

NAM THEUN 2 AND WORLD BANK POLICY VIOLATIONS

An initial analysis of Nam Theun 2's compliance with World Bank policies indicates that the project violates provisions of the following World Bank policies:

- OP 4.01 Environmental Assessment
- OP 4.04 Natural Habitats and OP 4.36 Forests
- OP 4.12 Involuntary Resettlement
- OD 4.20 Indigenous Peoples
- Guidelines for Procurement under IBRD Loans and IDA Credits
- Operational Guidelines on the Economic Evaluation of Investment Projects

OP 4.01 ENVIRONMENTAL ASSESSMENT

Violation 1: No analysis of impacts in all areas of influence

Paragraph 2 of OP 4.01 states that "EA evaluates a project's potential environmental risks and impacts in its area of influence", which is defined as "The area likely to be affected by the project, including all its ancillary aspects, such as power transmission corridors, ... borrow and disposal areas, and construction camps..."¹

The Environmental Assessment and Management Plan (EAMP) for Nam Theun 2 admits that many aspects of project design and construction have not been finalized yet, including the location of the saddle dams, the downstream channel, transmission lines and resettlement roads. As a result, the EAMP states that "the EIA of these components can only be preliminary in nature and limited to identifying the major areas of consideration." The EAMP notes that the precise location of the quarries, spoil disposal sites, construction work camps and work areas "are yet to be determined", and therefore, no Environmental Assessment of these activities has been undertaken, despite the fact that these will have significant impacts on the Nakai Plateau, Nam Phit and Xe Bang Fai ecosystems.²

In addition, a transmission line from the Thai border in the middle of the Mekong to the main substation at Roi-Et in Thailand, a distance of 161.2 km, will be built by the Thai utility, EGAT. This transmission line is part of the Nam Theun 2 project, enabling the delivery of power to Thailand. However, no environmental impact assessment of this transmission line has been undertaken, nor is one planned to be undertaken, because an EIA is apparently not required by Thai law.³ In this situation, World Bank policy requires greater due diligence than national law, yet the World Bank has done nothing to ensure compliance with its Environmental Assessment standards.

Violation 2: Inadequate baseline data

Annex B of OP 4.01 describes the required contents of an EA report for a Category A Project, which includes a requirement for baseline data which "assesses the dimensions of the study area and describes relevant physical, biological, and socioeconomic conditions, including any changes anticipated before the project commences."

¹ As defined in Annex A, paragraph 5.

² Nam Theun 2 EAMP, November 2004, Chapter 3, p. 109.

³ Asian Development Bank, "Summary Environmental and Social Impact Assessment, Nam Theun 2 Hydroelectric Project," November 2004, p.42.

Independent reviews of the EAMP focusing on hydrology, water quality and Xe Bang Fai fisheries found major gaps in baseline data and analysis. Specifically, the review of the project's hydrologic data found that the analysis is so deficient that it is impossible to predict how much water is available for power generation. The reviewers found developers were relying on a maximum of 18 years of stream flow and rain flow monitoring, which is not a statistically valid basis for deriving 100-year and greater flood estimates.⁴

A review of the water quality assessment found that the EAMP fails to accurately predict water quality impacts post-impoundment because it uses models calibrated with limited and insufficient data sets. According to Dr. Guy Lanza,⁵ the water quality data is “not sufficient either for use in estimating water quality changes in general, or for accurately calibrating water quality models.” In addition, the EAMP provides no data on aquatic macroinvertebrates, which play a vital role in establishing and maintaining good water quality and are an important source of food to many fish and other species.⁶

David Blake⁷ reviewed the EAMP's treatment of the project's potential impacts on fisheries in the Xe Bang Fai and other downstream rivers.⁸ Blake found that the EAMP was severely lacking in detail and rigorous scientific analysis. The official prediction of impacts on fisheries for the downstream rivers is based on only three field surveys, all conducted during the dry season. As a result, the EAMP likely underestimates the number of fish species present in the Xe Bang Fai, and contains no study of fish migrations in either the Nam Theun or Xe Bang Fai river basins. The EAMP also ignores the importance of other aquatic organisms in the riverine ecology and food chain, and therefore fails to consider the implications of the loss of these resources for the food security and livelihoods of the people of the Xe Bang Fai basin.

In addition, the EAMP itself admits that the baseline data on wildlife species living on the Nakai Plateau and surrounding national biodiversity conservation areas are inadequate. According to the EAMP, wildlife surveys “employed relatively crude survey methodologies”, and “do not permit any measure of variability, statistical confidence, or assurance of completeness.”⁹ The last wildlife surveys were carried out in 1999, and no explanation is provided for the failure to conduct additional surveys.

Violation 3: Failure to consult with all project-affected groups

Paragraph 14 of the Environmental Assessment Policy requires the borrower to consult “project-affected groups and local nongovernmental organizations” and that these groups should be consulted “at least twice” — once before the terms of reference for the EA are finalized, and once a draft report is prepared. Villagers who fish along the Nam Theun river and tributaries downstream from the dam have never been consulted about the project. In fact, the only study

⁴ Willing and Knoop, *Review of Hydrology Component of Environmental Assessment and Management Plan (EAMP) For Proposed Nam Theun 2 Hydropower Project, Lao People's Democratic Republic*, January 20, 2005, available at www.irn.org.

⁵ Professor Guy Lanza, PhD is an aquatic ecologist and microbiologist who is Director of the Environmental Sciences Program at the University of Massachusetts, Amherst.

⁶ Professor Guy Lanza, *Review Of The Water Quality Assessment (EAMP), Proposed Nam Theun 2 Hydroelectric Project*, January 2005, available at www.irn.org.

⁷ David J.H. Blake is a specialist in tropical smallholder agricultural and aquaculture systems who has worked on various projects in Thailand and Laos for over 10 years.

⁸ David Blake, *A Review of the Nam Theun 2 Environmental Assessment and Management Plan (EAMP) as it pertains to impacts on Xe Bang Fai fisheries*, January 2005, available at www.irn.org.

⁹ Nam Theun 2 EAMP, November 2004, Chapter 3, p. 99.

on downstream impacts along the Nam Theun was commissioned belatedly in 2004 and only recently completed.

While some discussions with villagers along the Xe Bang Fai took place in 1997, these visits consisted of (a) disseminating information about the Project, (b) land use mapping and discussions about livelihood and (c) collection of statistics about each village.¹⁰ These cannot be considered consultations, especially as these discussions took place at a time when project authorities were claiming that there would be more water, and therefore more fish along the Xe Bang Fai, and were downplaying negative project impacts. Consultations with Xe Bang Fai villagers did not take place until the middle of 2004, thereby violating the requirement that affected people be consulted “at least twice.” In addition, villagers with assets on project construction lands are “yet to be consulted in detail about project impacts.”¹¹

In addition, there are villages living on the north side of the Nam Theun river that will lose access to fisheries resources, but have never been consulted about the project. While they do not live directly along the river, they get a significant portion of their protein from the Nam Theun and one of its tributaries, both of which will be inundated by the reservoir. Villagers will not be permitted to fish in the reservoir, as this will be reserved for the exclusive use of displaced Nakai Plateau residents.

OP 4.04 NATURAL HABITATS AND OP 4.36 ON FORESTS

Violation 1: Degradation of critical natural habitats

Paragraph 4 of the Natural Habitats policy states that the “the Bank does not support projects that, in the Bank’s opinion, involve the significant conversion or degradation of critical natural habitats.” Critical natural habitats include “sites that are critical for rare, vulnerable, migratory or endangered species.” OP 4.36 on Forests includes a similar provision in paragraph 5.

At least nine rare, vulnerable or endangered bird species living in the wetlands of the Nakai Plateau will have their habitat destroyed by the reservoir. A population of white-winged duck living on the Nakai Plateau are some of the last 450 individuals surviving globally. According to the EAMP, the loss of their habitat to the reservoir “will likely result in their extirpation.”¹²

In addition, according to the EAMP, at least 120 endangered Asian elephants – approximately ten per cent of the total elephant population in Laos – live in one of the subpopulations inhabiting the Nakai Plateau. Another large sub-population living on the Plateau has never been surveyed so the total elephant population on the Nakai Plateau is unknown. The Nakai Plateau population is thought to be one of the largest wild elephant herds remaining in Laos, Vietnam, Cambodia or China. Considering the species’ precarious status in the Indochina region, the Nakai herd may be of critical importance to regional conservation of the species. The inundation and degradation of a large part of the Nakai Plateau would eliminate 95 per cent of the wetlands, almost all mineral licks, and large areas of forests and grasslands that are essential habitat for the Nakai elephants. It would also disrupt their migration routes. While the elephants will not die out immediately, the reservoir will affect their ability to survive, threaten their genetic viability and increase dramatically the potential for human-elephant conflicts. Currently there is no plan for how to deal with this issue.

¹⁰ Nam Theun 2 SDP Addendum, January 2005, Chapter 6, p. 9.

¹¹ Nam Theun 2 EAMP, Chapter 5, p. 150.

¹² Nam Theun 2 EAMP, November 2004, Chapter 3, p.106.

Downstream of the dam, NTPC's Riparian Release Study notes that the Big-headed Turtle, a species that IUCN lists as endangered, and that CITES lists under Appendix 2, has been observed only within the Nam Theun river valley directly downstream of the dam.¹³ The habitat for the turtle is the Nam Theun's fast-flowing water and rapids, which will be eliminated once the flow of the river is reduced to only 2 cubic meters per second.

OP 4.12 INVOLUNTARY RESETTLEMENT

Violation 1: Affected people not consulted

Paragraph 2b of OP 4.12 states that "Displaced persons should be meaningfully consulted and should have opportunities to participate in planning and implementing resettlement programs." The policy covers those people who suffer "direct economic and social impacts" including "loss of income sources or means of livelihood, whether or not the affected persons must move to another location". See section on consultation above (under Environmental Assessment) for explanation of how all affected people have not been meaningfully consulted about the project.

Violation 2: Nakai Plateau logged before compensation paid

Paragraph 10 of OP 4.12 requires that "taking of land and related assets may only take place after compensation has been paid". However, the Nakai Plateau was heavily logged in anticipation of the project, depriving resettled communities of significant income and livelihood sources. Widespread logging on the Nakai Plateau continued until at least the late 1990s despite a condition in a 1995 World Bank Aide Memoir requiring the government "to demonstrate clearly that logging has been brought under control" in order for the Bank to support the project.¹⁴ Communities have never been compensated for these losses, and efforts to restore their livelihoods have been solely linked to the dam.

OD 4.20 INDIGENOUS PEOPLES

Violation 1: Proposed livelihood systems do not support production systems adapted to needs of indigenous people

OD 4.20 states that "Development activities should support production systems that are well adapted to the needs and environment of indigenous peoples, and should help production systems under stress to attain sustainable levels."¹⁵

Proposed development plans for indigenous peoples on the Nakai Plateau who will be resettled for Nam Theun 2 do not adequately consider the importance of rice production and buffalo-raising to their economic and cultural livelihoods. The project will supply only 0.16 hectares of irrigated paddy land for villagers, and the Nam Theun 2 Social Development Plan (SDP) admits that the soils in this area are "heavily leached and infertile" and that nothing will be able to be grown without extensive inputs of organic and inorganic fertilizer.¹⁶ Villagers will have to grow cash crops to exchange for rice, and villagers have expressed concerns about lack of sufficient

¹³ Dr. Benoit Laplante, *Economic analysis of the environmental and social impacts of the Nam Theun 2 Hydroelectricity Power Project, Final Draft Report*, February 7, 2005, submitted to the World Bank.

¹⁴ The World Bank: *Aide Memoire on Nam Theun 2 Hydroelectric Project*, Washington DC, November 9, 1995.

¹⁵ Paragraph 14(e)

¹⁶ Nam Theun 2 SDP, November 2004, Chapter 21.

rice farming land and their dependence on selling crops to markets which currently do not exist.¹⁷

The Nam Theun 2 reservoir will inundate 45,000 ha of prime buffalo-raising land.¹⁸ Buffalo play a vital role in village life as well as in the village economy on the Nakai Plateau. The loss of buffalo for the people on the Nakai Plateau may not only be economically disastrous, but could cause great cultural upheaval for communities on the Plateau. Many villagers have expressed anxiety about their buffalo herds and fear they will have to sell their herds after resettlement because there will be a shortage of grazing land. The SDP admits that “it is generally assumed that buffalo-raising in the future will be restricted to a smaller area and thus it will be difficult to raise the same or more buffaloes than currently raised.”¹⁹

Violation 2: No access to legal systems to defend their rights

Paragraph 15(a) of the Indigenous Peoples Policy states that the plan should contain an assessment of the ability of indigenous peoples “to obtain access to and effectively use the legal system to defend their rights.”

The grievance procedure that is briefly outlined in Nam Theun 2’s Social Development Plan entails a three-step process, the last of which is an appeal to the Provincial Court. However, there is no analysis of the political context in Laos and the impact that this will have on the ability of indigenous affected people to effectively use the legal system to defend their rights. Similarly, there is no discussion of the rudimentary nature of the court system in Laos, the gaps in due process and rule of law and the limitations this will impose upon people’s ability to defend their rights in court, or utilize the Project Grievance Committee established at the District Level.

GUIDELINES FOR PROCUREMENT UNDER IBRD LOANS AND IDA CREDITS

The World Bank’s Guidelines for Procurement under IBRD Loans and IDA Credits²⁰ require that for procurement under BOT concessions, either the initial BOT contract must be selected under International Competitive Bidding (ICB) procedures, or all goods, works or services required for the facility, and to be financed by the Bank, shall be procured in accordance with ICB provisions.²¹ In the case of Nam Theun 2, the BOT concession was awarded to NTPC without International Competitive Bidding, and therefore, to be in compliance with World Bank guidelines, all construction contracts should be subject to ICB. Yet the Head Construction Contract and Civil Works 1 contract were awarded to NTPC shareholders and were not subject to ICB.

The World Bank claims that these guidelines do not apply because the World Bank’s involvement in the project would be limited to a partial risk guarantee. The Bank states that all goods and services procured under the Nam Theun 2 Social and Environment Project, an IDA credit, will be procured in accordance with ICB.²² This claim is spurious because the \$20 million

¹⁷ *Agriculture and Livestock Development Plan for the Nam Theun 2 Hydropower Project: An Independent Analysis*, January 2005, published by International Rivers Network.

¹⁸ Nam Theun 2 SDP, November 2004, Chapter 21, p. 30.

¹⁹ Ibid.

²⁰ Published in May 2004 and available at

<http://siteresources.worldbank.org/INTPROCUREMENT/Resources/Procurement-Guidelines-November-2003.pdf>.

²¹ pp. 29f. of the Guidelines

²² Letter from Mr. Robert Mertz, NT2 Project Manager at the World Bank to Mr. Peter Bosshard and Ms. Aviva Imhof, International Rivers Network, February 11, 2005.

IDA credit will be used to essentially pay for part of the Lao Government's equity in the project by covering social and environmental mitigation measures.

OPERATIONAL GUIDELINES ON THE ECONOMIC EVALUATION OF INVESTMENT OPERATIONS

The World Bank's guidelines for the economic evaluation of investment operations, including electric power projects, states that the "Bank finances only those supply facilities and demand-management measures that help meet economically efficient demand at the least economic cost."²³

A study commissioned by the World Bank in 2004 found that Thailand's "realistically achievable potential" for renewable energy projects, as well as demand-side management and energy efficiency programs, exceeded the output of Nam Theun 2, and could provide Thai customers with power that is 25 percent cheaper than that from Nam Theun 2.²⁴ This study has never been released to the public, despite repeated requests for its disclosure by Thai and international NGOs.

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²³ OP 10.04 and GP 4.45.

²⁴ *Nam Theun 2 Hydropower Project: Impact of Energy Conservation, DSM and Renewable Energy Generation on EGAT's Power Development Plan*, Prepared for the World Bank, August 28, 2004.