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The birth of a discipline Producing authoritative green knowledge, World Bank-style

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ABSTRACT ■ After 10 long years of growing social movement pressure, the World Bank has effectively responded with a new work paradigm, 'environmentally sustainable development', that aggressively incorporates lessons from its worst critics (as well as some of the critics themselves). This article focuses on a case study of the World Bank's transformation-in-progress in Lao People's Democratic Republic to explicate the institutional and epistemic framework on which the Bank's new forms of intervention are based. This article argues that the World Bank successfully produces a green authoritative knowledge that contradictorily caters to the critics' demand for democratization and the investors' call for privatization. The article explains both the process of knowledge production and the way in which it becomes authoritative, situating newly produced forms of green knowledge and eco-rationalities within the institutional context of 'development' and its expanding relations of power.

KEY WORDS ■ development/underdevelopment, governmentality, knowledge/power, World Bank

We are subjected to truth in the sense in which it is truth that makes the laws, that produces the true discourse which, at least partially, decides, transmits, and itself extends upon the effects of power. (Foucault, 1994: 211)

While a great deal is already understood about the political economy of such organizations [as the World Bank], much less is known about how they function as organs within a political economy of truth. (Watts, 1995: 55)

Introduction

On Christmas Day 1990, 5000 villagers threatened by forced resettlement and their supporters set off on their 'Long March' to a dam site in India's Narmada River valley, hoping to close down the Sardar Sarovar dam construction project. Eight days into their walk, police refused to let them continue; many were beaten, 140 were arrested, and eight began a hunger fast on the side of the road.¹ Twenty-one days later, under a swarm of international media, the dam's main financier, the World Bank, agreed to commission an independent review, and the hunger strike ended. Eventually, the Bank's first-ever Independent Review Panel found that the Narmada project was fundamentally flawed.

When the nearly 400-page review was presented to the World Bank's Executive Directors, they had little choice but to vote to pull out.² This episode was significant not only to social movements that could see the potential of their power, but for the World Bank itself. The 'Narmada effect' gets invoked regularly inside the Bank, and reminds staff how the Bank must 'reform or die'.³ In 1995, the first action of the incoming Bank president, James Wolfensohn, was to single-handedly cancel a large dam in Nepal, Arun 3, because of claims that feasibility studies failed to account for the likelihood of extremely negative ecological and social effects. He did so even before any full hearing or, more importantly, before a social protest movement was fully ignited.⁴ Wolfensohn's move sent chilling reverberations through World Bank headquarters, putting staff on alert that any project without rigorous scientific support could evaporate under social movement pressure or presidential fiat. After this event, the World Bank started doing business differently.

This was the context in which the Bank's top environmental advisor suggested I travel to the Lao People's Democratic Republic (Laos) to observe the newly reformed World Bank at work. Under the combined force of the 'Narmada' and 'Arun' effects, he explained, I would find that the Bank had made a major effort to make its projects more environmentally and socially sound, as reflected in its Nam Theun 2 dam project.⁵ Indeed, Nam Theun 2 has become an effective litmus test for the Bank's ability to carry out its

particular version of ‘environmentally sustainable development’. Today in Laos, a majority of the money invested by the Bank and Northern aid agencies falls under the rubric of green conditionalities or investments. Reflecting its own brand of environmentalism, and yet one that is becoming hegemonic around the world, the World Bank’s set of green conditionalities is intensifying pressure on borrowing states to establish and/or restructure their environmental agencies, regulatory regimes governing resource use and access, and the business of land use in general.

This sequence of events illustrates the argument of this article. The ‘greening’ of the World Bank over the past decade has been the result of persistent pressure from a growing transnational social movement.⁶ Consequently, the largest of the World Bank’s capital investments are now explicitly framed through the lens of a global environmental discourse, albeit one not necessarily of critical social movements’ choosing. This movement pressure has effectively forced the Bank to re-establish its legitimacy by conducting scientific assessments of environmental and social impacts and developing additional projects (or project components) that seek to mitigate the worst effects. In the process, it has reached out to NGOs, particularly from the North, and sought their professional assistance in the production of green project assessments, projects and regulatory reforms. This outreach has helped to legitimize the Bank’s efforts by enlisting international development and conservation NGOs to do the work that has historically drawn so much criticism.

But perhaps even more significant than the legitimization function that the Bank’s ‘remaking’ has served are its effects on state institutions and resource-dependent peoples as new environmental and social ‘facts’ are produced. The terms of reference, institutional constraints and political-cultural milieu in which hired scientists conduct their environmental and social assessments profoundly shape research outcomes. Also, newly imported concepts such as conservation, biodiversity, sustainable development and watershed management have material effects when they become translated and concretized into new regulatory regimes, state agencies, and large-scale capital investments (e.g. dams, tree plantations, and biodiversity and conservation parks). As Bernard Cohn (1996: 4) noted on British rule in India, ‘there was widespread agreement that this society, like others they were governing, could be known and represented as a series of facts. The form of these facts was taken to be self-evident, as was the idea “that administrative power stemmed from the efficient use of these facts”’. Like colonial knowledge production, green knowledge production by the World Bank has transnational roots and effects.

The World Bank’s practices, however, are also very different. Today, new forms of knowledge and sets of institutional norms are being shaped by neoliberal discourse and its rights-based orientation, on the one hand, and

new disciplinary mechanisms of globalized environmentalism, on the other. Specifically, because of the Bank's interventions, the remote mountain populations that inhabit the Mekong watershed are being made accountable for what appears to be the Mekong's rapid ecological degradation. They are the new targets of large capital-intensive schemes to produce hydro-electricity for export and, in turn, are to become the new productive citizens under transnationally managed eco-territories. Unlike colonial conservationists who rarely acknowledged the 'value' of resource-dependent communities, however, the World Bank and its partners have financed a process – the art of what I call elsewhere 'eco-government'⁷ – that specifically targets resource-based populations, putting them in the center of public inquiries, accounting for them and the qualities of their environments in the new discourse of ecological improvement, and compelling them to participate in a new global environmental governing process. This science of environmental and social needs assessment (Porter, 1995) – and the role of professionals therein – becomes critical to the Bank's intervention, as state institutions are restructured and redesigned to implement these large loans and their eco-territory and resource-based population management components. This article focuses on this new green development science proffered by the World Bank and the professionals hired to generate it.

In this article, I explore how the World Bank goes about the work of producing an authoritative green knowledge by looking at the case of Nam Theun 2 in Laos.⁸ By 'authoritative green knowledge', I refer both to a certain understanding of environmentalism (e.g. environmentally sustainable development), and to the particular set of facts that are produced to differentiate, classify and categorize populations and their natural environments. In engaging this question, I divide my inquiry into two parts. First, I ask how this new knowledge about the people and environment of Laos is actually produced, that is, what is the *process* of knowledge production; second, I ask how it becomes *authoritative*, or dominant. Although my emphasis is on one production site, I am also interested in how these findings and practices make their way into the global circuit in which World Bank artifacts and idioms travel and become transformed into global knowledge and expertise. The data on which my analysis is based come from fieldwork I conducted in Laos in 1998, where I interviewed World Bank staff and consultants, NGO staff, government staff, and members of the 'international development community', and from follow-up interviews in 2000. They also come from ethnographic research inside World Bank Headquarters in Washington, DC, and extensive interviews with professional staff, scientists and activists in places such as Bangkok, Santiago and Berkeley for a larger project on the new politics and science of the World Bank.

Green knowledge production in Laos

Just as its latest self-proclamation as *the* global knowledge bank (World Bank, 1999b) suggests, the World Bank is the source for cutting-edge knowledge on development. Over the past 10 years, the Bank has carved out a green agenda, producing policies, financing, tools and data for an applied global environmental science, and training thousands of professionals in borrowing countries to do green science for development. It is currently carrying out this agenda in Laos.

Nam Theun 2 (NT2) represents the Bank's flagship green development project, seen inside Bank Headquarters as a model for other projects in the Bank's portfolio. At the heart of the project is a large dam to produce hydroelectricity for Thailand, which – until its recent economic crisis – had been experiencing a period of sustained economic growth undergirded by rapid industrialization. Associated with the dam, and reflecting the Bank's new concern with environmentally sustainable development, is a state-of-the-art set of linked projects that includes investments for a Forest and Conservation and Management Project, Wildlife and Protected Areas Management Project, indigenous peoples' extractive reserves, irrigated and modernized agriculture with experimental farms, electricity and new roads, mega-fauna running corridors and eco-tourism, sustainable logging and tree plantations, and new housing settlements. To help understand the potential impacts of NT2, a series of detailed environmental and social assessment studies has been conducted. Furthermore, because of the controversial nature of such large-scale projects, two independent evaluation teams have been set up by the World Bank to ensure that this project unfolds according to its new environmental directives: the International Advisory Group, which looks at large dams internationally, and the Panel of Experts, which looks at NT2 specifically. The World Bank's recent *Annual Report* (1999a: 51) expressed the uniqueness of its 'Laos model' of sustainable development, explaining that 'an unprecedented program of international oversight and local consultation is accompanying environmental and social impact assessment studies' for Nam Theun 2.

Given the scope of the proposed project and the small professional class capable of meeting the scientific-technical demands ('standards') of multi-lateral aid conditionalities, the Bank has allocated money to support a wide range of state-oriented activities related to NT2, including state capacity and institution-building, a thorough review of government policies, and environmental law reform. Because neither the World Bank nor the government of Laos has the in-house capabilities to study the feasibility and social and environmental impacts of the proposed investment, the Bank has enlisted a barrage of Northern consultants to do these studies.⁹ In what follows, I describe the practices for hiring these consultants and the conditions under

which they work to show how social movement pressure has led to a more open and transparent project evaluation process, albeit one that is powerfully influenced by the World Bank's institutional norms and interests.

The hiring of project evaluators

The old system of hiring consultants to evaluate a proposed project was efficient, cost-effective and mutually beneficial for all the players involved. Typically, the World Bank would hire familiar Northern engineering firms that had often worked with the proposed contractors – that is, the firms who were expected to build the infrastructure, be it a dam, power plant, or irrigation system – to collect and analyze data to assess a project. More often than not, the engineering firms would find that indeed the project was feasible (or would be, with certain modifications) and that its negative impacts could be mitigated through some additional investment – for example, a drainage system might be added to resolve a potentially leaky irrigation system. As long as the project was not shown to be *infeasible* (a highly unusual occurrence), these impact assessments could lead to an increase in the size of a loan and the work for engineering firms and builders. In some parts of the world, the World Bank uses the same firms for all its projects, creating an enduring and comfortable relationship between the loan managers and the projects' reviewers.¹⁰

This is precisely what happened, at least initially, with the Nam Theun 2 project in Laos. In 1990, the World Bank contracted an Australian engineering firm, Snowy Mountains Engineering Company, to conduct its feasibility study for Nam Theun 2.¹¹ Snowy Mountains has worked with the largest stockholder of Nam Theun 2, Transfield Holdings Ltd. of Australia, in the past. The feasibility report that Snowy Mountains produced was quite positive overall; on this basis, the government of Laos, the World Bank, the dam investment consortium (NTEC), and the Bank-appointed Panel of Experts subsequently recommended that the project be funded.

After NT2 got the green light from these parties, the international NGO community did its own evaluation of the report and made a strong case that it was seriously flawed.¹² In the end, the Bank was forced to admit that the environmental impact assessment (EIA) and social impact assessment (SIA) were inadequate, and that the required 'study of alternatives' was missing. It then contracted with another engineering group to do the job, the Thai-based TEAM firm, another old-time Bank consultant.¹³ Its environmental impact assessment for Nam Theun 2 met a similar fate, and was ultimately dismissed by the World Bank when challenged by international activists.¹⁴

In 1995, a *third* round of feasibility studies was commissioned, with some responsibilities contracted out to two long-time Bank consultants, the German firm Lahmeyer International (the study of alternatives) and the

New Jersey-based firm Louis Berger International (economic analysis). Representing a dramatic shift for the Bank, however, the environmental and social assessments were contracted out to two international NGOs, IUCN (World Conservation Union) and CARE International. The decision by the World Bank to incorporate NGOs into the process was a highly conscious and significant one, and reflected a growing sense within the Bank of the need to work *with* its critics if it hoped to transform them from critical observers into constructive participants or ‘stakeholders’.¹⁵

Working under contract

As NGOs and private consultants have been incorporated into the project assessment process, the process has become more open, more transparent, and less subject to a conflict-of-interest relationship. Yet even for these independent groups and individuals, important institutional factors shape the knowledge production process. The most general are the ‘terms of reference’ (TORs) under which hired consultants must work. In exchange for high salaries, unique research opportunities, and unusual access to what were formerly impenetrable societies and research sites, the Bank specifies exactly what kind of information is needed, a time frame in which the research must be completed (and by implication, how long the researcher[s] can be in the field), and how it will be written up. Moreover, the direct contractor – be it the Bank, the borrowing government, an engineering firm, or an NGO – is given exclusive right of ownership over the product (typically a report) as well as the raw data. Legally, one cannot use the data for one’s own research, or distribute one’s findings without permission from the contractor.

By far the biggest source of pressure comes from the stringent time constraints that are placed on those carrying out research for the Bank. Because social and environmental assessments are not stand-alone projects but pre-conditions to a loan process with its own set of temporal imperatives, the amount of time allocated for data collection and analysis is limited. As a result, the method of development-related social and environmental research that has come to be most widely accepted is ‘rapid rural appraisal’, an applied form of research that well suits the World Bank’s constrained timeline for loan processing. Rapid rural appraisal (RRA) is ‘a systematic means of quickly and cost effectively gathering and analyzing information. The method has an *extractive* purpose in which outsiders learn about local situations . . . an iterative process of rapid and progressive learning from respondents and secondary data’ (IUCN, 1998: A-9; emphasis in original). What is key here is the emphasis on *speed*.

Those who do social and environmental impacts studies for Nam Theun 2 are powerfully affected by the fast-paced clock of Bank projects. One consultant for the most recent socio-economic study of the Nakai Plateau

people (the group that will be most directly affected by the dam and its standing reservoir) described his team's working conditions in the following terms:

At first, we asked if we could get three days for every two villages in the plateau and another four to six days time for write-up – 7–9 days per two villages – so the data wouldn't get confused in our minds. We figured it would take up to three days just to hike into a village. That's the very least we asked for. But the project was on a very tight schedule, as the World Bank needed the report soon.

It's not easy work, and we were working in completely new terrain. [My partner, an ethnolinguist] discovered at least two previously unknown languages. We were trying to cope with new languages, cultures, lifestyles, and trying to interpret it, all within a very short time period.

Because so much time was being consumed by the arduous task of getting from village to village, covering hundreds of miles of very dense jungle, his team was transported by military helicopter, at the cost of US\$1100 per hour.

The helicopters saved us some time. But everything else about working in the jungle takes time. We brought in our own food, which we cooked on our own, and we'd set up camp. We were left with very little time to enter a village, explain who we were, and learn about their lives, only to turn back, return the helicopter, and write it all up in Vientiane.¹⁶

A similar pressure to do research quickly was noted by several ichthyologists who were hired to assess the effects of a set of proposed projects on the Mekong fisheries.¹⁷ According to these scientists, the task of studying the Mekong fisheries is enormous, and requires a large, interdisciplinary team to gather data all along the river and its tributaries. At the very least, data need to be collected over a full year (and preferably, several), since, as one consultant explained:

Everything is geared to the annual flood-dry cycle. Different species appear at different places and different times of the year to carry out critical life-cycle events (spawning, feeding, refuge during the dry season). Migration enables these habitat shifts to take place and is of course the fundamental reason why any migratory animal needs to make regular seasonal movements.

In addition, researchers need to collect data on fish movements at multiple sites, because these fish do not migrate in straight lines, and the Mekong is not a single river but a whole system of rivers, with numerous arteries that house their own diverse fish species. The problem is further complicated by the fact that these rivers are not clear trout streams, but are

deep, dark and characterized by dangerous currents. The Bank's approach, however, has been to hire consultants on several different occasions to do the job in three to five months. Ironically, the amount that the Bank spent on this study could have financed numerous teams of investigators conducting comprehensive field-based studies in multiple locations over a number of years.

The fish biologist who told me the preceding story took care to distinguish these 'jet-setters' from 'fish-heads' like himself, who prefer to go to a village and work with local fisher folk who have generations of experience with the river. He was asked to study the downstream effects of the recently completed Theun-Hinboun dam adjacent to the Nam Theun 2 site (Australian Mekong Resource Centre, 2000). Hired on a '4-day input per month' schedule, it was impossible to do what his contract directed: to study the by-pass flows at this post-impoundment stage of the finished dam. (International activists and local villagers protested that the fisheries were being destroyed, which the government, lenders, and builders strongly denied; consequently, he was hired.) He took the view in his report that a whole team of scientists was needed to study the dam's effects on the river, over a substantial period of time and space. Yet, he also stressed, one did not need to be a biologist to understand that if there should be between 45 and 60 cumecs of water passing the dam site and only 5 cumecs pass through, this will cause problems for downstream biota. 'If the 45 to 60 cumecs represents a loaf of bread necessary to maintain the system, then the 10 cumecs represents a slice and the 5 cumecs just crumbs.' In other words, the more water the dam held back to produce electricity, the more the downstream fisheries would be destroyed, as the downstream villagers were experiencing.

His immediate recommendation was to increase the minimum dry-season by-pass flows from 5 to 10 cumecs, which he noted would result in the loss of electrical sales of US\$1 million but would save at least some of the fisheries in the short term. In spite of public promises to post the report on its web site, the Asian Development Bank chose to suppress it, claiming there were no 'clear recommendations' in the report.¹⁸

This incident of suppression is not unique; in fact, it is common practice.¹⁹ Tyson Roberts, an ichthyologist well known for his work on the Mekong fisheries, was hired to do a fishery study for Nam Theun 2. Like a number of his peers, Roberts cautioned the Bank and government against making any rapid assessments without first gathering extensive data on fish migration.²⁰ But, midway through his consultancy, he was fired and his visa was taken from him.

My (legally contracted) EIA work on Nam Theun 2 was suppressed by the Lao Hydropower Office, probably in collusion with the Nam Theun 2 project sponsors (NTEC). World Bank policy of only employing EIA consultants

approved by the World Bank and the host country (thereby assuring the sponsoring company can influence the selection [since they are the ones generating the revenues for the host]) is totally against any honest concept of EIA.²¹

Meanwhile, Roberts and his colleagues have documented more than 85 different species on the Theun river, and he suspects that several are endemic to the river and will become threatened with extinction if the dam is built.²² After he was fired and forced to leave the country, the government, the World Bank and NTEC hired another Northern scientist to conduct the rapid appraisals they needed to move the project along.²³

Although the motivation for particular acts of suppression varies with context, the most general motivation is that problematic EIAs and SIAs can delay, or, even worse, prevent a project's approval. The whole process of having to do these assessments is strongly disliked both by Bank staff whose job it is to make loans, and by borrower government staff, who often have strong political and economic interests in the kind of large infrastructural projects the Bank funds. As one veteran environmental advisor at the World Bank explained to me, it is never easy to get support for a long-term study unless investors (i.e. multilateral banks, private foreign capital, and governments) are certain there will be a project at the other end.²⁴ In other words, project investors wag the scientific tail. Since there can be no 'guarantee' for a project without the requisite environmental assessments, EIAs are being done, but the process is not disinterested or apolitical. For Bank loan officers, the primary concern is to avoid getting burned by activists who are closely monitoring their studies. As Bank staff are instructed in staff training seminars on environmental assessment in Washington, DC: 'Don't get zapped by the *Narmada effect*, do your EIAs!'²⁵

In another incident involving the socioeconomic study mentioned above, certain research findings were also suppressed, although in this case neither the Bank nor the Lao government was directly responsible. As one of the researchers (an anthropologist) explained, what he and his partner found did not please their contractor, the international conservation group, IUCN, which had its own motivations for wanting the dam project to move forward.

What we found was that people on the plateau survived on tubers and foraging, hunting and trapping, rice and corn cultivation, and animal raising. People in Vientiane had warned that there was famine in these places where rice crops had failed. But we saw that the people survived fine on non-farm activities. This would be impossible if the people living in the surrounding areas were to be forced out of their villages and into new places to only cultivate rice. If they were left only with sedentary agriculture and not allowed to forage, hunt and fish, as current plans call for, they might not survive.

We also knew what happened to other ethnic minorities who have been resettled from the hills to the plains, as the government has tried with others from the hills. Almost half the resettled population had died within the first few years. It takes more than three years to adjust to grow rice or adjust to the new environment and lifestyle. Many just can't adjust fast enough to survive, so they die, and are listed officially as famine victims. That's why we made the case that the government and the Bank needed to take this whole resettlement plan slowly.

My partner wrote the section of the report saying that these people should not be classified as 'ethnic minorities' but as 'indigenous people'. But that opened a whole can of worms with IUCN. I myself pushed another line that they hated equally. I said, instead of moving them out, the best thing for these people are health clinics, schools and agro-ecosystem support to keep them going. But IUCN felt it would make the plateau such a habitable place that others would migrate in and destroy their project of developing the non-inundation parts of the plateau into one large NBCA (National Biodiversity Conservation Area).²⁶

These two anthropologists found themselves in a struggle with IUCN staff, who disliked their findings and demanded that they change their final report. In particular, IUCN did not want the term 'indigenous people' used at all, for fear that the classification would require that the project fall under the Bank's Operational Directive on indigenous people, which could further postpone it. The delay threatened to affect IUCN directly, as it was negotiating a \$60 million contract with funders including the Bank to design and run a series of National Biodiversity Conservation Areas (NBCAs) that would enclose more than 15 percent of the nation's territory. These NBCAs would be largely financed by a percentage of the government's share of the revenues from the Nam Theun 2 dam, and the Bank planned to set up an international board of directors that would directly receive these revenues for conservation.²⁷ In other words, groups such as IUCN were on the verge of a remarkable windfall.

In the end, IUCN decided not to circulate the report. The dam investors consortium, NTEC, then hired a consultant from Norway to write up a new social action plan, which did not refer to the silenced study. He concluded that these ethnic minorities were in fact no different than many other groups living in Laos, and that all the peoples of the plateau *could* be resettled without harm (NTEC, 1997). He also described the different ethnic tribes as a singular ethnic group, 'as a whole, a melting-pot culture', which could survive and benefit from resettlement. This consultant is now the main anthropologist on the Nam Theun 2 project.

Instances of outright suppression of research findings, such as those I have just described, are well known within the research community hired

by the Bank and its contractors. But an equally significant, and invariably more subtle, shaping of the knowledge production process takes the form of omission of certain types of information. Scientists whom I interviewed spoke at length about their research; yet most of what they discussed with passion and interest never appeared in their official reports. What happened to these ideas, interpretations and more nuanced understandings of the complex environmental and social realities they were studying? The answer is suggested by a biologist who exhaustively described species interdependence and reproduction along the Mekong tributaries, as well as differences in social groups and their relations with different flora, fauna, and marine species.²⁸ In his exposition, he spoke about the people who depend upon the river floods for reviving the soils and flooding the fields for rice growing; the people who harvest river flora for building materials; and those who harvest snakes, fish and frogs during one season, and hunt and gather in the forest when the river recedes. It was a startling image of complexity, reciprocity, knowledge and interdependence that I had not come across in any official report. When I asked where in his report I could read about this symbiosis, he replied, 'nowhere'. Why? Because the Bank had hired him only to explain the ability of the river to accommodate aquaculture. It did not ask about the complex relationship between these river people and their natural environments. In this way, knowledges are selectively isolated and/or adapted into a larger truth regime. It became clear through my conversations with both natural and social scientists that the most sophisticated expertise, analyses, data, observations, wisdom and practices – from Northern scientists alone – would never appear in formal scientific reports commissioned by development institutions *if* they conflicted with those institutions' larger purposes.

The subjugation of subaltern knowledges

Along with this type of subjugation of the knowledge of 'experts' (North-erners, locals and translocals) is the treatment of the knowledges of the 'non-experts', the millions of people who are being studied and classified and who rarely show up as positive and contributing citizens of modern society. Instead, they are studied and then dismissed as irrational and unscientific; development plans and state policies reflect this conclusion as a starting point for social reform. This epistemic (and ontological) violence occurs in numerous ways. Some surveys construct and then identify populations based on simplistic (but enduring) social categories, classifying people as fisher, hunter or swidden cultivator when many people can be all or none at different times of the year. Some studies define 'downstream' as being just a few miles away from the dam or project and hence make invisible the ecological and social 'downstreams' of large projects, which can include

hundreds of miles and whole groups of people, such as the semi-nomadic, who remain absent from census data or outside of the 'project's command area'.²⁹ While most people affected by Bank projects are accounted for through processes of census, classification, and the like, they are accountable within the context of a capital investment and the culture of capital; hence, qualities that have little to do with commercial markets are ignored or defined as destructive to the unquestioned goal of (trans)national economic growth. Never are the non-commoditized realms of social interaction considered to have value, except as museological. Even when the World Bank seeks to get direct feedback from them as 'project stakeholders' and involve them in project decision-making – a new practice of reform that has become institutionalized in the green development process – the effects are to normalize asymmetric relations between development experts and development 'beneficiaries', and to scientize stereotypes of the latter as 'lacking', irrational, environmentally degrading, and in 'need' of development at almost any cost.³⁰

In a short time, the remote environments and societies of Laos get judged in terms of their value to the proposed capital investment, and not the reverse. These unknowns for Northern scientists have been made knowable not just because the Bank has afforded them the time to conduct research, but also because these objects of knowledge have been translated through the epistemic discourse of development, in its latest green-neoliberal version. In the Mekong, it has become the framing device through which authorities speak, and through which many become authorities.

A small window into the relationship between the Bank's consultants and 'the people' for whom the development apparatus has been mobilized is provided by the story of its 'public consultations' on the Nakai Plateau. The Bank and its contractors have held numerous public consultations to exchange information and ideas on the dam and its affiliated conservation projects with the people who will be most directly affected. The idea behind these interactions was that local people could – and should – help planners understand their needs and concerns, which would lead to project 'improvement'. Indeed, public consultation has been honed to a science, especially since the issue of participation and consultation has become politically volatile for the Bank. The Bank takes it so seriously that for Nam Theun 2, it hired an evaluation expert to evaluate formally the effectiveness of the Nam Theun 2 public consultations. According to her final report, while attending these meetings, the consultant noticed that most of the plateau people just stared at the presenters (Franklin, 1997). Rightfully so, she wrote, as the presenters had described the dam project in a language 'more appropriate to an Army Corps of Engineers meeting'. After the day-long sessions of PowerPoint presentations of maps, schemes, and diagrams, she interviewed the attendees – forest dwellers who had been brought down to

the town to fill the consultation. She learned that a high percentage of them had absolutely no idea what the meeting was about. Of those who said they did understand the topic, when questioned, most of them had no idea that these meetings were about moving them from their land and resettling them as rice farming entrepreneurs. In fact, some thought these men had come to present them with a simple but appreciated gift: not Laos' largest dam, but a village water well.³¹ Despite its most overt and costly attempts, the Bank fails at the most direct form of information exchange with its 'objects' of development.

National political interests

In addition to the institutional forces shaping the knowledge production process are the political interests of the borrowing country government, in this case, the ruling party, the Pathet Lao. One of the top priorities of the Pathet Lao government is to generate as much hard currency as possible, which the development of the country's hydroelectric power industry clearly facilitates. Hence the government's interest in getting the NT2 project funded, and its willingness to go along, however reluctantly, with all the new green conditionalities being placed upon it.

Yet it is not only the Lao government that is cooperating with the World Bank to make NT2 a reality; the World Bank is also cooperating with the government. For example, it has looked the other way when the Lao government engages in (or otherwise supports) highly unsustainable (and unwise economically) logging practices – such as giving valuable rights to log (without any clear limits) native forests to the Chinese and Vietnamese militaries in exchange for past military support³² – or carries out its 'Laoization policy' of trying forcibly to resettle 900,000 people (of a population of 4.6 million), mostly non-Lao speaking minorities, from the forested mountains down into the plains.³³ In neither case are the negative environmental and social impacts of these national policies and practices being examined. Instead, the focus is on what *is* politically acceptable to study.

Of course, corruption and lies in the world's logging industry and 'nationalist' projects are nothing new, and this is not the first time the Bank has colluded with its borrowers.³⁴ But the larger point is that there are institutional effects of this highly politicized knowledge production process: loans and grants are earmarked for a borrowing country's 'development problems', as defined by the scientific work conducted to justify the investments. When the World Bank and its partners generate data for particular countries, and yet systematically leave out the most socially transformative and ecologically destructive nationalist projects, they are creating a powerful image that takes on a life of its own and invariably gets acted upon.

From the money of bilateral and multilateral agencies, an accepted and

widely utilized *scientific protocol*, or concretized set of practices, is emerging in Laos. The hiring practices, terms of reference, complexity/enormity of projects, institutional imperatives of the Bank and its partners, and the nationalist agenda of the state have all contributed to shaping this protocol. The ‘rapid rural appraisal’ method of research, with its tremendous time–space constraints, plus the mechanisms that suppress, omit and outright dismiss what are considered illegitimate or irrational forms of knowledge, together represent the essence of this protocol. It is being normalized through its widespread use by the Bank and others, and by its institutionalization in borrowing countries. It is to this that we now turn, asking, what *does* count as nature, society and green scientific knowledge within these institutional constraints? How does this knowledge get reflected in new institutions, norms and practices?

Institutionalizing green knowledge

What types of knowledge do you want to disqualify in the very instant of your demand: ‘Is it science?’ Which speaking, discoursing subjects – which subjects of experience and knowledge – do you then want to ‘diminish’ when you say: ‘I who conduct this discourse am conducting a scientific discourse, and I am a scientist’? Which theoretical-political *avant-garde* do you want to enthrone in order to isolate it from all the discontinuous forms of knowledge that circulate about it? (Foucault, 1994: 205)

In order to spread their particular approach to green science and environmentally sustainable development, Northern aid agencies and banks have invested in ‘capacity building’ in borrowing countries. These funders have given birth to or helped to support research institutes, training centers, and national science and policy agendas. In this way green development knowledge has become imbricated with processes of professionalization, authoritative forms of power, and disciplinary mechanisms.³⁵ Enormous flows of money (relative to GDP) stream into borrowing countries to restructure and modernize state agencies and institutions. Consequently, the contentious, uncertain and tentative process of knowledge production described above has become institutionalized, normalized and multiplied in local sites (e.g. retooled state agencies, newly trained professional class) through which new forms of knowledge and power now circulate.

In Laos, 50 foreign bilateral aid agencies, multilateral banks, and donors³⁶ contribute money annually to the Lao state. At the last donor meeting (‘the Roundtable Meeting for the Lao PDR’) held not in Vientiane but Geneva, Switzerland, \$1.2 billion was pledged directly to the Lao government for 1997–2000 (Government of Lao PDR [GOL], 1997; United

Nations Development Program [UNDP], 1997). In 1994, fully half of Laos' domestic revenue came from foreign grants, and a remarkably high 80 percent of the state's Public Investment Program came from foreign aid (GOL, 1997; UNDP, 1997). That is, almost every public works project and every state agency (related to these large capital investments) is financed by foreign money.³⁷ Much of the funding aimed at restructuring state agencies and capacity building actually goes to foreign consultants and firms who are hired to reform state institutions and to train a Lao professional class. Although the net capital outflow from borrowing countries is often greater than the capital inflows from these multilateral banks and bilateral aid agencies,³⁸ artifacts do remain within the country; these include highways, transmission lines, a cultivated professional class, and discourses and forms of knowledge, all of which help localize transnational social networks as well as accommodate potential foreign investors.

In the case of Laos, multilateral development banks and Northern agencies have tried to restructure the moribund and highly indebted socialist state into one that can interact more successfully with foreign agencies, banks, regulatory regimes and corporations. In the past few years, many of Laos' property and natural resource use laws have been overhauled to reflect the prevailing ideology of its multilateral creditors (neoliberalism). Many laws were written by Northern consultants to the Bank, bilateral agencies and even some NGOs. For example, Laos' new environmental protection law was written by consultants for UNDP; a US lawyer for IUCN wrote some of the country's new forestry laws, and other Northern lawyers wrote the rules and regulations that will establish 20 National Biodiversity and Conservation Areas, projected to comprise some 15 percent of the nation's territory.³⁹ Although these acts have been mediated and delayed by Lao state officials unhappy with such foreign interventions into the internal workings of the state, the new rules, laws and regulations clearly reflect the new truth regimes on Lao nature and society generated by Northern experts.

The Forestry Department alone contains more than 50 separate foreign-funded projects – for sustainable logging, tree plantations, forest conservation, etc. The Ministry of Forestry and Agriculture, the Hydropower Office, and most state agencies overseeing natural resources in Laos are almost wholly financed and their staff trained by these Northern agencies and their consultants. The National University's research arm, the Forest Training School and Training Centre and the state's central environmental agency are all financed by foreign aid.

In the creation of these new resource use laws, new eco-zones, and new rules and regulations for forest access, a whole new lexicon has been introduced to Laos. Conservation, biodiversity, sustainable logging, environmentally sustainable development and environmental economics are imbued with meanings derived from negotiations among these transnational

agencies and experts. What counts as biodiversity in Laos is defined by actors other than the people who live there; the very notion of 'biodiversity' is an exotic one. In the mid-1990s, when the World Conservation Society and IUCN described the state of the environment in Laos, they unambiguously stated that *no* conservation practices existed – indeed, one report said that the word does not even exist in the Lao language.⁴⁰ If, in fact, there were (or are) no conservation practices in the country, how is it that the Lao forests are flush with more than a dozen 'globally threatened species' such as rare tigers, elephants, muntjacs, barking deer, gibbons, langurs and warty pigs, and its rivers filled with otters, white-winged ducks and diverse fish species, including the Asian cyprinid, which is known for its remarkable ability to pluck monkeys off the river banks? Foreign funders want to train Lao professionals in English, send them off to research centers in Europe to teach them how to identify Mekong species, and then return them to the country to run new environmental institutes, state agencies and conservation projects. There is a huge gap between the epistemologies of nature-and-society of transnational experts and those of local peoples. It seems that what is missing for the World Bank and its partners when they gaze at Laos is a reflection of themselves.

The material effects of this epistemic shift promise to be significant. When populations are divided up into categories such as slash-and-burn cultivators, poachers, illegal loggers, failed rice farmers and the like, and when new rules and regulations prohibit hunting, fishing, semi-nomadism, swidden cultivation, and forest use in large swathes of inhabited forest – these changes affect not only epistemic politics but also ontological and material realities. The new authoritative logic of eco-zone management that is carving up Laos is designed to ensure that there will be 'sustainable' hardwood supplies for export, watersheds for dams and biodiversity preservation for pharmaceutical firms and eco-tourists. This worldview represents most small producers as ecologically destructive and backward. Under this line of reasoning, many will be resettled to eco-zones deemed more appropriate to their development, in the hopes that they will 'mature' into sedentary, successful, rice farmers, forest-product entrepreneurs, and modern-day buyers and sellers of goods (including their own labor power). In this way, the old nationalist Lao project to 'Laoize' the ethnic minority forest populations (forcibly resettle them out of the forests and into the plains) has been painted over by the new transnational project of environmental sustainability, in which these minorities will now be critical players in the rejuvenation and global integration of Lao nature and society. For the more than 60 different ethnic minority communities who have been incorporated into the aspirations of development, the material effects of these activities promise to be enormous, and possibly devastating.

Certainly, debates are taking place within the ruling party on precisely

how much power it should cede to foreign donors. Indeed, the government is taken aback by this onslaught of money, expertise and imperial arrogance. In one case, a state planning office wrote a critical conceptual paper on the origins of 'the idea of poverty' in Laos, because Northern experts were asking the government to start using the concept in its policy work.⁴¹ Indeed, the World Bank liaison officer in Vientiane explained to me that nothing changes in Laos unless a top official publicly says it is okay.⁴² She said it wasn't until the recent Sixth Congress that a Lao official had ever used the term 'poverty'; or, for that matter, 'the environment' or 'regional integration'. 'It was only after that meeting that we could officially proceed on these issues,' she noted. As an afterthought, she added: 'They actually took the phrasing, word for word, from one of our reports.'

Conclusion

The World Bank has begun formal negotiations with Microsoft to start a 'Global Development Gateway', which would be the world's largest Internet portal for development knowledge, targeting universities, schools, research institutes and government agencies as recipients and users. The idea follows from its widely distributed *World Development Report 1998–99*, in which it proclaims itself to be the globe's 'knowledge bank'. Indeed, the Bank is unique in its ability to access the world's most remote regions and most secretive governments and emerge with a surfeit of apparently reliable information. There are no equivalent institutions in the world. Knowledge is now its greatest asset, claims the Bank, and it is generated and used in highly strategic ways. This article has sought to describe the Bank's latest innovation in knowledge production – green knowledge – and how such knowledge gets produced and becomes authoritative, locally and transnationally.

The Bank's claims are *partially* true: its ideas, data and analyses are an asset, because they have such power, in borrowing as well as in lending countries. As we saw in Laos, transnational actors are the ones who gather the data, decide their utility and purpose, and design the institutions that will continue the process. Moreover, the data collection process reflects the needs and limits of the large-scale capital investments (and investors) that motivate them in the first place. Finally, however contentious and uncertain the *localized* process of knowledge production may be, the stamp of the World Bank gives it (and the data it yields) tremendous *global* legitimacy and wide circulation. Professional economists, policymakers, reporters and professors in universities in the South and North are among the many that use the Bank's reports as authoritative sources of information.

Besides being the world's main producer of concepts, data, analytic

frameworks, and policies on the environment, the Bank has also become the world's leading environmentalist, teaming up with NGOs, borrowing states, and other donor agencies. This new role of the Bank has led to a cascade of institutional effects. This is particularly ironic because the Bank was pushed into its greening phase by an extremely effective transnational social movement. Up against the wall, it responded to the 'reform or die' mandate with fervor, ingenuity and capital. Consequently, the Bank's form of environmental knowledge production has rapidly become hegemonic, disarming and absorbing many of its critics and expanding its terrain of influence. It has successfully cultivated its own champions in the burgeoning borrowing-country and transnational professional classes to do 'environmentalism' World Bank-style.

In the political spaces opened up by the Bank's new efforts to be green and transparent, social movement activists have developed their next 'war of position' (Gramsci, 1971). Among other tactics, activists are publicly questioning the scientific reliability and political-economic motivations of the Bank's studies, and mounting successful media campaigns to expose the Bank's Achilles' heel, its scientific authority. By hiring their own independent experts, they have put a spoke in the wheel of the loan-approval and capital-disbursement cycle, slowing down the leviathan, and infusing these spaces with alternative and, in their eyes, radically democratic worldviews.

Activists have not only hired scientists to help them gain greater access to the Bank, governments and the international press, they have also worked more reflexively with people displaced and disenfranchised by the Bank's development projects. In the last few years, there have been hunger strikes and confrontations with the military, lawsuits, scientific battles, resignations at the Bank, international tribunals reconsidering the construction of big dams, and large political rallies throughout the postcolonial world where the Bank works. As science studies scholar Donna Haraway (1989: 6) notes, scientific practices are a process of 'negotiation, strategic moves, inscription, translation – and science [is] effective belief and the world-changing power to enforce and embody it'. As anti-Bank activists show, the interrogation of these regimes of truth is the first step towards destabilizing and replacing them.

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Notes

- 1 See accounts by McCully (1996) and Baviskar (1995).
- 2 In fact, they never had to vote as the Indian government, in anticipation of a negative result, kicked the Bank out before the directors' vote.
- 3 Interviews in World Bank Headquarters, Washington, DC, 1995–8.
- 4 The principal bilateral donor, the German development Bank (KfW), described Arun 3 as the 'best-studied development project ever undertaken by the German government'. See Usher (1996: 62).
- 5 Interviews, 1995–6, Washington, DC.
- 6 Although this movement is criticized for being dominated by 'Northern, petit-bourgeois youth', according to Trevor Manuel, South African chairperson of the IMF/World Bank Board of Governors and ex-revolutionary member of the once-banned ANC, that misconception is based on the limited images produced by the mainstream media of certain participants at protests at the WTO meetings in Seattle (November 1999), the WB/IMF meetings in Washington, DC (April 2000), and Prague (September 2000). But, during this same 10-month span, there were hundreds of strikes, rallies and battles with police protesting World Bank and IMF policies and projects around the world. In the month of May 2000 alone, half of South Africa's workforce went on general strike against World Bank-instigated job-cutting policies; 20 million workers in India went on general strike protesting Bank/IMF neo-liberal policies; 80,000 people participated in anti-IMF demonstrations in Argentina; and thousands in Turkey, Haiti, Paraguay and Thailand hit the streets protesting Bank/IMF policies. For a more comprehensive list, see Patrick Bond (2000). For ongoing campaigns against World Bank projects, see the web sites of umbrella groups such as Bank Information Center (Washington, DC), Bretton Woods project (London), International Rivers Network (Berkeley), and 50 Years is Enough project (Washington, DC). Each region of the world has its own 'Bank Watch' umbrella group and information clearinghouse service – a network that seems to have expanded dramatically in size and effectiveness over the past few years.
- 7 The idea of *eco-governmentality* reflects an undeveloped domain in the governmentality literature (Foucault and his successors) in which differences in nature and natural territory also matter for states and national economies, from which emerge distinct political-epistemic rationalities and disciplinary mechanisms. The concept is developed in Goldman (2000).

- 8 In this paper I use 'green knowledge' as shorthand for both environmental and social knowledge. Although I am particularly interested in the environmental component of this World Bank 'project', the environmental and social aspects are inexorably intertwined.
- 9 It is important to note that while officially it may be the government or a private investment firm that is responsible for hiring consultants, it is the Bank official in charge who oversees all activities. Although the chief officer in the Lao Hydropower office may sign off on a report or a payment to a consultant, it is not s/he who finds the consultant and sets the terms of reference for the job. In other words, the whole process is governed by the Bank, even if the responsibilities are dispersed among other actors.
- 10 Some of these engineering firms are actually subsidiaries of builders, while others have worked alongside them for years. In his analysis of the dam construction business, Patrick McCully (1996: 261) demonstrates a close relationship between Northern consulting firms, builders and equipment suppliers, and bilateral aid for dams in the South. For example, in one case he analyzed, more than half of a Swedish consulting firm's (Swedpower) dam-related contracts were paid for by Swedish bilateral agencies (SIDA and BITS), and tied to a major Swedish/Swiss multinational (ABB Generation) corporation. See also Usher (1996), Rich (1994) and George and Sabelli (1994).
- 11 The term 'feasibility study' generally refers to a group of studies that assess the economic and environmental feasibility of a project, its potential social and environmental impacts, and how it measures up against possible alternatives.
- 12 Berkeley-based International Rivers Network (IRN) and Bangkok-based TERRA have hired or used their own university-based scientists to review these reports, a practice that is quickly catching on, and is being sponsored by Northern charitable foundations acting on the same rights-based principles of the newly greened World Bank – transparency, participation and scientific objectivity (IRN, 1999).
- 13 The international consulting firm TEAM (based in Bangkok) conducted the studies for the Pak Mun dam in Thailand, revealing the typical conflict of interests that results when a consulting firm is dependent on future consultancies with the same national government(s) and multilateral agencies. This project was so heavily criticized inside and outside of Thailand that the minister in charge had to acknowledge the political impropriety publicly and say that Thailand would never build another dam. Instead, Thailand (with ADB and Bank support) is investing in dam-building in neighboring Laos, Vietnam, Cambodia and South China, partners eager to export electricity to Bangkok.
- 14 At least five organizations have put Nam Theun 2 on the top of their priority list: the International Rivers Network (IRN, Berkeley, California,

- USA), the World Rainforest Movement (Uruguay), the Environmental Defense Fund (EDF, Washington, DC, USA), AidWatch (Australia), and TERRA (Thailand). These groups have organized an international campaign around Nam Theun 2, which specifically targets the Bank's questionable science production process.
- 15 It also reflects a tacit admission that many locally-based NGOs have better access to and working knowledge of the 'grassroots' than have the firms the Bank has historically hired, though this is by far the less important motivation for the change.
 - 16 Interviews, Vientiane, January 1998.
 - 17 From interviews, email correspondence, phone conversations and published media and scientific reports.
 - 18 A few weeks later, International Rivers Network's (IRN) Mekong campaigner wrote a pointed letter to the ADB director in charge demanding that the report be released and rebutting the Bank's claims that the report failed to produce any clear recommendations. Indeed, since IRN already had the report, it was easy to challenge the ADB's interpretation of its content. The quotation in the text comes from the ADB's response to the hired scientist and to IRN. The scientist was told by a Lao official that his report was suppressed to keep the information from the 'environmental lobby' such as IRN.
 - 19 This observation is based on numerous conversations I have had with consultants doing research for the World Bank, as well as public and news reports.
 - 20 The first major study on NT2 fisheries by Hill and Hill (1994: 42) argued that 'the central problem with this evaluation, as well as other studies of the Mekong fisheries, is a lack of data and information. Proposed development projects cannot be safely designed or adequately mitigated without a sound and reliable environmental data base'. These authors unambiguously warned against acting on any speculation at this point because of the dangers of speculating without data. 'There is virtually no body of knowledge upon which to rely in making these decisions.' Despite these strong conclusions, and the call for multiple-year and multi-sited studies *before* any development decisions should be made, these words were never heeded (Hill, 1995: 278). Moreover, these conclusions and warnings are missing from subsequent references to this pivotal study; the World Bank and its partners, in both confidential and published reports, put a very different spin on these findings.
 - 21 Email correspondence, July 2000. See Roberts (1999).
 - 22 Independent of the dam EIAs, Roberts and his colleagues have methodically identified new and potentially rare species of fish and other river fauna. See Roberts and Baird (1995) and Roberts (1995).
 - 23 Understandably sensitive about his treatment, he described the task at hand

as extremely complex: 'It's not like studying salmon migration in US rivers, where they make one big migratory push before they die. In the tropics, these are feeding migrations, and the fish move when an area dries up. But that includes much more than the big fish – the whole ecosystem packs up and moves with them. And there are absolutely no data on how the whole system holds together' (phone interview, July 2000).

- 24 Personal correspondence, July 2000.
- 25 From my participation in a Bank staff training seminar on EIAs (April 1996).
- 26 Interviews, Vientiane, January 1998.
- 27 Recently-discovered rare species of ox, deer, pig and frogs by Northern conservation scientists may be the necessary 'facts' that will help cement the agreement for internationally-run wildlife protection sites, mega-fauna running corridors and biodiversity parks in Laos. These transnationalized territories would preserve the 'global heritage of species' as well as support global scientific research, pharmaceutical bio-prospecting, 'sustainable' export-based logging and eco-tourism.
- 28 Interview, 1997. He is now an official in the Mekong River Commission, Phnom Penh, a funder-driven research and policy institute.
- 29 See Fairhead and Leach (1996) and Berry (1993) for other examples from Africa and their policy effects.
- 30 For differing views on this project, including the much-touted participation aspect, see World Commission on Dams (2000), the report's web site (www.damsreport.org), and those of the IRN (www.irn.org), and the World Bank (www.worldbank.org).
- 31 Franklin (1997) as well as interviews with people who attended the consultations.
- 32 The Lao military, which receives its budget primarily from its logging concessions, is a prime offender, as are neighboring Asian logging enterprises. The most significant and yet undocumented set of unsustainable logging practices have resulted from top-level agreements between the Lao government and the Chinese and Vietnamese militaries; in exchange for military support during crucial moments in recent history, the cash-poor Lao government has given logging concessions to its military supporters. According to observers studying the Lao logging industry, there is no official accounting for either the monetary value of the debt nor the amount of logs being exported as repayment. This 'under-pricing' of Lao's commercial timber apparently infuriates World Bank officials, but their displeasure has inspired little change on the Lao government's part. See Tropical Rainforest Programme (2000), a report based on confidential Lao government documents, and Walker (1996).
- 33 In 1989, the Lao government set the target of the planned (and forced) resettlement of 900,000 people (of a population of 4.6 million) from the

mountains on to 750,000 hectares of land in the plains, by the year 2000. The Lao government has not been able to finance this massive human engineering project alone; but since many of the planned dams and NBCAs overlap with where the non-Lao ethnic communities live and work, donors and multilateral banks may be able to accomplish what the government has not yet.

- 34 For example, The Corner House (2000) as well as Rich (1994) and George and Sabelli (1994), and McCully (1996), among others.
- 35 On professionalization, see Escobar (1995).
- 36 These range from the ADB, to the bilateral aid agencies such as Swedish aid agency SIDA, and the NGOs such as CARE.
- 37 As I note elsewhere, this financial and political pressure encourages a stratification process within borrower states, creating a transnational state sector (e.g. forestry, mining, natural resources) funded to facilitate foreign capital investment, and a domestic state sector (e.g. health, education, welfare) that receives little attention, if it is not bled. See Goldman (2000).
- 38 The net capital outflows from South to North are partially documented in the Bank's Annual Reports, and more comprehensively by critics of this development/underdevelopment process.
- 39 The Lao government was forced to concede a portion of the annual revenues from the dam's electricity sales for 'conservation' in areas surrounding the destructive dam reservoir. To enforce the deal, the World Bank wants the money kept in an offshore account and managed by a board of directors including international conservation experts. This conservation strategy could easily be identified as 'post-colonial', as it is similar to earlier colonial practices of conservation by the metropole in its colonies. For examples of correspondence among international conservation NGOs, the World Bank and anti-dam NGOs, on the conversion of international conservation groups to a pro-dam position, see IRN's correspondence files on Nam Theun 2, the NT2 files kept at the Bank Information Center, Washington, DC, and IRN (February 1999). For other postcolonial examples of conservation being 'coercive' towards forest dwellers, see Peluso (1993).
- 40 See IUCN (1993).
- 41 As the author sees it, 'Such poverty analysis tends to focus on the deprivation and incapacity of individuals and society while ignoring the capabilities and strengths of individuals, institutions and government. Such analysis tends to transform the poor into helpless victims who can only be saved by donor assistance. While this can, and does, often lead to increased aid flows, the quality, effectiveness and impact of such increased aid does not necessarily also increase' (State Planning Committee, 1997: 1).
- 42 Interview, Vientiane, January 1998.

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