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## SUMMARY OF CONCLUSIONS AND MAIN RECOMMENDATIONS

- ! The serious global financial and economic downturn has impacted the Lao economy at all levels.
- ! A project designed to produce one tenth of Laos' income has to be reassessed in the context of these wider developments.
- ! The IAG argues that, once the macro-economic indicators start turning up, the social, environmental and general developmental case for proceeding to appraisal is strengthened, not weakened by the global developments.
- ! Were the project not to proceed, the prospect is that the Laos economy will languish indefinitely, the opportunity to make a dent on poverty will decline, pressures to go on logging unsustainably will grow and the country's globally important biodiversity heritage in the project area will be irretrievably damaged.
- ! Progress has been made on the ground particularly with the legislative framework for the project and in the introduction and testing of alternative livelihood options.
- ! Elements of concern are the slow pace of capacity building and decentralization, the occasional inability to translate the high level of political commitment to the project into concrete decisions or assignments of responsibility and resource allocations, the lack of progress in seeking World Heritage status for the watershed and associated areas, the lack of a national forest resource management regime and a number of unresolved environmental impact issues.
- ! Also of concern is the prospect that momentum may be lost in the villages if World Bank or other funding is not forthcoming to bridge resource gaps in early 1999 and the impression the IAG has that the people's expectations of the project may be too high and stifling local initiative.
- ! The IAG recommends:
  - ! that the Thai Government and the World Bank both take a close interest in the forthcoming negotiation of the Power Purchase Agreement in the interest of ensuring equity (3.1);
  - ! that alternatives to forest resources and electricity as revenue earners be developed in the medium-term (3.2);
  - ! that the world conservation and development community be challenged to decide on the degree to which it is willing to compensate Laos for conserving its biodiversity (3.3);
  - ! that the UNDP be challenged to play a more dynamic role in fostering capacity-building on this project and elsewhere in Laos (4.2);
  - ! that a much more effective forest resource management and sustainable use regime be established in Laos (4.3);
  - ! that the World Bank seek a means to ensure that the livelihood activities it has been funding in the watershed area are sustained beyond early 1999 (5.1);
  - ! that better access to watershed villages through upgraded tracks and possibly the use of jetboats be investigated in the interest of better social and other services (5.1);
  - ! that stepped up communication of the content, timing and intent of the Resettlement Action Plan be undertaken (5.2);
  - ! that serious consideration now be given to resettling an entire village at an early date as a pilot project (5.2);
  - ! that a detailed plan and budget for the post-relocation period in the Nakai villages be drawn up (5.2);

- ! that similarly a prioritized, focussed and tightly budgeted work plan be drawn up based on the excellent but very lengthy ESMP (5.4);
- ! that a wider institutional framework with political and financial clout be established to create project linkages from central to village level (5.4);
- ! that further research and possibly mitigation measures on fish resources in all affected areas be undertaken (5.4);
- ! that even more vigorous measures be taken to counter the illegal activities of Vietnamese hunters and wildlife traders in the watershed and other areas (5.4);
- ! that in this project where the stakes are so high on several levels this fact be perceived as both an argument for caution but also, on balance, as an argument for proceeding to appraisal (6).

## 1. INTRODUCTION

The five member International Advisory Group (IAG)<sup>1</sup>, set up to provide an independent assessment of the World Bank's handling of environmental and social issues in the proposed Nam Theun hydro-power project in Lao PDR and of the risks involved for the Bank, first visited Lao PDR in May-June 1997. Copies of the resulting report may be obtained from World Bank headquarters<sup>2</sup>.

In mid-November 1998 the IAG reassembled to undertake a two-day site visit, together with four days of consultation with project stakeholders ranging from ad hoc discussions with elders in the catchment and plateau villages to formal talks in Vientiane with the Deputy Prime Minister, other ministers, top officials of concerned departments, IUCN and the developers (NTEC)<sup>3</sup>.

The visit was in effect a monitoring one. Hence this report aims to provide a brief update on and assessment of developments since the IAG's last visit, a check on whether the major recommendations of its first report have been addressed, an evaluation of the situation now reached and some observations and recommendations on the future. Given the time constraints and the IAG's relatively restricted Terms of Reference, the report does not claim to be comprehensive in its reach. It should be read in conjunction with the original report.

The biggest single development in the eighteen months since the IAG was last in Lao PDR is the serious global economic and financial downturn. As discussed in the body of the report, this has had substantial impacts on the Lao economy at all levels. Clearly a project designed to produce a tenth of a country's forecast income in the years ahead has to be reassessed in the context of these wider developments. Though the will to proceed appears to be strong among Government of Lao PDR (GoL) ministers, World Bank officials and the developers alike, some hard macro-economic decisions lie ahead, some slippage in timing of the project seems inevitable and the net returns may well be less than originally hoped, though still worthwhile. The possible implications are discussed below, including the need to keep up the momentum of broad developmental activities and to use creatively additional time and opportunities which emerge.

Developments since the Group's first visit which might be interpreted as essentially positive are:

- ! The recent signature of a Heads of Agreement document<sup>4</sup>, establishing general principles agreed between the GoL and the developers on the mandate to proceed further with negotiations with the Electricity Generating Authority of Thailand (EGAT), with multilateral and commercial lenders and with contractors and on structural moves (creation of an "Ownership Company") and compensation payments to GoL for environmental and social impacts. This provides the basis for moving to the next stages of developing the project.
- ! The re-ranking of the Nam Theun 2 project by the GoL, based in part on a consultants' report on the alternatives, as the priority power development project on its development and investment list.
- ! As a consequence of the above, the emergence of a clear political will at the highest levels of the GoL to proceed with negotiating and implementing the project.
- ! A generally supportive assessment by the Panel of Experts (POE) of the environmental impacts and trade-offs envisaged in the overall Nam Theun 2 plans.

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3 See appendix 2 for working programme of the IAG  
4 16 November 1998

- ! Production of virtually final drafts of the Resettlement Action Plan (RAP), the Environmental and Social Management Plan (ESMP) and the Social Action Plan (SAP) for the watershed area. The latter document in particular is in a more developed and refined form than the earlier versions and represents a significant move towards addressing some of the more sensitive aspects of the project.
- ! Promulgation or drafting of decrees which are building blocks for proceeding with the project and/or associated activities if and when the final go-ahead is given (e.g. Decree on the Appointment of the Nam Theun 2 Project Resettlement Committee dated 4 November 1998; draft decree on the establishment and activities of the Nam Theun 2 Watershed Management and Protection Authority).
- ! Initiation of activities on the ground in both watershed and plateau villages designed to begin testing the feasibility of alternative livelihood options.

Elements of concern are:

- ! As already mentioned, the impacts of the global economic downturn on the Lao economy and the project and associated activities.
- ! The relatively slow pace of capacity-building on the Lao side both in institutional terms and 'human resource development' terms.
- ! The occasional inability to translate the undoubted high level of political commitment to the project and associated activities into concrete decisions on (admittedly complex) issues and particularly into appropriate budget allocations and assignments of responsibility.
- ! The problems being faced by the Lao Government in putting its decentralization policy into practice.
- ! The lack of progress in seeking World Heritage status for the catchment and nearby areas.
- ! The prospect that some of the momentum - and trust - built up in starting to develop livelihood options in the villages of the catchment and the Nakai plateau may be lost if World Bank or other funding is not forthcoming to bridge emerging resource gaps early in 1999.
- ! The lack of a comprehensive national forest resource management regime to bring order, better returns to the GoL and communities, and a sustainable use approach to Laos' greatest natural resource.
- ! Remaining and unresolved environmental impact issues such as countering more effectively stepped up border incursions by wildlife traders and hunters, and the lack of fully credible plans to sustain, let alone expand, indigenous fish populations in the project-affected riverine and reservoir systems.

A final concern which should be mentioned here is the impression gained by the IAG that expectations of the impacts of the project on the daily lives and situation of the affected people may have been raised too high and may have tended on occasion to stifle local initiative as the people wait (with great patience) for promised improvements in their situation.

## **2. ACTION ON GENERAL RECOMMENDATIONS OF FIRST IAG REPORT**

The following is a brief assessment of action taken on the more general recommendations of the first IAG report:

*Recommendation:* Set up a competent and independent negotiations advisory team answerable only to the GoL and its negotiators.

*Action:* A set of advisers in the areas of international legal agreements and financial and energy negotiations has been engaged (at considerable cost) and has, according to GoL interlocutors,

performed competently. The IAG has no independent means of assessing the performance of the advisers.

*Recommendation:* Engage an external auditor to monitor the substantial and complex financial transactions involved in the project.

*Action:* It appears that, while components of the project are to be externally audited, there is as yet no provision for an overall audit of what will evolve into the biggest economic venture in Laos. The IAG maintains its original position that such provision would be highly desirable - and provide reassurance to the GoL itself and to lenders.

*Recommendation:* If the project proceeds, the World Bank Office in Vientiane to be strengthened.

*Action:* The WBO is in the process of moving to new premises to absorb the increase of staff from two to six. Current arrangements are that senior Bank headquarters staff visit on a rotational basis every three to four months. When (and if) the project go-ahead is given, a permanent project team will be established in Vientiane.

*Recommendation:* Social and economic development and biodiversity conservation to be addressed in an integrated way.

*Action:* Surprisingly good progress on this front at the village level (where it is an imperative). As in most countries achieving effective integration at the national and regional levels is more difficult. The institutions are largely in place; the challenge is to make them work effectively, and to inculcate the habit of collaboration. The statement of the 'principles of management' in Part 1-4 of the ESMP needs rephrasing to underline more clearly the indissoluble links between development and conservation.

*Recommendation:* Seek long-term commitments from the Lao leadership on using project revenues for poverty alleviation and on offsetting biodiversity impacts and protecting the watershed and extensions.

*Action:* Such undertakings are implicit in the Lao leadership's continuing support for the project and in many of the GoL's actions but specific undertakings remain to be negotiated. The World Bank should seek such assurances, including in relation to the distribution of compensation to the people to be resettled.

*Recommendation:* Monitoring and evaluation of all aspects of the project.

*Action:* The RAP records (paras 6.4.1 and 6.4.2) that a system of internal and external monitoring has been established in respect of resettlement operations. The internal system appears to amount simply to the aggregation of monthly reports, which will be useful to management in quantitative but not qualitative terms. A 'quality assessment' system, however subjective its indicators, is also called for. Independent advice will be provided by an external monitoring system which will stay in place 'until it can be shown that the resettlement objectives have been fully achieved'. The methodology to be employed is not yet spelled out. New assessment techniques are being developed elsewhere and should be considered.

In respect of the Nakai Nam Theun Conservation Area (NNTCA), the ESMP describes in general terms plans for both ecological monitoring and monitoring of financial and administrative performance. The latter will apparently be completely internalized. There are to be annual independent audits, which will cover both aspects of monitoring and will undertake annual evaluations of the performance data. Again, the exact methodology to be adopted is not yet specified.

The plan for a Research and Monitoring Institute to cover social, ethnographic and resource use in the NNTCA (para 12.5.4 of Part IV of ESMP) appears to be innovative, and sound in its proposed multi-disciplinary approach.

The most obvious gap is in monitoring and evaluating the overall performance of the project and associated activities at the national level, as contrasted with the component parts in the field. Annual aggregation and a rigorous analysis of the component audits would provide an important tool for the GoL authorities to monitor progress and to ensure that the project is continuously evaluated and does not become a victim of the 'conspiracy of success'. Which GoL unit should undertake this task should be clarified.

Actions on the first report's detailed recommendations will be reviewed in the relevant sections of the report below.

### 3. MAJOR ISSUES - THE GLOBAL DIMENSION

#### 3.1 Impacts of global downturn

The IAG warned in its first report of some danger signals on the inflation front. But no-one was forecasting at that time a serious global economic and financial downturn, an inflation rate in Laos currently running at around 110% or the Kip losing more than 60% of its value against the US dollar. These conditions, produced in part by the regional economic crisis in 1997, were worsened by some serious macro-economic policy failures in Vientiane such as maintaining fiscal and credit expansion, not keeping a tight control on government spending and not taking corrective measures against insolvent banks brought down by non-performing loans. Chronic budget and current account deficits expanded and capital flight ensued as confidence in economic management waned.

The impacts might, of course, have been even greater if much of Laos's economy were not still essentially a subsistence agriculture-based system. In 1997 climatic conditions were favourable so food production rose and the overall growth rate fell only to 6.5% from an average 7% over the previous three years.

One relevant factor in all this is that if the Nam Theun 2 project - orders of magnitude larger than other ventures - is approved this will directly and indirectly widen the exposure of the Laos economy to global trends. Furthermore, although there are elements of an enclave approach in the way the project is structured and the GoL and the developers will no doubt seek respectively to cushion themselves against the effects of externalities, the IAG was sufficiently concerned about the prospect of additional indebtedness for the Government arising from its investments in Nam Theun 2 as to seek future information on prospects.

One reality is that the economy of Thailand, the principal market for electricity exports (and sawn timber) has contracted sharply. Another is that with the global and regional economies both still in roller coaster mode there are no constants and no certainties. So new assessments have to be made about the prospects for electricity supply agreements, prices which may be realized and time frames for power delivery.

Some reassurance may be taken from the responses on the above issues. Investment is starting to flow back into Thailand. Modest growth is expected there in 1999 and beyond. EGAT has reaffirmed a continuing interest in purchasing up to 3000 MW of hydro-electricity from Lao PDR. In response to a Thai enquiry, the GoL has re-ranked Nam Theun 2 as the top power project for the country in the years ahead. Lao ministers and provincial authorities see the project as crucial not simply as a long-term earner of foreign exchange but - through associated activities like the development of alternative livelihoods, the prospective alleviation of poverty in the watershed and Nakai plateau and the development of new irrigation potential downstream from the reservoir - as a development imperative. They also appear to regard the project as a potential kick-starter for the economy in the current adverse circumstances.

The next step in the evolution of the project - the negotiation with EGAT of a Power Purchase Agreement (PPA) - is an important one. The Thai Government, as an ASEAN partner and close neighbour with an interlocking economy, has an interest in helping ensuring that the PPA is a fair and equitable document. The World Bank also has a stake in the outcome and should be involved in the process. Some slippage in delivery dates seems likely in the circumstances, with 2005 appearing now more likely than 2004, though Laos still favours the earlier date.

What is the level of exposure of the GoL in all this? In summary, although the updated financing package envisages GoL direct equity commitments totalling around US\$ 90 million through the GoL share holding agency, Electricité du Laos (EDL), less than US\$ 10 million of these involve upfront cash injections by the GoL side. Multilateral and bilateral donors and export credit agencies will fund most of the GoL equity requirements through grants or soft loans. Furthermore, loan repayment requirements would be an EDL liability rather than a GoL one and lenders would have only normal commercial recourse to EDL. On the other hand, GoL has two broad contingent liabilities relating to its role as a 'sovereign power' providing back-to-back support for the World Bank Partial Risk Guarantee and through EDL's share holding.

All of the above arrangements merit very close scrutiny and reassessment by the GoL's independent advisers in the changed global circumstances.

The interim view of the IAG is that GoL deficits - and the level of overall indebtedness - will undoubtedly go higher (assuming that the macro-economic indicators improve and the project goes ahead as a consequence). But both should be relatively marginal and should be offset to a considerable degree by the stimulating effect on the economy of the activities in and around the project and by the still worthwhile revenue flows projected from electricity exports.

That depends of course on three large assumptions: that the GoL will get its house in order in terms of macro-economic management, that Thailand is prepared to pay a fair price for Lao electricity, and that an even more severe global downturn does not unfold.

Were the project not to proceed, the prospect is that the Laos economy will languish indefinitely, the opportunity to make a dent on poverty will decline, pressures to go on logging in a quite unselective and unsustainable way will grow and the country's globally important biodiversity heritage in the project area will be irretrievably damaged.

### 3.2 Impacts of global downturn at local level

The impacts of the global economic downturn have fed down through the national to the local level in Lao PDR. Job losses have occurred, incomes are lowering, savings have dissipated and businesses have gone to the wall. The cumulative results impact on the project area directly and indirectly. Thus, declining demand for sawn timber in Thailand, when combined with more restricted access to some readily available forest areas in the project area and grossly inefficient management and use of accessible timber resources, has reportedly resulted in a major timber concessionaire (Boulisat Phatana Khet Phoudoi, BPKP) being unable to fulfil its timber extraction quota. A fall-off in profitability and hence in revenue (tax) flows to GoL coffers has resulted. This appears to be a general trend. At the same time, there are still large numbers of magnificent logs being trucked across borders. It is not always clear where these are coming from, who is profiting, or whether the people and GoL are benefiting from the trade.

At the more personal level, the decline in more regular forms of income in Vietnam appears to have produced a stepped up effort by Vietnamese traders to exploit the wildlife and other resources of Lao border areas. The number of intrusions has jumped significantly with some border villages - and even some well away from the border - reporting daily contacts with Vietnamese. It is reasonable to assume that, in spite of a highly impressive endeavour by GoL agencies in places like Nakai and at border posts to enforce regulations against hunting and the taking of wildlife, the temptation for Lao villagers to trade wildlife for needed Vietnamese consumer goods and occasionally to kill animals for their own consumption is irresistible. This is understandable in the circumstances but the impact on the area's biodiversity will be severe if wildlife trade and hunting continue undiminished for much longer.

The reality faced by the Lao authorities is that in the meantime there are few alternative sources of income - national or personal - to the use of the country's forest resources, timber and non-timber. To head off an uncontrolled and unsustainable harvesting of these resources it is suggested that action on three fronts be pursued:

- ! First, a much more effective forest resource management and sustainable use regime appears to be called for (see 4.3 below).
- ! Secondly, alternatives to forest resources and electricity as revenue earners need to be developed (tourism, mining, development of value-added processing industries for timber and farm products?). Doubtless all these options are and should be pursued but the processing options look the most promising in the short-term.
- ! Thirdly, the world conservation and development community has to decide on the degree to which it is willing to compensate the Government and people of Lao PDR for absolutely conserving the biodiversity treasures and carbon sink functions of the NNTCA and associated areas such as the proposed Northern Extension.

The second of these areas of action (alternative development options) is obviously outside the IAG's competence. The two other areas require further consideration. The IAG's preliminary views on the first issue appear in section 4 below (national issues) and on the third issue immediately below.

### 3.3 Global price of protecting Conservation Area biodiversity

The IAG pays tribute to the decisions taken over the years by the GoL to protect its biodiversity heritage and to endeavour to enforce its conservation regulations. Even the Lao Army border guards have been enlisted in the effort to slow the expanding outflow of wildlife products - flora and fauna - from Laos into Vietnam and thus to China and other East Asian markets.

The Lao PDR Government and people cannot be expected to bear alone the cost of conserving this heritage without price. There are stretches of the Conservation Areas where the returns from one-off logging would well exceed US\$ 20,000 per hectare. To go on foregoing such income at a time of economic downturn amounts to a national sacrifice and - certainly in the period until electricity exports start to bring in income - amounts to a highly responsible but painful act of self-denial by Laos for the benefit of the global community.

To ensure that the Government and people of Laos are able to continue to maintain this conservation regime the global community has, as the IAG pointed out in its first report, an obligation to move quickly to back them up. An early move - but one which should not delay action on other supportive fronts - would be for the GoL to submit an application to the World Heritage Bureau in UNESCO Headquarters in Paris for World Heritage status for the NNTCA and its contiguous Northern Extension, preferably linked to an adjacent high biodiversity site (Vo Quang) in Vietnam. The closing date for an application to be reviewed in the year 2000 is 30 June 1999. The IAG encourages GoL (through the Ministry of Agriculture and Forestry) to complete such an application quickly, if necessary drawing on international expertise to help complete the papers (might the members of the POE help in this regard?).

The point of achieving World Heritage status is that it would help protect the site through enhanced international recognition and standing and through the subsequent monitoring by the World Heritage Bureau and its technical advisers.

The IAG's view is that a transborder World Heritage site, linking the Lao site to the adjacent area in Vietnam would make sense and would help foster transboundary cooperation in the protection of both countries' highly valuable biodiversity.

On this basis, the IAG would suggest the following options, with a preference for the first one, for inclusion in the World Heritage application:

- ! A transboundary site incorporating the NNTCA and the Northern Extension in Lao PDR and the adjacent area in Vietnam.
- ! A 'Laos only' package including both areas in the country.
- ! A NNTCA application only.

The IAG cannot over-emphasize how important in the overall project is the international recognition of the site(s) in this way. Protection of these sites is the quid pro quo for the inundation of the Nakai Plateau and other environmental impacts of the dam construction. A World Heritage mantle will help. If the cross-border option is ruled out in the short-term then a "Laos only" package should go to UNESCO in 1999.

Beyond this move, the GoL might consider utilizing the intermediary services of the World Bank in seeking global compensation for its designation of the NNTCA and adjacent areas as a strictly protected biodiversity and carbon sink area, through one or other of the following mechanisms:

- ! Establishing a National Environment Fund to undertake mitigation and livelihood support work.
- ! Joint Implementation.
- ! Other carbon sequestration schemes.
- ! Debt for nature swaps.

Finally the IAG recommends that the GoL in collaboration with the Secretariat of the Convention on Biological Diversity and IUCN, researches the 'state of the art' in international endeavours to patent or otherwise protect its individual plant or animal species from illegal and unrecompensed exploitation by international pharmaceutical and other product development organizations. One of the principal objectives of the CBD is to govern such exploitation - Laos PDR should ratify the Convention and then proceed to establish benefit sharing and fair compensation principles as envisaged in the Convention. Negotiated contracts or MOUs with research teams should establish clearly the terms of any collaboration. On the basis of experience elsewhere a transparent government authority is required to work on the issues involved and equitable long-term benefit sharing systems should include delivery mechanisms for financial benefits such as a national trust fund(s).

#### **4. MAJOR ISSUES: NATIONAL LEVEL**

Limited trained manpower is a factor holding back the achievement of policy objectives ..... A key problem, linked to the human capacity one, is the weakness of institutional arrangements, nationally, regionally and at village levels ..... Decentralization of the government structure by providing local communities not only with more authority, but also with more financial independence would contribute to rural development in Laos." IAG Report, August 1997.

## 4.1 Achieving Decentralization

Decentralization is an official policy in Laos as elsewhere. But (as elsewhere also) there seems to be some confusion about the objectives of such a policy and the way to put it into practice. The two are linked. The so-called “subsidiarity” policies being pursued in the European Union and say, parts of West Africa, are based on the conviction that it is through passing both real authority and revenue-raising powers to those most directly affected by them that accelerated social and economic development will most surely occur. This is perhaps even more important in the case of formerly centrally-planned economies where initiatives from the centre tend to be awaited before local energies are engaged.

Experience elsewhere suggests that decentralization is not achieved simply by promulgating the policy but by conscientiously devolving real decision-making and revenue-raising powers. The centre has to formally let go some of its powers. And so do the provinces - to the district and even sub-district and village level. Once people realize that the object is to enable them to take their own initiatives (within broad national guidelines) the entrepreneurial and self-help instincts of the Lao people will bring a new dynamic to development in the country.

Of course there has to be reciprocal degree of accountability in all this: the centre needs to retain a light monitoring and, on occasion, a heavy auditing role.

It is suggested that Lao PDR could learn from the experience of others in the benefits of decentralizing. Is this a capacity-building exercise for UNDP to consider? Or is this an area where the new LIL (Learning and Innovation Loan) mechanism of the World Bank has a particular role? The LIL is apparently designed to help identify and pilot institutional arrangements necessary to determine the best course of action before moving into permanent structural changes. Its applicability to the requirements of the Nam Theun 2 project seems obvious, although it will presumably add to Laos’ net indebtedness.

## 4.2 Capacity-building

The passage of time - and a second visit - has strengthened the view of the Group on the central importance of capacity-building. This is true of most developing countries; in Laos, which lost several decades of nation-building through its involvement in a war not of its own choosing, it is doubly true. It is possible to interpret the recent macro-economic failures as in large part due to a dearth of capacity in policy formulation and management. At the other end of the scale, the comparative lack of progress as yet in bringing services to the villages in the NNT watershed is attributable in part to the lack of people - inside the villages and outside - with the requisite basic agricultural, agro-forestry, health care, sanitation and teaching skills. In between the policy formulation and management skills at the centre and the more basic “barefoot” requirements in the villages there are gaps at the provincial and district level in administrative and financial expertise and increasingly in the area of entrepreneurial skills.

The initiative must come from the Lao side. But the international community has a role too. It is the understanding of the IAG that in the United Nations system it is the UN Development Programme (UNDP) which has a particular responsibility for helping out in the capacity-building side. Yet UNDP seems almost detached from the major developments in Laos and certainly has not taken a forward role in helping promote skills training in the range of areas demanded by big cross-sectoral ventures like Nam Theun 2 and its associated activities. With a new Resident Representative in place, IAG would expect UNDP to take a more assertive role in the capacity-building sector, not least in regard to the construction and the “post dam” phases in the areas affected by the Nam Theun 2 project.

UNDP, in consultation with the World Bank and others, might look at such ideas as boosting training for State Planning Commission and Ministry of Finance staff in macro-economic management, strengthening the Economics Department in the Lao National University and helping establish an economic research institute in Vientiane to link into the international debate on how to handle the problems of increasing globalization.

Bringing in more and more expatriates is not the medium-term answer. It should be written into the terms of reference of every expatriate in Laos that his or her basic job is to pass on skills to Lao counterparts and then withdraw. The Lao authorities have a responsibility to ensure that adequate counterparts are available. Of course, the "transfer of technology" function in Nam Theun 2 applies as much to NTEC as it does to IUCN and other agencies.

The ultimate objective of the Nam Theun 2 project is to lift the quality of life of the Lao people. The Lao concept of Human Resource Development includes all economic, social, environmental and cultural sectors and focuses on children, youth and women. Setting medium-term targets provides a framework for planning. Lengthening the planning period so that the entire transitional phase (30 years) of the Nam Theun 2 project is covered may be highly speculative but has its utility. Are targets along the following lines realistic and achievable in the project area and country-wide by 2025?

Health:   ! infant mortality of 125 per 1000 births (1994) reduced to 25;  
              ! maternal mortality of 656 per 100,000 (1994) reduced to below 150;  
              ! safe drinking water for all households.

Education:  
              ! 100% enrolment at primary level (60% in 1992) and secondary level   (50% in 1992);  
              ! full adult literacy including all ethnic groups (64% in 1994).

Human Development Index: targeted at Medium Income community levels.

The Group merely mentions these - perhaps ambitious - targets as a basis for discussion among those undertaking capacity-building planning. Less formal training will of course often be the requirement in the case of Nam Theun 2 and its associated activities in the watershed, the plateau and downstream.

#### 4.3                   Establishing a more effective forest management and sustainable use regime

The relevance of this national issue to Nam Theun 2 is that on the observation of the IAG the timber resources of the Nakai Plateau are not being efficiently or sustainably managed and that the pressure to log the hugely valuable timber resources of the NNTCA (and other proposed Conservation Areas in Lao PDR) will grow in the years ahead and must be countered by the adoption of a rational nationwide management regime which ensures that those forests which are biodiversity-rich or essential to watershed preservation are conserved while the remaining forest resources are managed sustainably for the benefit of the Government and people of the country and not squandered.

The IAG is aware that there have been efforts over many years to develop an effective forest management regime. The consensus among both Lao and foreign observers is that such a regime is not yet in place though many of the elements are there. Thus there are detailed forest resource maps available. These would form the basis for a hard-headed assessment of which of the remaining forest resources - inside Conservation Areas or outside - are not essential for conservation and watershed management purposes and hence might potentially be made available for use. The IAG is not arguing here for opening up the NNTCA for exploitation. It is suggesting that if the Nakai Plateau resources

and some of those elsewhere were rationally and sustainably managed, then the biodiversity and watershed functions of areas like the NNTCA could be more firmly secured in the long-term.

What are the options for such a regime if further areas were identified as potentially available for sustainable use? This is beyond the IAG's areas of expertise but we would observe simply that the forestry management and commercial skills needed to ensure a sustainable regime and an adequate return to Lao PDR on say, the remaining forest resources of Nakai do not appear to exist in such agencies as the BPKP. An alternative or parallel regime adopted elsewhere is the community forestry approach where the resources - timber and non-timber - are vested in communities for their long-term benefit. Whatever regime is chosen, the benefits from lessons learned elsewhere in experiments with low impact and selective logging, with quality production control and marketing, with forest regeneration techniques and use of self-sustaining species must be acquired by Lao PDR. If a national regime is not feasible in the short-term then perhaps a pilot project based on the Nam Theun 2 impacted areas, notably the Nakai Plateau, might be introduced. This might address the illegal logging now reportedly taking place on the north side of the future reservoir area and elsewhere.

An essential part of such a forest resource management regime would be a revision of present structures so that the Ministry of Agriculture and Forestry would have the capacity to manage the forest estate. As we understand it, such development agencies as the BPKP are accountable only to the Ministry of Finance and thus the relevant line Department has no means of exercising control over all the country's forest resources.

## **5. MAJOR ISSUES: PROJECT LEVEL**

### **5.1 Introducing new livelihood models**

The IAG was pleased with the progress achieved in the Plateau area and in the watershed village of Ban Mak Feuang on developing new livelihood options. The redrafted Social Action Plan for the watershed area is a big improvement on the rather embryonic plan being developed eighteen months ago and is realistic in not envisaging a wholesale change of approach. Furthermore the work being undertaken in Nakai and Ban Mak Feuang in developing new techniques (wet rice, agro-forestry) and new crops and varieties, testing the husbandry practices required and measuring the acceptability of new products among the villagers is an impressive start in the key exercise of weaning the people away from destructive practices and of achieving food security. The demonstration plots are an effective way of showing people that new techniques work. But the hard part is yet to come. Experience elsewhere suggests that changing past mindsets and habits and moving to new techniques and practices is the next and most difficult phase. In this regard there is something of a consensus among extension workers that the upland and plateau minorities are more amenable to change than some and that so long as they can be brought into close contact with new methods and be persuaded of the net benefits to themselves and their families they will adapt relatively fast. The apparently successful adoption by the three pilot families in Nakai (Theun Douane) of new vegetable crops and agro-forestry approaches and the network of minority group 'cousins' who in effect help promote technology transfer were cited as examples of the adaptability of the Lao people to new ideas. All this is encouraging.

The work must be maintained without a break, for experience suggests that the building of trust and credibility is an essential element of livelihood change activities - and continuity is important in this respect. The World Bank is asked by the IAG to seek a means to ensure that the important livelihood activities it has been funding in the watershed area are sustained beyond the present (funding) expiry

date in early 1999. This work will be fundamental to the success of the project in conservation terms and is a contribution to alleviating poverty. A parallel exercise must be the promotion of social development work in the areas of health and education. IUCN and Ecolao are to be commended for their quiet and unheralded initiation of low-key activities such as providing village health workers (where they exist) with some very basic medicines and endeavouring to be supportive of the few teachers in the villages. The opportunity exists - at minimal cost - to chalk up some 'quick wins' in this way and to make a quite disproportionate impact on the people's daily lives. One woman leader interviewed said that medical help was a higher priority than growing more food because the latter activity could not be undertaken by those weakened by fever or intestinal problems. Eventually such costs will have to be internalized in Lao PDR if the services are to be sustainable but in the intervening period of low government revenues some external infusion of resources is highly justifiable. It is recommended by the IAG.

Of course access to the watershed villages is an inhibition but not a total block to the provision of better social services. Without resorting to destructive roading, tracks capable of taking off-road motor cycles and even buffalo carts, might be constructed up river valleys and the feasibility of using rugged aluminium jetboats on the Nam Theun and its tributaries might be investigated (see recommendation 3.6 (5) of the first IAG report). Such upgraded access would facilitate the introduction of other low-impact techniques such as micro/micro hydro devices and would certainly simplify the task of introducing social services.

The IAG makes these observations because if there are to be delays in implementing the Nam Theun 2 project, it is all the more important to use the extra time available to test and introduce new livelihood options and to start meeting some of the raised expectations of the villagers for better social services. This activity is not linked to the project start-up. It is needed anyway and has been for some time. It should proceed regardless of the tribulations of the hydro-power project.

## 5.2 Resettlement

The IAG's view in 1997 was that despite the sorry record of most resettlements elsewhere, the Resettlement Action Plan (RAP) for Nam Theun 2 appears to provide a sound basis for achieving a successful resettlement. This remains the Group's view.

The IAG notes the World Bank Aide Memoire with Lao PDR, Nam Theun Social and Environmental Project of 1-13 December 1997, addressing the revision of the draft RAP. Referring to its previous conclusions and recommendations on the handling of social issues, the IAG notes that action has been taken on the following points raised:

- ! IAG notes that its concern in relation to the broad issue of integrating planned social development activities across the whole scope of the project area has been partially addressed by Public Consultation and Public Participation (PCPP) and notes that many responses from communities affected in areas in the downstream area will be spontaneous rather than planned. However, the issue of internal migration and measures to handle this has not been substantially addressed. This calls for further thought and action.
- ! Capacity-building continues to be a major concern, as already noted. Provincial and district level institutions are inadequately resourced for human resource development.
- ! Impacts on other affected communities such as those affected by the transmission line to Savannakhet have been further investigated. PCPP work was carried out from 10-13 February 1998 in five villages in Xe Bang Fai district and in eight villages in Savannakhet Province (Xaybuy and Khatabuly districts). The goals of the PCPP visits were to:

- ! ensure that affected people were aware of and understood the features and impacts of the project and their implications;
  - ! collect statistics on each village and identify possible transmission line impacts.
- Not having visited these areas, the IAG has no view on the net results.

- ! The IAG notes the role of PCPP teams in all areas to be impacted by the tailrace channel and increased flooding along the Nam Phit and Xe Bang Fai. This includes zones 8, 9, 10, 11 and 12 and consists of more than 100 communities. The goals of these PCPP visits were to:
  - ! ensure that affected people were aware of and understood the features and impacts of the project and their implications;
  - ! document existing livelihood patterns, land usage and aspects of society (socio-cultural and economic) likely to be affected by the project;
  - ! collect information in regard to existing village development systems and decision making processes (defining their structure and efficiency);
  - ! ask villagers how negative impacts might be mitigated, including discussing possible compensation; and
  - ! draw up land usage maps and discuss livelihood options.
- ! The IAG was able to hold consultations with provincial officials at Thakhek on 21 November 1998. Provincial officials were particularly aware of opportunities for irrigation of flat lands along the Xe Bang Fai for rice cultivation, and other agricultural production. This marked a step forward in terms of potentially positive downstream impacts.

The IAG monitored resettlement work and comments as follows:

- ! The IAG welcomes the fact that the time frame for implementation of the RAP has now been increased from five to eight years. This is a useful move. This longer time frame is, we believe necessary to ensure sustainable results in resettlement activities.
- ! The IAG notes that the high expectations of villagers awaiting resettlement continues and that there is the added element of frustration at the delays in implementation of resettlement.
- ! The GoL's policy is clear with regard to compensatory issues for resettled families. Only those families registered as residents on the Plateau will receive compensation. IAG notes that already population has increased over the past few months.
- ! The issue of immigration of non-Lao is again not mentioned in any resettlement document.
- ! The IAG notes the work of the PCPP on the Nakai Plateau (April-May 1998) and the contribution of villagers to the process. The IAG takes note that the major issues identified are food security, the importance of a diversified livelihood model, detailed modifications to house design proposals, village lay-out and the importance of appropriate gender-sensitive training. The need for greater discussion and cooperation between NTEC and the various GoL organizations is highlighted especially in sensitive areas such as controlling immigration and registration of those receiving compensation.
- ! The IAG notes the structure adopted in the RAP for the Nam Theun 2 resettlement organization (Fig. 6-3). Administrative responsibility for resettlement has been transferred from the central Government to provincial and district institutions.

Issues still to be addressed:

The IAG is not satisfied that decentralization of responsibilities with regard to the RAP is adequately understood. The cooperation of provincial, district and village bodies is the key to the success of the RAP. There remain substantial gaps in the effective implementation of decentralized policy. There are gaps in the comprehension of the RAP at provincial/district/village levels. The IAG expects that this situation will improve but more effective communications are called for.

- ! The IAG continues to feel concern over internal migration and non-Lao migration. Accepting the inevitability of migration does not reduce the social and environmental impact on communities living on the Nakai Plateau. More internal discussion of this issue is called for.
- ! The IAG proposes that serious consideration be now given to resettling an entire village at a very early date. The IAG believes that such a visible and tangible model will have a greater impact on communities preparing for resettlement and both positive and negative experiences can be utilized by communities and implementing agencies.
- ! The IAG queries the lack of a detailed plan and budget for the post-relocation period to support the livelihood programme and other social and economic services established under the RAP. The IAG in discussions with the GoL understands that the budget was originally estimated at US\$ 5.6 million and has during the planning process now grown to US\$ 32 million for a period of eight years. Clarification of the arrangements for expenditure will avoid future disputes and assure sustainability of RAP financial instruments and livelihood systems.
- ! The IAG notes the participation of the Lao Women's Union (LWU) in the PCPP. The involvement of the LWU has greatly facilitated the participation of women at community level in the discussions relating to services such as health and education, resettlement, the design of houses and livelihood options. The IAG notes from discussions with representatives of LWU in Thakhek that the priority for women is better health services and urges the implementing agencies of the RAP to respond to the issues raised by women.
- ! In this regard, while understanding the position of the GoL that "mass movements" such as the LWU are the equivalent of less official NGOs elsewhere, the IAG gently suggests that it study the positive benefits secured in other developing countries through fostering the work of international NGOs and promotion of the emergence of local NGOs with capacity in areas like social and environmental development.

### 5.3 Who fills the vacuum post-RAP?

The IAG notes that the responsibility to implement all the commitments in the finally agreed RAP will be distributed between the GoL and the Ownership Company (OC) which is a different body from the NTEC consortium. The OC will be formed by the GoL and the private sector members of NTEC at or before financial close.

With a projected budget of US\$ 32 million the OC will be responsible for funding of the resettlement plan and the GoL and provincial authorities will be responsible for the actual relocation of the families to be resettled and their social welfare.

As indicated in the RAP para 6.2.5, as the owner of the project, OC will play a key role in the resettlement planning and implementation of Nam Theun 2. The company will be responsible for providing funding according to the approved RAP. It will be responsible for some civil engineering components, such as construction of new roads to relocated villages, preparing resettlement sites, and providing infrastructure and facilities, including the provision of water and electricity for relocated households.

The IAG notes that provincial authorities, the LWU, and village organizations are also implementing organizations.

The implementation of the RAP is for a period of eight years, and the life of private sector involvement is 30 years.

Whilst resources will be directed towards capacity-building at provincial and local level it is important to note that the OC has the prime responsibility for the implementation of the RAP. The OC may well come to assume the unenviable position of a 'government within a government' in providing

services to local communities. This is often a pattern of development when government is under resourced in human and financial capital. It must be handled with sensitivity.

The IAG looks beyond the RAP implementation time period, and is concerned that at a time when the private sector withdraws from Nam Theun 2, there is a danger that insufficient capital will have been set aside to maintain services, nor sufficient invested in the development of human resources necessary for delivery of services to communities. Social disruption may follow.

The IAG sounds this cautionary note in order to underline the importance of ensuring:

- ! that transfer of skills and information from OC to GoL personnel occurs at provincial, district and local level during the involvement of NTEC;
- ! that revenues generated from Nam Theun 2 are invested inter alia in sustainable activities involving resettled communities;
- ! that sufficient revenues from the project are set aside for long-term maintenance of roads, schools and hospitals for resettled communities through Trust Funds or such like mechanisms.

## 5.4 Environmental aspects

While it might be inclined to make the case for an “ecosystem wide” or river basin approach to the project with an administering authority extending from the Vietnam border to the Mekong, the IAG accepts that in the special circumstances of Laos an authority covering the Nam Theun watershed only is an adequate approach. At the same time it supports the view of the Panel of Experts that a wider institutional framework with political and financial clout is needed for establishing project linkages between central, provincial, district and especially community levels. Its only comment on the draft Watershed Management and Protection Authority decree is that the Director of the Secretariat should have the power to make appointments - but “in consultation” with the Board. (See Article 7,2).

The IAG is of the view that the very comprehensive and lengthy ESMP needs to be prefaced by a prioritized and focussed work plan. The highly competent IUCN team should endeavour to produce such a work plan by the end of this year (1998). It is needed inter alia in order to facilitate negotiation of the closing of the still existing gap between needs and resources for implementing the Plan.

A new development since the IAG last reported is the requirement by the Thai energy client that the Nam Theun 2 project be adapted to meet a “demand peaking” system i.e. that electricity flows not be even throughout the day but decline or be stepped up according to demands on the Thai side. NTEC’s response has been that this situation can be adequately met, and that the potentially disruptive effect of the variable daily downstream flow can be countered by expanding six-fold the capacity of the regulating pond at the foot of the plateau. Queries from the IAG side about the effect on oxygenation of the water were met by the explanation that the water would be more highly oxygenated because of the higher drop from the regulating pond to the river bed.

That may well be so. The IAG remains nevertheless uneasy about the overall impact of the whole project on fish resources and especially diversity in the various riverine systems. There is no doubt that the reduced flow below the Theun Hinboum dam, combined with heavy siltation already occurring from degraded slopes outside the NNTCA, will severely affect fish stocks in the lower Nam Theun. The IAG remains to be convinced that the reservoir area will sustain the larger fishery being predicted by NTEC (though it is reassured that no exotic species will be introduced to attempt to achieve this production growth). And it is apprehensive about the scientific basis for the assertions that little species loss will occur in the Xe Bang Fai system. Experience elsewhere suggests that

aquatic species are at least as vulnerable as terrestrial species to large-scale projects like this one. More research (and mitigation measures during the construction period, for example) is called for.

Finally, as already indicated in the sections above on the impacts of the global downturn at the local level (3.2) and establishing a forest resource management regime (4.3), the IAG has serious concerns about the impacts on biodiversity of the stepped up incursions into the NNTCA by Vietnamese wildlife traders and hunters and the increasing pressures on the forest resources of Laos in general. The environmental trade-off in this project is that the loss of the remaining natural resources of much of the Nakai Plateau is offset against the conservation of the biodiversity of the catchment area. Were that trade-off to be endangered by the degradation of the catchment area's resources the case for Nam Theun 2 proceeding would be severely weakened. We underline the point again because the pressures on the natural resources of Laos are continuing to mount and need ongoing attention.

## 6. CONCLUSION

As the Bank moves towards the pre-appraisal and appraisal phases of the project, it should bear in mind, despite its current and appropriate preoccupation with the macro-economic management performance of the GoL, that the original case for this venture to go ahead remains valid: as the IAG said 18 months ago, on balance the developmental, poverty alleviation and environmental benefits of the project outweigh the negative aspects.

That remains true. Indeed the IAG is inclined to argue that deteriorating prospects on the social and environmental fronts with the passage of time strengthen the case for proceeding. It is not simply that Laos has few realistic alternative development and conservation models to pursue. It is also a consideration that a world disillusioned with hydro-power projects which have, through gross neglect of social and environmental angles, cast doubt on the future of one of the few proven renewable emerging sources is seeking a better way forward on the hydro-power front. The World Commission on Dams is one attempt to establish the beginnings of a global consensus on the subject. The Nam Theun 2 project is an attempt on the ground to try to establish new approaches to mitigating the social and environmental impacts of building dams. It is also an experiment in three-way collaboration between the Government of a small developing country and international private sector and inter-governmental organizations. The stakes are high. This is an argument for caution. In the context of the Nam Theun 2 project it is also, in the view of the IAG, an argument for proceeding to appraisal.