

Hydropower-induced displacement and resettlement in the Lao PDR

Claudio O. Delang and Matthew Toro

Abstract: The Lao People's Democratic Republic (PDR) is one of the poorest countries in South East Asia. Yet it has great potential for hydropower development, and the Government of Laos plans to build a large number of hydroelectric dams on the tributaries of the Mekong. Among the areas where these dams are being built is the Bolaven Plateau, the country's main coffee-producing region, inhabited by 22,000 smallholder households (15,000 of which produce coffee), distributed in small villages of 40 to 300 households each. This paper describes the attitudes of the farmers displaced due to the construction of dams. Fieldwork was carried out in communities displaced by two dams: the Huay Ho, completed in 1997, and the Xe Katam, whose construction, at the time of the fieldwork in early 2009, was planned to start in the near future. By comparing these different communities, the authors look at the attitudes, expectations and perceptions of those faced with future relocation, as well as the difficulties and coping strategies of those relocated, 13 years after they were resettled.

Keywords: coffee farming; hydroelectric dams; displacement; resettlement; Bolaven Plateau; Laos

Author details: Claudio O. Delang (corresponding author) is with the Department of Geography, Hong Kong Baptist University, 10/F, West Wing, Oen Hall, Kowloon Tong, Hong Kong, e-mail: cdelang@hkbu.edu.hk. Matthew Toro is with the Department of Geography and Resource Management, Chinese University of Hong Kong, Wong Foo Yuan Building, Shatin, NT, Hong Kong.

Dams and the economic transformation of the Lao PDR

The Lao People's Democratic Republic (Laos) is a small, landlocked country in South East Asia, bordering Vietnam, China, Burma, Thailand and Cambodia (Figure 1). Laos is one of the poorest countries in the world. With a population of 6.2 million people, in 2008 it had a



Figure 1. The Bolaven Plateau in southern Laos.

gross domestic product (GDP) of only US\$5.43 billion, or US\$876 per capita (World Bank, 2009).

In a country where agriculture employs 70% of the population and provides more than 50% of the national GDP, rural development is crucial for the economic development of the country and for social and political stability. Hence, since 1986 government policy planning has placed special emphasis on rural development, trying to increase

agricultural output and conserve natural resources (Lao PDR, 2003). Many of the policies pursued by the government since opening up to the West in 1986 follow the neo-liberal precepts of its international advisers (such as the World Bank and the Asian Development Bank [ADB]).

First, the government has been moving towards privatizing land. Consolidating land security is supposed to facilitate access to capital, which in turn should increase agricultural productivity and allow farmers to secure higher incomes (Deininger, 2003; World Bank, 2003). Second, the government has engaged in the resettlement of people from the highlands to the lowlands, for environmental (in particular to protect the forests in the highlands and the water supply in the lowlands), economic (to facilitate the integration of farmers into the capitalist economy), social (to allow farmers easier access to government services, such as schooling and healthcare) and security reasons (Baird and Shoemaker, 2005). Third, the government has promoted policies aimed at shortening the fallow period so as to reduce the amount of land that is being 'degraded' through regular cutting and burning, thus reducing environmental problems and securing a more regular water supply in the lowlands.

At the same time, since 1986 the government has been encouraging foreign investment. Laos being a land-locked country surrounded by other countries with equally cheap labour but cheaper transportation to the markets, foreign investment did not focus on labour-intensive industries, but on the exploitation of its natural resources. Among the few natural resources available to Laos is bauxite, found on the Bolaven Plateau, forests and forestland, and especially water. Since the start of the New Economic Mechanism (NEM) in 1986, Laos has focused on the exploitation of these resources. Thus, capital entered the country to transform its forests, orchards, upland rice fields and fallow areas, along with smallholder cash crop fields, into coffee plantations, rubber plantations, logging areas, mines and dammed reservoirs. Hydroelectricity in particular has been a popular, if somewhat controversial, source of revenue to Laos, and hydroelectric dams have been built on several tributaries of the Mekong. As Mr Haruhiko Kuroda, President of the ADB, put it when the ADB agreed to finance the Nam Theun 2 Dam,

'While progress [on the economic front] has been made, seven out of every 10 people in the Lao PDR still live on less than \$2 a day. About 80% live in rural areas with little or no access to basic social services. The sustainable development of hydropower is one of the few

options the country has for long-term growth and for further reducing poverty.’ (ADB, 2005)

The first large hydro-dam in Laos was the Nam Ngum Dam, which was completed in 1971. It was constructed by a Japanese firm and financed with assistance from 10 countries, under the auspices of the United Nations. The dam has a generating capacity of 150 megawatts, and generates most of Laos’s electricity, including all the power used in the capital, Vientiane. It also produces 70% to 80% of the electricity that is exported to Thailand, accounting for about a quarter of Laos’s foreign exchange earnings (Malaiwan and Peerapornpisal, 2009). Because of political and economic constraints, hydropower development was halted until the late 1980s, when the construction of Se Xet 1 (which started operating in 1990) began. Since then, hydropower has become one of the engines of economic growth, and official data (EPD, 2009b) show that, as of March 2009, there were 10 hydroelectric dams in operation, nine under construction, 17 in the planning stage and 44 in the feasibility analysis stage. Lao PDR is estimated to have 26,000 megawatts (MW) of hydroelectric potential from the Mekong and its tributaries (Sadettanh, 2004), and is obviously trying to capitalize on this seemingly unlimited potential source of power.

Most of the electricity produced is not for internal consumption, but for export to the power-hungry industries, especially in Thailand and China, and to a lesser extent Vietnam. Electricity is now the country’s third largest export earner, and is set to become the growth engine of Laos. As such, the government of Laos has signed a number of memorandums of understanding (MOUs) with the governments of Thailand (for the supply of 7,000 MW of electric power by 2020) and Vietnam (for the supply of 3,000 MW of electricity from now until 2020), and with a number of private corporations (EPD, 2009a).

The construction of dams in particular causes the displacement of large numbers of people. No aggregate data exist, but the planned Nam Theun 2 Dam would, for example, ‘displace 6,200 indigenous people and impact more than 100,000 villagers who depend on the Xe Bang Fai River for fish, agriculture and other aspects of their livelihood’ (IR, 2004, p 1).

The aim of this paper is to describe the human consequences of dam construction, particularly as they concern the relocation of peasants. The paper focuses on two communities on the Bolaven Plateau whose lives have been (or are being) disrupted – the first by the Houay Ho

hydropower project, completed in 1997, and the second by the Xe Katam hydropower project, the construction of which is expected to start soon. By comparing the situation in the two communities affected, the paper also looks at the consequences for – and choices available to – the people from the time the dam was first proposed to the time of its completion. The paper takes the approach of giving a voice to the people, to reveal their view of the government's development policies, their adaptation – or resistance – to these policies, and their understanding of the options available to them. It concludes with a review of the common themes that emerge from these two case studies.

The Bolaven Plateau

The Bolaven Plateau is a highland region in southern Laos (Figure 2). Referred to in the Lao language as *Phou Phieng Bolaven*, the plateau is centrally located between the Annamite Mountain Range, which forms Laos's border with Vietnam to the east, and the Mekong River to the west. From the generally flat lands surrounding the plateau between approximately 200 and 500 metres above sea level (m asl), the terrain rises – sometimes gradually, sometimes abruptly – to a relatively flat surface ranging in most areas from about 800 to 1,400 m asl. The gradient between the plateau and the surrounding landscape makes it an easily discernible topographic feature. The highest peak on the plateau, found in its north-eastern area, is about 1,704 m asl. The most conspicuous physiographic characteristic of the plateau, however, is the slight drop in elevation that accompanies parts of the Xe Katam, Xe Namnoy and Xe Pian Rivers and effectively bisects the plateau into two separate tablelands. The areal extent of the Bolaven Plateau is approximately 4,000 sq km.

The human population of the Bolaven Plateau region is estimated to be between 125,000 (Epprecht *et al.*, 2008) and 134,000 (Duris, Bonnal and Pilecki, 2002). Much of the plateau is scattered with small villages of approximately 40 to 300 households each. The predominant economic activity in the region is smallholder coffee production. Coffee was introduced into the region by the French colonial authorities in the 1920s, and for much of the time since then it has been the most important (in terms of economic output and labour employed) economic activity in the area. Nowadays, approximately 15,000 smallholder households (out of a total of approximately 22,000 households on the Bolaven Plateau) depend on coffee production as their primary source of income.



Figure 2. Bolaven Plateau location and elevation.

Even though the income from coffee is small, the coffee farmers on the plateau have some of the highest cash incomes in Laos.

The Bolaven Plateau region stands at a historical–geographical crossroads. Just a decade into the twenty-first century, the lands and waters of the region are presently undergoing or are targeted for reconfiguration in ways never before witnessed. Supporting and dominated by Laos’s relatively small and unsophisticated (yet locally and nationally important) coffee industry, the landscape of the Bolaven Plateau is becoming an increasingly diversified economic space as political processes reconfigure regional land uses. A proliferation of land concessions has been or is in the process of being granted by the government to foreign, primarily South East Asian, multinational corporations seeking to capitalize on the region’s hydrological wealth. The social and environmental manifestations of these new arrangements have begun to engage with those of comparatively long-established land use/land tenure systems in the region, the most preponderant of which is coffee production by smallholder households. In some instances of this engagement, entire communities

are being displaced through public–private resettlement schemes aimed at eliminating obstructions to new large-scale development projects.

Hydroelectric production and the peasants' response

The prospect of producing electricity from the hydrological resources of the Bolaven Plateau region lies not, as has been suggested (cf Cornford, 2006, p 31), in the 'region's fast flowing rivers'. The flow rate of most rivers in the region is relatively slow. However, the sloped topography of the plateau itself provides enormous capacity to generate electricity. All existing and planned hydropower projects in the region are based on the simple engineering principle of utilizing gravity to generate energy from the region's rivers. The steep escarpments found in the south-eastern portion of the region provide the natural topographical mechanism to subject the region's water resources to the energy-producing force of gravity. The two prime objectives of all hydropower development projects in the Bolaven Plateau region, then, are first to store as much water as possible in a reservoir, and second to re-channel and concentrate that water towards the edge of the plateau, where the coupling of pressure conduits with the natural drop in elevation can create far more electricity than is otherwise available based on the rivers' rates of flow.

There are more than 10 hydropower projects in the Bolaven Plateau region either already in existence or in the final planning stage, two of which – the Houay Ho and the Xe Katam projects – are discussed below.

The Houay Ho Dam

Khamin (2008a, pp 73–75) describes the development of the Houay Ho hydroelectric power project as follows:

'The Houay Ho Hydropower Project is located on the eastern part of the Bolaven Plateau in Champassak and Attapeu Provinces. The 76-meter-high dam blocks the Houay Ho stream and diverts the water to the Xekong River via a 980m concrete-lined channel. Houay Ho was the first privately financed joint venture BOT hydropower project in Laos. [Under a 'Build-Operate-Transfer' (BOT) arrangement, the investing corporation is responsible for securing all project financing, construction, and operation for the duration of the concession period (in this case 30 years). Upon completion of that concession period, the project is transferred to control of the state].'

‘The Houay Ho project was rapidly developed despite the fact that the Korean and Thai firms involved had little experience building large dams. According to a GoL observer from the former Ministry of Industry and Handicrafts, “It had a bad smell. We never got to see any studies for the project. I don’t think any were done.” The main dam and headrace tunnel shaft were completed in April 1997, and the project started producing power at the end of 1998.’

‘Critics both inside and outside of Laos have noted that the Houay Ho Dam was developed with little transparency and that the GoL received a poor deal, reportedly due to its lack of adequate legal representation during negotiations. The project is paying little in taxes or royalties to the GoL. Furthermore, Electricité de Laos (EdL) will not receive any project dividends until 2010, despite the fact that it has had to make annual interest payments of \$1.8 million since 2000 to cover its \$10 million equity loan. The CA did not stipulate responsibility for resettlement or other social and environmental impacts. As a result, Daewoo [which financed the bulk of the construction and commissioning costs] made a single payment of \$230,000 and left the GoL to deal with resettlement issues.’

One village, Nam Han, was directly located in what would become the reservoir area for the Houay Ho dam. Ultimately, though, approximately 2,500 people from 12 villages were relocated out of the watershed areas of the Houay Ho, Xe Pian and Xe Namnoy Rivers. The Houay Ho Power Company itself explains on its website that, in fact, Nam Han was the only village directly impacted by the dam’s reservoir, and that the other 11 villages were relocated due to the ‘environmental protection programme’ of the Government of Laos (GoL) (HHPC, 2010). The villages were moved to a relocation site called Chat San village, roughly translatable as ‘planned village’ (Khamin, 2000, p 26). In total, about 640 households, or 2,700 persons, essentially all of whom belong to the ethnic minority group Nya Heun, were relocated to Chat San. Since the ethnic Nya Heun population in Laos was estimated at 5,552 in 1995, the Houay Ho project threatens the survival of the entire ethnic group. Perhaps more impressive than the size of this demographic movement, though, are its socioeconomic implications (Khamin, 2000).

Many of the negative socioeconomic impacts of the Houay Ho dam have been documented in various case studies on the project (IR, 2008; Khamin, 2000, 2008a; Sayboulaven, 2004). The most significant prob-

lem (still) facing the Nya Heun a decade after the Houay Ho dam began commercial operation in September 1999 is the shortage of land on which to grow either an adequate food supply, or a profitable crop to be sold in exchange for the money needed to purchase that food supply. In either instance, the bottom line is that the Nya Heun suffer from what is perhaps the most severe crisis of food insecurity one can find anywhere in the Bolaven Plateau region. International Rivers (IR) estimated in 2004 that, '[w]hile 90% of the relocated families used to be self-sufficient in rice, it is now estimated that 95% have rice deficiencies, with enough rice for only three months of the year' (IR, 2004, p 2). Moreover, their water supply is highly irregular and fundamentally insufficient.

To understand the policies of the Lao government (and others) in the new village, let us quote again a few passages from Khamin (2008a, pp 73–75):

'The Daewoo Corporation was hit hard by the Asian financial crisis in the late 1990s. As a result, in 2001, Daewoo and their Thai partner, Loxley Company, sold their 80% stake in the Houay Ho Power Company to the Belgium-based multinational Tractebel S.A. and its Thai partner MCL (Tractebel's Thai unit) for \$140 million.'

'Tractebel purchased its stake in the Houay Ho project with financing from export credits provided by the Government of Belgium. This subjected the company to the Organisation for Economic Cooperation and Development's (OECD) Guidelines for Multinational Enterprises. In 2004, concerned groups in Belgium learned of the problems facing the resettled villagers and realized that Tractebel appeared to be violating OECD guidelines. The Belgian NGO Proyecto Gato subsequently filed a formal complaint with Belgium's National Contact Point against Tractebel. This case marks the first attempt to force a private company involved in a Lao hydropower project to follow the international investment standards set out by the OECD.'

'Proyecto Gato argued that Tractebel should be held responsible for the problems facing local people in the resettlement area. Tractebel and its powerful owner Suez responded that the NGO should sue Daewoo and the GoL, not them, for the problems facing affected communities. After many months, Belgium's National Contact Point ruled that Tractebel was not responsible for the project impacts that occurred before it purchased the Houay Ho Power Company in 2001.'

‘In an effort to improve its image, Tractebel has, however, supported repairs to the old school in the resettlement area, and the construction of a new school valued at \$30,000. The company also refurbished the health center in the resettlement area and the 3.5 km road between Houay Kong Village and the resettlement site, at a cost of \$50,000. Finally, Tractebel fixed the broken wells in the resettlement area and constructed six toilets in six villages, at a total cost of \$15,600. Proyecto Gato’s OECD complaint increased the attention paid to the resettled communities by both Tractebel and the provincial government, encouraging the provision of some assistance. However, little has been done to address the lack of access to land and natural resources for the resettled villagers or Houay Ho’s impacts on people living downstream.’

The irony of this precarious set of circumstances in which the Nya Heun now living in Chat San village find themselves lies in the fact that they were indeed compensated by the GoL and Tractebel for the hardships they were forced to face – and continue to face – for the accommodation of the Houay Ho dam. As compensation, the villagers of Chat San village were moved into brand new houses built by the GoL. These houses were also much closer to the main roads, and the quality of the newly constructed secondary roads leading from the main roads to Chat San are indisputably superior to the often extremely poor or non-existent roads that led to the old villages. Chat San has a relatively large and well built school, something not present in any of the original Nya Heun villages. Chat San also boasts a health clinic, something else not provided in any of the original Nya Heun villages. What is more, there is a small ‘Nya Heun cultural centre’ in Chat San village, in which an authentically designed, traditional Nya Heun thatched hut is displayed. Adjacent to this is another small hut inside which two mannequins, supposedly intended to represent a Nya Heun man and woman, are displayed wearing traditional Nya Heun clothing. While it is quite easy to develop feelings of uneasiness as one tours the tiny ‘cultural centre’ – and most Nya Heun themselves exhibit either indifference or indignation towards the centre – the fact that such a place even exists is testament to the types of efforts made to foster at least a semblance of cultural preservation in an otherwise culturally destructive development path. The HHPC also built several hand-pump wells for the villagers of Chat San. However, only two of those wells are presently in operation. Finally, the HHPC constructed several concrete lavatories, being sure to display

the company logo clearly on each one. Due to malfunction, though, not one of the lavatories is presently in use. So the Nya Heun have new houses, new dirt roads by which to connect with markets and other villages, a new school to train the next generation to live productive lives, a new health clinic ostensibly ensuring that those lives are lived healthily, and even a 'cultural centre' intended to bequeath to future Nya Heun a sense of cultural appreciation and pride. In total, then, it would seem that the Nya Heun are now living materially superior modern lives, while nevertheless retaining the symbolic and identity-based values embodied by the preservation of their traditional culture. However, the modernization of traditional Nya Heun society fails to account adequately for the most vital prerequisite for indulging in these benefits: survival.

In addition to the modernization of traditional Nya Heun villages, the GoL promised to provide the resettled families with rice for three years, the expected length of time it would take for them to readjust to their new villages. The three-year period was not arbitrary: this period is more or less equivalent to the length of time it would take for the new coffee seedlings planted throughout the vicinity of Chat San village to mature and begin producing harvestable fruit. For '[t]he Houay Ho resettlement plan depended upon a strategy to convert subsistence-oriented swidden farmers to cash-crop coffee growers over a short period of time' (Khamin, 2008a, p 74). However, there were problems with this plan – profound problems with equally profound consequences that plague the resettled Nya Heun to this day.

To start with, according to the villagers of Chat San, the GoL's promise of a continuous supply of rice for three years stipulated specifically that each adult would be given 15 kilograms of rice per month. However, many people were in fact given only between two and three kilograms of rice per month. The villagers explained that the government was selective with regard to who was actually entitled to receive this level of rice ration. Apparently, the GoL had given the villagers a strict deadline by which they had to abandon their old homes and lands completely in order to relocate to their assigned homes in Chat San. The deadline was set in mid-1994 for one year's time: all families needed to be resettled in their new villages by mid-1995. And indeed, many families, like that of the head of the new Lasasin village (a unit of Chat San), complied with the deadline and were moved to their respective Chat San village units by mid-1995. These families were granted the promised 15 kilograms of rice per person per month. Many other families,

though, failed to adhere to this one-year resettlement deadline and were thus not provided with the same amount of rice as those who were able to meet the deadline.

Essentially, all of the villagers who moved after the one-year deadline explained that they had not done so out of defiance; rather, they explained, they moved late simply because they misunderstood the instructions and the ultimatum they had been given. They were under the impression that they were not mandated to leave, but rather that it was their prerogative either to stay on traditional lands, now being disrupted by the Houay Ho dam and reservoir (not to mention the accompanying company roads now bisecting parts of the forest), or move to the resettlement site where they would have access to new amenities such as roads, a health clinic and a new school. They thought they had a real option to decide what was best for their own lives. Clearly, though, they thought wrong. Those who insisted on staying on their old lands were warned that they would be subject to automatic arrest. Under the ominous threat of government persecution, then, the Nya Heun assigned for resettlement eventually did cooperate and resettle in Chat San village. Those who moved late, though, were effectively penalized – either because of poor government planning that resulted in inadequate food supplies for the resettled population, or as a form of deliberate punishment for failing to adhere to official mandates. In any case, the resettled villagers were given insufficient food supplies to cover the transition to their new lives.

Even more detrimental than the broken government promises to ensure food security through the first few years of the resettlement transition, though, were the broken government promises to ensure land resources for the long-term survival of the Nya Heun of Chat San village. To begin building new lives, the compensation package also included the allocation of land resources on which the villagers were to produce coffee. However, the land resources assigned to the villagers were subject to two underlying problems. The first problem was that most of the land was of inferior quality to the lands of their old villages, and the villagers claim that the soil quality of the new land was inadequate to engage profitably in coffee production. Each relocated household was originally intended to receive three hectares of land (IR, 2004, p 44). Most households complain, however, that they received a mere 0.33 hectares. One resettled villager – who just happens to have served as a village mediator between the provincial and district authorities and the rest of the resettled villagers – explained that claims of households

receiving only 0.33 hectares are exaggerated and that, in reality, each household received approximately 1.5 hectares (still only half of what was originally intended). Furthermore, he noted that households almost uniformly stated that they had received only about 0.33 hectares because only 0.33 hectares were of productive quality.

The second problem was that most of the land – approximately 80% of it (Khamin, 2008a, p 74) – had already been claimed by the long-established villages abutting the various village units of Chat San. According to the head of one of those units, a total of 116 hectares of land were allocated to the village by the authorities. He went on to explain that when the resettled Nya Heun try to utilize that land, they more often than not encounter conflict with the residents of the neighbouring villages, most especially with the Laven living in adjacent Houay Kong and Nam Tang villages. He observed that the government's failure to provide title to the newly assigned land left the Nya Heun powerless to settle their claims with the Laven of the neighbouring villages. When newly resettled Nya Heun villagers tried to clear, maintain or otherwise utilize land that had been allocated as part of the government's compensation package, the neighbouring Laven would confront them and assert that the Nya Heun had no right to use that land. When the Nya Heun villagers explained how the officials had permitted them to use the land in question, their Laven counterparts would stress that such claims were illegitimate because the Nya Heun had no title to the land. However, as pointed out by many Nya Heun residents of Chat San, the Laven of the neighbouring villages also lacked legal title to the land. Nevertheless, as one Nya Heun woman explained:

'They [the Laven] insist that they don't need a title to the land. They simply declare that, "This land belonged to our parents. Our Laven people have been here for a long, long time. This land has been used by our families long before you came here. The land at Houay Ho belonged to your parents. That land was used by your families for a long, long time. So that land is yours, but this land is not." What can we say? They [the Laven] are right. But now our land is gone. What are we supposed to do?'

When we inquired of the head from one of the village units of Chat San as to why they had not appealed to the various government officials to mediate between the Nya Heun and the Laven on the issue of land tenure, he offered the justification that the government had simply informed

him and other Nya Heun that they needed to 'be patient' and wait until the land titling process finally made its way into the remote areas in which these land tenure conflicts were taking place.

The problems of land inadequacy and food insecurity have led most of the Nya Heun resettled in Chat San village to spend long periods (up to several months at a time) at the sites of their old villages, even though it is illegal for them to do so. The former lands of the Nya Heun are generally characterized by an abundance of forest and river resources. The Nya Heun rely heavily on the collection of non-timber forest products (NTFPs) to supplement their diets. They also use the forest for hunting and rivers for fishing. In 2000, Khamin (2000, p 28) reported that approximately 30% of all the houses in Chat San village looked abandoned. During our field visit in early 2009, it appeared that the percentage of vacant households was even greater, at perhaps 60 to 70%. Indeed, finding people to talk to in Chat San was difficult in and of itself. We encountered some houses that were occupied only by adolescents and their younger siblings. These youths explained that their parents insisted that they should stay in the village so that they could continue going to school while the parents worked for several months in the old lands, only to visit the village every few weeks or so to bring some food. One 13-year-old girl explained that she had not eaten anything other than the small portions of rice given to her by some of the other villagers. She informed us that she had been waiting for several weeks for her mother and father to return to bring her food, but that it was very common for them to be unable to make the journey back regularly from the old village to the new one. She made the conscious decision to remain in Chat San eking out a living while her parents struggled to return to their old lands where they could more easily subsist, because, 'Staying here in Lasasin is the only way I can continue going to school. And only by going to school and getting an education can I make money so my family won't be so poor.' The ongoing movement of resettled Nya Heun people from their resettlement sites to the sites of their traditional lands illustrates what Evrard and Goudineau (2004) have termed 'resettlement-induced migration' in which a 'village moves officially to the new site but the villagers [unofficially] keep their land and temporary "field houses" on the old site'.

The village head of one of the units of Chat San justifies these forms of mobility by frustratedly explaining that:

'In the old village, life was much better than it is here. We had farms,

pools for the fish, land; but now that we're here [in Chat San], we have difficulty finding food and resources. Every time we farm some land, or every time we go to the forest to collect some resources, somebody always says to us, "Those resources don't belong to you! They belong to somebody else!"

When asked about the overall pros and cons of living in Chat San *versus* his old village, the man affirmed:

'Yes. Living here [in the Chat San resettlement site] is comfortable in terms of having roads, a clinic, a school, access to the market, but we don't have the most important thing: land. So we now have access to the market, but we can't sell anything. Because we can't grow our own food like we used to, we have to buy food. But because we can't grow enough coffee to sell [profitably], we can't buy food either.'

When we questioned him specifically about the hardships involved in living a transient life between the new and old village sites, he described the political predicament he and the rest of the Nya Heun face:

'The government knows we want to go back to our old houses. They know we want to use our old lands. But every time we try to explain this to the government, we are told that we are wrong. If we speak about wanting to go back to our old lands, it's as if we are saying something wrong. If we say these things, it's like we don't respect the government and are against the government. So most people don't say anything about going to the old lands, they just do it. But now, the government knows that it must let us return to the old land. If they don't let us go back, they know we'll die.'

The Xe Katam dam

The Xe Katam dam is a 322 MW dam planned for construction in Champasak province, in the west of the Bolaven Plateau. It is expected to commence operations in 2012. The 2008 report of International Rivers quoted extensively above also includes a section on the Xe Katam dam (Khamin, 2008b, pp 76–79). We quote here the introductory paragraphs:

'In 2004, Kansai Electric Power Company of Japan signed an MoU

with the GoL to investigate the potential for the project. The dam's 2006 Feasibility Study, which was conducted by Kansai Electric Power with Japanese government funding, recommends the construction of a 40-meter-high dam at a cost of about \$120 million. The dam would be constructed on the Xekatom River between Nam Houng and Thong Houng villages (both ethnic Heuny villages), and would inundate stretches of the Xekatom Noi and Xekatom Nyai Rivers for the dam's 7.6km² reservoir. A section of the Xekatom River would become dry once the river is dammed, as the water from the reservoir would be channelled through a tunnel to the powerhouse and then into the Nam Houng River, which flows into the Xekatom River downstream.

The project is being developed on a BOT basis over a 30-year period. The GoL would hold a 25% stake in the project, but it is unclear how it would finance this share, or what its return on investment would be. In December 2007, a new agreement between Kansai and the GoL was signed. Site preparation has not yet begun, but the Champasak Province WREA office claims that construction will begin around mid-2008.'

Six villages are acknowledged by government officials and Kansai corporation to be directly impacted by the Xe Katam hydroelectric dam and power plant project: Nong Mek, Nam Houng, Nong Hin, Nong Theum, Tayeuksua and Nam Tuad. Each of these villages is also located within the boundaries of bauxite concession areas, and is thus susceptible to the impact of both mines and dams. In total, there are approximately 265 households throughout these six villages, occupied by a total of about 1,569 people. Most of the people affected would be indigenous Nya Heun, but some Laven would also be affected.

In 2006, an environmental impact assessment (EIA), social impact assessment (SIA) and resettlement action plan (RAP) were produced for the Xe Katam project. In September 2007, the GoL approved these documents, but they were never publicly released. The SIA states that the project would require the expropriation of 763 ha of lowland rice paddy, coffee plantations, swidden agriculture, orchards and forests, most of which would be flooded (Mek Consultants and NEWJEC, 2007).

Fieldwork was carried out in early 2009 in two villages that face relocation. To ensure that the individuals concerned cannot be identified, we will call the villages Pha Oudon and Mo Ka Khan. Pha Oudon is targeted for relocation because its present location situates it near the site of the Xe Katam dam, and about 1 km from the dam's reservoir.

Pha Oudon village houses approximately 35 families, with a total population of 232. Government officials and company planners have proposed resettling Pha Oudon village to the Thong Kalong area in Paksong district, in an area that is under application for bauxite concessions expansion. However, the villagers are refusing to move. They are comparing their present circumstances to those of the people resettled over a decade ago for the construction of the Houay Ho dam. They know that those who were resettled are still very poor, and facing considerable difficulties many years after being resettled. From the villagers' perspectives, those resettled for the Houay Ho dam have few prospects of improving their livelihoods in the foreseeable future, while they themselves are relatively well off: they have paddy land producing sufficient rice for subsistence, small coffee plantations, forests providing NTFPs, and a river to fish.

The village headman of Mo Ka Khan explained his overall sentiment regarding the dam with the following comment:

'The dam is not good because it negatively affects our village. The worst part is that we will lose our paddy rice. If the government gives adequate land compensation – and with good land that is the same quality as our current land – then the dam is a good thing. If the government wants development, it must help us develop. So we believe the government will help give us a good life. If the government doesn't help us improve our lives, and makes our lives worse, then that is not development. That would be underdevelopment, not real development.'¹

He went on to explain that, 'In the proposed resettlement area, there is no land for wet rice, so I don't know where the government will find the land'. 'We don't want more land for coffee, we want land for rice. Rice is what we eat, not coffee.' Most peasants in Mo Ka Khan produce sufficient rice for subsistence, while people supplement their nutritional intake with the collection of NTFPs. On the other hand, the main sources of income for this village, as for the other villages in the region, are coffee production, cow and water buffalo breeding and the production of brooms from *khaem* (*Thysanolaena maxima*). According to the headman, coffee has been produced in Mo Ka Khan since either 1956 or

¹ Literally, the man's words translate as: 'This would be low development, not high development'.

1957, when the French planted it throughout various parts of the plateau.

The residents of Mo Ka Khan village reported that the government had proposed giving compensation for the productive agricultural land that would be lost. The villagers, however, are unsure as to how much compensation they would be receiving from the government, and unsure as to how much would be fair. Despite the uncertainty amongst the villagers about how much compensation should be considered appropriate, all villagers are unequivocal in their stance of wanting to retain their land rather than receive any monetary compensation for it. Regarding compensation for their old lands with new, the villagers are also resolved in insisting that any new land they receive as compensation must meet three requirements: it must be nearby, easily accessible and of the same quality as their present lands.

In Mo Ka Khan, the villagers have been told by the government that as compensation they will be receiving new houses. According to the village head for Mo Ka Khan, the government would be building identical houses to be uniformly arranged throughout the village. The village head went on to explain that he considered the building of new houses to be 'absolutely unfair', and that he expected the government to first 'survey, evaluate, and appraise the value of the old houses before it takes any action with building new houses'. Apparently, according to the government, building new houses for the village is one way to improve the material quality of life for the residents while also providing 'compensation' for them. We naturally asked about those families who actually needed big houses because of the large number of people living in them, and, conversely, about those smaller families who needed smaller houses. Why would the government want to build uniform houses for the village? The head of village responded, 'We want houses that are adequate for the people living there. We are not really sure about what the government plans to do.'

For each coffee tree lost, either through the construction of the Xe Katam dam (see below) or through bauxite mining, the government has proposed compensating the villagers. It has proposed paying 4,000 kip (less than 50 US cents) for each tree lost. The head of village exclaimed, 'We don't know how to value each tree! . . . We can harvest these trees for so long, but now they will destroy them, and pay so little for them!'

In Pha Oudon, the sentiment of its village head is quite similar with regard to the Xe Katam Dam project: 'The government can give me new land, but if the government gives me money as compensation, then

I don't want it!' When asked what he would do with the money if he did in fact receive that form of compensation, he simply insisted: 'I don't want money', and went on later to say, 'It depends on the government. If the government wants to kill the people, they will only give money.' When asked if he considered the Xe Katam dam project a good or bad thing for the village, he said,

'On the one hand, the dam will have a direct negative impact on our village. On the other hand, though, if I think about the overall development of my country, then, well, if the government wants to build a dam, then it must be a good thing. The government wants to develop the country, so if that's what the government wants, it must be good for the country. Overall, I trust and believe in the government.'

We proceeded to ask him whether he had any fears that the fate of his village would be similar to the fate of Lasasin village. He said,

'We know about the problems of Ban Lasasin, and we talked about those problems with the government; they [the government officials] promise that our case won't be like Ban Lasasin. We can only wait and see what happens.'

In his 2008 case study of the Xe Katam project's social and environmental impacts, Khamin (2008b, p 76) explains some of this apparent passiveness: 'As with other hydropower projects in Laos, villagers have been given the impression that the dam is a government priority; objecting to it is therefore not an option'.

However, not all members of Pha Oudon share this level of passivity. Informal interviews with a group of a dozen or so men and women partaking in the traditional communal drinking of *lao hai*² – and thus perhaps slightly inebriated and more vocal than usual – revealed a much more apprehensive and hostile attitude towards the Xe Katam dam project and the GoL's endorsement of it. A very vocal gentleman, aged about 35, exclaimed:

'The government is trying to kill us! That's what it's trying to do. They want to develop the country, but in the process, they are killing

² *Lao hai* is rice whisky fermented in a large clay urn and drunk from the urn through long bamboo straws.

the people in the country. How are we going to survive without our rice fields?! Me – I'm doing pretty well for myself; and I don't have to worry as much as everyone else, but I'm still angry. I have four hectares of coffee, and two hectares of rice in Thong Houg. Most people in this village have only one or two hectares of [paddy rice land] in Thong Houg, and even less coffee, or no coffee at all. I'm lucky actually – but I'm still angry. They're going to kill us!'

When we asked the group, and especially this one man, what measures they thought the government and related corporations should take towards minimizing the villagers' losses and keeping them satisfied, the same man asserted:

'It's very simple: if they take our land, they have to give us new land! But the government must understand, we don't want money – we want land. Land is much more important to us than money. And we don't want just any type of land – we want land that is as good as our current land. And most importantly, we need our land in Thong Houg. That land is the most important to us.'

All the people in the group agreed with this emphasis on land as the most legitimate form of compensation, and particularly land capable of producing rice, like the paddy fields of Thong Houg.

However, when we asked the people if they knew of any land in the vicinity of their village that could potentially offer them the same access to rice production as Thong Houg, or on which they could plant new coffee, their answers were fundamentally the same. 'There's no land like Thong Houg around here. That's why it's so important. Almost all of the communities around here use Thong Houg. Most of our food comes from Thong Houg,' explained one man. 'Once Thong Houg is gone, we will have no way to get rice,' said one woman, adding, 'We will have to start buying rice. We're too poor to buy rice!' Indeed, as Khamin (2008b, p 76) affirms, '[T]here is no additional [rice] paddy land available in the area'.

When asked what they intended to do when forced to leave their lands and begin resettling in a new site, most people remained silent in uncertainty or ambivalence. The inebriated and impassioned individual made his thoughts very clear on the matter of action, though: 'I'm not going to let them move me. If the police come to arrest us, I'm going to fight! I'll fight because I'm not going to let them kill us!' Other than this

determined individual, it seemed that most people had no real plan regarding how to cope with the imminent resettlement and livelihood transformations. Indeed, during our visit in early 2009, the people of Pha Oudon were too busy processing coffee, collecting NTFPs and hunting to supplement their daily food intakes, and living life as normally as they could, irrespective of their cognizance that their entire lives could, and would, at any moment be radically changed. Perhaps most shocking to witness was that, despite their knowledge that their village, at least as they presently knew it, would soon no longer exist, many still persisted in burning small plots of secondary forest to plant new coffee saplings. When we asked why they were planting coffee – a plant that takes between three and four years to bear harvestable fruit – when it was likely that the location of their village would soon be moved, one man explained,

‘We really don’t know what’s going to happen. Maybe we will have to move our village, but the land that we’re planting isn’t going to be affected by the [Xe Katam] dam. And if [that newly cultivated land] is affected, then we should get compensation for it.’

Indeed, the lack of information available to the people is really quite striking. As Khamin (2008b, pp 78–79) notes,

‘Very little information about the Xekatom Dam has been released to villagers or to international observers. Despite the fact that the project has been studied since 2004, villagers were not officially informed about the Xekatom Dam plans until mid-2007, and those living along the Xenamnoi were still unaware of the project in mid-2008 after the project EIA had been approved. Furthermore, those who would be affected have not received any information about the potential downstream impacts of irregular water releases from the project or the water quality threats to the Xenamnoi and Sekong Rivers.

The company claims that “public consultations” were held in villages in July 2005 when the IEE was prepared, as well as in Vientiane in January 2006. There were also EIA consultations in Pakse in September 2006 and Vientiane in January 2007 to discuss the draft SIA, EIA and RAP. Yet locals feel that they have had no real opportunity to express their concerns. Community representatives attended one of the consultations at the Champasak Palace Hotel and even though

they were very concerned, villagers said they agreed with all the policies that were presented at the meeting. The consultations at the village level also seemed superficial to local people, since little information was provided to them.'

The villagers of Pha Oudon adapt to this lack of information by trying to carry on with life as usual, regardless of the forthcoming resettlement scheme. During our visit, they were collectively building a new house to accommodate a recently married couple from the village. As the men erected the foundations and structure of the new wooden home, one of them explained to us their disposition towards building the house in light of the dam project:

'Just because the government wants to move us in order to develop the country doesn't mean we should stop living here normally. When the government comes, it will have to build new houses for all the ones it tears down. We have to wait and see what happens; but until we see what happens, they [the newly married couple] need a new home.'

These sentiments reflect their underlying lack of understanding with regard to the GoL's plans, despite the public consultations supposedly designed to clarify matters.

According to the presentation material from the public consultations (Kansai, 2006) with the six affected villages of the Xe Katam dam project, there is in fact a proposed resettlement site for Pha Oudon. The 230 or so residents of Pha Oudon are tentatively scheduled to be relocated to a site just a couple of kilometres to the south-west of their current location, near the present sites of Nong Hin and Nong Theum villages. The problem with this proposed resettlement site, though, is that the land to which the people of Pha Oudon would be transferred is land to which some of the people of Nong Hin and Nong Theum already lay claim or otherwise maintain for agricultural purposes or for utilization through their hunting or NTFP-collection activities. What seems to be developing with regard to the Xe Katam dam project and its associated village resettlement plans, then, is in fact quite similar to the result of the resettlement plans associated with the Houay Ho project about a decade ago: local communities are put into direct land use and land tenure conflicts with each other.

Discussion and conclusions

This paper has reviewed the problems faced by coffee farmers who are relocated – or who face relocation – as expressed by the farmers themselves. The two case studies discussed reflect the different stages that relocated people face. First, there is the threat of relocation accompanied by uncertainty as to when that relocation will take place and what kind of compensation will be given: a constant threat hanging over the villages like the sword of Damocles. Second is the lack of suitable farmland in the new location. In the case of Chat San village, the Lao government did try to replace farmland with other amenities, such as latrines and a ‘cultural centre’, but these can in no way compensate for the lack of farmland. Third is the attempt by the farmers to return to work on the old farmland, which is typically illegal and accompanied by important social costs, as the children are left alone in the new village so that they may go to school. These two case studies also bring out common themes, which are now reviewed. Each of them is in some ways a development of the previous, and together they may help us understand how hydropower development can be made more sustainable.

It is obvious that the most important problem that the displaced farmers face is the lack of land. Indeed, most farmers insist that cash cannot replace land. This is a problem that is likely to persist and worsen in future hydroelectric projects: in spite of the low population densities in Laos, agricultural land has already become scarce. According to the International Union for Conservation of Nature (IUCN), only 3.3% of land in Laos is arable (Chape, 1996), while the Agricultural Census gives the total arable land at 3.7% of the national territory (Vandergeest, 2003), compared with 34.3% of land in Thailand. It is quite obvious that whenever peasants are relocated, the agricultural land they are given is already claimed by other villages (Baird and Shoemaker, 2005). Only infertile land in secluded areas may still be relatively free for the taking. Land titling might reduce conflicts, but since space is limited, any land allocated to a displaced household will have to be taken away from another household. Furthermore, as more dams, bauxite mines and plantations gradually take over the agricultural land on the Bolaven Plateau, less land will be available for the relocated peasants. While the situation is likely to worsen in the future, there do not seem to be other venues for the peasants who have lost their land: for the time being, no large-scale labour-intensive industries suitable for unskilled farmers seem

to be developing (if they would take such jobs in the first place), and one may wonder if Laos would be able to attract such industries, given the competition of Vietnam and China.

In spite of the severe drop in the standard of living experienced by the resettled peasants, there seems to be very little peasant resistance. In other contexts, such actions have been discussed by social theorists in terms of everyday forms of peasant resistance (EFPR), both in the South East Asian (for example, Scott, 1986, 1990; Scott and Kerkvliet, 1986; Kerkvliet, 1986, 1990; Adas, 1981, 1986) and in the South American (for example, Joseph, 1990; Korovkin, 1997) contexts. EFPR scholars look at the covert or concealed acts of resistance (such as unauthorized utilization of large landowners' land, petty theft, feigned incompetence and foot-dragging) that peasants engage in against more powerful players (local political or economic elites, such as landowners, capitalist entrepreneurs or the state). In some countries, for example, peasant resistance (for instance, to the construction of dams such as the Sardar Sarovar dam in India [Lupine, 2007]) has a long history. Why can we not observe overt or covert peasant resistance in Laos? EFPR scholars argue that this covert resistance reflects the refusal of the peasantry to accept the legitimacy of the current patterns of exploitation, coupled with their perceived inability to challenge the economic and political structures that create these patterns (Scott, 1986, 1990). Few would say that the Lao peasants are able to challenge the economic and political structures of today's Laos. Freedom of speech and of the press is limited, NGOs are not allowed to engage in political activism, and political parties (apart from the ruling Pathet Lao) are not permitted to exist, so there are no organizations that can channel the discontent of the farmers. The pattern of development promoted by the Pathet Lao is presented as the only possible option available to Laos. The people in general do believe that the Lao government is genuinely trying to develop the country (as our quotes also show), and accept the new patterns of exploitation in the hope that these will lead to a more prosperous future for them and their children. Most people seem to recognize that dams are necessary for the economic development of the country, and that the other limited options (logging and mining) also compete for their land. Since people agree that the government is doing its best to develop the country, and that dams are one of the few options available, overt opposition to the dams would then be seen as both opposing the government and opposing the development of the country, neither of which would be well received, either

by the government or by fellow Lao citizens. The threat of being ostracized as 'opposing the development of the country' is then a powerful tool that may (perhaps subconsciously) stop people from overtly protesting against the dams, and which may be more powerful than the assumed threat of state repression.

To this must be added the general dislike for open confrontation in Laos, especially towards those of a higher status, as peasants obviously perceive government officials to be. In this case, political plurality would help create a debate about the construction of dams, or the level or form of compensation, since the peasants would be able to mount their support behind new powerful figures that might emerge against the construction of dams and in favour of alternative, more sustainable, forms of development (as has been happening in Thailand, with the development of a green movement and the emergence of intellectuals, such as Anan Ganjanapan, promoting a more sustainable, people-centred development). As has been shown in the case, for example, of the Philippines, it is sometimes the emergence of political plurality that spurs open opposition to government policies (Kerkvliet, 1993).

Against (or because of) this background of little (if any) peasant resistance, NGOs can play an important role. In Laos, NGOs have little power because they are not allowed to interfere with government policies or to challenge the decisions made by the government. However, NGOs do have the power to influence the practices of the foreign companies that finance and run the hydroelectric projects. For example, the Belgian Proyecto Gato forced Tractebel to improve the livelihoods (even though only slightly) of those resettled by the Houay Ho dam. While legal avenues failed, it was probably the threat of a public relations disaster that led Tractebel to invest in improving the lives of the relocatees. Similarly, the Japanese NGO Mekong Watch wrote to WREA and the Department of Engineering and Construction of Kansai, 'criticizing the lack of information disclosure and calling for the Xekatom project's social and environmental documents to be made public' (Khamin, 2008b, p 79), pointing out that the 'WREA is supposed to notify and invite the affected parties to comment on the draft EIA report' (Khamin, 2008b, p 79). Thus, although the national community, and in particular the farmers, have little power to influence government affairs, the international community can put some (albeit limited) pressure on the financiers or owners of the dams.

Related to peasant resistance is the lack of openness on the part of the

government and access to information for the peasants. Although the Xe Katam dam has been studied since 2004, those who face relocation were only officially informed about the dam in mid-2007. Similarly, those relocated from Houay Ho maintain that they did not know exactly when they had to leave, and misunderstood government instructions. Lack of openness may be caused by economic or bureaucratic uncertainties that may delay the dam to an unforeseeable date, but it may also be an intentional strategy to weaken opposition. These uncertainties increase the stress levels and the economic costs of the people concerned, since they are not able to plan their move properly. Hence, in Xe Katam, people are still planting coffee seedlings and building houses for newly-weds, even though they will probably eventually lose those investments.

The last observation that can be drawn from these two case studies is that EIAs, SIAs and RAPs are often ignored, if they are carried out at all. These assessments should be made during the project's planning phase (and not after the decision to build and how to build the dam has been made), with the involvement of the local people, and made public (which hardly ever happens). Indeed, in the case of the Xe Katam dam, some of the communities affected were still unaware of the project after the EIA had been approved. However, equally important would be the development of a strategic environmental assessment (or strategic EIA) to plan for the role that hydroelectricity (and each individual dam) could play in regional and national development. Right now, 'hydro concessions seem to be given out to any interested developer on a first-come, first-served basis, with little apparent concern for basin planning processes' (IR, 2008, p 15) or their role in the long-term economic development of the country.

Acknowledgments

The work described in this paper was fully supported by a grant from the Research Grants Council of the Hong Kong Special Administrative Region, China (Project No CUHK442707). We would like to thank all those who kindly and patiently answered our questions, especially the smallholder peasants whose future is so uncertain. Special thanks go to Soukdavanh Bouadaphom, without whom this research would not have been possible. We would also like to thank the anonymous referees for their helpful comments.

References

- Adas, M. (1981), 'From avoidance to confrontation: peasant protest in precolonial and colonial Southeast Asia', *Comparative Studies in Society and History*, Vol 23, No 1, pp 217–247.
- Adas, M. (1986), 'From footdragging to flight: the evasive history of peasant avoidance protest in South and Southeast Asia', *Journal of Peasant Studies*, Vol 13, No 2, pp 64–86.
- ADB (2005), 'ADB to support Nam Theun 2 Hydroelectric Project in Lao PDR', website: <http://www.adb.org/Documents/News/2005/nr2005042.asp> (accessed 10 August 2009).
- Baird, I. G. (2010), 'Land, rubber and people: rapid agrarian changes and responses in southern Laos', *Journal of Lao Studies*, Vol 1, No 1, pp 1–47.
- Baird, I. G., and Shoemaker, B. (2005), *Aiding or Abetting? Internal Resettlement and International Aid Agencies in the Lao PDR*, Probe International, Ontario.
- Baird, I. G. and Shoemaker, B. (2007), 'Unsettling experiences: internal resettlement and international aid agencies in Laos', *Development and Change*, Vol 38, No 5, pp 865–888.
- Barney, K. (2007), *Power, Progress and Impoverishment: Plantations, Hydropower, Ecological Change and Community Transformation in Hinboun District, Lao PDR*, YCAR Papers and Rights and Resources Initiative, Toronto, and Washington, DC.
- Chape, S. (1996), *Biodiversity Conservation, Protected Areas and the Development Imperatives in Lao PDR: Forging the Links*, IUCN, Vientiane.
- Cornford, J. (2006), *Globalisation and Change in Southern Laos*, Occasional Papers Series 1 (ed, A. Bamford), Focus on the Global South, Bangkok.
- Deininger, K. (2003), *Land Policies for Growth and Poverty Reduction*, World Bank, Washington, DC.
- Ducourtieux, O., Laffort, J.-R., and Sacklokhkam, S. (2005), 'Land policy and farming practices in Laos', *Development and Change*, Vol 36, No 3, pp 499–526.
- Duris, D., Bonnal, P., and Pilecki, A. (2002), 'The coffee commodity chain in Laos, and farmer strategies', *Recherche et caféiculture*, CIRAD-CP, Montpellier, pp 60–74.
- EPD (2009a), 'History of hydropower in Lao PDR', Department of Energy Promotion and Development, Vientiane, website: <http://www.poweringprogress.org> (accessed 10 August 2009).
- EPD (2009b), 'Electric power plants in Laos', Department of Energy Promotion and Development, Vientiane, website: <http://www.poweringprogress.org> (accessed 10 August 2009).
- Epprecht, M., Minot, N., Dewina, R., Messerli, P., and Heinimann, A. (2008), *The Geography of Poverty and Inequality in the Lao PDR*, Swiss National Centre of Competence in Research (NCCR) North–South, Geographica Bernensia, and International Food Policy Research Institute (IFPRI), Washington, DC.
- Evrard, O., and Goudineau, Y. (2004), 'Planned resettlement, unexpected migrations and cultural trauma in Laos', *Development and Change*, Vol 35, No 5, pp 937–962.
- HHPC (2010), Houay Ho Power Company Ltd, website: <http://www.houayho.com/> (accessed 11 January 2010).
- High, H., and Baird, I. G. (2009), 'Internal resettlement in Laos', *Critical Asian Studies*, Vol 41, No 4, pp 605–620.
- IR (2004), *The Legacy of Hydro in Laos*, International Rivers, Berkeley, CA, website: http://www.internationalrivers.org/files/Legacy_of_hydro_low.pdf (accessed 11 January 2010).
- IR (2008), *Power Surge: The Impacts of Hydro-Development in Laos*, International Rivers, Berkeley, CA, website: http://www.internationalrivers.org/files/Intl%20Rivers_Power%20Surge.pdf (accessed 11 January 2010).

- Joseph, G. M. (1990), 'On the trail of Latin American bandits: a reexamination of peasant resistance', *Latin American Research Review*, Vol 25, No 3, pp 7–53.
- Kansai (2006), *Xekatom Hydroelectric Power Project*, Public Consultation Presentation Materials, Kansai Electric Power Company, Pakxe.
- Kerkvliet, B. J. T. (1986), 'Everyday resistance to injustice in a Philippine village', *Journal of Peasant Studies*, Vol 13, No 2, pp 107–123.
- Kerkvliet, B. J. T. (1990), *Everyday Politics in the Philippines: Class and Status Relations in a Central Luzon Village*, University of California Press, Berkeley, CA.
- Kerkvliet, B. J. T. (1993), 'Claiming the land: everyday politics in the Philippines with comparisons to Indonesia, Peru, Portugal, and Russia', *Journal of Peasant Studies*, Vol 20, No 3, pp 459–491.
- Khamin, N. (2000), 'More trouble for the Heuny', *Indigenous Affairs*, Vol 4, pp 22–29.
- Khamin, N. (2008a), 'Case Study Nine: Houay Ho Hydropower Project', in *Power Surge: The Impacts of Rapid Dam Development in Laos*, International Rivers, Berkeley, CA, pp 73–75.
- Khamin, N. (2008b), 'Case Study Ten: Xekatom Hydropower Project', in *Power Surge: The Impacts of Rapid Dam Development in Laos*, International Rivers, Berkeley, CA, pp 76–79.
- Korovkin, T. (1997), 'Indigenous peasant struggles and capitalist modernisation of agriculture: Chimborazo, 1964–1991', *Latin American Perspectives*, Vol 24, No 3, pp 25–49.
- Lao PDR (2003), *National Poverty Eradication Programme (NPEP)*, Lao PDR, Vientiane.
- Lupine, E. (2007), 'Protesters assemble to oppose Sardar Sarovar Dam', International Rivers, website: <http://internationalrivers.org/en/south-asia/india/narmada-river/protesters-assemble-oppose-sardar-sarovar-dam> (accessed 11 January 2010).
- Malaiwan, T., and Peerapornpisal, Y. (2009), 'Diversity of phytoplankton and water quality in the reservoir of Nam Ngum Dam, Lao PDR', *KKU Science Journal*, Vol 37, pp 42–49.
- Mek Consultants and NEWJEC (2007), *Social Impact Assessment: Xekatom Dam*, Mek Consultants, Vientiane.
- Rigg, J. (2005), *Living With Transition in Laos: Market Integration in Southeast Asia*, Routledge Curzon, London.
- Sadettanh, K. S. (2004), 'Renewable energy resources potential in Lao PDR', *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, Vol 26, No 1, pp 9–18.
- Sayboualaven, P. (2004), 'Hydroelectric dams and the forgotten people of the Boloven Plateau' (unpublished), International Rivers, Berkeley, CA.
- Scott, J. C. (1986), 'Everyday forms of peasant resistance', *Journal of Peasant Studies*, Vol 13, No 2, pp 5–35.
- Scott, J. C. (1990), *Domination and the Art of Resistance: Hidden Transcripts*, Yale University Press, New Haven, CT.
- Scott, James C., and Kerkvliet, B. J. T., eds (1986), *Everyday Forms of Peasant Resistance in South-East Asia*, Frank Cass, London.
- Vanderveest, P. (2003), 'Land to some tillers: development-induced displacement in Laos', *International Social Science Journal*, Vol 175, pp 47–56.
- World Bank (2003), *Laos: Second Land Titling Project. Project Appraisal Document*, World Bank, Washington, DC.
- World Bank (2009), *World Development Indicators 2009*, World Bank, Washington, DC, website: <http://data.worldbank.org/indicator> (accessed 11 January 2010).