September 24, 2010

Mr. Robert B. Zoellick
President
The World Bank

Mr. Haruhiko Kuroda
President
The Asian Development Bank

Dear Mr. Zoellick and Mr. Kuroda,

Re: Comments on the Update on the Lao PDR: Nam Theun 2 Hydroelectric Project (July 7, 2010)

We write this letter to send our comments and recommendations on the Update on the Lao PDR: Nam Theun 2 Hydroelectric Project (NT2) dated July 7, 2010. We agree that “many of the key challenges still lie ahead” on this project (World Bank & ADB 2010a: 18, para 48). However, we have different observations on the following issues and still believe that NT2 is not compliant with the Concession Agreement, the World Bank’s Safeguard Policy on Resettlement, and the Prime Minister’s Decree on the Compensation and Resettlement of the Development Project. Thus, we would like the World Bank and Asian Development Bank to address these issues as soon as possible.

A. Nakai Resettlement Site

Are the resettlement families in Nakai Plateau already better off?

The report states that “socio-economic monitoring shows that resettlers are already better off following resettlement” (World Bank & ADB 2010a: 5, para14 & 8, para 18). While we do not doubt that there are indicators showing that many families are better off at this stage in the resettlement process, we remain concerned about the long-term sustainability of the livelihood program. For example, in an earlier blog, the World Bank admitted that “it’s far too early to be talking about sustainability of livelihoods, or whether or not the project will meet the socioeconomic targets set out in the concession agreement” based on the project’s Living Standard Measurement Surveys (LSMS) (World Bank 2010a). While the LSMS indicates that
incomes have risen in the past few years, it is not clear how these figures were calculated. For example, if the calculation includes compensation payments for cows, buffalos and other lost assets, income from the sale of cows and buffaloes, and income from temporary employment at the dam construction site, these are all clearly forms of income that are not sustainable. The report should be clear about the definition of “yearly income per person” and NTPC should fully disclose socioeconomic monitoring data for resettled households.

According to our interviews with resettlers between May 2009 and May 2010, people are happy with their new houses, access to health care, new schools, and good access roads. However, as the LSMS survey shows, many families continue to be concerned about the quality and quantity of land, and access to forests, non-timber forest products, and the river, which the resettlers used to have in the old villages and relied on as main sources of livelihood (World Bank 2010b). Many resettlers complain that “fewer NTFPs are available and that they have to travel further to access them” and “a number of households expressed concern about lack of grazing land for buffalo” (World Bank 2010b). Access to these natural resources is vital for people’s livelihoods and as a social safety net for particularly vulnerable families. Although the report states that “Villagers greatly

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Figure 1: Grazing buffalos after harvest in paddy fields inundated under the reservoir in the old Nakai Neua Village (2006)

Figure 2: Grazing buffalos in the resettlement site (November 2009)

Concerns of households—what got better and what got worse, May/June 2009

<table>
<thead>
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<tr>
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<td>Other</td>
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</tr>
<tr>
<td>Total</td>
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</tr>
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Figure 3: Nam Theun 2 – How are the resettled people doing overall? In their own words... (part 2 of 2) Submitted by Nina Fenton on Tue, 2010-03-30 02:07 (World Bank 2010a)
appreciate their new physical surroundings, are developing assets, and many are investing in improving their homes and buying new assets such as televisions and motorbikes (World Bank & ADB 2010a: 4, para13)", they have lost access to one of the most important assets for their livelihoods, such as quality land, forests, and the river. Therefore, we believe it is too early to claim that families are better off as a result of resettlement.

Delay in establishing irrigation system in Nakai

We continue to believe that the delay in establishment of the irrigation system on the Nakai Plateau is a violation of the Concession Agreement and illustrates the poor planning process surrounding the design of the resettlement program. Nevertheless, we hope that the irrigation systems will be completed by the end of this year in order to enable dry season cultivation on villager plots. However, a critical issue not addressed in the report, but one that has been of ongoing concern to the Environmental and Social Panel of Experts (POE) and our organizations, is the market for any cash crops grown by villagers. The POE report expresses growing concerns that “commendable increasing emphasis on the cultivation of more vegetables, and a wider range of vegetables, has not been linked heretofore to equal emphasis on how those vegetable are to be marketed and/or processed” (McDowell, Scudder & Talbot 2010: 26). According to our interviews in May 2010, villagers do not have a clear idea of what cash crops they are going to grow on their lands, how to grow vegetables or other cash crops using the irrigation system, and where they can sell their products.

Although the last two IFI Annual Updates repeatedly state “The marketing strategy will draw from the initial results of a marketing study developed by NTPC in 2007 and efforts will first be directed towards the marketing of agricultural produce” (World Bank & ADB 2008: 9, para 27) in 2008 and “A marketing strategy has been developed to encourage and support resettlers in gaining access to markets across the various livelihood pillars” (World Bank & ADB 2009: 9, para 24) in 2009, little progress appears to have been made so far. This year’s Annual Update fails to even mention this crucial issue.

Recommendation 1:
A coherent and viable marketing strategy needs to be developed, explained to resettlers and implemented in order to ensure resettlers have a market for cash crops they are expected to produce.

Are the reservoir fisheries sustainable?

As the Annual Update states, “fisheries contribute strongly to resettler livelihoods” (World Bank & ADB 2010a: 9, para 22). Thus, sustainable reservoir fisheries are a vital issue for resettlers and sustainable reservoir fishery management is a key to maintain the current income level of resettled households. However, there are many challenges on the reservoir fisheries management. Although village fishing groups, Reservoir Fisheries Association, the Reservoir Management Committee, and the Watershed Management and Protection Authority are supposed to ensure effective fishing enforcement in order to enhance prospects for sustainable fisheries management (World Bank & ADB 2010a: 9, para 22), local institutional capacity is limited.
According to our interview in May 2010, the Reservoir Fisheries Association does not have strong enforcement mechanisms to implement the Fishing Regulation. The Fishing Regulation states that only registered resettlement villagers can fish commercially. However, many villagers, who have the license for subsistence fishing and are allowed to catch 5kg of fish per day per license, catch more than 5kg of fish and sell these fish to middle men. Moreover, with a tourist license many outsiders fish more than 5kg of fish according to our interview in May 2010. Thus, just relying on local institutional capacity to implement the reservoir fisheries management would not be the best way to ensure sustainability of reservoir fisheries for now.

**Recommendation 2:**
Until the Fishing Regulation is fully implemented and sustainable fisheries management is ensured, NTPC should temporarily have alternative plans to ensure sustainability of reservoir fisheries, including regular release of fry and putting stronger efforts to ensure sustainability of reservoir fisheries.

**No payment of compensation for paddy fields and fruit trees**
It is surprising that compensation payments for paddy fields and fruit trees have not been completed yet, after three to four years of resettlement. The World Bank and ADB claim that everyone resettled on the plateau has received a substantial compensation package and that compensation for loss of paddy fields for resettlers is “additional compensation”. This is misleading. Compensation for paddy fields is a primary right of resettled households. What resettlers have received so far is 0.66 ha of poor quality land that is not of equivalent quality and quantity to their former paddy fields. This is quite evident when comparing the photos of paddy field in the old villages (See Figure 4) and the new land in the Nakai resettlement site (See Figure 5). Furthermore, some of the drawdown areas allocated to the resettlers are still not ready to grow vegetables or other crops as they have not yet been cleared, according to our interviews with villagers in May 2010. The Annual Update also admits that compensation for buffalo losses has not been completed, even
though this issue has been raised for several years.

This is a clear violation of the World Bank Resettlement Policy, which states that “displacement or restriction of access [to assets] does not occur before necessary measures for resettlement are in place. […] In particular, taking of land and related assets may take place only after compensation has been paid” (OP 4.12 paragraph 10). Moreover, the Prime Minister’s Decree on the Compensation and Resettlement of the Development Project, requires “provision of ‘land for land’ arrangement of **equivalent size and productivity** (GoL 2005: Article 6, para 2”).

We understand the need to have systems in place to ensure that villagers are well prepared to deal with the influx of cash from compensation, but that these systems should have been put in place years ago. There is no explanation as to why the compensation payments have been delayed until now. We would like to point out that **no compensation payment for paddy fields and considerable delays (3 to 4 years) in compensation for fruit trees are in violation of the World Bank Resettlement Policy.**

**Impacts of the high iron contamination in the reservoir water**

As the report states, there is “relatively high iron” in the reservoir and total iron “needs close ongoing monitoring”. Thus, local communities face risks of fish depletion and poor water quality. Contamination of reservoir water is likely to impact not only the Nakai resettlers, but also the communities downstream along the Xe Bang Fai River. According to Professor Guy Lanza from the University of Massachusetts, Amherst, iron can interact with other chemicals (such as fertilizers) and reduce the efficiency of nutrient uptake and use by plants -- both irrigated land crops like those in riverbank gardens and aquatic plants.¹ This could affect agricultural productivity for Xe Bang Fai villagers.

According to Professor Lanza, the problem with iron is also magnified when it occurs in a reservoir with water stratification zones. Iron is often accompanied by manganese in these situations -- and manganese is much more toxic than iron. Other problems associated with the project-induced changes in iron and manganese chemistry include potential toxicity to rice (high iron content is toxic to rice and probably other key crops), toxicity to aquatic plants and animals (e.g. fish gills are coated with iron, which causes pathology), and general corrosion and odor problems. The 535 boreholes and pumps downstream of the Xe Bang Fai River could become clogged and fouled by iron and iron bacteria biofilms, leading to blockage of flow, increased concentrations of iron and corrosion of the pumps.

**Recommendation 3:**

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¹ The overall problem with excess iron is that iron is very reactive chemically and changes its effects in the environment as it shifts back and forth as different chemical forms (oxidized and reduced forms with and without color).
NTPC should develop an explicit plan to mitigate the impacts from iron contamination in the reservoir and disclose that plan. At the same time, an independent monitoring body should monitor the water quality, particularly in terms of iron contamination, including manganese, cadmium, and other minerals potentially harmful to ecosystems, livestock, and human beings.

B. Downstream Xe Bang Fai River

*Access to safe water* The Annual Update states that 535 boreholes and pumps have been provided to villages along the Xe Bang Fai River (World Bank & ADB 2010a: 13, para 31(iv)). However, some pumps are broken and the water quality of some boreholes is not suitable for drinking. According to our interviews in Beungxe Village in May 2010, none of the eight boreholes was suitable for drinking and domestic use due to turbidity and high salt content, although the World Bank and ADB’s letter dated April 8, 2010 states “in Ban Beungxe there are three fully functioning boreholes of good quality” (World Bank & ADB 2010b: 3). The villagers used to drink boiled river water, but now they have to buy drinking water or get drinking water from other villages. In Navang Tai area in Navan Gnai Village, nine boreholes are developed by NTPC. However, in May 2009 two of them were closed due to poor water quality and one of the boreholes’ pumps was broken. The remaining six boreholes were not suitable for drinking due to high salt content or bad smell. At that time, NTPC was constructing two new boreholes in the Navang Tai area; however, the villagers were wondering whether the water would be suitable for drinking.

Thus, according to our interviews, **water from boreholes is not available for all downstream villagers, and some people continue to have no option but to keep drinking the river water.** The Concession Agreement states that “[a]lternative sources of domestic water of appropriate quality will be developed prior to the Commercial Operations Date” (NTPC 2005a, Section 4, Part 2: 120). Thus, this is a violation of the Concession Agreement.

**Recommendation 4:** NTPC should accelerate its program to ensure access to clean and safe water for all Xe Bang Fai riparian villages.

*Fisheries compensation*

The Annual Update makes little mention of impacts on fisheries, but does state that “fish catch is being impacted differently in different areas of the river” (World Bank & ADB 2010a: 12, para 29). The report states that “some fishermen are adapting to the new situation by using wet season fishing gear or changing fishing grounds” (World Bank & ADB 2010a: 12, para 29), and infers that there is no significant impacts on fisheries.

The report continues to assert that “[p]roject water releases are having only very small impacts on the natural water quality in the river to date” and that the changes in water quality relate to an increase in total suspended solids (TSS) during the dry season (December-May) which are almost the same levels as during the wet season (June-November) (World Bank & ADB 2010a: 12 para 30). This statement contradicts what was written in the Social Development Plan (SDP)
produced prior to project approval. According to the SDP, “An increase of maximum background TSS [total suspended solids] concentrations between 44 and 70 mg/l during the dry season to between 90 and 95 mg/l [caused by NT2] is well above 10% of the seasonal mean concentration and more than 10 above background level.\(^2\)” As such, water quality standards will be exceeded during the dry season on a weekly basis when nearly all fish productivity in the Xe Bang Fai mainstream takes place, and as a result “significant impacts on fish productivity can be expected” (NTPC 2005b, Vol.3 Chapter 4: 20).

According to the SDP, “annual fish productivity in the mainstream of Xe Bang Fai is limited to the dry season while the rainy season does not provide much opportunity for fish to spawn and grow” (NTPC 2005b, Vol.3 Chapter 4: 38). It also says that high productivity of snails, shrimps, and mussels and upstream spawning migration of fish in the dry season depends on a high density of aquatic plants, phytoplankton, and periphyton. However, TSS concentrations and resulting turbidity hamper sunlight penetration, specifically the critical Photosynthetic Active Radiation (PAR), hampering the productivity of aquatic plants, phytoplankton, and periphyton in the Xe Bang Fai River (NTPC 2005b, Vol.3 Chapter 4: 38). Therefore, if TSS levels are similar to those usually found during the wet season as the report states (approximately 120-330 mg/l), significant impacts on fish productivity and other aquatic products can be expected.

\(^2\) “Australia and New Zealand require for suspended particulate matter/turbidity (equivalent to TSS) any changes that are not more than 10% of the seasonal mean concentration. [...] In Canada the increase of TSS concentrations should not be more than 10 above background level.” (NTPC 2005B: 17).
The current compensation programs, which are structured around savings and small-scale loans, are flawed because they could compensate vulnerable community members only when they are willing or able to take the risk of borrowing money to invest into development projects such as digging a fish pond.

**Recommendation 5:**
NTPC should disclose the fisheries monitoring data in the downstream Xe Bang Fai River, and strengthen fisheries compensation measures particularly for occupational fishermen and vulnerable community members.

**Compensation for project-induced erosion**
Although the Annual Update claims that monitoring systems are in place for erosion, it is not clear how NTPC plans to compensate for asset losses as a result of project-induced erosion (World Bank & ADB 2010a: 12, para 31 (i)).

**Recommendation 6:**
NTPC should clarify what the procedures are to determine erosion caused by the NT2, and what procedures exist for villagers to claim compensation for losses of their vegetable gardens or other assets caused by erosion.

**Compensation for riverbank gardens**
The report simply states that “NTPC started the compensation process for impact to riverbank gardens along the Xe Bang Fai in December 2009” (World Bank & ADB 2010a: 12, para 31 (ii)). However, it does not explain why NTPC did not start the compensation process until December 2009, even though the company knew that they would start full operation of the project in March 2010. Both the World Bank and ADB’s letter dated April 8, 2010 and the Annual Update on July 7, 2010 state that the compensation process for impacts to riverbank gardens along the Xe Bang Fai will be completed in the coming months (World Bank & ADB 2010a: 31 (ii) and World Bank & ADB 2010b: 4). It is difficult to see progress in the compensation process in three months, although the report states “The IFIs have been working with NTPC to accelerate and prioritize the implementation of this program” (World Bank & ADB 2010a: 31 (ii)). As paying compensation before affected communities lose access to lands is a requirement of the World Bank Resettlement Policy (OP4.12 paragraph 10), the project is not in compliance with this policy.

**Recommendation 7:**
The progress in compensation payments should be reported. Clear explanations as to why the compensation process could not start earlier than December 2009 should be provided. NTPC should complete compensation payment for riverbank gardens as soon as possible.

*How important is the issue of skin rashes in the downstream area?*
The Annual Update states that “a small percentage of residents” have suffered from skin rashes as a result of contact with Xe Bang Fai water (World Bank & ADB 2010a: 13, para 31 (iii)). The World Bank also states that “[i]n May 2010, some residents in the upper part of the Xe Bang Fai downstream area reported experiencing an itchy skin irritation” (World Bank 2010e: FAQ12). This is inconsistent with our interviews in May 2010 with villagers along the Xe Bang Fai River and from hinterland villages. According to our interviews, not only the residents in the upper part of the Xe Bang Fai downstream area, but also the villagers in the middle and lower part of the Xe Bang Fai River and the villagers from hinterland villages who fish in the Xe Bang Fai River experienced skin rashes.

NTPC should pay more serious attention to skin rashes being experienced by villagers. The company should brief villagers about the results of their investigations, in particular what causes the skin rash; whether the skin rash would indicate any further risks of using the water; and what mitigation and compensation measures will be implemented. The Annual Update only states that “[T]he result of the investigation will be made known through the usual public health channels.” However, it is not clear whether the information will be made publicly available and how often water quality information will be disclosed.

Recommendation 8:
NTPC should publicly disclose water quality data and make the results of their analyses available to villagers so that they can understand the risks and issues related to water quality in the Xe Bang Fai River.

Expansion of downstream program
Given the delay in the compensation and mitigation measures for the Nakai and downstream Xe Bang Fai River, it is unrealistic to expect that NTPC’s downstream compensation and mitigation program will be completed by 2015, after five years of commercial operation, as is currently planned. The Panel of Experts and many outside observers have continuously recommended allocating additional budget for the downstream program (World Bank & ADB 2010a: 3, para10). As the POE’s latest report states “the $16 million allocated to the XBF is inadequate to meet CA [Concession Agreement] requirements for offsetting adverse project impacts to over 100,000 XBF riparian and hinterland people” (McDowell, Scudder & Talbot 2010: 32). In addition, the Annual Update states the downstream program is active in only 77 villages out of around 150 villages along the Xe Bang Fai River and hinterland, indicating that there remains a long way to go (World Bank & ADB 2010a: 11, para 26 & 28).

Recommendation 9:
We would like to emphasize again that it is vital to increase the budget of the downstream program. Also, the program should be expanded to other downstream villages as soon as possible since commercial operations have already begun.

3 Mekong Watch and International Rivers conducted interviews in Ban Mahaxai, Ban Pha Nang (Upper stream); Ban Veun Sananh, Ban Kaeng Kasy, Ban Beung Xe (Middle stream); Ban Navang Gnai (Lower stream); and Ban Kham Pae Dong (Hinterland).
The POE’s fifteenth report also recommends that the Government of Laos, NTPC and the International Financial Institutions should “reconsider the volume of funds required to meet in full CA livelihood restoration obligations” and “allocate funds accordingly” in the Xe Bang Fai and Khamkeut downstream area and project lands. The POE’s fifteenth report continues, “The big hurdle on the downstream side is the chronic shortage of funds for livelihood restoration and associated activities.” It concludes that a belief that these obligations can be met by Commercial Operations Date and within the existing budget is “simply unrealistic” (McDowell, Scudder & Talbot 2009: 17).

**Recommendation 10:**
Following the National Policy on Environmental and Social Sustainability of the Hydropower Sector in Lao PDR, which states that “[t]he Developer will cover the cost of implementing all environmental and social safeguard procedures under the ‘user pays’ principle” (GoL 2006: 16), NTPC should take the responsibilities for all the costs of implementing environmental and social mitigation measures and compensation for the downstream communities.

**C. Disclosure of monitoring reports**

It is commendable that many monitoring activities are taking place on NT2. However, in spite of the fact that the National Policy on Environmental and Social Sustainability of the Hydropower Sector in Lao PDR states that monitoring reports should be publicly disclosed, most of the monitoring reports are not yet publicly available.

**Recommendation 11:**
The following is a list of reports and documents that should be disclosed publicly:

**NTPC’s monitoring reports**
NTPC produces regular environmental and social reports to its donors, POE, and others. These regular monitoring reports should be disclosed.

**Living Standards Measurement Survey**
Conducting household level socio-economic surveys in the resettlement site is a commendable approach that is likely to help in understanding the livelihoods of resettlers. However, comprehensive survey data has not been disclosed, and the World Bank has only disclosed portions of the data. Thus, it is hard to capture a comprehensive picture of the socio-economic situation in the resettlement site. Comprehensive data in the Living Standards Measurement Survey should be disclosed in order to promote a better understanding of the socio-economic situation in the resettlement site.

**Water quality in reservoir, water channel, and downstream**
It is critical that NTPC discloses more detailed water quality data from the reservoir, downstream channel, and downstream Xe Bang Fai and Nam Theun Rivers as this is directly related to the risks that communities are facing.
**Downstream monitoring activities**

In order to ensure sustainable livelihoods in the downstream Xe Bang Fai area, **it is important that monitoring data including fish and other aquatic products catch, erosion, the evaluation of the savings and credit scheme, and the Food Consumption Monitoring Program is disclosed.** However, none of this data has been disclosed. The Annual Update states that “NTPC is establishing systems to make some appropriate monitoring information publicly available on a regular basis” in the downstream Xe Bang Fai River (World Bank & ADB 2010a: 12, para 31(i)). The company should make it clear what it considers to be appropriate monitoring information and how it proposes to disclose this information.

**Ministry of Finance report on the application of NT2 revenues**

It is great that the Ministry of Finance will report on the application of NT2 revenues in December 2010 and internal coordination mechanisms between Ministry of Finance, the Ministry of Planning and Investment, sector ministries, and the State Audit Office will be formalized (World Bank & ADB 2010a: 16, para 44). It is important to disclose the report on the application of NT2 revenues from the Ministry of Finance in order to ensure transparent and accountable management of public resources.

**D. Benefit sharing and Revenue management**

It is great to learn that the Government of Lao PDR has allocated the projected US$6.5 million for this fiscal year through the budget process for primary education, rural electrification, basic health, rural roads, and environmental protection (World Bank 2010e: FAQ 19). However, ensuring sustainable livelihoods for affected communities, the downstream mitigation and compensation program, and management of the watershed are still key challenges.

**Recommendation 12:**

**The revenues from the Nam Theun 2 Hydroelectric Project should be allocated to the directly affected communities in Nakai resettlement area, project land, and downstream Xe Bang Fai River and Nam Theun Rivers including hinterland villages as a priority.** The project-affected communities should be the primary beneficiaries of the project.

**E. Strengthening development of future hydropower projects in Lao PDR**

We believe that the World Bank and ADB’s initiatives in building the capacity of the government of Laos to manage hydropower projects are commendable. However, there is little evidence that Nam Theun 2 Hydroelectric Project has resulted in any improvements to other hydropower projects being developed in the country.

The National Policy on Environmental and Social Sustainability of the Hydropower Sector in Lao PDR has not been implemented to date. For example, several hydropower projects have
commenced construction without disclosure of an EIA, there is no third party monitoring besides the Nam Theun 2 Hydroelectric Project, very few monitoring reports have been publicly disclosed, and no plans have been disclosed to bring existing projects into compliance with the policy. In a separate report, the World Bank admits that individual project proposals are not integrated into broader land and water management planning and hydropower development is driven by developers on an ad-hoc basis (World Bank 2009: 4, para 8).

Recommendation 13:
The World Bank and ADB should make future development assistance to Laos conditional upon full implementation of the National Policy on Environmental and Social Sustainability of the Hydropower Sector in Lao PDR.

We are looking forward to hearing your response to our comments and recommendations. Thank you for your attention and we hope we can count on a response to this letter before October 22, 2010.

Sincerely,

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