

THE WORLD BANK'S BIG DAM LEGACY

Glenn Switkes, IRN

House flooded by the Yacretá Dam reservoir.

The World Bank has traditionally been the most important international funder of large dams. Since its founding, the Bank has supported more than 550 dams around the globe, with over US\$90 billion (in 2007 dollars) in loans and guarantees. World Bank-backed dams include some of the world's worst development disasters, and their legacy lives on.

In the 1990s, as the Bank faced mounting criticism about the impacts of its projects, World Bank dam funding declined. Together with other stakeholders, the Bank established an independent high-level commission, called the World Commission on Dams (WCD), to evaluate the development impact of dams and formulate recommendations for future projects.

A RENEWED HIGH-RISK STRATEGY

The WCD published its landmark report in 2000. Yet in the seven years since, the World Bank has not even tried to implement its ground-breaking recommendations. Instead, in 2003 it adopted a renewed high-risk strategy for the infrastructure sector, and began promoting large dam projects once again. In fiscal year 2007, the Bank approved US\$814 million in loans, guarantees and carbon finance for nine hydropower projects. This is US\$132 million more than it provided for all renewable energy and energy efficiency projects combined during the same period.

Renewable energy and energy efficiency projects are more effective in reducing poverty than large hydropower projects, often with a significantly smaller social and environmental footprint, including lower greenhouse gas emissions. Similarly, decentralized, low-technology water supply solutions, such as

rainwater harvesting and drip irrigation, have a better track record in increasing agricultural productivity and benefiting rural communities than large-scale dam and irrigation projects. Yet the Bank's preference for centralized, top-down approaches crowds out this "soft path" to water and energy solutions.

THE UNRESOLVED LEGACY OF WORLD BANK DAMS

As the World Bank plunges back into the big dam business, the legacy of its past dam projects remains unaddressed. This legacy includes the displacement of at least 10 million people, lost livelihoods, damaged ecosystems, corruption, massive debt burdens and, in some cases, serious human rights violations. There are, for example, the Tonga people forced from their lands by the Kariba Dam in the 1950s who still await assistance, and the Guatemalan farmers seeking justice for the murder of hundreds of family members who opposed the Chixoy Dam. There are the people who were impoverished by the Lesotho Highlands Water Project, while multinational companies enriched themselves through corrupt dealings. And there are the coastal communities in Pakistan who were harmed by a seriously deficient World Bank drainage project and the floods and devastation it caused.

The World Commission on Dams found that “in too many cases an unacceptable and often unnecessary price has been paid to secure the benefits [of dams], especially in social and environmental terms.” It recommended addressing the legacy of existing dams by achieving the following benchmark: “Outstanding social issues associated with existing large dams are identified and assessed; processes and mechanisms are developed with affected communities to remedy them.”

CREDIBILITY AT STAKE

The World Bank currently lacks the necessary tools to address the social and environmental legacy of its projects. The Bank rarely monitors projects after their physical completion. It can-

not provide grants, but only new loans or credits, to compensate affected people for their losses. The Bank’s Inspection Panel, which has documented harmful violations of World Bank policies, has no monitoring mandate to ensure that remedial actions are implemented.

The World Bank defends its renewed zeal for large dams with assertions that it has learned from past mistakes. This claim is not credible as long as the legacy of the Bank’s dam projects remains unresolved. International Rivers Network and its partners will continue to hold the Bank accountable for these failures. The World Bank urgently needs to develop the tools required to address its big dam legacy.

GENERAL RECOMMENDATIONS

- The World Bank should work directly with communities who have been harmed in past Bank-funded projects to develop rehabilitation plans and reparations processes. The Bank should provide reparations from its own resources.
- The World Bank’s Inspection Panel mandate should be extended to include the review and monitoring of proposed remedial actions, and reporting to the Board of Executive Directors on their implementation.
- The World Bank should help develop an enforceable compliance system for addressing the needs of dam-affected people. As recommended by the WCD, such plans should include benchmarks for success, and the use of financial guarantees, performance bonds or trust funds to underwrite the commitments to affected people. Compliance with promises on resettlement and rehabilitation will be strengthened if truly independent monitoring bodies, which include members of civil society, are created. The choice of such bodies should be left to the affected communities.
- The World Bank should overhaul its system of evaluating options for meeting water and energy needs. All options should be assessed on a level playing field, and long-term social and environmental costs should be incorporated into economic analyses.

KARIBA DAM, ZAMBIA AND ZIMBABWE

The Kariba Dam on the Zambezi River is one of Africa's largest dams, and the scene of perhaps the continent's worst dam resettlement operation. In the late 1950s, at least 57,000 Tonga people living along both sides of the river were ousted for the Kariba Dam. As the 280 square-kilometer reservoir was filled, a massive effort to rescue wildlife from the rising waters was undertaken yet the people were ignored. They were forced onto infertile land, separated from their families, and left to manage by themselves. The Tonga people were given little or no compensation for their losses, and promises of electricity and water for irrigation never materialized. Since resettlement, the Tonga have not benefited from the dam, the reservoir's fisheries or from tourism in the area. The Tonga people continue to go hungry on the lands to which they were resettled.

In 1997, the Bank included the Gwembe Tonga Development Project (GTDP), a rehabilitation project for the Zambian Tonga, as part of a large power sector loan. Although the power sector project involved numerous financiers, the Bank was unable to secure more than a third of the US\$15.1 million budget for the rehabilitation project. The Bank's 2006 completion report found that the work anticipated under the GTDP



The Tonga people in Sinazongwe, Zambia must gather water by hand every day. Electricity finally arrived in Sinazongwe in 2005, but only to special destinations such as the Chief's home.

IRN/ Karen Retief

actually required US\$172 million, eleven times the original budget. The electricity, a few schools and other small projects provided by the GTDP did not begin to compensate for people's losses, and were 50 years overdue.

In northern Zimbabwe, the World Bank has made no attempts to address the food insecurity, cultural deterioration, and socio-economic vulnerabilities of the Tonga community. The trauma of displacement has exacerbated other causes of community suffering, namely the AIDS epidemic and hyperinflation. One AIDS worker described the Zimbabwean Tonga as a people "at the brink of total collapse."

RECOMMENDATION

The Tonga communities displaced by Kariba Dam continue to seek adequate rehabilitation and redress. The communities want the World Bank to engage in a discussion with them about developing and financing an adequate rehabilitation program.

CHIXOY DAM, GUATEMALA

The Chixoy-Pueblo Viejo Hydroelectric Dam Project, financed by the World Bank and the Inter-American Development Bank, was built on the Chixoy River in the early 1980s. The Chixoy Dam and its reservoir forcibly displaced more than 3,500 Maya community members and resulted in the loss of land and livelihoods to 6,000 other families in the area. In 1982, 444 farmers were brutally murdered by the Guatemalan military government for opposing the construction of the Chixoy Dam.

For more than 20 years, communities affected by the Chixoy Dam have demanded reparations for damages caused by the project. They want the World Bank to acknowledge its responsibility for the Chixoy legacy, and to work to develop and fund a reparations plan. The Bank has agreed to participate as an observer to the commission to verify damages, which hopefully will result in negotiations for reparations.

RECOMMENDATION

The World Bank should acknowledge its responsibility for financing a project that caused enormous harm to affected people. It should expedite the damage verification and negotiation process, and help to finance the reparations plan proposed by affected communities.



Monti Aguirre, IRN

Maya-Achi children at Chixoy Dam reservoir.

YACYRETÁ DAM, ARGENTINA AND PARAGUAY

The Yacyretá Dam on the Paraná River separating Argentina and Paraguay has been under construction since 1979, and is still not complete. The project has already flooded out some 15,000 people, and the fate of an additional 80,000, who could be affected by the raising of Yacyretá's reservoir to its design level, remains uncertain. Yacyretá, for which the World Bank provided US\$878 million, was originally budgeted at US\$2.5 billion during the period of military dictatorships in Argentina and Paraguay. The project's total cost soared over the years, and has now exceeded US\$15 billion. In 1990, shortly following his election as Argentina's president, Carlos Menem called Yacyretá "a monument to corruption." But despite well-documented allegations that companies and politicians siphoned off public funds during Yacyretá's construction, no one has ever been brought to justice.

Inspection Panel complaints were filed from groups in Argentina and Paraguay in 1996 and 2002. Investigations revealed a number of Bank policy violations and confirmed that the reservoir had been routinely operating at above its "official" level, adversely affecting riverbank communities. Despite these findings, the World Bank has given tacit approval to the governments' plans to raise the level of Yacyretá's reservoir to its design level. Social and environmental mitigation plans are still not in place.

RECOMMENDATION

The World Bank should hold Argentina and Paraguay to prior agreements requiring that all potentially affected people are afforded adequate resettlement conditions and just compensation before the reservoir is filled. The Bank should also ensure that compensatory protected area offsets are fully implemented.

LESOTHO HIGHLANDS WATER PROJECT, LESOTHO

The Lesotho Highlands Water Project (LHWP) is a huge inter-basin water-transfer scheme comprised of five dams (two of which are built), 200 kilometers of tunnels blasted through the Maluti Mountains, and a 72-megawatt hydropower plant to supply power to Lesotho. The LHWP's primary purpose is to transfer water to Gauteng Province, the industrial heartland of South Africa. The World Bank has provided US\$165 million for the project since 1983.

The LHWP has been mired in bribery scandals since 1999. In 2002 and 2003, the Lesotho courts convicted Acres International of Canada and Lahmeyer International of Germany of corruption in the context of the LHWP. The World Bank delayed its decision to debar Acres for nearly two years after the conviction, allowing the company to receive at least four Bank contracts in the interim. In 2006, Lahmeyer was also debarred by the World Bank. In the three years between

Lahmeyer's conviction in Lesotho courts and its debarment by the World Bank, the company received at least 18 Bank contracts totaling nearly US\$15 million.

The LHWP has caused the vulnerable Highlands population to lose fields, grazing lands and access to fresh water sources. Their livelihoods have not been restored, and poor people have been pushed closer to the edge in their struggle for survival. More than 20,000 people were affected by Katse Dam, losing their homes, farmland or the use of communal grazing lands. Another 7,400 were affected by Mohale Dam. For those who lost houses, replacement housing took years to complete. Problems of erosion and the downstream effects of massive water diversions are disrupting ecosystems and people's livelihoods.

Although one of the project's four key goals was to "maximize the poverty reducing impact of LHWP," Lesotho has actually gotten poorer since the project began. Programs funded by the Bank have failed to help affected people recover from the project's impacts, and were rated "highly unsatisfactory" in the Bank's 2007 project completion report. The completion report also notes that the Bank's policies and procedures "do not provide sufficient time or resources for the preparation of large, complex projects such as the LHWP," particularly in "sensitive areas such as working with affected communities and assessment of environmental impacts at the front end of the projects in order to avoid problems later on."



Men affected by Katse Dam, the first dam built for the Lesotho Highlands Water Project.

RECOMMENDATIONS

The World Bank should improve its response to corruption by reducing delays in debarbing companies. It should debar companies involved in corruption on Bank projects even if the Bank has no direct contract with that company. The World Bank should also provide financial assistance to poor countries seeking to prosecute corruption in Bank projects.

The World Bank should revise its project preparation cycle to ensure adequate time and resources for conducting consultations and developing comprehensive plans to mitigate impacts on affected communities and the environment.

NATIONAL DRAINAGE PROJECT, PAKISTAN

Dams built both for irrigation and power generation and the construction of drainage systems for agricultural run-off are the primary causes of destruction of the Indus basin. The World Bank has been a major supporter of these projects over the past several decades. In 1997, the Bank approved US\$285 million for Pakistan's National Drainage Program Project (NDP). The project was supposed to improve drainage in Pakistan's irrigation system in order to address the problems of salinization and waterlogging.

Affected people filed a complaint against the NDP with the World Bank's Inspection Panel in September 2004. The Panel found that the project violated six of the Bank's binding policies. According to the Inspection Panel, the alignment of the drainage canals was "technically and environmentally risky", and "technical mistakes were made during the design" of the canals. As a consequence, "increased salinity has affected large tracts of agricultural lands", and the failure of the drainage infrastructure "as led to major harm to the ecosystem, wildlife and fisheries." Increased flooding, which was partially caused by the project, claimed more than 300 lives in 2003.

In response to the findings of the Inspection Panel investigation, in 2006 Bank management outlined measures they would take to address the policy violations and problems in the NDP. However, IRN's October 2007 report, *Shattered Lives and Broken Promises*, shows that the World Bank's Action Plan was not prepared in consultation with the people living in NDP-affected areas. The Action Plan does not include adequate meas-

ures to mitigate the impacts of World Bank-funded water projects on the affected people and ecosystems, nor does it provide compensation for people's losses. It ignores affected people's suggestions regarding long-term solutions to the problem of drainage effluent disposal, while also failing to provide alternative solutions.

RECOMMENDATIONS

The World Bank should revise the NDP Action Plan in close consultation with affected communities to address, in particular, the root causes of the drainage network's failures.

The World Bank's Executive Directors should authorize the Inspection Panel to monitor the implementation of the revised Action Plan and the level of consultations with affected people, and to report their findings to the World Bank's Executive Directors.

NAM THEUN 2 DAM, LAOS

In 2005, the World Bank committed US\$153 million in loans and guarantees for the US\$1.45 billion Nam Theun 2 hydropower project, the first large dam approved since the Bank announced its intention to re-engage in "high-risk/high-reward" infrastructure. When its power exports to Thailand begin in December 2009, Nam Theun 2 will have forcibly displaced more than 6,200 indigenous peoples, flooded 450 square kilometers on the Nakai Plateau, and taken land and assets from 2,000 additional households in the path of construction activities. More than 120,000 people downstream will be affected as water is diverted from the Nam Theun reservoir to another river, the Xe Bang Fai. They stand to lose fisheries, vegetable gardens, drinking water supplies and suffer other impacts as a result of increased flooding and erosion and decreased water quality.

Funding and planning for Nam Theun 2's downstream mitigation program is inadequate, and the failure to clear vegetation from the reservoir area will contribute to greenhouse gas emissions and water quality problems. Nam Theun 2's Nakai Plateau resettlement is behind schedule, replacement land has

not been provided to entitled villagers along the downstream channel, and livelihood restoration programs are in jeopardy in all project-affected areas. Key project documents, such as resettlement plans for villagers affected by construction activities, have not been disclosed, in violation of Bank policies.

Despite the World Bank's claims, there are no guarantees that Nam Theun 2's revenues will be used to help the poor in a country ranked as one of the world's ten most corrupt by Transparency International in 2007. Existing dams in Laos, a country with no free press or independent civil society organizations, have left a legacy of broken promises and uncompensated losses.

RECOMMENDATIONS

The World Bank should work with Nam Theun 2 developers and the Lao government to develop an interim compensation scheme for downstream villagers, and ensure that biomass is removed from permanently flooded areas of the reservoir to reduce water quality problems downstream.

The World Bank should urgently address the violations of its information disclosure and involuntary resettlement policies and enforce Nam Theun 2 legal agreements.



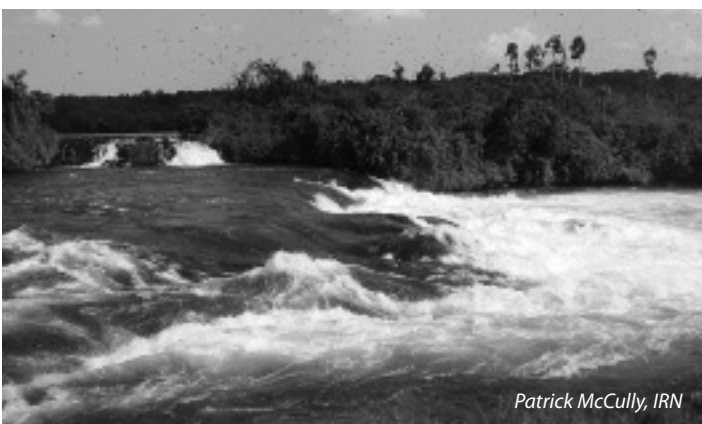
Shannon Lawrence, IRN

Boys fishing on the Xe Bang Fai river. Once Nam Theun 2 becomes operational, increased flows and water quality changes will cause fisheries losses along the Xe Bang Fai, potentially of up to 85 percent.

BUJAGALI DAM, UGANDA

After years of stops and starts, the World Bank approved US\$360 million in loans and guarantees for Uganda's US\$799 million Bujagali Dam in April 2007. The Bank's decision was taken on the basis of a flawed analysis that downplayed the potential impacts of climate change on the project, minimized the potential for other alternatives to meet Uganda's energy needs, and was dismissive of risks to fisheries. The dam will drown Bujagali Falls, a national treasure of cascading rapids which has great cultural importance for the Busoga people. The Bujagali Dam could also be disastrous for Lake Victoria, the world's largest tropical lake, and a drag on Uganda's economy. And Bujagali's high cost means its electricity will not be affordable to the majority of Ugandans, only a small percentage of whom are connected to the national grid.

Ugandan organizations have submitted a complaint to the World Bank's Inspection Panel, arguing that the Bank has violated its policies in the design and appraisal of Bujagali. The Panel's findings are due in 2008. Meanwhile, the Ugandan government has given the go-ahead for construction to begin.



Patrick McCully, IRN

Bujagali Falls will be drowned by the Bujagali Dam.

RECOMMENDATIONS

The World Bank should immediately commission a cumulative impact assessment of dams on the White Nile, to include the existing Kiira and Naalubaale dams, as well as Bujagali and future planned dams. The assessment should evaluate Kiira Dam's legacy of harm to Lake Victoria and consider livelihood disruptions from dam-induced drops in the lake's level. The Bank should work with the three governments around Lake Victoria develop a plan to address the problems caused by over-releases of water from dams.

The World Bank should help Uganda undertake an honest analysis of climate change risks to the country's energy sector and economy, especially now that Uganda will be almost completely dependent on hydropower from two Bank-funded dams.

International Rivers Network protects rivers and defends the rights of communities that depend on them. IRN opposes destructive dams and the development model they advance, and encourages better ways of meeting people's needs for water, energy and protection from damaging floods.