



October 22, 2009

Ms. Ikuko Matsumoto Director, Lao Program International Rivers

Dear Ms. Matsumoto,

#### Re: International Rivers concerns regarding the Nam Theun 2 (NT2) project

Thank you for your letter dated September 8, 2009. The Asian Development Bank (ADB) and the World Bank have studied your concerns, some of which were previously discussed when you visited us in Vientiane in May 2009. We have also discussed the issues you raise with the project implementers and parties to the Concession Agreement - the Government of Lao PDR and the Nam Theun 2 Power Company (NTPC). On this basis, we would like to offer you the following response.

As we have already pointed out, the Government of Lao PDR and NTPC are the implementers of the NT2 project. It may be more efficient in the future to address your concerns about project implementation directly to them. The ADB and the World Bank are happy to continue responding to questions regarding our own supervisory and monitoring role in the project, and our commitments made to the international community.

Of the different issues raised in your letter, there is only one (irrigation facilities) that needs to be accomplished before the commercial operations date (COD), and all the others follow a longer time frame (please refer to Schedule 4 of the Concession Agreement). As a multipurpose energy and development project, NT2 has always had a number of different timelines. The start of commercial operations – officially at COD – is a key milestone for the project's hydropower facility, however, the environment and social programs operate on a longer time frame that reflect the realities of building sustainable livelihoods and protecting the environment. Such explicitly different timetables are a key strength of the NT2 project, and were agreed by all parties concerned including financiers at the time of project approval in 2005.

Provided below is a detailed response to your concerns and recommendations. We have followed the numbering system in your letter.

#### 1. Livelihoods on the Nakai Plateau

Your letter raises concerns about the livelihoods of resettled people, including around rice productivity, land use, irrigation, livestock, reservoir fishing, the limited scope of "livelihood programs", and food security.

First, by way of context, the NT2 plateau livelihoods program commits NTPC to broadly double income for all households over the five year period post resettlement – by 2013 at the latest. Practically, the program is designed to provide opportunities for villagers to benefit from four livelihood pillars: agriculture and livestock production; fisheries; community forestry; and off-farm income. The extent, to which villagers engage in each pillar, or in sub-activities within each pillar, is their choice. Project implementers, with the full support of the ADB and the World Bank, are not trying to push villagers to conduct specific livelihood activities that could undermine sustainability. The emphasis is therefore on providing opportunities, technical inputs, demonstrations and support.

Regarding rice productivity, the Social Development Plan (SDP) baseline data shows that villagers grew an average of 60 kg/capita of unmilled rice on Nakai for the 2002 harvest, prior to resettlement. NTPC data shows that the average 2008 harvest was 100 kg/capita of unmilled rice for the 15 resettled villages (including Ban Phonphanpek as in the baseline). The harvest for 2009 is expected in the coming weeks.

It is important to note that the project has not set rice self-sufficiency as an objective for sustainable livelihoods on the Nakai plateau. For reasons of soil quality, land availability<sup>1</sup>, and technical abilities, there are other potential agricultural opportunities that can be more profitably pursued by resettlers rather than focusing narrowly on rice self-sufficiency. NTPC is working with villagers and district extension teams to develop agro-ecological approaches that will maximise the production capacity of the 0.66 ha plots granted to each family, as well as using them in coordination with other potential land available in the drawdown zones (DDZ) and agroforestry zones within the Village Forestry Association (VFA) area.

A Participatory Land Use Planning (PLUP) process is taking place under the responsibility of the government's Resettlement Management Unit, with support from specialists paid for by NTPC. The process will involve the resettled communities in finalizing the exact boundaries and uses for land in the project area, including village lands, VFA boundaries and use-zones, and the allocation of the DDZ. The process is consistent with the Concession Agreement and following Lao law to ensure the maximum protection for villagers, and should be finalized early in 2010, with some follow-up on confirming the exact areas of the DDZ once a full draw-down has occurred.

<sup>&</sup>lt;sup>1</sup> As has been noted in previous correspondence, during initial consultations communities were provided information and given a choice to resettle off the Nakai plateau in order to benefit from increased land area and soil quality. All communities preferred to resettle within their 'spirit territories' on the plateau, despite the more challenging livelihoods that would result from this.

Irrigation systems are currently under construction, and NTPC is working to complete these systems across the resettlement area by COD and believes it will be able to do so. Roll-out of irrigation systems has been delayed by the need to redesign the approach after the initial systems installed for the pilot program (and as specified in the SDP) proved inappropriate to local conditions. More practical and user-friendly small-scale irrigation systems are currently being implemented in consultation with villagers. Project oversight agencies, including the Environmental and Social Panel of Experts (POE), the Lenders' Technical Advisors, and the international financial institutions have all had inputs into this process. We continue to monitor implementation progress.

The creation of the Nakai Reservoir has substantially reduced the amount of grazing land available for the large number of cattle and buffalo that were kept on the plateau. Compensation for the cattle and/or buffalo lost during the 2007 flooding was provided to the resettled families concerned. Following that period, villagers were encouraged to sell their buffalo but many refused to accept the prices offered by traders, apparently aware of the fact that the project would compensate them if their buffalo died. It is apparent that some buffalo died during the 2008-09 dry season, but how many and the causes of death are still under investigation by Government, Compensation for this loss will be provided as soon as the list is available. To help support the livestock population over the 2009 dry season, the NTPC supplied villagers with mineral supplements for their stock. More land for grazing and forage growing will be available after the rainy season of 2010 as the drawdown zone evolves, but villagers will still be encouraged to reduce their numbers of large livestock and to increase the value of each individual animal through intensification of livestock management, better feed, vaccination and breeding policies. We agree the key challenge is to match livestock numbers with the actual carrying capacity of the plateau, and ensuring that the opportunities for smallholders are not undermined by larger commercial operations. The PLUP described above will help establish a basis for a longer-term and more sustainable approach to livestock management on the plateau.

Fishing is a key source of income for resettled villagers at present. While we expect some volatility in the behavior of a new reservoir, at this stage it may be rather premature to state that the Reservoir fishery will "rapidly decline". While the peak fish catch (around 150 Tons/month) observed between January-March this year dropped in June, it should be noted that villagers are busy planting crops, including rice, during May and June and so have less time available for other activities. By July and August, catches averaged 135 tons and big fish were observed again in the Oudomsouk market. Of critical importance to sustainability over the long-term will be effectiveness of regulation and enforcement efforts across the reservoir, which requires concerted cooperation between the local government and the villagers through their fishing associations. The changes in aquatic resources are being closely monitored, and studies over the next few years will establish the characteristics of the reservoir biodiversity and the available fish resource.

It is important to distinguish between the broader livelihoods program, which covers all resettlers, and demonstration or pilot activities, which are aimed at helping resettlers learn about new technologies or approaches. All resettlers are already benefiting from the VFA dividend and will do so every year; and almost all households have been fishing, farming and raising some variety of livestock. Off-farm income sources such as wage labor, small shops and services, etc., are also occurring but at a smaller scale. The Concession Agreement requires project implementers to support livelihoods over the medium-term and well after COD: it generally takes longer than 1-2 years for people to adapt to a new and very different new set of circumstances, opportunities and technologies – as would be the case for any rural livelihoods project. From our perspective this will remain the key challenge on the plateau: while the technical side is broadly known, and the institutional side is progressing, some of the social change processes remain challenging. There is consensus on this point by all project stakeholders, and efforts to address this are ongoing.

Finally, on **food security**, it is true that some households are doing far better than others at securing their own food needs, either directly through growing their own, or through purchases in markets. We agree that this is an important issue that requires close monitoring. Project monitoring suggests that such differences are a result of differing inputs (such as whether villagers are following advice on soil treatment), but also because of different aptitudes or assets (such as availability of household labour). We expect that differences based on inputs will motivate people to learn from demonstration plots and their neighbours, while vulnerable people will require more ongoing attention and support. The NT2 project is designed to address this challenge through close socioeconomic monitoring, adapting livelihood support to their needs, and providing supplemental rice and protein support for genuinely vulnerable families.

#### 2. Project Lands

Your letter raises concerns on project lands compensation for the transmission corridor, the downstream channel, and on livelihood programs.

As we stated in the last Update to the Board, in general the project lands program has been well managed, and the program is being gradually wrapped up. As part of this process, specific cases are still being dealt with as they emerge, primarily through the **grievance process**. As you already know, a grievance system was established with village, district and provincial authorities so that all families who felt they had not been compensated fairly were able to state their case and have it reassessed. In certain cases, such claims were judged to be legitimate and additional compensation was awarded. In other cases, it became evident that complaints were based on a misunderstanding of entitlement, and further explanation was made: compensation was not awarded in a 'blanket' fashion, but rather following assessment of what had been lost by each household. It was reported to us that in a few cases, it became clear that a few individuals were attempting to claim far more than they had originally held. The process of informing, registering, claiming, assessing, reviewing and closing the various compensation programs has

been systematic and appropriate. The ADB and the World Bank, as well as the POE, have all reviewed this process closely in the past. The NTPC policy of providing compensation well above the market rate for all goods and land lost has meant that the majority of people affected by the Project are satisfied with their compensation.

During your visit in May you raised two specific project lands cases in the transmission line corridor with us. We have followed up on these cases and note that both households had in fact received — and signed for — their compensation. However, since there was still come confusion or miscommunication about their circumstances we have recommended that their cases enter the grievance system. The annex to your letter repeats aspects of these cases in Ban Phon Kham, including that some households impacted by the transmission line corridor "cannot cultivate rice anymore on their



1. Rice fields near the transmission line at Ban Phon Kham. September 2009- Photo: NTPC

land". As picture 1 clearly shows, people in Ban Phon Kham continue to cultivate rice within the transmission line corridor, as allowed by the regulations. It is unlikely that one family has been forbidden from cultivating rice under the transmission line while the other families are doing so.

With respect to the **downstream channel** compensation, there has been generally good progress made in finding "land-for-land" solutions in the Gnommalath area despite the land market problems. The approach to these problems was detailed in the July 2008 update to the Board. In a small number of cases some affected households are holding compensation in their bank accounts, waiting for land prices to decrease and/or because they don't feel the need to develop land. The project is not in a position to bind the local market or force families to invest their compensation funds if they are not willing to do so. Regarding commuting distances to new land, many families in Gnommalath District have farmed rice fields one or two kilometres from their houses for generations. We will continue to monitor this program until all cases are resolved: we also like to note that affected villagers have also received disturbance allowances and temporary compensation during this process.

The Livelihoods Program is dedicated to households which have lost 10 percent or more of their productive (cash and imputed income-generating) land assets. In the case of the households in the Sankeo and Tham Phuang villages mentioned in your letter, it depends on whether the villagers interviewed are entitled to this support or not, which could not be determined from the information that was provided. We suggest that you communicate directly with NTPC to check on the specifics of these cases. By July 2009, over 240 households were participating in livelihood programs covering a variety of income-generating activities. While

not all participating households have recorded good results in all programs, successful mushroom growers, frog breeders, livestock raisers, owners of improved rice fields, and small business owners have all been assisted through the Project Lands program.

## 3. Downstream Xe Bang Fai

Your letter raises issues about the village income restoration funds ('savings and credit schemes'), livelihood programs, fish ponds, and program funding levels.

Before addressing the details of the program, it is important to note that there have been almost no project-related impacts on the downstream Xe Bang Fai to date, nor will substantial impacts be felt until around COD. The downstream program is investing ahead of project impacts in an effort to prepare villagers and reduce any adverse effects on their livelihoods.

The downstream program includes elements that involve direct compensation for direct losses – such as for riverbank garden losses – but the broader objective of much of the program is to improve the overall livelihoods of the people living in downstream areas in a sustainable way. This approach has been endorsed by key project stakeholders as the best way to assist downstream communities over the long-term. The village income restoration fund (VIRF) was designed with this in mind, and is intended to help villagers adapt their livelihoods to a changing environment brought about by the project (which presents potential upsides as well as downsides to downstream communities). The program is not designed to impose any kind of new livelihood activity on households: they may choose to develop a "new" activity or simply to further intensify or scale-up an already ongoing activity.

A recent review of the program outlines actions to strengthen it. Among other things, the review demonstrated that: (i) while some households borrow money for social purposes, the vast majority of households borrow for familiar activities such as support to dry season rice production; (ii) money is lent under much softer conditions than are available through any other lenders locally; (iii) participation rates are good, including for vulnerable people (the latest data suggests that VIRF participation is now close to 70 percent, including 50 percent of poor households), and; (iv) a lack of investment opportunities and lack of labor force are the most common reasons for not borrowing from the VIRF – risk aversion comes only fourth.

Given this evaluation, and our own monitoring in the field, the ADB and the World Bank view VIRF progress as substantially positive, a view also shared by the POE in their last report (Page 18, Report 15). Nevertheless, the ADB and the World Bank will continue to work with NTPC to monitor and strengthen the program, with a particular focus on the most vulnerable people.

Temporary use of **fish ponds** is often an effective practice by many farmers in Asia (Thailand, India, Bangladesh, etc.) and elsewhere. In these countries, many ponds are temporary pools that are stocked early in the wet season and harvested progressively throughout the dry season, and can be highly productive. Many ponds in the Xe Bang Fai area will not be different.

For the case of the NT2- impacted areas where fish ponds are being used, several cases have been found where seepage is too high due to poor soil quality and ponds cannot retain water for a sufficient period of time. The NTPC is now in the process of implementing a test "pond sealing" program to improve water retention. The program will be expanded during the 2009-2010 dry season to all ponds with high seepage. This program is fully funded by NTPC.

Because of rainy season flooding (not NT2 related), NTPC has replaced some of the fingerling stock lost. NTPC has developed a range of technical aquaculture packages for villagers, and none of these are pilot packages. Amongst them is an "after-flood aquaculture" package that consists of delaying the pond fish-stocking until after the annual floods (late September). This package was recommended to villagers with ponds in at-risk areas, but the advice has not been followed in each instance. We expect that fish ponds will become even more successful as villagers get used to different approaches and their consequences. As with other aspects, we will be monitoring their progress.

The US\$16 million budget for the NT2 downstream program was based on the best available information at time of project appraisal. Given that no significant project impacts have occurred on in the Xe Bang Fai downstream area, we have no basis on which to reappraise these costs. Following the start of commercial operations and consequent downstream impacts, we will continue to monitor downstream areas closely. Once actual impacts are known in the coming years, we will be in a much better position to reappraise downstream impacts and costs if required. This situation was anticipated in our project agreements, which require the Government to finance additional costs of the downstream program should it become necessary.

Some of your recommendations relate to broader flood management and irrigation issues for the Xe Bang Fai, which are not the direct responsibility of the NT2 project. Government, ADB, the World Bank and NTPC fully recognize the new and more economic irrigation opportunities brought about by the NT2 project, as well as the broader flood management challenge for the Xe Bang Fai river basin (which has always had an annual flood cycle). The World Bank's Khammouane Development Project is intended to assist and to address these issues. We are also working with Government to develop stronger institutional arrangements for river basin management, including flood management in the Xe Bang Fai and elsewhere. NTPC has gone beyond its obligations in the Concession Agreement to install a number of irrigation outlets in the downstream channel to facilitate future irrigation investments.

## 4. Revenue Management Arrangements

The last update to the Board report from the ADB and the World Bank summarizes progress on implementing the Revenue Management Arrangements (RMA) or as you call it, the Benefit Sharing Arrangements. (WB & ADB 2009, pgs. 14-15, para. 41 - 45). The update describes the progress that has been made, including indicative allocations for this financial year. In general the RMA provide for the money to be used for priority poverty-reduction and environmental protection activities, and the various public financial management arrangements

to assure this. There are so far no provisions for NT2 revenues to be used for compensation related to the project, as the mechanisms and budget for compensation is already provided for in the Concession Agreement and various other project agreements. Should additional monies for compensation ever be payable by Government – such as in the possibility of the downstream program as described above – then it would be Government's choice as to how it would choose to finance it.

## 5. Disclosure of Information

As you know, the NT2 project broke new ground internationally with the extent of its oversight and monitoring arrangements, as well as the range of information disclosure, and in the opportunities for stakeholders' voices to be heard.

Some monitoring data is already being analyzed and provided to some of the specified monitoring agencies for the NT2 project, as required by the Concession Agreement. We are assisting NTPC to improve their capacity to manage and analyze socioeconomic data that are now being produced post resettlement. As the analyses become standardized, we hope that this will result in the release of more socioeconomic data in the months and years to come.

The websites of the ADB and the World Bank contain many documents on NT2, but are not the only source of public information. The Government discloses key reports (such as those by the POE and other releases subject to Concession Agreement arrangements) on the website (<a href="http://www.powerinprogress.com">http://www.powerinprogress.com</a>), while the NTPC website (<a href="http://www.namtheun2.com">http://www.namtheun2.com</a>) also contains a wealth of detailed information about the project and its implementation.

We hope the above information addresses your concerns about the NT2 project. We look forward to continued constructive feedback on the project in the future.

Sincerely,

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