

Highlights from the Multilateral Development Banks' Water and Power Pipelines September – November 2010

Compiled by International Rivers

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Note: All monetary figures are given in US dollars.

WORLD BANK

NEW PROPOSED PROJECTS

Sources: World Bank Monthly Operational Summary

<http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/PROCUREMENT/0,,contentMDK:50004501~menuPK:63001537~pagePK:84269~piPK:60001558~theSitePK:84266,00.html>

and Projects Portfolio

<http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/0,,menuPK:51563~pagePK:95873~piPK:95910~theSitePK:40941,00.html>

Armenia

Loriberd Hydro Power

The objective is to increase the supply of clean, renewable energy. Project Concept Review Meeting scheduled for 27 April 2011. Identification is underway. Environmental Assessment Category A. \$40 million (IBRD).

Azerbaijan

Water User's Association Development Support Project

The tentative PDO is to improve the effectiveness and financial viability of irrigation water distribution and management in the project areas. The PDO would be achieved through capacity building and support to WUAs, WUA support units, and the AIOJSC, and through rehabilitation of on-farm I & D infrastructure. Environmental Category B. \$80 million (IBRD/IDA Specific Investment Loan).

Brazil

Sergipe Water Project

The project aims to improve environmental conditions in the Sergipe river basin through investments to recover degraded areas and promote the efficient and sustainable use of water resources. The project aims to tackle the challenge of revitalizing the Sergipe river basin through a balanced approach of integrated investments in water infrastructure, irrigated agriculture and Water Supply and Sanitation (WSS) services coupled with strengthening of the institutional and political framework and improving the integrated management of water resources and the environment in the State of Sergipe. The project will be implemented by the State secretariat of environment and water resources, through the project technical administration unit, and by the State water supply and sanitation company. Environmental Category A. \$70.28 million (IBRD Specific Investment Loan).

China

Shandong Renewable Energy

The objective is to support Shandong Province in the scale-up of renewable energy development and reduce the greenhouse gases emission. Environmental Assessment Category B. \$100 million (IBRD).

China

Sichuan Wudu Irrigated Agriculture Development Project

The proposed project would include the construction of irrigation works in three counties (Jiangyou, Zitong and Yianting counties) of Mianyang Prefecture, including construction of Jinnong sub-main canal and 11 branch canals with the total length of 373.9 km which would covers an irrigation area of 53,000 hectares. It will include also construction and rehabilitation of the on-farm system including laterals, sub-laterals and farm ditches covering the above area. The primary impact survey showed that more than 3600 *mu* (240 ha.) of land acquisition and 2800 *mu* (187 ha.) of temporary land occupation would be caused by this construction, and the land acquisition would affect about 1873 people who needed full rearrangement in economic production. The project will divert water from two reservoirs formed with Wudu and Jinfeng Dams: Wudu Dam is under construction and will be completed by the end of 2010, and Jinfeng Dam is to be constructed with government internal funding during the project implementation. The Jinfeng reservoir and the Xizi main canal would cause the requisition of about 9,427 *mu* of land and relocate a total of 5,616 people. Environmental Category A. \$100 million (IBRD Specific Investment Loan).

India

National Ganga River Basin Project

The objectives of the proposed National Ganga River Basin Project are: (a) to operationalize and support the NGRBA and its associated state-level institutions, to ensure their capacity to plan and implement a multi-sectoral river water quality improvement program in a basin context; and (b) to reduce pollution loads into the river in selected investment locations. The Bank is currently supporting several of the Ganga basin states including the Vishnugad Pipalkoti Hydroelectric Project. Environmental Category A. \$1 billion (IDA Specific Investment Loan).

India

Second Karnataka Watershed Development

The objectives are to improve selected watersheds, advance rural livelihoods, strengthen capacities of local institutions, and demonstrate successful convergence of integrated watershed management with MNREGA soil and water conservation operations. Environmental Assessment Category B. \$125 million (IDA Credit).

Mekong

Integrated Water Resources Management Project

The development objectives of the Integrated Water Resources Management (IWRM) Project are to contribute to regional sustainable IWRM for the Mekong River Basin through two interim objectives: (a) the implementation of the approved water utilization rules/procedures and further development of the regional tools to assess infrastructure impacts on water quality and quantity; and (b) support for policy development and capacity building at the national level towards regional IWRM. Environmental Category B. \$30.6 million (IDA Specific Investment Loan).

Mozambique

MZ PROIRRI Sustainable Irrigation Development

The Project Development Objective is to increase the irrigated area in the targeted Provinces and to enhance agricultural productivity on smallholder farms for selected food and high-value crops. The proposed operation targets primarily smallholder producer organizations in Sofala and Manica provinces as well as around the city of Maputo. Investments would include (i) mostly rehabilitation (and to a lesser extent new construction) of small dams (less than 8m high by Mozambican standards) and irrigation schemes, (ii) construction of community-managed micro dams for rainwater harvesting (with a focus on women), and (iii) rehabilitation of rural/feeder roads and supply of electricity to the pump stations. Environmental Category B. \$70 million (IDA Specific Investment Loan).

Nepal

Second Kabeli "A" Hydroelectric

The objective is to support the creation of new electricity generation capacity in Nepal. Project preparation is underway. Environmental Assessment Category A. \$30 million (IDA Credit).

Nigeria

Irrigation and Water Resources Management

The objective is to improve the performance and financial sustainability of irrigation service delivery and water resource management in pilot States. Environmental Assessment Category B. \$160 million (IDA Credit).

Vietnam

Managing Natural Hazards Project

The overarching objective of the proposed project is to strengthen national, provincial, and local capacities for natural disaster prevention, preparedness, and mitigation. This objective would be achieved through strengthening the capacities of national, provincial and local disaster risk management, improving weather forecasting and early warning systems, and putting in place effective structural measures to reduce typhoon and storm risks in high priority areas. Rehabilitation of selected dams to improve their safety would be eligible. Environmental

Category B. \$150 million (IDA Specific Investment Loan).

INTERNATIONAL FINANCE CORPORATION

NEW PROPOSED PROJECTS

Source: IFC Projects Database

<http://www.ifc.org/projects>

<http://www.ifc.org/disclosure>

Honduras

La Vegona Hydroelectric Project

<http://www.ifc.org/ifcext/spiwebsite1.nsf/f451ebbe34a9a8ca85256a550073ff10/bf1f10a4885f6773852577d800742e35?opendocument>

The La Vegona power project comprises a 38.5 MW run-of-the-river hydroelectric development on the Humuya or Comayagua River, 8 kilometers downstream from the existing 300MW Francisco Morazan (“El Cajon”) hydroelectric project. The Project is expected to produce an average of approximately 172 GWh per annum. The Project will sell electricity to industrial clients as well as the state-owned utility ENEE under long-term power purchase agreements. The Project is being developed by Compañía Hondureña de Energía Renovable S.A. de C.V., a Honduran company created for the purpose of developing the Project. The total cost of the project is estimated to be up to \$126 million. IFC’s proposed investment for its own account consists of a \$20 million A loan, a \$10 million C Loan. IFC is also expected to mobilize additional funds from other financial institutions to complete the financing. Environmental Category B. Projected board date: December 13, 2010.

Peru

Cheves Hydro

Empresa de Generación Eléctrica Cheves S.A. is developing a run-of-river 168 MW hydroelectric power generation plant, along the Churin and Checra rivers, approximately 245 km north of Lima, Peru. The Project is expected to generate 838 GWh annually on average, yielding a plant utilization factor of around 57%. The Project comprises the construction of a total of 18 km in tunnels (including a water conveyance system), an underground power house, and a 77 km transmission line to connect the project to the National Interconnected System. The Project has been in development for over 10 years and Cheves has now secured all necessary key permits for its development, including a Definitive Concession (required for electric power generation activity), and performed the required Environmental & Social Assessments in accordance with local regulation. The Company has also secured 8 Power Purchase Agreements with electricity distribution companies for a period of 15 years starting in 2014. The Project’s cost is estimated at around \$400 million. IFC is expected to provide up to \$100 million between senior and subordinated loans, and to mobilize up to \$200 million through its B loan program. Environmental Category A. Projected board date: December 2, 2010. Status: pending approval.

ASIAN DEVELOPMENT BANK

NEW PROPOSED PROJECTS

Sources: ADB Business Opportunities, Proposed Projects

<http://www.adb.org/Projects/summaries.asp> and

ADB Projects Search, Proposed Projects
<http://www.adb.org/Business/Opportunities/prpprjcs.asp>

Bangladesh

Public-Private Infrastructure Financing Facility

The Public-Private Infrastructure Development Facility (PPIDF) will involve ADB's financing of a US dollar denominated loan of up to US\$165 million to Infrastructure Development Company Limited (IDCOL). The PPIDF will have two purposes, namely: (i) the financing of infrastructure sub-projects implemented by the private sector; and (ii) providing funds to IDCOL's successful renewable energy program which was started under the Rural Electrification and Renewable Energy Development Project (REREDP), originally funded by the World Bank. Grant \$1.3 million (Climate Change Fund).

China

Risk Mitigation and Strengthening of Endangered Reservoir in Shandong Province

<http://www.adb.org/Projects/project.asp?id=40683>

The proposed project will rehabilitate 9 reservoirs to meet modern technical standards for safety. Among them are 2 large and 7 medium-sized reservoirs. Six of these reservoirs utilize clay-core earth-fill dams, 1 reservoir utilizes a homogeneous earth-fill dam, 1 reservoir utilizes a clay-core earth-fill dam combined with a homogeneous earth-fill dam, and 1 reservoir utilizes a masonry dam combined with a homogeneous earth-fill dam. Technical Assistance \$300,000 (Special Fund); Loan \$29.8 million (Ordinary Capital Resources).

India

Capacity Development for Power Grid

<http://www.adb.org/Projects/project.asp?id=44406>

Technical Assistance \$225,000 (Special Fund).

Indonesia

Water Resources and River Basin Management

<http://www.adb.org/Projects/project.asp?id=40497>

Technical Assistance \$1.8 million (TBD).

Laos

Nam Ngum 3 Hydropower Project

<http://www.adb.org/Projects/project.asp?id=41385>

This project is for the construction and operation of a rockfill dam and hydroelectric power plant with 440MW maximum output on the Nam Ngum River, a tributary of the Mekong, on a 25-year build-operate-transfer (BOT) basis. The power generated is to be sold to the Electricity Generating Authority of Thailand. Participating parties include the Ratchaburi Electricity Generating Holding PCL., GMS Lao Co., Ltd. and Marubeni Corporation Co., Ltd. The project is expected to start the commercial operation date in order to strengthen the country's power system in 2017. Projected board approval date: May 31, 2011. Loan \$70 million (Ordinary Capital Resources).

Laos

Small and Mini Hydroelectric Development Project

<http://www.adb.org/Projects/project.asp?id=42320>

The impact of the project will be for private and public sector to provide clean and renewable electricity generated at medium, small, and mini hydroelectric power plants to rural communities in remote areas. The outcome of the project will be a project design, with CDM registration, of the hydroelectric power plants that the Government of Lao PDR and ADB will agree upon to be used as model for further replication at other small-scale hydropower projects. Grant \$10 million (Asian Development Fund); Loan \$10 million (Asian Development Fund).

Nepal

Upper Seti Hydropower

<http://www.adb.org/Projects/project.asp?id=43281>

Physical investment and project implementation for Upper Seti hydropower development. Generation of hydropower (127 megawatts) aims to alleviate the power crisis, particularly in the dry season, and enhance access to electricity for the poor. It will also be eligible for the Clean Development Mechanism for climate change. Since Nepal has a large potential for hydropower plants, this project aims to provide a knowledge base for subsequent similar projects in planning financial, technical, and safeguard measures in a sustainable manner. Grant \$2.5 million (Asian Development Fund). Loan \$100 million (Asian Development Fund).

Nepal

West Seti Hydroelectric Project

<http://www.adb.org/Projects/project.asp?id=41055>

The West Seti Hydroelectric Project (WSHEP) is a 750 MW storage scheme proposed on the Seti River in the Far Western Development Region (FWDR) of Nepal by West Seti Hydro Limited (WSH), the project proponent. The dam site is located 67 km upstream of the confluence of the Seti River with the Karnali River. The WSHEP will generate electrical energy (through an underground power station some 19 km downstream of the dam) throughout the year, storing excess wet season river flows in a reservoir and using this water to generate energy during daily peak electricity demand periods. The electricity will be exported to India under a Power Purchase Agreement (PPA), initialled in 2003 with Power Trade Corporation India Ltd (now called PTC India Ltd), and earn considerable export revenue for the project owner and the Government of Nepal (GoN). Project construction will occur over a period of 5.5 years (66 months), commencing with the construction of access roads to the work sites. Construction will commence after the tender documentation has been approved, the construction contract has been executed, finance is secured and all permits and approvals have been obtained.

An Environmental Impact Assessment (EIA) of the project was initiated in 1997 and the EIA report was approved in 2000 by the Government of Nepal's then Ministry of Population and Environment. This included an Environmental Management Plan (EMP) and a Resettlement Action Plan (RAP). Project activities have recently resumed, following a period of limited in-field project work. Current estimates show that 2,421 households (18,269 persons) will be directly affected by the project as a whole, which includes 296 households that will be affected by construction of the transmission line. The reservoir and downstream developments will affect 2,125 households. Of these, 1,680 will be affected by the reservoir and an estimated 445 by downstream project sites. An estimated 1,393 households will have to be resettled from the

reservoir area and downstream project sites. Loan \$45 million (Ordinary Capital Resources).

Pakistan

Renewable Energy Development

<http://www.adb.org/Projects/project.asp?id=34339>

The proposed loans will follow the multi-tranche financing facility (MFF) lending approach. The first tranche will cover three components, namely, clean energy development, feasibility studies and capacity development. The implementation period of the overall Renewable Energy Development Sector Investment Program (REDSIP) is estimated to be ten years. Part A includes the expansion of small hydro-power generating capacity by constructing 3 grid-connected power plants, each ranging from 2.6 MW to 36 MW in the Northwest Frontier Province (NWFP). This component will also include the construction of 5 small to medium hydro-power stations in Punjab Province and consulting Services for detailed design as well as implementation of Part A. Part B will undertake 8 feasibility studies of raw sites in both NWFP and Punjab. Part C: Capacity Development: Part C will support (i) training and capacity development of Project-related agencies in operating and maintaining new hydropower stations; (ii) external monitoring of safeguards; and (iii) various other financial management and human resource development activities within EAs and IAs.

The subprojects under the first tranche are: (i) Daral Khwar Hydropower in NWFP (ii) Ranolia Khwar Hydropower and (iii) Machai Canal Hydropower in Punjab (i) Chiannawaii Hydropower (ii) Deg Fall Sheikhpura Hydropower, (iii) Pakpattan Canal Hydropower, (iv) Okara Hydropower and (v) Marala Canal Hydropower. Land acquisition and resettlement impacts of proposed subprojects under the first tranche have been examined. Part A will require permanent acquisition of 11.78 hectares (ha) in NWFP, and temporary acquisition of 0.85 ha of 0.45 in NWFP, and 3.2 in Punjab. Part B and Part C will not require any acquisition of land or other property and therefore will not have any resettlement impacts. Land acquisition for Part A subprojects will affect 61 households, and 2 residential structures. Loan \$250 million (Ordinary Capital Resources).

Philippines

Decentralized Framework for Sustainable Natural Resources Management and for Operations and Maintenance of Rural Infrastructure

<http://www.adb.org/Projects/project.asp?id=42196>

The Philippine government has adopted sustainable development as a national policy for all environment and natural resources plans and programs. Towards this end, it has employed the integrated watershed management or the watershed ecosystem management approach. Technical Assistance \$1.3 million (TBD).

Philippines

Rural Community-based Renewable Energy Development in Mindanao

<http://www.adb.org/Projects/project.asp?id=44132>

Development of small scale renewable energy sources. Technical Assistance TBD.

Regional

Ensuring Sustainability of Greater Mekong Subregion Regional Power Development

<http://www.adb.org/Projects/project.asp?id=43293>

The Greater Mekong Subregion (GMS) countries are in the process of building capacity of their national institutions responsible for integrating the environmental issues in the power system planning and ensuring sustainable development of power sectors. The Asian Development Bank (ADB) is already supporting regional energy cooperation in the GMS through the 2007 regional technical assistance (TA) project Facilitating Regional Power Trading and Environmentally Sustainable Development of Electricity Infrastructure in the Greater Mekong Subregion. The 2007 TA, among other outputs, formulated the GMS Power Transmission Master Plan (the GMS master plan), which proposes building new power generation and transmission infrastructure facilities to satisfy the growing demand for energy in the GMS from 2010 to 2025. However, the master plan, which employs a traditional least-cost approach, needs to incorporate environmental and social impact assessments of the planned infrastructure facilities. Further there is a pressing need to build the capacity of key GMS agencies and utilities to manage and mitigate the social and environmental impacts of these facilities. In this regard, the governments of the GMS countries requested TA from ADB to undertake a strategic environmental assessment (SEA) of the GMS master plan. Technical Assistance \$1.4 million (TBD).

Vietnam

Northern Chu and Southern Ma Rivers Irrigation System

<http://www.adb.org/Projects/project.asp?id=40239>

About 76.2 km of new main canals will be constructed to gravity deliver water from the Cua Dat Reservoir to the command area. The many existing pumped irrigation schemes which presently draw water from the Chu and Ma rivers and local small dams, lakes and ponds will be converted into gravity systems. The Project will cover the following key areas: (i) construction of new and rehabilitation of existing irrigation and drainage infrastructure within the irrigation service area; (ii) support capacity building of the irrigation management companies and water user associations to improve operation and management (O&M) of the irrigation system; and (iii) provide extension services to beneficiary farmers. Participatory approaches for modernizing irrigation systems management will be adopted to improve system performance. Loan \$80 million (Asian Development Fund).

Vietnam

River Basin Water Resources Management and Development

<http://www.adb.org/Projects/project.asp?id=40196>

Technical Assistance \$1 million (Special Fund); Loan \$60 million (Asian Development Fund).

INTER-AMERICAN DEVELOPMENT BANK

NEW PROPOSED PROJECTS

Source: Projects Gateway, Projects in Preparation

<http://www.iadb.org/projects/index.cfm?language=English>

Bahamas

Sustainable Energy Program for the Bahamas

<http://www.iadb.org/en/projects/project,1303.html?id=BH-L1025>

The general objective of the Sustainable Energy Program (SEP) for the Bahamas is to support

the financial and operational sustainability of BEC and the diversification of the electricity matrix in the Bahamas. Category A, 2011. Ordinary Capital Investment Loan \$30 million.

Chile

Sustainable Energy in Chile

<http://www.iadb.org/en/projects/project,1303.html?id=CH-L1048>

Category A, 2011. Ordinary Capital Investment Loan \$70 million.

Ecuador

Sopladora Hydroelectric Project

<http://www.iadb.org/en/projects/project,1303.html?id=EC-L1091>

Support the GoE and the Executing Agency to finance the Sopladora Hydroelectric Project. Ecuador's state hydro generator Hidropaute awarded consortium China Gezhouba Group-Fopeca the contract to build and put into operation the 487 MW Sopladora hydropower project, wire services reported. The contract is worth \$672 million, which the Export-Import Bank of China will help finance, according to wire reports. Sopladora will use water from the Paute River in Azuay and Morona Santiago provinces. Category A, 2011. Ordinary Capital Investment Loan \$50 million.

Ecuador

Support to the Hydroelectric Power Generation Plan in Ecuador

<http://www.iadb.org/en/projects/project,1303.html?id=EC-L1092>

The project is aimed to support the development of the Ecuador's Electric Generation Expansion Plan on the basis of the country's water resources, contributing to the promotion of small and medium hydroelectric projects. Category A, 2011. Ordinary Capital Investment Loan \$120 million.

Nicaragua

Integral Management of the Apanas and Asturias Watershed

<http://www.iadb.org/en/projects/project,1303.html?id=NI-X1005>

The GEF operation seeks to promote the sustainable management of the land, forest and biodiversity of the Apanas and Asturias watershed. This watershed is of paramount importance for hydroelectric generation and its appropriate management will help reduce CO2 emissions. Category A, 2011. IDB/Global Environment Facility Nonreimbursable \$4,040,900.

Trinidad and Tobago

Sustainable Energy for Trinidad and Tobago

<http://www.iadb.org/en/projects/project,1303.html?id=TT-L1023>

Support the Government of Trinidad and Tobago in the preparation of a sustainable energy program that will focus primarily on renewable energy, energy efficiency and conservation and optimization of fossil fuel based production and use. Category A, 2011. Ordinary Capital Policy Base Loan \$35 million.

AFRICAN DEVELOPMENT BANK

NEW PROPOSED PROJECTS

Source: ADB Business Bulletin

http://www.afdb.org/portal/page?_pageid=473,969595&_dad=portal&_schema=PORTAL

No new projects were added in this issue.