



Photo: International Rivers

The World Bank and Dams

PART 2: DISPELLING MYTHS OF NAM THEUN 2

Given its fraught dams legacy, the World Bank promised that the Nam Theun 2 Dam in Laos would serve as a new model for sustainable hydropower when it approved the project in 2005. The World Bank has since cited the project's purported success to justify scaling up lending for large hydro globally. Ten years later, does the claim of Nam Theun 2 as a success story still hold water?

“We are poor. We used to rely on the river for food and income. Now there is nothing,” said a woman living along the banks of the Xe Bang Fai, a river in Laos that served as the lifeblood for hundreds of thousands of people. What was once the source of thriving and productive fisheries has seen major declines as a result of hydropower development upstream.

In 2005, the World Bank announced its support for the Nam Theun 2 Dam (NT2) in central Laos, paving the way for additional financing from a suite of development banks and private financiers. At 1070 megawatts, Nam Theun 2 was touted as a foreign exchange earner for cash-strapped Laos. It would also serve as the World Bank's first major foray into

financing large dams in a decade. The Bank had largely withdrawn from the sector following a string of controversies surrounding the impacts that its dams had wrought.

In the wake of the World Commission on Dams (WCD) process¹ that documented the troubled legacy of dams' impacts on the environment and communities, the World Bank pledged that Nam Theun 2 would constitute a new approach to large hydropower, calling the project a “test case” with “the potential to be broadly replicated.” As a result, the Bank invested enormous amounts of time, money, and manpower into managing the complex development challenges that a project like Nam Theun 2 poses.





Village families living downstream of Nam Theun 2 report facing a shortage of food due to the loss of access to productive riverbank gardening and water level fluctuations that destroy their crops along the river. November 2014. Photo: International Rivers.

Since the dam began producing power in 2010, the World Bank has showcased the project as a success, and even went so far as to commission a book about it, entitled *Doing A Dam Better*. Some of the key claims that the World Bank has continued to make about Nam Theun 2 are that it has led to demonstrable poverty reduction; that state-of-the-art investments have left resettled communities better off; and that impacts on communities downstream are effectively managed. Unfortunately, as pointed out by the bank's own independent Panel of Experts, which became increasingly critical of the project throughout its lifetime, these claims are not an accurate reflection of the reality on the ground.

Given the Bank's continued reliance on the purported success of Nam Theun 2 to justify scaling up its hydro investments from Niger to Nepal, it is time to take a closer look behind the claims that the World Bank has made.

MYTH 1: POVERTY REDUCTION

“NT2 will yield about \$2 billion in government revenues...with that revenue to be used by the government to reduce poverty.”

– World Bank hydropower brochure, 2014

The World Bank's rationale for supporting Nam Theun 2 is that harnessing its rivers is one of few options for Laos to generate much-needed government revenues. Indeed, 95% of the project's power is exported to neighboring Thailand. Thus the project's development rationale – and its ultimate success – has always hinged in large part on revenue generation to fund development programs aimed at reducing poverty in the country.

Given persistent corruption and governance challenges in Laos, the World Bank, as a condition of its support, instituted extraordinary measures through the creation of a Revenue and Expenditure Management Program to track revenues from the project and ensure expenditure on development programs.

However, despite reporting that Nam Theun 2 has “been generating higher-than-expected revenue” by surpassing electricity export targets, the World Bank admits that less than half of revenues are fully accounted for, a share that is in fact declining.

Not only has the government of Laos not published its financial statement or audits, in the five years since Nam Theun 2 was commissioned, the company has not disclosed revenue figures. With severe restrictions on civil and political freedoms, Laotians have no avenue by which to demand transparency and accountability. Instead of ensuring poverty reduction for Laos, the project has entailed severe hardship for those bearing the cost of the project.

MYTH 2: RESETTLED COMMUNITIES' LIVES ARE IMPROVED

“Most resettler households are significantly better off today than they were before the project.”

– 2013 Progress Report, World Bank

The World Bank's principal selling point on Nam Theun 2 is the process undertaken to resettle and rehabilitate nearly 6,300 people who were forced to move to make way for the dam's reservoir. The Bank rightly prioritized resettlement, as the World Commission on Dams report and the Bank's own research documented the long-term impoverishment that communities face from dam-induced displacement.

To avoid this result, the Bank and its partners agreed to invest nearly \$40 million and substantial staff time to devise and implement the resettlement plan, which included significant investment in the resettlement sites on the Nakai Plateau. Indeed, there is little doubt that resettled families now have better local infrastructure because of the project, including houses, electricity, roads, schools, and health centers.

However, in the years since they were relocated, the resettled communities still struggle from the loss of their traditional livelihoods, having lost access to their paddy and swidden fields, forests, and grazing lands. The poor quality and small size of land parcels in the resettlement sites continues to cause problems for villagers, who are unable to grow sufficient food or retain livestock. Given the limited space on the Nakai Plateau, many of the families have sought ways to purchase land elsewhere or earn income from farming family lands in distant locations.

Meanwhile, fish stocks in the reservoir – meant to replace riverine fishing as a long-term livelihood – have declined significantly, and restrictions on access to the reservoir,

Other Myths

- **Myth:** *Nam Theun 2 produces green energy.*
Reality: A 2014 study commissioned by project proponents showed that the reservoir is emitting greater quantities of methane than estimated. Methane is a greenhouse gas that is 25 times more potent than carbon dioxide, and scientific studies show that methane emissions from dam reservoirs are a significant source of global warming.
- **Myth:** *Nam Theun 2 is model of public consultation.* **Reality:** With no freedom of speech in Laos and heavy restrictions on civil society, meaningful consultations could never take place. Downstream communities were not aware of the project or its potential impacts until after the decision to develop the project was taken.
- **Myth:** *Nam Theun 2 was the best option available.* **Reality:** A robust options assessment for power production or revenue generation in Laos was never conducted. Likewise, the decision to export power was based on inflated estimates of demand in Thailand. When Nam Theun 2 started to generate electricity for Thailand in 2010, Thailand already had an energy surplus.

including licensing, has meant that the predicted income boom from reservoir fishing for resettlers has not been borne out in reality.

While the initial investments in infrastructure have been impressive and significant, their sustainability is in jeopardy without dedicated funds for maintenance and repairs, nor adequate for a growing population. More importantly, the project's plans for ensuring that their livelihoods are recovered and sustained over the longer term have not borne out.

MYTH 3: DOWNSTREAM IMPACTS WERE MANAGED

“The level of downstream impacts were in line with or even less than what was anticipated.”

– World Bank promotional video, 2012

Nam Theun 2 is a trans-basin hydroelectric scheme wherein power is generated during the transfer of water from the Theun River to the much smaller Xe Bang Fai River. This has entailed dramatic changes in the hydrology of the Xe Bang Fai, including affecting water quality and significantly higher year-round flows, which could be exacerbated by future plans to expand the project.

After overlooking the potential risks to the Xe Bang Fai, the World Bank was pressured to examine the impacts on the 120,000 people who would be severely impacted by changes to the Xe Bang Fai and to devise plans to compensate them for lost assets and help fishermen and farmers adapt practices to a completely different river. The World Bank set up a Downstream Program to channel funds for this purpose. However, after less than 3 years of operation, the program was handed over to the Lao government and subsequently terminated when the funds ran out prematurely.

Despite claims by the Bank that downstream impacts were minimal, researchers who visited downstream villages in 2001 and again in 2014 found a “fundamental shift in the ability of villagers to support their food security and income from Xe Bang Fai fisheries.”²² Changes in the river's ecosystem have caused villagers to suffer dramatic reductions in fish catch, which had previously been the cornerstone of local livelihoods. The impacts have fallen disproportionately on women because of their reliance on the river for income generation.

Meanwhile, rice cultivation has declined during the rainy season because of excessive flooding caused by dam releases, and plans for dry-season rice cultivation have largely failed because of the high cost of electricity needed to pump the river's waters to irrigate fields above. People living along the Xe Bang Fai all the way down to the confluence with the Mekong River 100km away have been left worse off.

FAILED MODEL BEING REPLICATED

The World Bank continues to propagate a series of myths around the Nam Theun 2 project, promoting it as a model for other large dam projects to follow. Ten years on from approval and five years since Nam Theun 2 began producing power, it is important to take stock and learn these lessons. Troublingly, the Bank appears to be repeating the same mistakes it made in Nam Theun 2 in a new generation of dams:

- **Poverty Reduction from the Inga 3 Dam.** Similar to Nam Theun 2, the development rationale for the \$14 billion Inga 3 Dam in the Democratic Republic

“Nam Theun 2 confirmed my longstanding suspicion that the task of building a large dam is just too complex and too damaging to priceless natural resources.”
 – Thayer Scudder, member of International Environmental and Social Panel of Experts



A lack of biomass removal at the site of the reservoir is leading to unexpected levels of methane gas and other greenhouse gas emissions. November 2014. Photo: International Rivers.

of Congo (DRC) is predicated on generating revenue for the government to reduce poverty. However, the prospects of ensuring transparent accounting and use of Inga 3's proceeds are bleak in DRC, which is perhaps even more prone than Laos to corruption and financial mismanagement. The track record is not encouraging. Despite significant work done to ensure transparency in the DRC's mining sector through the Extractive Industries Transparency Initiative (EITI), there is little evidence of these funds reaching those who need it.

- **Resettlement at the Kandadji Dam in Niger.** The World Bank has devoted significant attention to the first phase of the resettlement process (5,410 people) at the Kandadji Dam in Niger, which encouragingly includes provisions for benefit-sharing of revenues to support resettled communities. Still, the livelihood restoration plans rely on irrigated agriculture downstream of the dam, which has a poor track record in Africa, to replace traditional, flood-recession cultivation methods and fishing. Even with income accruing for community projects from the dam, resettled people may find it difficult able to provide for themselves. The prospect of challenges in ensuring food security once the second phase (32,500 people) is undertaken is even more concerning.

- **Downstream Impacts from the Fomi Dam in Guinea.** The World Bank is currently supporting preparatory work at the headwaters of the Niger River for the Fomi Dam in Guinea that, like Nam Theun 2, would entail massive disruption to communities who live downstream. Particularly vulnerable are the nearly 2 million people downstream in Mali – pastoralists, rice farmers and fishermen – who rely on the annual flooding of the Inner Niger Delta, one of Africa's largest wetlands, to provide grazing land and fertile floodplains, and to sustain and replenish fish stocks. Fomi is being billed as a “multipurpose dam” that would facilitate the dramatic expansion of irrigation to lands that have been allocated to foreign investors in Mali's irrigation zone. The World Bank's confidence that the trade-offs can be managed is of little comfort to marginalized groups in the Inner Niger Delta.

Nam Theun 2 was supposed to be different, with the World Bank going above and beyond to offer a positive model for managing the risks that large dams pose to the environment and to communities, and delivering genuine development. Yet as the World Bank again invests in large dam schemes with the promise of “sustainable hydropower,” it has unfortunately failed to learn from its past mistakes.

NOTES

1. The World Commission on Dams was a multi-stakeholder process that researched the economic, environmental and social impacts of large dams. The WCD concluded in 2000 and produced comprehensive guidelines for responsible dam development.
2. *The People and their River, the World Bank and its Dam: Revisiting the Xe Bang Fai River in Laos* by Ian G. Baird, Bruce P. Shoemaker and Kanokwan Manorom, Development and Change, September 2015..

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