary carry out field visits to selected power stations.
- Carry out a full supervision of the status of implementation of the EAP in February/March to determine extension of loan closing date beyond March 31, 1998." (¶ 15)

**FINDINGS**

- Bank staff supervision missions appear to have been conducted in compliance with its policies and procedures and repeatedly pointed out the shortcomings in implementation of environmental projects.
- Management recognized noncompliance with loan covenants and decided not to exercise the formal remedy of suspending disbursements but to work with the Borrower toward a resolution and remedy. As the Management Response suggested, the approach perhaps has not been effective.

### G. Indigenous Peoples: OD 4.20

OD 4.20 states that "the center of this directive is to ensure that indigenous peoples do not suffer adverse effects during the development process, particularly from Bank-financed projects and that they receive culturally compatible social and economic benefits." (¶ 6)

A description of the Bank's role includes the following: "Issues related to indigenous people are commonly identified through environmental assessment or social impact assessment processes and appropriate measures should be taken under environmental mitigation actions." (¶ 10)

#### I. Panel's July Report

142. The Request raised the question of whether the Bank had complied with its policy (OD 4.20) on indigenous peoples, alleging that no special consideration was given to tribal and ethnic groups in the Singrauli area. The Management Response considers that it has complied with the policy "because the socio-economic surveys carried out before appraisal found that no indigenous people were affected by the new investments in the ash dykes of Rihand II and Vindhyachal II." (pg. 11) The Response further points out that, since some NGOs questioned this result at the time, further follow up socioeconomic surveys were carried out. According to Management, "some of the confusion arose, because about 10% of the PAPs of Vindhyachal I, which is not a Bank financed project, are classified as indigenous people," that is, tribals. (Response, footnote 25) The Inspector raised the question in the field and in discussions with GOI representatives. The responses received confirmed the information provided in the Management Response.

Since the Inspector received no contradictory information during his field visit, the Panel did not address this allegation further.

#### II. Desk Study

**FINDINGS**

143. OD 4.20 demands that special attention and procedures have to be applied for indigenous peoples. Given the considerable area of the Project and the number of ethnic
groups encompassed in that area, a number of staff considered it likely that the expansion of a power plant of this magnitude must impact the indigenous people.

144. The Management Response merely denies that there were any indigenous people identified in the specific area that experienced involuntary resettlement due to the new investments in the ash dykes for Stage II of Rihand and Vindhyachal.

145. Further investigation of files and interviews of those who were concerned with the appraisal and processing of the loan revealed no further information. The Management Response claimed “full” compliance with this policy; so no corrective actions were then, or have subsequently been, proposed.

APPENDIX 1

Processing of Loan 3632: R&R Component

146. As noted in paragraphs 92 and 93 of the Investigation report, project files indicate that ASTHR and legal staff were concerned about the rapid processing and approval of the Project, which did not allow sufficient time for RAP preparation in accordance with OD 4.30. The following memoranda record staff experts’ concerns at the time. A note from a Senior Anthropologist in ASTHR to his Manager and Regional Managers tells the story. On March 1, 1993, he responded to a request from the Region for comments:

“...you asked for my comments on the resettlement action plans (RAP) as outlined in the Environmental Impact Assessments and Resettlement Socio Economic Studies for Rihand and Vindhyachal Thermal Power Projects in the Singrauli area and for advice on what to do next, as there may not be any further site visits before project approval. You also mentioned that it may be two to three years before any people are evicted and will need to be resettled. I have three sets of concerns on the RAP. These are:

**NTPC Policy.** This is fine in the earlier parts which describe categories of affected people (PAPs) and their eligibility. However, those who are considered to be eligible are not entitled to receive anything more than the oustees of the earlier NTPC Bank-financed projects in the locality of these two power stations, e.g., Singrauli Power and Dudhichua Coal. Apart from vague references to the possibility of revenue land, or land further acquired being made available, and the possibility of shop-keeping there is no definitive description of how oustees will replace their present income earning nor what provisions will be made by NTPC or SADA to achieve this end. Mention of poultry keeping and cattle raising is frequently made by project entities disposessing people from their productive assets in India and cannot be taken as a serious R&R solution. The NTPC Resettlement Policy in itself provides no assurance that the Bank’s own guidelines would be followed. (I believe that both ...(ASTHR) and ...(LEGOP) have already expressed their concerns over the NTPC R&R policy.)

**Resettlement Plan.** Full RAPs set out in a timetable and listing the actions to be taken by various agencies to both relocate people and restore their incomes could have made up for a weak policy. But, in the case of
Rihand Power Station, there is no commitment to provide replacement (farm) land or jobs requested by affected people, and only a promise of a plan for Vindhyachal in June 1993.

Coal Mines supplying the two power plants also cause resettlement, i.e., Amlohri, financed by ODA for Rihand and Nigahi for Vindhyachal, but there is no mention of any policies or plans for resettlement by Northern Coalfields Ltd. (NCL).

And lastly the Senior Anthropologist expressed his general concern for the approach being taken:

"I appreciate your concern to proceed with processing this project, but bearing in mind the current interest in, and concern for, resettlement both inside and outside the Bank, and bearing in mind there is nothing in the documents you gave me which give assurance that R&R will be any better than in the past I can only advise that NTPC be requested to come up with a more adequate policy and a full RAP. I suggest the NTPC R&R policy should state clearly what the R&R provisions will be, not what they could or might be for each category of PAP, and that these provisions should be of substance and include such items as replacement land acquired through Land Purchase committees. The RAPs should set out exactly what will be done by whom and when. The first project the Bank financed in the Singrauli area caused so much aggravation and pain, that I do not think we should fall into the same trap again. I also think you would be advised to request to see the RAPs and/or a progress report from the two coal mines supplying coal. [emphasis added] I suggest that NTPC be requested to prepare full Resettlement Action Plans in respect of the two thermal power plants which incorporate the concerns expressed above and bring them up to Bank standard before the project is appraised."

147. On March 16, 1993, the Senior Anthropologist reported to his Manager and to the Region on his discussions in Washington with senior NTPC officials:

"As you are aware I have been in discussions with ... of NTPC over the past few days. Our discussions have covered the general NTPC R&R policy and the specific R&R plans (RAPs) for Rihand and Vindhyachal SSTPs, the first to be funded under the above project. I have been advising and reviewing documents concerning R&R under the project for the past year and feel uneasy that we may be asked to sign off on RAPs which have actually been drafted while the NTPC team is here in DC. Whatever ... produce during their visit can only be treated as possibilities until the PAPs are consulted about the options that will be offered to them; until the State Governments of MP and UP have agreed to the proposals; the offer of "land for land" to those that want it is made; the administrative, organizational and financial arrangements are made clear; and, a timetable for implementation is developed and presented.

Last April I drew up an outline of what would need to be included in an RAP prepared in respect of the thermal power plants to be financed under the project. I attach a further copy of my outline which was sent to NTPC in May 1992, entitled ANNEX 1 INDIA - NTPC TIME SLICE POWER PROJECT. I do not think I wish to change anything in the outline which therefore still stands.
I also do not see much point in being asked to agree to piecemeal efforts of the NTPC staff visiting the Bank at present as I would wish to see a complete plan as agreed to by all parties. We cannot properly appraise a list of intentions which is not agreed to and enforced by those who will benefit and those who will implement it.

On the **general policy of NTPC**, I earlier gave my views, the lawyers have given their views, and ... has given his views, and still the policy does not come up to Bank standards. The policy is weak on what will be done to ensure that PAPs restore or improve income levels, and is particularly weak on the issue of providing “land for land” to those that want it. In discussions I have mentioned to ... the need to purchase land for PAPs on a willing-seller/willing-buyer basis, possibly by means of a land purchase committee, but they are reluctant to pursue this matter as general NTPC policy, even if it is agreed to for Bank-financed projects. Yesterday you mentioned that you would like to see the NTPC policy adopt the best features of the Narmada SSP policy, i.e., provision of land, and I fully agree, although I suggest that in addition some other income earning activities such as are being proposed by NTPC are further developed. I have also already suggested that it would be advisable for NTPC to propose a policy compatible with that of the Bank before project approval and I still hold that view. I certainly feel very uneasy pursuing the current incremental development of R&R plans and policies from two standpoints, a) NTPC have had a year to prepare a proper plan, and b) I want to see the commitment in writing of what they will do for the PAPs as part of a package and not in the form of notes.”

148. Finally on March 30, in response to an invitation to attend the Regional Loan Committee Meeting on the proposed project and to provide comments and suggestions in advance, the Senior Anthropologist wrote as follows to the Senior Operations Advisor (...):

"1. I acknowledge receipt of your invitation to a meeting to discuss the above on Thursday, April 1, 1993 and will be in attendance. As requested in your EM, I have some comments and suggestions to make.

2. Your EM did not highlight involuntary resettlement as an issue connected with this project, presumably because the matter was not drawn to your attention. There are two resettlement issues, the question of NTPC's resettlement policy which would apply to resettlement under all power plants, and, the specific resettlement plans for people displaced under the first two power plants to receive Bank assistance under the new loan. For the past 12 months ... and myself have been reviewing policies and plans proposed by NTPC and have gone to considerable lengths to advise NTPC through the task manager on what would be acceptable and in line with the Bank's OD 4.30. A Bank lawyer has reviewed the NTPC resettlement policy and found it to be needing considerable improvement to become compatible with the Bank's OD. At the time of the return of NTPC employees to New Delhi last week, neither the policy nor the resettlement action plans were considered to be acceptable on technical grounds.

3. The underlying issue is that a resettlement plan (or policy) which does not genuinely offer the “land for land” option will, in all likelihood, result in
resettlement of affected families in a similar manner to those resettled under the Bank-financed Singrauli Project and which drew heavy criticism and complaint from both Project Affected Persons (PAPs) and NGOs. The other implication is that whatever plan the Bank accepts for the first two power plants (Rihand and Vindhyachal) will be used as the standard for the other nine plants to be financed under the loan.

4. I am attaching some of the memoranda and electronic messages sent over the past year in connection with resettlement under this project which illustrate the gap between NTPC’s position and conformity with the Bank’s OD 4.30. I suggest that the meeting decide on what further action [should] be requested of NTPC in respect of resettlement, before proceeding further with project processing."

APPENDIX 2

Implementation of RAPs: Problems Identified by Staff in 1995

149. As noted in paragraph 94 of this Report, in April 1995 the staff of NDO visited the Singrauli area on a fact-finding mission and warned that implementation of the R&R component was headed for the Inspection Panel. Details from that Back-to-Office Memorandum are as follows:

“Purpose of visit: To gain more detailed and immediate information on the progress of R&R activities and on the status of the PAPs.

Places visited: Singrauli resettlement colony, Chalkadand; Vindhyachal resettlement colony, Navjivan Vihar; Rihand resettlement colonies, Punarvas 1 & 2; Sirosoti affected village, Rihand; NCL resettlement colony, Ambedkarnagar; Shapur village, Vindhyachal Stage 1 ash pond; Mithini village, Rihand Stage 2 ash pond.

1. There are three sets of issues in R&R that need to be addressed simultaneously, with different tools and at different levels. The first set of issues is the most immediate and threatening to the progress of R&R in the three power plants in the Singrauli belt. These three sets of issues are:

(a) the immediate and urgent need to deal with the situation of some of those affected by NTPC’s work in Shapur (Stage I ash pond) and “dharkan basti” (harijan settlement) in Sector 4 of Navjivan Vihar in Vindhyachal STPP and Mithini in Rihand STPP. This needs to be combined with the equally urgent need to definitively produce ReAPs for all three plants and revised RAPs for phase 2 in Vindhyachal and Rihand;

(b) the need to restructure NTPC’s response to dealing with R&R issues, and the need to develop a set of benchmarks which can serve to indicate whether NTPC is making progress in the achievement of the ReAPs and RAPs to which it is committed; and

(c) the longer term need to link into wider ongoing development initiatives in the region, as well as creating opportunities for building sustainable strategies for livelihood maintenance.
2. This memorandum concentrates on the first two sets of issues. It is purposefully brief, to provide a set of points for discussion and action. The third set of issues needs to be dealt with in parallel with the other sets.

3. The immediate problems which need resolution are:
   (a) **Vindhyaachal - Ash Ponds, Stage 1.** The most urgent problem is to be found in Shapur village, where a number of villagers face the imminent submersion of their plots. There is a compelling need to find a solution before the onset of this year's monsoon (i.e., before the end of June this year). The situation by the Stage 1 ash pond is extremely volatile—people are angry and tired of what they see as NTPC's endless prevarication. The threat of a breakdown in law and order is very real. The large number of contractors' vehicles already in place, but on hold, exacerbates the tension, as villagers maintain that monies paid to keep these idle could well be used to solve their problems. The potential for this case to be used as a trigger for inspection is great—it could easily be argued that the Bank has failed to ensure that the conditions of the R&R policy have been complied with. NTPC has not been able to find a solution and the living conditions of PAPs have quite obviously deteriorated. Any solution needs to be combined with a solution for the four villages affected by Stage 2. Compensation has been paid some years ago to both sets of villagers. People are demanding land-for-land, or land-for-jobs options before they will move. It is suggested that flexible means be developed to deal with the issue of previous compensation (soft loans over an extended period of time?), and that NTPC immediately and vigorously pursue the land-for-land option.
   (b) Over 100 people, PAPs as well as NGOs, attended a meeting organized by NTPC for the Bank team, to further discuss problems in Vindhyaachal area. One demand by a number of PAPs present was for clear and definitive statistics about number of affected persons, numbers resettled and rehabilitated and amounts of compensation to be given. The pre-eminent demand, of course, was for naukari (jobs), to replace the security being lost through the acquisition of their land.
   (c) **Rihand - Ash Ponds, Phase 2.** Work on Phase 2 has continued. According to the concerned engineer, the threat of flooding due to construction work has been eliminated for this current season. The villagers are not convinced. The production of a participatory action plan is imminent. ... from Banwasi Seva Ashram has been invited to work with the PAPs to produce such a plan. This is to be strongly encouraged and is likely to be the only way in which a plan which is acceptable to PAPs can be produced.
   (d) **Vindhyaachal - Navjivan Vihar, Sector 4.** The pressing need to ensure sustainable livelihoods to the occupants of "Dharkar Basti" in Sector 4 is obvious. Their infrastructural needs are in the process of being dealt with. The PAPs' demands for naukari (jobs) cannot be met, but there is, nevertheless, a significant need to find alternative employment opportunities. This is not easy, given their educational levels and severely restricted income generating opportunities. A number of suggestions have been made (direct contracting of laborers by the plant thereby avoiding exploitative middlemen, NTPC providing materials for the women to pursue their basket work). It is suggested that ..., and his NGO (Srijan Lokhit Samiti) be asked to develop a program of community
development work, together with interested others in Navjivan Vihar, and that
the NGO be given resources to intervene with immediate impact, as a prelude
to longer term sustained commitment.

Organizational Problems That Need to be Addressed

4. Restructuring NTPC's R&R initiative. The face that NTPC presents to the vil-
lagers is, with a few significant exceptions, not a very favorable one. This is derived from
a number of historical circumstances. All need to be addressed with some urgency.
(a) There is firstly the corporate culture, which is dominated, quite naturally,
by the views and opinions of (male) engineers, who address social problems in
the same ways they would address road construction.
(b) Like many organizations in India NTPC is hierarchical and status-oriented.
While this may promote efficiency and effectiveness in dealing with physical
infrastructural investments, it is not the most efficient or effective [way of] dealing
with the people affected by these investments—the most trivial decisions need to
be made by the General Manager rather than by those involved in R&R work.
(c) The traditional management culture has dealt with PAPs in an ad hoc and
individualistic manner. This has varied from General Manager to General
Manager and from person to person. Patronage networks, together with
promises which have ensured short-term allegiances, have predominated. The
accumulated costs of pursuing such individual initiatives are now beginning to
emerge as PAPs call into account the past promises made to obtain access to
land, as old promises of jobs and other benefits are resurrected.
(d) Policies pursued have been interpreted in different ways by different man-
gers. This has meant that overarching solutions to the problems of PAPs have
not been forthcoming, because they have not been prioritized systematically.
(e) R&R is perceived as primarily a public relations activity. The main aim
appears to be to keep the demands of PAPs to a minimum, rather than seeing
the RAPs and ReAPs as development opportunities, and to resist external
intervention because it diverts attention from the main business.
5. These circumstances are not unique to NTPC. They are however problems that
need to be vigorously addressed, and action on all five issues needs to be taken.
Recommendations are thus to:
(a) significantly alter the skill mix of people dealing with R&R issues and dele-
gate real authority for decisions to those involved with R&R issues at corpo-
rate and at plant levels. (An important aspect of this would be the identifica-
tion of who is actually responsible for R&R and giving him the necessary
administrative and financial authority.);
(b) develop a more participatory management culture within the corporation;
(c) pursue, with the PAPs and interested NGOs, a much more participatory approach
to the development of Action Plans to which all major stakeholders can agree;
(d) avoid the pursuit of individually prescribed solutions which have not
involved collective decision-making processes; and
(e) ensure that R&R is distanced from PR in the thinking and in the designs of
management, preferably by distancing the R&R activities from the purview of
the general management of the plant.
Conclusion

6. The impression of deliberate obfuscation combined with a lack of importance attached to R&RR issues, is difficult to avoid. It is evident in the "imminent" nature of much that remains to be done, the inability to convincingly delineate the boundaries of the problems, and the failure to produce revisions of ReAPs and RAPs. Significant progress in the production of identifiable and measurable indicators of achievement needs to be forthcoming within a reasonable time period (say three months). And, this would also include NTPC's response with specific action plan on issues raised by ... in his BTOR and ... letter of April 17, 1995. If such progress is not forthcoming, then serious consideration should be given to sanctions by the Bank for non-compliance with the conditions of the loan."

APPENDIX 3

NTPC Independent Monitoring Panel

150. The Aide-Mémoire of the September Bank supervision mission states that: "The Project-Specific Action Plan also included the establishment of an Independent Monitoring Panel (IMP) by the end of September. This panel was to consist of eminent persons in India, representatives of NGOs, supreme court advocates, retired justices and individuals with professional backgrounds in R&RR. Their role would be to systematically and regularly review and advise on implementation of the R&R program. They would be fully independent, with the right to investigate any elements of the R&R action plans they deem appropriate."

151. Annex 2 of the Aide-Mémoire of the September Bank supervision mission provides important details of this innovative monitoring approach:

"The objective of the independent monitoring panel is to systematically and regularly review and advise on implementation of the R&R program for the NTPC Power Generation Project funded by the World Bank.

NTPC is currently implementing these RAPs and ReAPs—RAPs for Vindhyachal (V-2 ash dyke) and Rihand (Mithini ash dyke) and ReAPs for Vindhyachal-I, Rihand-I and Singrauli. The RAPs cover what NTPC refers to as "Stage 2" PAPs, who are eligible for the benefits described in the new policy, and the ReAPs cover what NTPC refers to as "Stage 1" PAFs who are not eligible for the benefits covered by the provisions of the new policy, but who do have some entitlements under the provisions of the R&R policy. The unit of entitlement for Stage 1 persons affected by the project is the family (hence PAF) whereas the unit of entitlement for persons affected by Stage 2 persons [is] the adult individual (hence PAP).

PROPOSED SCOPE OF WORK: The Panel's scope of work would include:

• decide on implementation mechanisms in order to achieve the objectives of the Panel
• provide systematically and regularly review and advice on implementation of the 1993 R&R policy and implementation of agreed RAPs and ReAPs
• review and advise on monitoring and supervision of the project
- assess the functioning of grievance mechanisms and public consultation procedures for the project
- facilitate resolution of conflicts and divergent views between NTPC and project-affected population and other stakeholders
- advise NTPC and the Bank on any other areas which the Panel considers appropriate in the context of the project's resettlement program within the agreed policy framework.

**Mechanisms.** The Panel will be fully independent, with the right to investigate any element of the R&R action plans they deem appropriate. They will have full access to any documentation relevant to the R&R programme. They will be expected to visit the project sites and interact with stakeholders as they deem necessary.

**Time Frame.** The Panel is expected to function from November 1997 for a minimum period of one year. The Panel will meet at least quarterly, unless a specific situation requires, more frequent review. At the end of that period, an assessment will be made of the Panel's role and functions, and a decision will be taken on whether to extend and/or change the Panel's mandate. Any revisions will be mutually agreed by the NTPC, MOP, DEA, and the Bank.

**Membership.** The Panel will consist of three Indian nationals:

1. a Supreme Court/High Court advocate or retired justice, to function as Chair of the Panel and maintain a Secretariat;
2. a representative of a NGO with a national reputation of competence and integrity, [who] has not been working actively in the Singrauli area; and
3. a development expert with background in R&R issues in India.

**Consultation Process on Panel Establishment:** Selected stakeholders including a selected list of national and international NGOs will be invited to comment on the scope of work of the Panel, and to propose members. Organizations involved in the consultation process will not themselves be considered eligible for Panel membership. The final decision on Panel work program and membership will be taken by NTPC, MOP, DEA, and the World Bank. NGOs participated in the consultation process related to NGOs proposed for review and consultation in establishing the Panel.

**NOTES**

1. In addition, on June 12, the Panel received a submission in support of the Request from some PAPs. The submission complained that the "project authorities are now anxious to move us out with use of force without any guarantee of an alternative livelihood." These Requesters "urge our situation to be spot checked by the Panel." "Supportive Claim - Request Registration No. RQ/97/2" June 3, 1997, from eight PAPs from the villages of Amratali and Judi.

2. Disclosure. The Request, Management Response, and Panel's "Report and Recommendation" to the Board can be found in a separate volume which has been available to the public since the Board's decision on September 11, 1997. Also made publicly available was the Management's September 2, 1997, Updated Action Program.
3. As noted in the Panel's "Report and Recommendation" of July 1997, broad questions related to OD 10.04 on Economic Evaluation of Investment Operations cannot be addressed realistically at this late date and were not to be discussed, except as they related to the choice of ash disposal options. The very complex question of an alternative energy source is hardly relevant in practical terms considering that decisions have already been made and the current infrastructure exists which cannot be basically removed but may be able to be upgraded to existing environmental standards. Any alternatives for the future are being and must be thoroughly explored and are outside the scope of this investigation.

4. Management's remedial actions were laid out in the Action Program attached as Annex A to the Response. There were two parts to the Action Program. One was a "broader action program" for the future; the other a Project Specific Action Program.


6. In the case of this Project, the situation is complex. First, there are two RAPs prepared in 1993 which apply to those being involuntarily resettled to allow for construction of ash dykes to meet the expanded capacity of the Rihand and Vindhyachal thermal power plants—known as Phase I. Second, as noted earlier in this report, the Bank loan is supporting a time-slice of NTPC's power expansion plans. The initial investment in the Rihand and Vindhyachal power plants, as well as the Singrauli one, were made without Bank financing. Therefore there were no RAPs. Under this Project it was agreed to improve the situation of the many people displaced during this first phase (Phase I). Thus the project required the preparation and implementation of three Remedial Action Plans ("ReAPs").

7. The Inspector learned from NTPC and the District Collector that no equivalent public land suitable for agriculture was available in 1993 in Madhya Pradesh for resettlement of Vindhyachal II oustees.

8. Of those displaced prior to Bank involvement through acquisition of land for construction of ash dykes for Phase I of Rihand and Vindhyachal as well as the Singrauli thermal plant, by 1993 some had relocated to other areas but most had been moved to resettlement colonies (Chilkadand for Singrauli, Punarwas I for Rihand, and Najveevan Vihar I for Vindhyachal); and some continued to farm the acquired land (and employ laborers) as permitted by NTPC until such time as the land was actually needed.

9. PAPs gave to the Inspector some 30 letters with over 100 signatures.

10. In addition, India has a National Human Rights Commission to which one group of PAPs—represented by Ms. Kohli—submitted a complaint over their treatment by local authorities. The Commission found those particular complaints lacking in merit.

11. Source: Terms of Reference for XIDAS.

12. These NGOs, listed in the September Aide-Mémoire, Annex 2, are MYRADA, Action Aid, INTACH, WWF, SPARC, Development Alternatives, Berne Declaration, CIEL, Institute for Policy Studies, PRIA, CSE, PIRG, Banwasi Sewa Ashram, and the Ford Foundation.
The Inspection Panel’s Experience
Thus far, the focus of the preceding chapters has been almost exclusively on the Panel's recommendations to the Board and the related Board decisions for each case in which the Panel has recommended an investigation, and not on the role of the Panel over the past four years, and its impact. This chapter will review these cases, and the related Board decisions to establish a clear picture of the Inspection Panel's role.

As of December 1997, 10 formal Requests for Inspection had been presented to the Panel—Nepal: Arun III Hydroelectric Project; Ethiopia: Compensation for Expropriation of Foreign Assets; Tanzania: Emergency Power IV Project; Brazil: Rondônia Natural Resources Management Project; Chile: Panguet/Ralco Complex of Hydroelectric Dams; Bangladesh: Jamuna Bridge Project; Argentina and Paraguay: Yacyretá Hydroelectric Project; Bangladesh: Jute Sector Adjustment Credit Project; Brazil: Itaparica Resettlement and Irrigation Project; and India: NTPC Power Generation Project in Singrauli. As can be seen from the foregoing Panel reports in the previous chapter, only eight of the Requests presented were registered and processed by the Panel.

Of the eight Requests registered, the Panel recommended an investigation for only five: Arun III Hydroelectric Project, Rondônia Natural Resources Management Project, Yacyretá Hydroelectric Project, Itaparica Resettlement Project, and NTPC Power Generation Project. In each of these projects, the Panel found that the potentially affected local populations could be suffering harm caused by lack of compliance by the Bank with its own policies and procedures. In a unique example of the value of the inspection mechanism, the Panel, even though it did not recommend an investigation, found that the char (island) dwellers had been left out of the original resettlement programs of the Jamuna River Bridge Project. However, Management and the borrower agreed on a plan to compensate the char dwellers. As a result, the Board instructed Management to report back on the execution of agreed measures to compensate the char dwellers and invited the Panel to provide comments at that point.

For the five cases in which the Panel recommended an investigation, the Board accepted only one—the proposed Arun III hydroelectric project. In each of the other cases, the Board developed "tailor-made" approaches for each case, including a limited investigation restricted to a desk study from Washington.

In an attempt to demonstrate how each case followed a process peculiar to itself, outlined below is the process as envisioned by the Resolution and the Panel's Operating Procedures, which the reader will find is not fully consistent with the actual developments that occurred in each case.
The Request Process

According to the Resolution and the Panel's Operating Procedures, after the Panel receives a Request:

- The Panel sends the Request to Management. Within 21 days Management provides a response to the allegations, which is then submitted to the Panel. In its response, Management is required to provide evidence that it has complied with, or intends to comply with, the Bank's relevant policies and procedures.
- Upon receipt of Management's response, the Panel makes a preliminary review of the Request and the merits of Management's response to determine whether the request meets the eligibility criteria as set out in the Resolution. On the basis of the review, the Panel within 21 days makes a recommendation to the Board as to whether the matter should be investigated.
- The recommendation by the Panel is then submitted by the Executive Secretary of the Panel to the Executive Directors for decision.
- The Board then meets to decide on whether to accept or reject the recommendation.
- After the Board has considered the Panel's preliminary review and recommendation, it is made public along with the actual Request for Inspection.

Clarification of Certain Aspects of the Resolution

In October 1996, the Executive Directors, as called for in the Resolution that established the Panel, completed a review of the inspection process and as a result adopted a "clarification of certain aspects of the Resolution." The clarification stated that:

"...in cases where the Inspection Panel believes that it would be appropriate to undertake a "preliminary assessment" of the damages alleged by the requester (in particular when such preliminary assessment could lead to a resolution of the matter without the need for a full investigation), the Panel may undertake the preliminary assessment and indicate to the Board the date on which it would present its findings and recommendations as to the need, if any, for a full investigation. If such a date is expected by the Panel to exceed eight weeks from the date of receipt of Management's comments, the Panel should seek Board approval for the extension, possibly on a "no-object" basis. What is needed at this preliminary stage is not to establish that a serious violation of the Bank's policy has actually resulted in damages suffered by the affected party, but rather to establish whether the complaint is prima facie justified and warrants a full investigation because it is eligible under the Resolution. Panel investigations will continue to result in "findings" and the Board will continue to act on investigations on the basis of recommendations of Management with respect to such remedial action as may be needed."1

The clarification also provided that "Management will make its response to requests for inspection available to the public within three days after the Board has decided on whether to authorize the inspection."

As chronicled below, the Panel's experience shows that the process evolved somewhat differently from what was envisaged in the Panel's Resolution and Operating Procedures and the 1996 clarification of certain aspects of the Resolution.
Nepal: Proposed Arun III Hydroelectric Project
In the proposed Arun III project IDA Management in its response claimed full compliance with applicable policies. After the Panel submitted its recommendation in December 1994, the Board in January 1995 requested Management to furnish the Panel with more information on IDA's actions with regard to the alleged violations of its policies. After thorough consideration of the information received and discussions with Management, the Panel reiterated its original recommendation for an investigation in the three areas. The Board then in February 1995 accepted the Panel's recommendation that the allegations of damage resulting from apparent violations of IDA policies in three of five policies—environmental assessment, involuntary resettlement, and indigenous peoples—had to be investigated. Specifically, the Board authorized the Panel to investigate: the consistency of the determination of the access road alignment with Operational Directive 4.01 (Environmental Assessment); the consistency of the treatment of indigenous peoples, if any, with Operational Directive 4.20 (Indigenous Peoples); and the consistency of arrangement for compensating seriously affected families for land acquired by the government with OD 4.30 (Involuntary Resettlement), and it instructed the Panel to take into account any action plans subsequently developed by Management. The Board decision, the Request for Inspection, and the Panel's report, as provided for in the Resolution, were then made public.

The Panel completed its investigation in June 1995 and sent its report to the Board and the President of IDA on June 21, 1995. The next step in the process called for Management to submit to the Board, for its consideration within six weeks a report indicating its recommendations in response to the investigation findings. However, after receiving the Panel's investigation report, senior Bank Management reassessed the project as proposed, and on August 2, 1995, IDA's President informed the Board that IDA had decided to withdraw support for the project.

Brazil: Rondônia Natural Resources Management Project (Planaflores)
In the case of the Rondônia project, Bank Management in its July 1995 response acknowledged and explained some instances of lack of compliance with its policies. The Panel, after an initial field study and a preliminary review that included consultations with federal and state entities and people in the project area, concluded that the rights and interests of the intended beneficiaries may have been or were likely to be directly and adversely affected in a material way, as a result of alleged failures in design, delays in the execution, and omissions in supervision or monitoring of the project.

The Panel, in its report to the Board in August, acknowledged the effort made by Management in its response to provide extensive information and a fair and realistic assessment of most of the project's difficulties and delays. However, the Panel stated that it was not convinced that there had been full compliance with Bank policies and procedures, or that the proposed remedial measures were adequate in the instances where Management had admitted failures. Therefore, the Panel recommended that the Board authorize an investigation. In September 1995 the Board, instead of accepting or rejecting the Panel's recommendation, as called for in the Resolution, concluded that it needed additional information. It instructed the Panel "to further substantiate the materiality of the damages and to establish whether such damages were caused by a deviation from Bank policies and procedures." At the end of November, while the Panel was conducting this additional review, Bank Management presented an Action Plan designed to remedy
past failures. In December 1995, a few days after receiving this plan, the Panel sent the Board a report on its Additional Review.

In its additional review the Panel found that the situation of many intended beneficiaries was worse than when the project started and again recommended that the Board authorize an investigation. In the same month Bank Management sent the Board a plan of action to deal with the principal issues raised by the Panel, which had been agreed on by the federal and state governments of Brazil. Later, in January 1996, the Board decided that, in light of the action plan agreed on by Management, it would not be advisable to proceed with the investigation recommended by the Panel. Nonetheless, it did agree to review Management’s progress on the plan in six to nine months and invited the Panel to assist in this review. In January 1997 in an informal meeting the Board instructed the Panel to review the progress of the project and to prepare a status report based on Management’s December 1996 report on the status of implementation. The Panel, in its March 1997 report on the review of the progress and status of implementation of the project, noted that there had been significant progress in the supervision and administration of the project, but that deforestation and protection of indigenous and extractive areas continued to be problematic. It also noted that, despite short-term efforts and the active participation of indigenous peoples organizations, a sustainable solution continued to elude the health component for indigenous peoples. The Board considered the Panel’s review in April 1997 but did not request any further involvement from the Panel. The Panel’s reports, along with the Request for Inspection and Management’s reports were subsequently made public.

Argentina and Paraguay: Yacyretá Hydroelectric Project

In the Yacyretá project Management’s response of November 1996 claimed full compliance with policies and procedures and challenged the eligibility of the Requesters on four grounds. One, that only one loan out of the many made by the Bank for the project remained open or less than 95 percent disbursed; hence, the Panel’s mandate was restricted only to provisions of a loan to Argentina (Loan 2854-AR). Two, that all of the Bank loans were made to Argentina and that Requesters, who were Paraguayan, were ineligible because the Resolution specified that a request had to be presented by an affected party in the territory of the borrower. Three, that Sobrevivencia (the local NGO that filed as a Requester) could not file a Request for Inspection on its own behalf, since it had not been damaged, but could only do so on behalf of the residents of Encarnación, Paraguay. Four, that the confidentiality claimed by the Requesters inhibited Management’s ability to respond to their concerns.

The Requesters claimed that 10 policies had been potentially violated, with a particular focus on the Bank’s environmental, resettlement, and project supervision policies. The Panel assessed the eligibility issues raised by Management in its response and determined that the Requesters were eligible not only owing to the binational nature of the project and the obligations accepted by the government of Paraguay, but also because: (1) another loan had been made to Paraguay, which included a component to address the resettlement of people living in Encarnación displaced by the reservoir; (2) a local NGO would have the right to file a Request with regard to serious environmental or economic damage caused by violation of a policy at the national level; (3) anonymity had always been recognized as a legitimate demand by Requesters, who have valid fears of reprisals; and (4) the Panel had always guaranteed, whenever requested, the anonymity of Requesters.
Following a review of the situation on the ground, the Panel found an imbalance in the implementation of the project. While the main civil infrastructure component was almost complete, only a third of the housing in the resettlement component was complete, and other activities and social mitigation measures lagged far behind. Moreover, the Panel was satisfied that there had been material adverse effects to the area people that may have resulted from policy violations of a serious nature, although Management submitted several remedial action plans. Therefore, in its December 1996 report, the Panel recommended that the Board authorize an investigation. In February 1997, Management sent the Board a progress report that included references to remedial action plans, which had been recently agreed on by the governments. When the Board met in February 1997 to consider the Panel's report, it invited the Panel "to undertake a review of the existing problems of the project and to provide an assessment of the adequacy of the Action Plan as agreed between the Bank and the two countries concerned within the next four months." It also indicated that "independent of the above decision the Inspection Panel [was] expected to look at the extent to which the Bank staff had followed Bank procedures with respect to [the] project."² The Board had again, as in the case of Rondonia, declined to either accept or reject the Panel's recommendation, as called for in the Resolution.

The Panel, as requested, conducted a field review of the project. In the course of the review, the lead Inspector was given oral and written Requests for Inspection requesting the Panel to review aspects of project execution that the Requesters claimed were detrimental to the people, communities, and environment on the Argentine side of the reservoir. The Panel, after consideration of the new Requests, determined that, while some of the Requests could be considered new, the issues raised were in substance the same as in the original Request for Inspection. Thus, in consultation with the Board, the new Requests were incorporated into the ongoing assessment of the project that was being carried out in parallel with the investigation mechanism of the IDB. The Panel submitted its report to the Board for its review in September 1997. In December of the same year, the Board considered the Panel's September report, without any conclusion. The Board decided to postpone any decision on future Panel involvement until a second review of the role of the Inspection Panel was completed. At the time of writing the second review of the role of the Panel is still under way.

**Brazil: Itaparica Resettlement Project**

In the Itaparica project Bank Management claimed full compliance in its April 1997 response. In reviewing the Request for Inspection, the Panel faced an important eligibility question. There had been two different loans approved by the Bank, but they had been treated in some of the Bank's documentation on the project as a single loan. It was a critical issue, since the Resolution disallowed a Request for Inspection where more than 95 percent of the loan had been disbursed. In this case 96 percent of the combined loans had already been disbursed. However, for the aggregate of both loans, only 92 percent of the second project loan had been disbursed and, more important, only the second loan was cited in the Request for Inspection. Following an extensive review, the Panel found that the Requesters' concerns were well justified with regard to the design of the project, and it submitted its report to the Board in June recommending an investigation, noting that the borrower and implementing agency were moving toward attempting to meet their concerns.
In July 1997 discussion of the project by the Board was postponed because an Executive Director requested a Legal Opinion from the Senior Vice President and General Counsel on the interpretation of the 95 percent loan disbursement provision of the Resolution. The General Counsel agreed with the Panel that both loans should be regarded as separate for purposes of the 95 percent rule. In September 1997 the Board finally met to decide on the Panel’s recommendation for an investigation of the project. It ruled that, in light of the fact that the government of Brazil had recently approved an action plan to complete the project, which committed substantial financial resources to its execution and requested continued Bank supervision for two more years, it would not approve an investigation. Instead, it decided that it would review progress on the action plan within 12 months, with the assistance of the Panel.

At a seminar with the Board in February 1998 representatives of the local NGO that filed the Request complained that they were not consulted in the preparation of remedial measures and that, up to that date, the Brazilian authorities had not informed them about the existence of an Action Plan. They also claimed that the funds allocated for the project were less than would be required for just maintenance of existing project facilities.

India: NTPC Power Generation Project in Singrauli

In the NTPC project Bank Management acknowledged in its June 1997 response certain shortcomings in the application of its policies and procedures, ranging from “substantial” to “partial” compliance. Management also submitted, together with its response, two action plans, one general on the Bank’s application of environmental policies in India and the other project specific. The Requesters complained that they were and continued to be compelled to move from their rural locations without any alternative livelihood. In addition to which they alleged that they had not participated in the design or implementation of the resettlement plans. During July, the Panel reviewed the situation on the ground and found that the Requesters concerns appeared to be well justified. It also reviewed the Action Plans and considered the specific plan inadequate. In July 1997 it submitted its report to the Board, recommending an investigation. In September, Bank Management submitted an updated specific remedial Action Plan designed to address some of the concerns raised by the Panel in its report. In light of this plan, which carried the support of the government of India, the Board decided in September to approve a limited investigation, restricted to a desk study in Washington. In its report submitted to the Board in December 1997 the Panel found that although the Bank loan processing complied with formal procedural requirements, some actions had led to the project’s problems. The Panel found that pressure to process the loan before the closing of the fiscal year, accompanied by a lack of capacity on the part of the Bank to supervise, and its misjudgment of the Borrower’s capacity to implement appropriate environmental and resettlement actions had led to problems. A Board decision on the Panel’s report is still pending.

Review of the Panel’s Experience

After more than four years’ experience, a number of fundamental questions can and should be raised about the Inspection Panel, especially because of the inevitable impact
that this experience could have on other multinational bodies. Among the most fundamental questions raised are:

- Has the Inspection Panel met its objectives and increased the credibility of the Bank?
- How have the Panel's operations affected different stakeholders?
- What have been the lessons of the Panel?

### The Panel's Objectives

A variety of internal and external factors played key roles in the creation of the Inspection Panel. Ibrahim F. I. Shihata, Senior Vice President and General Counsel of the World Bank, discussed some of the internal and external factors in his book *The World Bank Inspection Panel*. Mr. Shihata noted that some of the most important objectives that the Executive Directors had in creating the inspection function were as summarized in a management report of September 19, 1993, as follows:

- "Citizens of the developing and developed countries increasingly ask for transparency and accountability of international development institutions. The World Bank as the leading development agency, should respond positively and constructively to this demand.
- "...The existence of an independent body [would] increase the credibility of the Bank.
- "The cases where major conflicts [arose] with affected parties [would] be dealt with more efficiently and consistently by a permanent and independent structure than by ad hoc bodies.
- "The borrowers involved, if they [wished, would] have a better opportunity to present and defend their position and to get the attention of the public and the media in the developing and industrialized countries.
- "The professional competence and integrity of management and staff [would] be protected if an independent investigation [assessed] the facts and actions taken.
- "Members of the Board, and directly affected parties, [would] have an additional, independent instrument to ensure that projects under preparation or implementation [were] fully compatible with the policies and procedures of the Bank."

### Has the Panel Met its Objectives and Increased the Credibility of the Bank?

The Panel has, despite tremendous pressure, functioned as an independent structure, as it was intended, consistently providing the Board with an independent view of projects with potentially harmful impacts on local populations and the environment. Thus, both the Board and directly affected parties have had recourse to an instrument that could accurately determine whether or not projects were fully compatible with the policies and procedures of the Bank. And its creation has certainly increased the Bank's credibility, as noted by Lori Udall in a recent review of the Inspection Panel. The creation of the Panel by the Bank, said Ms. Udall, was "the most concrete step taken by the World Bank in the last ten years to establish public accountability and openness in Bank operations."
How Have the Panel’s Operations Affected Different Stakeholders?

There are a number of stakeholders, both internal as well as external, that are affected by the Panel’s actions. Some may feel that being subjects of an “investigation” has a direct impact on them, while others may see in the Panel a new instrument to redress harm or avert potential harm. Therefore, the answer to the question of the Panel’s effect depends on the perspective of the stakeholder in question.

Among the internal stakeholders in the Bank are the President and Management. The President has a dual role as head of Management and chairman of the Board. The President responds to a number of actors including the governments of both lending and borrowing sectors, the media, NGOs, and, in general, is the interface to the outside world, where criticism of the Bank has been high and demands for increased transparency and accountability have gotten stronger. Nonetheless, the President has been a strong supporter of the Panel. Many feel that he should have access to the Panel in its preventive mode, in addition to the corrective mode based on investigations prompted by third parties. During the first review of the Panel’s experience undertaken by the Board, the Panel suggested that the Resolution be clarified to explicitly provide the President with access to the Panel. At the time, a considerable number of Executive Directors spoke against the proposal, and it was rejected.

In contrast to the President, Management, the other internal stakeholder, has used every possible defense to avoid an investigation, including questioning the eligibility of the claimants and preparing Action Plans outside the terms laid out in the Resolution. Moreover, Management has consistently denied violation of policies, and only in one case has it recognized “partial” or “substantial” compliance. Instead, in almost every case Management has prepared Action Plans in anticipated response to the Panel’s reports to the Board, in which it proposes solutions to existing problems, thereby diminishing or obviating the need for an investigation. By introducing these Action (or reaction) Plans, Management effectively preempts or delays (as in the cases of the Rondonia and Itaparica projects) the Panel’s further involvement. The last-minute preparation of Action Plans to correct or avert further damage on the part of Management has created what the Panel views as “moving targets.” These Action Plans have, as a rule, been presented either at the Board meeting itself, or shortly before a meeting when the Panel was due to present its report and recommendation to the Board. Thus, the Panel, without the benefit of any previous knowledge of these plans, is usually asked to give an opinion on the spot. In addition, the formulation of such last-minute plans has prevented any meaningful consultation with affected parties, as required by Bank policy.

The Executive Directors also have a dual role as members of the Board and representatives of their national governments. It is precisely this dual role and the fact that, by definition, inspections can only take place in borrowing countries that has led to the split of the Board largely along Part I and II lines. Since governments of borrowing countries feel threatened by being “investigated,” they thus instruct their Executive Directors to attempt to stop or delay the process. Borrowing country governments largely see the Panel as an intrusion into their internal affairs and as a pressure to fulfill legal covenants related to Bank loans. They also fear that interventions by the Inspection Panel may lead to additional liabilities.
Governments of some lending countries initially supported the creation of the Panel due to basic concerns about transparency and accountability. Nonetheless, they do not constitute a “block” in the same sense as the borrowing countries, and their support for the Panel’s work has been more fractured. The formation of “alliances” among Part II countries to block investigations has been effective and represents one of the most fundamental threats to the effectiveness of the inspection function. As a consequence of the creation of these “blocks,” the Executive Directors may lose the capability to analyze each case according to the facts and merits, and the effectiveness of the Panel as a Board instrument could be irremediably lost.

Local governments are also important stakeholders since they often have to deal with the consequences and impacts of project implementation, and because of this fact, they may enter into conflict with national governments for increased attention to problems related to Bank projects. Their active participation is often critical in finding appropriate solutions to local problems.

What Have Been the Lessons of the Panel?

In 1996 the Board undertook a review of the Resolution based on two years of experience of the inspection function. As a result, the Board formalized the inspection mechanism as a permanent institution of the Bank, and issued a set of clarifications to deal with a number of issues that had arisen. In the years since the completion of that review, an increased number of complex cases raised the Board’s interest in the nature of the Panel’s work. In its third year alone, the Panel received five new formal Requests (1996–97).

Reviewing the five cases where the Board had acted on the Panel’s recommendations for an investigation, a number of important lessons emerged that might lead to further useful clarifications.

1. One of the unique features of the Inspection Panel is that it gives ordinary private citizens direct access to the Board of the World Bank, and potentially affected groups now have a direct mechanism through which to complain when they feel that a Bank project has affected them negatively or might do so in the future. This is a fundamental change in behavior for an international financial institution. The World Bank took the lead in setting up an accountability mechanism that links local grassroots populations with an independent body that reports only to the Board. It is understandable that this process has been far from smooth and that all parties are still climbing the learning curve. However, the most salient lesson from the cases considered earlier is that concerned local citizens now have a new way to relate to the World Bank and to monitor the transparency and accountability of its operations. It is a clear advance in the development of international laws of institutions and human rights.

2. The Inspection Panel was conceived as an instrument to improve transparency and accountability in Bank operations. In practice, however, some Executive Directors and government officials have seen the Panel more as an instrument for pressuring Bank Management into insisting on borrower compliance with legal covenants related to the projects in question.

3. The Resolution envisaged that the Panel would focus primarily on the Bank’s adherence to its own policies and procedures. The Resolution is clear on this. In every
case in which the Panel has proposed an investigation, it has stressed that it is the Bank alone, not the government or borrower, that is to be the subject of any investigation. Whatever the original intent, however, the practical result is that borrowing countries themselves feel under threat of an “investigation” and, given the perceived political implications of this, they have acted accordingly to block or avoid any further Panel involvement in the review of World Bank-financed projects. The terms “investigation” and “inspection” are difficult for borrowing countries to accept because of the negative connotations inevitably associated with them. The result often has been a sharp division among the Executive Directors, usually, for obvious reasons, along Part I and II lines.

4. According to the Resolution, the Panel has two main functions: to monitor Management's compliance with the Bank's operational policies and to assess “material harm” on affected or potentially affected populations. Of these two functions, the first, which can be described as a “policing” function, has proven to be less useful to the Board since the Panel's “verdict” does not lead—not should it lead—to any action beyond correcting failures in project design or execution.

5. The Panel's report and recommendation for an investigation has repeatedly provoked Management into preparing ad hoc remedial Action Plans. (These are different from any remedial Action Plans that may be included in the Response to show that Management is taking adequate steps to follow the Bank's policies and procedures.) The Resolution had not anticipated that Management would act in this way, at least not prior to the Board addressing the Panel's recommendation to authorize, or not to authorize, an investigation. By acting in this way, Management has effectively preempted the process envisaged by the Resolution.

6. A review of past Board decisions reveals that the Panel's role in checking compliance with operational policies has been downplayed, while its role in addressing actual or potential harm to local populations and assessing remedial actions has been emphasized.

7. The Inspection Panel has identified at least two important types of systemic problems that are interrelated and have other critical links to project performance. The first one is the persistent imbalance that develops in projects that have infrastructure as well as social and environmental components. The Bank usually finances the former item, while the latter is left for counterpart funding. The second problem is the unequal status that social and environmental operational policies still seem to have vis-à-vis other directives in the execution of projects. This is related to other problems such as the “approval culture” and the incentive/punishment system for task managers, where due attention to environmental and resettlement problems may delay project approval. The Panel first pointed to the “imbalance” problem in the context of the Planaflo case in Rondônia, where the infrastructure component includes road rehabilitation and paving. The Panel noted the tension between these components and the fact that the infrastructure component was always ahead of schedule, while most of the reserves still had not been created. In the Yacyreta case, the Panel pointed to the imbalance between the completion of civil and electromechanical works (99.8 percent) with the resettlement and environment components, which were less than 30 percent completed. These examples, and others like the NTPC case, have shown that a problem exists with the application of the social and environmental directives, which in practice do not seem to have equal standing with other policies.

8. Another important lesson from the Panel's experience is that, in some cases, the implementation of solutions needed to correct harm and bring the projects into compli-
ance with Bank policy requires considerable time, sometimes several years. However, the Resolution is based on a scenario in which investigations are either approved or disapproved and are carried out expeditiously, and it certainly did not foresee the Action Plan phenomenon. In the Yacyretá case, implementation of Plans A and B, which were scheduled for completion during 2000, have fallen behind schedule, which over time, may make, the work of the Panel irrelevant. In NTPC, the Independent Monitoring Panel has entered into its second year and problems continue to evolve. The Itaparica case is another example of a solution that may take many years to implement. Whatever the final decision, practice has demonstrated the need for a clearly defined role of the Inspection Panel during the implementation of Action Plans.

Although four years is a relatively short period in the life of any institution, the Panel has proven to be an effective instrument for starting a process to correct or avert damage. Its direct access to local populations has given a voice to the poor and disenfranchised and allowed their complaints to be heard at the highest level of the institution. As the Bank enters a new millennium, optimism abounds that the Bank is responding effectively to the challenges of developing countries and economies in transition with a more humane focus, and the existence of an independent body increases its credibility.

Notes

2. The project was cofinanced with the Inter-American Development Bank (IDB) and a separate request was submitted to the IDB at the same time that the Request was submitted to the Panel. The Board of the IDB approved a review of the project at the same time the Bank's Board approved the Panel's review of the project.