
January 2003
With the concurrence of IAG chair Dick de Zeeuw, I joined the Panel of Experts (Professors Thayer Scudder and Lee Talbot) in one of their regular field visits to the NT2 project area in Lao PDR. We spent a week outside Vientiane, talking to the families now in residence in the pilot resettlement village on the Nakai plateau, helicoptering down the planned path of the transmission line to the Mekong, interviewing villagers in the montane areas of the Nam Pheo river valley, notably in Ban Buuk, Ban Kuname and Ban Nameo, and walking and rafting out of the area down the Nam Noy to the Nam Theun itself. Lee Talbot, together with the new NT2 Task Manager in the World Bank, Robert Mertz, and wildlife biologist from the World Conservation Society, Dr. William Robichaud, tramped up the Nam Pheo valley towards the Vietnam border to assess the status of wildlife in this remote area, while Ted Scudder and I undertook an on-the-ground survey of the current situation of NBCA villagers and their livelihood systems.

Set out below is a review of some of the major issues which arose in the course of this absorbing three week odyssey.

The watershed

Conservation of the biological diversity and integrity of the priceless watershed area is a major offsetting element in the complex set of arrangements which make up the NT2 project. Linked to this---and fundamental to its success as a conservation measure---is the reduction of poverty among the human communities of the watershed through environmentally sustainable development work. A draft Mission Statement to guide the Watershed Management and Protection Authority (WMPA) is currently being worked on by the GOL people. It endeavours to capture the interdependence of the two goals whilst acknowledging the primacy of the conservation one in this instance.
There is good news and bad on the biodiversity front. All observers are agreed that the Government’s logging ban in both the watershed and the resettlement forestry reserves on the plateau remains highly effective. That is heartening. It also seems clear from our observations on this mission that the wholesale confiscation of village guns by the Nakai District Administration, together perhaps with a heightened awareness of the objectives of conservation among some villagers at least, has led to a big reduction ---but not yet the elimination---in the killing and consumption of birds in the Nam Pheo and Nam Noy valleys. William Robichaud lived in this area for some months several years ago; his impression is that there has been a considerable recent resurgence in bird numbers across a range of species including around villages. This is encouraging, though we saw occasional evidence of continued setting of bird snares. Traditional hunter gatherers cannot shift easily from livelihood practices which have stood the test of centuries.

However, non-avian species such as the Chinese box turtle and the pangolin face a very uncertain future. Their huge retail value---based on their supposed medicinal and/or aphrodisiacal qualities---in the wildlife markets of Vietnam and China appears likely to lead to the eradication of these species in the forests of South East Asia. Heading off a similar fate for the many cat---from civets to leopards to tigers---and other species, evidence of whose continued presence we observed on the sandbanks of the Nam Pheo and the Nam Noy, is an urgent requirement. So is the preservation of fish species being poached in the upland rivers. To be frank, although the village militia has stepped up its patrolling and there is provision for more surveillance of wildlife by the military and police in the draft operational plan for the WMPA, it seems apparent that only an early, concerted and sustained campaign by the Lao military to reduce the porosity of the country’s long border with its northern neighbour---preferably backed up by an inter-governmental agreement on measures to reinforce these actions---will halt the continued poaching and trading of the NBCA’s invaluable wildlife. The uniqueness and global significance of this stock has been underlined by reported recent sightings of saola and of the spoor of the endangered Sumatran rhino.

Enforcement action along the border should be accompanied by a stepping up of the campaign to raise awareness among villagers of the conservation goal of the WMPA and the reasons for it, coupled with the devising of positive incentives to preserve wildlife. Ingenuity is called for
here. The incentives should include cash or other compensation for foregone resources, since heightened awareness of the intrinsic and other values of biodiversity is an inadequate substitute for the nutritional and trading value of wild plants and animals. Carrots and sticks are both called for in the struggle to conserve the watershed. In this regard, a source of ideas is the recently published IUCN-sponsored work Conservation and Development: Finding the Linkages. Based on lessons learned on the ground in Laos, this useful text comes up with practical proposals for the sustainable use of NTFPs, through the domestication of NTFPs like rattan, for example.

Diversified and expanded livelihood options on these and other lines for the upland people are a key part of the whole package. What this mission underlined for me was the delicacy of this endeavour. The reality is that hunting and gathering, plus swidden cultivation of upland rice in some communities, has provided a subsistence lifestyle for a long time---and in some cases a relatively affluent and arguably sustainable lifestyle at that. But the proposals in the draft WMPA operational plan for developing alternative and improved practices nearly all call both for behavioural and attitudinal changes of some magnitude on the part of the communities. This will not occur overnight.

Furthermore, such developments as introducing improved or managed fallows or switching to permanent agro-forestry in existing swidden areas, improving and extending current irrigation systems and opening up new padi land, and the more intensive production of domestic livestock, will all be achievable but it is clear from our observations on the ground that there are limitations arising from shortages of labour, flat land and trained draft animals which will inhibit even these extensions to existing practices. Going beyond this to introduce dry season padi techniques where they do not yet exist, organising group marketing and value-added local processing of NTFPs, managing wildlife offtake for consumption only---let alone withdrawing children from labouring and hunting to attend school---will demand some big changes in outlook. This is not an argument for not proceeding. It is an argument for going step by step and ensuring that alternatives being put in place do represent an improvement on what exists. Softly, softly.....

There is a further consideration. At the risk of over-simplifying a mosaic of human diversity in the NBCA, it struck me more forcibly than in the past that there are some potentially awkward coincidences of ethnicity,
culture, technology use, income and living standards from village to village. Generalizing, the Vietic-speaking people of Ban Maka remain largely hunter gatherers living in very basic housing, the Brou people of Ban Kunaë are one or two steps up the technology and income ladder but neither of these groups approach the “affluent subsistence” level of the predominantly Sek villages of Ban Buuk and Ban Nameo. This poses some dilemmas for the planners in the evolving WMPA structures. It suggests that the “integrated conservation and development” models will have to vary considerably from village to village. It also raises the question of whether there are enough resources to advance on a range of developmental fronts without making some difficult choices on priority sectors and priority communities. These are the sort of matters which the WMPA Board is going to have to come to grips with before the first draft of the operational plan can truly be called such.

The draft plan---or to give it its full title, the Social and Environment Management Framework and 1st Operational Plan for the WMPA, SEMFOP for short---is a first shot at cobbling together under time pressure the practical implications of the myriad of reports and surveys undertaken on the project over the years. As such it is a competent piece of work though it could be said to have a bias towards the developmental goal as contrasted with the conservation one and there are occasional inconsistencies in the text. What is needed now is a fresh look at the conservation elements of the draft by a wildlife biologist who knows the watershed with a view inter alia to linking more closely the twin goals of the project and rethinking the functions and expertise needed by the wildlife section of the WMPA Secretariat. Subsequently an overall editing of the text to ensure coherence would be valuable. Then it must go to the WMPA Board for debate since it is vital that they own the document.

The Board meets in February to consider the structure and budget for the WMPA. The first tranche of $1 million is to be available from the developers in April. There is little time for the Board to be settling some of the big issues before it. We reminded the GOL people of the old rule in institution-building that “form follows function” and suggested that there be a further look at the precise functions of the Secretariat before final decisions are taken on structures and staffing categories and numbers. Some capacity should be retained to give flexibility for handling new problems as they arise---not all staff positions need to be filled in the first year of operation. The GOL should resist in the interim attempts to pressure the
Board into making premature decisions on such questions as setting indicators and devising measuring systems for monitoring and evaluating the work of the WMPA---these are fundamentally capacity-building and management functions which the Managing Director of the Authority and his staff should wrestle with and decide, not an outside expert working in isolation.

My own belief is that the new Managing Director will feel the need when appointed (and this is a crucial appointment) to have some form of informal steering or consultative committee set up to act as a sounding board between meetings of the full Board.

I leave to my POE colleagues to raise other sensitive watershed matters such as restricting access---in particular the construction of tracks not roads---in-migration and birth spacing and would simply note that I share their views, thrashed out over campfires in the bush.

The plateau

The disillusionment among those to be resettled over the protracted delays in decisions on the project which IAG missions have heard for some years has been lifted to a degree by the acceptance and initiation of an IAG recommendation---that a pilot resettlement village be set up to start experimenting with both housing and livelihood options. Since I was last on site in March last year considerable progress has been made. There are three houses in place, built on the models discussed with the people over the years, and they appear to be a success. Gardens have been established, drawing on water trapped by a small weir, and are flourishing. A nursery school has been established, freeing up parents to work on their plots. Three deep wells have been dug---though the water is not of high quality---and three tank reservoirs put in place. A rice bank has been established and appears to be a source of some security (and low interest credit) to the villagers, while they have acquired “right to use” titles to their allocated land plots. So far, so good.

As expected, the experiment is usefully raising ahead of the major moves some important questions. The original plan had been, for example, to space the houses out across the whole resettlement site, in part to enable people to be close to their gardens. Good idea---but counter-culture. “We decided to live together to help each other,” explained the village leader. So
the three families are close to each other but a good walk from their fields. Does that matter? A small herd of elephants provided an answer two days after we left, raiding a maize seed holder and cheekily filching some sugar cane plants from a garden. If African experience is a guide, keeping elephants out of gardens may prove a large problem in time. Old tracks and salt licks are being mapped so as to avoid provocation in deciding on village sites but I suspect that some of the electricity eventually generated may have to be diverted to fences designed to deter elephants disturbed from their traditional grounds by the reservoir and new villages. And human consumers could also prove to be a problem around garden areas in due course. Farmers will have to live in makeshift shelters by their gardens around harvest time—-as they do already in some places.

The siting of houses may become a bigger issue if the rumour that the number of resettlement villages is to be reduced from the original 25 to 11 proves to have substance. This would exacerbate water, sanitation and waste disposal problems since there would be an average of 100 families in each village instead of around 40. Furthermore the fields would be even further from most houses. The considerations which may lead to a decision to consolidate into 11 or 12 villages were not satisfactorily explained but it may be that the GOL feels that this would help in delivering health and education services, for example. That may be true but other problems would, as noted, arise. A compromise worth considering, whether there are to be a dozen villages or twice that number, would be to consolidate service centres (dispensaries, schools, community halls etc.) in the geographic centre of the village but disperse groups of families of the same clan, for example, into sub-villages as it were across the whole site so that all would have the security of cohabitation while avoiding the health and other problems of too much proximity—-and being closer to their fields as well.

The livelihood options for the resettlers have had to undergo substantial revision as a result of further analysis. It emerged from our visit to the demonstration farm at Theun Duane that the rice padi experiment there had been abandoned. It seems that a combination of poor and acidic soils (including phosphatic and potassium deficiencies) and the cold temperatures on the plateau compared with the plains below was reducing productivity to unacceptable levels. Whether the soil inadequacies are a site-specific failure is not totally clear but the results of a plateau-wide preliminary survey suggest not—-the revised EAMP (pp.6-8,6-9) notes that over much of the resettlement areas the soils are shallow with many rock
outcrops. They are free draining and highly leached. There are a further 1000 ha. or so of sandstone-derived soils considered “well suited for pasture and moderately suited for field crops and field trees” though acidity and water deficiency are limitations. Detailed soil surveys await the clearing of UXOs from access roads and village areas, a task which the responsible party, the US Government, is reportedly unwilling to take on. In the meantime, it seems prudent to assume that the 0.15 ha. of irrigated land suitable for padi originally planned to be set aside for each family may prove difficult to find. Realistically enough, the proposal being looked at now is for a consolidated 0.65 ha. of irrigated land to be set aside, with pumps and distribution systems to be installed and maintained for 25 years. Rice deficiencies will need to be paid for from other undertakings—a cultural adjustment already being accepted by the three pioneering families.

This is not the only adjustment called for. It now seems that the area of 10,000 ha. calculated to be available as a community forest resource for resettlers was over-optimistic, the figure being closer to 5,600 ha. in total. There is a high degree of confidence among the fisheries advisers that the reservoir will provide good volumes of fish over the long term—but this cannot be guaranteed ahead of time. Some rethinking of the livelihood equation is required. It is starting to happen. The three mainstays of resettlers now are seen as forestry, fishing and off-farm employment—in that order. The sponsors’ forestry consultant adjudges that the smaller accessible forest resource will, with a higher but still apparently sustainable cut of both pine and hardwoods, produce as before a dividend per family of $100 p.a. The downside is that forestry employment opportunities will be reduced from $200 to $150 per family p.a..

With padi rice largely having to be purchased or worked for, it becomes the more important to try to ensure the financial viability of resettled families by firming up their access to off-farm employment and reservoir fisheries. Legislation gives priority to Lao citizens for unskilled labour opportunities, including at the dam and powerhouse sites. It would be difficult to bias this further towards resettlers alone—there are not enough of them—though they might be given some level of priority when recruitment starts. But it would be comparatively simple (though difficult to enforce on occasion) to decree that at least for the medium term the fisheries resources of the reservoir are to be the exclusive preserve of NT2 resettlers. Development of the fisheries marketing and distribution systems should probably be open to all Lao citizens—and should desirably not be in the
hands of a monopoly of any sort. Moves on these lines will be strongly supported by the POE and me, being necessary to shore up the income base of the resettlers in the face of uncertainties in other sectors.

The diminished prospects for padi rice production also suggest that more attention should be paid to boosting field crop and field tree production and to lifting the “cash crop” potential of livestock large and small. Since pre-impoundment irrigation of resettlers’ lands has been adjudged “uneconomic” they will not now be in a position to profit fully from the vegetable and fruit bonanza which the presence of large populations of workers around the construction sites will bring. In any event an over-emphasis on market gardening would in the long term run the risk of over-production for a limited market. More intensive research into the potential marketability of resettlers’ products will be called for in due course.

Experience elsewhere shows that the significance of reservoir drawdowns in the dry season—which expose areas for crops and provide fodder for livestock—is often under-rated by planners. The area thus exposed in the case of NT2 is substantial for this is a shallow reservoir. It may prove in time that livestock fodder thus made available will expand considerably the carrying capacity of the plateau for cows and buffalo. The attractiveness of livestock expansion is that the techniques involved are largely known already to the resettlers and cows and particularly buffalo have a hallowed niche in the culture and economics of the Lao.

In summary, sufficient uncertainties are emerging in the livelihood package for the resettlers to suggest that this area be subject to continuing close scrutiny over the next few years. The global history of beneficial resettlements is not distinguished by success.

The downstream channel and Xe Bang Fie

Reflecting to a degree what has been the orthodoxy, the IAG paid only passing attention in its early reports to the impacts of the project below the powerhouse. We began making up lost ground in our Third Report of 6 April 2001 and last year Ted Scudder and I were able to make a field visit to the area, walking and rafting down much of the XBF. The new reality is that with the shift in the World Bank’s focus in recent years to poverty
alleviation the project can be said to impact on many more people below the powerhouse than above it. There remains controversy about how many people are impacted downstream and to what degree, the totals ranging from 40,000 to upwards of 150,000. The IAG’s next collective visit should include a good look at this sector.

The developers themselves were initially reluctant to view the project as a multipurpose one. While their hesitation about getting involved in taking up the opportunities for downstream dry season irrigation, for example---as contrasted with creating them---is understandable enough, it is also true that NTEC were slow to address the cumulative impacts of diverting such large quantities of water on an inter-basin scale into the small and fragile Nam Phit and the XBF. Much work has been done in the last two to three years at both the engineering and socio-economic levels by way of mitigatory planning. The latest publication is a fairly comprehensive socio-economic survey of the sector, establishing benchmarks which will be useful when actual impacts can be assessed. Nevertheless, it probably remains true that the downstream sector is potentially the developers’ Achilles heel. Thus, there is still a tendency on the part of the developers to “throw money at the problem” when compensation for land or houses lost to the transmission line, for lost riverbank gardens or lost fisheries resources is discussed. The more lasting alternative is to adopt formally an across the board policy of replacing like with like, houses for houses for example. The developers are now moving in this direction.

So long as this course is followed there would appear at this stage to be few problems likely in relation to the construction of the transmission line. It goes near to few villages and the most unsightly outcome may be the towers across the magnificent Mekong.

Earlier apprehensions about scouring and erosion in the Nam Phit and the XBF leading to damage to fish habitat not least algae food and hence to fish losses are now shared by the sponsors’ fishery advisers. The prospect is that, short of effective mitigatory measures being devised, compensation for reduction in the fish resource is likely to be substantial in the early years of the inter-basin transfer. This is provided for in the Concession Agreement.

There is some pressure from certain sections of the Bank team for a separate report to be produced relating to the ethnic minorities residing in
the downstream area. While it could be argued (and is, by anthropologists associated with the project) that nearly all the people here are of one ethnic minority or another, the developers have agreed to have another look at their earlier studies and revisit some communities. Most communities below the powerhouse are more acculturated to lowland Lao ways---and the market economy---than those above it so we had some reservations about whether the Bank’s OP 4.20 on indigenous peoples is strictly relevant to the lowland minorities. We shall await the outcome of the second look at the issue with interest.

A further matter which the IAG might usefully address during its upcoming visit is the plans to exploit the opportunities for dry season irrigation which would be opened up by the project. The WB and now the Asian Development Bank are interested and have resources available and other donors have shown some interest. This is also an opportunity to bring the capacity of an under-utilized Lao Irrigation Department to bear. It would be good to get a better fix on what might be done were all the potential donors brought together with the Lao irrigation planners to draw up a coordinated approach, not least to the chances opening up in the Gnommalat and Nam Khatang plains for gravity-fed irrigation.

In the interim it is important for all those involved to recognize the potential significance of both the downstream impacts and the opportunities in assessing the overall value of the NT2 project.

General thoughts and conclusions

The primary objective of this interim report is to bring IAG members up to date on broad developments on NT2 and to suggest some of the subjects they may wish to address during their mission. Team members should know that there is a renewed sense of purpose in the way Bank staff are going about their NT2 business, which is reassuring. There was no shortage of interest(or personnel!) among Bank staff while we were in Vientiane and the project management team of Robert Mertz---only recently on board---and Jayasankar Shivakumar is a formidable combination at the Washington end.

There is a downside of course when new technical staff (I do not include Robert Mertz) appear on the scene of a project like this, which is that
they have to be brought up to speed fast, they tend to revisit issues laid to rest long ago and they do like to put their own imprint on the project somewhere along the line……All of this is comprehensible and to a degree inescapable. It also reflects commitment to the task in hand. But some restraint is called for—and is not always forthcoming. I counted twelve new requirements for assessments, studies, plans, analyses, frameworks, programmes and visions in the last week we were in Vientiane. This is already the most studied dam project proposal in the Bank’s history according to Professors Scudder and Talbot—who have been associated in some way with many of them. At some stage a moratorium on new requirements will have to be called and the project submitted to the WB Board for a decision. We should support work which can be expected to be asked for by the Board but it was not surprising to hear expressions of exasperation from the GOL people, to say nothing of the developers, as new requests emerged at what must surely be the tenth if not the eleventh hour. Crunch time is approaching. Appraisal has to be undertaken (though surely much of it has already been done?) and the target of September 2004 for financial close appears more immutable than most such dates prove.

The usual questions of Government capacity and commitment are on the table as in most developing countries. These again are issues for the IAG to have a close look at. For my part I remain opposed to some of the more draconian proposals for prolonging the Bank’s leverage. The long list of financial, economic and administrative measures taken over the years by the GOL in response to external pressures—amounting in total to a reorientation of the national economy—should be taken into account when assessing what additional conditions are to be proposed to Vientiane. They are an affirmation of goodwill and positive intent.

This remains a viable and attractive project, at a crucial stage in its evolution. The next visit of the IAG will be the most important one we have undertaken. I look forward to being a part of the collective endeavour to further our mandate.

David McDowell