

# Coffee, mines and dams: conflicts over land in the Bolaven Plateau, southern Lao PDR

CLAUDIO O DELANG\*, MATTHEW TORO† AND  
MARIEKE CHARLET-PHOMMACHANH‡

\**Department of Geography, Hong Kong Baptist University, Kowloon Tong, Hong Kong*  
E-mail: cdelang@hkbu.edu.hk

†*Department of Geography, Hong Kong Baptist University, Kowloon Tong, Hong Kong*

‡*Paris Institute of Technology for Life, Food and Environmental Sciences, Paris, France*

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During the last decades, neoliberal economic reforms aiming at facilitating trade and cross-boundary investment have encouraged transnational and national economic actors to search for 'empty' land to grow export crops, to mine, or to develop hydroelectric dams. Mainland Southeast Asia is one of the regions where such investment has been taking place as it contains resource-hungry countries (Thailand and in particular neighbouring China), and countries with 'empty' land and the willingness to use such land to foster economic growth (Laos, Cambodia and Burma). This beset the question as to what happens to the people who inhabit the land that is supposed to be 'empty', and the relationship between the different land uses that takes over that 'empty' land. This paper describes the land conflicts in one area in southern Laos, the Bolaven Plateau, where national and international capital backing large-scale coffee plantation, bauxite mining and dam construction is displacing smallholding coffee farmers – the 'traditional' land users – within a political environment of poorly enforced property rights and endemic corruption. We describe how the smallholding coffee farmers are relocated to make way for the new economic activities supported by considerable amounts of foreign capital, and how the land grabbing results in lower standards of living for the smallholding coffee farmers, with few benefits to the country as a whole.

KEY WORDS: Laos, Bolaven Plateau, land grabbing, coffee farming, mining, hydroelectric dams

## Introduction

During the last decades, neoliberal economic reforms along the lines of those supported by the International Monetary Fund (IMF) and the World Trade Organisation (WTO), aiming at facilitating trade and cross-boundary investment, have encouraged transnational and national economic actors, from corporations to national governments, and from private equity funds to enterprising individuals, to search for 'empty' land, often in distant countries, to grow export crops, to mine, or to develop hydroelectric dams. Many countries have encouraged such investment by reducing restrictions on the export of capital, by allocating land to foreign investors at a cost that does not reflect its commercial value, or by privatising and commodifying land, which facilitates investments by regulating ownership and reducing transaction costs (Musole 2009). International organisations such as the World Bank (WB) and the Asian Development Bank (ADB) have also encouraged such

investment by providing funds to countries and corporations (Hirsch 2001).

Mainland Southeast Asia is one of the regions where such investment has been taking place. It is a region with both resource hungry and capital plenty countries, such as Thailand and in particular neighbouring China, and countries with 'empty' land and the willingness to use such land for development, such as Laos, Vietnam, Cambodia and Burma (Wong and Chan 2003; Frost 2004; Barney 2009; Stuart-Fox 2009)<sup>1</sup>.

The 'richer countries' need large amounts of raw materials (including mineral products), timber and electricity, which either cannot be found in their own countries, or whose exploitation is halted by concerns over the environmental impacts or protests by green groups. These countries export the environmental risks and environmental degradation to countries that cannot afford to care about the environment, or whose environmental degradation has not yet reached the level of the 'richer countries'. Hence when Thailand (in

1989) and China (in 1998) restricted the logging of their own natural forests, they started importing legally or illegally logged timber from Burma, Laos and beyond (Sun *et al.* 2004).

The 'poorer countries' of mainland Southeast Asia (Laos, Cambodia, Burma and to some extent Vietnam) are in need of foreign investment, have few alternative sources of funds to support the development of their countries, and have little choice but to use their natural resources. Hence, whenever the opportunities arise, these countries have focused on the export of hydroelectricity, minerals and agribusiness products in their efforts to develop (Sunshine 1995).

With only 25 people/km<sup>2</sup>, Laos is one of the least densely populated countries in the world, and has a very low population density also by regional standards. Cambodia, the second least densely inhabited country in the region, has a population density over three times higher, with 80 people/km<sup>2</sup>. It is somehow natural that Laos, a landlocked country with limited opportunities to develop a labour-intensive manufacturing sector (also given the competition of neighbouring China and Vietnam) would use its land to set in motion development. Overall, by one estimate, Laos has already 'signed away' between 2 and 3 million ha, or 15% of its territory (MacKinnon 2008).

In Laos, three distinct sectors, all requiring large amounts of land, can be identified as particularly important: plantations, mining and hydroelectricity. Plantations of rubber, coffee, eucalyptus, acacia and other cash crops are one of the fastest growing economic sectors in Laos. The earliest rubber plantations in northern Laos date back to the 1990s (Diana 2007), but in 2008, the Government of Laos (GoL) Committee for Planning and Investment (CPI) estimated that 17 companies had already obtained 200 000 ha of land concessions, specifically for rubber (*Vientiane Times* 2007). Still more land will be set aside: the Lao Ministry of Agriculture and Forestry has targeted 500 000 ha of industrial plantation by 2020 (Barney 2007).

The hydropower sector, which is already very important, is set to expand considerably and become one of the main economic sectors in Laos, both in what concerns the contribution to GDP and in terms of export revenue. In September 2010, 10 hydropower projects were in operation, with a total capacity of 1976 MW, over half of which was due to the Nam Theun 2, which began commercial operation in March 2010 (IRN 2010). However, many more hydropower projects are eventually set to dot the landscape. According to International Rivers, as of September 2010, four projects were under construction, with an expected total capacity of 1265 MW, 23 projects were in the planning stage, for a total capacity of 6540 MW, and 42 projects were in the feasibility stage, for a total capacity of 12 295 MW (IRN 2010). If all these projects come to fruition, Laos would be producing over 22 GW/year.

The mining sector is attracted by the rich mineral resources found in Laos, which include gold, copper, zinc, lead, tin, iron, gypsum and alumina (Boungnaphalom 2010). It is currently made up of a large number of small operators with some 119 companies involved in 193 mining sites (Barney 2007). However, two projects are changing the landscape: first, the Oxiana/Lan Xang Minerals at Xepon, which has invested more than \$400 million; second, the Phu Bia/Pan Australia Ltd, which has invested more than \$300 million.

The GoL justifies promoting land-demanding foreign investment, thus taking control of land from villagers to provide it to foreign investors, with the arguments that these new land uses address and combat shifting cultivation (Shi 2008; Barney 2007), offer regular wage labour to poor, marginal farmers, thus raising their standards of living, and increase state revenue that will be invested in the development of the country.

The fact that population densities are low does not mean that the land is unused, even though Lao development discourse frequently promotes the myth that there are plenty of 'empty spaces' and 'unused land' available in Laos for foreign investors (Barney 2007). Simply, the land is used by people with land-extensive lifestyles (shifting cultivation, cattle raising in pastures or forests, and the collection of forest products).

Different forms of compensation exist for the relocatees, and when these projects are financed by the WB, the ADB and others, compensation is often a prerequisite for the disbursement of funds (Noland 1998). Often, the compensation consists of money and land, and the predominant view is that if the assets of the relocatees are replaced in cash or in kind, then the relocatees are properly compensated, and the project can go ahead (Cernea and Mathur 2008). There are problems with this approach. One problem is that people generally only get compensation for fixed assets, such as domesticated crops and fruit trees (Xiong 2011). The non-marketed products that people gather from forests or streams are usually excluded from the compensation, even though they may be essential for people's survival. Hence, while the cash incomes may increase, the level of livelihood may drop (Delang 2006). Also, compensation in the form of cash may not be suitable for people not used to receiving large amounts of cash (Mathur 1999; Tan and Wang 2003; Wilmsen *et al.* 2011). Without the tradition of saving, that money may soon be spent in leisure, followed by increased poverty. Alternatively, new land is allocated to the relocatees to replace the land they lose. However, the land allocated is usually not of comparable quality – since all the best land has already been claimed (Mathur 1999). Example after example shows that compensation has been unable to re-establish the livelihood of relocatees (Heming *et al.* 2001).

Other times, the relocatees are offered jobs in the ventures developed on their land, for example on

plantations (Obein 2007; Pholsena 2009). This does provide a fixed, salaried income to people who likely did not have one before. However, the requirements of the new employers, in terms of daily 8 h work periods with 2 days off a week, might not be the favoured way of life for people used to being their own employers, working at their own pace in their own fields (Baird 2010). The social capital available to the relocatees in their villages of origin is also ignored, and obviously cannot be replaced with any tangible product that the government may be able and willing to give to the relocatees.

Because of these problems, 'seldom have the relocatees become materially and socially better off than before their move' (Parnwell 1993, 48; quoted in Heming *et al.* 2001), and some suffer from 'refugee like' situations (Heming *et al.* 2001). Cernea and Mathur (2008) argue that if resettlement programmes only provide compensation for the assets lost by the relocatees, the latter will not be able to re-establish livelihoods to the previous levels. For relocatees to really experience development, projects need to focus on the relocatees themselves, rather than on the broader 'development' objectives of the country. This is hardly the case in Laos, where development projects are meant to help the 'economic growth' of the country, rather than to improve the standards of living of the people among whom these projects take place (High 2008 2009; Baird *et al.* 2009), especially if these are minority people.

This article describes the conflicts over land in the Bolaven Plateau, where coffee, rubber, bauxite and hydroelectricity investors compete with smallholder coffee farmers for the farmers' land, and the consequences upon the relocatees. We start with a brief account of the methodology used. We then introduce the Bolaven Plateau and the smallholding coffee production that forms the backbone of the regional economy. We then discuss the new land uses – coffee plantations, mining and hydropower – and the ways in which they compete with, and displace, smallholding coffee production. Finally, we conclude with a discussion of the reasons for the government's failure to properly manage the foreign investment, the consequences on the smallholding coffee farmers, and the prospects for national economic growth.

## Methodology

The information presented in this paper come from two field trips, totalling over 3 months, in six different villages of the Bolaven Plateau (Ban Phoumakao, Ban Tongkatay, Ban Phouoye, Ban Houay Kong, Ban Chat San, Ban Nong Mek), all located in Pakxong district. The first field trip took place in early 2009, and the second in May 2011. The first field trip was done with the help of a translator. No government official was present for either field trip. These six villages, in which smallholding coffee farming is the predominant eco-

nom activity, experience different kinds of conflicts over land use. A review of the conditions in these villages can help us understand the broader picture of the changes that are taking place, and the impacts these changes have on the villagers.

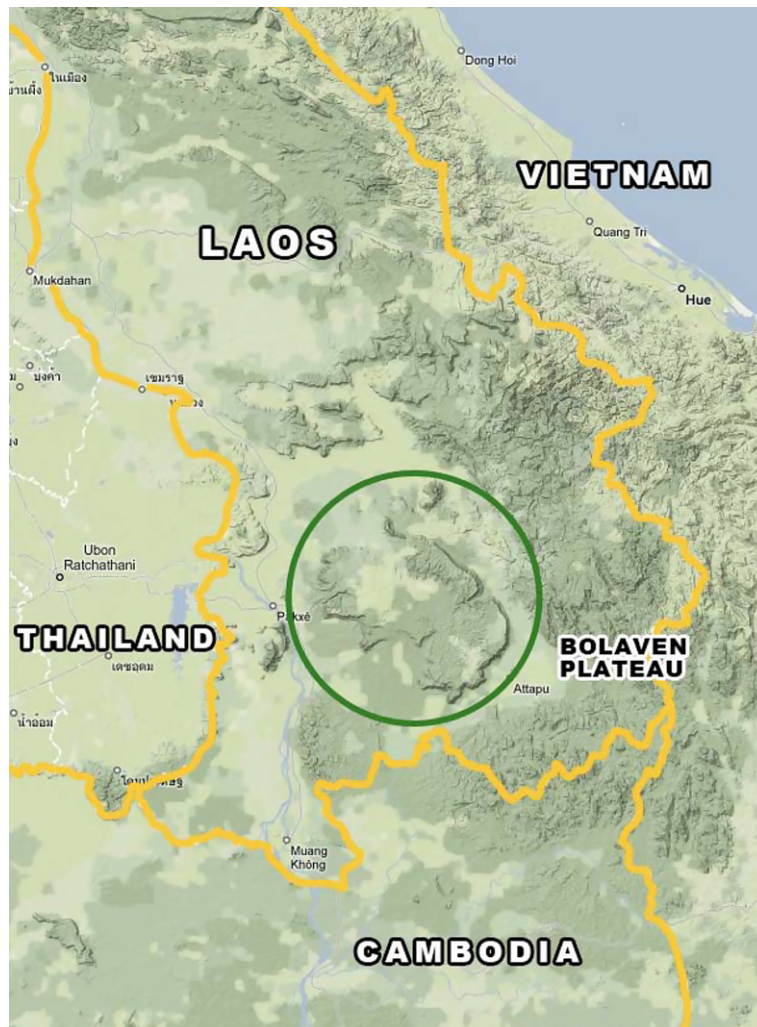
In the villages, the fieldwork started with informal interviews in the households of the headmen of the villages. A group of villagers habitually joined these meetings, and participated in the informal discussions. These meetings were usually followed by visits to the village land. More formal interviews were also carried out in the offices of companies investing in the Plateau [the Dak Lak Rubber Co., Sinouk Café Lao Ltd, and Sino Australian Resources Company (SARCO)], as well as the Agricultural Promotion Bank (APB) branch of Champasak Province. The information obtained during the fieldwork was supplemented with official data from the District Agriculture and Forestry Office (DAFO).

## Smallholding coffee production on the Bolaven Plateau

The Bolaven Plateau is a highland region in southern Laos, covering approximately 4800 km<sup>2</sup>, and ranging in most areas from about 1000 to 1350 masl (Figure 1). The largest town on the Bolaven Plateau is Pakxong, the capital of the district with the same name, a subunit of Champasak province. The south-west portion of the region falls within the boundaries of the 910 km<sup>2</sup> Dong Houa Sao National Biodiversity Conservation Area (NBCA), one of Laos' 18 NBCAs (Robichaud *et al.* 2001, 101; DAFO-Pakxong 2008a), while other protected areas can also be found at the edges of the plateau (Figure 2).

The human population of the Bolaven Plateau region is estimated to be between 125 000 (Epprecht *et al.* 2008) and 134 000 people (Duris *et al.* 2002), about half of which live in the Pakxong district (DAFO-Pakxong 2008b). Since the French colonial occupation, the Bolaven Plateau has been particularly important for supporting smallholding coffee production. In 2002, coffee was estimated to represent 65% of agricultural incomes on the Bolaven Plateau, or between US\$17.5 and 22.5 million. Approximately 15 000 smallholder households, or 69% of farms, depend on coffee production as their primary source of income and harvest about 15 000 tons a year (Tulet 2007, 37).

Together with coffee, smallholders grow swidden rice and (very little) paddy rice for subsistence, as well as a number of cash crops (such as tea, cardamom, chayote, cabbage), supplemented by cattle and pig raising (Ducourtieux 1994, 117). However, rice is only grown on 3% of the cultivated area in Pakxong district (Sisouphanthong and Taillard 2000, 76). Fishing and the gathering of non-timber forest products (NTFPs) also play an important part in the population's subsistence, but are being gradually replaced



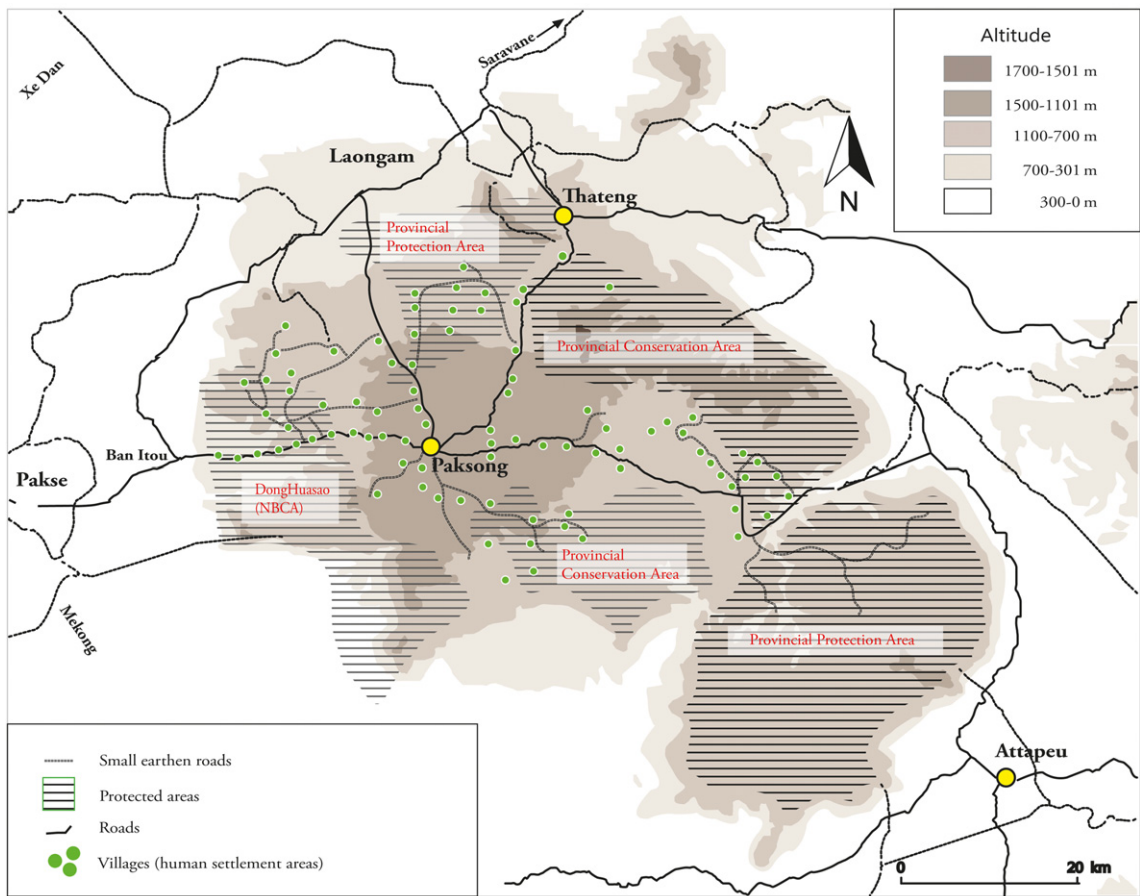
**Figure 1** Laos and the Bolaven Plateau  
Source: Lazarus (2009)

by marketed products. Because of coffee, the Bolaven plateau stands out with a much lower poverty ratio than the national average (Messerli *et al.* 2008, 133).

Coffee production by smallholder farmers has for many years also been important for the national economy. In the late 1990s, coffee represented about half of all cash crops exported (Sisouphanthong and Taillard 2000, 82). Since then, its importance has been declining, but in 2005 coffee still accounted for 16% of total exports (Tulet 2007, 41). Almost all Lao coffee comes from the Bolaven Plateau (Tulet 2007, 37)

In spite of its national importance, smallholding coffee production is not very efficient. The output per hectare is less than half that of Thailand and Vietnam, and the coffee is of lower quality. However, since the

early 2000s, local and national authorities have promoted various measures to increase the productivity and the quality of the coffee (Tulet 2007, 37). The quality and productivity of coffee are also increasing due to the introduction of a new variety of Arabica, Catimor coffee, which is more productive and valuable<sup>2</sup>. It is already grown by all large-scale plantations, and is slowly replacing the old Robusta planted by smallholders, although it requires more input and care, and is thus less suited for smallholders. In 2011, about 30% of coffee planted on the Bolaven Plateau was Catimor, a rate which may reach 50% by 2013, according to Sinouk Sisombath (CEO of Sinouk Café Lao Ltd and President of the Lao Coffee Association) (personal communication, 5 August 2011).



**Figure 2** Human settlements and protected areas on the Bolaven Plateau  
 Source: Derived from unofficial District Agriculture and Forestry Office (DAFO) maps

Since the late 1990s, following the 'New Economic Mechanism' (NEM) that opened up the country to foreign investors in 1986, other land uses have started to compete with smallholder coffee farms. This article looks at three in particular: industrial coffee plantations, hydropower dam development, and bauxite extraction and bauxite/alumina/aluminium refinement. In the following pages we discuss the conflicts that arise between smallholding coffee production and each of these different land uses, and what happens to the coffee farmers who are displaced by the new investments.

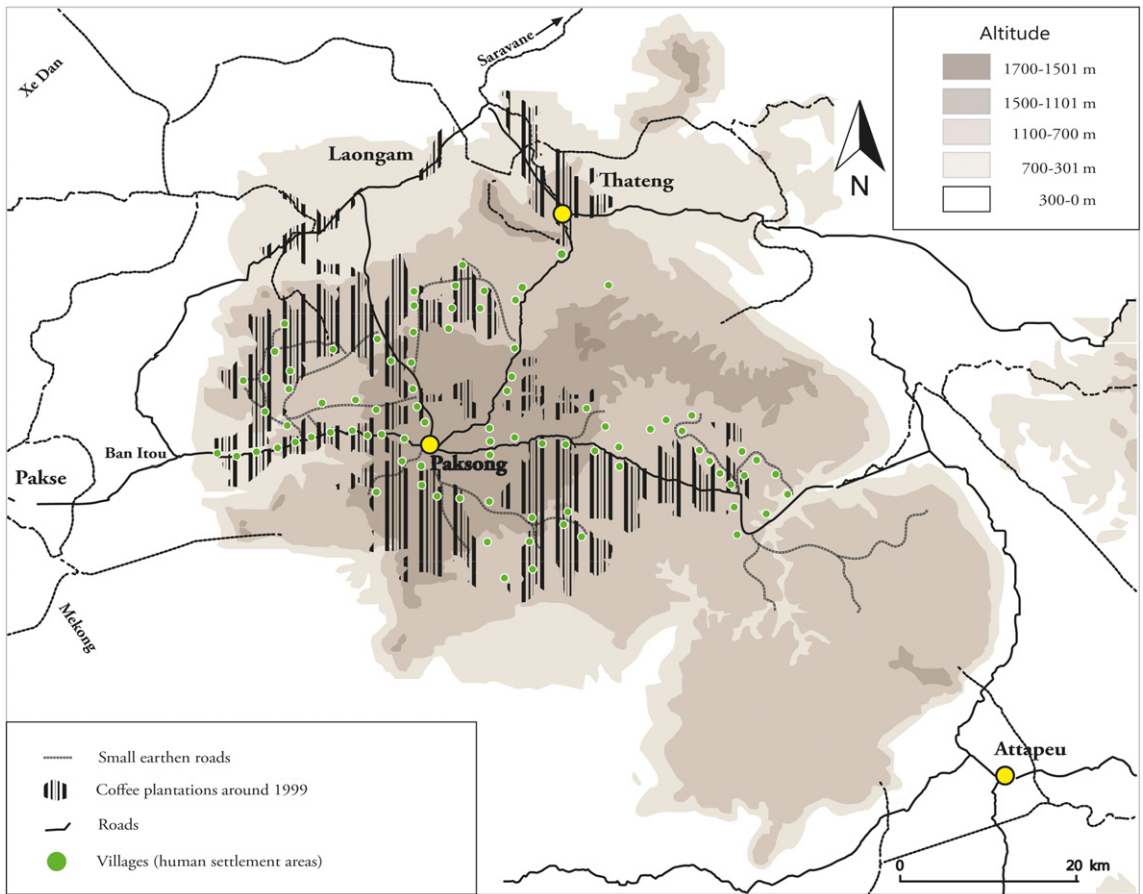
### From smallholding coffee production to coffee plantations

A number of investors are investing in large-scale coffee plantations, to take advantage of the fertile land of the region, and the availability of wage labourers – some of whom are forced to engage in wage labour

after their own coffee land is given over to the plantations. Most large-scale industrial coffee plantations are located in the central and western parts of the Plateau, especially north-western Pakxong and southern Laognam districts, at elevations between 900 and 1,300 masl (Figure 3).

One of the companies involved in coffee production is Dak Lak Rubber Co. – named after Vietnam's Dak Lak province – which started to invest in the region in 2006. An official from the Dak Lak Rubber Co., interviewed by us in early 2009 at the company's Pakxe offices, indicated that the company had already planted approximately 250 ha of coffee on the plateau, and that it intended to expand its coffee holdings to about 500 ha, or possibly more, in the near future.

Dak Lak Rubber Co.'s coffee holdings is just one example of the growing control over the Bolaven Plateau by plantation companies. In 2007 the Vietnam-Laos Coffee Joint Stock Co. firm, operating



**Figure 3** Coffee concessions (in about 1999)  
 Source: derived from Fortunel (2007)

under the Vietnam National Coffee Corporation (Vinafe), along with another Vietnamese company, the Dak Uy Coffee Company of Vietnam's Kon Tum province, came to an agreement with authorities of Champasak province to grow 1000 ha of coffee in Champasak, assumedly on the Bolaven Plateau. The project also reflects the bilateral economic program between the Lao and Vietnamese governments. According to the agreement, the land would be leased to the Vietnamese investors, with the possibility of expanding between 3000 and 5000 ha at some time in the future (T&CTJ 2007; TNN 2007; AP 2007). Analysts of the plan, however, believe that yet more land will be converted under the agreement (AP 2007). The project is extolled for its utilisation of 'uncultivated land' while 'providing jobs for thousands of Lao labourers' (T&CTJ 2007; AP 2007). However, Vietnam is no longer the only source of foreign investment in coffee plantations. Since 2008, the Thai company Paksong Highland Co. Ltd has cul-

tivated a concession of 3000 ha, the biggest on the Plateau (DAFO-Pakxong 2011), while the newly established Singaporean company Outspan Bolovens Ltd received a similar sized concession in 2010 (KPL 2010).

Since the best coffee land is already being farmed by the smallholders, some of the land allocated to the companies by the government is invariably already under cultivation. Hence, companies such as Dak Lak Rubber Co. appropriate productive and semi-productive coffee lands from the smallholder coffee communities through official (i.e. government sanctioned) means. This is also the case for two adjacent villages visited during the fieldwork periods: Ban Phoumako, a former State Farm (*nikhom*) village with little land created in 1976, and Ban Tongkatay, a long-established Jrou (Laven) village, both situated south of Paksong. According to the villagers, Dak Lak Rubber Co. expropriated 30 ha in Ban Phoumako and 300 ha in Ban Tongkatay, an area which the villagers maintain

exceeded that legally granted through the concession contract. That is, the Company's bulldozer drivers illicitly extended the area of the plantation without proper authorisation and with pure impunity.

Lao government officials are often conscious of this transgression of the territorial extent agreed in the concession contracts – several villagers from Ban Tongkatay even lodged a complaint at the province level – but have so far failed to take any action against it, in spite of the fact that a high-ranking officer in the Ministry of Foreign Affairs originates from this village. Indeed, it is not surprising that companies prefer to acquire land that is close to existing villages: while villages are likely to have been established close to the best coffee land, they also provide a ready pool of workers for the plantations (a workforce that will be looking for wage work once their land is expropriated).

During an interview conducted in Phoumako in 2009, one man explained that he was forced to sell his family's land to Dak Lak Rubber Co. Because the land was considered 'productive' (due to the presence of regularly maintained coffee trees) he was entitled to compensation for his land. However, the man reported he received as compensation a mere 1 300 000 kip (US\$150). The man explained that only because he had productive coffee trees did he receive any compensation (albeit insufficient). Those families whose lands were completely forested, or who had poorly maintained or unharvestable coffee trees, received no compensation at all, irrespective of whether they held titles to that land – a temporary land use certificate issued from 1997 by the district land office and signed by the district governor and the head of the village (*Bay yang diun sit nam say ti din*). The company would simply present the government-issued document authorising the land concession. Upon seeing these government mandates, the villagers had no recourse.

Against this background of people losing their farmed and unfarmed land, there is the picture of new economic opportunities in the villages. According to Ban Phoumako's village head, about 20 villagers work on the plantation where they earn about 25 000 kip (about \$3) per day. He explained:

The policy of the government is to try to improve this village – a poor village – so they gave the land to the Vietnamese company to improve the lives of the villagers by giving us jobs . . . This company has built a school and a health centre in Phoumako for the people, and maintains the road until Ban Tongkatay.

Asked how he considered the future of the smallholders in the village, he responded: 'All their plantation can still be extended. Villagers plant coffee trees every day. But it's true that we can't find new land'. Similarly, one villager from Ban Tongkatay told us that 'all

the smallholders can get the biggest part of their revenue from coffee until the end of their life since nobody lost all his land'.

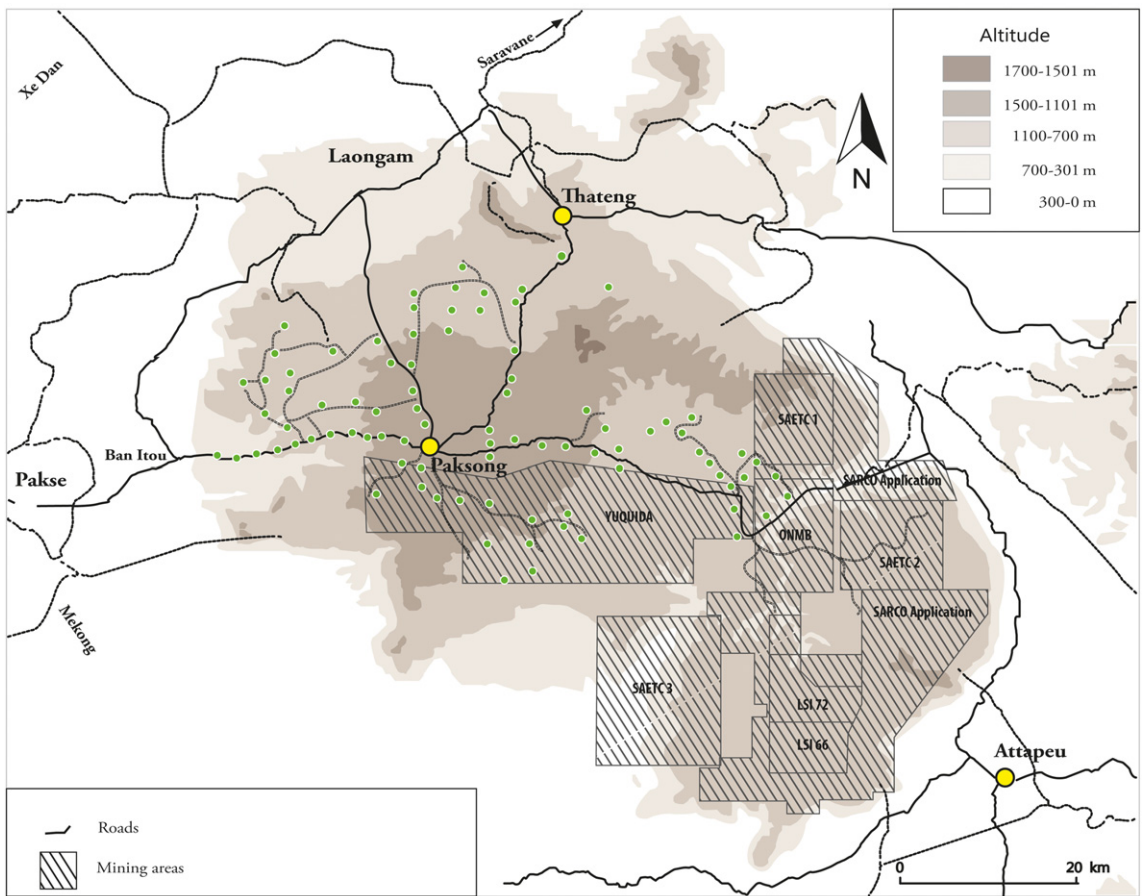
### From smallholding coffee production to mineral extraction and processing

While these coffee-growing areas are not yet included in any known government-granted land concession to foreign mining companies, they are in no way invulnerable to future mining, hydropower or other types of concessions (Obein 2007, 25–26). The GoL has granted or is in the process of granting about five land concessions to Chinese, Australian and Thai investors to exploit the region's confirmed and potential mineral (bauxite) reserves (Tulet 2007, 88). Unlike the coffee plantations, these mineral reserves are found in the south and east of the Bolaven Plateau (Figure 4).

Bauxite is found near the ground's surface and is thus extracted through surface mining (strip or open-pit mining), a process through which all vegetation and topsoil are removed. Sometimes the layer of topsoil can be restored after extraction is complete, but the restored soil loses its ability to retain water. This precludes annual crop production such as coffee (IRN 2005, 5).

One specific corporation, Sino Australian Resources Company (SARCO) – a joint venture between the China Nonferrous Metals International Mining Company (CNMIM) and the Australian Ord River Resources Corporation – has led the push to transform the regional economy of the Bolaven Plateau towards the mining sector. According to an October 2006 statement made by Ord River Executive Chairman, John Towner, 'The Lao Bolaven Plateau has the potential to be one of the biggest bauxite deposits in the world' (Ord River 2006).

SARCO has, or is actively pursuing, mineral survey and exploration access for two companies, the Chinese corporation called Yuqida Mining Group Ltd and the Lao Service Incorporation Co. Ltd. The bauxite tenement controlled by the Yuqida Mining Group Ltd, referred to as the 'Yuqida 589' (Yuqida) tenement, was, as of January 2008, 589 km<sup>2</sup> and initially targeted to yield 300 million tons (MT) of bauxite (Ord River 2008a). By December 2008, 30.6% of the 67.5 km<sup>2</sup> exploration target in the Yuqida tenement was estimated to contain 110 MT of bauxite, and the total amount of bauxite that may eventually be mined in the Yuqida Tenement was estimated to be between 440 and 570 MT (Mineweb 2008). The Yuqida site is only one of two already conceded tenements. SARCO is also performing exploration and definition drilling on behalf of a Lao corporation called Lao Service Incorporation Co. Ltd in what is referred to as the 'LSI 138' tenement, measuring 138 km<sup>2</sup>, and consisting of two sub-tenements, 'LSI-66' and 'LSI-72', based on their respective sizes (Ord River 2008a) (Figure 4).



**Figure 4** Mineral concessions  
 Source: Based on Ord River (2009, 75)

According to April 2008 estimates, the LSI tenement contains an additional 20 MT of bauxite, thereby making SARCO's total estimated bauxite resource on the Bolaven Plateau 130 MT. The present estimated quantity of the resource is important to note because once 300 MT are confirmed to exist, SARCO will have the authority to initiate feasibility studies for a full-scale alumina refinery to be built on the Bolaven Plateau (Ord River 2008b).

SARCO's goal to develop a 'world-class aluminum industry in Laos' (Ord River 2007) by not only performing bauxite mining, but by also building an alumina refinery and aluminum smelter, which make the possibility of even more land being conceded to foreign investors wishing to capitalise on the Bolaven's new mining sector. If the plans for an alumina refinery and aluminum smelter do come to fruition, then it would be increasingly difficult to make an argument against the expansion of mining rights over the entire region, as so much capital and infra-

structure would already have been invested. Indeed, rumour has it that the total amount invested might exceed the investment made for the Nam Theun II dam, which with an estimated base project cost of \$1.25 billion, is 'the largest investment ever made in Lao PDR and the world's largest private sector hydroelectric project financing' (Miga 2006, 1).

The existing bauxite concessions are more or less on the southern and southeastern parts of the Plateau (Figure 4), where fewer smallholding coffee-producing villages are located. However, according to one of its March 2008 statements, the Chinese-Australian joint venture has, 'an application for an [additional] 867 km<sup>2</sup> area in its final stages of approval', that, when combined with its current bauxite tenement areas, will provide 'access to close to 1,550 km<sup>2</sup> on the Bolaven Plateau' (Ord River 2008c), which means that the company would effectively have resource rights to nearly 40% of the entire Bolaven Plateau. The new tenement SARCO is hoping



to acquire (or perhaps has already acquired) will be the first one that makes significant leeway into the north-eastern part of the Plateau where most coffee-producing villages are located. Thus, while smallholder coffee production still represents the most prevalent type of land use system on the Plateau after forests<sup>3</sup>, this might change. The result of these processes is likely to be a smallholder coffee industry operating in an increasingly small section of the Plateau's northwest.

The impacts of the impending expansion of the bauxite/alumina/aluminum industry on the smallholding coffee producers of the Bolaven Plateau region cannot be understated. An April 2008 statement made by Ord River (which holds 49% ownership in SARCO; Ord River 2009) claims that the highly prospective areas of bauxite ore are found in difficult to access 'areas that are partly covered by forests' (Ord River 2008b). However, a subsequent May 2008 SARCO presentation (SARCO 2008) on the project's progress claims that 'Initial satellite studies were aimed at defining areas with low intensities of agriculture and at defining bauxite [areas]', but then immediately proceeds to concede that 'Agricultural areas were found to cover most of the Yuqida tenement with small areas of forest still left'. While SARCO and senior Champasak officials (*Vientiane Times* 2009) would still like to present mining as an activity that threatens few smallholding coffee farmers, it will be less so as mining concessions are given towards the north of the Plateau.

According to two villagers from Ban Houay Kong, four villages southeast of Ban Houay Kong are threatened with relocation because they are located on prospective bauxite pits: Thadikseua (already resettled in the 2000s in anticipation of the Xe Pian – Xe Nam Noy dam), Nong Phanouan and Houay Chot (which were also scheduled to be moved but in the end were not; Khamin 2008a) and Nam Tuat. Three representatives of each of these villages had been invited to attend the project meeting held at Pakse Grand Palace in 2010 but in May 2011 they still did not know the time or place of their relocation.

While now relatively few smallholding farmers are threatened with relocation (many people were relocated in the 1990s and 2000s from the areas now allocated for bauxite; Khamin 2008a), this does not mean that the land is 'empty' or 'barren'. These mines directly encroach on protected areas: the Dong Houa Sao NBCA is located 35 km west of Slaco's planned mine area, the 2665 km<sup>2</sup> Xe Pian National Protected Area is located 3 km west of Slaco's planned processing site and 15 km southwest of the mine area, and 63% of the 1240 ha large Dong Bak District Protected Area is located within the boundaries of Slaco's processing site. Thus, apart from displacing people, the mining will lead to drastic transformations of the land use of the region, from conservation to devastation (Lazarus 2009).

### From smallholding coffee production to hydropower

There are three hydropower projects on the Bolaven Plateau, either existing or in the final planning stages: the Houay Ho (completed in 1999), the Xekatom, and the Xepian-Xenamnoi hydropower projects (Figure 5). The Houay Ho hydroelectric power project was the first dam developed in Laos under the 'Build-Operate-Transfer' or BOT scheme (Khamin 2008a). Under a 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 to be transferred to control of the state.

One village, Nam Han, was directly located in what would become the reservoir area for the Houay Ho dam. Ultimately, though, a total of 12 villages were relocated out of the watershed areas of the Houay Ho, Xepian and Xenamnoi rivers. The Houay Ho Power Company (HHPC) itself explains on its website that Nam Han was the only village directly impacted by the dam's reservoir, and that the other 11 relocated simply due to the GoL's 'environmental protection program' (HHPC 2008). The villages were moved to a relocation site north of Ban Houay Kong called Chat San village, roughly translatable into 'planned village' (Khamin 2000, 26). In total, about 640 households, or 2700 people, were relocated to Chat San, essentially all of whom belong to the Mon-Khmer ethnic minority group Nya Heun (IRN 1999).

The government built housing and a road for the relocatees, as well as the land to grow coffee seedlings, and promised to provide the resettled families with 15 kg of rice per adult for 3 years, a period sufficient for the new coffee seedlings to mature and begin producing harvestable fruits. For 'the 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, 74). However, there were problems with this plan<sup>4</sup>.

To begin with, according to the Chat San villagers, many families did not receive the monthly supply they had been promised. Many, in particular those who relocated after the deadline set by the government, claim that they received only 2 or 3 kg of rice per month. In addition, while households were originally promised 2 ha of land (IRN 2004, 44), many claim to have only received approximately 1.5 ha, most of which was not of productive quality. Furthermore, most of the allocated land – approximately 80% (Khamin 2008a, 74) – was already claimed by the long-established Laven villages of Houay Kong and Nam Tang, who would confront the Chat San villagers when the latter would try to use the land. The result is that 'while 90% of the relocated families used to be self-sufficient in rice, it is now [2004] estimated that

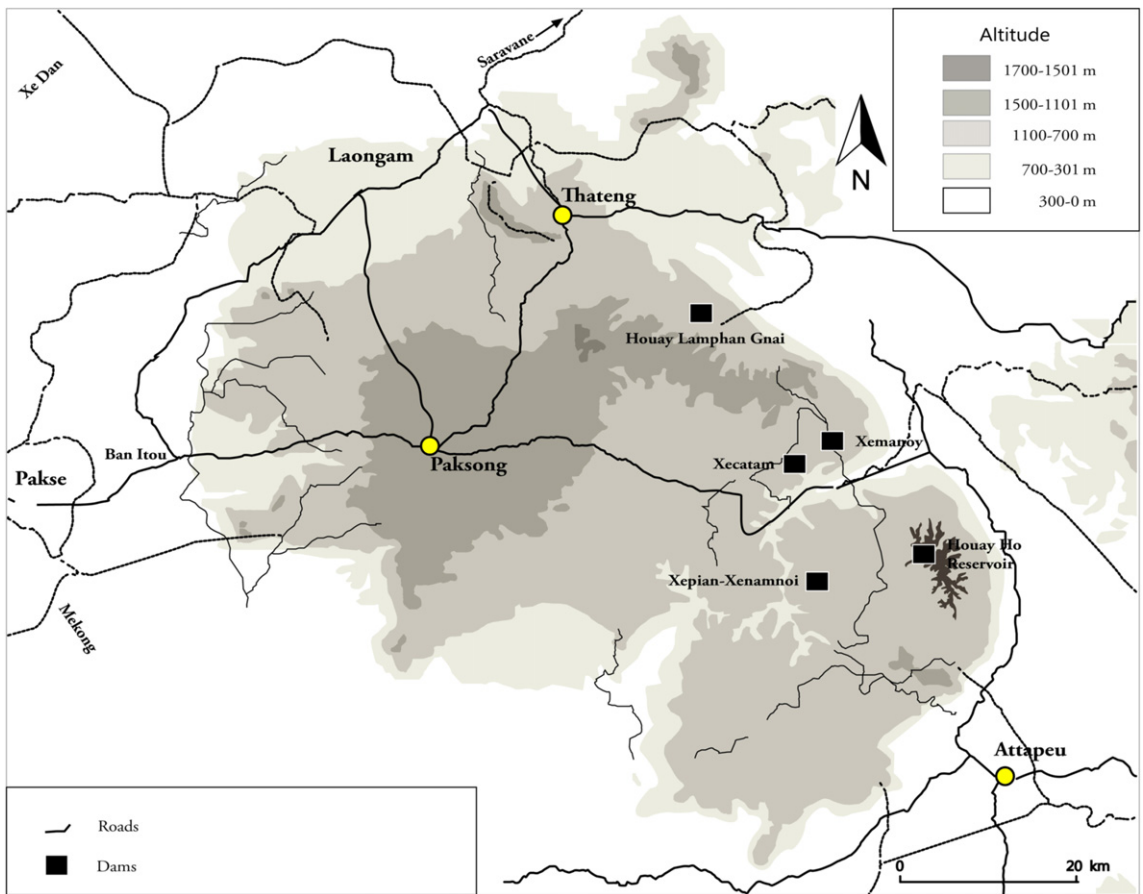


Figure 5 Hydroelectric dams

95% have rice deficiencies, with enough rice for only three months of the year' (IRN 2004, 2).

The problems of land inadequacy and food insecurity have led most of the Nya Heun resettled to Chat San village to spend long periods every year at the sites of their old villages. In 2000, Khamin reported that approximately 30% of all the houses in Chat San village looked abandoned (2000, 28). During our field visits in 2009 and 2011, it appeared that the percentage of vacant households was even greater, at approximately 50–60%. In 2009, we encountered some houses that were occupied only by adolescents and their younger siblings, whose parents insisted they stay in the village so they could go to school, while the parents worked for several months on the old lands. The ongoing movement of resettled Nya Heun people from their resettlement sites to the sites of their traditional lands illustrate an example of what Evrard and Goudineau (2004, 939) have termed 'resettlement-induced forms of mobility' 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'.

A newly established coffee plantation further decreases the amount of land available to the people living in Chat San. The Singaporean Outspan Bolovens Ltd received a 638 ha concession for coffee plantations in 2009, and planned to expand coffee plantations to 3000 ha in Paksong district (Champasak province) in 2011 (KPL 2010). Part of the 2009 concession is inside the territory allocated to Chat San and covering the coffee plantations of about 10 families. According to a group of villagers we interviewed in May 2011, the village head was unable to stop the plantation from taking over the land because that land had been allocated to the company by the provincial government, and the villagers had not yet received land titles for their land.

At least two hydropower projects are still planned for the Bolaven Plateau. One is the Xecatam Hydroelectric Project, north of Chat San, for which a memorandum of understanding between the Lao gov-

ernment and the Japanese KANSAI Electric Power Co. was signed in September 2004 (Kansai 2006; Khamin 2008b; XHPP 2011). Although the construction of the dam has not started yet, its 763 ha reservoir will eventually flood the paddy rice and swidden rice fields of Ban Nong Mek and Ban Nam Houng, two long established Nya Heun villages (Phanmatha *et al.* 2009). These two villages are no longer planned for relocation (unlike what the original plan suggested), but the reservoir would nevertheless flood the more productive paddy rice fields, leaving the villages with a larger rice deficiency than they are experiencing at present (Phanmatha *et al.* 2009; XHPP 2011). As a form of compensation for the paddy fields lost, the project plans to allocate to the villagers a new area, situated at Thoung Pongling, a lowland valley 3 km west of Nong Mek. However, this place is already cultivated by the adjacent village of Ban Pongling (XHPP 2011). The problems presently experienced by Ban Chat San villagers – being allocated land already claimed by another village – are repeated in Ban Nong Mek and Ban Nam Houng. Ironically, Ban Nong Mek already suffers from the establishment of two coffee plantations on 122 ha of its territory, one by Outsplan and one by Dak Lak Rubber Co.

### Discussion and conclusions

In examining the dynamic land use changes currently taking place in the Bolaven Plateau region, it becomes apparent that smallholding coffee farming is being increasingly threatened by new, more capital intensive land uses, able to generate larger profits. This raises three interrelated questions. First, about the development path that the Lao government is pursuing. Second, about what happens to the relocatees. Third, how to accommodate these disparate – and conflicting – land uses on the Bolaven Plateau.

The common view propagated by the Lao government is that it is attempting to develop the country, to exit the 'least developed countries' group of nations by 2020 (Lintner 2008), and that to do this it needs to attract foreign capital – which is only interested in land and the product of that land. The view that the government is doing its best to develop the country is widely accepted by the people we interviewed, even the relocatees who suffer under the present policies.

This broad approach towards the development of the country (and the role that the Bolaven Plateau plays in it) can be easily justified. Laos is a 'least developed country' with a GDP per capita of only US\$986 in 2010. With limited opportunities, land and the products of land (coffee, rubber, hydroelectricity and bauxite) are some of the few goods that the government can exploit to obtain (foreign) capital to invest in the development of the country. However, the question arises as to whom that development is meant for, and this brings us to the second question raised above.

We mentioned in the introduction that the common point of view is that provided the relocatees are compensated for the assets they lose, the investment that forces them off their land can be justified. Yet, we have seen that in the case of the relocatees in the Bolaven Plateau, this compensation in many cases is merely hypothetical. People are often relocated to areas which are already claimed by others, forcing them to return to farm their original land, illegally and at considerable distance from their new village, if that land is still available and accessible. Also, in many cases the compensation they are supposed to receive does not materialise, putting them in a position similar to that of refugees (as discussed in Heming *et al.* 2001). It seems that the people living on the Bolaven Plateau are at best bypassed by the benefits of the foreign investment pouring into the region, and at worst the victims of such investment (*Vientiane Times* 2007). This strengthens the argument put forward by Cernea and Mathur (2008) that the people living in the areas where investment takes place should be the first to benefit from such investment. The reasons why smallholding coffee farmers are not being properly compensated can be put down to the widespread corruption at all levels in Laos, and the failure to institute the rule of law.

Increasingly, there seems to be a competition for land among the investors. The first comers take over the best (most accessible, most fertile) land, with the late comers having to satisfy themselves with the remaining land for which they are forced to pay more, since opposition to land grabbing is slowly increasing. So far, there is still a separation of land uses, with mining taking place in the south, and coffee plantations in the north. But there is already some overlapping (Figure 6), and as more land will likely be allocated for mining in the north, this will increase.

There also seems to be competition among districts and provinces, and civil servants within these political entities, to distribute land as quickly as possible, before others do so (Dwyer 2011). As Stuart-Fox (in MacKinnon 2008) stated, 'It's simply a matter of greed. Officials are grabbing what they can. Companies need land and are prepared to pay well. It all goes under the table'. Some sales (or leases) of land are sanctioned by the central government, but some are promoted by the provincial governments, and are not regulated, or registered, centrally. The Ministry of Planning and Investment (MPI), the organisation that is responsible for attracting and authorising transnational deals, has information on only between 5% and 9% of all projects in the country, as measured by land area (Dwyer 2011). In particular, the MPI 'does not hold information on the areas of medium and small-scale plantation projects (less than \$3 million investment and production area less than 100 hectares), which have been approved at the provincial level' (Voladet 2009, 3). In many cases, land is also allocated by the district authorities, which may give

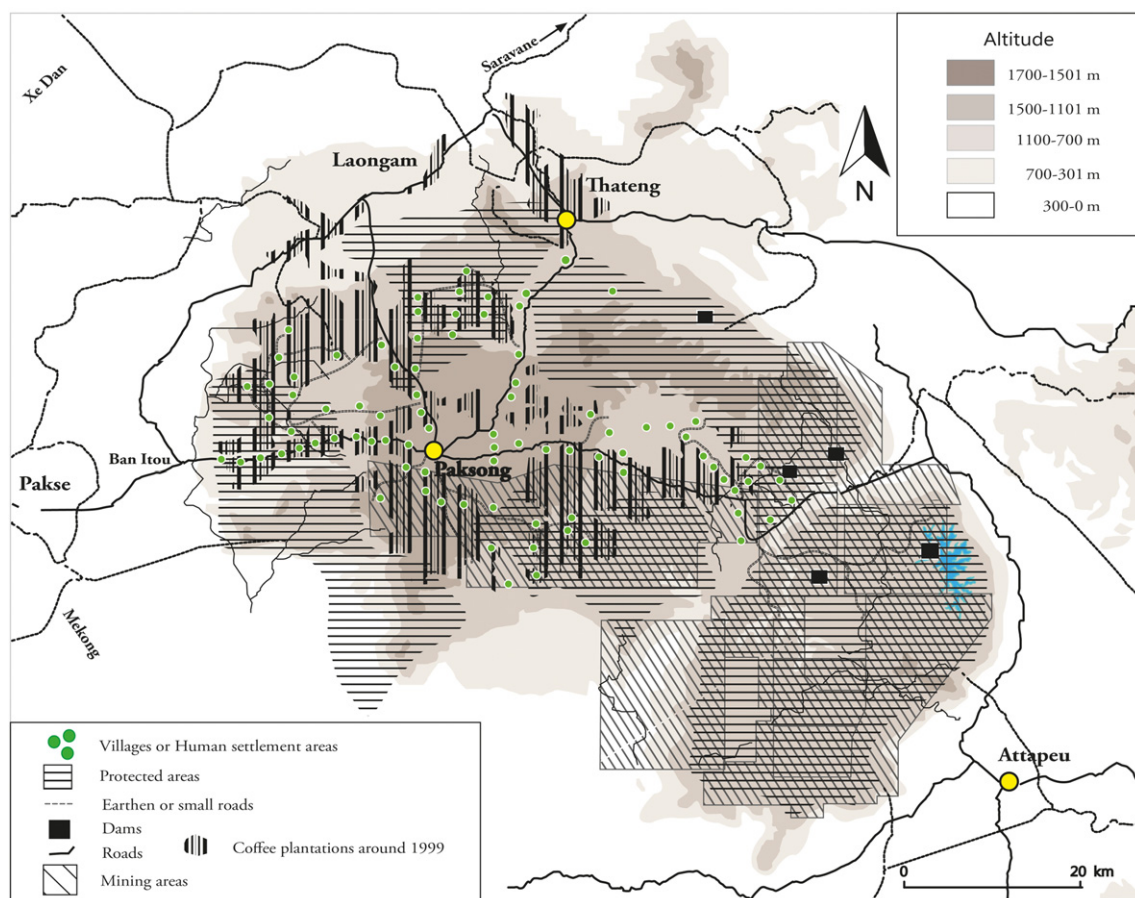


Figure 6 Land use conflicts in the Bolaven Plateau

concessions that the provincial authorities – let alone the central authorities – know nothing about. It is not surprising then that different investors – perhaps inadvertently – may obtain portions of land of the same villages, as is the case of Ban Nong Mek, each grabbing a small part of the total village land, but together compromising the ability of the villagers to sustain their livelihoods.

When the land is allocated by the provincial and district authorities, it is they who decide on the amount of compensation that villagers should receive. Since one can expect more stringent compensation for the villagers to reduce the kickbacks to the civil servants, it is not entirely surprising that many villagers receive little compensation (see also Baird 2011). As Schuettler (2008) writes, in many cases local officials 'go to a village and say 'this land is degraded and can be used for plantation development', without any compensation to the villagers. When considering that civil servants earn between \$20 and \$60 per month (FAO 2006), while having control over resources (land

or minerals) worth millions, it is to be expected that 'officials are grabbing what they can'. As an anonymous foreign advisor in Vientiane quoted in MacKinnon (2008) stated, 'The situation is completely out of control. It's a fire sale. People in power are just desperate to get their hands on the money so they don't miss out. For the companies coming in it's a massive land grab.' The competition to allocate land also prevents the Lao government from actually benefiting from such land grabs by raising funds that can be used for the development of the country, which are the justifications behind foreign investments in the first place. Land is leased for very low prices, of between \$3 and \$9 a hectare per year, a fraction of the commercial value (MacKinnon 2008). In the meantime, Laos is slowly running out of land. As an anonymous expert quoted in MacKinnon (2008) stated 'It's a myth that Laos has so much virgin land. There's no land left. Plantations promised 20,000 hectares or 50,000 hectares can't find it when they survey. They might get 50 hectares here or there.'

The central government has tried to improve regulation. In May 2007, the Lao government declared a moratorium on land concessions over 100 ha. What prompted the moratorium was a story in the *Vientiane Times* of the problems caused by a Vietnamese rubber concession in southern Laos (Baird 2010). However, the more fundamental causes of the moratorium were the lack of transparency of the agribusiness investments, and the lack of knowledge by the central government of the most fundamental information on such investment: which land has been allocated, what payment was made, what crop is being farmed, what compensation was paid to the villagers, etc. During the speech announcing a moratorium on land concessions, the Prime Minister at the time, Bouasone Bouphavanh, emphasised the need for better surveying: 'Previously, once an agreement was signed for industrial tree plantations, investors would start cutting down trees straight away, but this was something that had to change, [the prime minister] said. Officials should first carry out proper surveys to determine how many hectares of the land were owned by locals, or lay in protected or watershed areas, and report the findings to the government for consideration. 'These problems were caused by deficiencies in our strategy, and we will now review our regulations that are incompatible with the country's land laws,' he said.' (*Vientiane Times* 2007). Yet, the moratorium seems to be ignored by provincial governments. Only a month into the moratorium, the governor of Vientiane province granted 705 ha of land to a South Korean rubber project (Schuettler 2008).

The situation of the Bolaven Plateau exemplifies some of the problems that rural people are confronted with when capital enters rural areas. In Laos the position is that short-term sacrifices are needed for the long-term economic development of the country. Unsurprisingly, these sacrifices are expected from those with the least political power: minorities, farmers and the poor living far from the centres of power, Vientiane and the regional capitals. In the rural areas, in this case the Bolaven Plateau, they are at the mercy of the local civil servants, who are expected to oversee the use of very valuable resources, and yet receive very low salaries. It is not surprising that the people among whom the investments take place are those international capital and local civil servants who are the least concerned about, and end up living in 'refugee-like' situations.

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### Notes

- 1 Of course this distinction between recipients of capital and recipients of the products of land is not always clear cut. For example, Vietnamese companies held large investments in Laos and Cambodia (Baird 2010).
- 2 In August 2011 it was sold for US\$1300 /ton for robusta and US\$5300 /ton for arabica (S. Sisombath, personal communication, 5 August 2011).
- 3 In Pakxong district, forests account for nearly 58% whereas cultivated land represents only 25% (DAFO-Pakxong 2011).
- 4 Many of the negative socioeconomic impacts of the Houay Ho dam have been documented in various case studies on the project (IRN 1999; Khamin 2000, 2008a; Sayboulaven 2004; Delang and Toro 2011).

### References

- AP 2007 Vietnam to harvest coffee in Laos *Associated Press* 19 July
- Baird I G 2010 Land, rubber and people: rapid agrarian changes and responses in Southern Laos *The Journal of Lao Studies* 1 1–47
- Baird I G 2011 Turning land into capital, turning people into labour: primitive accumulation and the arrival of large-scale economic land concessions in the Lao People's Democratic Republic *New Proposals: Journal of Marxism and Interdisciplinary Inquiry* 5 10–26
- Baird I G, Barney K, Vandergeest P and Shoemaker B 2009 Internal resettlement in Laos: reading too much into aspirations: more explorations of the space between coerced and voluntary resettlement in Laos *Critical Asian Studies* 41 605–14
- Barney K 2007 *Power, progress and impoverishment: plantations, hydropower, ecological change and community transformation in Hinboun District Lao PDR* Political Ecology series, (Re)making Governance series York Centre for Asian Research, York University
- Barney K 2009 Laos and the making of a 'relational' resource frontier *The Geographical Journal* 175 146–59
- Boungnaphalom E 2010 Mineral development in Lao PDR Paper presented at the *International Conference on Mining: Staking a Claim for Cambodia* 26–27 May, Phnom Penh
- Cernea M M and Mathur H M eds 2008 *Can compensation prevent impoverishment?* Oxford University Press, Oxford
- DAFO-Pakxong 2008a *Summary for 2007–2008 and plan for 2009* Pakxong District Agriculture and Forestry Office
- DAFO-Pakxong 2008b *Summary: Pakxong district village list* Pakxong District Agriculture and Forestry Office
- DAFO-Pakxong 2011 *Pakxong district land use and statistics* Pakxong District Agriculture and Forestry Office
- Delang C O 2006 Not just minor forest products: the economic rationale for the consumption of wild food plants by subsistence farmers *Ecological Economics* 59 64–73

- Delang C O and Toro M** 2011 Hydropower induced displacement and resettlement in Lao PDR *South East Asia Research* 19 421–48
- Diana A** 2007 Socio-economic dynamics of rubber in the borderlands of Laos Unpublished field report, Research School of Pacific and Asian Studies, Australian National University
- Ducourtieux O** 1994 *L'agriculture du plateau des Bolovens. Evolution du système agraire de la région de Pakxong – Sud Laos [Agriculture in the Boloven Plateau: evolution of Paksong agrarian region, South Laos]* FAO, Rome
- Duris D, Bonnal P and Pilecki A** 2002 The coffee commodity chain in Laos, and farmer strategies *Recherche et caféiculture* 60–74 CIRAD-CP, Montpellier
- Dwyer M B** 2011 Building the politics machine: tools for resolving the global land Paper presented at the International Conference on Global Land Grabbing, Institute of Development Studies, University of Sussex 6–8 April 2011
- Epprecht M, Minot N, Dewina R, Messerli P and Heinemann A** 2008 *The geography of poverty and inequality in the Lao PDR* Swiss National Centre of Competence in Research (NCCR) North–South, Geographica Bernensia, Bern and International Food Policy Research Institute (IFPRI), Washington
- Evrard O and Goudineau Y** 2004 Planned resettlement, unexpected migrations and cultural trauma in Laos *Development and Change* 35 937–62
- FAO** 2006 *Country strategy and program: Lao People's Democratic Republic 2007–2011* FAO, Rome ([www.adb.org/documents/csp/lao/2006/default.aspx](http://www.adb.org/documents/csp/lao/2006/default.aspx)) Accessed 1 February 2012
- Fortunel F** 2007 Le plateau des Boloven et la culture du café, entre division interne et intégration régionale. L'espace *Geographique* 36 215–28
- Frost S** 2004 Chinese outward direct investment in Southeast Asia: how big are the flows and what does it mean for the region? *The Pacific Review* 17 323–40
- Heming L, Waley P and Rees P** 2001 Reservoir resettlement in China: past experience and the Three Gorges Dam *The Geographical Journal* 167 195–212
- HHPC** 2008 Houay Ho Power Company ([www.houayho.com](http://www.houayho.com)) Accessed 20 October 2010
- High H** 2008 The implications of aspirations *Critical Asian Studies* 40 531–50
- High H** 2009 Rejoinder: complicities and complexities: provocations from the study of resettlement in Laos *Critical Asian Studies* 41 615–20.
- Hirsch P** 2001 Globalisation, regionalisation and local voices: the Asian Development Bank and rescaled politics of environment in the Mekong Region *Singapore Journal of Tropical Geography* 22 237–51
- IRN** 1999 *Power struggle: the impacts of hydro-development in Laos* International Rivers Network, Berkeley
- IRN** 2004 *The legacy of hydro in Laos* International Rivers Network, Berkeley
- IRN** 2005 *Foiling the aluminium industry: a toolkit for communities, activists, consumers, and workers* International Rivers Network, Berkeley
- IRN** 2010 Existing and planned Lao hydropower projects – September 2010 ([www.internationalrivers.org/files/LaoHydro2010\\_Sept\\_FINAL.pdf](http://www.internationalrivers.org/files/LaoHydro2010_Sept_FINAL.pdf)) Accessed 10 February 2012
- Kansai** 2006 *Xekatom Hydroelectric Power Project* Public consultation presentation materials, The Kansai Electric Power Company, Pakxe
- Khamin N** 2000 More trouble for the Heuny *Indigenous Affairs* (4) 22–9
- Khamin N** 2008a Case study nine: Houay Ho Hydropower Project in *Power surge: the impacts of rapid dam development in Laos* International Rivers, Berkeley 73–5
- Khamin N** 2008b Case study ten: Xekatom Hydropower Project in *Power surge: the impacts of rapid dam development in Laos* International Rivers, Berkeley 76–80
- KPL** 2010 Singaporean company to export 30% of Lao coffee beans (<http://laovoices.com/2010/05/07/singaporean-company-to-export-30-of-lao-coffee-beans>) Accessed 2 May 2011
- Lazarus K M** 2009 *In search of aluminum: China's role in the Mekong region* WWF Denmark, Copenhagen and International Institute for Sustainable Development, Winnipeg
- Lintner B** 2008 Laos: at the crossroads *Southeast Asian Affairs* 2008 171–83
- Mackinnon I** 2008. The resentment rises as villagers are stripped of holdings and livelihood *The Guardian* 22 November
- Mathur H M** 1999 Restoring incomes and livelihoods of project-affected people: Issues in resettlement planning *Scandinavian Journal of Development Alternatives and Area Studies* 18 51–75
- Messerli P, Heinemann A, Epprecht M, Phonsaly S, Thiraka C and Minot N** eds 2008 *Socio-economic atlas of the Lao PDR – an analysis based on the 2005 population and housing census* Swiss National Center of Competence in Research (NCCR) North–South, University of Bern, Bern and Geographica Bernensia, Vientiane
- Miga** 2006 Hydropower in Asia: the Nam Theun 2 Project World Bank Group Multilateral Investment Guarantee Agency, June ([www.miga.org/documents/NT206.pdf](http://www.miga.org/documents/NT206.pdf)) Accessed 10 February 2012
- Mineweb** 2008 Laos bauxite and alumina study for Ord River and China Nonferrous, 2 May ([www.mineweb.com/mineweb/view/mineweb/en/page36?oid=52176&sn=Detail](http://www.mineweb.com/mineweb/view/mineweb/en/page36?oid=52176&sn=Detail)) Accessed 20 October 2010
- Musole M** 2009 Property rights, transaction costs and institutional change: conceptual framework and literature review *Progress in Planning* 71 43–85
- Noland J D** 1998 Comparative analysis of the Laotian law on foreign investment, the World Bank guidelines on the treatment of foreign direct investment, and normative rules of international law on foreign direct investment *Arizona Journal of International and Comparative Law* 15 659–93
- Obein F** 2007 Industrial rubber plantation of the Viet-Lao Rubber Company, Baching District, Champassak Province. Assessment of the environmental and social impacts created by the VLRC Industrial Rubber Plantation and proposed environmental and social plans Earth Systems Lao, Vientiane
- Ord River** 2006 *Australian resource company pioneers a new aluminum industry in Laos* Ord River Resources, Sydney
- Ord River** 2007 *Ord secures additional bauxite exploration areas for Laos Bolaven plateau bauxite project* 23 January, Ord River Resources, Sydney

- Ord River** 2008a *Encouraging bauxite reconnaissance drilling results for the Yuqida tenement in the Bolaven Plateau, Laos* Ord River Resources, Sydney
- Ord River** 2008b *Maiden resource statement for Ord JV Company SARCO Bolaven Plateau Bauxite Exploration* Ord River Resources, Sydney
- Ord River** 2008c *Significant steps in the Bolaven Plateau bauxite project in Laos* Ord River Resources, Sydney
- Ord River** 2009 *Laos mining joint venture agreement signed* Ord River Resources, Sydney
- Parnwell M** 1993 *Population movements and the Third World* Routledge, London
- Phanmatha S, Jindarojana J, Doolgindachbaporn S and Doolgindachbaporn T** 2009 Optimum environmental management of human settlement: a case study of Nam Houng village, Xekatom Hydroelectric Power Project, Lao PDR *KKU Research Journal (GS)* 9 98–107
- Pholsena V** 2009 *Rôle des acteurs du développement dans la zone transfrontalière Densavanh-Lao Bao [Role of development players in a transfrontier area: Densavanh-Lao Bao]* Colloque Transiter, Vientiane, December
- Robichaud W, Marsh C W, Southammakoth S and Khounthikoummane S** 2001 *Review of the national protected area system of Lao PDR* Lao-Swedish Forestry Programme, Vientiane
- SARCO** 2008 *Bolaven bauxite project progress to 15 May 2008* Ord River Resources, Sydney
- Sayboulaven P** 2004 *Hydroelectric dams and the forgotten people of the Bolaven Plateau*. ([www.internationalrivers.org/files/Houay\\_Ho\\_2004.pdf](http://www.internationalrivers.org/files/Houay_Ho_2004.pdf)) Accessed 1 August 2011
- Schuettler D** 2008 Laos faces thorny land issues in Asia's orchard Reuters, 10 April
- Shi W** 2008 *Rubber boom in Luang Nam Tha: a transnational perspective* GTZ RDMA, Vientiane
- Sisouphanthong B and Taillard C** 2000 *Atlas of Laos. Spatial structures of the economic and social development of the Lao People's Democratic Republic* Silkworm, Chiang Mai
- Stuart-Fox M** 2009 Laos: the Chinese connection *Southeast Asian Affairs* 141–69
- Sun X, Katsigris E and White A** 2004 Meeting China's demand for forest products: an overview of import trends, ports of entry, and supplying countries, with emphasis on the Asia-Pacific region *International Forestry Review* 6 227–36
- Sunshine R B** 1995 *Managing foreign investment: lessons from Laos* East-West Center, Honolulu
- T&CTJ** 2007 Project to grow 3,000 ha of coffee in Laos kicks off *Tea & Coffee Trade Journal* 179
- Tan Y and Wang Y Q** 2003 Rural resettlement and land compensation in flooded areas: the case of the Three Gorges Project, China *Asia Pacific Viewpoint* 44 35–50.
- TNN** 2007 Vinacafe to expand coffee cultivation in Laos *Thanh Nien News* 21 July
- Tulet J C** 2007 *Development trends analysis on the Bolaven Plateau* Ministry of Agriculture and Forestry, PCADR, PAB, AFD, Vientiane
- Vientiane Times** 2007 Reducing poverty or perpetuating it? *Vientiane Times* 23 April
- Vientiane Times** 2009 Bolaven bauxite mine not to affect coffee growers *Vientiane Times* 20 May
- Voladet** 2009 *Sustainable development in the plantation industry in Laos. An examination of the role of the Ministry of Planning and Investment* National Economic Research Institute, Vientiane
- Wilmsen B, Webber M and Yuefang D** 2011 Development for whom? Rural to urban resettlement at the Three Gorges Dam, China *Asian Studies Review* 35 21–42
- Wong J and Chan S** 2003 China's outward direct investment *Expanding Worldwide China: An International Journal* 1 273–301
- XHPP** 2011 *Environmental Impact Assessment (EIA)*. Xekatom Hydroelectric Power Project ([http://reta.3sbasin.org/attachments/148\\_Xekatom%201%202009%20-%20Somsavanh%20Panmatha.pdf](http://reta.3sbasin.org/attachments/148_Xekatom%201%202009%20-%20Somsavanh%20Panmatha.pdf)) Accessed 5 May 2011
- Xiong S** 2011 *Land requisition compensation and resettlement issues and related policy analysis research* 3rd International Conference on Computer Research and Development (ICCRD), Shanghai, 11–13 March 2011