Civilising the uplands:

development of rubber plantations in remote areas of Lao PDR¹

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1. Introduction

In the preface of his fascinating book, *The Arts of Not Being Governed: an Anarchist History of Upland Southeast Asia*, Scott(2009: ix) terms vast areas of Asian hinterlands- known as the Southeast Asian mainland massif, covering 2.5 million square kilometres, composing 100 million diversely ethnic populations-as 'Zomia'. Scott views Zomia, a term proposed firstly by Van Schendel (2002), as 'the largest remaining region of the world whose people have not yet been fully incorporated into nation-states' (Ibid). No doubt that Scott accounts Zomia as a 'stateless' space from his metaphor of 'state' and 'non-state' space(Scott 1998: 186). The Zomia, as Scott states, is a zone of 'refuge' or 'asylum' (p. 22, 31,143) where its population chose 'to move outside the easy reach of the state power'(p. 128). Cultural, economic, and social features of Zomia contrast to what have been found in a state space, which is termed as a 'space of appropriation'(Scott 2009: 40) where it has been made to be legible to and accessible for the state to take advantage from a surplus of grains (usually from irrigated wet-rice cultivation) and corvée labours. Scott argues that while 'state' people have settled down in quasi-permanent areas and practice permanent agriculture, especially paddies, 'stateless' people usually maintain their mobility and shifting agriculture –an agricultural form of escape(1998: 23).

In the eyes of the modern state and lowland populations, hinterland people have been always seen as 'uncivilised' people. Their gricultural practices, settlement, social organisations, and culture of the upland people which differ from those lowland 'civilised' population are usually seen as 'simple', 'primitive', 'backward', 'destructive', and 'inefficient' (Laungaramsri 1999; Li 1999; Tsing 1999; Duncan 2004a, 2004b; McElwee 2004). Scott, however, attempts to deconstruct what he calls a lowland discourse on civilisation which sees hinterland populations, who are not yet incorporated into a 'state' space, as people who are 'left behind' civilisation(p. 128). He argues that 'uncivilised' features of hill peoples cannot be viewed as a given because it is the hinterland peoples who choose, politically and intentionally, to place themselves out of the civilisation through a process of 'self-marginalisation' or 'self-barbarianisation' (p. x, 128, 173-174). Scott notes that:

most,..., the characteristics that appears to stigmatize hill peoples- their location at the margins, their physical mobility, their swidden agriculture, their flexible social structure, their religious heterodoxy, their egalitarianism, and even the nonliterate, oral culture-

¹Paper prepared for RCSD International Conference 'Revisiting Agrarian Transformations in Southeast Asia: Empirical,Theoretical and Applied Perspectives', 13-15 May 2010 Chiang Mai, Thailand. Please do not circulate or cite.

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This paper is based on research is undertaking in Luang Namtha province. The research cannot be possible without the support from Faculty of Agriculture, National University of Laos, Luang Namtha PAFO, Sing DAFO, and Nalae DAFO.

far from being the mark of primitives left behind by civilization, are better seen on a long view as adaptations designed to evade both state capture and state formation. (p.9)

Thus, 'uncivilised' characteristics- their mobility, swidden culture, subsistence-oriented production- of the hill peoples are the strategies to maintain their distance from the state. 'Self-barbarianisation' makes hinterland people can be 'illegible' to the state, therefore escaping from being appropriated (Scott 2009: 179- 219).

Scott's argument provides pictures of relations between formation of the state and the subjects at the frontiers. He attempts to demystify the views looking at upland populations and their culture as those who are 'out of the reach of civilisation' by proposing a new perspective to see upland population's 'uncivilised' features as 'the arts of not being governed'.

It is important to note that Scott has already warned that his argument may not fit to the current situations of Southeast Asia hinterlands as the state has 'engulfed' into its peripheral areas(Scott 2009: xii). However, I think it might still be worth at some points to consider what is going on in Scott's Zomia region. How far upland population can maintain their 'uncivilisation' in a current era of globalisation. In which contexts that upland populations can or cannot maintain distance from civilisation.

Above questions will be reflected through upland situations in Lao People's Democratic Republic (hereafter, Laos). The paper looks at the expansion of rubber planted areas, in mountainous areas of a northern province of Laos, Luang Namtha. In this paper, the expansion of rubber trees is read as a part of a 'civilising' project being brought to Lao borderland areas. Instead of looking only the role of the state, the paper details how the state and non-state actors- from global, national and local levels- have involved in the upland civilising project. The paper also attempts to clarify how upland people react to the 'civilising' project.

This paper begins with the global context of the rubber expansion. The paper then summarises what have been seen as the upland problems and some limited success to resolve the upland problems. In the following section, the paper considers why the state considers that a rubber tree is likely to be compatible with the attempt to develop the uplands. Two different paths of rubber boom in two upland communities in Luang Namtha province are also detailed for considering how 'civilisation' climbs hills.

2. Global context of the rubber boom

The global demand for rubber, both synthetic and natural, had increased significantly since late 1990s, from lower than 15 million tons in 1995 to 18.4 million tons in 2002 before reaching 20 million tons in 2004, 22 million tons in 2006, and 23.2 million tons in 2007. Due to the global economic situations, the world's rubber consumption slightly dropped to 22.3 million tons in 2008 (Thai Rubber Association n.d.). However, it is believed that the decline in rubber demand is only a shortening period. Assuming that the world economy will recover from the recession soon, the International Rubber Study Group (IRSG) forecasts that the world's rubber consumption will reach 22.5 million tons in 2011 and continually rise to 27.2 million tons in 2015(Smit 2009).

The rapid increase in rubber demand significantly relates to the growth of the Chinese economy in last decade. China has become the world's largest rubber consumer since 2002; it consumed 18.10 per cent (3.34 million tons) of total rubber supplies, surpassing the former largest consumer, the United States, accounting for 16.31 per cent (3 million tons). China's share of the global rubber consumption accounted 21. 70 per cent (4.47 million tons) in 2004, and constantly grew to 24.8 per cent (5.46 million tons) and 27.07 per cent (6.04 million tons) for 2006 and 2008, respectively (IRSG 2009 cited in Thai Rubber Association n.d.).

Due to China's economic growth, especially in automobile sector which grows at 20 per cent each year, it has been projected that China's rubber demand will reach 30 per cent of the world's consumption by 2020 (Douangsavanh et al 2008: 5; McCartan 2007). However, China today can produce only 4 million tons annually (McCartan 2007). No doubts that Chinese demand is filled by imports, mainly from Asian countries.

Through synthetic rubber (SR) accounts more than half of the world's rubber consumption, the share of natural rubber (NR) has increased constantly from 40.9 per cent (around 7.6 million tons)in 2002 to 43.6 per cent (9.7 million tons)in 2008 (IRSG 2009 cited in Thai Rubber Association n.d.). The increasing demand for NR is not resulted exclusively from the growth of the economy but it also relates to some other factors: the rise of energy and oil price resulting in the increasing costs for producing SR, and environmental concerns over a SR-producing process (Douangsavanh et al 2008: 5). It is projected that by 2020, the global demand for NR will reach 13.6 million tons while the world's producing countries are estimated to produce only 12. 6 million tons(IRSG 2007 cited in Hicks et al. 2009: 17). Figure below shows a trend of NR production and consumption until 2020.



Figure 1: Global consumption and production for NR (2002-2020)

Source: extracted from Thai rubber association (n.d); Hicks et al (2009); Smit (2009)

IRSG's data (IRSG 2009 cited in Thai Rubber Association n.d.) reveals that China has also been ranked number one for NR consumption. China's consumption of NR rapidly increased from 18.47 per cent of the world's NR consumption (1.4 million tons) in 2002 to 23.7 per cent (2, 15 million tons) in 2005 and 26.32 per cent (2.56 million tons) in 2008. Chinese domestic production of NR, however, cannot meet its increasing demand. In 2008, China could contribute only 5.6 per cent of global production of NR; its domestic production accounted 21.5 per cent of its consumption(Thai Rubber Association n.d.).

The rising demand for NR led to a remarkable increase in the world's NR price over 180 per cent from just around 500 US\$ per ton in 2002 to reach its peak at almost US\$ 2,000 per ton in 2007 (FAO 2008: 15)³. However, NR price began dropped from late 2008 until the end of 2009 due to the world's economic hardship. In Thailand, the world's first largest producing countries, price of natural latex in December 2008 ploughed to a trough of US\$ 1 per kilogram (THB 33.77), dropping from its highest price at around US\$ 3 (THB 98.5) in June. Natural Latex price has recovered since early 2010. Its price rose to more than US\$ 3 (THB 102.4) per kilogram in March (Office of Rubber Replanting Aid Funds n.d.).

The Chinese rising demand for NR and the attractive NR price have led to rapid expansion of the world's rubber planted areas, especially in Southeast Asia – the world's largest producer. China itself had 740,000 hectares of planted areas in 2005; over 50 per cent of cultivated areas was located in Hainan Province, followed by Yunnan (41 per cent), and Guangdong (5 per cent) (Douangsavanh et al 2008: 9). China finds difficulties in expanding further plantations at home due to the limits of domestic areas suitable for rubber trees. It, therefore, has to seek new suitable production area abroad; the lower Mekong countries including Laos, Cambodia, Myanmar, and Vietnam become attractive for its investment. Hence, seeking international cooperation to develop overseas natural rubber productions, is placed as one of the 'three-step development strategies' to secure raw material rubber supplies of a Yunnan Agricultural Plantation Group Co., Ltd., a state-run rubber company in Yunnan (Yang 2008). The company then has followed the Chinese government's policies on the promotion of outward foreign direct investment, the 'Going Global Strategy' also referred to as 'Going out'⁴. The company has gone to Myanmar making agreement to develop 6,667 hectares (100,000 mu) of plantations in Wa State. The company has also got the permission from the government of Laos (hereafter GoL) to establish plantations in four northern provinces (Luang

³ Price of coffee and palm oil rose around 90 per cent and 70 per cent, respectively, for the same period (see FAO 2008: 15)

⁴ The strategies was initiated in late 1990s but formalised later in the '10th Five-Year Plan for National Economic and Social Development' in 2002. The main principle for the Chinese government's promotion of overseas investment is the domestic limits of natural resources and raw materials for the country's industrial development (YDOC 2007 cited in Shi 2008: 24). According to the 'going-out' strategy, Chinese enterprises which go abroad to invest in natural resource sector can obtain benefits from a subsidy policy. Rutherford and colleagues (Rutherford et al 2008) observe a pattern of Chinese capital going to three lower Mekong countries (Laos, Vietnam, and Cambodia) that it is under a form of 'importing resource, exporting manufactured goods'. Agribusiness, hydropower, and mining sectors are most favourable for Chinese enterprises in these three countries but the characteristics of investment are different. While Chinese capital has been able to push vast investment in all three sectors in Laos and Cambodia, only mining sector is considerable for Chinese investment in Vietnam(Rutherford et al 2008).

Namtha, Udomxai, Bokeo, and Xayaboury). According to the agreement, signed with the Ministry of Agriculture and Forestry of Laos, the company has obtained permission to set up 33,333 hectares (500,000 mu) of demonstrative rubber plantations⁵ and to promote local people establishing 133,333 hectares (2 million mu) of plantations under a contract system (Yang 2008).

Low rental rates of land in these lower Mekong countries are not attractive only for Chinese investors but also other world's NR producing countries in the region, Thailand and Vietnam in particular, which find difficult to obtain suitable land at the low prices at home⁶.

Thailand, the world's largest exporter of NR, had around 2.4 million hectares of cultivated areas in 2007 with around 1.8 million hectares put into the production. Thai rubber enterprises have also gone to Laos ensuring they will have more raw materials to supply rubber industries in Thailand. Thai companies set up plantations mainly in central and southern parts of Laos. One of Thailand's largest producers and exporters, Thai Hua Rubber Company Ltd has jointed up with Chen Shan Group, China's second largest rubber producers, and New Chip Xeng Company- a Thai shipping company in Laos- establishing Lao- Thai Hua Rubber Company Ltd. The company plans to operate 300,000 hectares of the plantations in 6 provinces in the central and southern regions. Half of total areas is planned to be under a contract system with Lao farmers while the company itself is responsive to establish the second half under a concession pattern. The contract lasts for 35 years (Manager Daily, 28 March 2010)⁷.

In Vietnam, rubber cultivated areas increased from around 418,000 hectare in 2006 (Thai Rubber Association n.d.) to around 600,000 hectare in 2009(Vietnam News 3 January 2009). The country aims to increase the plantations, mostly in the central highland region, to 700,000 ha by 2020(Douangsavanh et al 2008: 10). Moreover, because of limits of arable land suitable for rubber trees at home, Vietnamese rubber companies have also sought to set up the plantations abroad. One of the country's largest rubber producers, Vietnam Rubber Group, plans to plant rubber trees on the 100,000 hectares of land in Laos and another 100,000 hectares in Cambodia (Bloomberg, 19 March 2009). This state-run company also look for expanding the cultivated areas in South Africa aiming to increase its production areas from 160,000 hectares now to 520,000 hectares by 2020 (Reuters 8 March 2010). Myanmar is another alternative source to supply raw materials to Vietnam's rubber industries. In March 2010, Memorandum of Understanding (MoU) on Agriculture between Vietnam's Ministry of Agriculture and Rural Development and the Myanmar Ministry of Agriculture and Irrigation was signed. According to the MoU, Vietnam's rubber firms are permitted to establish 200,000 hectares of plantations (Reuters 8 March 2010).

⁵ Lao official describes a demonstrative plantation as the planted area that the company sets up as a training centre for local farmers to obtain necessary knowledge and skills relevant to rubber issues. However, practically, the demonstrative plantation does not fulfil this task. It seems to be only a well-looking form of a concession.

⁶ Thailand is ranked number one of the world's largest NR producing countries while Vietnam is the forth, behinds Indonesia, and Malaysia. China is the biggest NR consumer of both Thailand and Vietnam.

⁷ Manager Daily reports that Lao-Thai Hua Rubber Company Ltd is a joint company between rubber companies from Thailand and China with Lao company. But, the company website states that the company is a 100 per cent foreign-owned company (see http://laothaihuarubber.com/index.html).

In Cambodia, it is recorded that the government of Cambodia has granted concession of around 250,000 hectares of land for setting rubber plantations. There is also an estimation that by 2030, the country's rubber planted areas will increase to 400,000 hectares(Hokleng 2008). In Burma, the official record shows that there was around 302,000 hectare of rubber trees in 2006 and the Ministry of Agriculture and Irrigation also aimed to increase for further 100,000 hectares by 2008(LNOD 2009: 7).

There is no doubt that remarkably increasing demand for NR is the primary factor leading to rapid expansion of rubber plantations in the GMS countries. It is estimated that, more than 500,000 ha of mainland Southeast Asia's upland areas may have been already converted to rubber trees (Ziegler et al 2009: 1024).Low rental rates on suitable Land in Burma, Laos, Vietnam, and Cambodia become favourable for highly profitable rubber investments which mainly are invested by China or aim to produce for the Chinese market. However, the market is not the only one factor for an amazing boom in rubber. In next section, the paper details some other conditions stimulating the dramatic increase in rubber plantations in Laos.

3. The upland problems and 'civilising' schemes

In Laos, influenced by Marxist ideas of a universal progress, modernising agricultural techniques was set as the primary objectives of the government after the Lao's People Revolutionary Party (LPRP) came to power in 1975. Lao agriculture at that time, even in the lowland areas, was seen as a 'backward' system. Kaysone Phomvihane, general security of the party and also the prime minister, expressed: '[i]n our country..., scattered agriculture took on a natural and autarkic character which was still very backward, and the mode of production was still *prefeudal*' (Phonvihane 1980 cited in Evans 1988: 299). The party viewed that the principle cause for the regret of Laos peasants was their 'backward' practice which should be eradicated by introducing of new agricultural techniques through cooperative work (Evans 1988: 228-229). However, the attempt to modernise Lao agriculture was performed only in lowlands, with a very short period⁸.

'Civilising' upland agriculture has become a primary concern of the government since the adoption of the 'New Economic Mechanism' (NEM), a shift towards a socialist market-oriented system. In 1986, Kaysone Phomvihane gave a speech to the Congress:

We should be aware that the commodity economy, including the simple commodity economy, is more advanced than the natural and self-sufficient economy. Therefore, our state must encourage and develop the commodity money relationship...with a view to turning the natural economy into the socialist-oriented commodity economy (Political Report 1986 cited in Evans 1995: 55)

The GoL faces a challenging task to manage natural resources for economic development and conservation purposes. Launching the NEM has led to transitions of Lao natural resource management. 'Modernising' upland agriculture, especially a dominant form of upland agriculture-shifting cultivation, has been prioritised by the GoL (MAF 1999: 48, 53; CPI 2006: 13; GOL 2005). Many policies, practices have brought to the uplands over three decades, claimed to bring

⁸ See Evans (1990) for the attempts of the GoL and the limited success of the cooperative system after the revolution.

'development' and the better life to upland people. The 'will to improve', borrowing from Li (2007), focuses upon shifting cultivation interwoven with opium and poverty problems.

3.1 The upland problems

Key concerns over upland agriculture are shifting agriculture and opium poppy cultivation which are linked to the poverty in the upland areas. From the perspective of the GoL, aid donors and some international development organisations, these issues are the serious problems of the uplands which should be resolved seriously.

3.1.1 Problems of shifting cultivation⁹

Shifting cultivation was a dominant form of agriculture in the upland Laos and other Lao ethnic population and ethnic minorities (non- Lao ethnic groups) engaged in practicing this agricultural system. Today, it is still a main economic activity of many upland communities, especially in the northern region. It was estimated that in 1990 around 210,000 households practiced shifting cultivation, covering an area approximately 210,000 hectares(GOL 2005: 39). The area under shifting cultivation was 148,000 hectares (156,720 households) in 1998 and decreased to 79,559 hectares (48,225 households) in 2009 (MAF 1999: 26; MAF 2010).

Shifting cultivation was not much concerned of the GoL before the adoption of New Economic Mechanism (NEM), a shift towards a socialist market-oriented economy, in 1986. The government's early attempt to control upland agriculture emerged in 1979 through the Council of Ministers (CM) Instruction No 74 on Forest Protection. According to the CM No 74, shifting agriculture was prohibited but only in watershed areas. In practice, enforcement was very limited(GOL 2005: 2-3). But after the NEM was launched, shifting cultivation has been a primary objectives of upland development programmes implemented by either the GoL or international development agencies.

From the perspective of the GoL and some development agencies, one of the major problems of shifting cultivation is that it is a 'destructive' and 'unsustainable' system. This problem is linked to the decline in Lao forest areas after the second half of the last century. It is estimated that in 1940, forest area covered around 70 per cent of the country but it failed to 64 per cent in mids-1960s, and only 47 per cent in 1989 (Tong 2009: 7). The government identifies various causes of the forest decline, including shifting cultivation in the uplands, firewood collecting, unsound logging practices, forest fire, forestland opening by lowlanders, and 'orange chemical' during war time (MAF 1999: 19). However, shifting cultivators have been always described as those who should be the blame for the decline in forest covers. The government sometimes mentions to shifting cultivation as the major causes of the forest loss (GOL 2005: 42). The government stressed in late 1980s that the country lost around 300,000 hectares of forests from shifting cultivation annually (GOL 2005: 3).

⁹ In Lao official documents and statements, slash and burn cultivation, swidden agriculture, and pioneer shifting cultivation are also used to refer to shifting cultivation. The GoL differentiates shifting cultivation from rotational agriculture but there is some inconsistence between use of shifting cultivation and rotational cultivation. Shifting cultivation is sometimes mentioned as rotational cultivation not as a slash and burn agriculture. This inconsistence is found in both an official document (MAF 1999: 73) and a report for development agencies (Richter et al 2006)

The perspectives which see shifting cultivation or '*hay kheuan nhai*' in Lao as 'harmful' system to the forest is resulted from the views of the GoL on the nature of shifting cultivation. This agricultural system is described by the government (GOL 2005: 39)that the system requires clearing new forestland every year for farming as shifting cultivators move every year from one place to another, usually forestland, without any intention to return to the old plots. According to the GoL's definition, Shifting cultivation is more destructive and unsustainable than another rotational cultivation, or '*hay moun vien*', as it is the system that farmers usually return to the old fallows after a recovery of soil fertility. Through the GoL sees the latter system as more sustainable than the former, the GoL, however, worries that it becomes unsustainable due to population increase (MAF 1999: 73). Vandergeest (2003: 53) disagrees with this view. He points that literature on swidden agriculture in Laos seems to exaggerate the impact of population concentration on the unsustainability of shifting cultivation. Research conducted at a village level in Huaphan province (Seidenberg et al 2003) shows that when a number of populations increase, villagers choose to reduce fallow periods rather than open new distant primary forest area as it is too far from their village which is now settled permanently.

Laying the blame mainly on shifting cultivators for the loss of forest areas seems to underestimate the fact that some state polices also caused deforestation. Since the *Lao People's* Revolutionary *Party* (LPRP) came to power in late 1975, Lao economy had grown from commoditisation of its natural resources. In late 1970s, nine State Forest Enterprises (SFEs) were established and an average of 200,000– 300,000 hectares of forest areas were allocated to each enterprise to manage-harvesting and processing of forest products rather than reforestation or protection (GOL 2005: 3). A study in villages in Luang Prabang and Oudomxay reveals that logging has been a primary cause of the forest decline rather than shifting cultivation(Fujisaka 1991).

At the National Forestry Conference, sponsored by the World Bank, held in 1989, issues having effect on national forest and forest protection were raised. The conference agreed to introduce the government launching policies and practices to return forest covers to 70 per cent of the country's total area by 2020. Stabilising shifting cultivation, a significant agenda of the conference, was highlighted as one of the national priorities(GOL 2005: 3-4). Two year later, the National Assembly endorsed the Socio-Economic Development Plan. One component of the plan was setting the aim of stabilising shifting cultivation by 2005 and eliminating it by 2010. At the beginning of this year, the Ministry of Agriculture and Forestry just provided the Ministerial Instruction to MAF's staff at provincial level to achieve the GoL's goal of stopping shifting cultivation, an agricultural system which leads to '[t]he encroachment and destruction of forests as well as forest resources put negative impacts on the environment every year' (MAF 2010).

3.1.2 Uplands and opium cultivation

Another 'uncivilised' feature of the uplands is that it is mentioned as a space of opium production and addiction. Shifting cultivation is seen as it has a close association with opium. Laos was ranked number three of the world's opium producer, behind Afghanistan and Myanmar. Through an export of Lao opium production was far less important than the world's top two producers, Lao was heavily criticised by the US (Baird and Shoemaker 2005: 8). Ten northern provinces were identified as the opium poppy growing areas and ethnic minorities living in the uplands were referred as poppy growers or opium addicts. Opium eradication has become a target of the GoL since late 1990s, strongly forced by the US and the United Nations Drug Control Programme (UNDCP). The US, as a major donor of the UNDCP, was a significant actor who pushed the GoL to speed up its opium eradication programme from mids-1990s to early 2000s through the UNDCP (Baird and Shoemaker 2005; Cohen 2009).

In late 1990s, Laos had almost 30,000 hectares of opium poppy cultivated area, which later dropped to 14,000 hectares in 2004 after a National Campaign on Drugs was launched in 2001. Thereafter, more aggressive campaign was implemented aiming to achieve the government's goal of eliminating opium cultivation. Opium poppy fields failed down to 2,500 hectares in 2005 and 1,500 hectares in the following year. However, the cultivation areas slightly increased to 1,600 hectares in 2006 (UNODC 2008: 15). The number of opium addicts dropped from over 52,000 to 28,000 in 2004, and 12,680 in 2008 (CPI 2006: 32; UNODC 2008).

Both shifting agriculture and opium poppy cultivation are central concerns of the GoL and international agencies in Laos. They are linked to a poverty problem in the uplands. In 2001, the government issued Prime Ministerial No 10 identifying 47 districts as the first priority poorest districts and 25 districts as the second priority, out of the total 143 districts throughout the country. Over haft of first priority poorest districts is located in the remote highlands and most of them are difficult to access (Richter et al 2006). Shifting cultivation is mentioned, by the government authorities (MAF 1999; GOL 2003; 2005) and development agencies (WB 2006; ADB 2008), as the significant cause of poverty in upland areas. According to the ADB's participatory poverty assessment (PPA) report (ADB 2001 cited in Rigg 2006:125) conducted in 2000 in 84 rural villages, 90 per cent of poor villagers relied on swidden agriculture. Richter and colleagues (Richter et al 2006: 60) also note that by 2002/2003, slash and burn agriculture was widespread across the 47 poorest districts. The ADB also link shifting cultivation with the poverty; it notes that 'most shifting cultivators live in poverty, their farming system unable even to meet household food consumption needs,' (ADB 2008: 1).

The association between the poverty and poppy cultivation is also described. The UNODC (2008: 8) asserts that most opium poppy growers usually live in poverty. The government has pointed to a strong correlation between opium and poverty by showing that opium fields were found in 67 districts in 2002; of these, 32 districts were among the 47 poorest districts(GOL 2003: 122). After rapid decline in opium cultivation in mid of 2000s, The UNODC has encouraged the GoL to develop a post-opium programme to improve livelihoods of former opium poppy cultivators and to prevent them returning to opium cultivation. The government has launched the 2006-2009 National Programme Strategy for the Post-Opium Scenario. The programme introduces the Action Plan targeting 1,100 poorest priority villages in 32 out of the 47 priority poorest districts. The programme aims to make opium elimination in these villages sustainable (LNCDC and UNODC 2009: 4-6). Furthermore, the government has developed the National Drug Control Master Plan Strategy for 2009- 2013. The aster plan sets 9 components but alternative development and poverty reduction is the focus of the plan¹⁰; the alternative development

¹⁰ Other 8 components are: i) trend analysis and risk assessment, ii) drug demand reduction and HIV protection, ii) civic awareness and community mobilisation, iv) law enforcement, v)criminal justice and the rule of law, vi) chemical precursor control, vii) international and national cooperation, and viii) institutional capacity building (LNCDC and UNODC 2009: 5-10)

and poverty reduction programme is allocated US\$ 44 million from US\$ 72 million of the strategy's total budgets(LNCDC and UNODC 2009: 11).

Overall, since the adoption of NEM, shifting agriculture and opium poppy cultivation have been ranked as the primary of Lao upland development programme. There is strong correlation between shifting agriculture, opium poppy cultivation, and the poverty. The attempts to resolve the upland problems have been made untiringly. A following section details some significant improvement programme implemented in the uplands.

3.2 Limited success of upland improving programme

The 'will to improve' has led to implementation of many policies and improving programmes in the uplands. Through there are some differences in the focus of each individual programme, promotion of a sedentary farm seems to be an essential element of many alternative development programmes. Permanent agricultural system is the most favoured agricultural system from the eyes of the GoL and development aid donors, believed that, it should resolve all the main upland problems: replacing shifting and opium cultivation, and reducing the poverty. Permanent agriculture is also an efficient tool to fulfil the state's goal of increasing forest covers. Moreover, as it is believed that opium poppy is grown in shifting upland rice fields, permanent agriculture would benefit to the state in controlling opium cultivation. Inspecting opium cultivation on permanent agricultural plots is much easier than doing this job on the agricultural plots that move every year.

The GoL stated in late 1980s that stabilising shifting cultivation should be achieved by providing alternatives to villagers not by ordering or forcing (GOL 2005: 3). One of the most significant policies which has a serious impact on upland population and agriculture is the Land and Forest Land Allocation Programme (LFAP), or 'beng din beng pa', introduced originally in 1994. The programme aimed to promote crop production to replace shifting cultivation, to protect forest, and to utilise allocated forest on sustainable basis(GOL 2005: 5-6). The programme, supported by the World Bank, and multilateral or bilateral development agencies, had assumption that land-right security should increase land's owner's incentives to intensify the use of lands and make productive investment on land. LAFP allocates forest lands to the community for sustainable management, and also allocates potential agricultural land and degraded forests to households, on a three- year temporary land use right. A long-term use right can be applicable only after the lands have been permanently used for three years (GOL 2005: 5). According to the LFAP, villagers cannot use the plots which have been left more than 3 years. The abandoned plots, including three-year fallows, should automatically return to the village community for being allocated to other villagers who have potential to do a sedentary farming (Ducourtieux et al 2005: 506). The plots under shifting cultivation cannot be granted a longterm use right; the government, influenced by the World Bank, believes that this measure should convince villagers to abandon practicing shifting cultivation and establish a permanent farm.

It is recorded that, between 1995/1996 and 2002/2003, LFAP was implemented in 6,830 villages (more than 50 percent the total villages of Laos) with the allocation of more than 9 million hectares of land (GOL 2005: 6). However, the success of the programme is questionable. Through the programme can reduce shifting cultivated areas and increase permanent farms, it seems difficult for villager to make a living under the 3 plots; they are not allowed to practice shifting beyond the three plots of allocated lands. A study in Kone Kean village in Luang Prabang finds that most of lands allocated for households' farming are degraded forests having short fallow periods (only 1 - 3 years)

while long fallowed land are classified as protection, conservation, or regeneration forests which cannot be used for farming (Satoshi et al 2006). It is likely that villagers face hardship to make a living from only three plots of degraded lands they have been allocated. Research based on study villages in Sayaburi, Vientiane, and Phongsaly points to the programme that cannot eliminate shifting cultivation as villagers see it is the only way to sustain their lives. Moreover, the programme also leads to a gap and social differentiations among villagers who have unequally access to the benefits of the programme. The study also points to the emerging of landless farmers due to limited potential in accessing to natural resources(Ducourtieux et al 2005). Vandergeest (2003: 51) also notes to the displacement and impoverishment generated by the programme; non- ethnic Lao seem to be most at risk of both situations.

To phase-out shifting cultivation, commercial crops have been introduced to the uplands. It is believed that agricultural commodities will improve the quality of life of upland populations who face restrictions on practicing shifting cultivation. There is optimistic belief that cash crops provide income for uplanders to be able to buy rice filling a gap period or even to have rice to eat without growing rice(Ducourtieux et al 2006: 66). The government also hopes that income generated from cash crops should be attractive enough for villagers to make productive investments for sedentary farming and stop practicing shifting cultivation. Moreover, commercial crops also function as opium-substitute crops. The GoL and international development agencies, especially the UNODC, have attempted to introduce commercial crops in the former opium cultivated villages aiming to prevent villagers to return to opium cultivation. The government and development organisations have worked continuously to develop necessary market infrastructures and skills providing uplanders to be ready for market integration¹¹.

However, a concern over the potential of cash crops to be the alternatives for upland peoples is raised. The UNODC's document (2008: 30) notes that by 2005, around 50 per cent of former opium growing villages still could not find new alternatives and they were at risk of resuming poppy cultivation. The report also states that only 41 per cent of the former poppy growing households has just enough livelihood assets to cope with the stop of opium cultivation (UNODC 2008: 31). The success of replacement shifting cultivation by commercial crops is also limited. Some research observes that shifting cultivation cannot be easily eliminated by introducing cash crops. The 'improving' projects through cash crops , which are not suitable to the socio-economic context of the community, may not be welcomed by villagers. Thus, the failure of the project should not be surprising (Ducourtieux et al 2006).

Overall, Laos' upland agricultural system has been described as 'backward' or 'outdated' system. A dominant form of upland agriculture, shifting cultivation, which is linked to forest degradation, opium production, and the poverty problem in the uplands, is unwanted system from the perspectives of the government and development agencies. Many attempts to have been made to improve or develop the uplands and upland population. Considering through the decrease in shifting agricultural and opium poppy cultivation fields, one may view that the government and development agencies to modernise the uplands. However,

¹¹ It is stressed in the government's 'Strategy for Reform in the Agriculture and Forestry Colleges towards 2020' that the objective of reform strategy for technical agricultural education is 'to develop skill man resources for market-based development in the agricultural sector' (MAF 2008: 4).

concerning over livelihood security and uplanders' uncertain future, one may argue that current development schemes have very limited potential to bring the better life to upland populations.

3.3 Rubber tree and a new way of upland development

Rubber in Laos has a very short history in Laos. It was firstly introduced into southern Laos, Champasak, in 1930s by the French. However, they failed to expand the cultivated areas. In the 1990s, rubber was again planted in Bachiangchalernsouk district of Champasak by a state company, in an area of around 50 hectares. From that time, the rubber cultivated area constantly increased but it has accelerated since 2003 (Manivong and Cramb 2008). It is estimated that the planted area of rubber nationwide in 2008 was 140,550 hectares; only 23 per cent of the total planted area was run by small famers while the rest was under private companies. It is predicted that the total area of rubber planted will be almost 250,000 hectares by 2010 (Manivong 2009).

It is absolutely true that rubber boom in Laos, and also in other Mekong lower countries, are influenced mainly by the world's increasing demand for NR. However, this paper sees that the boom in rubber in Laos also correlates to the attempts of the GoL and international development agencies in Laos to civilise Lao marginal areas. The rubber expansion in Laos is the outcome of certain correspondence between the global demand and the will to 'improve' the uplands.

As mentioned earlier, many improving programmes introduced to the uplands are far from being successful. However, it might be misinterpretation if we see the projects' failure as the reflection of what Scott (2009)calls 'the arts of not being governed'. Villagers may not engage in the proposed projects but not because they want to escape from the 'civilisation' the projects intends to bring for them. Rather, it might be because they consider that the proposed crops are not attractive enough for them, comparing with their old agricultural practices. Ducourtieux et al (2006: 74)suggest the conditions required for the success of substitute cash crop programmes for shifting cultivation. They note that new alternative cash crops must: i) provide more productive than shifting cultivation, ii) provide more security than shifting cultivation, iii) ensure the access of stable foods, and iv) be easy for transportation. Ducourtieux and collegues (2006: 74) also note that if any of these conditions is not met, 'the failure of the cash crop proposed is predictable'. These conditions can also be applied to an opium-substitute crop programme.

While some proposed commercial crops may have uncertain future to be an alternative for uplanders, a rubber tree is in different situations. The success of farmers from Baan Had Yao of Luang Namtha province, a first village growing rubber trees in northern Laos, is attractive to not only other farmers being interested in rubber tree planting but also the government authorities who feel that the rubber tree has potential to address the upland problems. Douangsavanh et al (2008: 13) note the reasons that the GoL adheres to the promotion of rubber tree to small farmer:

- The rubber tree has potential to be an alternative crop for poverty reduction
- he rubber tree can substitute for opium cultivation and unregulated shifting cultivation
- Household can secure their income from the nature of rubber market: a quota system which price is set in advance.
- Rubber farmers can earn income in the early year of plantation establishment due to its potential for intercropping.

In Luang Namtha, the provincial governor set rubber tree as the priority to substitute for shifting cultivation and to reduce poverty among its populations. The provincial governor encouraged a household without paddy fields to set up at least 1 ha of rubber plantation. A senior official of Luang Namtha Provincial Agriculture and Forestry Office (PAFO) mentions that the provincial governor hopes that income generated from the rubber tree will help to remove Luang Namtha's three districts (Nalae, Long, and Vieng Phuka) from the list of the country's 47 primary poorest districts. Similar policies are also found in Bokeo province where the governor encourages poor farmers to plant 1 hectare of rubber in addition to other commercial crops(Hicks et al. 2009: 59).

Cohen (2009: 427) notes to the rapid expansion of rubber in the northern Laos after 2003; it has been 'the urgent need by both former opium growers and the GoL for a substitute cash crop for opium, the expanding market for rubber and high prices, declining rubber production in China, the investment impetus from China's own opium-replacement policy, and the universal appeal of rubber as an ideal "modern" crop'.

The rubber is also considered as the new efficient tool to transform the upland areas to be a productive space. After the adoption of NEM, the GoL and aid donors have promoted Lao farmers to shift from their self-sufficient production to market-oriented production. The World Bank's document notes that the problem of Lao agriculture is not about a scarcity of land but 'low incentives for production beyond family needs' (WB 2006: vi). At this point, through there might be some upland communities which can produce enough grains to meet their needs from practicing shifting farming, their subsistence, which is usually seen as 'backward' and 'lack of surplus' (Chamberlain 2007: 17), is still viewed as 'unproductive' system and needed to be eliminated due to its inability to make a valuable contribution to the economic development of the country.

Unproductivity of upland agriculture is usually mentioned that it results from its reliance on labour inputs and soil fertilisers rather than modern technologies or inputs (such as tractors, fertilisers, improved seeds and breeds) (MAF 1999: 4; WB 2006: 2). Another unproductive element of upland agriculture, shifting cultivation in particular, is that it requires a large area of land for both cultivation and fallow areas. It is estimated that to make the system sustainable and to gain high yields, it needs to leave a fallow field 20 -25 years to make a recovery of plots' fertility (Thomas 2005: 13). At this point, the officials see shifting cultivation as extremely unproductive agricultural system because it requires large area of land while provide less, or even none, produce for the market.

From this angle, the rubber tree seems to be one of the good choices for the government and some development agencies. It can provide high-value commodity from land use intensification and make a great contribution to the market demand and the country's economic development. Thus, rubber tree should be an efficient tool to turn upland areas from 'unproductive' to 'productive' landscapes. It also becomes the way to transform upland population from those who are less engaged in the market to intensively participate in the market; it moves upland farmers to relatively close to a 'full-time' producer for the market. It is the way turning a 'lazy' upland farmer who works just for meeting households' need to be a hard- working farmer producing for the market's increasing demand.

Rubber tree also helps the GoL to reach its ambitious aim to increase forest cover to 70 per cent of the country's total area. The GoL categorise forests into two types: natural forests and plantation forests. A rubber plantation is identified as a forest plantation while a plantation of some

commercial crops such as coffee and tea is not(GOL 2005: Annex 3). Therefore, increasing rubber planted areas is beneficial to the GoL to have more forest covers returned and the country can gain economic benefits from the commercial plantation. The GoL has granted land concession to rubber companies from China, Vietnam, and Thailand to establish large-scale plantations. It is estimated that by 2007, the GoL has granted concession covering an area of 165, 794 hectares to foreign companies to invest in industrial plantations. By 2007, around 40 per cent of the total concession areas (165, 794 hectares) that the GoL granted to foreign agribusiness companies to establish large-scale plantations was allocated for rubber plantations(Voladet 2009: 4).

It is reported that due to complaints from local people and local authorities about the impacts of rapid expansion of rubber, the GoL would not allow further plantation project until clear studies on the impacts of the plantation have been undertaken (VOA 19 November 2008). However, implementing this policy varies among the government authorities. Luang Namtha's governor has stopped granting more rubber contract to the investors. People are warned against planting more rubber trees. But local authorities in Udomxay province just approved the Chinese rubber project covering around 2,500 hectares (Bernema 6 January 2010).

It should be noted that civilising Lao uplands through in introduction of rubber trees has been engaged by various actors. Beside the Lao state, its neighbouring countries have played crucial role in promoting the rubber plantation in Laos. One example is the Chinese state who engages in a civilising mission in Laos through its opium replacement programme which is promoted in the context of China's 'go out strategies'. The programme provides both financial and non-financial supports for Chinese investment in several sectors, including agribusiness, made in Myanmar and northern Laos(Shi 2008: 24-27; Rutherford et al. 2008: 15). The programme was timed to coincide with influx of rubber investment in Luang Namtha(Shi 2008: 23). Chinese investors in Laos also have the perception that their investment in Laos is the way to modernise Lao society as one said, 'Laos is poor and dirty.' 'But we have many friends there already. We can make money and help make Laos more like China.' (Asia Times, 19 September 2009). Shi (Shi 2008) notes the views of a manager of a Chinese rubber company who asserts that rubber tree could be better choice for upland development than pervious development of western agencies, 'the westerner have been here for so long, building one bridge, one hospital, one school,...villagers are still poor, still living in the way they did ten, twenty, fifty year ago. What we bring is real development, real modernity.'(p 72, itlatic added).

4. Different paths of rubber boom in Luang Namtha

This section provides different paths of rubber engagement from two upland villages of Luang Namtha Province: one Khmu village in Nalae district and one Akha village from Sing district. The paper details how the rubber tree has been brought to the two villages and how villagers have engaged in the boom in rubber. The paths of rubber expansion into two upland communities should give some pictures of how 'civilisation' climbs the uplands.

Rubber plantations at Baan Had Jon

Baan Had Jon is a Khmu village of Nalae district- one of the 47 poorest districts of the country. Currently, the village is composed of 37 households. The first group of Khmu moved from their old

village located around 4 hours by walking from the current village in early 1980s; the last groups just moved in 2003 due to the GoL's resettlement programme. However, the government has not been able to provide agricultural lands for villagers; all households therefore continue using the cultivation plots surrounding the old village. None of Had Jon's household has paddy so dry-rice cultivation is a most significant livelihood activities for every household.

Villagers recall that before 1997, they usually had plenty of rice as there were no limits for their shifting cultivation practice. Some said they could even do shifting cultivation on 20- year long fallows. The shifting cultivation was limited firstly in 1996 when district authorities took more than 50 per cent of their cultivation area and fallows (around 500 hectares) to establish as a district's conservation area. Then fallow periods decreased from more than 10 years to around 6-7 years. In 2001, the government, supported by the GTZ, launched a Land and Forest Allocation Programme (LFAP). The village was allocated village's forestland for conservation and collecting some forest products but the forestland cannot be used for cultivation. 12 households which moved to current location before 2001 were allocated 3 plots of agricultural lands per household; each plot ranks around 2-3 heactares. According to a district's forestry official, one plot should be used for planting commercial crop such as corn, galangal, and cardamom while the other two plots should be used as dry-rice field and fallows. The programme expects that villagers should be able to have sufficient rice to eat or in case that they face rice deficiency, they can use cash generated from commercial crops to fill rice gaps.

However, villagers then face hardship to make the living. Very few households could produce enough rice to meet their need in each year. Many households faced a shortage of rice more than 3 months each year. This problem seems more serious when rubber tree has been introduced to the village. In 2009, only one household could have sufficient rice while many faced rice shortage more than 4 months. Alternative livelihood resources are also limited. The level of market involvement is quite low. In 2009, average hired labour income per household was 196,000 Kip, selling corn, the only commercial crop they grew, was 330,000 Kip, selling livestock 95,000 Kip, selling vegetables and NTFPs for local consumption (at district market) was 191,000 Kip, selling NTFPs for the Chinese market (through middlemen from Luang Namtha) 308,00 Kip¹².

Rubber trees were planted in the village firstly in 2005 on the area of almost 1.5 hectares. Boonyou was the first villager who established the plantation after he had heard about high income the Hmong from Baan Had Yao earned from rubber trees. Boonyou was encouraged to move from the old village to Baan Had Jon in 2003. He has faced difficulty in seeking arable land for growing rice. In 2004, he paid 2 million Kip for 1.5 hectares of a slope land which he brought from a lowland Lao, without any kinds of official certificate. He grew dry-rice on the plot for a 2004 agricultural season then turned the plot to a rubber plantation in the following year. The main reason for turning his rice field to rubber plantation was that he could not produce enough rice to eat from the land therefore he had to seek alternative choices to earn enough cash for buying rice. Hearing that Hmong from Baan had Yao could earn lots of money from rubber, Boonyou decided to start growing rubber. He hopes that rubber will give him enough money to buy rice.

Rubber tree has widely expanded since 2006 when a proposed rubber plantation development project of a Jiachuang company, the Chinese rubber company, was approved by the governor of

¹² Calculated from data collected from 22 households.

Luang Namtha province. According to the proposal, the company is allowed to promote villagers in Nalae district to establish the plantations under a contract farming system for the total areas of 2,000 hectares. The company is responsive for capital (seedlings, fertilisers, and equipments), technique and market while villagers contribute land and labour. 65 per cent of the profits goes to the company and 35 per cent goes to villagers. The contract lasts for 45 year from a planting year.

According to Nalae District Agricultural and Forestry Office (DAFO), rubber tree was chosen as the new solution for district's agricultural development. In 2004, rubber shifted from the 5th priority to 1st priority of Nalae DAFO's strategic plan. Rubber was also chosen as a new solution for the poverty problem in Luang Namtha. In 2006, a one family one hectare of rubber trees policy was promoted by the provincial governor. According to the policy, every family without paddy was encouraged to set up one hectare of rubber trees. From these contexts, the Jiachuang company has been allowed to go to Nalae. After discussion with the district authorities, the company targeted to promote rubber trees in 25 villagers in 2006 and extended to cover 29 villages in the following years. Through the significant objective of the promotion of rubber plantation is to alleviate poverty problem, DAFO's staff himself admits that some poorest villages are not included in the project due to difficulties to access them. Thus, most villages which participate in the project are those villages located close to a main road.

To promote rubber in Nalae district, the company has recruited two DAFO's staff members to work full time for the company's rubber extension. DAFO's staff worked closely with the company to convince villagers to participate in the project. Khmu from Baan Had Jon remember that they were called to gather at the village headman's house. DAFO's officials introduced the company and its project to villagers, guaranteeing that the project was agreed by the authorities. Villagers were asked for the cooperation with the company who came to help them having a better life. DAFO's staff informed the villagers that as none of Had Jon's household had paddy, the government strongly encouraged each family to plant 1 hectare of rubber. DAFO's officials also informed villagers that the GoL aimed to stop shifting cultivation by 2010. Villagers were told that they should plant rubber trees for ensure that they would have income to buy rice in the future. One Khmu who firstly hesitated to plant rubber trees says:

I was told by DAFO's staff that I should plant rubber trees because, in the future, the government will not allow us to practice our traditional shifting cultivation. They told me that I should grow rubber trees. It would be good for my future. As he said, I could earn lots of money from selling rubber latex and had enough money for buying rice. DAFO's staff told me that if I did not plant rubber trees, I would have nothing to sell. So, I would not have money to buy rice.

It is not an overstatement to say that the government (at provincial and district levels) has played significant role as a sponsor for in the rubber expansion in Baan Had Jon and other villages in Nalae district. But it is also important to note that the expansion of rubber trees in the village is also a strong desire of the villagers. Their desire was firstly inspired by rumour circulated throughout the province, perhaps the country, about the success of Baan Had Yao's rubber growers. The desire for improvement their lives through rubber trees was later stimulated by the Chinese rubber company and the experiences of rubber farmers in Yunnan's Xishuangbanna.

The Jiachuang company attempted to persuade villagers to join its project by referring to the better life of people in Xishuangbanna after their rubber latex can be sold. One Khmu says:

The company showed us a film and photos about a good life of hill people in Xishuangbannn when they could sell the rubber latex. The film and photos showed us the new house, new motorbike, new TV, and new electric appliances. The company told us that if we plant rubber trees, we will have everything we want either new house or motorbikes. we would have everything hill people in Xishuangbanna have.

The company also organised a study tour for village's committees to Xishuangbanna. 4 Khmu from Baan Had Jon joined the trip. The trip was successful in inspiring villagers' confidence in rubber plantations as their new alternative crop. One Khmu who visited the rubber plantations in Xishuangbanna with the company informs:

We stayed in a house of Khmu in Xishuangbanna. They told us that they were badly off before they grew rubber trees. They told us that if we had land we should plant rubber as many as we could. Rubber would provide the wealth for us. They said even some lazy farmers, they could make a living from only 70 rubber trees they had.

A study tour to Baan Had Yao was also organised for one person from every household. Similar stories about how rubber provides lots of money and modern life for the villager were repeatedly informed. These stories inspire villagers to participate in the company's project. DAFO's record shows that 46 out of 47 families have planted rubber trees for the company for the area of 47 hectares. Villagers themselves have also established their own plantations with an average of 300 trees (around 0. 7 hectare) per household¹³.

The establishment of rubber plantations in Baan Had Jon should be seen as the outcome of correlation between the Chinese demands for rubber products, the GoL's will to improve the uplands, and villagers' desire to improve their lives in the contexts of uncertainty of current livelihoods.

Rubber plantation at Baan Nam Det Mai

Nam Det Mai is an Akha village in Sing district. The village is a resettled village located around 10 kilometres from a district centre and 3 kilometres from a Lao- Chinese border. The first movement of the villagers to settle down their village at the current area took place in 1985 as the villagers wanted to settle down their new village close to their paddy fields which they opened around the beginning of 1970s. There had been continuity of the people from an old village moving to Ban Nam Det Mai or other two nearby Akha villages until late 2000s. Those people who came in 2000s were encouraged by the government to relocate from their old village located on the hill to live in the flat areas. Most of the households (50 out of 61 households) in Nam Det Mai have their paddy fields. Households without paddies are those who have relocated recently (after 2000s) and they have to rely only on upland rice cultivation. While some households have to work on both paddies and upland plots to have enough rice to meet the household's demand, some can have rice surplus from the paddy fields. Before the rubber boom in mids of 2000s, the latter worked only on paddy fields

¹³ Based on data collected from 22 households

and left their upland cultivation plots. In 2009, 17 households had rice surplus, 30 households could have rice just to meet the household's demand, and 14 households faced rice shortage.

Akha people of Baan Nam Det Mai have intensively involved in the market. Almost every household has taken NTFPs and vegetables from their small garden to sell in a Chinese market; Akha traders usually earn around 70 to 130 Chinese Yuan a day from their goods. Some households go to the market just around 10 times a year but many bring their goods to the market more than 50 times each year. Not many villagers bring their goods to a market in Sing district as the price in Sing market is much cheaper than in the Chinese market. Livestock selling is another important source of income for villagers. The village headman and village committees estimate that in 2009, the average household's total livestock sales was over 1.4 million Kip. Another source of income is sugar cane which was introduced to the village in early 2000s. Sugar cane is exported to a sugar factory in China. In 2009, 36 households could produce around 900 tons of sugar cane. Household income from selling sugar cane ranked from just over 2 million Kip to around 10 million Kip, the average was 3 million Kip.

Rubber came to the village firstly in 2005. The emergence of rubber tree in the village has been exclusively driven by the villagers' desire. As the village is located close to the border and crossing the border to visit friends, relatives or go to the market seems to be a normal activity of Nam Det Mai's Akha. The Akha have noticed improvement in quality of life of rubber farmers in China. Stories about the benefits rubber farmers in China can get from rubber trees are circulated across the border. Villagers mention regularly to some symbols of 'modernity' that rubber planters in Xishuangbanna get from the rubber tree including renovated houses, motorbikes or even cars, televisions, radios, mobile phones, and other commodity goods. Many Nam Det Mai's Akha said, 'without rubber they cannot have these things.' Stories about the wealth of their relatives, and friends in Xishuangbanna increase Akha's desire to have the better life as those who live on an opposite side of the border. One Akha man talks positively about his future:

The Chinese said, when rubber trees could be tapped, they could earn around 1 Yuan from one rubber tree each day. I have around 2,000 rubber trees so I can earn 2,000 Yuan every two days¹⁴. It will be better than any kinds of cash crop. This year I sold 40 tons of sugar cane and earned only around 6,000 Yuan. Now Akha in Laos is still poor. We are poorer than those who live in China or in Thailand. But we will have a good life as them when we can sell our rubber latex.

Seeing such success of uplanders in China, more than 10 Akha households of Nam Det Mai village began establishing their rubber plantations in 2005. A story of one Akha guy, Aja, may provide some picture about the transformations of village's upland landscape under a context of the rubber boom.

Aja was one of the first Akha who started planting rubber trees in 2005. The first commercial crops Aja grew for the market was corn grown in late 1990s but, due to low return, he planted it only one year. In 2001, a Chinese trader came to the village and encourageed villagers to plant sugar cane under a contract system. He then turned around 0.5 out of his 1 hectare of paddy to sugar cane plantation. He did not earn much from sugar cane plantation in the first year because he had to

¹⁴ When rubber tree grows enough to be tapped, each tree can be tapped every two days.

return costs to the Chinese trader. He could earn more for the second and third year. In 2009, he could produce 50 tons of sugar cane generated around 8,500 Chinese Yuan for him. Sugar cane is the major source of income for Aja, like many other villagers, making him to be able to set up his own rubber plantation. In 2005, all rubber seedlings were imported from China. Akja bought 500 rubber seedlings from China in 2005; he paid around 3 Chinese Yuan for each seedling. He has expanded his plantation every year. At the end of 2009, he had total 2,300 rubber trees. He still intends to plant more in 2010.

Aja has been establishing the plantation with the assistance of his relatives living in Xishuangbanna. Two of his relatives came to stay with him for providing advice when he firstly set up the plantation in 2005.

My relatives from Xisuangbanna came here to teach me everything. They told me about the distance between rubber trees, the deep and size of hole for planting, and the plant method. I asked them everything I did not know before about the rubber. Today, if I have problem regarding my rubber trees like death of trees or diseases, I always ask my relatives or friends who live in China. They have planted rubber for a long time so they have lots of experience about the rubber. They know better than us. We learn from them.

Some Akha have also learnt from Yao people of Baan Udomsin where a rubber plantation was established firstly in late 1990s.

When decided to plant rubber trees, Aia and also other Akha households, returned back to their abandoned upland fields. As many households could have enough rice from paddies, some large areas of upland cultivation fields had been left for more than 10 years. Before the rubber boom in 2000s, there was no concept of private ownership over the upland cultivation areas. It was normal that villagers could clear fallows which were used by others; they were not required to ask permission from former users. When the Land and Forest Allocation Programme (LFAP) was implemented in 1997, villagers were allocated three plots of land for agricultural purposes. The programme introduced the concept of private ownership to the village expecting that it would increase villagers' incensives to make a profit from the land. According to the village's headman, the LFAP has demarcated only the total forestland and agricultural land of the village; it has not demarcated three plots of agricultural land of each household. Through some villagers remember that they were told by Sing district authorities that the government would secure the land use right on the upland plots used permanently for 3 years, many households, especially those who could produce enough rice from paddies, did not claim their rights over the upland cultivation area. The programme was not successful in introducing a concept of private ownership to Nam Det Mai's Akha. Before the coming of rubber trees, villagers could be able to clear any fallows they wanted for cultivating dry-rice without any limits from others.

When the rubber began booming throughout the border areas in early 2000s, Akha began to claim the right over their fallows they used to practice shifting cultivation. A claim was not made by the LFAP's three plot concept but rather their use in the past. Thus, households which came to current location early tended to have more upland plots than those who just came in mid of or late 2000s. While Aja who moved to Nam Det Mai with his parents in late 1980s could lay claim to over 4

hectares of upland fields, Peeja who forcedly relocated in 2007 could not find arable land for his dry-rice cultivation.

Due to villagers' desire to plant rubber trees, villagers agreed in 2006 that the village's communal forestland should be allocated to every family for planting rubber trees. The allocation was done firstly in 2006 and again in 2007. Each family got around 2- 4 hectares of allocated land depending on a distance between the allocated plot and the road. Villagers mention that today only small pieces of the village's holy forest and watershed forest remain while all categories of forest (production forest, conservation forest, protection forest, regeneration forest, and degraded forest) had been already allocated to villagers for rubber plantations. According to the Forestry Law, only degraded forest is allowed for permanent agriculture. But in Baan Nam Det Mai, boom in rubber results in replacing primary and secondary forests with rubber plantations. By the end of 2009, only 2 out of 61 households did not plant rubber trees. The total rubber planted area was 115 hectares; among planted households, average area of plantation was around 2 hectare per household. Most households state that they will plant more in 2010.

5. Conclusion: civilisation, state, market and uplanders

Following the perception of the state and lowlanders who tend to see traditional upland agriculture, especially shifting cultivation, as 'uncivilised', we should see the rubber tree as a symbol of civilisation in all aspects (permanent agriculture, land-use intensification, and market-oriented production). In this aspect, we cannot say that 'civilizations can't climb hills' (Scott 2009: 20). Looking at the two upland villages in Luang Namtha, we can see obviously that people from both villages have intensively engaged in 'civilised agriculture'. Today, upland people in Laos do not run away from a civilising project; at least they do not flee from rubber trees.

Scott (2009) argues for Southeast Asia's upland situation in the period before the Second World War that Zomia's population chose to run out from the state's civilisation to a non-state space-inaccessible space- avoiding from being insecure in a state space. Looking at current upland situations from two villages in Luang Namtha, we see that both communities are no longer be inaccessible by the state and the global market. An array of attempts to 'civilise' the uplands has been untiringly made. Through a success of the programmes is questionable, the upland areas and upland populations have been more close to the state and a global market. Unintended consequence of the upland improvement's schemes, especially the resettlement programme and the LFAP, either voluntary or involuntary, implemented in both Baan Had Jon and Baan Nam Det Mai, is that the livelihoods of upland people are in vulnerable situations. To make their life secure, villagers cannot run out into an 'untouched' space; there is no 'inaccessible' space. Thus, being part of the civilisation which is brought hills by the state, development agencies, and the market, is likely to be the best way making life secure in a current era.

Adoption civilised agriculture of the upland communities also raises some issues about how civilisation climbs the uplands. Scott, in his last book (Scott 2009), tends views transformations of the uplands as an exclusive result of the state projects. When he warns us that his argument over the Zomia is less compatible with the upland situations after the Second World War, he reasons that it is because '...sovereign nation-state is now busy projecting its power to its outermost territorial borders and mopping up zones of weak or no sovereignty' through 'strategies of "engulfment"'(xii). But there is a question of how far the state can monopolise its 'civilising missions'.

Looking at the attempts to make Lao uplands become civilised, we see that since the country launched the NEM in late 1980s, the Lao state has never been the only one actor. International aid donors (especially the WB and the ADB) and an array of international development agencies have played a significant role in attempting to 'improve' or 'develop' the uplands. Many state's projects could not be completed without the supports from these agencies. In Baan Had Jon, villagers mention to the GTZ's project, the ADB's project, the Lao EU's project, and the UN World Food Programme. Some projects have been stopped while some still continue. Akha from Baan Nam Det Mai also refer to such development projects provided by international non-government organisations. Neighbouring states of Laos also involve in the civilising tasks in Lao uplands. In the northern region, it can be seen obviously through the China's opium replacement programme which provides subsidies to Chinese enterprises investing in Myanmar and a northern region of Laos. Moreover, the market is also another key actor of upland improvement programmes. One senior official from Department of Forestry mentions that improving infrastructures in the concession area is one of the GoL's conditions to grant concession to investors. He mentions that: 'our government wants to develop the rural area but there are too many development projects we have to spend our limited budget for. Giving concession to the companies is a way to develop infrastructure in remote area while we can save budgets for other development projects.¹⁵

Through there is always more than the state in a process of transformation of upland landscape (Li 2005), we cannot refuse the role of the state. In the case of Baan Had Jon, we may argue that the rubber company would not be able to establish the plantations without the support of the local state. Rubber plantation project may be seen as a 'state-sponsored civilising project'.

There are not only 'powerful' actors as the state, the market, aid donors and international agencies that make civilisation climbing hills. Looking through the lens of the rubber boom, we cannot deny the role of small farmers. In Baan Had Jon, through the local state and the company are two keys actors in developing the plantation, villagers also have strong desire for improvement through the rubber trees. In some extent, the state and the rubber company help to fulfil the dreams of villagers. The role of small farmers in transforming upland landscape is more obvious in the case of Akha from Baan Nam Det Mai. The expansion of rubber trees is exclusive outcome of villagers' will to improve while such 'powerful' actor like the state plays almost nothing. The active role of Akha of Nam Det Mai to develop their own rubber plantations points to a 'self-civilising' process in the Lao uplands.

¹⁵ Personal communication on 11th September 2009 at Department of Forestry, Vientiane.

Bibliography

- Asian Development Bank [ADB]. 2008. Lao People's Democratic Republic: shifting cultivation stabilizing pilot project. Vientiane: Asian Development Bank.
- Baird, Ian G., and Bruce Shoemaker. 2005. *Aiding or abetting? internal resettlement and international aid agencies in the Lao PDR.* Toronto, Canada: Probe International
- Chamberlain, James R. 2007. *Participatory Poverty Assessment II (2006): Lao People's Democratic Republic.* Vientiane: National Statistics Center, Asian Development Bank.
- Cohen, Paul T. 2009. The post-opium scenario and rubber in northern Laos: Alternative Western and Chinese models of development. *International Journal of Drug Policy* 20 (5):424-430.
- Committee for Planning and Investment [CPI], Department of International Relation, Government of Laos, 2006. *National Socio-Economic Development Plan (2006-2010)*. Vientiane.
- Douangsavanh, Linkham, Bansa Thammavong, and Andrew Noble. 2008. *Meeting regional and global demands for rubber: a key to poverty alleviation in Lao PDR?* Bangkok: The Sustainable Mekong Research Network (Sumernet), Sunernet Working Paper.
- Ducourtieux, Olivier, Jean-Richard Laffort, and Silinthone Sacklokham. 2005. Land policy and farming practices in Laos. *Development and Change* 36 (3):499–526.
- Ducourtieux, Olivier, P Visonnavong, and J Rossard. 2006. Introducing cash crops in shifting cultivation regions-the experience with cardamom in Laos. *Agroforestry systems* 66 (1):65-76.
- Duncan, Christopher R. 2004a. Legislating modernity among the marginalized. In *Civilizing the Margins: Southeast Asian Government Policies for the Development of Minorities*, edited by C. R. Duncan. Ithaca and London: Cornell University Press.
- ———. 2004b. From development to empowerment: changing Indonesian government policies toward indigenous minorities. In *Civilizing the Margins: Southeast Asian Government Policies for the Development of Minorities*, edited by C. R. Duncan. Ithaca and London: Cornell University Press.
- Evans, Grant. 1988. "Rich peasants" and cooperatives in socialist Laos. *Journal of Anthropological Research* 44 (3):229-250.
 - -----. 1990. Lao peasants under socialism. New Haven: Yale University Press.
- Food and Agriculture Organization of the United Nations [FAO]. 2008. *The State of Food and Agriculture in Asia and the Pacific Region 2008.* Bangkok: Food and Agriculture Organization of the United Nations, Regional Office for Asia and the Pacific.
- Fujisaka, S. 1991. A diagnostic survey of shifting cultivation in northern Laos: targeting research to improve sustainability and productivity. *Agroforestry systems* 13 (2):95-109.
- Government of Lao PDR [GoL]. 2003. *National growth and poverty eradication strategy (NGPES)*. Vientiane.
- Government of Laos [GOL]. 2005. Decree No 229/PM on Endorsement and Declaration of Forestry Strategy to the Year 2020 of the Lao PDR. Vientiane

- Hicks, Charlotte, Saykham Voladeth, Weiyi Shi, Zhong Guifeng, Sun Lei, Pham Quang Tu, and Marc Kalina. 2009. *Rubber investments and market linkages in Lao PDR: approaches for sustainability.* The Sustainable Mekong Research Network.(Draft)
- Hokleng, Lang 2008. Cambodia expects to grow rubber trees on 400,000 hectares of land by 2030. *Cambodiantown*, May 5.
- Lahu National Organization Development [LNOD]. 2009. Rubber mania: scrabling to supply China, can ordinary farmers benefits? *Undercurrents* (3- April):6-10.
- Lao National Commission for Drug Control and Supervision [LNCDC], and United Nations Office on Drugs and Crime [UNODC]. 2009. *National Drug Control Master Plan: A Five Year Strategy to Address the Illicit Drug Control Problem in the Lao PDR (2009- 2013)*. Vientiane.
- Laungaramsri, Pinkaew. 1999. Rai, rai lu'an loy, rai mun wian, and the politics of 'shifting cultivation'. *Watershed* 5 (1):39-46.
- Li, Tania Murray. 1999. Marginality, power and production: analysing upland transformation. In *Transforming the Indonesian Uplands: Marginality, Power, and Production*, edited by T. M. Li. Amsterdam: Harwood academic publishers.
- -----. 2005. Beyond "the state" and failed schemes. American Anthropologist 107 (3):383-394.
- ———. 2007. The Will to Improve: Governmentality, Development, and the Practice of Politics. Durham and London: Duke University Press.
- Manivong, Vongpaphane. 2009. Overview of rubber situation in Laos. Paper read at Asian Rubber Conference 2009, 18- 20 June, at Vientiane, Lao PDR.
- Manivong, Vongpaphane, and Rob A Cramb. 2008. Economics of smallholder rubber production in northern Laos. *Agroforest Syst* (74):113-125.
- McCartan, Brian 2007. China rubber demand stretches Laos. *Asia Times*, 19th December. Available at http://www.atimes.com/atimes/China_Business/IL19Cb01.html [accessed on 12th March 2009].
- McElwee, Pamela. 2004. Becoming socialist or becoming Kinh? government policies for ethnic minorities in the socialist Republic of Viet Nam. In *Civilizing the Margins: Southeast Asian Government Policies for the Development of Minorities*, edited by C. R. Duncan. Ithaca and London: Cornell University Press.
- Ministry of Agriculture and Forestry [MAF], Lao PDR. 1999. *The government's strategic vision for the agricultural sector*. Vientiane.
- ———. 2008. Strategy for reform in the agriculture and forestry colleges towards 2020. Vientiane.
- ———. 2010. The Ministerial Instruction No 22/ MAF to prepare for complete stopping of the slash and burn, and shifting cultivation in 2010.
- Office of Rubber Replanting Aid Funds. n.d. Thailand rubber price: Office of rubber replanting aid funds. Avaiable at http://www.rubber.co.th/menu5.php.
- Richter, Kaspar, Phonesaly Souksavath, and Anders Engvall. 2006. *Lao PDR poverty assessment report from valleys to hilltops- 15 years of poverty reduction volume II: main report.* Washington D.C.: the National Statistical Centre of the Committee for Planning and Investment, the Asian Development Bank, the Swedish International Development Agency, and the World Bank.
- Rigg, Jonathan 2006. Forests, marketisation, livelihoods and the poor in the Lao PDR. Land Degradation & Development 17 (2):123-133.
- Rutherford, Jeff, Kate Lazarus, and Shawn Kelley. 2008. *Rethinking investments in natural resources: China's emerging role in the Mekong Region*. Phnom Penh?: Heinrich Boll Stiftung Cambodia,

WWF and International Institute for Sustainable Development. Available at http://www.iisd.org/pdf/2008/trade_china_study.pdf [accessed on 7th May 2009].

- Satoshi, Yokoyama, Tanaka Koji, and Phalakhone Khame. 2006. Forest policy and agriculture swidden in Laos. Paper read at 8th Southeast Asian Geography Association Conference 26- 30 November, at Namyang Girls High school, Singapore.
- Scott, James C. 1998. Seeing Like a State: How Certain Schemes to Improve Human Condition Have Failed. New Haven: Yale University.
- ———. 2009. The Arts of Not Being Governed: An Anarchist History of Upland Southeast Asia. New Heaven and London: Yale University Press.
- Seidenberg, Charlotte, Ole Mertz, and Morten Bilde Kias. 2003. Fallow, labour and livelihood in shifting cultivation:implications for deforestation in northern Lao PDR. *Geografisk Tidsskrift, Danish Journal of Geography* 103 (2):71-80.
- Shi, Weiyi. 2008. *Rubber boom in Luang Namtha: a transnational perspective*. Vientiane: Rural Development in Mountainous Areas of Northern Lao PDR (RDMA) and Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)
- Smit, Hidde. 2009. Outlook for the rubber industry. Paper read at International Smallholder Rubber Conference, 24th June, at Phnom Penh, Cambodia.
- Thai Rubber Association. n.d. World rubber statistics. Available at

http://www.thainr.com/en/index.php?detail=stat-world# [accessed on 1st April 2010].

- Thomas, David. 2005. Reviews of policies and practices in upland areas of the Lao PDR. Paper read at Poverty reduction and shifting cultivation stabilisation in the uplands of Lao PDR: technologies, approaches and methods for improving upland livelihoods. Proceedings of a workshop held in Luang Prabang January 27-30, 2004, at Luang Prabang.
- Tong, Pei Sin. 2009. *Lao's People Democratic Republic Forestry Outlook Study, Asian-Pacific Forestry Sector Outlook Study II.* Bangkok: Food and Agriculture Organization of the United Nations Regional Office for Asia and the Pacific.
- Tsing, Anna Lowenhaupt. 1999. Becoming a tribla elder, and other green development fantasies. In *Transforming the Indonesian Uplands: Marginality, Power, and Production*, edited by T. M. Li. Amsterdam: Harwood academic publishers.
- United Nations Office on Drugs and Crime [UNODC]. 2008. Opium Poppy Cultivation in South East Asia: Lao PDR, Myanmar, Thailand: UNODC. Available at http://www.unodc.org/unodc/en/crop-monitoring/index.html [accessed on 12th January 2010].
- Van Schendel, W. 2002. Geographies of knowing, geographies of ignorance: jumping scale in Southeast Asia. *Environment and Planning D: Society and Space* 20 (6):647-668.
- Vandergeest, Peter. 2003. Land to some tillers: development-induced displacement in Laos. International Social Science Journal 55 (175):47-56.
- Vietnam News. 3 January 2009. Vietnam: rubber sector makes plans to bounce over economic crisis. *Vietnam News*, January 3. Available at http://vietnamnews.vnagency.com.vn/Agriculture/183970/Rubber-sector-makes-plans-to-

bounce-over-economic-crisis.html> [accessed 12th January 2010].

Voladet, Saykham 2009. Sustainable development in the plantation industry in Laos: an examination of the role of the Ministry of Planning and Investment. Manitoba: International Institute for Sustainable Development (IISD). Available at

http://www.tradeknowledgenetwork.net/pdf/sd_plantation_laos.pdf [accessed 7th May 2009].

- World Bank [WB]. 2006. *Lao PDR: rural and agriculture sector issues paper World Bank* (Rural Development and Natural Resources Sector Unit East Asia and Pacific Region).
- Yang, Yanping. 2008. Thoughts on industrial development of Yunnan Natural Rubber. Paper read at Fifth Shanghai Derivative Market Forum- International Seminar on Rubber, 28th May, at Shanghai.
- Ziegler, Alan, Jefferson Fox, and Jianchu Xu. 2009. The Rubber Juggernaut. *Science* 324:1024-1025.

Glossary of Abbreviations

ADB	Asian Development Bank
DAFO	District Agricultural and Forestry Office
EU	European Union
FAO	Food and Agricultural Organization of the United Nations
GoL	Government of the Lao PDR
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit (German bilateral agency)
LFAP	Lang and Forest Allocation Programmee
LNCDC	Lao National Commission for Drug Control and Supervision
NTFPs	Non-Timber Forest products
UN	United Nations
UNDP	United Nations Development Programme
UNODC	United Nations Office on Drugs and Crime
US	United States of America
WB	World Bank

Currency Conversion

1USD	=	8,500	LAK
1 CNY	=	1,250	LAK
1 GBP	=	12,950	LAK
1 THB	=	265	LAK
1 USD	=	6.8	CNY