

LAO PEOPLE'S DEMOCRATIC REPUBLIC
NAM THEUN 2 MULTIPURPOSE PROJECT



**SEVENTEENTH REPORT OF THE
INTERNATIONAL ENVIRONMENTAL AND SOCIAL
PANEL OF EXPERTS**

22 November 2010

**DAVID McDOWELL
THAYER SCUDDER
LEE M. TALBOT**

**SEVENTEENTH REPORT OF THE INTERNATIONAL
ENVIRONMENTAL AND SOCIAL PANEL OF EXPERTS**

**For the Nam Theun 2 Multipurpose Project
Lao People's Democratic Republic
22 November 2010**

CONTENTS

LIST OF RECOMMENDATIONS	1
1. INTRODUCTION	5
1.1 The Panel's Mandate	5
1.2 Panel Activities	5
1.3 Acknowledgements-Appreciation	6
2. SCHEDULE 35 AND THE NT2 PROJECT	7
3. NT2 AS A MULTIPURPOSE DEVELOPMENT PROJECT	8
4. THE NAKAI PLATEAU	10
4.1 Monitoring Resettler Living Standards	10
4.2 Nakai Plateau Resettlement: Dropping Incomes and Increasing Debt?	10
4.2.1 POE Objective One: Assessing Resettler Well Being	10
4.2.2 POE Objective Two: Livelihood Improvement	12
4.2.2.1 Development Issues: Extension	12
4.2.2.2 Development Issues: Water User Groups for the 221 Small Scale Irrigation Systems	13
4.2.2.3 Development Issues: A Micro-Finance System on the Plateau	13
4.2.2.4 Institutional Issues: RMU Staff, Nakai District Staff and Villager Training	14
4.2.2.5 Institutional Issues: Livelihood Development Coordination	15
4.2.2.6 Institutional Issues: Improved Integration of the NTPC Social Scientist and the Gender and Education Officer into NTPC Operations	15
4.3 Participatory Land Use Planning	15
4.4 Remediation in Plateau Villages	16
4.5 Village Forestry Issues	16
4.6 Sawmills on the Nakai Plateau	17
4.7 Logging Barges on the Reservoir	18
4.8 Other Threats to NPA and VFA Timber	18
4.8.1 Furniture Factories	18
4.8.2 Charcoal Making	19
4.8.3 Taxes, Levies and Dividends	19

4.9	The Reservoir Management Committee and Secretariat	19
4.10	Road Maintenance	20
5.	VIETIC ISSUES	21
6.	THE XE BANG FAI AND DOWNSTREAM DEVELOPMENT	24
6.1	Introduction	24
6.2	NT2's Downstream Program.	24
6.3	Finishing the Downstream Job	25
6.4	Future of Gnommalath Sites and Facilities	25
7.	WATERSHED	27
7.1	Introduction	27
7.2	Update of Prime Minister's Decree 39.	27
7.3	Decision of the Governors of Nakai and Khamkeut Districts Regarding the NPA	27
7.4	The WMPA	27
7.5	Livelihood Development	29
7.6	Water Buffalo in the NPA	30
7.7	World Heritage Status	30
7.8	The UN REDD Program	31
APPENDIX I	Letter of 4 November, 2010, regarding Schedule 35 from Jean-Christophe Philbe, Chairman of the Board of Directors of NTPC	33
APPENDIX II	Abbreviations, Acronyms and Glossary	37

Cover photo: **Successful women farmers of Nong Boua tell the POE their story.**

LIST OF RECOMMENDATIONS

The POE recommends:

- **1/17 That the welcome change in attitude reflected in the re-titling of the project be reflected also in the future planning, funding and implementation of a venture that still needs to be proven as a truly multipurpose one, worthy of being seen as a global model.**
- **2/17 That the Monitoring and Evaluation Unit promptly check the POE findings on debt and income trends and that the NTPC gender specialist and the social scientist be included in the survey team.**
- **3/17 That the Community Development Team prioritize the teaching of financial management skills at household and village levels in their program.**
- **4/17 That NTPC implement its CA responsibility to work with the Resettlement Committee and the RMU to recruit a salaried and skilled extension staff with daily responsibilities in the 16 resettler villages throughout the Resettlement Implementation Period.**
- **5/17 That NTPC carry out its responsibility to form and train water user groups for each of the project's irrigation systems including the irrigation system in the Pilot Village (Nong Boua).**
- **6/17 That an inclusive consultative process aimed at establishing and putting in place a flexible but effective village credit system be initiated as a matter of urgency, the funds to come from agreed reassignment of CA entitlements now not seen as a priority.**
- **7/17 That the recruitment of a commercial bank to set up an office in Oudomsouk or provide mobile banking facilities across the Plateau be pursued with vigor.**
- **8/17 That NTPC, RMU and Nakai District re-assess their compliance with the CA's staff training requirements with special emphasis on providing adequate community development and agricultural extension training to the 16 Village extension workers and resettler villages. Re-assessment should also involve close coordination with the Provincial Governor's and PAFO's plans to station 16 senior staff on the Nakai Plateau to work directly with village extension workers.**
- **9/17 That NTPC organize weekly Monday morning coordination meetings with the RMU, DWG and DAFO.**
- **10/17 That the NTPC Environment and Social Director, the Downstream Program Manager and the Nakai Plateau Resettlement Manager discuss with the NTPC social scientist and gender and education officer how their skills can best be integrated into the NT2 Project.**

- **11/17** That completion of Participatory Land Use Planning and Village Development Plans be prioritized along with Extension, Water User Group and Micro Credit.
- **12/17** That a body on which the resettlers have a majority be set up to oversee the selection of small practical projects to be funded by the SERF, that a low or intermediate technology approach be adopted where appropriate and that a low cost village waste disposal system along the lines set out in the text be one of the initial services established.
- **13/17** That immediate steps be taken to conclude the process of converting the VFA into a Limited Liability Company, that a new Board be appointed quickly and that the existing processing and marketing contract be renewed with appropriate modification, including managerial training requirements, for a mutually agreed period.

The POE strongly recommends:

- **14/17** That the NT2 Steering Committee reconfirm its December 2008 recommendation that authorization be given for only one sawmill (VFA) on the Plateau due to the limited forest resources available and the CA's provision for exclusive use of logs from the Resettlement Area for the benefit of the resettlers, and that the other sawmills be decommissioned and removed by December 9th, 2010, and all search for logs in the reservoir be stopped immediately.

The POE recommends:

- **15/17** That the remaining logging barges on the reservoir be removed before the Inauguration Ceremonies of December 9, 2010.
- **16/17** That an independent study of the equitability and appropriateness of the various taxes and levies imposed on the VFA be undertaken in the near future and modifications made if so recommended by the study.
- **17/17** That the RMS funding be confirmed and committed for a long enough period to ensure that their important registering, licensing, and monitoring of the use of the reservoir can be continued.

The POE requires:

- **18/17** That Vietic households consolidated in Nakadok and Na Thone village be allowed, in accordance with the World Bank's agreement with the GOL, to return to previously inhabited sites along the Nam Xot upriver from Nahao before those

two villages are relocated elsewhere in Bolikamsay Province to make way for commercial gold mining.

The POE recommends:

- **19/17 That Ahoe who so wish have the option of establishing a permanent presence at the Old Sop Hia site.**
- **20/17 That the WMPA establish a permanently staffed outpost at the Old Sop Hia site and work with the Ahoe as outlined in Recommendation 2b.**
- **21/17 That the Consultant's recommendation 4a be broadened to include all Vietic households in existing resettlement villages, in the Peripheral Impact Zone, and in the Watershed, and that the consultant's terms of reference be expanded to include recommending Vietic-oriented "special project components" and training of NTPC, RMU and Nakai and Khamkeut District staff.**

The POE strongly recommends:

- **22/17 That a concerted effort be made by all stakeholders to pull together the final \$5.5m required to complete the Downstream Program, given that the sustainability of an innovative program, the livelihoods of over a hundred thousand impacted people and the reputation of all those involved are at stake. Completing the Downstream work is fundamental to the overall success of the NT2 project.**

The POE recommends:

- **23/17 That, if a reasonable price and an undertaking to perform the necessary remedial and clearance work can be negotiated with Ital-Thai, their residential site and facilities at Gnommalath be acquired, possibly for conversion to a residential secondary school or an alternative educational priority.**
- **24/17 That a plan be developed for the Wildlife Conservation Society or another suitable organization to provide the WMPA with TAs and possibly other assistance, to be funded from sources independent of the WMPA annual budget.**
- **25/17 That closer collaboration between the various project livelihood teams be cultivated so that the lessons and techniques of each is shared with the others, not least in the propagation and production of NTFPs as cash crops.**
- **26/17 That the WMPA act rapidly and decisively after the start of 2011 to remove, sell or, if necessary, to destroy all the water buffalo belonging to resettlers which remain in the NPA.**

- **27/17 That GOL initiate the process of applying for World Heritage status for the NNT NPA without delay.**
- **28/17 That GOL work with the World Bank to investigate the possibilities that the REDD program may offer to provide GOL income from conservation of the NPA.**

1. INTRODUCTION

This is the seventeenth report of the International Environmental and Social Panel of Experts (POE or the Panel) for the Nam Theun 2 (NT2) Multipurpose Project in the Lao People's Democratic Republic. The members of the Panel are D.K.McDowell (consultant, Otaki, New Zealand), T.Scudder (Professor Emeritus, California Institute of Technology, USA) and L.M.Talbot (Professor, George Mason University, Virginia, USA).

The Commercial Operations Date for the NT2 Project occurred on April 30 of this year, and the principal focus of this present POE mission was Schedule 35 of the Concession Agreement (CA). Section 2 below describes Schedule 35 in more detail. The consistent practice of the POE has been to undertake on-site inspections of major elements of the NT2 Project in order to verify their situation and status. Accordingly, this present POE mission was devoted to first hand inspections of the status of the items in Schedule 35. In the course of Schedule 35 inspections, the Panel also addressed some key issues not referred to in Schedule 35, and they are discussed further in this report.

As we have noted previously, in aggregate the Panel members have over 150 years of professional experience, much of it international and much of it specifically involving large dams and/or their environmental and social impacts. In the long run, we have seen few if any of these projects to be successful in terms of the welfare of the involved local people and the environment being as well off, much less being improved, by the project. However, the Panel has felt that the NT2 Project has the potential to break this downward cycle and to result in real gains for the affected people as well as the environment, the latter particularly in terms of conservation of the NPA's biodiversity. The Panel remains cautiously optimistic that these objectives can be met, if the actions recommended below are carried out in the near future.

1.1 The Panel's Mandate

The Panel derives its mandate from the Concession Agreement. This is a 600 page legal document which assigns the POE a contractual responsibility to provide independent review of, and guidance on, the treatment of environmental and social issues associated with the Project, along with some executive functions, and after the Implementation Period of nine years or more, to determine whether the Project's environmental and social goals have been met. The POE remains a standing body for the period of the concession. The POE submits its findings to the GOL Minister of Energy and Mines and the Standing Deputy Prime Minister, addresses recommendations to the GOL, NTPC and the International Financial Institutions (IFIs), and is required to assess the extent to which NT2 meets the requirements of the safeguard policies of the World Bank and the Asian Development Bank on such issues as the environment, indigenous peoples and resettlement with development.

1.2 Panel Activities

POE members David McDowell and Thayer Scudder arrived in Vientiane on the weekend of October 16 and 17. They were briefed by the NTPC and on October 19 proceeded to the Nakai Plateau. During the next three days they concentrated on interviews with household members and officials in five of the 16 resettler villages and inspection of irrigation infrastructure with NTPC staff. The VFA workshop was attended.

Member Lee Talbot arrived in Vientiane on October 22 and proceeded directly to Nakai.

The next five days the POE spent on further site visits to resettlement and other areas of the NT2 Project, meetings with Jean Christophe Philbé, Chairman of the Shareholders' Board of Directors, EGCO Shareholders' Board member Ngamphis Chitphromphan, the World Bank's William Rex, ADB's Elizabeth Mann, NTPC's Environment and Social Director Ruedi Lüthi and NTPC Resettlement Office staff members, and with the WMPA, EMO, RMU, RMS, NRO, the Nakai Vice Governor, and the Nakai District Prosecutor. On October 24 the Panel met with the World Bank President and his party at the NTPC Guest House in Oudomsouk and Lee Talbot accompanied him to the NT2 Power Station.

On October 28 the Panel drove to Thakhek via project activities and sites, observing restoration and rehabilitation work, roading, quarry/borrow pit and revegetation areas, and meeting with RMU and the Khammouane Governor. The next two days involved meetings with the NTPC E&S Director and Managers and a boat trip down the Xe Bang Fai to observe the impacts of the project water flows.

The POE returned to Vientiane on October 31 for seven days of report preparation and meetings with the Hon. Somsavat Lengsavad, Deputy Prime Minister and Standing member of the Government, the Hon. Soulivong Daravong, Minister of Energy and Mines (MEM), the Dam Safety Review Panel, the NTPC Board Chairman, NTPC and MEM Project staff, and the IFIs prior to a Wrap Up meeting with GOL agencies, the CEO and other staff of NTPC, the Dam Safety Review Panel and the IFIs and departure on November 7 and 8.

1.3 Acknowledgements-Appreciation

The Panel expresses its appreciation for the organizational time and energy devoted by GOL, NTPC, World Bank and WMPA staff to setting up a most worthwhile schedule, not least Phalim Daravong. It is grateful to the Standing Deputy Prime Minister, Hon. Somsavat Lengsavad, the Minister of Energy and Mines, Hon. Soulivong Daravong, the Governor of Khammouane Province, the Deputy Governor of Nakai District, the Chairman of the NTPC Board, Jean-Christophe Philbé and the CEO of NTPC, Jean-Pierre Katz, for their insights and time. The POE is also grateful to the Dam Safety Review Panel for its most useful advice on a number of engineering and environmental impact items in the Schedule 35 list.



POE's Ted Scudder interviewing villagers at lunch
- an example of "opportunity sampling".



POE's Lee Talbot lunches with World Bank
President Zoellick and Minister Soulivong
Daravong.



Unplanned rubbish dump near Ban Thalang.



Project quarry site being prepared for sale.



Highway slumping on Nakai/Thalang route.



The POE inspecting fallow near Thalang.

2. SCHEDULE 35 AND THE NT2 PROJECT

As noted above, the principal focus of this mission was Schedule 35 of the CA. This schedule contains some 136 items that the CA requires the NTPC at this time to certify that it has completed or is in process of completing in order to satisfy its obligations to GOL, the resettlers and those affected in the downstream areas. **It should be emphasized that these items do not represent the full list of the Company's obligations under the CA.** Rather, Schedule 35 represents one milestone toward the achievement and full implementation of CA requirements. Each of the 136 items is to be listed as "C", i.e. fully completed, or "P", partially completed. The Company is to certify that the items are correctly listed, and to submit this Schedule 35 Certificate to GOL this month (November), after which GOL, POE and the Dam Safety Review Panel (DSRP) have 30 days in which to issue a "No Objection" or "Objection" to the Company's certificate.

The POE first reviewed the draft Schedule 35, and then devoted the majority of its time on this mission to carrying out inspections on the ground. In a few cases the Panel sought the help of the DSRP for advice on issues where that body had special expertise. The POE then recommended that 23 of the items originally listed as "C," completed, be changed to "P," partial. The Panel's conclusions have been discussed in detail with the GOL and the NTPC. The POE's recommendations have been accepted and the Company has also provided a letter reaffirming its undertakings to carry out its CA obligations in full (see Appendix 1).

As at the beginning of 2008, the NT2 project now faces major challenges. At the time of the POE's January 2008 mission, the major challenge was for GOL and NTPC to solve a number of major problems so that dam closure and reservoir filling could occur on time. Under the strong leadership of the Standing Deputy Prime Minister, the Minister of Energy and Mines and the NTPC Chief Executive that challenge was met and the dam was sealed in April 2008 as planned. The current challenge relates to satisfying by 2014 a number of major Concession Agreement requirements. This challenge is more complex for it relates to all three of the major project zones: The downstream XBF zone, the Nakai Plateau and the Watershed. The POE remains cautiously optimistic that these challenges can be met. Not only does the same leadership exist that met the 2008 challenge, but that leadership has been further strengthened by the active involvement of the NTPC Board of Directors as shown by the 4 November 2010 letter to the POE from the Chairman of the Board noted in the previous paragraph (see Appendix I).

3. NT2 AS A MULTIPURPOSE DEVELOPMENT PROJECT

When the POE came to Laos in 1997 the NT2 Project was described as a hydro project, a large one indeed, but just another hydro project from the global point of view. And so it was considered by GOL, NTPC, and the International Financial Institutions. When POE and International Advisory Group personnel visited the Director General of the Ministry of Agriculture and Forestry's Irrigation Department in 2002, we were told that we were the first project visitors they had received in spite of the NT2 Project's potential for improving dry season irrigation along the Xe Bang Fai for over 100,000 people.

The 9 December 2010 invitation of the Ministry of Energy and Mines on behalf of the Government of Lao PDR refers to the Celebration and Inauguration of the Nam Theun 2 Multi-Purpose Project. This wording reflects a major change in attitude that views NT2 as a multipurpose project. It remains to be seen, however, if this change in attitude will be reflected in the implementation of a project that is both multipurpose and a model for the future.

Since its initial report in 1997, the POE has emphasized the multipurpose development potential of the NT2 project. The POE then recommended in its second report "that the same sort of imaginative planning done for the Nakai Plateau and the NT2 Conservation Area be more systematically pursued [along the Xe Bang Fai] for project-affected areas and peoples between the power station and the Mekong River." As opposed to approximately 13,000 people living on the Nakai Plateau and in the Conservation Area at that time, at least 150,000 people lived downstream of the power station and regulating pond, approximately 120,000 of whom are currently considered by the Downstream Program to be project affected people.

Following the POE/IAG's 2002 meeting with the Ministry of Agriculture and Forestry's Irrigation Department "interest has increased, though much too slowly, in how the NT2 Project can provide a model for how Laos' many other 'hydro' projects can catalyze a process of downstream development" (POE Report 16, February 2010. Page 31). GOL is interested in the integrated development of the XBF basin and especially in using turbinized flows for developing dry season irrigation of higher value crops but the government has major budgetary constraints. While NTPC has more than met its financial requirements under the Concession Agreement by funding additional pre-feasibility studies, funding for implementing the CA-required Downstream Program through 2014 will be exhausted by the end of 2011. Unless a further \$5.5 million is found, the Downstream Program, in the POE's opinion, will fail (see Section 6 of this report).

Only the World Bank among the IFIs has shown sufficient interest in the XBF's multipurpose development to fund additional projects. The first was the current Khammouane Development Project (KDP) which emerged from the Bank's October 2003 XBF scoping mission. The KDP has two components: (1) Local Development and Provincial Capacity Building and (2) Support for Irrigation Development along the NT2 Downstream Channel and Lower Xe Bang Fai. Implementation, however, has been plagued by delays.

The World Bank's Project Appraisal Document for a Mekong Integrated Water Resources Development Project: First Tranche will be submitted to the Bank's Board for approval during the first half of 2011. The proposed project focuses on both Laos and Cambodia. In Laos, one component includes the XBF where support will be provided to develop a river basin organization and a flood management plan for the basin's lower portion. Flood gates, important for irrigation and fisheries management, and village irrigation projects, will be rehabilitated.

Clearly, multipurpose development efforts have begun in the XBF basin. On the other

hand, now that the NT2 Multi-Purpose Project has been inaugurated, there is the risk that interest in the project's multipurpose potential will fall-off. That would be a tragedy for Laos and the people of the XBF basin. It would also weaken the reputation of the NT2 project as a global model.

The POE recommends:

- **1/17 That the welcome change in attitude reflected in the re-titling of the project be reflected also in the future planning, funding and implementation of a venture that still needs to be proven as a truly multipurpose one, worthy of being seen as a global model.**

4. THE NAKAI PLATEAU

4.1 Monitoring Resettler Living Standards

The POE and all other parties involved in NT2 have been and remain severely handicapped by the inability of the Project Agencies to implement, and analyze data from, a satisfactory monitoring system prior to the December 9 inauguration of the NT2 Project. Inadequate data and analysis exists, for example, to test the general hypothesis for large dams that income is apt to drop when, as in the NT2 project case, several years intervene between the end of the construction phase and the implementation of the full range of livelihood activities.

The October 1998 Census and Socio-Economic Survey on the Nakai Plateau provided an adequate starting point for implementing a statistical analysis of changes and continuities in resettler livelihood throughout the Resettlement Implementation Period. Rejecting that approach NT2 Project Agencies attempted to monitor resettlement impacts on every household. Such an approach is “neither feasible nor practical,” as the POE stated in its first report (February 1997) for providing the type of data and analysis needed for adaptive management purposes.

Though currently the Monitoring and Evaluation Unit is completing the design of and preparing to implement, a more appropriate system that will provide data on such important issues as hire purchase and other forms of interest-bearing debt, the POE has had to rely on its own interviewing to explore living standard and income trends among middle and upper income resettler households. We are not comparing income, let alone living standards, with the pre-resettlement period but rather are concerned that the all too frequent drop in income following resettlement in a majority of large dam projects may be occurring because of the delayed implementation of NT2’s livelihood program.

During our February 2010 visit, POE concern had increased that resettler incomes might be dropping in a significant number of households. Further data collected in October 2010 in a small number of households and from officials in several “poor” and several “rich” resettler villages did suggest that over the past three years income for a significant number of previously non-vulnerable households has begun to drop while debt loads have been increasing.

4.2 Nakai Plateau Resettlement: Dropping Incomes and Increasing Debt?

4.2.1 POE Objective One: Assessing Resettler Well Being

During the POE’s current mission, our first of two objectives was to obtain more qualitative data on resettler well being by complementing detailed interviews with a small number of households, most of which we had interviewed during previous visits, in three villages, with lengthy interviews with elected village officials. All household interviews except one indicated a downward income trend in recent years and, in a majority of cases, an increasing debt load, which, in some cases, household members did not know how to pay off. As for interviews with officials, in Ban Phonsavang no decline in household income was noted, a belief denied by each of the five households subsequently interviewed in that village. In Ban Done, one of the largest and richest of the 16 resettler villages, officials estimated that the income of perhaps 15 percent of households was declining. In Nong Boua, it was estimated by a key official that in recent years income had declined in over 50 per cent of households.

Currently fishing and collection of forest products are the major sources of income. Increasingly fishers, both men and woman, sleep out one or two nights while fishing. In one case

a family's major provider spent only four or five nights a month sleeping at home. Camping in the NPA is common; hence the temptation to illegally collect rosewood and non timber forest products. Fishery yields have dropped following an expected initial increase in landings. Costs for boats, boat engines and fuel have not dropped, however, while purchase of ice, for icing fish in storage boxes, has become a necessity during overnight visits to more distant and productive fishing grounds.

Involving an upward trend, several types of debt were mentioned. Two types pose a problem for the current E & M Unit's emphasis on consumption and on a wealth index based on assets. One type of debt refers to cases where resettlers have an outstanding debt to the project for formerly recommended purchase of two wheel tractors and for livelihood experiments involving poultry, pigs and cows where livestock died for reasons beyond resettler control. The second type, which involves a much larger number of resettlers, is hire purchase debt for boat engines – required equipment for that majority of households dependent on fishery income. In Nong Boua, for example, a village official estimated that the majority of boat engines had been bought on credit.

Hire purchase debt for non-productive consumer goods, which also figure prominently in calculating wealth indexes, is also alarming. In one case a merchant had just sold, with no down payment and next day delivery, an overpriced three million kip refrigerator to the family we were interviewing. The head of the household told us that he had no idea of how he was going to pay off that and other debts. No data was available to the POE on the condition of such assets that had been purchased several years ago in spite of the fact that anyone walking through resettler villages can see dysfunctional motor bikes, tractor trailers, bicycles and other assets.

Most alarming, however, is gradually increasing debt for rice much to the concern of the women interviewed. Phrases mentioned during interviews included “every year we struggle for rice” or “get income - buy rice.” Several kinds of rice debt are involved. Those with relatives and friends (which can include a rice trader) tend to be smaller with no interest involved. Merchants either stop providing rice when an initial debt is not paid or allow the debt to gradually increase. One of the five best irrigation farmers in Nong Boua has an increasing high interest, rice debt of two million kip to a rice merchant. She fears her family falling into the vulnerable category. Yet this is one of the most innovative farmers in the village. She grew mushrooms successfully before NTPC withdrew all support in 2007. Yet still she is willing to innovate, as many other resettlers are. In 2010 she was one of those who grew floating rice in the drawdown area, and although she lost her entire crop when the water levels rose, is willing to try again.

In Phonsavang, representatives of four families were present at one interview. All were members of a 15 household irrigation project with drawdown area access; hence among the better off households in the village. Rice debt for the first household was four million kip, for the second three million kip, and for the third one million kip. The total debt of the fourth household was four million kip of which part was for rice. While VFA dividends can be used to purchase rice, just as income from non-timber forest products was used in pre-resettlement days, more uncertainty can be expected in people's minds regarding the VFA dividend because they have little control over it.

The risks associated with debts that have been gradually increasing from 2008 are that creditors, mainly merchants in Oudomsouk, will demand payment in resettler services and property including access to resettler labor (as fishers, for example), and to their boats, land and housing, questionable though this may be in legal terms.

The POE recommends:

- **2/17 That the Monitoring and Evaluation Unit promptly check the POE findings on debt and income trends and that the NTPC gender specialist and the social scientist be included in the survey team.**
- **3/17 That the Community Development Team prioritize the teaching of financial management skills at household and village levels in their program.**

4.2.2 POE Objective Two: Livelihood Improvement

The POE's second objective, in the event that there appeared to be a downward trend in income, was to investigate and recommend ways to reverse it. We prioritized during our current visit three development issues that warrant special attention and three institutional issues.

4.2.2.1 Development Issues: Extension

Over the years NTPC's Nakai agricultural research program has successfully demonstrated how poor plateau soils can support more intensive cropping systems on 0.66 hectare plots. Successful cropping experiments and on-farm demonstrations have been undertaken with a widening range of crops including short term and higher yielding varieties of rice, floating rice for growing in the drawdown zone and feed corn which is a higher potential crop for contract farming. Currently emphasis is shifting to implementing the Lao Extension Approach which was developed by GOL's National Agriculture and Forestry Extension Agency and recently approved by the Ministry of Agriculture and Forestry.

All this is excellent. What is deficient, however, is an intensively supervised and trained extension staff which can be relied upon to convey the above findings and knowledge to farmers in the 16 resettlement villages on a daily basis throughout the Resettlement Implementation Period. The CA states clearly that "all resettlers will be entitled to quality agricultural extension services for at least the duration of the Resettlement Implementation Period." (CA Schedule 4, Part 1, Page 110). Those services only can be phased out when resettlers have "sufficient income to purchase the inputs themselves, as adjudicated by the independent external monitors." Otherwise, "the company will continue to subsidize these inputs until the requisite [income] levels have been reached for each household" (Page 109).

Currently the extension service is the responsibility of 21 volunteers, 16 of whom are assigned to work daily in the 16 resettlement villages. Trained at agriculture and forestry colleges, some of them have been working in the villages for several years. The Company and the Project, however, have no control over the retention of such unsalaried extension workers whose main incentive for remaining on the Nakai Plateau is their hope of becoming salaried government staff rather than forming the required extension service. Such a situation is unacceptable since these volunteers, no matter how well trained and motivated, can not be expected to provide the necessary staff continuity over the next four years.

The POE believes that the only reasonable solution at this late stage for implementing an acceptable extension system is for NTPC to take responsibility for ensuring that the volunteers receive, on the condition that they remain project extension workers for a minimum of two years, salaries equivalent to new government staff. The POE discussed the extension problem in several meetings with senior NTPC, RMU, Nakai District and Provincial staff, with the Khammouane



Rice thresher at work in Ban Phonsavang.



Consultations with Nakai Plateau villagers.



Second generation houses in Ban Done.



Discussing gender and development issues with the NTPC Gender Officer and the NTPC Social Scientist over a drink.



Phonsavang drawdown zone planting.



Boy and dog at Phonsavang.

Provincial Governor following up those discussions with a lengthy staff meeting on October 29. The result of these meetings was a general agreement that:

- The RMU carefully evaluate all current volunteers and recruit additional ones needed to bring the total to one qualified extension worker for each of the 16 villages. Evaluation should assess both agricultural extension and community development skills since effective extension work requires both.
- These volunteers be hired, as a required NTPC responsibility, as salaried but probationary Nakai District government staff provided they are willing to sign contracts to do extension work in the same village for a minimum of two years and, if hired as permanent government staff, to remain as Nakai village extension workers until the end of the Resettlement Implementation Period in 2014-2015.
- At the same time the Provincial Government will transfer to Nakai District sufficient provincial staff to supervise, as a minimum requirement, the 16 village extension workers.

The POE recommends:

- **4/17 That NTPC implement its CA responsibility to work with the Resettlement Committee and the RMU to recruit a salaried and skilled extension staff with daily responsibilities in the 16 resettler villages throughout the Resettlement Implementation Period.**

4.2.2.2 Development Issues: Water User Groups for the 221 Small Scale Irrigation Systems.

Though NTPC's Resettlement Office expects to complete the necessary village irrigation infrastructure by the end of December 2010, no village water user groups have been formed and trained to operate and maintain their irrigation systems, including the re-establishment of the Nong Boua irrigation system water user association which the Company closed down in 2007. NTPC fully understands the necessity for such functional water user groups since even small-scale irrigation systems involve a new technology for the large majority of resettlers.

The POE recommends:

- **5/17 That NTPC carry out its responsibility to form and train water user groups for each of the project's irrigation systems including the irrigation system in the Pilot Village (Nong Boua).**

4.2.2.3 Development Issues: A Micro-Finance System on the Plateau

The apparent trends noted above of declining incomes and growing debt in some at least of the Plateau villages since resettlement commenced can be addressed inter alia through the establishment in the villages of a new and expanded system of making micro-finance funds available to promote livelihood activities (as contrasted with consumer spending). There have already been discussions among the LTA, the IFIs, the POE and the NTPC about what form the new system might take and where the funding might come from. Learning from the lessons of the successful downstream credit scheme the plan is to model the system on the Downstream Program system, with some adaptations, and add to the funds of the Village Credit Funds by incorporating compensation for a number of CA entitlements which are not now seen as a

priority. For example, although there were plans to provide one boat to every household there are now doubts about the wisdom of planning to have up to two thousand boats in total on the reservoir - the fishing resources being finite and the regulation of the activities of such a big fleet being a difficult task.

The POE supports this credit initiative strongly. Obviously there will have to be consultations with village leaders and individual villagers on their entitlements and the options before them. This is adaptive management in practice but the strategy calls for the assent and agreement of CA signatories, communities and individual householders. There is a growing credit gap which needs bridging.

The POE recommends:

- **6/17 That an inclusive consultative process aimed at establishing and putting in place a flexible but effective village credit system be initiated as a matter of urgency, the funds to come from agreed reassignment of CA entitlements now not seen as a priority.**

Beyond micro-financing there is a growing need on the Plateau for a conventional commercial bank office to be set up in Oudomsouk. The villagers' experience with depositing savings in a village-level facility has not been a positive one, several people having lost their savings in the process. Both GOL and NTPC have endeavored to persuade a bank to either establish an office on the Plateau or provide mobile services. They have not been successful. This is now to be taken up at a high level, with a greater assurance of success.

The POE recommends:

- **7/17 That the recruitment of a commercial bank to set up an office in Oudomsouk or provide mobile banking facilities across the Plateau be pursued with vigor.**

4.2.2.4 Institutional Issues: RMU Staff, Nakai District Staff and Villager Training

The Concession Agreement outlines in detail NTPC and GOL training requirements for RMU, Nakai District Working Group, Nakai District Staff and Village Resettlement Committee members. Under CA Schedule 4, Part 1, 11.2.1, RMU staff will be trained "to ensure that they have knowledge of the steps and skills required during the Resettlement Planning Period and the Resettlement Implementation Period, and the relevant obligations, including undertaking social surveys and an understanding of women in development." Furthermore, "The organizational capacity of the District Resettlement Working Groups and the Village Resettlement Committees shall also be strengthened through appropriate training, including to facilitate ... livelihood and community development."

Such training continues to be inadequate for a variety of reasons including too rapid staff turnover. Until recently, NTPC has given too many short term contracts for key personnel and has delayed too long the re-contracting process. Key staff, as a result, have sought other jobs on too many occasions, including defecting to the Theun Hinboun Extension Project. Rapid staff turnover has also adversely affected the training responsibilities of remaining senior RO staff because of the additional time required to train new RMU and District staff as well as Village Authority members.

The POE recommends:

- **8/17 That NTPC, RMU and Nakai District re-assess their compliance with the CA's staff training requirements with special emphasis on providing adequate community development and agricultural extension training to the 16 village extension workers and resettler villages. Re-assessment should also involve close coordination with the Provincial Governor's and PAFO's plans to station 16 senior staff on the Nakai Plateau to work directly with village extension workers.**

4.2.2.5 Institutional Issues: Livelihood Development Coordination

The NTPC downstream program has benefited from coordination meetings with the Resettlement Management Unit (RMU) and District Working Groups every three weeks. So too we believe the Nakai Plateau livelihood program would benefit from such regular coordination between NTPC's livelihood teams, the RMU, the Nakai District Working Group (DWG) and the Nakai District Agricultural and Forestry (DAFO) staff. At least initially such meetings should be weekly with a short meeting on Monday to discuss, review and coordinate the work plans for the coming week.

The POE recommends

- **9/17 That NTPC organize weekly Monday morning coordination meetings with the RMU, DWG and DAFO.**

4.2.2.6 Institutional Issues: Improved Integration of the NTPC Social Scientist and the Gender and Education Officer into NTPC Operations.

Currently the social scientist and gender specialist are part of the Community Development Team. While that provides strengthening to that team, the expertise of both personnel is equally relevant to other teams, especially agriculture and also fisheries and livestock extension. Moreover their expertise is also of importance to the Downstream Program since the social scientist and the gender specialist are general staff whose expertise should not be restricted to a single team or number of teams.

The POE recommends:

- **10/17 That the NTPC Environment and Social Director, the Downstream Program Manager and the Nakai Plateau Resettlement Manager discuss with the NTPC social scientist and gender and education officer how their skills can best be integrated into the NT2 Project.**

4.3 Participatory Land Use Planning

Participatory Land Use Planning has been successfully completed in only two of the 16 villages. Unfortunate delays have slowed down implementation in other villages, hence further delaying villagers from formulating their own Village Development Plans. The POE understands that PLUP completion and Village Development Plans are prioritized activities.

The POE recommends

- **11/17 That completion of Participatory Land Use Planning and Village Development Plans be prioritized along with Extension, Water User Groups and Micro Credit.**

4.4 Remediation in the Plateau Villages

Infrastructure projects in less developed countries often fail because there are insufficient funds available at project completion to maintain communal buildings and other infrastructure and services in good condition. A most useful innovation in the NT2 project is that an annual sum of \$300,000 has been set aside each year for the next 25 years to undertake social and environmental remediation in the resettlement villages. This money must be used wisely and well.

The plan is to seek ideas on how best to use the SERF (Social and Environmental Remediation Fund) now it is about to be set up. A committee is to be formed to make decisions on priorities. It is to be hoped that the Committee will have a majority of resettler representatives on it and that there will be strict financial control of and accountability for these valuable resources.

To make the funds go further the emphasis should desirably be on low or intermediate technology activities which benefit all. For example, there are plans to set up tourism ventures involving visits to selected villages for cultural performances. Visitors would not be impressed by the current state of some villages, where plastic and other unsightly and potentially unhealthy waste lies everywhere. The answer, if it is to be sustainable, is not to introduce costly complex energy-inefficient machinery to pick up and process the waste but to adopt a very low technology approach. A person or persons, perhaps from a vulnerable family, might be provided with a modest weekly wage, large wooden hand barrow, some basic gathering and digging instruments and a cut down 40 gallon drum for burning what cannot otherwise be disposed of safely. Some recyclable items may be able to be sold to an existing Oudomsouk business. The rubbish collector would go around the village several times a week to pick up waste on public ground and collect the sorted waste of each household. The minimal cost would be borne by the SERF. Another project might be to encourage the painting of the roofs of village houses, many of which are already going rusty brown.

The POE recommends:

- **12/17 That a body on which the resettlers have a majority be set up to oversee the selection of small practical projects to be funded by the SERF, that a low or intermediate technology approach be adopted where appropriate and that a low cost village waste disposal system along the lines set out in the text be one of the initial services established.**

4.5 Village Forestry Issues

While a decision was taken at the beginning of this year to convert the Village Forestry Association into a limited liability company (LLC), little progress had been achieved. A workshop was convened to address the outstanding issues and the POE was able to attend.

The outcome, driven by an articulate selection of village representatives, was very positive. A virtual consensus was achieved that the LLC concept should be actively pursued, that

the draft Articles of Association were, with some adaptations, acceptable as a basis for this and should be approved and that a new Board with an in-built majority of resettlement villagers should thereafter be put together to authorize the renewal of the logging and processing contract with the locally based company of Luen Fat Hong Wood Industries.

A multi-year contract like this should not, in the POE's view, have a fixed product price for the duration of the contract but should have a market-oriented and possibly indexed return. And, as emphasized to us and the contractor by the Governor of Khammouane Province, the contractor should begin to train selected resettlers in the intricacies of managing a forest enterprise like this, looking to an eventual assumption of the management role by experienced villagers themselves.

The POE recommends:

- **13/17 That immediate steps be taken to conclude the process of converting the VFA into a Limited Liability Company, that a new Board be appointed quickly and that the existing processing and marketing contract be renewed with appropriate modification, including managerial training requirements, for a mutually agreed period.**

The problems of the always-troubled forestry element of the resettlement exercise will not end there. The timber resources of the resettlement areas and the adjacent NPA are a magnet for poachers of all persuasions. At the workshop villagers were angry about the lack of enforcement of the regulations supposedly protecting the timber set aside as a mainstay of their livelihood program and incomes. They called for heavier penalties and a greater display of will on the part of enforcement agencies to halt the stealing of their precious but limited resource. Some practical proposals follow.

4.6 Sawmills on the Nakai Plateau

The timber available from the Nakai Plateau is either in the NPA and therefore unavailable for commercial logging, or in the lands reserved for the Village Forestry Association (VFA). There is one VFA sawmill on the plateau, and accordingly, in December 2008, the NT2 Steering Committee recommended that authorization be given for only one sawmill (the VFA one) on the Plateau. The Phonesack sawmill near Oudomsouk had been used to process "salvage logging", which is now no longer legally available. Consequently there is no further legal source of logs for that sawmill (and the POE has previously noted that some of the "salvage logging" illegally involved trees well above the high water line). The Panel believes that as long as that sawmill remains functional it will represent a threat to the timber of the NPA and/or the VFA, and we believe it should be decommissioned and removed immediately. In the same vein, the old but apparently still operational BPKP sawmill should be removed. With the 9 December 2010 Inauguration Ceremonies on the Plateau and the presence of many international as well as national participants, it would be embarrassing to GOL to have the non VFA sawmills remaining.

The Panel understands that the reason given by Phonesack to maintain their sawmill and the barges (see Section 4.8 below) is that substantial numbers of cut logs from the salvage operation remain in the reservoir. We have seen no evidence of such logs nor have any individuals whom the POE has consulted. Many logs, especially conifers, float. It has been over two years since the water level in the reservoir was raised, so that there should have been time to remove any legitimate logs in the reservoir. No legal standing timber remains available to

Phonesack on the Nakai plateau; the argument of the need to remove existing cut logs appears to the POE, and to all those we have contacted, to have no legitimacy.

Consequently the POE most strongly recommends that GOL stop all search for cut logs immediately and have decommissioned and removed the sawmills other than the VFA one before the December 9 ceremonies.

The POE strongly recommends:

- **14/17 That the NT2 Steering Committee reconfirm its December 2008 recommendation that authorization be given for only one sawmill (VFA) on the Plateau due to the limited forest resources available and the CA's provision for exclusive use of logs from the Resettlement Area for the benefit of the resettlers, and that the other sawmills be decommissioned and removed by December 9th, 2010, and all search for logs in the reservoir be stopped immediately.**

4.7 Logging Barges on the Reservoir

To facilitate the “salvage logging” Phonesack subcontracted loggers who brought with them a complete range of barges to expedite their activities. In our February, 2010 mission, the Panel counted 25 such barges moored on the outskirts of Oudomsouk. During the present mission eleven barges are still there, as some of the operators told us, in the expectation that logging would re-start. At least some barge personnel are reported to have continued to fish the reservoir illegally, and to enter the NPA for other illegal and environmentally degrading activities.

There is no legal use for these logging barges on the reservoir and they constitute a continuing threat to the resources of the resettlers, as well as an embarrassment to GOL. Consequently the Panel strongly recommends they be removed well before the December 9 Inauguration Ceremonies.

The POE recommends:

- **15/17 That the remaining logging barges on the reservoir be removed before the Inauguration Ceremonies of December 9, 2010.**

4.8 Other Threats to NPA and VFA Timber

4.8.1 Furniture Factories

There are a number of small-scale furniture makers or factories in Oudomsouk and Gnommalath. These appear to concentrate on making furniture out of rosewood and the Panel is not aware of a legal source for the quantities of rosewood involved. Consequently the furniture factories appear to represent a market for rosewood poached from the NPA or VFA lands. Accordingly the POE believes that there should be an investigation into the sources of rosewood used by these factories, and that a procedure for certifying the legality of any such woods that they use be established.

4.8.2 Charcoal Making

As the POE has pointed out before, the resettlers' right to sole use of the VFA timber is being abused at the moment by a group of expatriate charcoal manufacturers linked to the activated carbon plant still in Oudomsouk. According to the text of their contract they were only permitted to use waste and reservoir salvage wood to make charcoal. Yet the POE has observed on this as well as on previous visits that green wood, often of large girth, is being used in the charcoal kilns off the road near Ban Sop Phene. We believe that the charcoal kilns should be removed. However, if the expatriates' contract is still valid, the charcoal makers should be required to pay appropriate current and retroactive fees to the VFA for wood that is and has been used.

4.8.3 Taxes, Levies and Dividends

The resettlers at the recent workshop were concerned about the heavy and multiple tax take and levies imposed on their enterprise, reducing substantially as these do the yearly dividend. One source claimed that over \$1 million had been taken in taxes, which seems excessive in relation to a communal enterprise set up to help alleviate poverty. A study to determine the equitability and fairness of these imposts would be timely.

The POE recommends:

- **16/17 That an independent study of the equitability and appropriateness of the various taxes and levies imposed on the VFA be undertaken in the near future and modifications made if so recommended by the study.**

A dividend of around \$160 per household was paid last year and a further \$150 is to be paid shortly, possibly with an additional amount later this year. This is not close to the original estimate of \$300 per household p.a. from timber resources but sustainability of the resource and hence a dividend is more significant in the end than reaching arbitrary targets. To ensure this the time is well overdue for a more active program of propagation and reforestation, a subject covered in earlier reports. The time is also overdue to begin formulating the Village Forestry Plans called for in the CA.

4.9 The Reservoir Management Committee and Secretariat

PM Decree #32 of 21 March 2008 established the Nam Theun 2 Reservoir Management Committee chaired by the Vice Governor of Khammouane Province. The Committee's mandate is "for the whole period of the Concession Agreement of Nam Theun Hydroelectric Project." Responsibilities include coordinating and cooperating with all agencies whose activities impinge on the Reservoir and directing, leading, and managing "activities concerning the use of land in the drawdown zone, corridor, and fishery in the Nam Theun 2 Reservoir."

The Committee's Secretariat (RMS) was established on 18 February, 2009 with an experienced head with a five year contract. By the time the POE met with the Secretariat on this mission it was established in the former WMPA facilities in Oudomsouk, the RMS had boats and had made very substantial progress in registering boats on the reservoir and issuing licenses for fishing and fish trading. However, at the time of our visit on October 26 we were informed that their funding was due to cease at the end of October and they had received no commitment nor information about funding beyond that time. Because of the expenses of boats and staff, they said that their operations would come to a halt within a month.

The POE recommends:

- **17/17 That the RMS funding be confirmed and committed for a long enough period to ensure that their important registering, licensing, and monitoring of the use of the reservoir can be continued.**

4.10 Road Maintenance

The parts of the National Road system constructed on the Plateau by the NT2 Project were handed over to GOL this past spring. It appears that there has been no maintenance since then and the roads are in very bad shape. They are so rough and broken up that on this mission the Panel found it required twice the time to drive sections of the road than it did on our last mission eight months ago. This situation represents a major loss of time for those who work on, or drive across, the Plateau. It undoubtedly results in additional costs for vehicle maintenance, and it increases the costs for road maintenance when such maintenance is done. Road maintenance is now a GOL responsibility and the Panel urges that provision be made for present and continuing maintenance of the roads.

5. VIETIC ISSUES

The NT2 Project continues to be at risk of non-compliance with both the Concession Agreement and the Constitution of Lao PDR in regard to Vietic households living on the Nakai Plateau, in the Peripheral Impact Zone (PIZ) and in the NT2 Watershed. Such potential noncompliance would not only be a serious human rights violation but a reputational issue for GOL, NTPC, the IFIs and the project monitors including the POE.

Clause 9.1.4 of the Concession Agreement, which both GOL and NTPC signed, requires “relocation of Vietic and other vulnerable groups into separate administrative village units with clearly demarked boundaries and rights to resources.” The Constitution of Lao PDR is fully supportive of the above CA requirement. For example, Articles 1, 2, 3 and 22 emphasize the equality of all ethnic groups in the political process and protect their rights to preserve and improve their cultures. More specifically, Article 8 prohibits discrimination against any ethnic group that results in the group being broken up. Furthermore GOL has agreed to implement World Bank guidelines that support such rights for ethnic minorities.

Neither the POE nor the IFIs have followed up sufficiently on their efforts, including recommendations, to honor the preferences of Nakai Plateau Vietic households to be resettled in their own village and of Vietic households involuntarily consolidated in the PIZ villages of Nakadok and Na Thone to return to the Nam Xot river basin in the Watershed. In new Nam Nian, (Site 7A) which initially was supposed to be a Vietic Village, the site selected is not a separate administrative unit but rather is located in a corner of a larger multi-ethnic village which in turn has been consolidated with three other villages whose leadership is dominated by non-Vietic people. Furthermore the inappropriate site selected for Vietic households in new Nam Nian is adjacent to the northern access road rather than to the surrounding forest.

Since 1997 Vietic households have been involuntarily and physically consolidated in villages of other ethnic groups contrary to GOL’s understanding with the World Bank. Examples include involuntary consolidation of Vietic households in Nakadok, Na Thone and Nahao. The living conditions of over 40 Vietic families living in Nakadok and Na Thone are especially bad. Not allocated land for farming and dependent on local (and exploitive) wage labor for income, their living standards, including a significant amount of opium addiction, have been deteriorating.

The POE, in its July 1997 second report, expressed an opinion that project affected Vietic households could be better off with the project than without it because of “Various project associated management plans” and an “option... to leave previously consolidated villages to return to their old habitat and life style if they so wish.” In its February 2005 report, the POE recommended implementation of a World Bank suggestion that NTPC, cooperating with GOL officials in Nakai and Khamkeut Districts, “should advertise for an NGO to consult and work with project affected Vietic I and II communities as soon as possible after Financial Close for the purpose of identifying their relocation preferences and improving their livelihoods.” The POE further recommended that “Vietic households previously consolidated in Nakadok, Na Thone and Thameung villages must have the option, if they so wish, of establishing a separate Vietic Village, with school, in the middle or upper Nam Xot Basin.” Nothing happened.

In the POE’s October 2006 report the POE commended a recent government decision to allow Vietic villagers on the Nakai Plateau the option of forming their own resettlement village and to give Vietic households in the PIZ the option of returning to the Watershed. Again GOL and NTPC failed to complete the necessary consultation in a timely fashion. “Part of the problem was NTPC’s delayed recruitment of an ethnic adviser. One result of that omission was that as late

as June 2006 the Resettlement Office apparently was unaware of the fact that non-Vietic households not only had been resettled in what was supposed to be a Vietic Village (8A), but by that time were the large majority. As for the PIZ Vietic households, it was the yet-to-be-implemented responsibility of the WMPA to complete a survey of affected Vietic households by March 2006 to be followed by a procedure for seeking their informed consent to available options by the end of this year.”

WMPA insensitivity to Vietic issues continues to this day. During the POE October 2010 visit to the PIZ Vietic village of Pakatan, the WMPA figured prominently in an accounting of village problems. Granted the relevance of their indigenous knowledge to WMPA activities, the villagers wonder why none had been employed. They also complained that WMPA employees stationed at their adjacent check point would not allow them to use snares to catch vermin entering their paddy fields that lay outside the NPA.

In the POE’s required recommendation below it is important to remember not just that the Vietic people in Nakadok, Na Thone, and Nahao are, to the best of our knowledge, the original inhabitants of the NPA but that their livelihood was more dependent on foraging than on agriculture and livestock management. Their government-induced resettlement in farming villages since 1997 not only has had a destructive impact on their culture but has also adversely affected their health and pauperized them economically.

Even at this late date it is not too late to carry out the necessary consultation and, based on that consultation, design and implement culturally sensitive livelihood development plans. Three recent actions on the part of GOL and NTPC show that the current unacceptable situation can be reversed. GOL, realizing that Pakatan is the last remaining PIZ Vietic village, reversed a prior decision to consolidate Pakatan with two Hmong villages. Also during 2010 NTPC hired a full-time Lao social scientist and approved an international consultant to begin the necessary Vietic consultation.

The POE requires:

- **18/17 That Vietic households consolidated in Nakadok and Na Thone village be allowed, in accordance with the World Bank’s agreement with the GOL, to return to previously inhabited sites along the Nam Xot upriver from Nahao before those two villages are relocated elsewhere in Bolikamsay Province to make way for commercial gold mining.**

The POE endorses the August 2010 Report of the Consultant on Ethnic Minority Support to the Nakai Resettlement Office. Especially important are Recommendations 2a and 2b and Recommendation 4. Under 4(c) especially important under “special activities” would be research on Vietic languages.

Recommendation 2a states that:

“Ahoe villagers have a spiritual and ancestral connection to the old Sop Hia Site, and they should be permitted to establish a permanent village there; the village should be officially classified as a NNT NPA village, and accordingly NTPC and WMPA should approach the issue of development and livelihoods in this settlement just as they would for any other village in the NNT NPA, where the agreed upon emphasis is on balanced conservation and development.”

To comply with the intent of World Bank Guidelines for such Ethnic Minorities and GOL's NT2 Resettlement Policy to provide "special measures" for such people, Recommendation 2a should be implemented to the extent that Ahoe who so wish can maintain a permanent presence at the old Sop Hia site..

Recommendation 2b states that:

"The WMPA should consider setting up a permanently staffed outpost at the old Sop Hia Site to facilitate patrols and monitoring of the site itself and of the 'surrounding' corridor area. This should be used as an opportunity to work closely together with Ahoe villagers, to take advantage of their indigenous knowledge of WMPA activities, and to provide them with relevant employment and training opportunities with WMPA and NTPC."

The POE recommends:

- **19/17 That Ahoe who so wish have the option of establishing a permanent presence at the Old Sop Hia site.**

The POE recommends:

- **20/17 That the WMPA establish a permanently staffed outpost at the Old Sop Hia site and work with the Ahoe as outlined in Recommendation 2b.**

In regard to the consultant's recommendation 4, the POE believes that further "short-term consultancy work in the area of Ethnic Minority Support" is necessary to fulfill CA requirements and fully supports the three topics that further consultancies should cover. In addition to "first-hand training" for the NTPC social scientist (4(a), the POE believes that training should also be extended to appropriate RMU and district staff. Under 4(b), field visits to Vietic villages in the project area, the POE believes special attention should be paid to Pakatan – in particular to the problem of illegal encroachment of villagers from Ponsa-art on their paddy fields and other livelihood resources. Under 4(c) especially important under "special activities" would be research on Vietic languages.

The POE recommends:

- **21/17 That the Consultant's recommendation 4a be broadened to include all Vietic households in existing resettlement villages, in the Peripheral Impact Zone, and in the Watershed, and that the consultant's terms of reference be expanded to include recommending Vietic-oriented "special project components" and training of NTPC, RMU and Nakai and Khamkeut District staff.**

6. THE XE BANG FAI AND DOWNSTREAM DEVELOPMENT

6.1 Introduction

Planners of large dam projects continue to ignore impacts on downstream environments and people. NT2 is a major exception and hence a model not only for other river basins in Laos but also around the world where recent research (*Water Alternatives*, Special Issue, 2010) has shown, as a conservative estimate, that at least half a billion people have been adversely affected by large dams. Initially NT2 project planning in the Xe Bang Fai Basin addressed restoration of the living standards of project affected people. More recently, however, NTPC has become a partner with the Government of Lao PDR and the World Bank in addressing the multipurpose development of the XBF. At a still broader international level the World Bank's proposed Mekong Integrated Water Resources Management Project contains funds for establishing a river basin organization for the management and development of the lower, and most densely populated, Xe Bang Fai.

6.2 NT2's Downstream Program.

The Downstream program has two major components. The large Xe Bang Fai component targets 156 villages while a smaller Khamkeut District component deals with 38 villages affected by reduced Nam Theun river flows.

The evolving downstream program for the Xe Bang Fai is a model for addressing downstream people and habitats. Unique for planning purposes was the commencement of fish catch monitoring before the release of turbined waters so that subsequent impacts on mainstream, tributary and wetland fisheries could be documented. Two pre-project socio-economic surveys, the last with a major health component, were also completed prior to the discharge of turbined waters. A detailed statistical summary of the most recent Socio-Economic Survey was completed in September 2010 (Fredericks and Wijerathna, NTPC, September 2010).

The Xe Bang Fai Downstream Program has been expanded over the years to include 77 riverside villages by the end of 2010, 23 more by the end of 2011 and the remaining 56 thereafter. The program includes compensation for physical cultural resources and for lost riverbank gardens and project lands resources linked to grievance procedures, a water and sanitation component, modification of irrigation pumps required by increased flows and a comprehensive livelihood program to restore incomes adversely affected by fishery declines and unexpected impacts.

The livelihood program includes fisheries co-management and integrated water gate management, a village income restoration fund (micro credit) available to households for such activities as cattle raising and forage production, aquaculture (including production of fingerlings for stocking the fish ponds of other households), and contract farming of feed corn and rice for beer. Innovative experimental work is demonstrating on household plots seed multiplication for submergent-tolerant and iron-tolerant rice varieties and delayed planting of rice after flooding. Monitoring is ongoing, including river bank erosion and water quality monitoring.

The main weaknesses of the program are CA-related. They are emphasis on income restoration as opposed to income improvement and budget inadequacies.



Confluence of project water channel and the Xe Bang Fai.



Eroding banks on Xe Bang Fai (but not necessarily project generated).



Checking stream outlet on Xe Bang Fai blocked by bank-to-bank nets.



Wetland filter to remove leachates from Gnommalath waste disposal facility.



Uncleared construction equipment site, Gnommalath.



Potential site for conversion to educational facilities, Gnommalath.

6.3 Finishing the Downstream Job

It would be both a tragedy and close to a non-compliance situation were the excellent Downstream Program, so unprecedented elsewhere, not to be finished through a lack of funds. A cap of \$16 million was set by the Lenders and incorporated in the Concession Agreement. It was always on the cards that the sum provided would not suffice to carry out the objectives of the Program though the \$16 million has been made to stretch a long way. At this point the 77 riverine villages all have successful and diversified activities and infrastructural improvements under way. By the end of next year, when the present allocation runs out, such programs will cover 100 villages with a population of around 100,000. That still leaves around 56 villages in the hinterland areas impacted to a varying but lesser degree; around 55,000 people still needing compensatory activities.

What is involved is the sustainability of a unique and innovative advance in lessening the impacts of a large dam on the people downstream. How much money will it cost? To do the job adequately will, it is estimated, cost approximately \$5.5 million. There is a need to put together a grouping of potential contributors to find the money. It might well come from several sources through a co-financing arrangement, with all the stakeholders making a contribution in one way or another. The plan is to mount a mid-term review of the Downstream Program, to be ready by the end of January, in an endeavor to build a consensus among the stakeholders including those who have not contributed substantially to the project thus far.

The POE strongly recommends:

- **22/17 That a concerted effort be made by all stakeholders to pull together the final \$5.5m required to complete the Downstream Program, given that the sustainability of an innovative program, the livelihoods of over a hundred thousand impacted people and the reputation of all those involved are at stake. Completing the Downstream work is fundamental to the overall success of the NT2 project.**

6.4 Future of Gnommalath Sites and Facilities

The POE inspected three adjacent project sites, with their various facilities, along the Gnommalath road. The first, the former residential area of the Head Contractor, has already been handed over in good condition to the Provincial authorities who plan to convert it to a Vocational Training Center. Planning is underway but budgetary provisions have yet to be made. This would be an excellent use of the facilities and, with careful curriculum design, will make a valuable contribution to helping make the project sustainable in terms of anticipating skills and capacities required in the years ahead and educating resettlers, PAPs and their children to use those skills and capacities.

The second site also has potential. It includes 6-8 housing units in reasonable condition (though the grounds are not and include a large area of concrete which would presumably have to be removed) and could with the injection of some funds for remedial work and landscaping be adapted to be, for example, a residential secondary school for bright children from remote villages who have at present little chance of getting such schooling. Ital-Thai is asking an unrealistic sum for handing the site over and should reduce this substantially. Were another educational institution like this to be set up next to the planned Vocational Training Center there would be the opportunity to share recreational and perhaps even classroom facilities.

The third site is Ital-Thai's equipment and vehicle storage site. It is an unsightly mess at the moment but the company has until the end of the Demobilization Period (approximately twelve months) to clear it up and remove the remaining equipment. The site will require thorough decontamination, rehabilitation and restoration before it can be handed back.

The POE recommends:

- **23/17 That, if a reasonable price, and an undertaking to perform the necessary remedial and clearance work, can be negotiated with Ital –Thai, their residential site and facilities at Gnommalath be acquired, possibly for conversion to a residential secondary school or an alternative educational priority.**

7. THE WATERSHED

7.1 Introduction

In its previous reports the POE has described the Nam Theun National Protected Area (NPA) and its globally significant biological and cultural diversity, so we will not reiterate that here. However, we have become increasingly disturbed by the magnitude of the threats the NPA and its resources face. Since the start of the NT2 project, conservation of the biodiversity of the NPA and protection and rehabilitation of forest cover in the watershed have remained a fundamental objective. They are also a primary reason for the involvement and support by the World Bank and other international financial institutions and key environmental organizations. This is in part because protection of the NPA is an explicit offset under the World Bank's OP4.04 requirements for the area to be inundated, but it is also because of the clear global importance of conserving the area's biological diversity. In a somewhat similar fashion, protection of the area's cultural diversity has been an important objective of the project.

7.2 Update of Prime Minister's Decree 39.

The POE is very pleased to learn that the update of PM 39, which redefines the NPA, along with the WMPA and its rights, responsibilities and legal standing, has been signed by the Prime Minister. We note with pleasure the revised boundaries of the NPA, and the restructuring of the WMPA Board with its Chair now the Governor of Khammouane Province. The GOL organized the effort to update PM 39 and included high level representatives of NTPC, the World Bank, ADB and AFD. Among other important things the new decree absolutely prohibits mining and commercial logging in the NPA, along with hunting and harvesting of wildlife other than customary use of resources in controlled areas.

7.3 Decision of the Governors of Nakai and Khamkeut Districts Regarding the NPA

We were also pleased to see the "Decision of Nakai and Khamkeut District Governors on Enhancement of Regulations and Enforcement for Protection and Conservation of Nakai-Nam Theun NBCA." This regulation codifies and clarifies the rights and responsibilities of the WMPA and the District authorities in patrolling and otherwise protecting the NPA, and includes specific regulations about violations and penalties. This development is significant because there had been substantial uncertainty about enforcement issues on the part of some WMPA staff and others.

7.4 The WMPA

The Watershed Management and Protection Authority (WMPA) was established to ensure conservation of the NPA and its values. The WMPA and its challenges have been described in detail in the previous reports and will not be duplicated in detail here. We are impressed, however, that very significant problems remain.

Chief among these is the continued, if not expanded, poaching of wildlife and rosewood. With the assistance of the World Conservation Society (WCS), WMPA has conducted several surveys to try to determine the status of the larger wildlife in the NPA. These have included both foot patrols and extensive inventories using camera traps. In other reserves in Laos the traps, deployed by the WCS, have shown remarkable abundances of larger animals. In the Nam Theun NPA, however, these traps have indicated a real paucity of larger forms of terrestrial wildlife.

The camera trapping can provide a proven, objective sample of wildlife in the area involved. In addition, the foot patrols and anecdotal reports of others in the NPA, including the POE's own extensive experience on foot in the NPA since 1997, all indicate that the larger, terrestrial forms of wildlife in the NPA are grossly and increasingly depleted. The POE's conclusion is that the intensive poaching of recent years, including the broad scale setting of wire snares, has severely depleted the larger wildlife of the NPA and that the process is continuing and possibly accelerating.

Recognizing the seriousness of the poaching problems, earlier this year the POE supported the recommendation of the WMPA that their budget should be "front loaded" so that significant additional funds could be applied to protection of the area this year and next, and the budget was provided. As a result the WMPA can provide for unprecedented levels of patrolling and other protection, and clearly, the POE and others will watch closely to see if there is any apparent improvement in the situation.

No such improvement is evident yet and the information received by the POE indicates that the reverse may be true. While there are many factors contributing to this situation, one appears to be weakness in some of the WMPA staff. As we have written before, the WMPA requires staff that can understand and work to integrate conservation and development. This is a new requirement in Laos, and while staff assigned to WMPA from GOL forest agencies may be good foresters, it is not likely that their training prepares them to meet this new requirement.

One illustration of this problem may come from staff perceptions of the problems involved. Much of the forest cover of the NPA remains in apparently excellent condition. Yet we understand that a number of the WMPA staff with forestry backgrounds do not recognize or believe that the area's wildlife - under the trees - is severely degraded. Undoubtedly this attitude does not contribute to the effectiveness of WMPA's conservation efforts.

Missteps in management can contribute to the staff problems. The CA requires that the Independent Monitoring Agency (IMA) confirm to the NTPC annually that the WMPA's Operational Plan and Annual Work Plan and Budget are consistent with the WMPA's objectives and functions as described in the Social and Environmental Management Framework and Operational Plan (SEMFOP). Earlier this year the past IMA for the WMPA retired. WMPA replaced the IMA but did not follow the requirements of the CA and substantial errors were made, with the result that, in part on the POE's advice, NTPC is withholding the 2010-2011 funding of WMPA until a new IMA can be appointed and be operational in accordance with the CA requirements¹.

As the POE has noted previously, WMPA requires staff that can understand and work to integrate conservation and development. Since this is such a new requirement in Laos, the Panel believes that TAs may provide one way to improve the situation, enable the WMPA to succeed in its mandates, and provide training for Lao who can take over such responsibilities.

The Panel has noted that the Wildlife Conservation Society has established somewhat similar arrangements in cooperation with GOL for the management of other NPAs, notably the Nam Kading and the Nam Et-Phou Louey NPAs. They have or are developing a number of cooperative joint projects with GOL in other parts of Laos, including the Bolikhamsay Province. They have provided technical assistance, advisory help and support, and in the process their activities have produced many Lao nationals with good technical skills in the conservation field.

¹ To keep WMPA operational NTPC is providing funding one month at a time until the CA requirements are met.



WMPA checkpoint at mouth of Nam On.



Pakatan villagers in PIZ in discussion with POE.



Charcoal plant near Sop Phene using green timber.



Illegally harvested rosewood piles around houses at Ban Done.



Fishing in the reservoir.



Phonesack extensive sawmill and plant near Oudomsouk on the Nakai Plateau.

In addition they have carried out wildlife conservation projects for the WMPA. Since the WCS has a proven track record in Laos as well as an enviable international reputation, the Panel believes that a cooperative arrangement between the WCS and the WMPA would have a good chance of providing WMPA with needed assistance and capabilities.

The Panel also recognizes that the provision of additional TAs is not covered by the budget of the WMPA. Consequently, an additional, independent source of funding would be needed.

The POE recommends:

- **24/17 That a plan be developed for the Wildlife Conservation Society or another suitable organization to provide the WMPA with TAs and possibly other assistance, to be funded from sources independent of the WMPA annual budget.**

7.5 Livelihood Development

The project documents including the SEMFOP make clear that a balance is to be struck between conservation and development in the NNT NPA watershed. While the POE was unable on this visit to assess the situation on the ground beyond a brief journey by boat up the Nam On, it gathers from reports provided by the WMPA Secretariat that some surprisingly good progress has been made on the development front in the past year or so.

This seems especially so in rice production. While the watershed topography, soils and climate ensure that this is not a particularly hospitable region for rice growing and high yields cannot be expected, the technical problems earlier encountered have been largely overcome through new mulching techniques, distribution of improved varieties of seed and the judicious use of chemical fertilizer. The villagers' universal wish to grow their own rice to the greatest extent possible is thus beginning to be realized. A household survey undertaken by cluster staff in July of this year reportedly found that whereas before the advent of the WMPA livelihood work the rice deficit in watershed villages lasted up to eight or nine months of the year it has now been reduced to four months. The target for the year ahead is very ambitious, the plan being to raise production to cover 85% of the villagers' consumption of the staple. The POE is led to wonder how realistic this is and will be looking at the situation closely when it visits watershed villages in February 2011.

Conservation and development are linked and should be integrated and mutually reinforcing to a degree. For example, several of the NTFPs which are under pressure from harvesting, including rattan and bamboo, can be produced in garden plots or fields. There is expertise in propagation and cultivation of both these products in the other regions of the project, which underlines the desirability of closer collaboration between the various livelihood teams.

The POE recommends:

- **25/17 That closer collaboration between the various project livelihood teams be cultivated so that the lessons and techniques of each is shared with the others, not least in the propagation and production of NTFPs as cash crops.**

7.6 Water Buffalo in the NPA

The POE has previously referred to this problem. Large and increasing numbers of often semi-wild water buffalo are now in the NPA along the edge of the reservoir. The buffalo represent two threats to the NPA. One is ecological, in that the large numbers of buffalo appear to compete with the wildlife for food and the minerals in the salt licks that have been constructed for the elephants and other wild animals. They also heavily impact the wetlands that have been constructed for the wildlife to replace the wetlands inundated by the reservoir. The buffalo's very presence may keep the wild animals away.

The other threat posed by the buffalo, far more serious, is that the buffalo provide an excuse for the resettlers to enter the NPA for poaching of wildlife and rosewood. The resettlers cross the reservoir in their boats (many provided by the NT2 project) and when apprehended by the WMPA patrols, they say they are only there to look after their buffalo. These and other resettlers are reported to have become the major source of poaching in the western NPA.

There was a decision in mid 2010 by the RC that obliges resettlers to recover their buffalo from the NPA with logistics support from NTPC by the end of 2010. It states that any buffalo remaining in the NPA after December 31 shall become the property of the WMPA. Buffalo markets have been identified and prices agreed for those owners wishing to sell their animals. After December it will be the responsibility of WMPA to remove, sell or destroy the animals.

The POE recommends:

- **26/17 That the WMPA act rapidly and decisively after the start of 2011 to remove, sell or, if necessary, to destroy all the water buffalo belonging to resettlers which remain in the NPA.**

7.7 World Heritage Status

While in the past mission, the POE was very pleased to hear that there was strong support at high levels for seeking World Heritage status for the NPA, on the present mission we have been informed that the MAF has said that there should be delay in seeking that status. One reason reportedly given was that GOL should await the experience gained in seeking World Heritage status for the Phouhinnamnor NBCA, also in Khammouane Province. The POE does not agree that is a compelling reason for delay. GOL already has many years' experience with Luang Prabang as a World Heritage site. The WMPA and the guarantee of about 25 more years of funding support for it make the NPA the most qualified natural heritage site in Laos. Because of the global heritage values of the NPA and the benefit to Laos and to the conservation and management of the area that World Heritage status would provide, we have repeatedly urged GOL to seek that status. The process of applying normally requires several years, so the POE renews its recommendation that GOL initiate the process as soon as possible. If there is any way the POE can assist GOL in this process we will be happy to do so.

The POE recommends:

- **27/17 That GOL initiate the process of applying for World Heritage status for the NNT NPA without delay.**

7.8 The UN REDD Program

REDD, is the United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries. A multi-donor trust fund was established in July 2008 that allows donors to pool resources and provides funding to activities towards this program. Under the program industries that are large CO₂ emitters can get emission credits by funding developing nations to maintain their forest areas. We believe the NPA could participate in such a program and recommended action on this earlier this year. It would require an evaluation of how much CO₂ and other emissions the NPA would sequester, and then finding an appropriate firm in an industrialized country that would contribute on an annual basis. The World Bank staff in Vientiane have offered to assist GOL in this process. How much money might be available to GOL for maintaining the NPA would depend on the results of the evaluation and finding an appropriate donor, but this program appears to offer a potential for an ongoing and substantial income to GOL.

A further consideration is that the REDD program and World Heritage status are complementary, each would probably serve to facilitate the other, and both offer substantial benefits to Laos.

The POE recommends:

- **28/17 That GOL work with the World Bank to investigate the possibilities that the REDD program may offer to provide GOL income from conservation of the NPA.**

APPENDIX I

Letter of 4 November, 2010, regarding Schedule 35 from Jean-Christophe Philbe, Chairman of the Board of Directors of NTPC



Nam Theun 2 Power Company

Unit 09, Nong Bone Village
That Luang Road, Xaysetha District
PO Box 5862
Vientiane, Lao PDR
Tel: 856-21-263 900
Fax: 856-21-263 901
E-mail: info@namtheun2.com
Web: www.namtheun2.com

DATE: 4 November 2010

OUR REF: *NTPC/23672/POEX*

CONTACT: Jean-Pierre Katz

OBS:

FILE REF: *Doc.01.01*

YOUR REF:

To: Lee Talbot

Thayer Scudder

David McDowell

Environmental & Social Panel of Experts –
Nam Theun 2

Dear Lee, Ted and David,

NAM THEUN 2 MULTI-PURPOSE PROJECT ***Environmental and Social Commitments***

On behalf of the shareholders of the Nam Theun 2 Power Company, we wish to formally share our view that we have always been and will continue to be fully committed, as evidenced in our various contractual documents and, more importantly, through our past actions, to the achievement of the Environmental & Social Objectives of the Nam Theun 2 Multi-Purpose Project. We, as shareholders, fully recognize and appreciate that NTPC is one of the main project partners, together with the Government of Lao PDR and the International Financial Institutions and their respective advisors, in the overall Nam Theun 2 Project and that ultimately these Objectives can only be achieved with the joint cooperation and continuing positive relationships between all of us.

We greatly appreciate the opportunity we had to discuss these issues together on Sunday, 24 October. We appreciated the chance to directly interact and obtain feedback resulting from your field visits on the Nakai Plateau. As discussed together, we formally confirm the shareholders are committed to make sure that NTPC will ensure the same volume and quality of staffing & resources remain available on Nakai Plateau, as compared to the present situation, for the coming two years (two dry seasons and two wet seasons at least and, depending on the growth in GOL capacity until the end of the Resettlement Implementation Period).

We believe that the NT2 Concession Agreement provides a strong contractual framework for a successful and sustainable resettlement program, and we remain fully committed to achieving the Resettlement Objectives by the end of the Resettlement Implementation Period. We are keenly aware that the Concession Agreement Schedule 35 objectives represent a contractual milestone but in no way imply that the Resettlement Objectives have been met. The timeline to fulfil the Resettlement Objectives is an ongoing process during the Resettlement Implementation Period and we fully understand and recognize the difference between the contractual milestone of Schedule 35 of the CA and the achievement of the Resettlement Objectives. We also understand that actions qualified as "partially completed" will be actually completed in the future.

One example of existing E&S contingency commitments in the CA (Schedule 41 and 45) are the specific Environmental and Social Letters of Credit for which the Government may draw upon and for which the total is US \$8.5M. These remain in place until 3 May 2022.

As we recall our past actions and decisions taken over the past several years, we wish to emphasize that the shareholders have always reacted positively to ensure the necessary resources have been available to NTPC to proactively respond and work with our partners to implement the recommendations made by the E&S Panel of Experts.

We wish to recall that we agreed to double the budget allocated for the environmental & social aspects of the Project during the Construction Phase of the Project as compared to the Development Phase. We also recall that all the parties, including the Government of Lao PDR and International Financial Institutions and their respective advisors have been actively engaged and involved throughout the development of the Concession Agreement and the resource allocations defined therein.

We are in particular committed to providing the strategic planning advice and other resources needed to complete the following activities:

- Finish the Participatory Land Use Planning exercise and have defined the extent and use of drawdown zones and train the resettlers to enhance their livelihood and incomes through maximizing the potential of these zones;
- Help establish water user groups and train the resettlers in the most productive use of the irrigated plots;
- Add value to the fishing sector (e.g. through stocking and releasing fingerlings in the reservoir and providing training in the production, processing and sale of fish products);
- Lift the effectiveness of management, distribution and husbandry of small and big livestock thereby raising incomes from this sector;
- Measure livelihood and income levels through the revised LSMS (Round 6) in May/June 2011 (next LSMS tentatively planned by the end of 2012 or beginning of 2013) and revise regular income monitoring with the help of the World Bank;
- Put in place a Village Fund (micro-credit) system and assist the resettlers to use it appropriately to foster development activities;
- Design with the Resettlement Committee (RC) an arrangement to upgrade significantly, stabilize and maintain during the Resettlement Implementation Period the agricultural extension services to the resettler villages through intensified training and financial support of the existing 16 extension workers;
- Survey and report on available forest and other resources in the Nam Malou area defined in PM Decree 24 (13 February 2008);
- Prepare, define and begin the handover to GOL through the introduction in a participatory manner of Village Development Plans;
- Design and construct an agricultural bridge to enable movement across the Nam Kathang

Additionally to the above, we remain committed to cooperate with Government and the IFIs on the continued extension of the successful Downstream Program in all project affected areas and households. We note that a strength of this program, as agreed with Government, IFIs, and oversight agencies in the past, is its broad developmental approach, and we will therefore work with our partners to seek ways to make this program sustainable for the long-term. While we are not proposing to change the \$16 million NTPC cap set out in the CA, we will work closely with others, including the IFIs, to make this program sustainable.

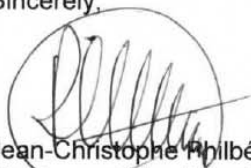
We confirm our continuing commitment during the Operations Phase to move forward in a positive manner with our partners to meet the Environmental and Social Objectives of the Nam Theun 2 Project. As shareholders, we are proud of the achievements the Project has made to date, and we will ensure that NTPC continues to comply with its obligations, will

implement appropriate levels of strategic planning and allocate appropriate resources in order to achieve its Concession Agreement targets. We recognize and ask for your continuing advice and guidance to NTPC on environmental and social issues related to the Concession Agreement.

But NTPC alone cannot achieve the Environmental and Social objectives of the Nam Theun 2 project and we also fully appreciate the necessary advice you make available to the Government to assist them in fulfilling their current role in project implementation, as well as to ensure a timely, smooth and efficient handover of programs which take in to account the long-term sustainability and adoption of the programs by the Government.

Again, on behalf of the shareholders, we wish to express our appreciation to the E&S Panel of Experts on assisting the Government of Lao PDR, NTPC, and the International Financial Institutions by providing advice and strategic guidance on environmental and social issues pertaining to the Nam Theun 2 Multi-Purpose Project.

Sincerely,



Jean-Christophe Philbé
Chairman of the Board of Directors

CC : Ministry of Energy and Mines
NTPC Board Directors

APPENDIX II:

ABBREVIATIONS, ACRONYMS AND GLOSSARY

ADB	Asian Development Bank
AFD	French International Development Agency
Ban	Village
CBD	Convention on Biological Diversity
COD	Commercial Operations Date (30 April 2010)
Company	Nam Theun 2 Power Company Limited
DAFO	District Agriculture and Forestry Office
DRWG	District Resettlement Working Group
DSRP	Dam Safety Review Panel
EAMP	Environmental Assessment and Management Plan
EDMP	Ethnic Minority Development Plan
EMO	Environmental Monitoring Office (of NTPC)
EMU	Environmental Monitoring Unit (of GOL)
EU	European Union
GOL	Government of Lao PDR
IAG	International Advisory Group for NT2 (World Bank)
IFIs	International Financial Institutions
IUCN	International Union for the Conservation of Nature
Lao PDR	The Lao People's Democratic Republic
IMA	Independent Monitoring Agency
KDP	Khammouane Development Project (of World Bank)
LNCE	Lao National Committee on Energy
MAF	Ministry of Agriculture and Forestry
Nam	River
NBCA	National Biodiversity Conservation Area (GOL Protected Area)
LLC	Limited Liability Company
NGO	Non Governmental Organisation
NNT-NBCA	Nakai Nam Theun National Biodiversity Area (a portion of the NT2 Project Area most of which is in the water catchment area of the project reservoir)
NPA	National Protected Area, the title now used for the NNT NBCA
NT2	Nam Theun 2 Hydro-Electric Project
NTFP	Non Timber Forest Product
NTPC	Nam Theun 2 Power Company
PAFO	Provincial Agriculture and Forestry Office
Panel, POE	International Environmental and Social Panel of Experts for NT2
PAPs	Project Affected Persons
PICAD	Participatory Integrated Conservation and Development
PIZ	Peripheral Impact Zone
PLUP	Participatory Land Use Planning
RAP	Resettlement Action Plan

REDD	United Nations Collaborative Program on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries
RC	Resettlement Committee
RMS	VCF Reservoir Management Secretariat
RMU	Resettlement Management Unit (GOL)
RO	Resettlement Office (NTPC)
Schedule 35	CA schedule of Project completion requirements
SDP	Social Development Plan
SERF	Village Social and Environmental Remediation Fund
TA	Technical Assistant (position)
UXO	Unexploded Ordnance
VCF	Village Credit Fund
VDC	Village Development Committee
VFA	Village Forestry Association
WB	World Bank
WCS	Wildlife Conservation Society
WMPA	Watershed Management and Protection Authority
WUG	Water User Group
XBF	Xe Bang Fai (a river)