

## **Review of Draft Final Resettlement Action Plan for Theun-Hinboun Expansion Project**

by Aviva Imhof, Campaigns Director, International Rivers, April 2008

### **EXECUTIVE SUMMARY**

The proposed Theun-Hinboun Expansion Project (THXP) in central Laos will displace up to 4,800 people and negatively affect another 48,441 people living downstream, on project construction lands and in host villages. The project involves a storage dam on the Nam Gnouang River and a doubling of capacity at the existing Theun-Hinboun power plant, resulting in a doubling of the amount of water diverted into the Hai and Hinboun Rivers.

This review highlights key concerns about the August 2007 Draft Final Resettlement Action Plan (RAP) for the Theun-Hinboun Expansion Project prepared by Norplan. It concludes that the measures proposed in the RAP are wholly inadequate to manage the substantial impacts that will arise from the project.

### **Resettlement Concerns**

Up to 4,800 people from 11 villages will be moved to three host villages along the Nam Phiat and Nam Ngoy. Resettlement will increase the population in the host villages from 1,591 to around 6,000 people, exacerbating competition for scarce natural resources in the area. The biggest problem with the RAP is the lack of productive agricultural land for the displaced population, and the lack of any concrete research or field data to document the land and resources available to sustain a quadrupling of the population in the area. The RAP acknowledges that there is already significant competition for other natural resources in the host village area, such as non timber forest products and fisheries, yet proposes few viable solutions to deal with even greater competition after the influx of resettlers.

The RAP only provides for direct compensation for losses of fixed assets, such as land, fruit trees and housing. There is no commitment to provide land-for-land, so many people will end up with cash compensation instead of land of equally productive value. The plan fails to quantify the damages that will be sustained from the loss of common property resources and to determine acceptable levels of compensation based on those losses. Instead, the plan proposes replacing losses with livelihood restoration programs.

However, the livelihood restoration measures outlined in the RAP are unclear, unproven and under-funded. The proposed measures have become the standard mitigation package for any hydropower project in Laos. They include: aquaculture to replace fisheries; dry season irrigated rice to replace wet season rice production; vegetable and fruit gardens to replace riverbank agriculture; investment in livestock management; and the always vague, and rarely successful, “non-farm employment” and “cottage industry” options. Despite their popularity with resettlement and environmental impact assessment consultants, these measures have never restored, let alone improved, livelihoods for dam-affected communities in Laos.

Furthermore, these measures have already been tried with limited success in communities affected by the existing project. The resettlement plan fails to draw lessons from the successes

and failures of the mitigation and compensation program in these villages, or from the experiences at the nearby Nam Theun 2 Hydropower Project. As such, THXP is poised to repeat past mistakes.

### Downstream Disaster

THXP's impacts on the Nam Hai and the Nam Hinboun will be severe as the project doubles water releases into these recipient rivers. The project will significantly increase the frequency and duration of flooding along the Nam Hai and Nam Hinboun, will cause even greater erosion along the riverbanks, and will almost completely decimate fisheries in the Hinboun River, with the exception of a few survivors adapted to very turbid waters.

Yet despite the fact that seven years of THPC's environmental and social mitigation activities have failed to address the devastating impacts of the existing Theun-Hinboun project, the RAP makes the optimistic assumption that the impacts from the new THXP can be managed and livelihoods restored. There is no justification for this assertion.

The increased flooding along the Hai and Hinboun will make life unbearable for many residents. As a result of the additional flooding, the resettlement plan admits that some villages or village households will need to be "relocated". THPC does not appear to know how many people will be required to relocate, which villages will be most affected, whether there is land available, and if not, to where people will move. The RAP states that preference will be given to relocating people within their village territory, but fails to consider the extra pressure on land and resources that will occur as a result.

Between 1,000 and 2,000 hectares of paddy land "have been or will need to be abandoned for wet season production in the Recipient River area", according to the RAP. Clearly, THPC does not know exactly how much paddy land will be affected by THXP. There is no paddy land available in the Hinboun valley with which to replace the paddy land lost to flooding. Villagers will instead be increasingly forced to rely on irrigated dry season rice production or upland rice cultivation. Yet along the lower Hinboun River, the land available for upland cultivation is increasingly being taken for large-scale industrial tree plantations owned by Oji Pulp and Paper.

As with the resettled villages, the RAP offers a predictable and equally vague array of livelihood options, again with no reference to previous experiences at THPC or other hydro projects in Laos, no attempt to draw lessons from these experiences, and no indication as to why these livelihood options would be successful with greatly exacerbated impacts and no appreciable difference in approaches. The result of THXP will be even greater rice and protein deficiencies amongst households that are already suffering as a result of the existing Theun-Hinboun project, making life unbearable for many Hai and Hinboun residents.

Ten years after the Theun-Hinboun project began operating, communities are worse off than they were before project development. Yet instead of attempting to learn from these failures, apply the lessons to a revised livelihood restoration program, and factor in direct compensation for actual losses, the THXP RAP appears to propose more of the same. This unwillingness to learn from past mistakes and invest the necessary resources for real livelihood restoration inspires little confidence that the Theun Hinboun Power Company (THPC) will be able to restore, let alone improve, livelihoods in the allotted six years after commercial operation.

The full report is available at [www.internationalrivers.org/en/node/2710](http://www.internationalrivers.org/en/node/2710)

## **Review of Draft Final EIA/EMMP for Theun-Hinboun Expansion Project, Lao PDR**

by David J.H. Blake, Independent Researcher, United Kingdom, April 2008

### **EXECUTIVE SUMMARY**

The author reviewed the August 2007 drafts of the Environmental Impact Assessment (EIA) and Environmental Management and Monitoring Plan (EMMP) for the Theun-Hinboun Expansion Project. The documents appear to be rather hastily compiled, with little oversight and due diligence, both technically and editorially, to merely tick a box for the developers. The quality and accuracy of data is poor, even though Norplan presumably had full access to project-related information.

The EIA fails to adequately examine the impacts from the existing Theun-Hinboun Hydropower Project (THHP) or discuss the extent to which mitigation and compensation measures implemented to date have dealt with the impacts. The EIA fails to correctly identify several of the most severe environmental impacts that have resulted from the THHP and thus could be expected to compound and intensify with the THXP.

The downstream erosion and sedimentation of the Nam Hai and Nam Hinboun Rivers is a case in point. The report does not quantify the loss of land that has occurred from erosion along the Nam Hai. Compelling evidence from an earlier EIA conducted by UK consultants RMR, which corroborates observations by local people documented in a recent report by Norwegian NGO FIVAS, *Ruined Rivers, Damaged Lives*, suggests that most of the sediment has ended up filling the pools of the Nam Hinboun in a “sediment wave” that has had profound effects on the ecology and flood carrying capacity of the channel. Floods are more frequent, deeper and last longer than before the THHP, according to villagers. It has also increased turbidity in the river which has caused mortality of rice plants and the gradual abandonment of wet season rice over at least 860 hectares of land. The potential for further erosion and sedimentation from a doubling of flows is essential information for any rational consideration of the true economic costs of the project. None of this critical information is included.

Some of the other key concerns include:

- The EIA fails to recommend any enlargements to the surge pond downstream of the powerhouse to accommodate the additional diversions. Instead it suggests that the existing pond can “accommodate” a doubling of flows without major modifications. In reality, the tailrace channel and surge pond are already far too small to fulfill their purpose and further live volume has since been lost through sedimentation. The refusal to make any modifications to increase the pond’s storage volume and thus reduce water fluctuations downstream appears to be a cost-cutting exercise by THPC.
- The EIA seriously underestimates the risks of poor water quality episodes during construction and operation of the new reservoir, especially in the early years of biomass decomposition. The release of water low in dissolved oxygen could cause massive fish kills downstream of the project in both the Theun-Kading River and the Hai and Hinboun Rivers. Norplan have allocated only US\$105,000 over 11 years to monitoring water quality, with nothing set aside for mitigation measures.
- The EIA fails to adequately describe pre-THHP aquatic ecology or identify and explain the changes that have occurred post-THHP. The report also fails to examine any mitigation

measures that were employed and their relative success or analyze threats to habitats and aquatic biodiversity or resource usage by local populations.

There is also a disturbing lack of clarity and detail in the EMMP and it appears that little thought has been put into its compilation. There are several contradictory passages and glaring omissions which suggest poor insight into mitigating impacts resulting from a complex trans-basin diversion and large reservoir hydropower project.

The proposed budget for the EMMP is clearly inadequate both for the scale and magnitude of the environmental impacts that will result from THXP and the length of time that the impacts will be felt. The total budget of US\$7 million over 11 years is pitifully small. Priorities for budget allocation would seem to far more closely match that of THPC minimizing exposure to actual costs, than the demonstrable needs of a complex trans-basin diversion hydropower project affecting tens of thousands of people. This is illustrated by the relatively high budget apportioned to protected area plans (US\$1,102,200) and a “forest regeneration program” (US\$2,029,500) which is likely to result in investment in monoculture plantations around the new reservoir.

Very little money is devoted to water quality monitoring (US\$105,000), fishery monitoring and mitigation (US\$99,000), and downstream “riverbed management” (US\$100,000). The EMMP allocates a mere US\$45,000 for downstream “bank protection and hydraulic works” and US\$24,000 for unspecified fishery “compensatory works”. It can be safely stated that no useful fishery protection or improvement measures or Nam Hai/Hinboun erosion and sedimentation mitigation can be achieved over 11 years with such paltry sums available.

Both the EIA and EMMP are littered with factual inaccuracies, exclude critical data which is already widely reported and in the public domain, and fail to comply with even the basic environmental regulations of Laos. Rarely does one see such a cynical attempt to so blatantly distort or ignore empirical data to create a sanitized version of events to achieve a pre-determined outcome.

The full report is available at [www.internationalrivers.org/en/node/2711](http://www.internationalrivers.org/en/node/2711)