



**USAID**  
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# MULTILATERAL DEVELOPMENT BANKS' ASSISTANCE PROPOSALS

Likely to Have Adverse Impacts on  
the Environment, Natural Resources,  
Public Health, and Indigenous Peoples

October 2008



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*This report does not prejudge the U.S. Government’s position where final versions of projects or policies have not yet been considered by the Multilateral Development Bank (MDB) Executive Boards; rather, it serves as a record of USAID’s environmental and social review and monitoring of MDB projects and policies*



# Multilateral Development Banks' Assistance Proposals Likely to Have Adverse Impacts on the Environment

## Introduction

This Report to Congress, "Multilateral Development Banks' Assistance Proposals Likely to Have Adverse Impacts on the Environment, Natural Resources, Public Health, and Indigenous Peoples," is submitted in compliance with Title XIII of the International Financial Institutions (IFI) Act, as enacted in Section 537 of Public Law 100-202. These provisions instruct the U.S. Agency for International Development (USAID) to report to Congress on proposed and current Multilateral Development Bank (MDB) projects, and other assistance proposals likely to have adverse impacts on the environment, natural resources, public health, or indigenous peoples.

This report covers a six-month period (April 2008 to September 2008) and provides to the Committee on Appropriations, the Committee on Foreign Affairs, and the Committee on Financial Services of the U.S. House of Representatives, and the Committee on Appropriations, the Committee on Banking, Housing and Urban Affairs, and the Committee on Foreign Relations of the U.S. Senate, information regarding the performance of the U.S. Agency for International Development in carrying out the tasks assigned in Title XIII of the International Financial Institutions Act.

Title XIII of the IFI Act directs USAID to ensure that Multilateral Development Bank assistance proposals are reviewed by USAID and other United States Government (USG) agencies to determine whether the proposals will contribute to the sustainable development of the borrowing/project country. The reviews address the potential adverse effects on the environment, natural resources, public health, and indigenous peoples. USAID and its partner reviewing agencies are to recommend measures, including alternative measures, which could eliminate or mitigate adverse impacts. After evaluating MDB proposals, USAID undertakes an affirmative investigation of projects that may have substantial adverse impacts, and ensures that the resulting information is made available to the public. USAID provides its findings from this process to the U.S. Department of Treasury.

USAID has continued to work with its regional bureaus and field missions, and other USG agencies, including the Department of Treasury, the Department of State, the Environmental Protection Agency, and the U.S. Executive Directors' Offices at the MDBs to:

- Assure adequate attention to priority MDB projects;
- Engage with project sponsors, MDB staff, civil society, and communities affected by MDB projects (project-affected communities); and
- Engage early in the proposal process with project countries, sponsors, and MDB staff.

## MDB Project Review:

MDB projects with the potential for adverse environmental and social impacts are initially identified by USAID field missions, USG agencies, and/or non-governmental organizations (NGOs). The criteria for selecting identified MDB projects for review include consideration of:

- Potential adverse impacts on the environment, natural resources, public health, and/or indigenous peoples;
- Ability to serve as a model within a sector for similar projects;
- Potential adverse environmental and social cumulative impacts; and
- Potential to undermine USAID's sustainable development activities.

The MDB projects selected by USAID, in consultation with other USG agencies, for review during the period covered by this report are either candidates for financing or have been approved for financing by the African Development Bank (AfDB), the International Bank for Reconstruction and Development (IBRD) and the International Finance Corporation (IFC) – World Bank Group, and/or the Asian Development Bank (ADB). Projects reviewed fall into one of three categories:

1. Projects for which respective MDB institution(s) have publicly released final Environmental Impact Assessments (EIAs) prior to Board vote, and whose potential adverse environmental and social impacts have been identified by USAID/Washington, USAID field missions, other USG agencies, and/or NGOs. These projects are referred to in this report as MDB Public Disclosure Projects.
  - Ethiopia – Gibe III Hydropower and Transmission Lines Project
  - Vietnam – Song Bung 4 Hydropower Project
2. MDB-financed projects previously reviewed by USAID with potentially significant environmental and social impacts or projects discussed during Tuesday Group.<sup>1</sup> These projects are referred to in this report as Post-finance Monitoring Projects.
  - Uganda – Bujagali Hydropower Project
  - Chad/Cameroon – Petroleum Development and Pipeline Project
  - Cambodia/Laos/Vietnam – Biodiversity Conservation Corridors Initiative
  - Cambodia – Hydropower Development and Transmission Lines
3. Projects under discussion with various MDBs, but where a management decision has not been made to bring these projects into the MDB formal appraisal process. These projects are on the MDB Watch List.
  - Cambodia – Environment and Protected Areas Management Project
  - Vietnam – Trung Son Hydropower Project
  - Laos/Vietnam – Ban Sok-Pleiku Power Transmission Project
  - Laos – Technical Assistance for Capacity Development in Hydropower and Mining Sectors
  - Laos – Nam Ngiep I Hydropower Project

Previous experience reveals that waiting for final project EIAs to be released by respective MDBs 120 days before the Board vote often results in inadequate opportunities and unsatisfactory results in identifying, averting, or mitigating negative environmental and social

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<sup>1</sup> Tuesday Group is a monthly meeting of NGOs and U.S. federal agencies, co-chaired by USAID and the Bank Information Center, to address MDB project loans and policies.

impacts. To increase its effectiveness in the oversight process, USAID continues to explore new approaches to engage earlier in the MDB project proposal process. However, earlier engagement does not obviate the need to engage with relevant stakeholders during the later stages in the project proposal process when all of the environmental and social documentation is available.

### **MDB Policies:**

In addition to reviewing MDB projects, USAID takes part in the Treasury-led interagency process of reviewing MDB policies, strategies, and action plans. Since these documents ultimately provide the framework for MDB-supported projects, it is important to ensure that they contain adequate provisions to ensure environmentally and socially sound projects.

**Report structure:** Following the Introduction, the report is divided into the following sections:

**Section 1: MDB Public Disclosure Projects**

**Section 2: MDB Post-finance Monitoring Projects**

**Section 3: MDB Watch List**

**Section 4: MDB Policies**

## Section I

### MDB Public Disclosure Projects

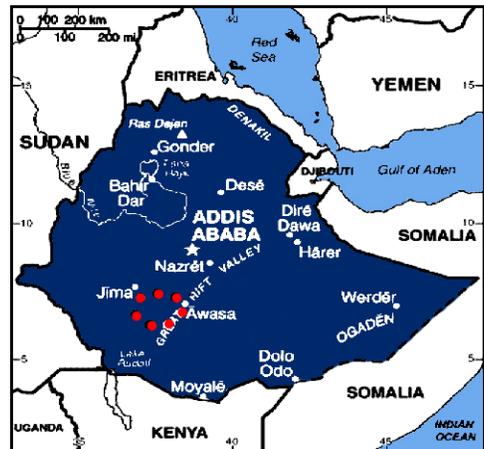
USAID's technical review consists of identification of outstanding Title XIII environmental and social issues (environment, natural resources, public health, and indigenous peoples under Section 1303), and analysis of EIA adequacy under the Pelosi Amendment (Section 1307). Following each completed review, recommendations are developed for submission to the U.S. Department of Treasury for its consideration regarding potential loan conditions in an attempt to prevent and mitigate potential environmental and social impacts, and assessment of the EIA.

### Ethiopia

#### *Gibe III Hydroelectric Power Project*

#### Project description:

The Gibe III hydroelectric power project is located within the Gibe-Omo River Basin, in the middle reach of the Omo River approximately 450 km south of Addis Ababa. Gibe III is the third development in a cascade of water resource schemes (Gilgel Gibe/Gibe I, in operation, and Gibe II, under construction) on the main Gibe/Omo River. Another hydropower project, Gibe IV, is expected downstream on the Omo River, adjacent to the country's largest national park, Omo National Park. This 1,870 MW facility comprises a 240 m high dam, creating a reservoir with a surface area of at least 200 km<sup>2</sup>, live storage of 11,750 million m<sup>3</sup>, underground and inclined penstocks, and a surface powerhouse equipped with 10 power generating units and switchyards. Electrical power generated by Gibe III will be available to cover both peak and off-peak demand in the Ethiopian interconnected power systems or exported to Kenya's market. Power produced will be evacuated through a four double circuit 400 kV, 65 km, overhead transmission line. The commissioning of Gibe III is scheduled for 2012.



## Financing:

The total cost is estimated at US\$ 1.72 billion. Due to the project procurement's non-competitive bidding process, AfDB is considering supporting Gibe III through a subcontract.

## USAID review:

USAID has recently initiated its review of the project. Based on discussions at the Tuesday Group meeting, the following concerns have been raised by civil society:

- The project procurement was not open to competitive bidding process.
- Reportedly, the Ethiopian Environmental Protection Authority did not approve the EIA until July 2008 although construction was initiated at least a full year prior to the approval of the EIA, which is a violation of Ethiopia's Environmental Policy.
- Freedom of expression of civil society is considerably restricted, which restrained many civil society groups from participating in the energy sector.
- There are few, if any, basin-wide studies of the Omo-Gibe River Basin, and they did not consider the basin's ecological functions, valuations, and effects/dependency on local livelihoods.
- There are potential downstream impacts affecting the Omo River, which flows a further 600 km downstream of the dam site, crosses the Omo National Park – an area of great biodiversity and populated by more than 15 different indigenous groups still engaged in traditional agriculture and pastoral activities – and the Lower Omo Valley, which was designated a UNESCO World Heritage Site in 1980.
- No scientific analysis was undertaken to estimate potential reservoir emissions of greenhouse gases and no plan was developed to remove woody biomass in the reservoir area prior to inundation.
- Projected increased incidence of malaria and bilharzia vectors without the appropriate mitigation measures in place for the population in the area.
- Although at least 400 families will be resettled, reportedly only 52 of them were officially consulted. Additionally, grazing lands of some 275 nomadic households will be eliminated once the reservoir is filled – these people have not been consulted or provided compensation.
- There may be an impact on the downstream riverine forest along the lower Omo River, which supports a great number of wildlife and used by indigenous groups.
- There has been limited dialogue with project-affected stakeholders including downstream indigenous groups in the lower Omo Valley.
- There are potential transboundary impacts, since the Omo River provides 80-90% of water flow into Kenya's Lake Turkana.



## Current status:

Board date is has not been scheduled. The earliest it may come up is January 2009. USAID is exploring the possibility of conducting a site visit to the project and downstream areas in December 2008.

## Vietnam

### *Song Bung 4 Hydropower Project*

## Project Description:

The Song Bung 4 hydropower project is located on the Bung River, in the upper part of the Vu Gia River, which flows to the China Sea at Da Nang. At least 40 hydropower projects have been planned in the Vu Gia-Thu Bon River Basin, of which two are under construction. One of these hydropower projects, the A Vuong, located on a tributary joining the Bung River downstream of the Song Bung 4 dam site, is under construction.

The Song Bung 4 project involves construction and operation of a 100 m dam, with a reservoir area of 15.8 km<sup>2</sup>, headrace tunnel, underground penstock, powerhouse, 35 km of 220 kV and 38 km of 35 Kv capacity transmission lines, 20 km of access roads, 20 km of new roads to two resettlement areas, and relocation of approximately six km of Highway 14D. The installed capacity is 156 MW with two 78MW units. It is anticipated that the project will take five years to complete.



The project is located in the biological conservation corridor endorsed by the Greater Mekong Subregion Governments' Summit in 2005. The southern part of the Song Bung 4 project catchment is within the Song Thanh Nature Reserve. The reservoir will inundate 143 ha within the core zone, which is rich in species and covered by broad-leaved evergreen forest. The Song Thanh Nature Reserve falls in the Central Truong Son Landscape, which is classified as a priority conservation area in the region.

Most of the rural population in the project area is from ethnic minorities; the Co Tu, the dominant group, has its own language and culture. The Song Bung 4 dam site and reservoir will require the resettlement of four Co Tu villages (~206 households/971 people) – Thon 2, Pa Dhi, Pa Rum A, and Pa Rum B – consisting of 206 ha. A resettlement and ethnic minority development plan has been prepared for livelihood restoration consisting of rice cultivation, livestock-raising, fishery development, community forestry management, and non-farm income generation. Villagers whose lands are impacted by the project (e.g. access roads, workers camps, transmission line) will be compensated for loss of productive lands, fishponds, and wet rice fields. Villagers living along the river fish in it almost daily – primarily for consumption, although some fish are also sold.

## Financing:

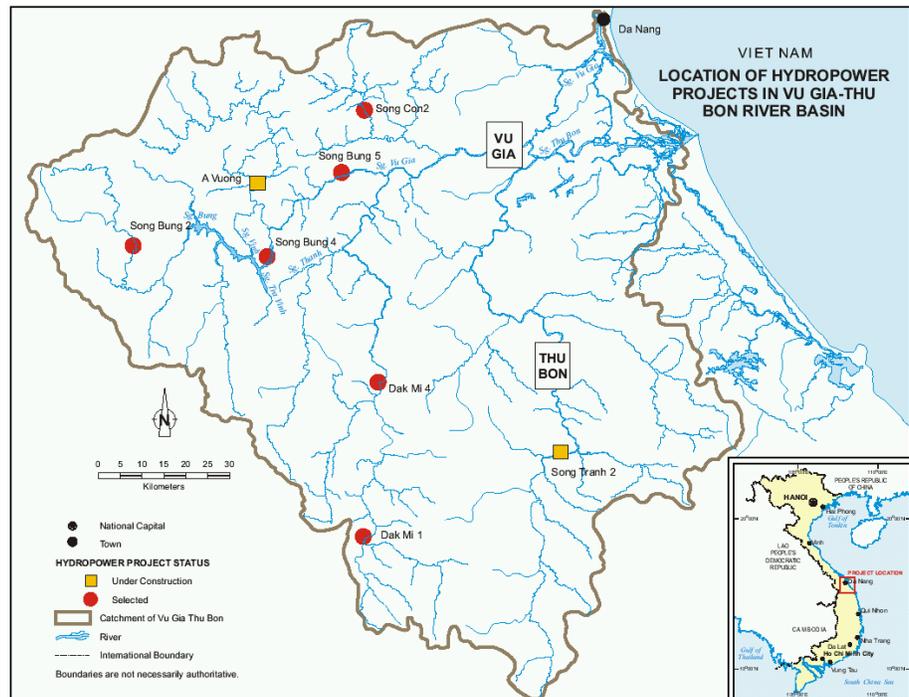
The total cost of the project is about US\$ 250.8 million. ADB is expected to finance ~US\$ 170 million (73% of the total cost) and state-owned Electricity of Vietnam (EVN) will provide US\$ 68 million.

## USAID review:

USAID initially reported on this project in the April 2008 MDB Report to Congress. USAID's final review determined that under Section 1307 the project EIA fell short of U.S. standards with regard to "no project"

alternative analysis, baseline data, and cumulative impacts as measured by USAID's Regulation 22 CFR 216 and Council on Environmental Quality's guidance on implementing the National Environmental Policy Act. Specifically:

- The alternative analysis did not provide an objective assessment and comparison of environmental, social, economic, and technical risks and benefits of the "no-project" alternative with other alternatives, including mitigation measures. Although the technical alternatives analysis for cascade options, dam sites, full supply levels, and operating levels were reportedly investigated in the pre-feasibility study, this information is not provided in the EIA, and thus robustness of analysis could not be determined.
- Terrestrial and aquatic baseline data collection is insufficient and did not cover seasonal variation. Information on aquatic life, including life cycle and migration habits, is limited. The Summary EIA states that the "knowledge of aquatic life in the river is limited and information on fish species is inadequate." The EIA (FINAL 16/04/2007) mentioned that an additional baseline study on fisheries was to be started in September 2006, but the study – or its status – was not discussed.
- The EIA acknowledged that the insufficient analysis of compensation flow due to the lack of baseline data "on the riverine ecosystem makes it difficult to recommend the magnitude of a compensation flow." This not only applies to Song Bung 4 but also to hydropower developments that will/are occurring in the basin. The ADB Strategic Environmental Assessment (November 2007) stated that although there were suggestions for fisheries/environmental flow maintenance downstream of the Song Bung 4 dam, these recommendations appear to have been ignored, because the "developer (EVN) believes it is not required to support the downstream river channels with environmental flows."
- The EIA has stated in several places that the actual routing and design of the transmission line and access roads were not yet defined. Therefore, without actual routing and design, it is difficult to assess environmental impacts and mitigation measures beyond the generic level.
- The EIA provided only a cursory treatment of cumulative impacts, since it only looked at hydropower projects in the Basin and no other developments, such as the extensive mining that is taking place in the area. The EIA acknowledged the absence of baseline data for cumulative assessment and stated that studies



of fish, riparian, and terrestrial aspects, among others, were underway, financed through an ADB technical assistance loan to the Ministry of Natural Resources and Environment. However, this information is not available in the EIA or supplemental material.

### Additional environmental and social issues raised during USAID's affirmative investigation of the project included:

- *Government of Vietnam (GoV) capacity:* Based on discussions with GoV and NGOs, USAID's site visit concluded that the Ministry of Natural Resources – especially Quang Nam Department of Natural Resources – does not have the capacity to oversee and monitor EIA implementation. The proposed increase in the number of patrol rangers, guard posts, and required capacity building (including budget) for the Song Thanh Nature Reserve is inadequate given the expected indirect and cumulative impacts that the project will bring to the area. For example, the proposal to recruit 10 more staff for five new guard posts and patrols is unrealistic since ideally, for a guard post to operate, there should be a ranger present at all times and at least seven more rangers to enable shift rotations and roving patrols.
- *Livelihood programs:* Reportedly, 100 percent of the project-affected ethnic minority Co Tu households fish, although the extent to which communities are dependent on fish both for food and income varies depending on their proximity to the rivers. Consequently, one component of the livelihood program is the establishment of a reservoir fisheries program. However, the potential success of this program is not supported by data collection and analysis. The **Song Bung 4** project manager told U.S. Embassy and USAID representatives that no studies would be conducted to determine what kind of effect the dam would have on fisheries.
- *Song Thanh Nature Reserve:* Due to increased access into the Reserve as a result of the project, project documentation does not adequately describe the political will and capacities of authorities involved to prevent poaching and illegal logging; moreover, staffing and financing for these additional duties are questionable. Although the direct impact on the Reserve from inundation is relatively small, the indirect and cumulative impacts will be significant. Without the proper safeguards in place, illegal logging and poaching will continue at a greater scale if left unchecked. For example, access into the heart of the Reserve core zone will be easier because of the inundation. One estimate has at least 2,000 construction workers situated on the border of the core zone. This greatly increases the likelihood that wildlife poaching for food and extraction of wood for fuel wood and construction materials will occur in the Reserve. Increased traffic on the roads leading to the construction sites will increase the difficulty of screening vehicles for illegal commodity transportation.

### Current status:

This project was approved by the ADB Board in April 2008. The U.S. Department of Treasury determined that the project met the Pelosi Amendment (Section 1307) requirements but abstained from voting on the project on the grounds that environmental and social safeguards are not sufficient to mitigate and prevent anticipated significant environmental and social impacts.

## Section 2

# MDB Post-finance Monitoring Projects

MDB-financed projects previously reviewed by USAID which have potentially significant environmental and social impacts or projects discussed during Tuesday Group are included in this section. It should be noted that at this stage of the project there is no formal leverage from the USG, and in many cases, the MDB involved in the financing lacks leverage if the loan has been disbursed and paid back.

## Uganda

### *Bujagali Hydropower Project*

#### Project Description:

USAID has reported on this project in previous MDB Reports to Congress, most recently in the October 2007 report.

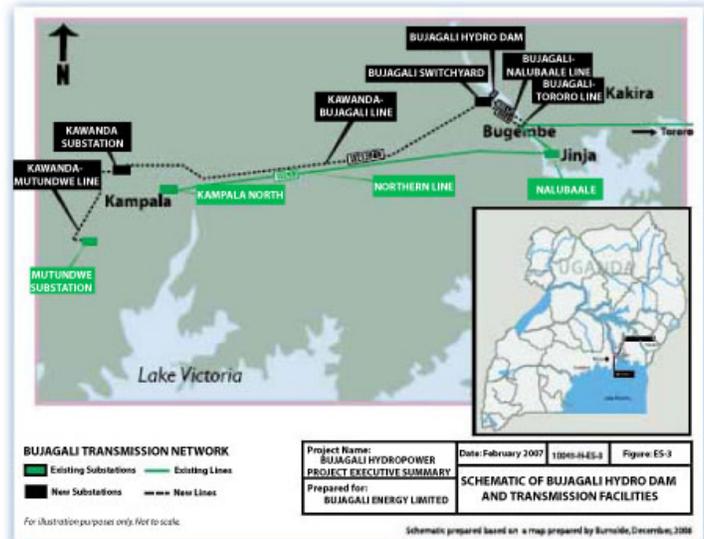
The Bujagali Hydropower Project will be located on the Nile River, at Dumbbell Island, approximately eight kilometers north of the town of Jinja, in Uganda. The project involves the construction and operation of a dam in the bed of the Nile River, immediately downstream of an existing hydroelectric complex, and upstream from protected natural areas, as well as other planned hydroelectric facilities. Bujagali will be operated as a run-of-river plant and it will impound a reservoir of 388 ha, comprising the existing 308 ha of the Victoria Nile and 80 ha of newly inundated land. The negative impacts to Jinja Wildlife Sanctuary and Bujagali Falls will be offset through the restoration and management of Kalagala Falls and the Nile Bank Forest Reserve.



The Bujagali Interconnection Project consists of the construction of approximately 75 kilometers of 220 kV transmission line on behalf of the Uganda Electricity Transmission Company Ltd. (UETCL), to evacuate electricity from the Bujagali dam. The project is an Independent Power Project (IPP) and will sell electricity to UETCL under a 30-year Power Purchase Agreement, which was signed on December 13, 2005. UETCL's payment obligations under the Power Purchase Agreement are guaranteed by the Government of Uganda through a government guarantee. The transmission line crosses the Lubigi wetlands and the central forest reserves of Mabira and Kifu.

## Financing:

The World Bank Group's financial support comprises US\$130 million in loans from the IFC to Bujagali Energy Ltd, a partial risk guarantee of up to US\$115 million from the International Development Association for the benefit of the project's commercial lenders, and an investment guarantee of up to US\$115 million from the Multilateral Investment Guarantee Agency. The African Development Bank support consisted of a US\$110 million loan.



## Current status:

Prior to WB and AfDB Board dates, the Ugandan National Association of Professional Environmentalists, together with other local organizations and individuals, submitted an inspection request to the World Bank's Inspection Panel and to the African Development Bank's new Compliance Review and Mediation Unit (IRM). The WB Board of Executive Directors and the AfDB Executive Directors approved the request in May 2007 and September 2007, respectively. The IRM Panel and WB Inspection Panel coordinated their field investigations and shared consultants and technical information during the investigation, although each Panel focused its compliance review on its own bank's policies and procedures. The WB Inspection Panel's final report has not yet been released. AfDB's IRM Compliance Review Report on the Bujagali Hydropower (BHP) and Interconnection Projects (BIP) was recently released.

The Report found instances of compliance and non-compliance with Bank policies and procedures related to social, cultural, environmental, hydrological, and economic aspects of the Bujagali Projects. Additionally, the Panel raised concerns about the way in which Bank management and staff had handled certain issues but, because of gaps or lack of clarity in the Bank's policies and procedures, was unable to make clear findings of either compliance or non-compliance. The AfDB Board of Directors accepted and adopted the Compliance Review Report, including its findings and recommendations. The Board instructed the Bank's management to prepare two action plans: the first one responds to the Panel's recommendations on the Bank's policies and procedures, and the second deals with the Report's actionable project-specific findings on non-compliance and areas of concern. The Board also approved the Panel's recommendation that the Independent Review Mechanism monitor the implementation of the project-specific action plan.

Key findings of the IRM Panel include the following :

- Social and Cultural
  - The failure to resolve all legacy issues prior to commencement of project activities and the resulting uncertainty that this created constituted non-compliance with the requirements of the Policy on Involuntary Resettlement.

- The shortage of systematically collected data about the status of the project-affected people before commencement of the projects made it difficult to confidently determine if the resettlement plan met all of the requirements of the applicable policies. This resulted in the finding that the AfDB failed to comply with the Policies on Involuntary Resettlement, Gender, and Poverty Reduction.
  - The appointment of only one Witness NGO to be both the independent monitor of the resettlement process and a participant in the decision making process that dealt with grievances arising from the resettlement, failed to comply with AfDB's applicable policy requirements.
  - While it is not clear that the deficiencies in consultation in these projects amount to a non-compliance, the Panel was concerned about AfDB management's failure to include an assessment of the adequacy of the consultations in the Bujagali Hydropower Project and Bujagali Interconnection Project appraisal reports.
- Environment
    - The Panel found that the cumulative effects of the cascade of dams of which this project will be part have not been adequately addressed in the project's Strategic Environmental Assessment (SEA). The AfDB's procedures do not address cumulative impacts and AfDB's only formal policy concerning cumulative impacts is not applicable to BHP since it is treated as a private sector project. Although this is not an instance of non-compliance, the Panel believes that the analysis of cumulative impacts is a best practice in environmental risk management.
    - Although the Kalagala Falls biodiversity offset was required for compliance with applicable World Bank policy, the Panel was concerned that there is no long-term management plan for ensuring that the offset achieves its environmental and socio-economic mitigation functions.
    - The Panel found that there was a failure to consider all possible alternatives for minimizing adverse impacts in Mabira and Kifu forest reserves, in particular the possibility of overlapping the two transmission lines, which could result in a significant decrease in the total area of forest reserve affected. The Panel cited the failure to document consideration of this option as the basis for its rejection as an instance of non-compliance with Annex 10 of AfDB's Environmental Procedures for Public Sector Projects.
    - The Panel concluded that the proposed plan to offset habitat and biodiversity loss due to the BIP was too vaguely stated and poorly developed to constitute an adequate mitigation or environmental management plan. Although there are no specific AfDB policies with which the Bank failed to comply, the Panel believes that best practices were not followed.
    - The Panel found that climate change was not addressed in the Bujagali documentation. However, in the absence of a specific AfDB requirement, a finding of non-compliance cannot be made. Based on the unfavorable hydrological conditions during 2000-2005, and the increasing global evidence of climate change impacts on water resources, AfDB management should have devoted special attention to investigating hydrological risks relating to climate change and reflecting results in the Project Appraisal.
  - Economic
    - While the Panel found that the hydrology issues were addressed in the Economic and Financial Study (PPA), it concluded that AfDB management are not in compliance with Operations Manual 600 (OM600) because they did not include adequate information in the Bank's own appraisal documents on hydrological sustainability and related economic impacts.
    - AfDB Management did not fully comply with the Resettlement Policy which requires that the project costs include the "full cost of all resettlement activities, factoring in the loss of livelihood and earning potential among affected peoples."
    - The BHP Investment Proposal does not clarify how it resolved the discrepancy in the interpretation of the Agreed Curve between the SEA and the PPA Study. While not strictly inconsistent with Bank policies, it represents a failure of the Bank management and staff.
    - The novel interpretation of the existing international agreements dealing with water release from Lake Victoria adopted by the PPA Study is inconsistent with the standard interpretation cited in the BHP-IP. Since the application of these different interpretations could affect the overall result of the

- economic analysis, AfDB management should have explained the possible impact of the different interpretations of the Agreed Curve on the economic and financial viability of the project.
- The AfDB failed to comply with the applicable policies which require AfDB staff to provide full explanations and justification for the selection of Bujagali in the Bank's appraisal documents.
- AfDB management and staff have not complied with OM600 on project sustainability and risk and sensitivity analysis.
- AfDB management and staff have not complied with applicable policies on poverty issues in its project appraisals.

## Chad/Cameroon

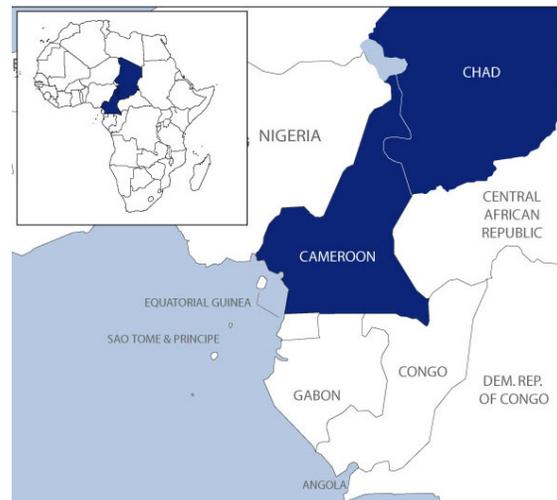
### *Petroleum Development and Pipeline Project*

#### Project Description:

USAID has reported on the Chad-Cameroon Petroleum Development and Pipeline Project in previous MDB Reports to Congress during the period of time it was actively proposed for World Bank financing. The project sponsors are ExxonMobil (the operator)-U.S. (40% private equity), Petronas-Malaysia (35% private equity), and ChevronTexaco-U.S. (25% private equity). The project was approved in June 2000.

The project entails three distinct components:

1. Development of approximately 500 wells in three oil fields (Miandoum, Kome, and Bolobo) in the Doba basin in southern Chad (almost double the 287 wells originally planned).
2. Construction of a 1,070 km (650-mile) buried pipeline through Cameroon to the coast.
3. Installation of an off-shore terminal facility in Cameroon which consists of a floating storage and off-loading vessel with associated marine pipelines.



The oil field development component is financed and carried out by Exxon (Esso Exploration and Production Chad, Inc.-EEPCI), on behalf of the three-member oil consortium. The pipeline is owned and operated by two joint-venture companies supported by World Bank financing: in Cameroon (Cameroon Oil Transportation Company-COTCO) and in Chad (Tchad Oil Transportation Company-TOTCO). The oil consortium jointly holds about 80% of the shares of the pipeline companies. The Government of Chad holds minority interests in both pipeline companies while the Government of Cameroon holds a minority interest in the Cameroon pipeline company. Both governments receive revenues from these holdings (financed through about US\$ 90 million in loans from the World Bank) and from royalties (to Chad), transit fees (to Cameroon), and taxes (to both governments).



- Thailand – Tenasserim-Western Forest Complex
- Vietnam – Ngoc Linh-Xe Sap (Central Annamites)

Hydropower development and mining concessions are raised as key issues by stakeholders in ensuring the success of the BCI. For example, in Cambodia's Southern Cardamom Mountains, there are 13 hydropower sites proposed. The Japan International Cooperation Agency (JICA) study to prioritize hydropower projects identified two potential hydropower developments within the Cardamom's as part of its top 10 priority list (Middle Stung Russey Chrum and Stung Kep II) and another that is upstream in the same watershed as the Middle Stung Russey Chrum. Reportedly, four hydropower projects within the Cardamom Mountains have been approved by the Government of Cambodia and are currently in various stages of development. The number of illegal land concessions in Phnom Samkos Wildlife Sanctuary is reported to be increasing, mainly due to the expectations of hydropower development in the southern area. Another example in Cambodia is in the Mondulkiri Biodiversity Corridor where a number of mining concessions and hydropower projects are being planned. Examples of hydropower projects include the Sre Pok 4 Project, which will submerge areas in the Mondulkiri Protected Forest (an eco-lodge site) and the Lower Sre Pok 3 Project, which submerges a large area in the Lomphat Wildlife Sanctuary (home to a number of globally threatened species including Saurus crane and the Irrawaddy dolphin).

These types of concerns are not only restricted to Cambodia. In Vietnam, the ADB is financing Song Bung 4 Hydropower Project (Section I of this Report) which will partially inundate the Song Thanh Nature Reserve, located in the corridor endorsed in the biological conservation corridor initiative by the Greater Mekong Subregion Governments Summit in 2005. Key impediments to ensuring a balance of environmental and economic interests and maintaining the integrity of these biodiversity corridors are the absence of transparency, public release, and consultation of environmental impact assessments, and cumulative impact assessments.

ADB documents state that cumulative impact assessment reports of at least two selected sections of the GMS economic corridors have been completed, in addition to impact assessments of hydropower, roads, and tourism development strategies by 2007. However, these reports, if they have been completed, do not appear to be available on ADB's website. Without access to these assessments it is difficult to see how the BCI will be successful, given the number of infrastructure and extractive industries planned within these corridors.

## **Cambodia**

### *Hydropower Development and Transmission Lines*

Both ADB and WB are involved in the development of Cambodia's energy/hydropower sector. The two banks are financing transboundary and internal transmission lines and substations which will evacuate power from various hydropower generation facilities, initially outside of Cambodia. It is planned that these lines will be used in the future to evacuate power from generation facilities that will be constructed in Cambodia. At the last regional consultation on the Mekong Regional Commission hydropower program (September 2008), the ADB presentation stated that the hydropower resources justify the Greater Mekong Subregion power market and the power market will in turn promote hydropower in the GMS.

The Government of Cambodia (GoC) is beginning to develop its country's hydropower potential for both domestic use and for export markets in Thailand and Vietnam. Although Cambodia is currently an importer of electricity, recent news articles have quoted Cambodia's foreign minister Nor Namhong expressing his desire to develop his country into the "battery of Southeast Asia." The Government of Laos has also expressed the same goal.

A 2003 plan estimated Cambodia's potential energy output at 10,000 megawatts (MW), with nearly half of that coming from projects that would be situated along the Mekong River. Technical hydropower potential has been calculated as 6,695 MW. The Mekong mainstream potential is calculated to be 3,580 MW (53.5%), while the Mekong tributaries could provide 1,771 MW (25.5%) and sources outside the Mekong Basin (e.g. Cardamoms) could provide 1,344 MW (20%). With respect to these hydropower projects on the Cambodian section of the Mekong mainstem, GoC officials have stated in news reports that Cambodia has nothing to lose should Laos move ahead with its plans to put hydropower projects on the Laotian Mekong mainstream.

As part of Cambodia's process to develop its hydropower potential, JICA funded a hydropower development plan that evaluated 32 potential projects. The screening criteria for these initial projects included socio-economic, natural environment, technical, financial, and speed of implementation aspects. As a result of the screening, 10 projects were identified that could meet forecasted demand (about 2,300 MW in 2024) if combined with thermal plants and power interchange in the GMS. Based on the information provided describing the process, it appears that a number of key elements were not taken into account in the analysis. For example:

- The analysis focused only on the specific projects and did not consider cumulative environmental and social impacts.
- The impacts of reduced flow of the tributaries to the Mekong due to hydropower projects were not considered. The importance of this issue is illustrated in the Se San tributary, which accounts for 16% of the flow into the Mekong. Approximately 23 hydropower projects are either in operation, under construction, or planned for the Se San River in (Vietnam (8), Laos (8) and Cambodia (7)).
- Most of the hydropower projects JICA identified are located within protected areas, national parks, or wildlife sanctuaries or within ADB's Biodiversity Corridors Initiative.

Finally, the GoC does not appear to be following JICA's proposed hydropower development plan – for example, a May 2008 news article highlights that GoC is looking for an additional US\$ 3.2 billion in private investment for 14 dams. Additionally, one project that is under development – Stung Tatay – was determined in the JICA study to not be economically viable. Unfortunately, this seems to be similar to the situation Laos is facing, where projects are approved to go forward based on availability of financing.

As hydropower projects are approved by the GoC, there is limited or no information being provided to civil society. The Satay and Chaum hydropower projects (to be developed by Chinese companies) were approved by the National Assembly without public consultation.

## **Section 3: MDB Watch List**

USAID continues to monitor the status of the following projects, since the MDBs continue to show various levels of interest in supporting them. As of March 20, 2008, these projects were not formally under appraisal.

### **Cambodia**

#### *Environment and Protected Areas Management Project – Virachey National Park*

The World Bank financed an Environment and Protected Areas (PA) Management Project in 2000. One component of the project was to develop and pilot activities to test approaches for a long-term program for biodiversity protection. Activities included enhancing park infrastructure, park management planning, staff development programs, community education and outreach, and park protection initiatives at Virachey National Park. Although the project ended in 2007, at the time of writing this report there an evaluation of the project had not been conducted. After this project closed out, the Cambodian Government granted mining concessions on nearly 70% of the park. The World Bank has a follow-on Environment and Protected Areas Project that has been in the pipeline since April 2007. The project proposes to expand activities initiated in Virachey National Park to four additional protected areas which have not been identified; World Bank documents stated that those areas would likely fall within the eastern and northern provinces of Preah Vihar, Stung Treng, Ratanakiri, and Mondulakiri. IDA commitment is US\$10 million. Based on Bank documentation, lessons from the first project and other donor experiences will inform the detailed project design in the Project Appraisal Document. It is unclear how the new PA law, which requires an economic evaluation of protected areas before demarcating core zones, will impact the success of this follow-on project. Estimated Board date is November 4, 2008.

### **Vietnam**

#### *Trung Son Hydropower Project*

The Government of Vietnam has approached the World Bank to finance the 250 MW Trung Son Project, on the Ma River in Thanh Hoa Province in northwestern Vietnam. The proposed dam and reservoir will be downstream from Laos. The dam will create a reservoir of 150 million cubic meters, inundating primary forest land. Approximately 381 households (~1,900 people), mostly of Thai minority descent, are expected to be directly affected. Total project costs are estimated at US\$ 310 million, of which ~US\$ 17 million is for environmental management and resettlement. The Government of Vietnam has requested World Bank financing of up to US\$ 264 million. Responsibility for project preparation and management in Vietnam has been assigned to EVN's Hydropower Management Board 2. Safeguard policies on natural habitats, involuntary resettlement, indigenous peoples, safety of dams, and international waters, in addition to the category A EIA, are triggered for this project. Estimated Board approval date is January 2009.

## **Laos/Vietnam**

### *Ban Sok-Pleiku Power Transmission Project*

This ADB US\$1 million technical assistance loan was approved by the Board in August 2008. The feasibility studies, once completed, will determine the technical, economic, and financial viability, and the social and environmental impacts of the proposed transmission lines and associated substations. The Project includes (i) construction of about 65 kilometers (km) of 500 kV double-circuit transmission line from Ban Sok substation in Laos to the Vietnamese border; (ii) construction of about 100 km of 500 kV double-circuit transmission line from the Laos border to the existing Plei Cu substation in Viet Nam; (iii) construction of the 500/220kV Ban Sok substation in Laos; and (v) extension of the 500 kV Plei Cu substation in Viet Nam. Power from the following generation facilities will be exported through the one single transmission line: Dak Emeule (138MW), Sekong 3A&3B (152+96MW), Sekong 5 (253MW), Sekong 4 (440MW), Xe Kaman I (468MW), and Nam Kong I (240MW). It is reported that Cambodian groups have raised concerns about the transboundary impacts of some of these projects on fisheries in the lower Mekong Basin.

## **Laos**

### *Technical Assistance for Capacity Development in Hydropower and Mining Sectors*

The World Bank is developing a US\$ 7 million project to strengthen Laos' capacity for project planning, transparent mobilization of revenues from hydropower resources, and implementation of mining regulation, management of mineral resources, improved practices of alluvial and small-scale mining, and increased transparency in revenue management. Success will be measured through the adoption of river-basin planning in all river-basins, applications of lessons learned through Nam Theun 2 to other hydropower projects in the country, adoption of mining regulations, implementation of the Extractive Industries Transparency initiative, transparent award of future concessions for mining and hydropower investments, and regulation of alluvial and small-scale mining. Estimated appraisal date is October 15, 2008 and estimated Board date is May 12, 2009.

### *Nam Ngiep 1 Hydropower Project*

ADB appraisal for this project is to take place September 2008 with Board date project projected for 2009. ADB financing is estimated at US\$ 35 million. A feasibility study conducted by Nippon Koei in 2002 reported that the project would affect approximately 13,000 people, displacing 1,600 in addition to causing serious downstream impacts on fisheries and aquatic life.

## **Section 4**

### **MDB Policies**

In addition to reviewing MDB projects, USAID takes part in the Treasury-led interagency process of reviewing MDB policies, guidelines, strategies, and action plans. Since these documents ultimately provide the framework for MDB-supported projects, it is important to ensure that they contain adequate provisions to guarantee environmentally and socially-sound projects.

Asian Development Bank Safeguard Policy Update: The ADB is undertaking a review of its three safeguard policies – environment, indigenous peoples, and involuntary resettlement, with the overarching goal of enhancing their effectiveness.



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