

TRANSBORDER RUBBER INVESTMENT AND ITS IMPLICATIONS ON FOOD
SECURITY IN LAO PDR: A CASE STUDY OF THAI RUBBER PLANTATIONS
IN ATSAPHONE DISTRICT, SAVANNAKHET PROVINCE

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นบทด้วยอุปกรณ์และแฟ้มข้อมูลฉบับเต็มของวิทยานิพนธ์ดังต่อไปนี้
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ແມ່ສາຮາຣນຮູ່ປະເທົານີ້ໄດ້ປະເທົານລາວຈະເປັນປະເທດທີ່ອຸດມດ້ວຍທິພາກຮອວມໝາຕີ ແຕ່ປະເທົາກ ສ່ວນໄໝ່ງ (80%)
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ດັ່ງນັ້ນພີ້ໆພລາທາງກາຮເກະຊຕຣແລະທິພາກຮອວມໝາຕີອື່ນໆຢັງຄົງເປັນແລດ່ອງອາຫາຣທີ່ ສຳຄັຟູໃນກາຮດໍາວັງເຊີຕ
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ກາປເອກຂົນຈາກປະເທດໄກຢູ່ຈິນແລະເກີດນາມລ້າວໃຫ້ຄວາມສນໃຈ ໃນກາຮລົງທຸນດ້ານຍາງພາຣາໃນປະເທດລາວ
ຈີນມີຄວາມຈຳເປັນອຍ່າຍິ່ງທີ່ຈະທາບດີສະຖານະດ້ານຄວາມມັ້ນຄົງທາງ ອາຫາຣໃນໜັນບັກ
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ບຣິຫຼັກໄທຢ້າຍຍາງພາຣາໄດ້ລົງທຸນສວນຍາງໃນໜ້າຈັງຫວັດຂອງປະເທດລາວ ຮາມເຖິງສວນຍາງດອນຂວາງທີ່ເປັນ ພື້ນທີ່ກຣນີສຶກຂາ
ໝູ່ນູ່ບ້ານກາງຕົ້ນທີ່ຢູ່ຕັ້ງຂູ່ອູ້ໃນເມືອງອາດສະພອນ ແຂວງສະຫວັນນະເຊີຕ ເປັນໜັ້ນໃນສິ່ນໜູ່ນູ່ບ້ານທີ່ໄດ້ຮັບ ພລກະທບຈາກສວນຍາງດອນຂວາງ
ວິທຍານີພນົມລັກທີ່ໄດ້ປັບປຸງໃຫ້ກ່ອບແນວຄົດແນວທາງນິເຄວິທຍາທາງກາຮເມືອງຂອງ (Blaike ແລະ Brookfield, 1987)
ເພື່ອກາຮສຶກຂາຄວາມເຊື່ອມໂຍງຮ່ວ່າງຄວາມມັ້ນຄົງດ້ານອາຫາຣໃນໝູ່ນູ່ບ້ານກາງຕົ້ວ ແລະ
ບຣິຫຼັກກາຮເມືອງແລະເສຽ່ງສູກີຈີທີ່ແວດລ້ອມກາຮລົງທຸນ ກາຮສຶກຂາຕ້ອງກາຮທາບດີ່ພລາກກາຮນີປົງສັນພັນໝົງ
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ແລະທ້າຍທີ່ສຸດວ່າກວບການກາຮນີໄດ້ດຳນັ້ນເຖິງພລາກມັ້ນຄົງດ້ານອາຫາຣໃນໝູ່ນູ່ບ້ານກາງຕົ້ວຫຼືໄໝ່ໄໝ່

ກາຮວິຈີຍພບວ່າສວນຍາງພາຣາດອນຂວາງທີ່ດັ່ງກ່າວໄດ້ເກີດກາຮປັບປຸງແປ່ງໃນເຊີຕຄວາມເປັນອູ້່ຂອງໜ້າບ້ານ
ທີ່ງຮມດີກາຮໄມ່ສາມາຮັກເຂົ້າດີ່ທີ່ດິນສ່ວນກລາງ ພລິກກັນທີ່ປາໄນ້(NTFPs)ທີ່ລົດລົງ ກາຮໃຫ້ສາຮເຄມີທີ່ເປັນພລຕ່ອນ້າ
ແລະສັຕົວມີເຊີຕໃນໜອນອັນ ທີ່ງລວມເປັນພລຕ່ອແໜລ່ອງອາຫາຣເດີມຂອງໜ້າບ້ານທີ່ສິ້ນ ຍັງໄປກ່າວ້ານັ້ນຄວາມໄມ່ເປັນຮອວມ
ຂອງເຈື່ອນໄຂສົງຄາງຮ່ວ່າງຄນາງຈາກໝູ່ນູ່ບ້ານກາງຕົ້ວກັບບຣິຫຼັກທີ່ສັງພລໃຫ້ເກີດຄວາມໄມ່ແນ່ນອາຫາຣ
ເພີ່ມຄວາມອ່ອນໄຫວ່ຕ່ອງຄວາມໄມ່ມັ້ນຄົງດ້ານອາຫາຣ ໃນຂະນະເຕີວັກພຸດທິກຣມຂອງອົງກຣອງບຣິຫຼັກໄທຢ້າຍພາຣາ
ແລະກວບການກາຮຂອງກາຮລົງທຸນຍາງໃນສາຮາຣນຮູ່ປະເທົານີ້ໄດ້ປັບປຸງໃຫ້ກ່ອບແນວຄົດແນວທາງເສຽ່ງສູກີຈີທີ່
ເສຽ່ງສູກີຈີທີ່ມາແກນທີ່ກາຮປັບປຸງກັນຄວາມໄມ່ມັ້ນຄົງດ້ານອາຫາຣ ໃນທ້ອງຄືນ ກວະແສກາຮເພື່ນນາຂອງສວນປາເຊີງພານີ້ຍົງ
ໃນປະເທດລາວໄມ່ສາມາຮັກນັ້ນຫວັງກັບໄດ້ ດັ່ງນັ້ນໃນທີ່ສຸດພລຂອງສກາພຄວາມໄມ່ມັ້ນຄົງທາງອາຫາຣໃນທ້ອງຄືນອາຈ
ຄຸກຄາມຂອງຄວາມມັ້ນຄົງຂອງມຸນຸ່ຍືນໃນດ້ານທີ່ໄດ້

ສາຂາວິຊາ...ກາຮພັນນາຮ່ວ່າງປະເທດ.....ລາຍມື້ອື່ນລິດ.....
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**SAWAPA TANGSAWAPAK: TRANSBORDER RUBBER INVESTMENT
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 SAVANNAKHET PROVINCE. THESIS ADVISOR: [ASSOC. PROF. VIRA
 SOMBOON, Ph.D.,],
 [pages] pp.**

Lao PDR is a resource rich but cash poor country where approximately 80% of the population live in rural areas and are subsistence or semi-subsistence farmers, the majority of whom still rely on agriculture and other natural resources for food production to satisfy their dietary needs. Industrial tree plantations, including rubber, have been promoted to the Government of Lao PDR to champion poverty eradication in Lao PDR. Private-sector actors from Thailand, China and Vietnam are all investors in rubber plantations in Lao PDR. To understand changes in rural food security, it is critical to study the changes in land tenure, access to natural resources and other social changes within host communities as a result of foreign direct investments (FDI) in rubber plantations in Lao PDR.

Thaihua Rubber has made its rubber plantation investments in five provinces in Lao PDR including Don Kuang plantation, the area of the case study. The establishment of Don Kuang affected four villages including Kan Tiew village in Atsaphone District, Savannakhet Province. The study investigates how government, private sector, and civil society actors and the community themselves interact within the process of Thai transborder rubber investment in Lao PDR, and ultimately how this process accounts for and affects food security in Kan Tiew village using the political ecology approach.

Findings reveal how Don Kuang plantation have caused changes which include land tenure security, decline in Non-Timber Forest Products (NTFPs) in Kan Tiew village and particularly the sub-standard contract conditions of Kan Tiew plantation households with the company have caused vulnerability to food insecurity. However, there are other factors causing the vulnerability beyond these immediate changes including the corporate behaviour of Thaihua Rubber and the process of its rubber investments in Lao PDR where the politics of power overriding the need to lessen the social and environmental impact on the ground and hence discounting food security.

Given the growth of industrial plantation development in Lao PDR could not be reverted, the resultant food insecurity condition may eventually also threaten other aspects of human security.

Field of study: Student's Signature:.....
 Academic year 2011..... Advisor's Signature:.....

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LIST OF ABBREVIATIONS

ACMEC	Ayeyarwady- Chao Phraya - Mekong Economic Cooperation Strategy
ADB	Asian Development Bank
AFTA	ASEAN Free Trade Area
BOI	Board of Investment
DAF	District Agriculture & Forestry
DDFI	Department of Domestic and Foreign Investment
DNA	Designated National Authority
EU	European Union
FAO	Food And Agriculture Organization
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GMS	Great Mekong Sub-region
JVC	Japan International Volunteer Center
LDC	Least Development Country
LFA	Land and Forest Land Allocation
LUP	Land Use Planning
MDG	Millennium Development Goal
MAF	Ministry of Agriculture and Forestry
MONRE	Ministry of Natural Resources and Environment
NAFRI	National Agriculture and Forestry Research Institute
NEM	New Economic Mechanism
NGO	Non-government Organization
NGPES	National Growth and Poverty Eradication Strategy
NLMA	National Land Management Authority
NORMAI	Non-profit Association for Rural Mobilization And Improvement
NPA	Non-Profit Association
NSEDП	National Socio-Economic Development Plan

NTFP	Non-Timber Forest Product
PAF	Provincial Agriculture and Forestry
PDR	People's Democratic Republic
SIDA	Swedish International Development Cooperation Agency
SNV	Stichting Nederlandse Vrijwilligers or Foundation of Netherlands Volunteers
TERRA	Towards Ecological Recovery and Regional Alliance
WFP	World Food Programme
WREA	Water Resources and Environment Administration
WTO	World Trade Organization
WVL	World Vision Lao PDR
WWF	World Wildlife Fund

CHAPTER I

INTRODUCTION

1.1 Background

In the last 25 years, Lao PDR has drastically transformed itself, moving away from a state-led, centrally planned economy to a state-coordinated market economy whereby a socialist government, the Government of Laos (GoL), decisively liberalized the traditional economy through the process of regional and global market integration. The process of integration over the years, particularly the regional integration within the Greater Mekong Sub-region (GMS)¹ and ASEAN, has brought unprecedented and often irreversible changes to the socio-economic, cultural, environmental, and urban-rural landscapes of Lao PDR.

With the launch of the New Economic Mechanism (NEM)² in 1986, Lao PDR's open-door economic policy automatically attracted an influx of foreign direct investment (FDI), mostly into the resource sector, from countries within the region such as China, Thailand and Vietnam. FDI has been heralded in many developing countries as the champion of economic growth, with its contribution to national GDP, its ability to expand employment opportunities, as well as the perception that it is a "tried and true" tool for poverty eradication.

The country's open-door policy coincided with the growing demand for natural rubber latex (*Hevea brasiliensis*) in the global market as a consequence of emerging giant economies like China and India and the push for trade liberalization through regional and global market integration. Consequently, rapid expansion of commercial-scale rubber plantations occurred throughout the entire country, with an infusion of foreign capital amounting to US\$ 100 million in 2006 (World Bank, 2006)

¹ The term Greater Mekong Sub-region (GMS) refers to the area consisting of Thailand, Lao PDR, Vietnam, Myanmar and Yunnan Province of the People's Republic of China, which has been targeted for sub-regional economic integration under a program supported by the Asian Development Bank.

– mostly by Chinese investors in northern Laos and Thai and Vietnamese investors in central and southern Laos.

1.2 Statement of the Problem

It is clear that there are strong linkages between the rising global demand for rubber caused primarily by thriving automotive markets, particularly in China and India on the one hand, and the rapid expansion of the agro-forestry sector and specifically investment in rubber cultivation, on the other.

However, the situation in Lao PDR has turned out to pose some great challenges to the government and people, as transnational companies (TNCs) are operating extensively in the midst of an under-regulated environment. Specifically, there is a lack of safeguard policy enforcement mechanisms as well as policy gaps. According to the World Bank (2008), FDI in Lao PDR rose from US\$30 million in 2001 to about US\$ 1 billion in 2008. Thailand is believed to be the biggest contributor of FDI in the country especially during 2006 - 2008 (*ibid*, 2008).

Lao PDR is known as a resource-rich country in which the majority of people are rural subsistence farmers and cash-poor. After two decades of economic turnaround, it remains questionable whether the benefits from economic growth have trickled down to the rural masses. Laos' Gross National Income (GNI) per capita jumped exponentially from a little over US\$ 500 in 1986 to US\$ 2,080 in 2007 (World Bank, 2007) As in other newly developed countries, wealth and opportunities tend to be concentrated in urban areas, and only in the hands of few elites. According to the Asian Development Bank's (ADB's) poverty assessment of Lao PDR, despite the reduction in population living below the poverty threshold from 45 percent in 1992/93 to 38.6 percent in 1997/98, income disparity among the population has actually increased - GINI Index in 1992-1994 (30.5), 2004 (32) and in 2008 (38)

² The New Economic Mechanism (NEM) was a national strategy for economic reform to create a market-led economy, following in the footsteps of other influential countries like China, Vietnam and Russia.

(World Bank, 2010). This fact led the ADB to conclude that the rich reaped a greater proportion of the benefits from economic growth than the poor (Bauer, et. al, 2008).

Aside from the growing income disparities alongside economic growth, FDI in large-scale commercial plantations has sometimes also created irreversible damage to nature, land and resources, which are the key survival elements for rural communities.

Like other major investors within the region, Thai investors have actively sought to expand rubber plantation ventures beyond their own national borders, as suitable land within Thailand has been dwindling due to competition over land with other high-value crops driving up land prices. The opening up of border trade and logistical linkages within the region further favoured Thai investments in Lao PDR.

Thai-Hua Rubber is the third biggest rubber exporter in Thailand and is among the top exporters in the world. It serves major automotive tire suppliers such as Bridgestone, Goodyear, Yokohama and recently the tire producers in China. The company produced around 380,000 tonnes of latex, rubber sheet and rubber block in 2009 and increased its production capacity to 500,000 tonnes in 2010 (Bangkok Business News Daily, 2010). In 2006, GoL granted Lao-Thaihua Rubber Company Limited, a joint venture between Lao, Thai, and Chinese companies with Thaihua holding 60 percent of total company shares. This makes Thai Hua one of the first major Thai rubber investors in Lao PDR. Currently, no extensive study has been done on the presence of Thai investors, although several items (Dywer, 2007; Asian Rubber Conference, 2009; Nanthavong, et al., 2009) of literature mention that Thai investors are active in rubber plantations, especially in central and southern Laos.

The joint venture granted by the Lao government turned over 32,000 hectares of land to Lao-Thaihua Rubber under a 40-year renewable concession agreement³. Lao-Thaihua Rubber has targeted Vientiane, Bolikhamsai (Pakkading District) and

³ In Lao PDR, the approval authority of agro-forestry, plantation concessions could be divided according to size of plantation. Area beyond 10,000 ha requires approval from the central government

Suvannakhet (Khanthaboury, Sayboury, and Outhoumphone Districts) (Laos News Agency, 2005). However, at this stage, it is not fully known on the ground how much land has been conceded to Lao-Thaihua Rubber for its venture.

According to Lao-Thaihua Rubber's Clean Development Mechanism (CDM) report published in 2006, the company has emphasized the potential economic and social development benefits towards the local people to be derived from its investment in the area, including land taxes and village funds. "Improvements to the infrastructure in the area is being carried out such as road network, water supply, electricity, construction of village meeting hall, fish pond, wells etc. Apart from that, the project is committed to consider any claims or feedbacks from the community so that it could respond to the real needs of the people. The project creates direct employment opportunities in the establishment, maintenance, harvesting, and processing of the products throughout the project cycle in the project area" (Lao-Thaihua, n.d.: 5). Additionally, the project also encourages community empowerment through active participation in all stages of the project.

Given the close connection between the quality of FDI in Lao PDR, the government's planning and regulation of FDI, and livelihood changes and food security outcomes for the Lao rural population, there is a need to analyze the factors that drive decision making and the costs/benefits among the relevant actors in the process of Thai investment in rubber in Lao PDR.

1.3 Research Questions

Main Question

How does the process of Thai FDI in rubber plantations account for the need to ensure food security in Atsaphone District, Savannakhet Province?

whilst provincial level could approve 100-10,000 ha. of land concession. The maximum concession period in Lao PDR is 50 years but renewable on a case-by-case basis (Land Law, 2003).

Sub-questions

- What are the corporate behaviours of Thaihua Rubber investing in rubber plantations in Lao PDR?
- Who are the key stakeholders? What are their roles and strategies used within the decision-making process related to transborder investment in commercial rubber plantations in Lao PDR?
- What changes in local livelihood have occurred, with particular focus on food security, in relation to Thai investment in rubber plantations in Atsaphone District, Savannakhet Province?

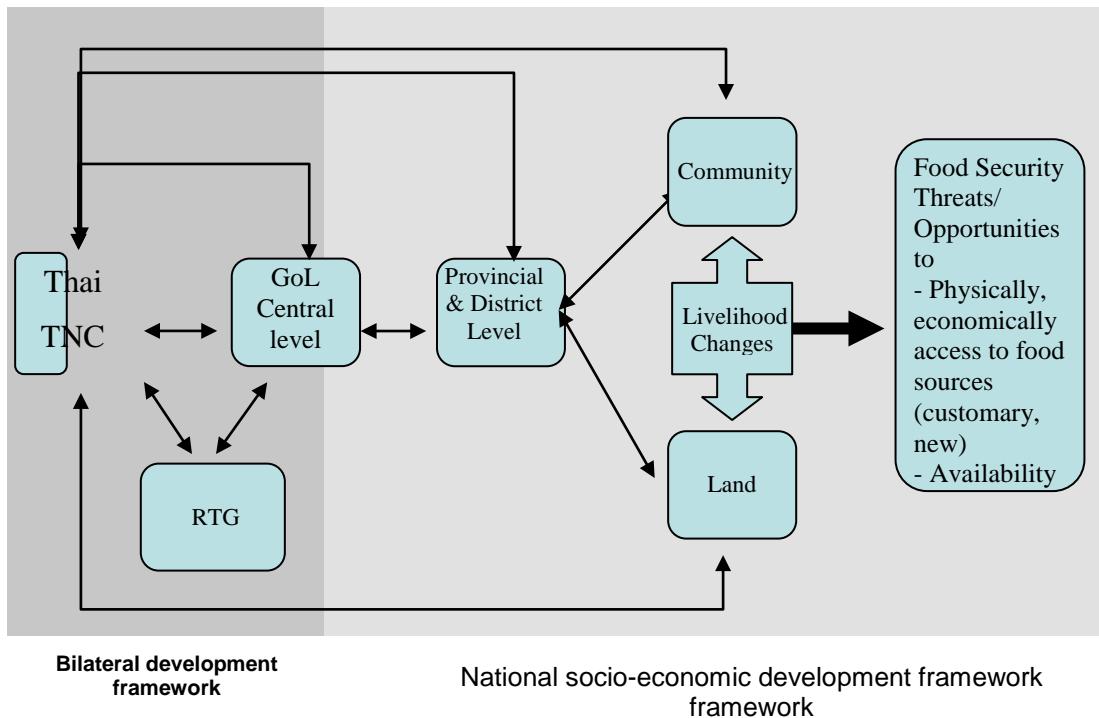
1.4 Research Objectives

In order to address the research questions, the objectives of this study are as follows:

- To study corporate behaviours of Thaihua Rubber investing in rubber plantations.
- To identify the stakeholders and their roles/strategies used within the process of foreign direct investment in rubber in Lao PDR.
- To study changes in local livelihoods with a focus on food security that result from Thai investment in rubber plantations in the specific case of Lao-Thaihua commercial activities in Savannakhet Province.

1.5 Conceptual Framework

Figure 1: Conceptual Framework



The study seeks to understand the key forces of change brought about by FDI by adopting Blaikie and Brookfield's (1987) "chain of explanation" conceptual framework where it recognizes the issue of power, the importance of explaining environmental impact on livelihood without separating out political and economic contexts. More precisely it analyzes the political ecology of foreign agro-forestry business, its effect on the relationship between rural communities and the natural environment, and the degree of impact on food security brought about by the investment.

Analysis of the political ecology of foreign-owned rubber plantations will involve studying the key actors who have a stake in the "benefits" gain within the process. At the cross-border level, these actors are the transnational company Thaihua Rubber; relevant Lao government agencies including the Ministry of Planning and Invsetment (MPI), the Ministry of Agriculture and Forestry (MAF), the Water

Resources and Environmental Administration (WREA), the National Land Management Authority (NLMA)⁴, the Royal Thai Government (Commercial Affairs Representative); the Industry Representative (Thai-Lao Business Council); non-governmental organizations such as the Thai Rubber Association; and multilateral organizations like the Food and Agriculture Organization (FAO). At the local level, the relevant actors include provincial representatives from MAF, NLMA and MPI, the district chief, NGOs working within the area including World Vision, Non-profit Association for Rural Mobilization And Improvement (NORMAI) and Stichting Nederlandse Vrijwilligers (SNV), the village headman, and the affected communities in Kan Tiew village. Political ecology seeks to ask: What are the political and economic power relations among these actors? What are the key strategies employed by the government of Lao PDR in order to attract investment? What are the key drivers for the Thai investor to expand beyond the national border and invest in rubber plantations in Lao PDR? It is essential to look into the changing relationship between rural communities and their natural resources as a result of FDI since in the Lao context, most of the rural population still relies on subsistence or semi-subsistence farming and is extremely dependent on land. The analysis will take account of the deepening relationship between the global market economy, regional economic integration and the emerging market-led socialist economy, as well as Thai-Lao political relations. It will finally address the causal relationships between the corporate behaviour of the Thaihua Rubber, the process and the actors within the decision making process and the consequent livelihood changes on the ground with regards to food security implications.

1.5.1 Food Security Definition

This research adopts the latest definition of food security as defined in The State of Food Insecurity (FAO, 2002). Food security "...exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food

⁴ On 15 June, 2011, a new ministry, Ministry of National Resources and Environment has been established as a result of merging of two major government agencies, National Land Management Authority (NLMA) and Water Resource and Environment Administration (WREA).

which meets their dietary needs and food preferences for an active and healthy life. Household food security is the application of this concept to the family level, with individuals within households as the focus of concern” (ibid, 2002). Whereas the condition of food insecurity is “when people do not have adequate physical, social or economic access to food..” (ibid, 2002).

In order to evaluate food security implications, the study would adopt food security at the household level to be:

- 1) The ability of households physically, economically access to safe food sources
- 2) The availability of food sources at all times to meet daily requirements.
- 3) Food sources will include households’ production, naturally available food sources in the surrounding and local market.

1.6 Research Methodology

This study adopts a qualitative research approach where it draws from a combination of primary fieldwork and the analysis of secondary sources (see Table 1.1 for summary of data collection). The initial literature review encompassed existing studies, published books, journals, newspaper articles, government documents as well as government websites and the websites of international development agencies such as the ADB, FAO, World Food Program (WFP), United Nations Development Program (UNDP) and from the websites of NGOs and INGOs whose work is related to Thai-Lao/GMS trade relations, policies on foreign investment or the impact of rubber plantations.

In order to understand the two major components of the research namely; the corporate behaviours and its investment process, and the livelihood changes with implications on food security in Kan Tiew, the selected village and Don Kuang Plantation in Atsaphone District, located approximately 70 km north of Kraisorn Promviharn, the provincial city in Savannakhet province. The primary fieldwork was undertaken in 2 periods during June – July 2011 in Bangkok Thailand, Vientianne City and 2 districts in Savannakhet province; Atsaphone and Kraisorn Promviharn,

Lao PDR. The approach to the fieldwork consists of key informant interviews using semi-structured questions (see further guideline to questions in Appendix A), group discussion⁵, in-depth interview with individuals to establish patterns and timeline, direct observation and collection of field documents and reports (only available in the field). The key informants were selected based on their knowledge and experience or familiarity with Thai/Lao trade relations, policies on the commercial-scale plantations and land-use situation within the country, the case of Lao-Thaihua rubber and the village under the case study in Atsaphone District. These key informants were relevant stakeholders in Thailand and Lao PDR, including Thaihua management, the Thai Trade Commissioner at the Royal Thai Embassy in Lao PDR, the National Agricultural and Forestry Research Institute (NAFRI), UNDP, representatives of NGOs, including World Vision, JVC and NORMAI and representatives from the village (see also Table 1.1 for full list of Interviewees). Since this is a qualitative study of the selected village, the analysis of the livelihood changes will also be supplemented by a quantitative/qualitative research report, which include the village under the case study by CIDSE, a local Catholic development agency in 2009.

With all the interviews, the researcher recorded responses with hand-written notes (no sound recording done due to sensitivity of the issue) with the exception of digital recording of interviews where permitted. Interviews with the Lao officials were conducted in Thai/Lao language with the exception of interviews within the village that two local guides assisted the researcher with translation.

The timing of this research was divided into two stages. The preliminary stage (7-12 June, in Thailand and Lao PDR) in Bangkok involved the discussions and interviews with existing NGO organizations, Focus on the Global South, World Vision Asia Pacific and TERRA/FER in Thailand, who had either worked on the plantation research or working with food security issues in Lao PDR. The purpose of this initial discussion was to gain knowledge on existing plantation and food security

⁵ Due to sensitivity surrounding the topic as well as restrictions in obtaining formal access, there was a change from the original plan in how primary data was gathered, specifically, focus group discussions in the village.

issues as well as the other relevant issues including land tenure security in Lao PDR. The preliminary visit in Savannakhet province in Lao PDR was conducted during 5- 7 June 2011 in order to establish local contacts as well as to consult with existing NGOs, JVC, NORMAI and World Vision Lao. These NGOs were able to provide some ground knowledge on the plantations, the villages and food security issues due to their long-term experience in the area. This stage was necessary for the process of case study site selection. The selection of the village was based on the balance between existing accessibility to the village as well as the extent of impact being affected by the community. The actual fieldwork took place in Lao PDR (27 June – 7 July 2011) and Thailand (8 July – 15 July 2011).

Table 1.1: Summary of stakeholders interviewed

Type	Position held	Name of Organization	Location
Actors Interactions			
Industry	Executive Vice President	Thaihua Rubber Public Limited	Bangkok, Thailand
	Thai business owners	Agricultural Industry	Savannakhet Province, Lao PDR
	Advisor to Board	Thai-Lao Chamber of Commerce	Bangkok, Thailand
Thai Government	Former Thai Minister Counsellor of Commercial Affairs to Lao PDR	Commercial Affairs, Royal Thai Embassy, Lao PDR	Phone interview, Chiangrai, Thailand
Government of Lao PDR	Former Agriculture Manager (PAF)	Ministry of Agriculture and Forestry (MAF)	Savannakhet Province, Lao PDR
	Director	National Agriculture and Forestry Research Institute	Vientiane City
	Senior official	Provincial Agriculture & Forestry Dept.	Savannakhet Province, Lao PDR
	Official	Planning Division, MAF	Savannakhet Province
	Chief Technical Advisor (EMSP)	Water Resources and Environmental Administration (WREA)	Vientiane City
	Director	Centre for ESIA of Investment Projects in Agricultural & Forestry Sectors (WREA)	Vientiane City
	Vice District Governor	Atsaphone District	Savannakhet Province,
	Village headman	Kang Tiew Village	Savannakhet Province
Multilateral Agency	Senior Programme Advisor	UNDP-PEI	Phone Interview, Vientiane city

Type	Position held	Name of Org.	Location
Food Security Implications			
International & Local Non-Profit Orgs	ICS Project Manager	NORMAI	Savannakhet Province
	Country Representative	CIDSE	Vientiane City
	Area Development Program Manager, Atsaphone District	World Vision Lao	Savannakhet Province
	Anon	Japan International Volunteer Center	Savannakhet Province
Government of Lao PDR	Village headman	Kang Tiew Village	Savannakhet Province
Community	Villager (male, 28)	Kan Tiew Village	Atsaphone District
	Villager (female, 39)	Kan Tiew Village	Atsaphone District
	Villager (male 48)	Kan Tiew Village	
	Villager (male 43)	Kang Tiew Village	Atsaphone District
	Villager/Plantation worker (male 41)	Kan Tiew Village	Atsaphone District
	Supervisor/ Don Kuang village headman (male 46)	Lao-Thaihua rubber	Atsaphone District

1.7 Research Scope and Limitations

The field research for primary data collection involving key informant interviews, focus group discussions and field observations took place in Bangkok (5-26 Jun and 8-12 Jul, 2011), Thailand with Thai stakeholders; in Vientiane City (6-7 Jul, 2011), Lao PDR with Laos government officials and officials from development agency headquarters; and in Savannakhet Province (Atsaphone District – 4-5 Jul, 2011 and Savannakhet Town (27 Jun – 3 Jul, 2011).

This research is not intended to perform a thorough assessment of food security impact as a result of rubber plantations but how food security is accounted for amongst the actors as well as within the process of foreign rubber investment in Lao

PDR.

1.8 Ethical Considerations

The researcher protected the rights of individuals at all times including the request for consent of individuals and organizations in disclosing such information that may have a negative weight or criticism towards any government(s). Individuals were treated with utmost respect and the purpose or objective of the research was fully explained to all parties concerned. In cases where interviews required the use of photos, voice recorders, or the names of individuals, the researcher requested the interviewee's consent before any actions took place.

1.9 Significance of the Study

The study will provide an overview of the nature of transborder investment in agro-forestry development and its food security implications on host communities on the ground and how the consequence of corporate rubber development strategy in Thailand would have implications across the border beyond economic development in Lao PDR. This essentially would require each country to go beyond the state-centric approach to resolve the transborder issue.

1.10 Overview of Thesis

The thesis seeks to investigate the relevant linkages between stakeholders in the process of Thai FDI in industrial-scale rubber plantations in Lao PDR and how strategies, key decisions among the powerful actors cause significant livelihood changes to rural communities at the grassroots level and consequently their food security. The thesis is divided into the following chapters:

Chapter I provides an overview of the need to study the phenomenon of Thai FDI in rubber plantations and why it is necessary to identify the significant linkages between industrial rubber plantations and pending threats or potential opportunities related to food security for the people of Lao PDR. The chapter also outlines the entire research methodology that guided the thesis process.

Chapter II reviews the existing body of literature, which provides varying perspectives on Thai-Lao political and trade relations; the phenomenon of the rubber boom in Southeast Asia that is particularly now emerging in transitioning countries such as Lao PDR; the Lao social and economic conditions as well as the food security situation; and the challenges and opportunities posed by rubber plantations to communities on the ground.

Chapter III provides findings of rubber investment situation in the area of the case study as well as the livelihood changes that occurred since the establishment of the plantation. In the analysis of food security implications, the chapter examines how these changes have impact on the households' ability to physically, economically access various food sources as well as the stability of food supply within the community.

Chapter IV intends to respond the sub-questions of the research in explaining the corporate behaviour of Thaihua Rubber. It will identify key actors and their institutions including relevant laws and regulations within the transborder rubber investment process at multiple levels. Considerations would be made on how the actors and relevant policies and strategies account for food security at the community level. Additionally, the chapter will outline the decision outcomes that have influence on food security conditions on the ground.

Chapter V concludes with further discussions and questions whether the current process of FDI in rubber plantations accounts for the food security situation of affected communities in Lao PDR. It also raises questions about the transboder nature of the issue and who should take responsibility of protection and empowerment in order to mitigate food insecurity as a consequence of the transborder rubber investment. The chapter also outlines some recommendations for major stakeholders, including the Royal Thai Government, the Government of Lao PDR and Thai corporations.

CHAPTER II

LITERATURE REVIEW

2.1 Introduction

The following literature review examines current studies on major issues relevant to the phenomenon of foreign direct investment in commercial-scale plantations. The issues include the characteristics and role of FDI in developing economies, Thai-Lao political and trade relations, the Lao social, economic and food security conditions, land tenure security and most importantly the impact and the associated costs and benefits to the host country of large-scale rubber industrial plantations.

2.2 Characteristics and Motivations of TNCs

Foreign direct investment was an ingenious invention of the market economy that became the arms and legs of the globalization process, facilitated by trade liberalization. UNCTAD (2007) has noted the significant growth of TNC activity (worth US\$ 200 billion in 2006) in the global south, between developing and transitioning economies, including the increase in bilateral flows of FDI in the resource-extractive sector. UNCTAD found that TNCs were motivated by the desire to seek resources to serve upstream and downstream businesses, seek markets through control over the distribution of resources, and seek efficiency by taking advantage of relatively cheap costs of production, namely land and labour (2007). In analyzing TNC behaviour, Lall has argued that both conventional scholarship by economists like Hymer, Caves, Horst, Baumann and Stevens based on neo-classical trade theory, as well as Marxist oriented arguments about TNCs, are too simplistic to divulge the essence of their behavior (1976, p. 1331). The former neo-classical analyses were lacking the knowledge of actual process of multi-national growth. Using the

“oligopoly theory” of direct investment, Lall (1976) presents a more multi-dimensional argument, stating that corporations in the FDI process suffer an “intrinsic disadvantage,” which includes communication difficulties, linguistic differences and lack of knowledge of local market conditions. At the same time, however, they also possess “market power,” which includes size of capital, exchange risk advantage, management, technology, economies of scale, bargaining and political power, that may offset the “intrinsic disadvantage.” So far, these literatures have looked into the economic side of the transnational corporations’ characteristics. The implications of such characteristics are yet to be explored i.e. their weight of their “market power” on other spheres of influence, which often shapes outcomes of many host countries’ development decisions including which industries would be prioritized for foreign direct investments.

2.3 Regional Rubber Boom and FDI in Rubber Plantations

Southeast Asia has long served as the world’s major natural rubber supplier, meeting global demand for rubber over the last few decades. In the 1970s and 1980s in particular, Thailand, Indonesia and Malaysia were the main countries fulfilling this role. The growth of the rubber industry went hand in hand with the global explosion of the automotive industry, driven largely by demand in emerging economies such as China and India (see Table 2.1). Approximately 70 percent of natural rubber goes towards the production of automotive tires (Industrial Rubber Goods, n.d.). Until recently, the rapid expansion of industrial rubber planting occurred in remote areas of China, Cambodia, Myanmar and Lao PDR (Baird, 2010). Most rubber plantations, as agribusiness development within the country, have been state-owned although early experiments of rubber plantations also existed during the French colonial period around the Indochinese region. Rubber as a commodity in the market is also competing with other important commodities such as rice, corn and sugar (Baumüller, 2008). This is important as these commodities also compete for land to grow them.

Table 2.1: Global natural rubber supply until 2020 (in million tonnes)

Countries	2000	2005	2010	2015	2020
Thailand	2.3	2.9	3.2	3.5	3.7
Indonesia	1.5	2.3	2.9	3.5	4.1
Malaysia	0.9	1.1	1.2	1	1
India	0.6	0.7	0.9	1	1.1
China	0.4	0.5	0.6	0.7	0.8
Vietnam	0.3	0.5	0.6	0.9	1
Cambodia	0.04	0.04	0.06	0.1	0.1
Africa	0.04	0.04	0.05	0.05	0.07
Latin America	0.02	0.2	0.2	0.3	0.3
Total	6.3	8.7	10	11.4	12.6

Source: IRSG (2007) (as cited in Hicks et al.,2009)

The proliferation of industrial-scale rubber planting in Lao PDR has been accelerated by the government's efforts to eradicate traditional swidden farming practice in order to capitalize on land more effectively, as well as the need to eradicate poverty within the country and the need to gain FDI income in order to increase GDP by supplying the global market for rubber. According to the Secretariat of the International Rubber Study Group⁶ (IRSG), global demand for rubber will reach 22.2 million tons by 2015 and 31.5 million tons by 2020 (cited in Hicks et al., 2009, p. 1). The growing demand for rubber in China is intricately linked with the growth in the automotive sector, where car sales rose from 822,300 units to 1.06 million units within 2010 (Suwannakij, 2010). According to the Thai Board of Investment, BOI, rubber was Thailand's top export commodity in 2010 with the value worth at least US\$ 2 billion annually (BOI, 2010). Lao PDR became the target for its surrounding rubber-hungry neighbours. Many foreign investors, mainly from China, Thailand and Vietnam, began to invest heavily in large-scale rubber plantations throughout Lao PDR (Dwyer, 2007; Baird, 2010; Hicks et al., 2010). World Bank (2006, 2008) noted that within two decades, FDI rose from US\$30 m in 2001 to about US\$ 1,000m in 2008. According to the international banking institution, FDI in the resource sector

⁶ The IRSG is an intergovernmental organization established in 1944. As well as bringing together the world's rubber producing and consuming countries, the IRSG organizes a number of forums for discussing matters affecting rubber demand and supply.

accounts for more than 80 percent of total foreign investment in Lao PDR and “*Plantation of rubber trees is one of the most active areas for FDI*” (Ibid, 2006, p. 23). A survey by the Laos’ Ministry for Commerce in 2007, found that 40 companies have come to grow rubber in Laos in a total area of 182,900 ha (Ministry of Commerce, 2007).

The Government of Lao PDR’s Social and Economic Development Plan specifically mandates the encouragement of industrial tree plantations and FDI for poverty reduction (GoL, 2006). The government’s Committee for Planning and Investment (CPI) estimated in February 2008 that 17 large companies had already obtained 200,000 hectares of land concessions in Laos specifically for rubber (Vientianne Times, 2007; cited in Baird, 2010, p. 1), with this number expected to climb to 300,000 hectares by 2020. Ziegler et al. have estimated that more than 500,000 hectares of land in the region (in China, Cambodia, Myanmar, Thailand, Vietnam and Laos) have already been taken up by rubber plantations, and that the amount of land designated to become rubber plantations could escalate two to three times beyond this number by 2050 (cited in Baird, 2010, p. 2). See table 2.2 for rubber plantation areas in Lao PDR.

Baumüller (2008) revealed that in comparison to other important crops like sugar and rice, total land use by rubber plantations might not be as significant.⁸ However, given the nature of rubber plantations, land-holding lasts for longer periods (up to 30 -35 years) and the investment per hectare is much higher (estimated US\$ 900/hectare compare to US\$ 100-300/hectare for rice). The growing volume of literature on rubber plantations phenomena in Lao PDR within the last decade reflects

⁷ Foreign investors had made remarkable investments in rubber plantations in Lao PDR, amounting to more than US\$100m in total. These include plantation activities by (1) Daklak Rubber Company of Vietnam (a US\$30m in the south) (2) Vietnam General Rubber Corp. (a US\$22m in the south); (3) The Lao-Thai Hua Rubber Company (a US\$35m joint plantation project in central region) by Thai Hua Rubber Public Company (Thailand) and New Chip Xeng Company (Lao PDR); (4) Junnan Power Biological Products Group, China (a US\$15m in central region); (5) other rubber plantations in Northern provinces, such as Luangnamtha, Oudomxay and Luang Prabang by Chinese investors.

⁸ According to a World Wildlife Fund (WWF) report dated 2008, the total amount of land projected for rice farming is 656,000 hectares; for sugar, 102,000 hectares; and for rubber, 52,000 hectares. [The

the shift of rubber plantation development from traditional rubber growing countries to transitioning countries with untapped land resources such as Lao PDR. The topic is particularly relevant given the growing competition for land between agricultural and other non-food crops production.

Table 2.2: Where is rubber being planted in Lao PDR

	Rubber planted 2007 (ha)	Rubber planted 2008 (ha)	Planned for 2010 ⁹ (ha)
Northern	16555	75,900	164,400
Phongsaly	15	12,600	26,400
LuangNamtha	8,770	21,700	20,000
Bokeo	700	9,800	25,000
Xayabouly	70	5,200	50,000
Oudomxay	4,500	17,100	21000
Luangpabang	2,500	9,500	22,000
Central	2950	25,600	34,300
Vientiane	100	9,200	10000
Borlikhamxay	1,000	5,100	4,000
Khammoune	1,500	6,100	6,300
Savannakhet	250	4,600	14,000
Southern	8,700	39,000	48,500
Salavan	1400	4,700	6,500
Champassak	6700	20,100	33,500
Xekong	100	6,200	5,000
Attapeu	500	8,000	3,500
Total Area	28,205	140,550	249,360

Source: Asian Rubber Conference (2009); 2007 numbers from FRC/NAFRI Survey; 2008 data and 2010 targets collated from provincial statistics.

2.4 Thai-Lao Political and Trade relations

Most of the existing literature (Chamber, 2007; Tsuneishi, 2007; Diokno & Van Chinh, 2006; Phanvongsa, 2008; and Theeravit, 2002) concerning Thai-Lao international relations has emphasized the changing dynamics during the post-Cold

figure of 52,000 hectares for rubber is different from the information provided in the paragraph above. You need to address this discrepancy.]

⁹ Total area in 2010 has yet to be formally surveyed. Land data is currently scattered in provincial offices.

War period and the corresponding transformation from bitter rivals to trading partners. Chamber (2007) implies that Thailand and Laos have exchanged their long entrenched “acrimonious history,” military and human security for increased regional wealth through economic co-operation and integration. Thailand’s foreign trade policy late in 1980’s under Prime Minister Chatchai Choonhavan¹ - “battle zones”¹ into “market place”, followed by a series of regional trade liberalization regime like GMS-EC (Greater Mekong Sub-region Economic Cooperation), initiated by Asian Development Bank in 1992 and ACMECS (Ayeyarwady- Chao Phraya - Mekong Economic Cooperation Strategy) in 2003. Diokno and Van Chihh (2006) point out that since the mid-1980’s and after the end of the Cold War, the idea of a shared destiny and mutual prosperity among the region began to emerge. Countries within the region like Vietnam, Laos and Cambodia began to open up with major economic reforms. This coincided with Thailand’s aspiration to expand its economic dominance over its neighbours, who were perceived as weaker, lesser and poorer countries, through the strategy of turning “battle fields into marketplaces.” Binh (2006) calls into question the success of the process, claiming that former sentiments of distrust and suspicion are still very much unconsciously rooted in the past, especially for Thailand and Laos. In Chamber’s (2009) analysis, even though Thai and Lao people share cultural, ethnic and linguistic affinities, both nations have long been rivals over the balance of power within the Mekong region, and the legacy of the divide in political ideologies still lingers in the sentiments between the Thai and the Lao state.

Since the capitalist transformation in its neighbour’s economy, Thailand has been ranked as the top source for FDI in Lao PDR, focusing mainly on the energy sector as well as the service and agribusiness sectors (see Table 2.2) (World Bank, 2006). However, by 2008, Thailand had been overtaken by China. In terms of trade specific to plantations, Mann (2009) points out that China has strategically and explicitly propagated the “Go Out” (*zou chu qu*) strategy, which has propelled Chinese companies to invest overseas. Rubber became the opium-replacement, and eligible investors were lured with 80 percent of initial costs subsidized.

Table 2.3: Approved FDI data in percentages 2003–2008

By country		By sector	
Thailand	23.7	Power generation	53.9
China	16.9	Agriculture	11.4
Vietnam	9.3	Mining	9.8
Japan	5.8	Industry and Handicraft	7.5
France	5.7	Services	4.3
India	4.8	Trading	3.8
South Korea	4.7	Construction	2.9
Australia	4.6	Hotel and Restaurant	2.6
Malaysia	1.8	Other activities	3.7
Singapore	1.4		
Others	21.3		

Source: IMF (2009)

Within Thailand, rubber plantations have tended to be concentrated in southern Thailand. However, due to cheaper land prices, rubber plantations have more recently also spread to the northern and northeastern regions of the country (Baumüller, 2008). Vietnam has also established a presence on the global rubber market with its state-owned plantations, both within the country and in neighbouring countries such as Cambodia and Lao PDR (Douangsavanh et al., 2009).

The development of industrial plantations including rubber also served additional purposes in Lao PDR. As in other countries, the Lao government has classified industrial tree plantations as secondary forest cover, hence fulfilling the overall national goal to increase forest cover from the current 52 percent up to 70 percent by 2020 (ACIAR, n.d.). According to the 1997 Kyoto Protocol, industrial plantations are also considered to be clean development mechanism (CDM)¹⁰ projects, thereby making the government of Lao PDR compliant in carbon reduction goals.

¹⁰ CDM is one of the “carbon-reduction” mechanisms initiated in the Kyoto Protocol as part of sustainable development and climate change initiatives.

2.5 Laos and its socio-economic conditions

2.5.1 Laos Society

Human development in Lao PDR has improved significantly over the last few decades. Lao PDR's Human Development Index ranking has risen from 141st out of 173 countries to 133rd in 2009 and 122nd in 2010 (UNDP, 2010). Its poverty rate has also declined from 46 to 26.9 percent (2010). It was estimated that approximately US\$ 6.32 billion would be required for the country to achieve its MDG goals by 2015. This is translated to US\$ 192.3 per capita per year and out of this, US\$ 149 per capita or 77 percent is government expenditure (*ibid*, 2010). According to official national statistics, the population of Lao PDR was 6.26 million people in 2010, out of whom 3.13 million were male and 3.12 million were female (Lao Statistics Bureau, 2010). The majority of the population (57 percent) is of productive age (15-64 years old), while approximately 39 percent of the populations are children under 14 years old and four percent are people over the age of 65. Population density in the capital, Vientiane City, is 174 persons per square kilometer. Other more densely populated provinces include Savannakhet, Saravan, Champasak and Luang Prabang, with a population density of 24-40 persons per square kilometer. Generally, Lao PDR is considered to be a fairly sparsely populated country, even though the phenomenon of urbanization is rising and the government has attempted to strategically relocate isolated communities into "focal points"¹¹ for better management of resources, infrastructure and other public utilities. This strategy will be discussed later in the chapter, as it has an influence on people's food security situation.

Like other countries in the surrounding region, Lao PDR is ethnically diverse. The population can be roughly classified into three major ethnic groups: *Lao Loum*, or

¹¹ Focal points, or *jut soom* in Lao language, represent a further sub-division within the districts. One focal point is often comprised of 4-5 villages. Infrastructure and other public facilities have been built around these focal points.

lowland people, comprised of 12 ethnic groups who constitute 69 percent of the population; *Lao Theung*, or midland people, comprised of 36 ethnic groups; and *Lao Soung*, or highland people, comprised of a further 20 ethnic groups (National Portal of Lao PDR, n.d.). The large number of sub-ethnic groups within Lao PDR has proven to be a challenge for the one-party state government given the relatively small size of the entire population.

The number of sub-ethnic groups also gives rise to various cultural and belief systems. Although Buddhism is the national religion and 67 percent of the population declares themselves to be Buddhists, animism and traditional beliefs accounts for 30.9 percent while the remainder are Christians, Muslims and Bahai (ibid, n.d.) In reality, the government of Laos has sought to neutralized religious beliefs with the political ideology of Marxism (Savada, 1994; cited in Vaughan, 2006, p. 48). On the ground, the practice of Buddhism is neatly integrated with former animist practices and the belief in spirits. It is clearly vital to understand and discuss religious belief systems within the context of Lao PDR, where the intertwining of political ideology and religious beliefs has governed people's motives, thoughts, practices and, as will be discussed later, their interactions with natural resources and food utility. Religious ceremonies and festivities still determine the order of the day for the people of Laos. It will also become evident later that the interplay of "modern" market-led economy and Lao traditional society, which is deeply entrenched in the religious belief system, causes frustration and misunderstanding for outsiders, who perceive Lao people as being too "backward" and "lazy" to function in the modern economy.

Lao PDR's poor educational system and low literacy rate remain a challenge for a country that has to move forward with the ever-changing global economy. According to an official survey in 2005, the overall literacy rate stands at 60 percent, while more men have received primary school education than women (83 percent and 63 percent, respectively), and the urban population is more educated than the rural population (89 percent and 54 percent, respectively) (Lao Statistics Bureau, 2005). The literacy rate also varies among ethnic groups, with those living in lowland areas having the highest literacy rate (75 percent). By comparison, for example, the literacy

rate among the Hmong is only 26 percent. Geographically, secondary education opportunities also tend to be concentrated in the northern region, closer to the capital. This factor naturally determines the varied literacy rates between the urban northern provinces and the southern part of the country (with the exception of border cities like Savannakhet and Pakse). The capital city itself houses several institutions of higher learning, including the Institute of Pedagogy, the University of Medical Science, National Polytechnic Institute, the National University of Lao PDR and other secondary private institutions (Thant & Vokes, 1997; cited in Vaughan, 2006, p. 49). The government has been commended by multilateral agencies such as the UNDP for its progress toward achieving universal primary education, which is one of its Millennium Development Goal targets, to be achieved by 2015.

Public healthcare in Lao PDR suffers the same fate as education, or rather is a reflection of the country's lack of achievement in education. With a limited number of medical professionals and facilities, the average national life expectancy remains relatively low at 62 years for males and 64 years for females. By comparison, life expectancy in neighboring Thailand is 66 for males and 74 for females, and in Vietnam, 70 for males and 74 for females (WHO, n.d.).¹² Nevertheless, the World Health Organization (WHO) (2010) has commended the Lao government for the significant improvement in life expectancy since its momentous economic reforms in 1986. Malnutrition, diseases related to poor sanitation, lack of clean drinking water supply and other major communicable diseases like tuberculosis, HIV and malaria are major health concerns in Lao PDR. Existing conditions of malnutrition and protein and vitamin deficiency, though not uniformly distributed throughout the country, are significantly present in remote areas as a consequence of food insecurity.

2.5.2 The Laos Economy

The momentous transformation from state-led to market-led economy under the NEM in 1986 caused tremendous changes in the entire socio-economic landscape

¹² Source: WHO, <http://www.who.int/countries/lao/en> (last accessed : 14 September 2011)

of Lao PDR. The former economy consisted mainly of rudimentary agriculture and customary practices related to growing rice, food crops, livestock, fishing and collection of forest-related commodities. Of Lao PDR's total land area of 236,800 square kilometers, three percent is arable and only 21 percent is suitable for agriculture (MAF, n.d.). Of the population in the age range of 15-60 years old, approximately 66 percent are economically active, and 80 percent of these people are subsistence farmers living in rural communities.

Despite progressive economic change with GDP growth between 7.5-7.8 percent in the period 2007-2010, Lao PDR is still classified among the least developed countries (LDCs) with per capita income at US\$ 2,387 (PPP) in 2008, 76.8 percent of the population still living on under US\$ 2 per day (2002) and 19 percent of the population suffering from hunger (Schoenweger & Üllenberg, 2009). With its economic reforms, the Lao government issued a series of decrees and laws in an attempt to jumpstart the economy and transform it from a subsistence-based economy into a modern monetary, consumption-based economy. Part of the reforms included laws and regulations to encourage FDI and domestic investment from the private sector. The strategy to become the “battery of Asia” has rapidly stimulated FDI in the hydropower sector, as discussed in the previous chapter.

In 2010, agriculture accounted for approximately one-third of Lao PDR's GDP, but employed three-fifths of the country's workforce (ADB, 2011). Other major contributions to the national GDP come from FDI in the resources sector, namely mining, hydropower and minerals. The Seventh National Socio-Economic Development Plan has ambitiously set a goal for the country to maintain its GDP growth rate at eight percent. The rate of inflation has also been on the rise (approximately six percent in 2010), with rising food prices in particular contributing most to overall inflation in 2010 (World Bank, 2011). As a late player joining the game, Laos is also limiting itself by positioning itself primarily as a supplier of resources and hence becoming dependent on the highly volatile price of commodities on the global market.

2.5.3 Laos and Food Security

In Lao PDR, food security is practically translated as rice availability and sufficiency, and is used as a major poverty indicator (WFP, 2011). Central Laos, and especially Savannakhet Province, produces more rice than any other region of the country, yielding 656,000 tons in 2010 (see Table 2.4 below for annual rice yields in Lao PDR by region) (*ibid*, 2011). Annual per capita rice consumption averages 206 kilograms, making Laos the highest per capita consumer of rice in the world (Saysana, 2011). Theoretically, if a person requires at least 206 kilograms of rice per year, Lao PDR's annual rice production of 3 million tons would be sufficient to feed the country's entire population, which numbered 6.6 million in 2008. Nevertheless, despite the availability and sufficiency of rice within Lao PDR, distribution and access to rice remains uneven (WFP, 2011). Aside from the pull factor of the trading price of rice on the Lao and Thai markets, the skewed distribution of rice could also be attributed to the geographical isolation of certain settlements and villages, especially in the northern area of the country.

Table 2.4: Annual Rice Yield in Lao PDR by Region

Region	Total Area ('000 ha)		Total Rice Prod. ('000 tons)	
	2009/2010	2010/2011	2009/2010	2010/2011
North	196	195	639	618
Central	481	460	1,803	1,670
South	211	214	763	718
Total	887	870	3205	3,006

Source: WFP Food Security Assessment (2011)

In addition to rice production, there are also other important food sources,

including food crops such as vegetables, roots and tubers (cassava, taro and sweet potato), sugarcane, banana, watermelon, NTFPs such as wild fruits, bamboo, frogs and mushrooms, aquatic animals and livestock. In studying the role of wild products in human nutrition & food security in Lao PDR, Foppes has also mentioned that “Glutinous rice is definitely the staple food for the people of Lao PDR, but there is a growing recognition that food products gathered from forests and wetlands are equally essential for the food security to Lao people” (Foppes, 2008:7). Additionally, Foppes (2004) has identified that NTFPs also contribute indirectly to food security by way of sales of NTFPs to purchase rice for household consumptions. For instance, in terms of fish catch, Fobbes (2009) has shown the monetary value gained through its sales by indicating the recent reliable estimate of wild catch fisheries in Lao PDR is 208,503 tonnes/year or 28.6 kg/capita/year which estimated to be of US\$ 459 million per year in terms of possible income.

However, NTFPs as a source of food are diminishing with the rising phenomena of landlessness and forest loss, as well as due to the greater restrictions placed on rural communities that prevent them from accessing “preserved¹³” forests. Increasing contestation over land has resulted in decreasing availability of agricultural land, which has a direct impact on the food security situation in Lao PDR. The process occurring today in Lao PDR parallels the transformation that already took place in Thailand, where other resource sectors and investors have been constantly grabbing land for other purposes.

2.6 Land tenure and Land policies in Lao PDR

The overarching theme of Laos’ existing development model is poverty eradication and economic growth. This theme is reflected in the government’s existing land policies and its efforts to promote industrial plantations as a way of stabilizing swidden cultivation, on the way toward eliminating it completely by 2010.

¹³ Within the context of Lao PDR, there are three main types of forests under preservation (Preservation, Conservation & Production) where total protection zones completely prohibited unauthorized entry to harvest any forest products.

Indeed, the government has declared that the promotion of tree plantations for “commodity production are to be strongly promoted” (GoL, 2005, p. 2). In practice, this policy trajectory translates into the government’s push for commercial-scale agro-forestry systems and the boosting of exports.

Established in 2005, the Lao government’s National Forestry Strategy 2020 comprehensively summarizes relevant land and plantation policies, as well as implementation principles. The Land Use Planning (LUP) Policy, including land use planning and allocation (LUP-LA), and the Tree Plantation Development Policy are two major policies governing the development of commercial rubber plantations. When the LUP Policy was initially implemented in 1996, Prime Minister’s Decree 117 specified in three articles that each household be allocated 2-5 hectares of forest and forestland, while each village was to receive 100-500 hectares of land. According to LUP-LA, land formerly used for swidden cultivation¹⁴ by local villagers classified as “degraded” land” was eligible for use by large-scale rubber plantations.

In contrast to most land laws that favor foreign investors, Baird (2010) has observed that the Forest Law (2008) is more restrictive of their interests. Similarly, Article 67 of the Land Law also states that foreign land concession holders are obliged “not to violate the rights and interest of other persons” (GoL, 2003). Article 14 of the law states that “the change of (use of) land from one category to another category can be made only if it is considered to be necessary to use land for another purpose without having negative impact on natural or social environment and must have the prior approval of the concerned management authorities” (GoL 2003).

To conclude, while the existing Land Law and Forest Law are quite comprehensive and continuously updated, the government lacks the institutional capacity to implement and enforce the laws on the ground. Further compounding the problem are the sometimes conflicting roles among the relevant agencies, such as between the National Land Management Authority (NLMA) and the Ministry of

Agriculture and Forestry (MAF) (NLMA, 2009). Moreover, actual land demarcation in many provinces has not been completed and land law awareness is still lacking at the district and community levels. Efforts to build capacity and create awareness among the communities are not able to keep pace with the rapid advance of foreign investment on the ground. By way of illustration, between 2001 and 2009, 387 FDI agro-forestry projects worth US\$ 1.03 billion were approved.

2.7 Impact of Industrial Rubber Plantations

2.7.1 Possible Rubber “Costs”

A host of studies by international NGOs, international development/funding agencies and government research centers have been conducted on the development of industrial rubber plantations, peaking especially after the GoL’s moratorium on large-scale industrial plantations throughout the country in 2007. The debate in these studies has centered on the implementation gap in land policy and land tenure security, as well as its implications, which include agrarian and customary livelihood changes.

All studies have directed attention to the significant social and environmental costs associated with large-scale rubber plantations in northern Laos, backed by Chinese investors, and in southern Laos, backed mainly by Vietnamese investors. These social and environmental costs have led to significant, often irreversible livelihood changes in affected communities (Dwyer, 2007; Obein, 2007; Thongmanivong & Fujita, 2006; Manivong & Cramb, 2008; Xiaofei, 2008; CIDSE, 2009; Hicks et al., 2009; Nhoybouakong et. al., 2009; Asean Rubber Conference, 2009; Kenney-Lazar, 2009; CRILNR et al., 2009; Baird, 2010). For instance, some social costs include lack of compensation or insufficient compensation for personal and community land loss; economic dependency of farmers on plantation income as they are transformed overnight from subsistence farmers into daily wage labourers; and physical conflicts which arise from land grabbing. These social issues have

¹⁴ According to Forest Strategy 2020, swidden cultivation accounted for 0.5 million hectares or 2.2

already been studied and have long existed in other countries of the global south since the appearance of the rubber boom. Dove (1996) has analyzed the social impact of rubber plantations in Borneo in the early 1930s from a political economy perspective. Rather than merely describing the impact, he highlights the linkages and interactions between two realms, local history that was more about rice, and the global economic history that was more about rubber. His analysis takes into consideration the manipulation of global rubber prices as well as laws and regulations that favoured the colonial-era European-owned plantations over smallholder rubber development. In the Amazon, Murphy refers to the social change occurring as a result of rubber transformation within the area, noting that “once a social change is made and a new adjustment found, it is almost impossible to turn the clock back and reestablish what has been lost” (1956, p. 159; cited in Dove, 1996, p. 52).

In relation to employment and poverty alleviation, Obein (2007), who studied the case of Vietnamese investment in rubber through Viet-Lao in Champasak Province, has shown that the involvement of farmers as labourers in the plantations was not economically viable. He indicated that employees earned on average around 500,000–1,000,000 kip per month, equivalent to around US\$ 50–100. This amount may or may not be sufficient, depending on the size of household and the degree of dependency on this income. This sum was only the expected amount written in the contract, but the actual amount received by a worker would vary according to the type of work assigned. Furthermore, some studies of Vietnamese companies indicate that only labourers between 18–45 years old were allowed to work with the company, and not every able worker was hired on a full-time basis (Baird, 2010).

Environmental costs studied by various NGOs, international agencies, national research centers include primary and secondary forest encroachment, underground water table depletion, top-surface soil nutrient loss, and water and ground pollution associated with the use of pesticides. Other literature that has studied the impact of rubber plantations in other rubber-growing countries has also revealed a similar

scenario. In Xishuangbanna Prefecture, China, Mann (2009) notes that Chinese researchers have attributed the tripling of soil erosion and surface runoff as well as the rapid depletion of the underground water table to the growth of rubber.

Land tenure rights and GoL's fragmented implementation of land policies have received the attention of many academic and development agencies. Most studies were conducted in northern Laos with Chinese investors and southern Laos with Vietnamese investors (Dwyer, 2007; RRDTC, 2009; Sipaseuth & Hung, 2009; Baird, 2010; Fujita & Phengsopha, 2008; MAF et al., 2009). Studies presented evidence of land misappropriation, which resulted in affected rural communities being disenfranchised and losing access to land and forests, which led to further economic insecurity (Cornford, 2006). It is known that large land concessions with unnecessarily long contract periods of 30-50 years usually occur in southern Laos (Baird, 2010). Land is sometimes conceded without the knowledge of villagers or communities. For instance, Obein gave an example of Viet-Lao plantations in Champasak Province where the villagers were not informed of the acquisition and as a result 83 percent of 33 villages affected by lost their agricultural land (Obein, 2007). The loss of land or access to land also amounted to the loss of villagers' customary source of livelihood, namely non-timber forest products (NTFPs) including wild mushrooms, forest fruits, malva nuts, wild cardamom, wild honey, bamboo shoots and fish catch (Baird 2010).

These costs, although not in explicit monetary terms and often bore by the communities at the grassroots level, bring about changes between land and communities and consequently threaten food security. Studies by the FAO (2003) and other organizations have underscored that potential food insecurity is a consequence of land loss and villagers' involvement with rubber plantations, including the loss of land to grow food, loss of forestland to collect non-timber forest products and loss of grazing land for livestock. WFP (2011) admits that large-scale plantations have caused limited access to land for animal grazing. UNCTAD (2007) has also acknowledged the social and environmental impact associated with FDI in extractive industries, but argued that TNCs could also reduce adverse environmental

consequences by using advanced technologies and applying higher" standards of environmental domestic companies. This argument, however, may not be valid when considering southern TNCs operating in the global south, such as those from Thailand where the notion of corporate social responsibility is still at the nascent stage.

2.7.2 Potential Rubber "Benefits"

Very little literature has mentioned the positive outcomes resulting from commercial-scale rubber plantations, although a number of studies (Manivong & Cramb, 2008; Mann, 2009; Nhoybouakong et al., 2009; Asean Rubber Conference, 2009) have pointed out the possible economic benefits of smallholder rubber plantations with intercropping of other cash crops. Manivong and Cramb (2009) systematically calculated economic gains and concluded that smallholder rubber plantations could be proven economically profitable. Some of the existing literature does reveal that smallholder farmers have experienced significant economic benefit from rubber operations, such as in the case of Thailand, where the government promptly limited foreign direct investment during the industry's start-up phase (Douangsavanh, Thammavong & Nobel, 2008). In a study cited by Mann (2009), rubber sales enabled a typical township in China to increase its income almost ten-fold.

2.8 Research gap and conclusion

The literature review confirms the growing phenomena of rubber expansion among the emerging countries through transborder investments. Extensive information prepared by academics, governments and development agencies about the impact of rubber plantations is available due to the rapid expansion of foreign investment in rubber plantations in Lao PDR. However, there are few or no studies that provide a political ecology perspective, which might draw attention to more systemic issues associated with the transborder nature of FDI in rubber plantations above and beyond the immediate social and environmental impact on rural communities. Moreover, the linkages among FDI outcome, livelihood changes occurring as a result of rubber development, and food security implications have yet

to be thoroughly studied. Finally, previous studies have concentrated on the impact stemming from Chinese and Vietnamese investors, who are state-sponsored rather than having a true corporate identity, as in the case of Thai investors.

CHAPTER III

FOOD SECURITY IMPLICATIONS OF KAN TIEW VILLAGE

3.1 Introduction

This chapter attempts to respond to the research question on food security implications on the ground as a consequence of the FDI process in rubber plantation by taking a case study of Kan Tiew village in Atsaphone district, Savannakhet province. In studying food security implications, the chapter will first present the broader context of the socio-economic development, food security status and FDI in plantation development in Savannakhet province. The findings will identify the current profile of Kan Tiew village including its livelihood, the eating culture, land tenure situation and the status of Lao-Thaihua plantation in Don Kuang. Don Kuang plantation is an area covering several villages in Atsaphone district. Secondly, it will identify the relevant livelihood changes as a consequence of land loss and the diminishing Non-Timber Forests Products (NTFPs) since the establishment of the plantation. The final part of the chapter focuses on possible food security implications as a result of these livelihood changes.

3.2. Socio-economic Conditions in Savannakhet Province

Savannakhet Province is one of the biggest provinces in Lao PDR, covering approximately 21,774 square kilometers. It is located in central Laos, south of Khammuan Province. With its proximity close to a major Thai-Lao border crossing with Mukdaharn Province, Savannakhet Province lies strategically along the Mekong River, linking Thailand and Vietnam via Highway No. 9, which is dubbed the East-West Corridor (see map of Lao PDR in Appendix C). The province also boasts significant role as the trade and economic hub for the central and southern regions of the country. It has also recently enjoyed an economic boom, attracting FDI (see Table 3.1 and Figure 3.1 below), mostly in mining, industrial plantations, entertainment and Export Processing Zone (EPZ). The growing phenomena of urbanization and

development within the province remain concentrated around Kaysone Phomvihane, the provincial city center, where public infrastructure is already in place. Paved roads are the norm within the urban area of Kraisorn Phomviharn District. There are relatively good road conditions on Highway No. 9, which runs east-west between Thailand and Vietnam, and on Highway No. 13, which links the southern city of Champasak to Vientiane City (see Appendix C). However, some of the dirt and gravel roads leading to the highways, such as Route No. 10, may not be accessible during the monsoon season.

Table 3.1: Proportion of FDI by Country in Savannakhet Province (2006-2007)

Country of Origin	No. of Projects	Value of Investment (US\$) million	% of total FDI investment
China	4	7.4	8.4
Thailand	2	34.7	40.6
Vietnam	2	24	28
France	1	2.4	2.8
Australia	1	0.5	0.6
Sweden	1	0.17	0.2
New Zealand	1	0.3	0.35
UK	1	11.3	13
Malaysia	1	5	5.9
Total	14	85.5	100

Source: Department of Planning and Investment (DPI), Savannakhet Province (2010)

The majority of people in Savannakhet migrated into the area between 30 and 100 years ago. Out of the total provincial population of 903,737, the urban population in Kraisorn Phomviharn District accounts for 13.5 percent, or approximately 122,220

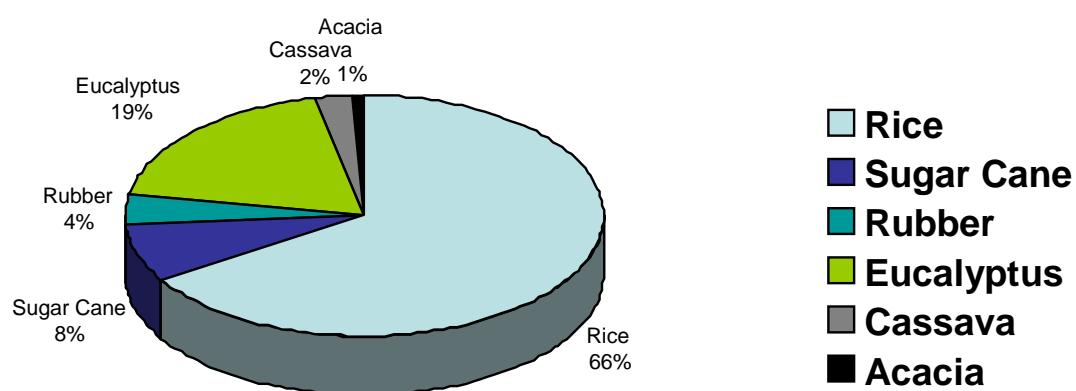
people (DPI Savannakhet, 2010). In 2007, 64 percent of the population remained as farmers while only 4% work as State officers, 2% worked for private companies and 21% had been classified as other occupations (DPI Savannakhet, 2007). Approximately 175 villages, or 17 percent of the total number of 1,050 villages in Nong, Phine, Sepone, Vilabouly, Thapangthong, Phalanxay, Atsaphone and Xonhbouly Districts are living in “poverty,” a condition defined by the government as meaning not having permanent housing, lacking sufficient funds for the education of children and medical care, having insufficient rice (less than 16 kilograms per person per month) and torn clothing (DPI Savannakhet, 2010). The wealth and poverty divide is on the rise. This fact is reflected in the simultaneous existence of many large vehicles purchased in cash¹⁵ and owned by locals or rich Vietnamese businesspeople living in the urban areas of Savannakhet, along with large segments of the population in districts like Phine, Sepone, Nong and Vilabouly, who still lack access to health clinics, clean water, roads and schools. Public utilities such as electricity and a clean drinking water system have yet to fully reach eight out of 15 districts in Savannakhet Province (Department of Investment and Planning, Savannakhet, 2010). Although Savannakhet boasts a literacy rate of 95 percent (Institute of Asian Studies, 2004; cited in Vaughan, 2006, p. 52), the discrepancy in teacher-student ratios between the districts is great. For instance, urban Kaysorn Phomvihane District boasts a teacher-student ratio of 1:24, while in Phine, a remote district on the eastern side of the province, the ratio is 1:102.

In terms of agriculture, rice is the most productive crop in Savannakhet Province, both in rain-fed and irrigated rice farming. Savannakhet Province is considered to be the “rice bowl” area of Lao PDR, contributing up to 22 percent of the country’s annual rice production (see Table 8). The total area under rice production in the province is 182,246 hectares, or 8 percent of the total land area (2.17 million hectares). Other land areas have been devoted to foreign-owned eucalyptus, sugarcane, rubber, cassava and acacia plantations (see Figure 4.1 for proportion of land use). Other major domestic food and cash crops in the province include maize,

¹⁵ The method of payment for a vehicle is evident from the colour of its number plate. Yellow Vehicle

starchy tubers, roots and cotton. Economically, agriculture accounted for 48 percent of the province's GDP in 2007, producing a value of 4.8 billion kip (approximately US\$ 4.8 million). By comparison, industry accounted for 27 percent of provincial GDP, and services, 25 percent. In terms of FDI by industry, agriculture dominated other sectors in terms of size of investment between 1992-2007, followed by FDI in the energy and mining sector¹⁶ (see Figure 4.2 below). Food and fuel were the top import items in 2007, while in 2006, top export items were copper, valued at US\$ 3.85 billion, forest products, valued at US\$ 3.2 billion, and gold, valued at US\$ 1 billion. (*Ibid*, 2010).

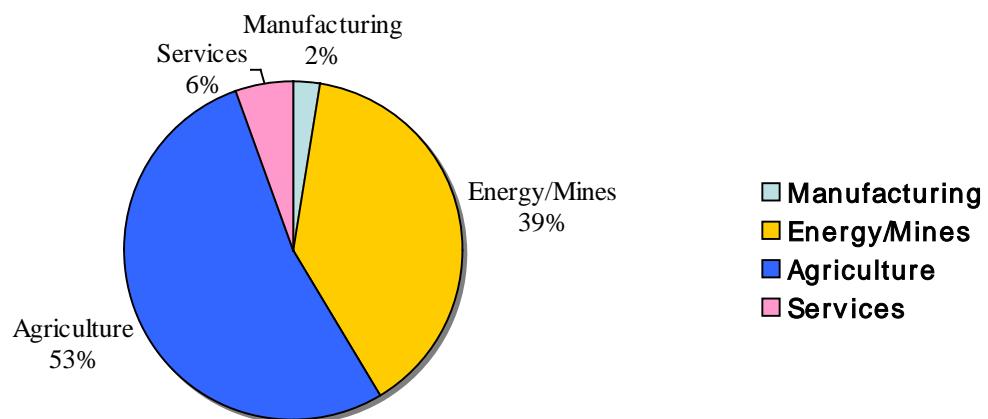
Figure 3.1: Proportion of Land Use by Plantations and Rice Farming in Savannakhet



Source: Collated from data Department of Planning and Investment, Savannakhet Province (2007).

number plate indicates the vehicle was bought in cash.

Figure 3.2 Growth in FDI by industry sectors by size of investment in Savannakhet Province (1992-2007).



Source: Collated from data Department of Planning and Investment, Savannakhet Province (2007).

3.2.1 Savannakhet Food Security Conditions

In Lao PDR, since rice¹⁷ is the main dietary staple, one of the key food security indicators is officially expressed in terms of annual rice sufficiency and availability (DPI Savannakhet, 2010). Theoretically, the annual amount of rice produced in Savannakhet Province is four times greater than the total amount required by annual rice requirement per capita or 192 kilograms per person per year. As in other provinces, the majority non-urban population still relies on rivers, streams, forests for their NTFPs supplementary food sources such as shoots, mushrooms, wild fruits and animals such as frogs, fish, snails etc. in addition to rice as their main staple. Table 3.2 below illustrates the dependency of fish and other aquatic animals as household food sources in Savannakhet province.

¹⁶ Between 1992-2007, Agricultural sector = 14 projects (US\$ 446 million), Energy and Mines = 2 projects (US\$ 327 million), Services = 17 projects (US\$ 47 million) and Manufacturing = 21 projects (US\$ 21 million).

Table 3.2 Household consumption of aquatic animals in Savannakhet

Category	Kg/family/year	%
Fish from wild fisheries	31	17
Fish from fishponds	26	14
Processed fish (dried, fermented)	35	19
Other Aquatic Animals	90	49
Total Annual Consumption	182	100

Source: (Bush, i.p. as cited in Foppes, 2004)

Given the competition for land among the commercial-based agro-forestry and the mining sector in Savannakhet Province (see mapping of land-use by industries in Appendix D) as well as rising food prices (see Table 3.3) for food price trends in Savannakhet Province) and the frequency of natural disasters including the storms and typhoons¹⁸, these collective factors could have a negative affect on the food security status of most of the province's rural population. Moreover, access to customary supplementing food sources such as mushrooms and wild animals are diminishing over time, which are due to other factors such as climate change and the rapid replacement of dense forests for other commercial land uses. There are efforts being made on the ground to mitigate potential food security risks in Savannakhet Province. Several INGOs and local NGOs are implementing programs, which directly and indirectly address food security issues including Hevetas, World Vision Laos, SNV, JVC and NORMAI. These projects mainly related to improvement in agricultural

¹⁷ Rice expressed throughout the paper indicates sticky rice variety.

¹⁸ Typhoon Ketsana in 2009 was reportedly submerged many rice-farming districts of Savannakhet, Sekong and Attepeu provinces. This catastrophic disaster led to sudden rice shortages. Tropical storm Nock-ten hit central Laos in August 2010 leaving more than 500 villages in Khammuan, Savannakhet, Champassak and Borikhamxay provinces under water (EC-FAO, 2011).

production yield and marketing of rice and other cash crops, management of Non-Timber Forest Products (NTFPs), emergency food aid relief in the event of disasters. For instance, World Vision Lao in Savannakhet province has been actively involved in emergency food aid relief for the affected villages damaged by typhoon Ketsana in 2009.

“Apart from food aids during disaster relief operations, in our previous food security project, we had tried to introduce other variety of cash crops to selected villages. Not only this has helped with the nutrition, it also acted as a mean for the villagers to earn their income”. (Interview with World Vision provincial manager during preliminary field visit on 5th June 2011).

Table 3.3: Trend in Food Prices, Savannakhet Province (2005-2007)

Food Items/ kg	2005	2006	2007
Glutinous Rice	3,200	3,592	5,250
Morning glory	4,208	4,000	5,000
Bean	4,750	7,375	8,030
Pork	27,417	27,833	25,750
Beef	33,250	32,833	33,583
Chicken	26,750	29,833	20,042
Dried fish	50,000	55,000	60,000
Sugar	4,333	7,000	6,250

Source: Collated data from DPI Savannakhet, 2010 (All prices are quoted in Kip)

3.3 Case Study Findings

In order to thoroughly understand the livelihood changes and the relevant food security implications, findings gathered from a series of key informant interviews as well as a small group discussion with Kan Tiew villagers related to the profile of the Kan Tiew village and its interaction with Don Kuang plantation are presented. The village profile includes its geographical setting, its social structure, villagers' previous livelihood, eating culture and their perception of land tenure security. The findings will also attempt to summarize the current contract arrangement between Kan Tiew villagers and Lao-Thaihua rubber in Don Kuang plantation and the community's initial reaction towards the plantation. Latter sections will discuss the livelihood changes that have occurred in Kan Tiew village as a result of Don Kuang plantation. The analysis of food security status will consider how the livelihood changes have shaped the vulnerability status towards dimensions of food security namely; availability, access and utility of food sources at the household level.

3.3.1 Kan Tiew Village profile

The case study was undertaken in Kan Tiew Village, a rural community that is one of four villages¹⁹ affected by the Lao-Thaihua Rubber plantation in Don Kuang, Atsaphone District. Kan Tiew Village is located approximately 70 kilometers away from the provincial capital of Savannakhet Province. At the time of the field study, the village was only accessible via a gravel road, Route No.10 (see location on Map 3.1 and Map 3.2 below).

Map 3.1: Atsaphone District – indicating location of Kan Tiew village



Source: photographed from Atsaphone District Office, Savannakhet Province

Map 3.2: Location of Atsaphone District in Savannakhet Province



The village was first established in 1953. The current population in Kan Tiew village is 822 persons or 96²⁰ households with men and women are almost equal in number. Administratively, the village is governed by the chief village headman and vice village headman. As with other typical villages in Lao PDR, there is also formal set up of Women's Union group and Youth representatives. This leadership represents the village-level of the government and is responsible for all affairs of the village including dissemination of new government policies, disputes negotiation, complaint

¹⁹ Three other villages are 1) Don Mak Or, 2) Don Kuang and 3) Atsaythong (CIDSE, 2009 confirmed by informant interview with local NGO staff on 28th June, 2011)

handling and land-use planning and management within the village (Interview with village headman on 4th July 2011). These villagers are “Bru” or “Ka Long”, an ethnic minority with the language belonging to the Mon-Khmer language group. Villagers would only speak “central Lao” language in official settings but would communicate in their language among themselves. According to official statistics (DPI, Savannakhet 2010), the village does have access to clean drinking water, primary school and a health center. This may be because the village is presumably under the higher local administration called “focal point” or “Jud Soom” where 4-5 villages would be administratively managed with shared common public facilities including a health center, primary school and weekly local market (Interview with NGO 1 on 27th July 2011). There is one major stream running across the village (Interview with village headman on 4th July 2011), which is a tributary of Xe Bangfai River (PRONAM, 2000). “Focal Point” has actually been the Government’s relocation strategy in the 90’s to promote congregation of ethnic minorities in to a single “focal point” and integrate these minorities economically, socially and culturally with the dominant Lao culture and livelihood. These Bru people in Kan Tiew village have been part of this integration.

The total village land is 70 hectares and the main livelihood in this village is rice –farming, fishing, collection of NTFPs and basket weaving. Each family generally owns a plot of land for rice farming and traditional food crops. Although Bru’s ancestors have practiced shifting cultivation many decades ago, these Bru villagers have migrated to the area since the mid fifties (CIDSE, 2009) and eventually have adapted the lowland Lao agricultural practice including annual wet-rice cultivation as a result of a series of resettlement of ethnic minorities as previously mentioned. Kan Tiew village is part of the “focal site” or “Jud Sum”, a sub-district level of administration whereby the government has relocated four to villages into one area and close to the main road. Production is generally just sufficient for individual household consumption. The issue of land-use and land tenure security within the village will further discussed in the next section. The villagers interviewed could not

²⁰ This is the latest number of households given during the interview by the village headman although

tell the exact hectares of land they owned but they just knew among themselves the boundary of each land. The occasional sale of NTFPs and livestock provides supplementary income to meet other daily needs (interview with local NGO 1 on 27th June, 2011). For instance, depending on the types of mushrooms, villagers selling “Ked Puak”, a particular seasonal (June – July) mushroom variety, could demand for as high as 30,000 kip or US\$ 4 a kilogram at a local market. Livestock raised within the village include pigs, cows, water buffalos, pigs, and chickens.

“Most households here don’t own cows. They are “big animals” and very expensive. We use our buffalos to work in the rice field. Raising pigs and chickens are easier.... we could sell our animals when we really need money. The last thing we want to sell are the buffaloes. They help us so much...unless we really need money..” Village headman discussed the typical livestock raised within his village. (Interview during field visit on 4th July 2011).

When asked what were their former food sources, there responses were:

“Before (his life before working on the plantation), I hardly ever have to buy anything for food in my family. We usually have enough rice (sticky) to feed a family of 6. Sometimes, we can just ask from our neighbours if in some months we don’t have enough” (Interview with Lao-Thaihua worker from Kan Tiew village on 4th July, 2011). This villager has lost part of his land to Lao-Thaihua rubber.

“We do grow a small vegetable patch on my land. There is an organization that came to introduce some vegetable varieties. We don’t really need money to buy food because we can just go into the forest and find things to eat. Now is the mushroom season.” (A response from villager (male), Kan Tiew village in small group discussion on 4th July 2001).

These are the contrasting views on current livelihood situation between current Lao-Thaihua plantation worker, whose land is currently under the Lao-Thaihua contract farming scheme and another Kan Tiew villager who is not part of the scheme.

According to official statistics, no household in Kan Tiew Village is classified as “living under poverty (Department of Investment and Planning, Savannakhet, 2010²¹). At the time of the field study, the implementation of official land use and land management was yet to be completed (not everyone in the village has received Temporary Land Use certificates and no one has Land Title deed issued). This indicates that land “ownership” remains unclear, except where villagers had evidence of land tax payment issued by the district Land Management Authority or DLMA. Additionally, despite its relative proximity (within 70 kilometer radius) to urban centres like Xeno and Kraisorn Promviharn, the provincial town of Savannakhet, this village appears to remain mostly unaffected by modernization (no electricity or running water system in placed) with the exception of 1 tractor owned by the village headman.

3.3.2 Findings on the community’s eating lifestyle

An insight to Kan Tiew dietary preferences and types of dishes served within the household is most useful to take into consideration when linking the relationship between food security status at the household level and the impact of Don Kuang rubber plantation. This section also illustrates the existing current dependency of Kan Tiew villagers on their remaining forests and river stream as well as their own rice and maize production for their dietary needs. Fish becomes the central part of their diet. According to a small group discussion (in Kan Tiew village on 4th July 2011) on typical meals in Kan Tiew village, the significant food item central to the cuisine in this village is “*Pah Daek*” or fermented raw fish (raw fish soaked in brine and rice husks for a period of at least one week). This is also typical of Lao cuisine in general.

²¹ The document, Poverty Statistics 2010 was gathered from field visit in Savannakhet province. It is written in Lao language and was published by the Department of Investment and Planning, Savannakhet province.

It is then used to either season other dishes or the actual fish being made into the chili paste. “Meats” used in cooking are often found from the surrounding natural resources including fish, field crabs, snails, birds, squirrels and rats depending on the catch of the day. The frequency of having “meats” in their meals would also depend on time availability within the household. The role of finding the catch or other raw materials for cooking would alternate between men and women within the household depending on one’s time availability. Note there is no expectation of role or responsibility for particular gender in seeking for food although there is an expectation for women of the household to cook for the family. Meals are always eaten with sticky rice. Maize also forms supplementary staple next to rice. It is mainly at the beginning of the rainy season but the harvest could usually be kept throughout the year. During It is also useful to note that cooking methods do not require use of oil and the only items that required money to purchase from the local market are salt, “Parng Nua” or MSG, and sometimes chili.

It is useful to observe that within this village, there is still a high dependency on the natural resources as their food sources. Even though they villagers also grow some vegetable crops for their own consumption. There is a small sum of money required to purchase a few items. Additionally, livestock such as buffalo is butchered as part of a traditional Bru ceremony during rice-harvesting season. It can be concluded that the following elements are essential to food security within Kan Tiew village namely; the condition of surrounding forests and stream and hence protection of such resources, the ability to grow one own’s food and the importance of livestock as part of the Bru eating tradition.

3.3.3 The villagers’ perspective on land use and land tenure security

Kan Tiew’s village land was customarily managed under the leadership of the village headman (according to the interview with the village headman, he could not provide specific years. This was possibly prior to 1996). It was assumed that whoever had settled and works on the particular plot of land, the plot became “their land”.

Although this was unwritten code, people within the village practiced such system prior to the government's official land allocation system. Apart from individual households' land, there were also some nearby forest areas "*Pah Som*" that any villagers would have access as they wish and it was believed to be "common" land among them.

According to land allocation manual issued by Ministry of Agriculture and Forestry in 2010, the national-scale Land-Use Planning and Land Allocation (LUP-LA) was first instituted and implemented by Ministry of Agriculture (MAF) in 1996²². The early official land tenure system did not provide full legal right to ownership of land but permitted land use and land transfer as inheritance within the families. Moreover, there was no clear instruction on land delineation of this land tenure system at the village/community level. The initial land management policy was designed to target swidden cultivation and therefore promote a "permanent" settlement by communities through the issue of Temporary Land Use Certificates (TLUC). In addition, individual's use of land was also required to pay land tax to the government (via National Land Management Authority or NLMA) where the land tax receipt would be given. It was only in 2003 that Land Law (article 17) stipulated the issue of Land Title as a form of private ownership of land among individuals and private organizations.

Since the enforcement of land tax, the villagers in Kan Tiew claimed to have paid up their land tax with the District Land Management Authority on a yearly basis. In return, they received tax receipts. The actual land tax receipt and TLUCs had not been sighted during the field visit. Land tenure security from the perspective of Kan Tiew villager could be summarized in the following response:

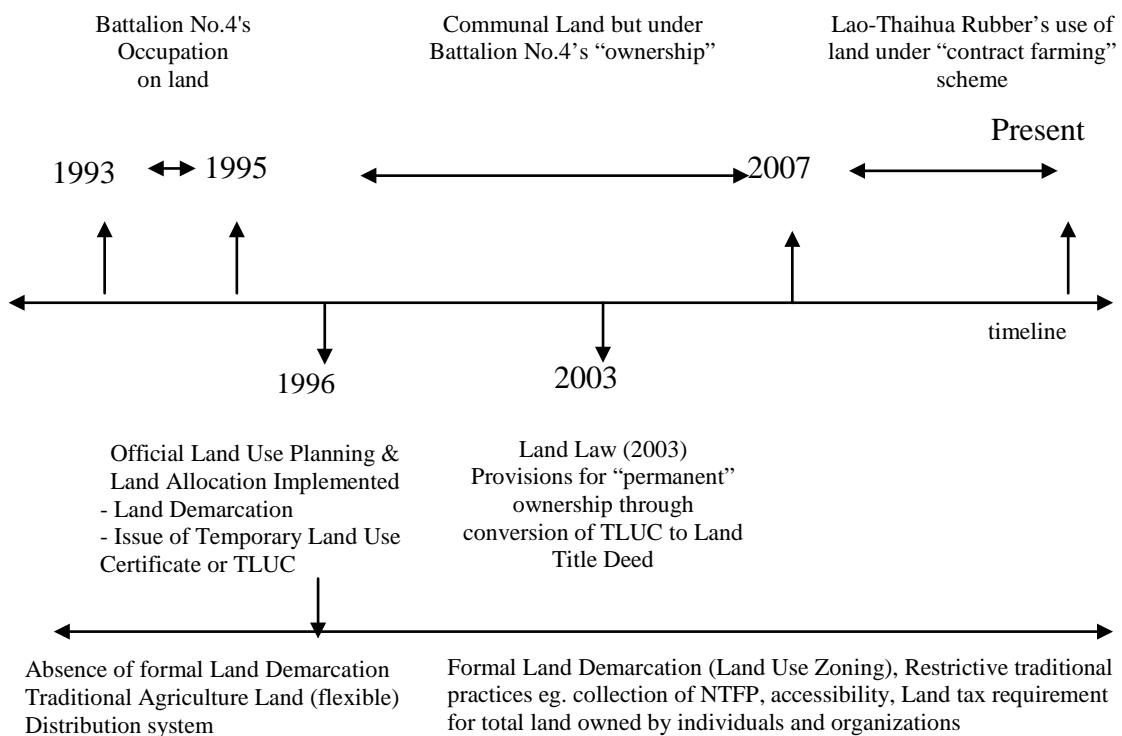
"For me, I don't know much about legal things. Recently, the village headman and this local NGO tried to explain to me that we all could get a land title. My family has always been on our land for a long time. When the government

asked us to pay land tax, we paid our tax to local land authourity and they gave us the receipt. Isn't that enough to show everyone that we own the land because we pay land tax?..." (Interview with Kan Tiew villager on 4th July 2011).

In another interview with the Atsaphone district vice chief, he shed some lights on the confusion over the land ownership documentation.

" This is what always happened. The villagers don't usually pay the taxes for all the land they own. They only pay for a much smaller plot of land. When they tried to use the receipt as evidence that they own the land. They could not. Firstly, that land tax payment did not cover all the land they claimed to have. Secondly, our law required them to change (their temporary land use certificate) to the permanent document, the title deed." (Interview with District vice chief of Atsaphone district, 4th July 2011).

Figure 3.3: Timeline of Land Occupation in Kan Tiew Village



²² In this period, a total 7,130 villages out of 11,640 villages in Lao PDR underwent through the first,

Source: compiled from information gained during interview with villager (4th July 2011), former NGO (27th June, 2011), Lao businessman (29th July 2011, CIDSE report and government documents

Figure 3.3 summarizes the turn of events surrounding the plot of land in Kan Tiew village. Moreover, it could not be clarified if this particular plot of land had any form of land “ownership” document (TLUC) or which party (Battalion No. 4 or District Land Management Authority) receive land lease fee.

During 1993²³, Battalion No.4 from Xeno approached the village headman to request for some plot of rice fields from the villagers. Some households had to give up some of their paddy land as a result²⁴. It was not known the total land the military had actually acquired at that time. In 1995, the military approached the village again, this time, asking the villagers to make use of the land as they wished. The villagers had freely used to grow rice and other crops. It was not until early in 2007 that Lao-Thaihua rubber sought to lease land from the Battalion No.4 and other land nearby through a Lao businessman. It was difficult to truly grasp during the interview with the village headman regarding the exact amount of land involved in the entire process but in total, CIDSE (2009) cited in their report that Lao-Thaihua rubber conceded 301 hectares of land within the area (spanning over 3 other villages). Despite the confusion over land issue in Kan Tiew village (see also figure 4.3 for timeline of events), it could be concluded that weak land tenure security system, especially at the village level, as in the case Kan Tiew has allowed the ease of land “grabbing”, mostly from less powerful villagers to dominant government or company figures.

Another important aspect of the finding on Kan Tiew villagers’ perspective on land tenure security was that there has a belief among the villagers that if you don’t appear to “work” on your land, the State could confiscate your land back at any time.

²³ nation-wide Land-Use Planning and Land Allocation in 1996.

²⁴ Source: CIDSE 2009, exact years not given at interview with village headman.

²⁴ CIDSE report indicated 5 households gave up some of their land to the military.

“You either work on your land, plant something...you don’t leave the land alone because they can take it from you..of course, if you have big family, it’s good..more people to help. Otherwise, you just call your relatives nearby..of course, they have their own land to do” (Interview with Kan Tiew villager, 4th July, 2011).

This factor may be key to the motivation of why the six families that had their land cleared for the plantation were also interested in working with Lao-Thaihua. On one hand, there was a hope (this initial enthusiasm is later discussed in more detail) of getting a better life and the other that they would permanently lose their land to the company if they do not take up the offer of contract farming with the company.

3.3.4 Lao-Thaihua Rubber plantation in Don Kuang²⁵

The company’s management in Thailand declined to provide an update of the operation and land acquisition in Lao PDR stating:

“I cannot really provide you with the update on our Laos operations. Since it is a sensitive issue, we would like to keep it low profile” (Phone interview with company’s management on 25th June 2011 in Bangkok).

It is possible however, to use evidences gathered from other sources including interviews in the media, field interview with some local NGO staff working in the area, some businessmen and with the villagers. According to Thaihua’s interview with Manager Daily (2007), so far the company had already acquired 2,610 hectares in Savannakhet Province, of which 1,000 hectares was a land concession and 1,610 hectares in contract farming. The official MAF (2007) document on Lao-Thaihua Land Survey stated that the company has proposed to concede 1,750 hectares in

²⁵ Don Kuang is the name of the village being affected by Lao-Thaihua plantation. It denotes name of the area and hence being referred to as Don Kuang Plantation.

Outhomphone District (PAF, 2006²⁶). CIDSE (2009) also revealed that the company has already received 687 hectares in Atsaphone district, 301 hectares is Don Kuang Plantations. See also Appendix D for mapping of Lao-Thaihua plantation sites in Savannakhet province. It is useful to note that the evidences relating to the actual Lao-Thaihua's investment progress are not consistent with one another, especially on the total number of land that the company has acquired thus far.

Don Kuang rubber plantation (310 ha) is strategically located right along Route No.10, between Kan Tiew and Don Kuang villages. There are other two villages affected by the plantation; Don Mak and Atsaythong villages (Interview with local NGO on 27th July 2011). The area consisted of land leased from the military, (formerly accessible communal and individual land) and additional land from individual farm land in the four villages. Lao businessman recalled that:

"I was asked by Thaihua (referring to Lao-Thaihua representative) to help negotiate that plot of land with the military. The deal was successful and the military has leased out the land to Lao-Thaihua for US\$ 8 per 1 hectare. I heard that later there was some issue. It got cancelled or something I am not too sure...". (Informal interview with Lao businessman on 29th June 2011 in Savannakhet province).

The exact amount of individual land loss in all four villages is not known with the exception of Kan Tiew village. According to Kan Tiew village headman, there were a total of 6 households had lost their land to Lao-Thaihua plantation during Lao-thaihua land acquisition (this fact is also confirmed in CIDSE, 2009). The consequence of this loss would be discussed further later in the chapter in terms of livelihood changes.

It appeared that during the initial process of land negotiation, none of Kan Tiew villagers had been involved. It was mainly among Don Kuang village head (who

²⁶ This document originally in Lao language was obtained during field visit in Lao PDR.

is now also the plantation supervisor), the Lao businessman who acted as an agent and the military. By taking the land lease deal with the military as final, the company began to clear land for the plantation in April 2007 and cleared individual farmers' land in Kan Tiew village without prior warning (CIDSE, 2009). Kan Tiew village headman recalled some villagers from his village confronted the company on the encroachment but received threats from the company claiming its permission from the military and the central government. In another Lao-Thaihua plantation area, a study done by a group of NLMA researchers in Vientianne province, the company had prematurely cleared land in Ban That and Ban Vangmon-Neua beyond the government's permission.

“How can we resist with the big people, we have no power” (Interview with anonymous villager in Kan Tiew village on 4th July 2011).

Rubber tapping for this plantation would not start until 2012 (interview with Don Kuang supervisor on 4th July 2011). From field observation (there was no opportunity to enter the actual plantation but the plantation was sighted from the main road), the plantation appeared to be located much further from Route No. 10. According to the current Lao-Thaihua worker from Kan Tiew village, it is located approximately 6 kilometers behind Kan Tiew village and he would normally walk to the plantation (field interview on 4th July 2011). There was also a physical relocation of Kan Tiew plantation households to live within huts built by the company within the plantations, though these huts are still considered to be in Kan Tiew village area (CIDSE, 2009).

3.3.5 Initial Response to the plantation

According to the field staff that was working in Kan Tiew village during the initial stage of the plantation, she recalled many villagers responded to the news of rubber development with enthusiasm despite the initial conflict with the company on land issue.

“It was the possibility of earning money, having more income. They didn’t know yet what they were about to get into...” (Interview NGO staff on 28th June, 2011).

“We thought it would be something exciting....the village headman from Don Kuang came with the company representative to ask if some of us would like to work there” (Interview with Kan Tiew village headman on 4th July 2011).

This reflects a similar response related to the nearby sugar plantation, Mitr Lao. The villager also remembered the acceptance among her friends in the village (in Ta Ka Daeng) with the sugar plantations (Interview with villager in Ta Ka Daeng village, 4th July 2011). However, there were also a number of villagers who also doubted with the new possibility.

“It is the “wait and see” attitude that people have. They have to see if their neighbours would be successful first, then perhaps they would follow. To them it is too much risks to change everything” (interview with former provincial department of agriculture and forestry official who had been involved with Mitr Lao sugar plantation, on 1st July 2011).

Although Kan Tiew villagers did respond positively towards the possibilities that came with the plantation, the enthusiasm had been short-lived. This may subsequently influence the villagers’ decisions to participate with the company in the future in case where more labour is needed.

3.3.6 The Lao-Thaihua contract and the Rubber Contract scheme

Lao-Thaihua contract agreement (see Box 3.1 below and Appendix E) has been made with 6 households in Kan Tiew village (those who had loss their land). There are several rubber investment schemes that have emerged and practiced within Lao PDR (NAFRI, 2009). Generally, they can be grouped into three major categories:- smallerholder (5+0), contract farming (3+2) and large scale concessions

(4+1). These arrangements reflect the contributions towards the rubber plantations between the individual farmers and the investors (foreign or domestic), (see table 3.4 below). There are distinct advantages and disadvantages to each arrangement, which will not be extensively discussed here (see Appendix E for summary). In 2007, the government has officially promoted a 3+2 arrangement as the most effective poverty-reduction strategy nation-wide but imposed a moratorium on large-scale plantation concessions after witnessing massive social and environmental impact as a consequence such concessions as previously discussed in the literature review.

Table 3.4: Common Rubber Investment Models in Lao PDR

Model	Land	Labour	Capital	Marketing	Technology
Smallholder (5+0)	X	X	X	X	X
Contract farming (3+2)	X	X	O	O	O
Concession (4+1)	O	X	O	O	O

X = contribution from individual farmers

O = contribution from investor

Box 3.1: Details of the content of the Contract Farming between Lao-Thaihua Rubber and Kan Tiew Villagers.

Job descriptions: weeding, tending, growing rubber trees (fertilizers, pesticides, pruning), protection of plantation from fire, animals and other harms, fencing and others as assigned by the supervisor.

Workers' entitlement: A 70:30 profit-sharing (farmer: Lao-Thaihua rubber) once rubber tapping starts, growing their own vegetables (intercropping between rubber trees), raising poultry for their own income and consumption, 400,000 kip or US\$ 40 worth of building materials to build their own house within the plantation.

Period of contract: 5 years from the effective signature date on the contract

Termination and fines: deductions to be made from monthly income if workers do not fulfill duties within specified times. Company has the right to terminate the contract after the worker receives second warning for breaching the agreement.

Company: Duty to provide equipment and technical know-how on rubber planting and tapping.

Source: Own summary from actual company contract sighted in Lao language during field visit (see Appendix G).

Lao-Thaihua (n.d.) claimed to practice a 3+2 arrangement with the farmers in Lao PDR (statement written on company's website). While according to the interview with the Laos News Agency (2005), the company intended to operate in both contract farming and concession arrangements. Referring to Box 3.1 above on details of contract agreement between the company and some Kan Tiew villagers, the contract does not explicitly reflect contract-farming arrangements. On one hand, the company has outlined profit sharing of 70:30 (farmer: Lao-Thaihua) and its contribution of technical expertise in this contract, which resembled the contract farming arrangement. The contract however, is missing these key elements for a 3+2 scheme – landholding entitlement, marketing support and pricing arrangement. This is particularly a vulnerable situation, as affected farmers did not know the ownership status of their former land (evident in the small group discussion where “land loss” was being repeated several times, expressing the uncertainty of ownership status over those land). It also provides a loophole for the company to slip into a rubber concession arrangement, as the current contract conditions on land ownership remains unclear. Moreover, there are other useful observations on the contract, which may be relevant to aspect of food security; firstly, Lao-Thaihua plantation permits intercropping of rubber trees with other food crops and for the farmers to raise poultry “for own food consumption and additional income for the household” (Lao-Thaihua contract, p. 1). Secondly, the contract does not specify which party would bear the responsibility for costs of fertilizers and pesticides. The permission for intercropping of food crops as well as raising poultry within the plantation could contribute positively to ensure food security for the farmers under this contract, especially during the non-productive period where rubber latex is yet to be tapped.

Even when the contract agreement has been written in Lao language, the farmer/Lao-Thaihua worker mentioned that he could not read the details of the contract but was advised briefly by Don Kuang village head, who also has been hired

as the plantation supervisor. The researcher observed that contract has not been dated nor signed by corresponding parties (with the exception of signature by the village head of “Kan Ta”) as required (see photograph of actual contract agreement in Appendix G). The contract could then become legally non-binding.

“The plantation supervisor just read me some details that he said were in the contract. He pointed out how good it was that my household would be getting the monthly salary for doing the work and the company would allow me to grow things...He also said something else about the possible deduction if my family could not finish work on time. Everything happened so quickly...then they just point at a space for me to sign. (Interview with current Lao-Thaihua worker from Kan Tiew village on 4th July 2011)

In conclusion, the rubber contract arrangement between the company and Kan Tiew villagers has many loopholes. Although some of the details are clearly given, especially when it comes to the farmers’ responsibility on the plantation, the company’s responsibility including the system to buy back rubber latex from the villagers as well as the costs of additional seedlings, fertilizers and pesticides are not clear. The contract itself therefore, does not completely ensure positive economic gain for the villagers under the arrangement.

3. 4 Key findings - Livelihood changes with food security implications

3.4.1 Land loss and loss of access to land

In Don Kuang Plantation, a total of 25 hectares of land, or 35 percent of the village’s total land (70 hectares), was lost to the company (Interview with local NGO staff who worked in the area at the time when plantation started, on 28th June 2011). Some of this land belonged to six families out of Kan Tiew village’s total number of 91 households.²⁷ Although the small number of households affected might not appear

²⁷ The official number of households in Kan Tiew village has varied from 108 households in 2009 (CIDSE,2009) to 147 in 2010 (Department of Planning and Investment, Savannakhet, 2010) and 91 households in 2011 (Interview with village head during field visit, 5th July 2011).

significant but the entire village also lost physical access to their former communal land due to the company's enclosure reserved for the rubber plantation. "Communal Land" from the villagers' perspective consisted of dense forest ("Pa Khok" or dry dipterocarp forest) and "Pa Som", a small hilly forest area with flowing stream behind the village.

"Of course, there were so many trees in that forests. Big ones!. Normally you can sell these woods for a lot of money. I know sometimes, some Vietnamese want them. I think the company probably got the money from that too. I saw truckloads of them (trees) being driven away..." (One of the responses made during small group discussion in Kan Tiew village on 4th July 2011).

These areas were formally used as communal grazing land, rice farming and other forest use practices such as hunting and collecting the seasonal NTFPs (noted from small group discussion on 4th July 2011). From listening to the small group discussion, the villagers' perspective of land being "communal" because they (and their animals) had the choices to access this area at any time to go about essential activities as part of their livelihood. According to an interview with the local NGO staff (27th June 2011) and CIDSE (2009), the company also imposed a fine on animal grazing within the plantation areas (250,000 kip or US\$ 33 per damaged sapling).

Essentially, the situation of six Kan Tiew households who had lost their land to the company to be part of Don Kuang's rubber contract farming scheme has also led to other irreversible livelihood changes. The plantation caused the community's loss of access to their former communal land where the villagers also automatically lost their food sources, which would be discussed in the following section.

It is useful to note that Kan Tiew villagers' ethnic identity, Bru as an ethnic minority, their perceived inferiority could contribute to their inability or the condition of being powerless, as expressed in one of the field interview, to resist land deals within village, initially with the military in 1993 and with the company in 2007.

3.4.2 Rapid transition of subsistence farmers to day-time labourers

The engagement of some Kan Tiew villagers with the company in contract farming has two significant implications. Firstly, it is the shift from the realm of self-reliant livelihood through subsistence farming with little interaction with the market economy to money-dependent livelihood as plantation labourers sensitive to global market forces. Secondly, the socio-cultural shift associated with customary rice farming practice to rubber farming.

With regards to the shift to money-dependent or economically-dependent livelihood, prior to Lao-Thaihua plantation, most Kan Tiew households did not have to rely on “money” to obtain food for their daily sustenance as almost all households own paddy fields, food could be collected either in the forests (NTFPs), fish from the nearby streams, small crabs and snails from the rice fields and some vegetables and fruits from their own garden (this story was told by a small group of 4 people from the village. It is also confirmed in CIDSE’s report that 95% of the villagers practice rice farming and more than half (54%) of the villagers used to earn between 0 – 500,000 kip/month while 29% of the villagers did not have cash income. Exchange of labourers during rice planting season among the neighbours and relatives were also very common.

During the initial stage of Don Kuang rubber plantation, a proportion of villagers²⁸ enthusiastically worked on the plantation as daytime labourers involving fencing, land clearing and planting young rubber saplings. Some teenagers did not attend school but worked on the plantation for a day wage of approximately 5000 kip to 20,000 kip (or US\$.67 – US\$ 2.67) a day. Over the period of almost one year, the enthusiasm died down, leaving only few (6 households) permanent workers to work in the plantation. The early daytime labourers managed to earn some additional

²⁸ The exact number was not given in the discussion

income, which translated to additional income generating options. However, all respondents in the discussion agreed that the present situation of being “permanent” plantation workers did not appear to be “worth it” (“*Bor Kum*”). For the families that are “bound” by the company’s contract as in the case of the respondent, the option for his household to diversify or working on off-farm income generating activities is diminishing.

“I don’t really have time to do other things apart from working on the plantation. There are 4 of us; my two youngest children are too young to work. It’s hard enough for us to finish everything in a month, let alone working on other things. This time it is rice-planting season; we cannot do our own or help with our neighbours. They do give us rice (sticky), but I need to go find other food for my family.” Interview with current Don Kuang Plantation worker on 4th July 2011 in Kan Tiew village.

For these six households, they have also lost their ability to produce their own rice, as they had to abandon their own rice farm for the plantation due to lack of labour in the households.

“Yes, they have no other options... sometimes, I know two families that have to ask for more rice from their relatives” Interview with Kan Tiew Village headman on 4th July, 2011.

On another note, an anonymous worker also added:

“You know, they haven’t paid me for 3 months. How can I survive?..I need to do something...I don’t care if they are going to deduct more money for not finishing work this month”. In order to get his monthly income, the researcher was told he has to travel to Lao-Thaihua office in Xeno²⁹.

²⁹ Xeno is the nearest urban town and is approximately 20 kilometers away from Kan Tiew village

In the nearby sugarcane plantation (Mitr Lao), even when the situation was better (according to the respondents in Ta Ka Daeng village, the worker being paid 600,000 kip per person per month), the villagers perceived the involvement with the plantation as not “worth it”. (Interview with 2 respondents from Ta Ka Daeng village on 4th July 2011).

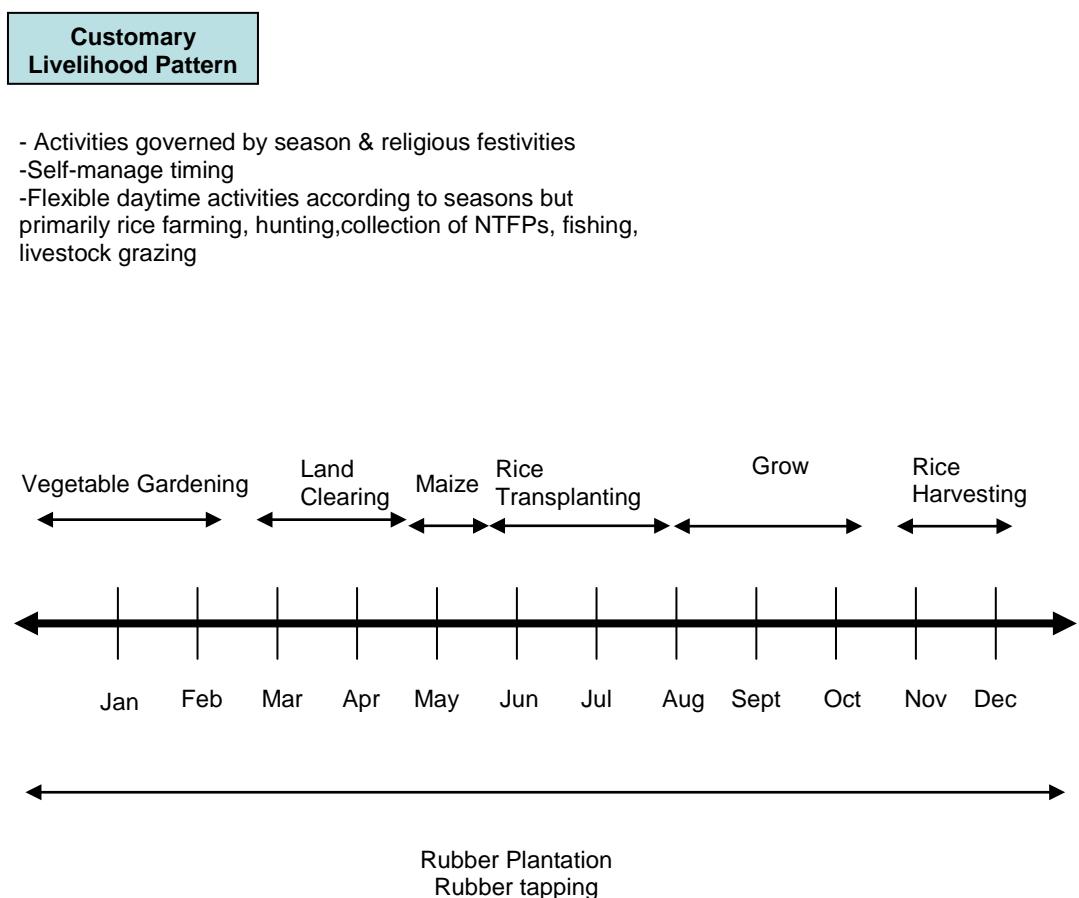
Essentially, the remaining six households engaged with the plantation have been transformed from subsistence farmers into wage labourers since they are yet to start rubber tapping. The change for these households directly has an impact on their food security situation. The degree of food insecurity could be reflected from the response that the farmer has given earlier in the interview on his desperation to abandon the work on the plantation.

In theory, figure 3.4 below maps out the possible changes in livelihood in transition – from subsistence farmer to become rubber farmer. It appears that rubber farmers may be able to have other livelihood options or other off-farm income-generating or off-farm food production activities once rubber-tapping phase starts.

In terms of socio-cultural changes associated with the transition from customary rice farming to rubber farming, they could be reflected in the distinct change in lifestyle, particularly with the communal village activities and gatherings that revolved around rice farming as well as the physical relocation of the plantation households. During the rice planting, transplanting and harvesting seasons, common rituals and festivals are carried out among the villagers. For instance, “Tet” a buffalo sacrifice ceremony would be carried out when rice harvest is done. Additionally, time and labour are shared among the neighbours according to the needs among the households during rice planting and harvesting. However, in the case of Kan Tiew plantation workers, they are time and labour bound with the plantations therefore, they could no longer share their usual resources with their neighbours or take part in ceremonial events. At the time of the field visit, which coincided, with the period of rice transplanting activity, the current plantation worker expressed his time and labour limitation to complete the tasks within the plantation let alone to spend time on his

own farm or the neighbours'. The act of full-time rubber farming therefore has socially isolated plantation workers from the rest of the villagers – the very social network could support him in times of need.

Figure 3.4: Summary of livelihood changes



Plantation-based

Before tapping: (approx. 7 yrs)

- All-day work until tasks done Or 6 am - 6 pm
- Preoccupation with plantation by most able Household as labourers

Rubber tapping: (remaining contract period)

- 3 am - 7pm. (tapping & selling)
- Possible free-time for "off-farm" activities
- Intercropping of some vegetables, fruits, raising poultry

Source: compiled from interviews with rubber plantation owner (smallholder) (15 July 2011), Villager in Kan Tiew & Ta Ka Daeng (4th July 2011)

Rubber farming also represents a new knowledge and skill unfamiliar to Kan Tiew villagers. It is not known at the time of the field visit if rubber latex yield would be close to the company's original plan given rubber tapping was yet to start and the fact that rubber latex yields vary with different geographical locations. In the case of nearby industrial-scale sugar plantation within the next district, the businessman gave an account during the key informant interview (29th June 2011) that local farmers under the sugarcane contract farming could not adhere to the strict regime of plantation maintenance including amount and timing of fertilizers to be applied and hence, the final sugarcane production was markedly affected. The abrupt transformation in farming practice and the ability of Kan Tiew workers to adapt would influence the success of the rubber yield and hence the prospect of economic gain from the rubber contract farming.

Therefore the transition of Kan Tiew villagers from being subsistence farmers into money-dependent labourers has several implications in terms of food security including the increase dependency on money to acquire food i.e. having to purchase more food items from the local market, the loss in capacity to produce one's own food due to time and labour constraint of plantation and the possible weakening of social network support in times of food crisis over time due to isolation.

3.4.3 Decline in customary food safety net

Natural food sources including NTFPs that consisted of plants, wild animals, fresh drinking water, fish and other aquatic animals as well as households' production crops including rice and maize have been customary food safety net in Kan Tiew village. Several factors related to the establishment and operation of Lao-Thaihua Rubber in Don Kuang has caused a decline in this customary food safety net although not equally among Kan Tiew villagers. As mentioned earlier in the chapter, part of the land acquired by Lao-Thaihua rubber in Don Kuang was said to consist of dense

forests or “*Pa Khok*” and “*Pa Som*”. Land clearing for rubber plantation has promptly cleared away such forests that have been home for wild habitats as well as various other plant and fruit varieties. According to the small group discussion in Kan Tiew village, they all agreed that there were less NTFPs including bamboos, mushrooms, resins, sour berries, lychees and forest mangos, all of which villagers relied upon for subsistence and supplemental household income. This was also confirmed by the CIDSE (2009) report where most of the respondents have expressed their perception that NTFPs were much harder to find and some villagers would travel to other villages to seek for them. It is beyond the scope this research to quantify the loss in NTFPs in Kan Tiew village in monetary terms, however, given the fact that these villagers have been relying on their surrounding environment for their daily survival and livelihood for decades, the significance of NTFP loss is serious from their perspective.

Secondly, the villagers believed the use of chemicals within the plantations have destroyed some of the remaining fish in the stream as evident by the number of dead fish that the villagers had witnessed (small group discussion on 4th July 2011). The use of chemical pesticides not only polluted the nearby stream causing death of fish but also impacted their source of drinking water. When asked if the villager was still drinking from the water, he said:

“What can we do? We still need to drink and fish from that water” (Key informant interview, 4th July 2011).

Current Lao-Thaihua worker from Kan Tiew village has also confirmed the use of chemical pesticides on the plantation, although he was not able to tell the exact names of the pesticides. In the study of mono-plantation impact, Guttal (2011) has concluded, *“Plantations are mono- cultures and require intensive use of chemical fertilizers, pesticides and herbicides, which create aridity, poison the soil and deplete it of nutrients, and contaminate aquifers and surface water sources.”* (ibid, 2011: 95).

With regards to the use of chemical pesticides and fertilizers, the national Environmental Protection law (1999) clearly bans the use of some prohibited chemicals within the agro-forestry sector. However, due to the lack of funding, the Environmental and Social Impact Assessment (ESIA) department has not been able to monitor the use of chemical in Don Kuang and other Lao-Thaihua sites (Interview with Director of ESIA department on 6th July 2011 in Vientianne City). The department too, lacked details on the chemical used on Lao-Thaihua plantation sites.

3.4.4 Additional livelihood changes

As with other impact studies on industrial plantations in other parts of Lao PDR, the enclosure of rubber plantations strictly prohibited animal grazing out of the assumption that animals would damage the plantations if left grazing within the plantation areas. The World Food Program (2011)'s recent assessment of the food security situation in Lao PDR acknowledges that industrial plantations such as for rubber have limited the areas available for animal grazing. In most cases, a severe fine is imposed on owners whose animals enter the plantation area to graze (in the case of Lao Thaihua rubber, the penalty fee has already been mentioned). In Kan Tiew village, some villagers still own buffalos, as these animals were essential for their rice farming (Interview with village headman on 4th July 2011). From observation around the village, there was no evidence of any other animals apart from wild pigs and chickens. Up to now, livestock customarily serve as a form of economic safety net for communities, since animals could be sold to provide additional income in times of need as well as used for special meat during important religious festivities (interview with local NGO worker on 2nd July 2011). For instance, cows could be sold at 300,000 - 400,00 kip or US\$ 40 - 43 per animal. CIDSE (2009) revealed that approximately 35% of the villagers have sold their livestock for motor tractors since the start of the plantation due to the lack of grazing land.

3.5 Food security Implications – Threats and Opportunities

From the finding of livelihood changes that occurred in Kan Tiew village as a result of Don Kuang plantation, it is evident that they become both direct threats and opportunities to food security at the household level, although not equally for ordinary Kan Tiew villagers and the existing Kan Tiew plantation workers.

3.5.1 Common threat of decline in availability of customary food sources

The situation in Kan Tiew village where there was the lack of physical access to former communal land presently occupied by Lao-Thaihua Rubber in Don Kuang could be considered as a direct threat to households' food security. The conversion of such forest land³⁰ on the plantation plot which has been customary "food cupboard" for the villagers, into rubber trees has also caused the decline in wild habitats and NTFP sources and hence, affecting customary food availability. Although this pervasive threat to food availability may appear to be temporary, i.e. Kan Tiew villagers have coped in time, the loss of NTFPs source is permanent. This threat is also affecting all Kan Tiew households whether they engaged with the company under the contract or not.

As a coping strategy, Kan Tiew villagers attempted to overcome the physical availability of NTFPs within its local vicinity by traveling further to other sites in the nearby village to look for more NTFPs both as food and as materials for sale in the market. However, the strategy could not guarantee their food security, as these villagers would need to compete with other villagers from the same NTFP sources. Moreover, it would take these villagers more traveling time in order to acquire food.

The possible usage of chemical pesticides and fertilizers has also limited the availability of clean and safe drinking water as well as the availability of fish and other aquatic animals in Kan Tiew village. Although the villagers also rely on ground water for their drinking source (interview with former NGO staff on 28th June 2011), the possible contamination in the nearby stream and into the ground could pose as the

pervasive threat of food security to households in Kan Tiew village, given this particular village rely on fish as part of their main diet as well as the stream running through the plantation has been used as a drinking water source. This pervasive threat has been relevant to both households working for the plantations as well as those not engaging with the plantation.

In the case of Kan Tiew plantation workers, the condition of lack in NTFPs posed as a more severe food security threat as they have more time and labour limitation to look for NTFPs in other sites or to grow rice on their own land. Moreover, given the relative isolation of plantation workers, the possible availability of food eg. rice may diminished over time as a result of weakening social network from within the village.

3.5.2 Kan Tiew plantation workers: Threat to economic access to food

Given the transformation of some of Kan Tiew households from subsistence farming to rubber contract farming, these households are inevitably pushed to change their former method of food access. The economic access to food sources has become increasingly important and relevant to these households. This transition would not become a threat if physical access to food sources was being compensated by the economic access i.e. the adaptation to ensure one's food security by using money earned to purchase the food items from local market as supposed to physically obtaining similar food items from surrounding forests.

However, there are two critical factors affecting the existing Kan Tiew plantation workers in their economic access to food sources. These factors have been shaped by the contract condition as well as the actual practice of the company. Firstly, the option to diversify off-farm income generating activities has been indirectly restricted by the contract condition, which required for the workers to complete the labour-intensive tasks within the timeframe over assigned area and the monthly payment by the household and not individually with possible deductions for

³⁰ This is consisted mostly for dense forests or “Pah Khok”. Details can be found in

incomplete tasks. Secondly, the actual practice of not paying the monthly salary due to the workers on time by the company has deprived the workers the very money they need to acquire food for their daily needs. These factors have caused the plantation workers to become vulnerable in terms of their economic capacity to access food, especially in the case where trend in prices of available food in the market within Savannakhet province is on the rise (refer also to Table 3.3, page 40).

Therefore this threat of economic access to food is only relevant to Kan Tiew plantation workers under the rubber contract with Lao-Thaihua Rubber. This threat is pervasive but may be temporary i.e. possibly until the workers start to earn regular income from rubber-tapping within the next few years.

3.5.3 Opportunities and limitation to food security

Contract farming with Lao-Thaihua Rubber theoretically has the potential to increase economic security for the households that are under the contract agreement with the company both during the non-productive phase (5-7 years) and the rubber-tapping phase. The 3+2 investment has also been extensively and officially promoted by the Government of Lao as the model that would generate a stable income for the farmers while benefiting the investors at the same time (Vientianne Times, 2007). In studying the relations between poverty alleviation and rubber farming in Lao PDR, Douangsavanh, Thammavong & Noble (2008) have noted that intercropping of crops such as maize, legumes or pineapples could substantially provide income to growers, especially in the first few years of non-productive phase.

In considering the possible economic potential during the rubber-tapping phase, it could not be known if the situation for the relevant plantation workers would improve economically since Don Kuang plantation has yet to reach the rubber-tapping phase. However, by critically looking at the details of the contract agreement issued by Lao-Thaihua rubber, the possibility of stable income is at risk due to the following

the findings section of this chapter.

factors namely the missing reference to the rubber pricing system to be used, the lack of details on the commitment to buy back from these farmers and the responsible party for costs of chemical fertilizers and pesticides.

Additionally, specific to Kan Tiew plantation workers, there was a potential opportunity to increase food availability since the company permitted intercropping of crops such as maize, pineapples and legumes and/or raising of poultry within the plantation (refer to Box 3 for details of contract agreement). However, this opportunity is limited in the case of villagers under the contract with Lao-Thaihua rubber. The pre-occupation of workers and their entire households with the work on the plantation has placed the strain on time and labour within the households to devote their time to grow food crops and raise poultry during the rubber-maturing or non-productive phase. This is evident in the response from the existing plantation worker during the interview:

“I don’t really have time to do other things apart from working on the plantation. There are 4 of us; my two youngest children are too young to work. It’s hard enough for us to finish everything in a month, let alone working on other things”
 (Interview with Lao-Thaihua plantation worker on 4th July 2011)

In the case where households have enough members to complete the tasks on the plantation within the timeframe (6 hectares per household per month), time and labour to grow food crops would still be a challenge for the household. This is relevant when considering their former agricultural lifestyle where the households could manage their own time in growing their own crops without the time constraint when compared to being employed by the plantation. Moreover, intercropping may no longer be physically possible during the later stage of rubber-maturing phase (4th and 5th year) as the rubber canopy formed could prevent sufficient sunlight for growing of crops on the ground.

In sum, the potential economic gain or future economic opportunity under the contract farming arrangement with the company, which could improve Kan Tiew

plantation workers' economic access to food in the market as well as the possibility of intercropping of food crops and raising poultry within the plantation area which would increase food availability, have been limited by the missing details within the rubber farming contract agreement and the less enabling physical environment i.e. chemical contamination on the ground would affect safety of food crops grown and the eventual insufficient sunlight as a result of growing rubber trees.

3.6 Conclusion

The livelihood changes among Kan Tiew households and Kan Tiew plantation workers within Kan Tiew village as a result of Don Kuang plantation establishment have subsequent food security implications. The livelihood changes have been more prominent for Kan Tiew plantation workers under the contract agreement with Lao-Thaihua Rubber as there was a transition from subsistence farming to rubber farming. The necessity of Kan Tiew plantation workers to rely on cash income to acquire food sources, the loss in food-production capacity as a result of time and labour constraints and the change in social relationships within the village due to relative isolation.

In conclusion, Kan Tiew plantation workers face pervasive food security threats in terms of their physical and economic access to food sources as a consequence of employment with Don Kuang plantation. The decline in NTFPs as well as the lost in capacity to produce their own rice and other food crops have affected their physical access to former food sources. The grown dependency on plantation income for food as well as the current income instability, have severely affected the workers' economic access to food, the access that have become the workers' main alternative to access food. Although condition of food security threats towards these workers may be temporary i.e. until rubber-tapping starts, these threats are pervasive and severe. This is evident by the willingness of the Kan Tiew plantation worker to quit work with the plantation in fear of not having enough food to feed the household.

For Kan Tiew village itself, food security threats may not be as severe but significant. The rapid loss of NTFPs during land clearing has left the villagers with less available food sources within the surrounding area. The decline in fish and other aquatic animals in the stream as well as the quality of water due to chemical pesticides used in the plantation indicate the lost in food availability in the long term. Although compare to the Kan Tiew plantation workers, other Kan Tiew villagers have not lost their opportunity in diversifying food sources i.e. working on rice farm and other productive crops as well as to perform other off-farm activities to earn their income.

Existing food security threats in Kan Tiew village as a consequence of the Don Kuang Plantation, could be attributed various factors including firstly, the lack of opportunity and possibly the lack of power due to their ethnic identity for Kan Tiew villagers to negotiate in the rubber contract farming scheme and during land acquisition, the operational nature of industrial-scale rubber plantation itself which involved complete clearing of land and the heavy use of chemical throughout the planting, and the exploitative contract agreement conditions issued by the company. Unfortunately, these factors only reflect the visible causes on the ground.

CHAPTER IV

TRANSBORDER TRADE AND ITS ACTORS

“For the market mechanism to function, certain rules must be established. Private property must be guaranteed and incentives to compete for scarce resources are encouraged and described as natural. Communal values and cooperation are not nurtured, because that would undermine the role of scarcity, which is the idea underpinning the whole system.” (Birchfield, 1999, p.32)

4.1 Introduction

This chapter seeks to respond to the first two sub-questions in the research - firstly in explaining or demonstrating the corporate behaviour of Thaihua Rubber Company Limited, a Thai TNC in rubber investment in Lao PDR within the context of regional market integration. Secondly, by referring to the conceptual framework, the identification of key actors, their roles and their strategies within the investment process would be done through exploring the interactions between actors namely – 1) Thaihua Rubber, the Royal Thai Government and the Government of Lao PDR within the context of bilateral agreements and 2) Thaihua Rubber and key representative ministries within the Government of Lao PDR at the central, provincial and district level specifically within the two significant foreign investment-related processes - Foreign Investment License approval and Land acquisition approval. The outcome of these specific processes will have direct influence on how and where the foreign investment is to be made within Lao PDR. The analysis under each interaction/decision-making process will evaluate 1) the consideration of social and environmental accountability given this factor would have a direct implication on food security within the context of Lao PDR where a high number of population still rely on their natural resources for their dietary needs and 2) how the politics of power and economic interests among the actors influence the decision outcome that caused livelihood changes in Kan Tiew village with food security implications as described in the previous chapter.

The findings presented in this chapter, which constitute the second part of the case study, is based on data and information gained from key informant interviews conducted both within Thailand and Lao PDR, relevant corporate and government field documents as well as from the published media sources.

4.2 Thaihua Rubber: A Thai TNC

In seeking to understand the corporate behaviours, with relevance to food security, of Thaihua rubber Public Limited or Thaihua Rubber, it is first necessary to present the findings gathered in two major parts - the company's current operations, business strategies in Thailand, which would reveal the company's motivation to expand its operations in Lao PDR. Secondly, the findings related to existing company's policies on social/environmental accountability in contrast with its current practice both in Thailand and in Lao PDR. The conclusion in this section discusses how the current corporate behaviours and the level of social and environmental commitment account for food security on the ground.

4.2.1 The company operations and strategies

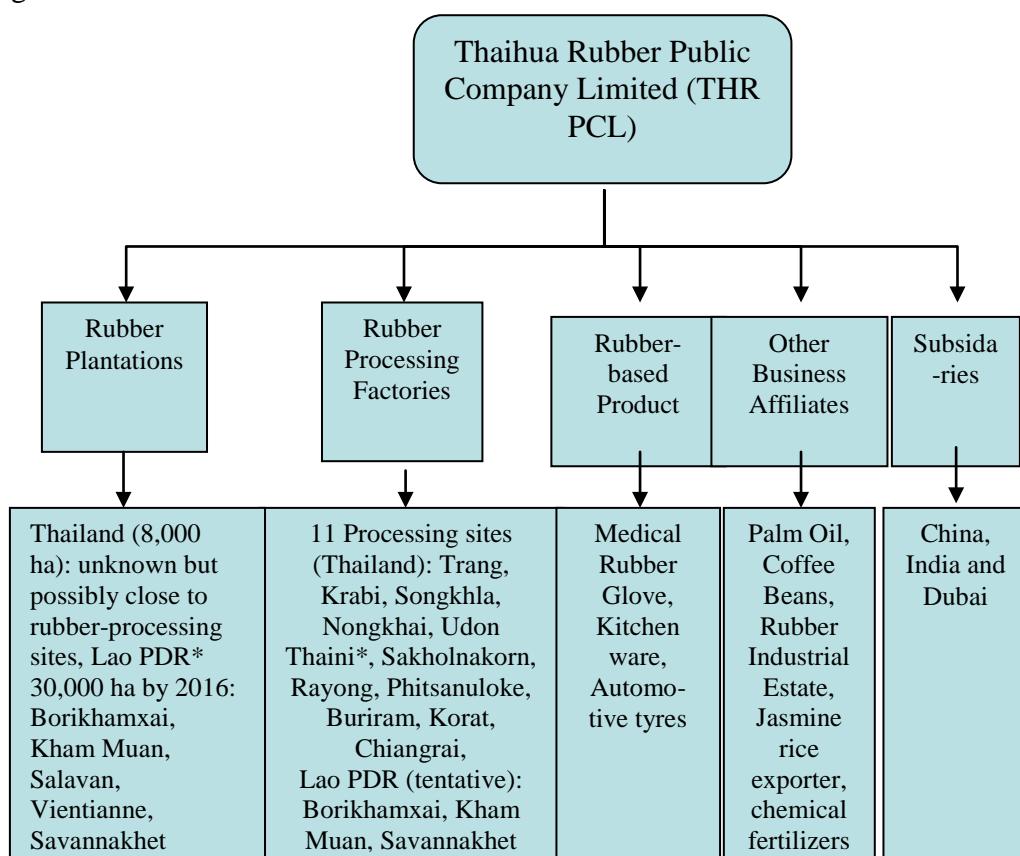
Thaihua Rubber initially started in 1957 as a smallholder in rubber plantation, a small family business in Rayong province, Central Thailand. It later became the smoked rubber sheets manufacturer in 1978 with Bridgestone as its first customer (Thaihua Rubber Public, n.d.). Thaihua Rubber was first registered officially as Thaihua Rubber Company Limited in 1985 but later changed its name to Thaihua Rubber Public Company Limited in 1996 with the intention of preparing the company for the initial public offering in the Thai stock market³¹ (Thaihua plantation, n.d.). But due to the financial instability in the following year, the company did not pursue its public offering as planned (*Ibid*, n.d.) and to date, it still has not. The company's export output of over 150,000 tonnes/year has placed the company to be one of the

³¹ Officially, it is called The Stock Exchange of Thailand or SET

biggest exporters³² of rubber sheet products in Thailand with the current production capacity of 385,000 tonnes annually.

On the economic front, Thaihua rubber has been perpetually expanding its business. Over time, the company becomes a integrated company where it not only captured upstream business of rubber plantations³³, it also dominated other mid and downstream sectors including rubber sheets/blocks manufacturing (11 factories), medical rubber glove, rubber-wood kitchenware, automotive tyre businesses (refer to Figure 4.1 below for Thaihua Rubber's integrated business overview).

Figure 4.1: Thaihua Rubber Business Overview



Source: Own compilation from Thaihua Rubber (n.d.), Bangkok Business News (2011) and Prachachart News (2011)

³² Total Thailand's output is 2.8 million tones (in 2010) and Thaihua's actual contribution was approximately 7% in the same year

³³ Approximate area 8,000 hectares of land throughout southern and northeastern Thailand (Bangkok Business News, 2011)

The automotive tyre business in Thailand is a joint venture with a Chinese investor and is expected to produce 3 million tyres a year (*Ibid*, 2011). The company has also strategically located its branch offices in China, Dubai and India (Thaihua Rubber Public Limited, n.d.). China branch office serves as liaison office with its major importers in the country while India branch office in Kottayam town of Kelara state, acts as another rubber production and distribution point for other international importers. Through the Thai media, the company also revealed the latest Thaihua's venture in developing a Rubber Industrial Park together with Chinese and Finnish investor worth US\$ 106 million in Rayong province by early 2012 (Prachachart News, 2011).

The company is due to enter SET within the last quarter of 2011, offering 25-30% of its registered shares worth THB 1,650 million or US\$ 55 million (Thairath, 2011). In the interview with another Thai media, company's CEO revealed that the company's total earnings were expected to reach US\$ 1.6 billion by the end of 2011 from US\$ 1 billion in 2010 (Bangkok Business News, 2011). He also expressed his confidence that the company's earnings would increase by 20% annually from then on since it has successfully captured the entire upstream, mid and downstream businesses as part of its business strategy. Within the next 5 years (by 2016), the company intends to position itself as one of the biggest rubber players in ASEAN. This seemingly ambitious goal could also explain the company's strategic plantation expansion by almost 4 folds (see figure 4.1, from 8,000 hectares to 30,000 by 2016) in Lao PDR.

The company's aggressive integration strategy mimics the common market logic heavily practiced by First World TNCs, where a corporation attempts to consolidate the entire market chain in order to ensure efficiency, profitability and survival amidst fierce market competition. The survival within the global market competition is especially relevant to Thaihua Rubber as regional market competition

is expected to intensify with the formation of ASEAN economic community³⁴ by 2015.

Thaihua Rubber expanded itself in Lao PDR in 2006. During the telephone interview with Thaihua executive, the company declined to provide any information on the current progress on its operation in Lao PDR:

“I cannot really provide you with the update on our Laos operations. Since it is a sensitive issue, we would like to keep it low profile” (Phone interview with Thaihua Rubber’s management on 25th June 2011 in Bangkok).

It is possible, however, to summarize information on the company through other sources including the news media and through informant interviews. In 2006, Lao-Thaihua Rubber Company limited was officially approved by the Government of Lao to operate rubber plantations covering 30,000 hectares within Lao PDR for the concession duration of 50 years (Laos News Agency, 2006). The investment approval process will further discussed later in the chapter (in section 4.6). During its press conference and signing ceremony on March 2006 which took place in Vientianne, Lao-Thaihua executive announced their master plan in Lao PDR; out of the total approved land of 30,000 hectares, 15,000 hectares would be allocated to rubber contract farming with local communities while the remaining 15,000 hectares would be as rubber concessions on state’s land. The main benefits from contract farming were said to be job creation and income generation for rural communities where the annual income would be as high as US\$ 1,000 per person (Thai Rubber Association News, n.d.). According to its business plan, the operation in Lao PDR is estimated to yield 10,000 tonnes of rubber latex and 60,000 tonnes by 2016 (Bangkok Post, 2006). In effect, the plantation in Laos would potentially contribute as much as 15% of its

³⁴ The initiative set out by the ASEAN member states in 2007 as an attempt to establish the regional economic integration. The main objectives of ASEAN economic community include the intention to create a single market and production base, a highly competitive economic region and to ensure the region’s full integration with the global economy.

current rubber latex production capacity³⁵. The company is also expecting to do similar investments in Myanmar.

The company CEO expressed the motive of company's investment cross-border in the interview with Bangkok Post (2006) that;

"Plantation areas in Thailand are quite limited at the moment. We have therefore been looking at Laos and Burma for new plantation areas.' (Ibid, Business Section, 07 August 2006).

Lao-Thaihua's inaugural rubber planting started in July 2006 in Savannakhet province (Lao-Thaihua, n.d.). The company is the joint venture between Thaihua Rubber Public limited, holding the biggest share of 60%, New Chip Seng Company Limited, a local Lao business, and Chiang Sun Group, China (20%) (Lao-Thaihua, n.d.). According to its website, the company claimed to have 32 small and medium sized plantation in Central and Southern Lao PDR (ibid, n.d.). In the recent interview with ASTV Manager Online (2011), Lao-Thaihua's director revealed that the company has already acquired 9,000 hectares in central and southern provinces of Lao PDR, 6,000 hectares as rubber concessions and the remaining 3,000 hectares as contract farming. Within the next 8 years, it intended to expand up to 20,000 hectares and aimed to reach total 30,000 hectares by 2021. The company was expecting their rubber plantations would start to yield latex in 2014. This would be when the company would further build 3 rubber-processing factories Kham Muan, Borikhamxai and Savannakhet provinces.

On the ground, Lao-Thaihua rubber board also initiated the implementation a small pilot Clean Development Mechanism (CDM)³⁶ project in Pakading district

³⁵ Calculation out of total Thaihua's capacity as of 2010 was 385,000 tonnes annually.

³⁶ Clean Development Mechanism (CDM) is one of market mechanism in "carbon-reduction" initiated from the Kyoto Protocol as part of sustainable development and climate change initiatives. The main concept behind CDM is the market option to enable industries within developed countries to offset their carbon emissions by way

(Lao-Thaihua Rubber, n.d.). The significance of CDM projects for Lao-Thaihua will be further discussed in the following section. In this area, the company reported having engaged 402 households with its rubber contract farming. In the case of the pilot CDM in Borikhamxai would be successful, the company has planned to expand CDM implementation to all its sites in Lao PDR. Elsewhere, Lao-Thaihua had started land clearing and rubber planting in some of the provinces, for instance, in Vientiane (670 hectares in Ban That and Ban Vangmon-Neua), Savannakhet (1,710 hectares in Oudomphone district, 687 hectares in Atsaphone district), Salavan (unknown) and Borikhamxai (unknown) (CIDSE, 2009, NLMA, 2009, DAFO, 2010). According to the provincial land survey report from the provincial office of Agriculture and Forestry (PAF) gathered from the field, in 2008, company has initially proposed for a concession area of 10,000 hectares in Oudomphone district, Savannakhet province. The department approved the company with 1,710 hectares at the initial stage (PAF, 2008).

Thaihua's ambitious goal to be the leader in the rubber industry in ASEAN by 2016 reflects the mainstream market logic within the global economic regime – accumulate and grow or be out of the competition. Thaihua's expansion into Lao PDR was inevitable, as the country became the convenient place for its investment due to the availability of cheap land and foreign investment policies that enabled the business operation to be economically viable. Secondly, there was also a push for expansion due to the lack of (cheap) land within Thailand. While it continues to accumulate and expand into Lao PDR, it is necessary to consider the nature of its operations and hence its social and environmental accountability in order to assess if its corporate behaviour would likely to induce positive food security for its host communities on the ground.

4.2.2 Thaihua's Social and Environmental accountability

of purchasing carbon credits from industries within the developing countries who

This section explores Thaihua's social/environmental accountability, the aspect that is crucial in determining the corporate attitude and behaviour, and the influence it would have on food security for the host communities on the ground.

In examining the company's social and environmental accountability, the degree of such accountability could be reflected from the existence of Corporate Social Responsibility or CSR policy within the company. The United Nations Industrial Development Organization (UNIDO) has defined the concept of CSR as "*... is a management concept whereby companies integrate social and environmental concerns in their business operations and interactions with their stakeholders. CSR is generally understood as being the way through which a company achieves a balance of economic, environmental and social imperatives ("Triple-Bottom-Line-Approach"), while at the same time addressing the expectations of shareholders and stakeholders*" (UNIDO, n.d.). Essentially, this is the principle of responsible investment where the company would also account for environmental and social performances in addition to its usual business operations. Companies' actual practice in CSR could range of philanthropic commitment or deep CSR where its values are completely integrated into the company's core values.

In reflecting upon TNCs and their commitment to CSRs on the ground within the context between developing countries, United Nations Conference on Trade and Development or UNCTAD (2007) has observed that in situations where both home and host countries are institutionally weak, or where CSR implementation is still in a nascent stage, the negative social and economic impact of transnational business operations can be significant on the host country, despite the CSR commitment of the company.

In terms of national policy, Thailand has yet to encourage Thai TNCs to integrate CSR policy into their overseas operations. The closest resemblance to CSR

earned carbon credits through their CDM certified projects.

principles is the obligations of foreign investors stipulated by the Promotion of Foreign Investment Law (2004). For instance, in Article 13.6, foreign investors are to “protect the environment and ensure that business activities do not cause an adverse impact on the public, the national security or social order” (Ibid, 2004: 4).

To understand Thaihua’s commitment to apply CSR in Lao PDR, it is useful to look at the existence of Thaihua’s policy on CSR and its current practice in Thailand. In the case of Thaihua Rubber, not only is it obligated socially as Corporate citizen within the regional and global market, it would soon be obligated to apply CSR when it becomes a public listed company in the Thai stock market. According to the company’s interview through the Thai press, it is expected to start the Initial Public Offering or IPO in the last quarter of 2011. In the telephone interview with the company’s executive, he stated:

“We don’t really have an official CSR policy at the moment. But we do many CSR activities with the areas we operate in. ..We have been giving out scholarships to poor students in the villages. It really depends on the needs of the community. In the south for example (referring to Southern Thailand) we would give money to help with the Muslim communities...” (Telephone interview with Thaihua’s executive on 25th June, 2011).

In another instance, the company CEO, who was also the President of Thai Rubber Association (ended early 2011), wrote an article on the importance of CSR and the elements of International Social Responsibility Certification - ISO 26000³⁷. He concludes that:

“Thailand Rubber Association acknowledges the importance corporate social and environmental responsibility. I would like to encourage the government sector, the private sector, farmers and relevant stakeholders to consider incorporating CSR concepts in their existing operations. Together

we can promote sustainable growth for the Thai rubber industry as well creating well-being for all” (Kittiphol, 2011: President’s Message).

So while the CEO, as the president of Thai Rubber Association endorses the application of CSR principle and certification, Thaibua Rubber company appear to fail as the leading role within the rubber industry where it lacks the written CSR policy. For large corporations such as Thaibua Rubber, having written CSR policy could indicate the commitment from the company’s management in seeking to be socially responsible.

The closest evidence of Thaibua’s written CSR policy could be found on its mission and vision statement on Thaibua Plantation Company’s website. Although, Thaibua Plantation Company Limited³⁸ is the daughter company of Thaibua Rubber, we could expect the company, at its best, to be aspiring to the values presented in these statements. It is interesting to observe that the operation in Udon Thani province has a separate website containing the company’s vision and mission statements as well as photographic evidence of CSR activities while the main Thaibua Rubber’s website (Thaibua Rubber Public Company Limited) does not contain any information on corporate governance or CSR policies. This may be due to the fact that the company may have plan to start a pilot CDM project in Udon Thani site.

The vision and mission statements below on Thaibua Plantation’s website (n.d.) could vaguely reflects its business strategy as well as its attitudes towards social and environmental accountability:

³⁷ ISO 26000 is an internationally recognized standard for certification on Corporate Social Responsibility.

³⁸ Thaibua Plantation Company Limited is another Thaibua Rubber company operating in Udon Thani province under a different name. It also has a separate company’s website with more comprehensive details of its business policy and CSR activities.

“Our Vision: To establish a complete integration of the rubber and palm oil industry and to restore the environment through commercial plantations under good governance principles.

Our Mission:

- 1) *To promote and expand areas for rubber and palm oil plantations in order to create sustainable green communities.*
- 2) *To expand the operation into rubber and palm oil processing sector*
- 3) *To develop knowledge on para-rubber and palm oil*
- 4) *To build human capacity in order to create a progressive organization under good governance*
- 5) *To promote and establish economy within local communities”* (Thaihua Plantation, n.d.: About THP)

In considering how these vision and mission statements could influence food security on the ground, it is useful to observe these intentions 1) “to restore the environment through commercial plantations through good governance principles”, 2) “to create sustainable green communities” and 3) “to establish economy within local communities” through its business operation.

The “restoration” of environment through commercial plantations under good governance principles implies the plantation is done on land that needed to be “restored” and it would operate within the boundary of law and regulations. This practice would be significant within the context of Lao PDR for two reasons. Firstly as implied extensively in the previous chapter, rural livelihood and food security are heavily dependent on forests land for their ecological services including provisions of NTFPs and habitat for wild life. Secondly, laws and regulations regarding land tenure security, social and environmental protection are still relatively nascent or not fully enforced. In reflecting back to the findings from Kan Tiew village (see 3.4.1), Thaihua through its Lao-Thaihua’s operation did not seem to adhere to this principle. Although from the perspective of the company, land acquisition and land clearing has officially been approved by the relevant Lao government agencies (details of the land

approval process would be discussed in section 4.4), company's own initial land survey was likely to consider the factor of available land best for rubber cultivation rather than the search for degraded³⁹ forest its plantations. The type of land the company acquired from Kan Tiew village was not degraded land from the villagers' perspective since the forest was still considered as "Pah Kok" or mixed dipterocarp forests. In this case, the company's is neither afforestation⁴⁰ nor reforestation⁴¹ but deforestation⁴².

With regards to the establishment of economy within the local communities, the principle is yet to be translated to current contract farming scheme in Kan Tiew village for two main reasons (see section 3.3.6). Firstly, the content of the contract itself does not cover complete requirements of a contract-farming scheme i.e. the guaranteed pricing standard as well as the detail on the responsibility for costs of fertilizers and pesticides. Thaihua has revealed the type of contract farming and its provisions to the farmers in Lao PDR through the Thai press that:

"Thaihua Rubber will promote agro-forestry in Lao PDR by providing loans, seedlings and others. It also would provide technical support and guarantee to buy back the production yield from the farmers.." (Manager Online, 1 December 2006).

To another paper, Thaihua management referred to the contract farming that:

"..the remaining land (referring to the company's allocation of plantations) would be planted by the local farmers (in Lao PDR) who would contribute land and

³⁹ It is constituted within the Forestry Law in Lao PDR that degraded forests could be utilized for the purposes of reforestation eg. through industrial plantations. Even the classification of "degraded" forest itself is a much-contested concept in Lao PDR. This will be further discussed later in the chapter.

⁴⁰ Afforestation is the establishment of forest cover on vacant land.

⁴¹ Reforestation is the re-establishment either naturally or artificially to increase the forest cover.

⁴² Deforestation is the removal of forests where land could be converted to non-forest use.

labour while the company would invest in technical know-how and marketing..” (ASTV Manager Online, 2 June 2011).

Secondly, within actual contract arrangement in Kan Tiew village, the existing farmers had not been paid their monthly salary for three consecutive months. Although, the exact timing of monthly salary for farmers during the non-productive rubber phase has not been mentioned in the contract, Lao’s Labour Law (1998) Article 38 stipulates the employer to pay its employee the monthly salary on time and either at the beginning or the end of the month. Given the obvious partial conditions applied in Kan Tiew village, it is highly unlikely that “local economy” within the local community would occur.

Other track record of the company as evident in the Thai newspapers could shed some light to the company’s commitment to social and environmental accountability. Within the course of one year, the rubber processing in Krabi province, south of Thailand being confronted with two major protests from the surrounding communities (Thai Rath, 22 January 2011, Thai Rath, 27 August 2011, Khao Sod Online, 23 January 2011). The earlier incident involved the chemical discharge emitted by the rubber factory into the community’s stream, *Nong Jik*, that resulted in massive death of fish. The ammonia fumes also caused disturbances in the community’s health. The report claimed the spillage spread upto 10 kilometers downstream, affecting over 2,400 families relying on the river for their livelihood. The factory was temporarily closed and was required to set up the immediate mitigation plan as well as be the responsible for the damages done in the community.

Another the discharge incident found in two different canals that occurred seven months later (August 2011). This time, the company claimed to be due to their faulty wastewater treatment. The company admitted the mistake and was willing to compensate for the damages done. According to another media source, the opposition to Thaihua’s rubber processing factories also occurred in Phitsanulok, a northern province of Thailand. In the public hearing conducted on 21 August 2011 by among the local stakeholders in Wang Nok Ann district, despite the company’s promise of

creating local economy, over 80% (486 out of 600) of the communities did not agree with the establishment of the factory due to potential poisonous fumes that the rubber factory would emit (Phitsanuloke Hot News, 24 August 2011).

These news not only reflect the growing environmental concerns within Thailand with the rubber industries but they also reflect the growing awareness and power of the communities in Thailand and the level of commitment of Thaihua's to environmental protection. The villagers in Kan Tiew village did not have a chance to make their cases known to the public as in the case of communities in Thailand.

The findings in Kan Tiew village also mimic a similar incident of water pollution where the villagers witnessed dead fish in the nearby stream (see Section 3.4.3). Although there was no quantitative evidence of the pollution, which the villagers believed to have caused by the chemicals, used within the plantations. The dwindling number of fish and other aquatic animals found from the stream directly impact food security of the communities since fish has been another main staple (apart from sticky rice) in the village.

However, on a positive note, there were some documented evidences of the company's CSR activities on Thaihua Plantation's website. It extensively documented its active role in CSR and CDM related activities, which include CDM awareness workshops, Rubber-tapping skills workshop for local rubber farmers in Nakhon Province and donations of sports equipment to a local school in Kanchanaburi province.

These incidences of water pollution both in Thailand and in Kan Tiew village and the philanthropic effort to grant scholarships and donate sports equipment have revealed current level of Thaihua's commitment to social and environmental accountability. The vision "to create sustainable green communities" has yet to be translated into the company's commitment and actions on the ground.

In terms of other social and environmental accountability commitment, Thaihua Rubber is actively pursuing CDM for its rubber plantations both in Lao PDR and in Thailand. The reason for investigating its CDM efforts of the company is relevant. Although CDM projects primarily intended to benefit the certified company economically, it also provides opportunities for it to be socially and environmentally responsible of its operations as part the requirements within the certification process (see social and environmental requirements in Box 4.1 below).

Thaihua's interests in CDM concept is evident in its initiation to host the workshop titled “*Procedures, opportunities, practice in Laos, Thailand and Greater Mekong Sub-region and challenges of the Clean Development Mechanism (CDM)*” in Bangkok which was presided by the deputy Minister of Agriculture and Cooperatives and two local workshops on CDM projects in Udon Thani and Khon Kaen province (Thaihua Plantation Company Limited, 2011). In Lao PDR, as mentioned earlier, it already pursued CDM registration⁴³ (see appendix I for registration process) for its rubber plantation site in Borikhamxai province.

The significance of CDM registration for the company is two fold. Firstly, unlike implementing CSR, which deemed to be “costs” to the operation, with CDM registration, the company could earn additional income from its third year of rubber planting for the period of 30 years (CSM-PDD Report, 2009). The statement from Lao-Thaihua Rubber also revealed that there is an economic motivation for the company to undergo CDM registration:

⁴³ Name of proposed CDM project “*Mitigation of GHG: Rubber based agro-forestry system for sustainable development and poverty reduction in Pakkading, Bolikhamsay Province, Lao PDR*” for 1,000 hectares. DOE for the project is TÜV SÜD Industrie Service GmbH, a German Certification Body located in Thailand (source: WREA, 2010, CDM-PDD Report,2009, Website: <http://cdm.unfccc.int>, last accessed 19 September 2011)

“The Board is actively pursuing CDM revenues through sale of Certified Emission Reductions⁴⁴ (CERs) and this will be a substantial and additional income component and CDM requirements will be met in full for this project.”

(Lao-Thaihua Company Limited, n.d.: About Company)

Secondly, as part of CDM application, Thaihua Rubber is required to fulfill the “sustainable development” criteria set out in CDM approval mechanism (see Box 4.1 for criteria details). The criteria is further separated into 4 categories; environment, social, economic and technology and knowledge transfer. The full extent of CDM is beyond the scope of this study but it is worthy to highlight some of these criteria relevant to food security impact on the ground including the social contributions and reduction of water pollution among the immediate communities.

Box 4.1 Details of Sustainable Development criteria under CDM approval process

Category 1: Environment

- Reduction of: air pollution, water pollution, soil pollution
- Biodiversity conservation and protection of endangered species
- Rational use of mineral resources
- Sustainable use of forest resources

Category 2: Social

- Concrete distribution to poverty alleviation
- Contribution to gender equality and social inclusion
- Stakeholder consultation
- Creation of employment in country
- Improvement of community infrastructure
- Mitigate risks for people within the vicinity of project area

Category 3: Economic

⁴⁴ Certified Emission Reductions are a type of emission unit or carbon credits used for trade within the carbon market under the Kyoto Protocol in order to achieve carbon reduction targets for developed countries.

- Share of project budget spent in-country
- Reduced dependence on imported fossil fuels
- Reduced dependence on imported energy

Category 4: Technological and Knowledge Transfer

- Transfer of appropriate and best available technology
- Capacity building of local stakeholders and industries/businesses

In looking at the company's possible accounting to food security, the fulfillment of requirements in the environment and social categories would deem to strengthen food security conditions for its host communities. The most visible example to reflect the company's commitment in fulfilling the requirements could be seen in the case of a CDM pilot project in Borikhamxai province, Lao PDR that was initiated in December 2007. The company has planned to replicate the model to other plantations in Lao PDR once the project gets successful (Lao-Thaihua, n.d.).

The main benefits put across by the company to validate its investment in Borikhamxai includes reducing poverty for 402 households who were believed to be living under poverty and most importantly, its plantation would revive the degraded land that has been classified as abandoned areas (CDM-PDD, 2009). At this site of pilot CDM project, the project proposal was committed to contribute socially to the community. For instance, the company would contribute 10,000 kip or US\$ 1.3 per hectare to the village fund. In terms of infrastructure, community participation and employment the project stated:

Improvements to the infrastructure in the area is being carried out such as road network, water supply, electricity, construction of village meeting hall, fish pond,

wells etc,. Apart from that, the project is committed to consider any claims or feedbacks from the community so that it could respond to the real needs of the people. The project creates direct employment opportunities in the establishment,

maintenance, harvesting, and processing of the products throughout the project cycle in the project area. (CDM-PDD, 2009: 5)

In actuality, the company claimed on its own website that to have done extensive consultation with the stakeholders and the communities:

“Extensive consultations with stakeholders (local, provincial, national authorities and villagers, farmers and their families etc.) were held before the decision was made and it was decided to lease land from 402 lessors who had previously slashed and burned their lands for decades and saw this as a good opportunity to improve their income and overall wellbeing which was committed by the Company.” (Lao-Thaihua Rubber Company Limited, n.d.: About Company)

So far, a photographic evidence of actual community contribution in this area spotted on its website has been donations to build a community hall in a village in Pakading District (Lao-Thaihua, n.d.). This project has already been approved by the national CDM committee or Designated National Authority (DNA) and is on its way to be registered with United Nations Framework Convention on Climate Change or UNFCCC (WREA, 2011).

4.2.3 Conclusion on Thaihua Rubber Corporate behaviour

Thaihua's aspiration to be the leader in rubber industry in ASEAN by 2016 reflects the market logic of accumulation within global market competition. Its move to become an integrated corporation has propelled itself to secure its production supplies and while land is diminishing in Thailand, led to its expansion beyond the national border into Lao PDR. In considering the nature of its current operations in Thailand and Lao PDR, the findings have revealed its economic imperative outweighing other imperatives of social and environmental accountability. The superficial commitment to social and environmental accountability is reflected in existing gap between the vision of building the “sustainable green communities” and

the realities of its actual operations on the ground. This is especially true when coupled with conditions of relatively weak law enforcement and grassroots' capacity on the ground as we have seen in the case of Kan Tiew plantation workers under the contract farming arrangement in Atsaphone district, Savannakhet province.

4.3 Thaihua, Royal Thai Government and Government of Lao PDR

Referring to the conceptual framework, this section will discuss the relations between Thaihua Rubber and the Royal Thai Government and the Royal Thai Government with the Government of Lao PDR. The interaction between the company and the Government of Lao PDR will be discussed separately in the next section. Various bilateral and multilateral frameworks including GMS (Greater Mekong sub-region)⁴⁵, AFTA⁴⁶ (ASEAN Free Trade Area), ACMEC (Ayayawady- Chao Phraya - Mekong Economic Cooperation Strategy)⁴⁷ and the ASEAN community⁴⁸ have governed the interactions among the actors in this section. These frameworks focused mainly on facilitating economic integration and have created more and more economic space for TNCs including Thaihua Rubber to expand their economic power beyond the national borders. Only the ASEAN community framework mentioned food security as a common mandate for the ASEAN countries (ASEAN, n.d.). Even here, food security has been mandated under the economic pillar i.e. ensuring food security in terms of increased food production capacity for the purposes of trade or to

⁴⁵ Initiated by Asian Development Bank (ADB) – see more details in literature review section 2.4).

⁴⁶ This is a multilateral agreement between ASEAN member countries including Thailand (in 1992) and Lao PDR (1999) with the goal to eliminate trade barriers among the countries including tariffs, trade laws and regulations to promote foreign direct investments.

⁴⁷ ACMECS (Ayayawady- Chao Phraya - Mekong Economic Cooperation Strategy) in 2003. The initiative was intended to bridge the economic gap as well as promote mutual prosperity within the region. Its objectives include generating greater growth along the borders, to relocate its agricultural and manufacturing industries to areas with “comparative advantage” as well as creating more employment opportunities, lessening income gaps among its people

⁴⁸ Instituted in 2003 by ASEAN during the 9th Summit in 2003 in order to promote full regional integration within ASEAN countries in terms of security, economy and socio-cultural sectors by 2015.

enhance competitiveness for agricultural commodities and not for ensuring food security for its own populations.

In practice, Thaihua Rubber has little relations with the Royal Thai Government when it comes to its investment in Lao PDR in 2005/6. The company directly approached the government of Laos at the central level without formal assistance from RTG's representative in Lao PDR (Key Informant Interview with Thai-Lao Chamber of Commerce on 21th June 2011). However, Thai Ambassador to Laos PDR presided over the MOU signing ceremony in Vientianne on 28 November 2006 (Manager Daily, 2006). Thai business sector perceives its government as having little power and strategy to lead the private sector for cross border investments in Lao PDR. This is expressed in the interview with representative from the Thai-Lao Chamber of Commerce:

“We (referring to investors within Thai-Lao Chamber of Commerce) don’t see the benefits in relying on the government for our investments in Lao PDR. The investors have more knowledge and connections than the government representative in Vientianne (referring to the Thai Commercial Affairs representative). They come to us instead of us going to them. We look for our own investment opportunities. We have the money, why not?..” (Key Informant Interview with Thai-Lao Chamber of Commerce on 21st June 2011).

In terms of government-to-government relations, Thailand considers its neighbouring countries including Lao PDR as beneficial in terms of relatively untapped natural resources, to its export-led, industrial based economy; however, the unstated patronizing attitude still remained. This is expressed through the interview with former Thai Commercial Affairs Minister Counselor stated that:

“Even though we have ACMEC since 2003, the government has not really prioritize its resources to push for Thai investments in Lao PDR. I think we (referring to the government) have underestimated the potentials that this country has. Then again, there was always the underlying attitude that we have

towards Lao PDR. It's time to stop thinking that they are less and to start thinking that they are equal trading partners” (Key Informant Interview on 10th July, 2011).

The attitude is also reflected through the lack of practical support for Thai overseas investments, particularly among its neighbouring countries. The overseas investment promotion policy has only come into effect in April 2007 (BOI, 2007). This move could be considered as delayed considering various regional frameworks eg. GMS (1992) or AFTA (1992) had been set up a few decades ago. At the time of the policy announcement, it was yet to set up the overseas industrial promotion subcommittee who would then translate the policies into strategies, incentives and guidelines with Thai overseas investment (*ibid*, 2007).

In another instance, the Commercial Affairs Minister Counselor mentioned of his limitations on the role of facilitation in the cross-border business negotiations:

“Unlike China or Vietnam where the governments are completely involved and take the lead in the negotiation process, the Thai investors in agribusiness sector very much have to do “deals” on their own. The market leads the negotiation. My unit sometimes tries to facilitate with investment workshops for the investors with Thai-Lao Business Council (which he is a member of). We also provide a up-to-date information on investments in Laos and we tried our best to keep up with the database. It is very hard when many Thai companies deal directly with the Lao counterparts...they do already some connections. So we don’t really have their data” (Key Informant Interview on 10th July, 2011).

When it comes to food security, social and environmental accountability, there is no formal policy provided by the Royal Thai Government to regulate Thai TNCs with their overseas operations. However, various actors have different opinions. When asked about the necessity of Thai investors to implement CSR policy or social responsibility in Lao PDR, the Commercial Counselor stated:

“I see lot of Thai investors in Lao PDR who just like to “grab and go” without even thinking to have the conscience to contribute something back to the communities. The locals also cheated them. It’s the whole mistrust game. I always advice the Thai investors that come to me that you should also give back to the local people. It should be like the big brother, taking care of the weaker one...there were too many bad examples that I see in my time. Why can’t you even help with the renovation of temple right across your office (referring to a Thai bank), a little gesture can go a long way and this is where you can build trust..” (Key Informant Interview on 10th July, 2011).

Other Thai businessmen who have been operating in Lao PDR for a period of time were also reflecting the similar perceptions.

“Most Thais think it’s easy to do business here. They just come to cheat the locals. Of course, they get cheated back. They don’t learn to give back to the people they are taking money from” (Interview with Thai Businessman on 29th June, 2011).

In response to how can Thai investments ensure food security in Lao PDR, the senior advisor to Thai-Laos Chamber of Commerce simply have a simple response:

“You just have to encourage more Thai investors to invest more in agribusinesses. So not only it would benefit back to Thailand, but also to the locals that help grow them” (Interview with senior Advisor to Thai-Laos Chamber of Commerce on 24th June 2011).

In conclusion, even though the Royal Thai Government perceives Lao PDR as the country that could serve as a resource or raw supplier for its thriving industrial-based and export-led economy, in practice, it lacks a coherent national strategic plan to truly also create sustainable investments among its neighbouring countries. Thai private sector perceives its government as not having power or authourity to lead the foreign investment in Lao PDR and hence preferring to secure business deals cross-

border through their own informal high profile connections. The government (RTG) also has little control over the social and environmental accountability of cross-border business operations. The responsibility to ensure food security, social and environmental accountability appears to rest on the investors themselves.

4.4 Key agencies within the decision-making process

This section intends to describe the plantation approval process as well as introducing the relevant actors within the approval process related to foreign investment in Lao PDR. This is the prerequisite in understanding the interactions within the transborder rubber investment process as well as the interests at stake. In analyzing the process against food security considerations, the section would also consider how relevant laws and regulations, and the actors within the process take account of food security on the ground via their commitment to mitigating social and environmental impact of industrial plantations.

The procedure of foreign direct investment related to rubber plantation in Lao PDR could be categorized in two major stages.⁴⁹ These stages could happen simultaneously at central, provincial and district level depending on the size of investment and the size of land required for the investment⁵⁰. In the case of Thaihua Rubber, given the investment size in Lao PDR is US\$ 35 million (Bangkok Post, 2006), the Foreign Investment License approval took place at the central government level whilst, the company approached the provincial governments separately for land.

1) Investment License approval (central government or provincial level) or the approval to invest in Lao PDR (Figure 4.2). This process could take place at the

⁴⁹ Although there are other investment-related processes such as company registration, required for foreign investment in Lao PDR, these are outside the scope of the research objectives and therefore would be excluded from the discussion.

⁵⁰ For instance, by law, Savannakhet and Vientianne provincial governors are able to approve investments worth US\$ 5 million dollars or under whilst the remaining provincial governors could only approve for investment projects upto US\$ 3 million

central or lower level depending on the size of foreign investment.

The key agencies related to Investment License approval decision-making process are Ministry of Planning and Investment (MPI), Water Resources and Environment Agency (WREA) and Ministry of Agriculture and Forestry (MAF). Together they form Committee for Promotion and Management of Investment (CPMI) at the central, provincial and district level.

2) Land approval for concession or contract farming (Figure 4.3) or the approval for land use, usually at the provincial or local level depending on the size of land requested (see also Table 4.2 for approval authourity).

Within the process of land approval decision-making, the key agencies are Ministry of Agriculture and Forestry (MAF), National Land Management Authority (NLMA), the Provincial/District governor as well as the village head or *Nai Baan* at the village level.

4.4.1 Ministry of Planning and Investment (MPI)

MPI's main function is to implementing investment, promoting regulation, and coordinate the entire investment approval process. The head of the Ministry often plays the leading role in the Committee for Promotion and Management of Investment (CPMI). As clearly stated in the Government's Law on the Promotion of Foreign Investment 2009 (GOL, 2009), there are two main areas in which MPI is able to indirectly ensures food security via protecting environmental impact on the ground namely its role of preventing investment which causes a negative impact on the environment (Article 70) and its role in requiring the investors to protect the environment and to ensure labour and social standards are adhered to (Article 69). In reality, MPI is driven by its mandate to ensure economic growth; contributions from other Ministries often could not sway the approval decisions within CPMI (Interview

dollars. For size of land and level of authourity, please refer to Table 4.1 under

with an anonymous source in Vientianne city, July 2011). This Ministry maintains a dominating influence over the decision-making process as would be further discussed later in section 4.5. This ministry generally does not have specific mandates to ensure food security.

4.4.2 Water Resources and Environment Agency (WREA)

The Water Resources and Environment Agency (WREA) was officially instituted in 2008 and is the main agency taking responsibility for environmental protection and sustainable development. In the recent restructuring of Ministries within the Government cabinet, WREA has recently been combined with National Land Management Authority to come under the new Ministry of Natural Resources and Environment (MONRE) in 2011. Environment Protection Law 1999 (GOL, 1999)⁵¹ stipulates WREA to perform environmental study, impact assessment and management plan for any investment project, including investment projects in the plantation sector and issue various environmental certificates such as Environmental Compliance Certificate (ECC), Environmental and Social Impact Assessment (ESIA) (Article 8). WREA is therefore obligated under this law to inspect and evaluate environmental effects of all proposed projects. By law, it could also suggest to the concerned agencies to mitigate or even stop investment projects temporally or permanently if the project has significant negative impacts on the environment. Although this may not necessarily be the case in actual investment approval practice as would be evident in the case of Lao-Thaihua plantation. According to an interview with WREA official, it was admitted that the department would need to be given a stronger authority to exert its influence on social and environmental concerns within CPMI members.

Within the context of discussion on social and environmental accountability,

section 4.6.

⁵¹ This law is relatively outdated considering the change in names and functions of relevant environmental bodies. The Science Technology and Environment Agency was the former implementer agency prior to the set up of WREA.

WREA plays the leading role in monitoring of social and environmental impacts of industrial plantations. Its capacity to be effective in monitoring would determine the strength of protection against the impact on host communities. Although it does not have specific mandates related to food security, this agency plays an indirect role in ensuring food security associated with investment projects via their effective enforcement and monitoring capacities.

4.4.3 Ministry of Agriculture and Forestry (MAF)

The Ministry of Agriculture and Forestry is the main Government agency responsible for the management of the country's natural resources, including allocation, protection and management of agricultural land, forestry, watershed, conservation and protected areas. While the MAF focuses on processing, approving, managing and controlling large-scale plantation projects in cooperation with the line agencies, the provincial and the district department or office for agriculture and forestry is responsible for small- and medium-sized projects with investment capital of less than \$3 million and production areas of less than 100 hectares with the exception of Savannakhet province, the provincial office is able to approve projects with investment capital of US\$ 5 million or less. It is the main agency responsible for implementing the Forestry Law (GOL, 1996), the Water and Water Resource Management Law (GOL, 1996), and the Agricultural Law (GOL 1998). The Forestry Law prohibits the clearing of "primary forest" and "secondary forest" (Article 13) for agricultural production, especially for large-scale production. Consequently, plantations, especially large- scale, are only allowed on "degraded forest areas".

MAF may not have a direct contact with the investors. However, it plays a major role within both, Investment Approval and Land acquisition decision-making process in key two areas. Firstly at the central and local levels, it plays a major role in spatial forests classification. This is particularly relevant when MAF has the authourity to determine and classify forests as "degraded land" – the type of land that is permissible for industrial plantations such as rubber or the kind of forests to be under conservation. Within the context of Lao PDR where it still boasts of abundant

forest resources, use of scientific calculation method to classify types of forests by MAF has the dominating influence over forests classification done by the communities. Secondly, MAF's role in conducting a land survey within the Land acquisition process has given it some authority to influence over the final decision of total land to be approved by the provincial or district governor. This authority of forests classification has left the Ministry vulnerable to influence by investors who may be interested in certain prohibited land for their plantation investment. Land survey also has a great influence on which land could be cleared for plantations. This could consequently lead to direct impact on food security on the ground as some forests rich in NTFPs could be classified as "degraded" and be cleared away by the investors.

Additionally, MAF also plays the leading role in ensuring national food security within Lao PDR with its policy on food security, the Food Security Strategy (2000)⁵² (WFP, n.d.). The main focus of the policy was the stability of rice production to maintain the daily caloric needs of the population. However, this policy did not address the full dimension of food security namely the aspect of malnutrition and the shocks to food security induced by both development projects such as industrial plantations as well as certain government policies including for Foreign Investment policy that may drive land-depleting developments over the need to preserve land for agricultural production. On the other hand, MAF is also responsible for commercial agricultural crop programs, which mainly intend to meet the demand of the global market as supposed to ensure sufficient consumption within the country. Essentially, the national food strategy has not taken into account the condition of possible food insecurity as a result of project developments such as industrial plantations.

4.4.4 National Land Management Authority (NLMA)

The National Land Management Authority (NLMA) was established in 2004, under initially with the status of a ministry and was attached directly to the Prime

⁵² Food Security Strategy (2000 – 2010)

Minister's Office. However, it has recently been combined with WREA to come under the Ministry of Natural Resources and Environment (MONRE). Land Law (2003) stipulated clear responsibilities for NLMA including land registration, issuance of Temporary Land-Use certificates and to centrally control land records and database (Article 8, 9 & 10). These mandates play a key role in land tenure security system in Lao PDR and have the potential to strengthen the decision-making process in land acquisition. However, there was often conflicting roles between NLMA and MAF particularly in land allocation and project land survey.

4.4.5 Provincial and District Governors

Within the current Lao government system, Provincial and District governors have the autonomous power and authourity over the constituencies under their jurisdiction concerning investment and land approval (see level of authourity in Table 4.2). Within the process of investment and land approval, these key figures are authourized to make final decisions, although supported by relevant feedback from concerned agencies. Law on Promotion of Foreign Investment (2009) stipulates Provincial/district governors to head CPMI at the local level. Land Law (2003) also stipulates the district governors' role in mediating unresolved village boundary and land use disputes. They must verify and authourize agricultural and forestry management plan prepared by DAFO/DLMA approve agricultural and land development proposals.

District governors play a key role in land allocation and land negotiation at the village level between the investor and the communities. This aspect is important when considering the loss and gain of land, the compensation received by the villagers.

4.4.6 International NGOs and Local NGOs

Other significant actors that appear to play the role of ensuring food security though not directly part of the decision making process in industrial plantation

developments are INGOs and local NGOs (known specifically in Lao PDR as Non-Profit Associations or NPAs). Though tightly restricted and monitored under the Government of Lao PDR⁵³, both INGOs and recently NPAs have played the role related to food security in the area of land tenure security issue, NTFPs management food crops production including introduction of new vegetable varieties, mother and child nutrition and food aid in times of disaster or emergency situations. There are over 26 INGOs working in the Agriculture, Forestry and Fisheries sector. Despite their limitations in gaining influence over foreign investment, food security, agriculture and forestry policy agenda compare to the more powerful multilateral agencies such as Asian Development Bank (ADB), World Food Programme (WFP) or Food and Agriculture Organization (FAO), they indirectly influence the policy agenda through their empirical research studies conducted in various areas in the hope to support policy formulation, formation of networks and coalition of NGOs such as Land Issues Working Group or LIWG and building strategic relationship and coordination with relevant government agencies. For instance, in the area of land rights and land issue LIWG has worked closely with NLMA to monitor industrial plantations and their impact (Interview with INGO representative on 7th July 2011). On the ground, some INGOs work on building capacity at the grassroots level.

INGOs and NPAs do have the capacity to ensure food security although they are not officially part of the decision making process in the transborder rubber investments. However, there are also issues of funding and specific mandates from mother agencies or donors outside Lao PDR that may limit or influence the direction of food security development projects and programs.

4.5 Thaihua Rubber and the Central government

The process of Foreign Investment License approval and Thaihua's interaction with key central government agencies would be discussed here as Thaihua's

⁵³ Only one NGO is permitted per district and per development sector. Local NGOs or NPAs have only been officially recognized in 2007.

investment license was obtained at the central level given the size of its investment⁵⁴ (Manager Online, 2006). The section will first discuss the strategy of Government of Lao PDR in attracting foreign investments including incentives and move on to the process itself.

“this (the Foreign Investment booklet)..shows comparative and competitive advantages of doing business in Savannakhet province such as plentiful productive land, abundant water resources, rich mineral resources, inexpensive land and low labor cost...” part of the Governor of Savannakhet’s statement published, (Savannakhet’s Foreign Investment booklet (2008): 1).

The above statement from the Laos government sector typifies the pulling strategy used by the Government of Laos (GoL) to attract the foreign investors. It represents the invitation to foreign investors to take advantage of their “plentiful” and “inexpensive” land⁵⁵ and “low labor cost”⁵⁶. The country has set itself to be the resource supplier for the global market economy. The foreign investment is further facilitated by numerous investment incentives (see Appendix I for Map of Investment and Incentives Zoning) for foreign investment in the agro-forestry sector such as rubber plantations⁵⁷ (Law on Promotion of Foreign Investment, 2004).

In considering some of the incentives provided to foreign investors, it is clear that GoL has intentionally lowered the barrier for investment, although may be to a point of compromise, in order to compete with other countries among the region for foreign investments. For instance, the Department of Domestic & Foreign Investment (under MPI) attempted to provide tax incentives without accounting for the investors conduct:

⁵⁴ Promotion of Foreign Investment Law stipulates that foreign investments above US\$ 5 million must be approved by the central government.

⁵⁵ Concession fee for rubber plantations is US\$ 1-7/ha/year.

⁵⁶ Minimum wage for labourers was US\$ 29 per month (as of 2006) although this has increased since 2006.

“The DDFI automatically awards all approved foreign investors an incentive tax rate of 20 percent, compared to the general tax rate of 35%. Unlike most other countries, this 20 percent rate applies to foreign investment in all sectors of the economy and does not depend on company or performance.” (DFFI, n.d.).

Other FDI-enabling incentives include various tax and tariff incentives “*tariffs in Laos are below the average rate of ASEAN countries*” (DDFI, n.d.: Economic overview), permission of land use rights⁵⁸, 100 percent ownership by foreign businesses, minimal restrictions in resource-based business sectors, and, more recently, streamlining the investment approval process so it can be completed within 15 working days (DFFI, n.d.). These incentives are indicative of GoL’s strategy to pull foreign investors in the hope of boosting its economy and hence the country’s GDP.

While Promotion of Foreign Investment Law in 2004 and 2009 provides plenty of protection for foreign investors, for instance Article 63 to Article 67 expands in details on rights the investors, however, with regards to social and environmental protection (protection of its people and resources), the Law on Promotion of Foreign Investment only stipulates two obligations namely 1) the obligation to provide insurance and social security to the employees, to improve technical capacity and knowledge transfer i.e. obligation to protect its labour force (Article 69) and 2) the obligation to protect the environment (Article 70).

In terms of Thaihua’s incentives, an evidence of Lao-Thaihua’s Investment License gathered from the field (in Lao language see Appendix J) indicated Lao-Thaihua has been awarded to operate rubber concessions for the period of 50 years with the corporate income tax rate exemptions of 5 years, reduction of 7.5% for 3

⁵⁷ The official foreign investment promoted sectors include: agricultural & forestry, constructions, tourism & transit services, human resource developments, production for export (Source: Law on Promotion of Foreign Investment, 2004)

years and paying the full tax rate of 15% for the remaining period.

Foreign Investment License approval procedure (Figure 4.2) as governed by Law on Promotion of Foreign Investment (2009) stipulates Committee for Promotion and Management of Investment (CPMI) under the prime minister's office to be the designated approval authourity for plantation investments. CPMI itself comprises of key members from relevant Ministries including Ministry of Planning and Investment (MPI), Ministry of Agriculture and Forestry (MAF) and Ministry of Natural Resources and Environment (MONRE)⁵⁹. CPMI considers relevant recommendations being processed by the Investment Promotion Department (IPD)⁶⁰. Formally, the head or vice of MPI usually leads and coordinates among other members within the CPMI decision-making circle (Voladet, 2009). The entire process is done in 15 days for preferred sectors⁶¹ investment including rubber plantations.

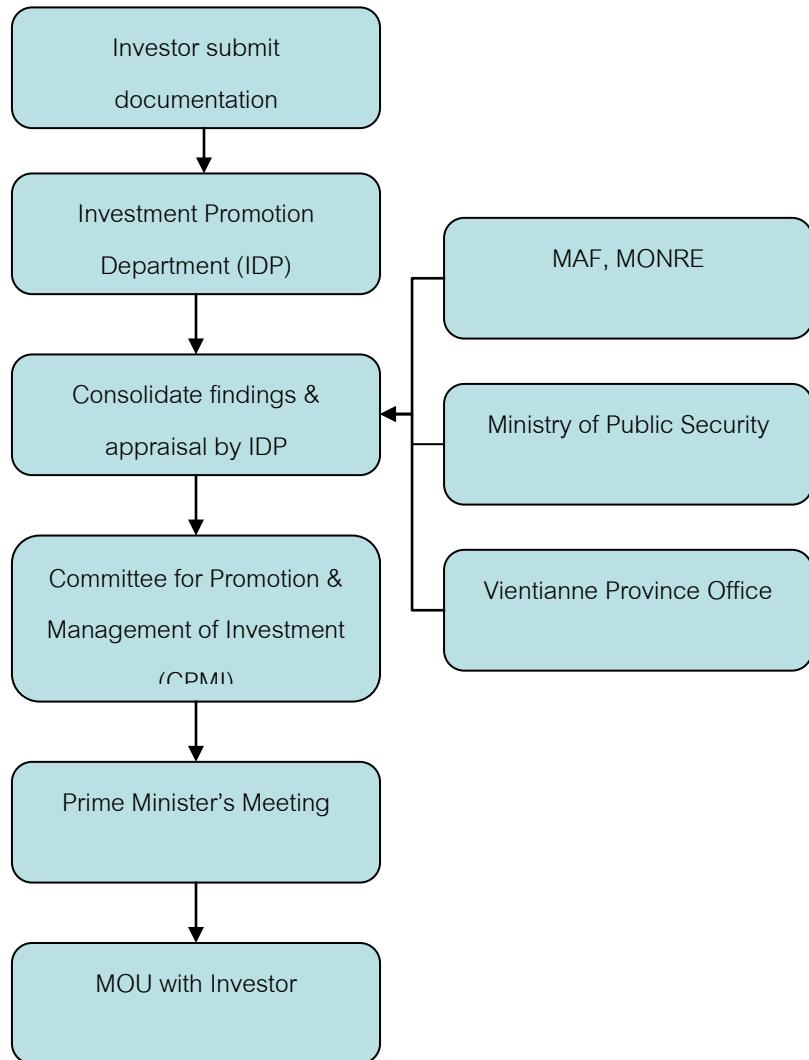
⁵⁸ Article 12 of Law on Promotion of Foreign Investment (2004) and Article 56 of Law on Promotion of Foreign Investment (2009)

⁵⁹ This is the newly instituted Ministry in June 2011, which combined agencies formerly directly under the Prime Minister's Office - the National Land Management Authourity (NLMA), Water Resources and Environment Agency (WREA). WREA has been formerly part of CPMI for plantation investment approvals.

⁶⁰ This is a department within Ministry of Planning and Investment.

⁶¹ Preferred sectors include agricultural and forestry, production for export, tourism, infrastructure contraction, human resource development and manufacturing of raw materials.

Figure 4.2: Investment License Approval Procedure (Industrial Plantations)



Source: Ministry of Planning and Investment (n.d.)

Prior to 2009, the key initial document required for investment license approval at this stage was the business plan and feasibility studies. It was not until the new Investment Promotion Law (2009) that initial investment screening process also requires the investor to submit Environmental Impact Assessment report. It could be said that prior to the revised law in 2009, the initial foreign investment approval did not have to consider social and environmental impact of the project although the foreign investor was obligated by law under the Law of Promotion of Foreign Investment to protect the environment.

Additionally, during this stage of investment license permission, the amount of total land availability versus the investor's land acquisition plan is not being considered since Master Plan on land is yet to exist at the central level. This lack of overview on total nation-wide land use and strategic planning would have a great influence over the phenomena of land grabbing among industries. This, in turn would have a direct influence over food security on the ground as valuable land may be replaced for other business uses.

Lao-Thaihua Rubber signed an MOU with the GoL in November 2006 (Manager Online, 1 December 2006). Prior to the MOU ceremony, the company was already granted the Investment License on 03 October 2006 although initially with only one local business partner, NCX Holding Company limited. Prior to its initial contact with the central Lao government, the company had already approached the Savannakhet Provincial office to start land negotiations in January 2006 (Provincial Land Survey Report, 2006). It is also useful to note that when the Investment license was granted to Thaihua, the total land for rubber concessions was not specified on the license (see Investment License in appendix J). However, during MOU signatory with the GoL representatives, total land to be acquired by Lao-Thaihua was announced (Manager Online, 2006). Moreover, the investment and land approval events did not occur in sequence but simultaneously.

At the central level, there were two main agencies that interacted with Thaihua Rubber, namely MPI and WREA.

MPI has granted the Investment License to Lao Thaihua Rubber in 2006. The company was approved to establish rubber plantations in 4 provinces of Lao PDR, namely Savannakhet, Kham Muan, Borikhamxai and Vientianne for the investment period of 50 years. The investment license did not really state the total hectares that were allowed to acquire by Lao-Thaihua Rubber but specified the type of investment privileges provided to the company. Although it did not specifically emphasize conditions of the investment, the license simply stated that the company is obligated to abide to all relevant laws within Lao PDR.

At this stage of approval done by MPI, there are two major concerns that may have a direct influence on food security on the ground. Firstly, although the investment license approval process required decision-making process among committee members within CPMI. MPI's influence in heading the committee, whose mandate was to increase foreign investment, dominated the final decision in approving the investment. This is confirmed by an undisclosed source that mentioned:

“We (the department) do know of the great impact of rubber plantations, the boss usually makes recommendations in the meeting but then I think our voice doesn't get heard so clearly” (Interview with key informant in Vientianne city, July 2011)

Another concern is the consideration of social and environmental impact during this process. Firstly, prior to 2009, Law on Promotion of Foreign Investment (2004) did not require the company to submit initial environmental assessment. Voladet (2009) has made one observation in the assessment of MPI's role within the investment approval process that since the approval decision took place prior to an extensive environmental assessment could take place, MPI was left to speculate the extent of environmental impact of the investment on the company's past environmental credentials. In practice, the company such as Thaihua Rubber could be given the license to start the process of investment without having to have mitigation plan for social and environmental impact of its operations.

With regards to contact with WREA, according to the interview with WREA's representative (7 July 2011), Lao-Thaihua was also issued an Environmental Compliance assessment although the time of the assessment or the scope could not be given. Actual Environmental Compliance certificate (ECC) has not been sighted but Director of ESIA Centre gave his perception on Thaihua's environmental compliance in this interview:

“We have no problems with Lao-Thaihua Rubber (referring to the outcome of initial Environmental Assessment). Usually large companies like Lao-Thaihua or Mitr Phol, they do try to adhere to our regulations and always willing to cooperate. We have issued Lao-Thaihua an ECC Certificate. There are some conditions they have to follow though.” (Interview with Director of ESIA on 7th July 2011).

The conditions set out on ECC stated that the company was required to establish social and environmental mitigation plan. The company was to set aside a budget to operate the plan as well as to report on its environmental and social impact status to relevant agencies on a regular basis.

When asked how often the department gets to monitor or follow-up on the project or even to monitor the conditions on ECC, the Director disclosed their limitations, which prevented effective monitoring of rubber plantations:

“We don’t really have the budget or the man-power to monitor all these sites considering the massive amount of industrial plantation projects in our country. That is why we have asked each company to set aside a budget so that the money could be used for our monitoring trips in the field. We can’t really go out monitoring on our own although we try to plan our annual monitoring schedule.” (Interview with Director of ESIA on 7th July 2011).

When the director was asked further that at the central level, what can be done to prevent the impact of industrial plantations to affect people on the ground, he stated:

“You know now there is a direct hotline which any ordinary person can call in directly to the National Assembly and voice out their grievances. This could be the channel for the villagers to get across the message of their concern. I also think that CPMI should have quotas for the plantations” (Interview with Director of ESIA on 7th July 2011).

Despite the comprehensive Environmental laws and regulations set out by the

government, the lack of budget and capacity at the central level has prevented meaningful monitoring activities that could have prevented some social and environmental impact on the ground. The UNDP-PEI representative in an interview has also confirmed this statement:

“There is a great need to strengthen institutional capacity in Lao PDR, particularly with the enforcement and monitoring activities (referring to WREA). That’s why one of our objectives in the project we are implementing specifically target this gap”. (Interview with UNDP-PEI representative on 12 July 2011).

The current gap in the enforcement and monitoring mechanism within WREA has left some social and environmental impact happening in Kan Tiew village (see findings in section 3.4.3) unaccounted for and hence, not curbing the control on the current use of chemical fertilizers and pesticides as the practice has the direct impact on the fish and other aquatic animal stock in the local stream as well as possible contamination of NTFPs in the surrounding area.

The overall possible gain for the GOL as a result of Thaibua's investment in Lao PDR in the form of land lease fee (US\$ 2-9 per hectare per year), royalty fee, the corporate and personal income tax in the next 50 years which may contribute significantly to the government revenues have externalized the costs socially and environmentally on its people and its natural resources such as in the example of community in Kan Tiew village.

4.6 Thaibua and the Provincial Government

The provincial level describes the interaction between Thaibua and relevant key provincial agencies during land acquisition process. Although land acquisition in Kan Tiew initially bypassed this stage, however the company's land proposal submitted to Savannakhet provincial office would be discussed. Thaibua was known to approach Savannakhet Provincial office and prior to investment license application and MOU signing at Central Lao government. In an interview with Manager Online

(2005), the company's management in Bangkok revealed that while the paperwork for the approval process was being gathered, the Provincial governor of Savannakhet has already permitted the company to start planting the rubber seedlings within the province as a head start. The initial planting was at 25th kilometers on the highway Route number 13 leading from Savannakhet provincial city to Xeno, in Outhomphone district. This is a clear example where the authourity exercising authourity beyond its own structure.

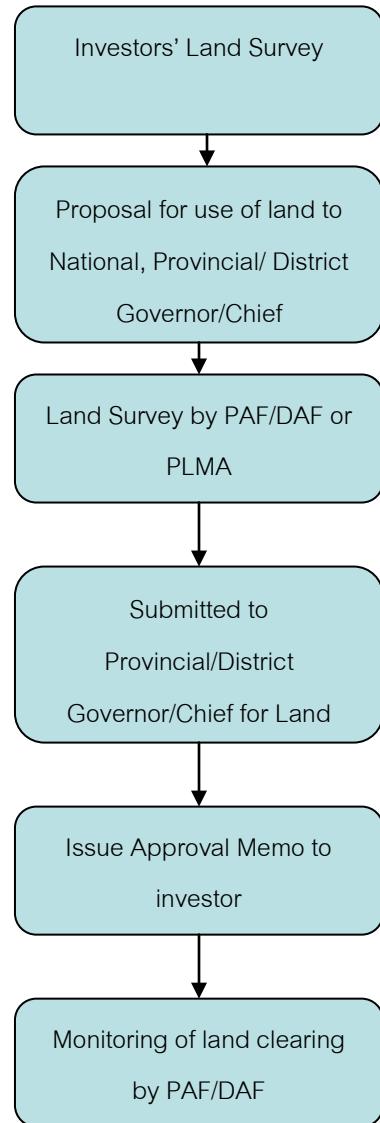
Once the Investment License is granted, the investor could proceed with the process of land acquisition on the ground (see Figure 4.3) although in reality, it may necessarily take place in specific order as in the case of Thaihua Rubber. This is where the investor is required to survey for land and proposed the site of interest to the provincial or district governor (see approval authourity in Table 4.1). The provincial or district office would then delegate Provincial Agriculture and Forestry (PAF) or District Agriculture and Forestry (DAF) technical team to perform a land survey. According to a land survey report gathered from the field, the survey team would only sample an area form the site of interest. The land survey team was required to summarize the types of land/forests under investigation as well as the exact types and the density of trees found within that site. The team would then make a recommendation on the report to the Provincial management of how much land would be permissible for the concession.

Table 4.1: Approval Authority for Industrial Plantation Investments

Land	Authourity
< 3 ha	Districts Authourity
3-100 ha	Provincial Authourity
100-10,000 ha	Central Government/ Prime Minister
> 10,000 ha	Approval by the National Assembly

Source: Schoenweger & Üllenberg, 2009

Figure 4.3 Land Approval process at the provincial or district level



Source: NLMA (2009)

In the field, the only information gathered on Thaibua Rubber's land survey available was of the area in Outhomphone district⁶², Savannakhet province conducted in March 2006⁶³. This could provide some information on how land was formally approved. For the district, the company has proposed for 10,000 hectares of land in Outhomphone districts to Savannakhet Provincial Office in January 2006. The land survey team that consisted of provincial and district technical experts (PAF & DAF),

⁶² Outhomphone is the district located adjacent to Atsaphone, the district of the case study.

⁶³ This kind of report is not publicly available. This is obtained from an unknown source.

and “people from surrounding the site” were in charge to conduct the survey on the site (PAF, 2006: 2). The objective of the land survey was to provide information to support the decision-making process at the provincial level.

The survey was divided into 2 parts, where Part 1 covered 2,280 hectares and Part 2 covered the remaining land. In this land survey report (Part 1), the conclusion of the study was to permit land the company to plant rubber for the area of 1750 hectares which was considered “degraded” forests⁶⁴ by the survey team (PAF, 2006). In terms of impact to the surrounding communities, the land survey report only noted potential surrounding communities being affected by the site and allowed some of the community members to participate in the land survey. No further details were given on the possible impact.

In the outcome of the land approval process, the provincial or district governor would issue an MOU with the company specifying the total number of hectares approved, land clearing arrangement (the amount of land to be cleared per year) with the mention of having the community to acknowledge the activity and the assigned responsibility to relevant local authourities to facilitate such land clearing. In the case of land clearing for its plantation in Vientianne province, NLMA research team had noted Lao-Thaihua violated land-clearing agreement as stated in the MOU with Vientianne Provincial Governor (NLMA, 2009). The company completely cleared 690 hectares of land when it was only approved to clear land of 100 hectares per year.

Despite the process of land acquisition not taking extensive account of social and environmental impact of the communities, apart from ensuring the communities acknowledgement, a former PAF official revealed in his interview on the government’s position:

⁶⁴ “Degraded” forests in the report was classified by the average number of mature trees (with more than 20 cm. in diameter) existed per hectare. By Forestry Law (1996) – Article 13, industrial plantations such as rubber are only allowed on degraded forests.

“We are fully aware of the impact of these industrial plantations. That’s why the government has tried to put a stop to it (referring to the moratorium on land concession greater than 10,000 hectares). I think the situation is even better on the ground. I am sure more people are aware of the danger....” (Interview with former PAF representative on 1st July 2011).

He also acknowledges the private land deals that might occur with the officials:

“Sometimes it happens...yes..sometimes” (Interview with former PAF representative on 1st July 2011).

Additionally, the current process of land demarcation and land allocation at the provincial and local level, Provincial Land Management Authority (PLMA) and District Land Management Authority (DLMA) often used hand-drawn maps to determine the size of land approved for the investors. An observation made in the research conducted by NLMA mentioned the impracticality of land data management at the local level which prevented effective and centralized monitoring of land use and land allocation, highly significant information required for the central government to manage large scale industrial plantations – *“Sometimes, the information obtained from various sectors at provincial and district level is not consistent. Especially data on the size of the areas leased/conceded or the name of projects/companies were often different.”* (NLMA, 2009: 19). According to UN-PEI (2009), a nation-wide computerized land use master plan is being developed and approved by the Government of Lao PDR. In the land approval for Thaihua Rubber in Vientianne province, NLMA research team has discovered the discrepancy between the approved hand-drawn land by NLMA and the map drawn by the company (NLMA, 2009).

In conclusion, land acquisition approval process at the local level proves to be comprehensive as well as time consuming. Given the amount of incoming investment requests for land and the department’s capacity to perform thourough land surveys could become a great challenge for the provincial management when considering the benefits that come with the investments. The decision-making process in the case of

Thaihua's land proposal in Outhomphone District appeared to account for the type of land/forests to be used for plantations i.e. degraded forests and identification of affected communities. However, the outcome of the decision at this stage still did not take into account of possible social and environmental impact on the ten villages identified, apart from the claim of having some villagers participated in the land survey (Land Report, 2006). Once again, the protection for the villagers such impact is not provided here. While the existing land tenure system that has yet to be completed in Lao PDR, the burden of actual land negotiation and land demarcation with the villagers simply get passed on to the district level. The individual actors within the system that allowed land acquisition independently has further complicate or exacerbate the impact on local communities. The entire process at this level did not directly address possible food security issues of affected communities associated with industrial plantations.

4.7 Thaihua and the District Government

In accordance with the governance structure in Laos, officials at the district level ultimately have to bear the burden of implementing plantation policies, including the responsibility to find land for the foreign investor. At the same time, district-level officials have the lowest amount of bargaining in the investment negotiation process. For example, collaboration between the district and communities was successful in resisting large-scale foreign investment in the area (Asian Rubber Conference, 2009). In other cases where local government is stronger, such as in Luang Namtha, the Provincial Governor announced a ban on large-scale industrial plantations after witnessing their questionable impact on the ground (Xiaofei, 2008).

In the case of Kan Tiew village, the District office was not initially involved in the negotiation process but the company directly contacted Battalion No.4 via a Laotian agent (Interview with local businessman on 29th June 2011). From the field finding, however, it is not clear when exactly the District office first became aware of

the project. But it could be concluded that, at the time of the contract signing⁶⁵ with the villagers, the District Officer, the former Don Kuang village head and the company representative were involved (source: actual Lao-Thaihua contract agreement). However, it appeared that the communities were unaware of the kind of scheme or contract that they were facing (i.e., whether it was a concession or contract farming) and whether they still owned the land to which they would be losing access (see findings in section 3.3.3).

In CIDSE's (2009) report, it revealed that once the Provincial office learnt of the incident, it immediately cancelled any land concession arrangements with the military and requested Lao-Thaihua Rubber to go through the formal process again. At the time of the land lease cancellation, land clearing had already been underway and the cut-down trees from the land have already been towed away by the company (CIDSE, 2009, confirmed by Informant Interview with anonymous source on 28th June 2011).

Due to the sensitivity surrounding Lao-Thaihua plantation, the interview with Vice District Chief did not involve direct questions to Don Kuang plantation but about the plantations in general. According to the interview with the vice district officer, he acknowledges the potential impact of Industrial scale plantations as he stated:

“We are aware of the impact of those large industrial plantations, that was why our government put a stop to the approval back in 2007. We are yet to see the real benefits of these plantations to the communities. Of course, we hope they would contribute to the local economy overall.I think it’s the company (investor) has to be responsible to take care of the impact. The NGOs in the area should also help. I do have good relationships with them here. They are doing a good job I think” (Interview with Vice District Officer in Atsaphone District on 4th July 2011).

⁶⁵ No specific date stated on the actual contract sighted during field visit.

One observation could be made from the response of the Vice District Officer, by mentioning the roles of other actors including local NGOs and the company; he saw the need for good governance in ensuring benefits of plantation to his own communities.

Thaihua's private dealing for land in Don Kuang at the local level has two major consequences. Firstly, land clearing by the company resulted in the loss of some community land without negotiations with Kan Tiew communities (see section 3.4.1). Secondly, since the deal did not go through a formal process, proper land survey has not been done to assess the condition of the forests cleared. As a consequence, there was loss of communal forests, the source of NTFPs that provided food security in Kan Tiew village (see section 3.4.1 and 3.4.3). The district office whose mandate was to mediate between the company and the communities in land negotiation did not occur in this case. Despite the district office's acknowledgement of the contract, it was not able to protect Kan Tiew farmers against households' economic instability that arise from the partial contract conditions issued by the company (see section 3.5.2).

4.8 Conclusion

Thaihua's corporate behaviour of accumulation and the added push factor of limited land in Thailand have led the company to expand its business beyond the national border into Lao PDR. The facilitation of regional trade through various bilateral, multilateral frameworks established in the region including GMS, ACMEC and ASEAN economic community, coupled with the pull factor of investment incentives, (cheap) land availability and low labour cost, have made Lao PDR attractive for the company's investment. However, the company's lack of social and environmental accountability and the decision-making process including the actors and the institutions, in the transborder investment in Lao PDR that failed to fully account for the social and environmental impact of rubber plantation on the ground and specifically food security. This is evident in the findings, have caused the

condition of vulnerability to food insecurity on the ground in Kan Tiew village, particularly with the villagers under the contract farming arrangement with the company.

CHAPTER V

DISCUSSIONS AND CONCLUSIONS

5.1 Introduction

The argument of foreign direct investment such as industrial plantations that would simultaneously bring economic development and poverty eradication in Lao PDR and consequently improving food security condition for host communities may not be necessarily true as evident in the case of Don Kuang plantation in Kan Tiew village. There is a need to acknowledge linkages between trade and economic decisions within and beyond countries to the actions and interests of actors within the decision making process of foreign rubber investment in Lao PDR. Furthermore, The unequal power relations among actors would likely to perpetuate the situation of food insecurity. Power lies in the attempt of control of land, the ability to influence outcome of decisions among actors shaping the phenomena of commercialized plantations in Lao PDR.

5.2 Responding to the research questions

5.2.1 Livelihood changes and food security status in Kan Tiew village

The change in former communal land access and some community land loss as a result of Don Kuang rubber plantation has resulted in a decline in customary households' food safety net namely NTFPs and livestock in Kan Tiew village. The decline in food safety net, in particular the fish and fresh drinking water, is further exacerbated by the existing use of pesticides and fertilizers within the plantation. Socially, these plantation workers also run the risks of losing their usual social safety net as they slowly adapt to the new rubber plantation lifestyle and in doing so, unconsciously separating themselves from socio-cultural activities that come with rice planting practices. The social safety net could provide support for the plantation workers in times of rice shortages.

The exclusion of host communities from the land negotiation process for the concession has left some villagers to take up the rubber contract with the company. Given the villagers' land tenure security status in question; the villagers' option to participate with the contract farming has been driven by the fear of losing their land permanently. This has limited these subsistence farmers on their choice to work on land or with other income-generating activities in order to be more food secured. The sub-standard rubber contract conditions including below-minimum wage payment during non-productive period as well as the company's exploitative practice outside the contract agreement have left farmers to become economically insecure as well as becoming cash-dependent for their food sources. This is clearly in contrast to the mainstream argument for industrial plantations that they could improve people's livelihood on the ground.

Food insecurity is therefore particularly severe in the case of Kan Tiew plantation workers. These changes could have been mitigated if 1) the villagers, especially the households that had lost their land for the plantation, had the opportunity to participate in land acquisition negotiation as well as rubber contract arrangement conditions with the investor during the initial stage of the plantation, 2) the plantation is being monitored for social and environmental impact on a regular basis and 3) the assistance from the district officials to mediate between the villagers and the investor.

5.2.2 The process of transborder investment in Lao PDR – the structure and its actors

Thaihua's current corporate behaviour of accumulation and lack of accountability as described in the chapter 4, have clearly negate the potential benefits that could be gained from the contractual arrangement of rubber farming with the host communities in Lao PDR and hence is not delivering economic improvement as it has committed. The possible economic improvement could increase economic access to food for the plantation workers. Moreover, the account of investment in Lao PDR as in the case of Kan Tiew village, the company's exercise of economic power through its dealing with local state agency while disregarding the impact of its plantation on

host communities have subjected the host communities to food insecurity. So far, the company is only accountable by law to its government, the Government of Lao PDR, its global customers, its affiliates, the Thai public and its shareholders. The business imperative to be a good corporate citizen is yet to be fully internalized by the company.

The process of this transborder investment in rubber in Lao PDR that encompass the actors and the institutions in which they operate and the push for development across the region have been done at the expense of vulnerable communities on the ground. While regional economic integration like GMS, which was initiated by the ADB, has accelerated the rapid flow of commodities, financial capital and labour through its vast infrastructural network development within the region, the framework does not seriously take into account of social and environmental impact of the developments it has facilitated.

The Royal Thai government has played its role in encouraging Thai foreign investments among its neighbouring countries through its bilateral and multilateral trade agreements. However, its imperative to establish its economic dominance within the region does not demonstrate any genuine commitment to the concept of sustainable development. The current policies and regulations do not require Thai investors of any obligation to account for social and environmental concerns of their operations overseas. Therefore, it does not regulate the corporate social and environmental accountability beyond its national boundary. By framing the argument for bilateral and regional framework agreements as the opportunity to expand (economic) development and well being across the region, the Royal Thai Government's action is perceived as facilitating a path for Thai transnational corporations to extract more resources from its neighbouring countries, which also included the cheap land and labour.

With GoL's imperative to jumpstart its economic growth through dependency on FDI, mostly in the resource-based sector as well as the need to propel itself out of poverty, it did not take into consideration of its institutional capacity to enforce,

control and monitor the impact of such FDI development despite its laws and regulations related to industrial plantations being comprehensive. It is clear that its economic imperative has outweighed its imperative to protect its people and the natural resources. Moreover, decision-making process, taking both formally and informally may further impede the government's ability to control and mitigate food insecurity situations that may arise as a result of large-scale plantations.

When protection has not been fully and systematically provided from above, the affected grassroots communities are left at the mercy of foreign investors and therefore food security could not be ensured.

At the local level, within the government's institutions, the lack of technical, human capacity, clear roles and responsibilities has clearly impeded the implementation of existing plantation related policies which could have lessen the impact of plantations on the grassroots communities. Power and responsibility to mitigate social and environmental impact, in practice lie with TNCs. Though accorded within the institution for its role and responsibility as a mediator between communities and investors, it is often lack the political power to override the company's economic and sometimes political power (endowed by the central government with the investment approval). This factor has disabled the immediate protection that is much needed for communities on the ground against the exploitation of foreign investments.

The economic and political power relations behind the interactions among the Thaihua and other relevant actors within the decision-making process of transborder rubber investment in Lao PDR have certainly played a big role in shaping such food insecurity consequences on the ground. Most importantly, there is also the underlying vulnerability factor of Kan Tiew villagers, as the ethnic minority which had made them the least powerful among the actors within the entire transborder rubber investment process. This is further deepened when the communities were not able to participate in the decision as well as not having the power to negotiate with the investor.

5.3 Key emerging themes from the research

5.3.1 Discounting food security against economic growth

The research has found that the existing process of Thai FDI in rubber plantation has clearly undermined food security of the affected communities in Lao PDR. While the Government of Lao and Thaibua have heavily promoted rubber contract farming scheme or 3+2 as a win-win model, ensuring economic prosperity for both the investor and the contract farmers, the reality of land tenure insecurity, the rapid transition of subsistence farmers into the cash-dependent labourers, the inability for the communities to negotiate and participate in land acquisition and contract farming conditions and most importantly the neglect to account for food security within formal and informal decision-making process at multiple levels have allowed food insecurity to occur on the ground.

The existing regional, national institutions that pushed for complete regional market integration within the region could not afford for the protection of the weakest of their the population from potential food insecurity that may come with commercial rubber plantations.

5.3.2 Transborder investments and Transborder implications

The research has demonstrated that the advent of the transborder development as in the case of Thaibua Rubber, that has also brought social and environmental impact which caused the condition of vulnerability to food insecurity within host communities with its development. Externalizing social and environmental costs to host countries will not bring sustainable development within the region in the long run. With the increase intensity of transnational or transborder investments due to the proximity within the region as well as the extensive infrastructure that has been put in place, the emerging social and environmental impact of the development could systematically marginalized the grassroots communities further into food insecurity. The regional economic development and integration therefore, should also be directed

to consider the “side effects” or the social and environmental impact that come as part of the development’s package.

Questions could be raised as to what responsibility should Thai TNCs such as Thaihua Rubber have for their operations across borders? How can Thai TNCs be held accountable for their actions or inactions?

5.3.3 Formal and informal decision-making process

The research has also highlighted the significance of the formal and informal decision-making process and their influence on the consequent impact on the ground. Informal decision-making process often occurs when actors are acting outside its institutions for private gain. Despite the comprehensive laws and regulations, which governed the formal decision-making process for the foreign investment in rubber plantations in Lao PDR, there exist other informal channels where the decisions get made simultaneously. These informal channels often raise issues of transparency, accountability, legitimacy and the level of participation. In the case of Don Kuang plantation, not only was the deal was within closed circles (therefore excluded any participation from the communities and even from other relevant government agencies), both the company and Battalion No.4 did not have to be accountable to the communities as the illegitimate deal was done outside the formal system.

Even within the formal decision-making process, not all actors have equivalent power within the decision-making circles. This could be seen by the influence of MPI over other agencies in finalizing the foreign investment approval without the extensive consideration in social and environmental impact of the investment.

5.4 Recommendation - Whose roles and whose responsibilities?

Overall, Thailand and Lao PDR must go beyond the state-centric approach to solve the emerging food insecurity issues as a result of plantation investments across

border. There is a need to recognize the necessity of cooperative state action to address the issues at the macro level.

Referring to the concept of Human Security (Ogata & Sen, 2003) where the reference point of threats has shifted from a nation state to individuals or people and where threats to human security must be mitigated through the process of protection (from above) and empowerment (from below). By taking the same approach towards the protection of the population against food insecurity, therefore the recommendations will consider solutions for protection from above and the empowerment from below. The recommendations to be successful, it would entail community involvement and commitment from both the governments and corporations.

The recommendations are:

Royal Thai government:

As part of the regional community, it is necessary for the Royal Thai Government to play the role of protection.

- To provide additional tax incentives for Thai corporations who also uphold CSR principles in their overseas business operation. For example, to permit Corporate tax deductions for the CSR activities implemented by the Thai corporation in their overseas business operation.

Government of Lao PDR:

It is primarily GoL's imperative to provide protection for its people, however given the rapid rubber developments as well as its existing limited capacity to effectively enforce and monitor existing regulations, it is highly recommended for GoL to include other actors such as INGOs and local NGOs to indirectly assist in the role of protection. Other recommendations are:

- To accelerate capacity building of environmental and social impact monitoring agencies such as MONRE.
- To foster collaboration with INGOs and local NGOs to be local monitoring agents on the ground.
- To continue to prioritize land tenure security
- To accelerate the issue of communal land titles
- To impose the good plantation practice principles for industrial plantations
- To implement usage of standard contract agreement in the case of contract-farming
- To contribute a percentage of revenues earned from industrial plantations in the form of land lease and tax for community funds to replace NTFP loss and allow community participation to manage such funds.
- To include food security indicator in the social and environmental assessment of industrial plantations.
- To offer free legal assistance in case of land or contract disputes for the communities.

Thai TNCs:

The company should first and foremost have clear CSR policy to be made available to the public. Not only would it fulfill the legal requirement considering the company is due to be registered in the Thai stock exchange in the near future, it would also fulfill the growing public interests in the region given its aspiration to be the

leader within the rubber industry. The benefits for company include trust building with community where it operates as well as having good reputation among the investors and the public. Additional recommendation includes:

- To apply for ISO 26000 certification
- To apply good governance principles for its overseas operation including in Lao PDR.
- To develop organic fertilizers and pesticides specifically for rubber plantations

For the Community (empowerment):

- To provide a channel to voice grievances at the local level.
- To facilitate and collaborate with INGOs and NPAs in expanding the existing empowering activities such as awareness-raising of land rights and food crops improvements to cover more communities
- To set up of local technical and marketing support for rubber farming (therefore, less reliant on the companies).

REFERENCES

- ANON. 2009. Thai Hua still seeing growth. *Bangkok Post*, 15 June 2009.
- ASIAN RUBBER CONFERENCE 2009. Rubber Development in Lao PDR, Ensuring sustainability: A collection of posters on developing a sustainable rubber industry in Lao. *Asean Rubber Conference, July 17-18, 2009*. Vientianne City, Lao PDR.
- ASTV MANAGER ONLINE. 2010. "Thaihua Rubber" - ready to trade in the Stock Exchange. *Manager Online*, 8 Febuary 2011.
- ASTV MANAGER ONLINE. 2011. Thaihua progresses with Rubber Factory and Plantations in Lao PDR. *ASTV Manager Online*.
- BAIRD, I. G. 2010. Land, Rubber and People: Rapid Agrarian Changes and Responses in Southern Laos. *The Journal of Lao Studies*, 1, 1-47.
- BALBI, L., GOODBODY, S., TOCKERT, M. & ARMSTRONG, J. 2011. FAO/WFP Crop and Food Security Assessment Mission to Lao People's Democratic Republic. *Special Report*. Rome.
- BANGKOK BUSINESS ONLINE. 2010. "Thaihua" - the conglomerate advances *Bangkok Business News Daily*, 25 May 2010.
- BAUER, A., HASAN, R., MAGSOMBOL, R. & WAN, G. 2008. The World Bank's New Poverty Data: Implications for the Asian Development Bank. Asia Development Bank.
- BAUMÜLLER, H. 2008. Prospects and drivers for agricultural change in the Mekong region. Vientianne: WWF Greater Mekong Programme.
- BINH, N. P. 2006. Geopolitics and Development Cooperations in the Mekong Region. In: CHINH, M. S. I. D. A. N. V. (ed.) *The Mekong Arranged & Rearranged*. Chiangmai: Mekong Press.
- BLAIKIE, P. & BROOKFIELD, H. 1987. *Land Degradation and Society*, London, Methuen.
- BRYANT, R. L. & BAILEY, S. 1997. *Third World Political Ecology*, London and New York, Routledge.
- CETRE FOR RESEARCH AND INFORMATION ON LAND AND NATURAL RESOURCES, NATIONAL LAND MANAGEMENT AUTHORITY, OFFICE OF PRIME MINISTER, FACULTY OF SOCIAL SCIENCES CHIANGMAI UNIVERSITY & RECOVERY, F. F. E. 2009. Research evaluation of economic, social, and ecological implications of the programme

for commercial tree plantations: case study of rubber in the south of Lao PDR. Vientianne City.

CHAMBERS, P. 2009. Edgy Amity along the Mekong: Thai-Lao Relations in a Transforming Regional Equilibrium. *Asian Journal of Political Science* 17 (April 2009): 89-118.

CHARLOTTE HICKS, D. S. V., WEIYI SHI, ZHONG GUIFENG, SUN LEI, PHAM QUANG TU, MARC KALINA 2009. Rubber investments and market linkages in Lao PDR: approaches for sustainability. The Sustainable Mekong Research Network (Sumernet).

CIDSE-LAOS 2009. Land Concession Induced Livelihood changes: A research on land and livelihood impacts from land concession from mono-culture tree plantation. CIDSE- Lao.

CONGRESS OF THE LAO PEOPLE'S REVOLUTIONARY PARTY 2011. Resolution of the 9th Congress of the Lao People's Revolution Party. Vientianne City: Government of Lao PDR.

CORNFORD, J. 2006. Globalisation and Change in Southern Laos. *Occasional Papers*. Focus on the Global South.

DEPARTMENT OF PLANNING AND INVESTMENT OF SAVANNAKHET PROVINCE 2010a. Poverty Statistics, Savannakhet Province, Year 2010. Kanthabuly City: Department of Planning and Investment of Savannakhet Province.,

DEPARTMENT OF PLANNING AND INVESTMENT OF SAVANNAKHET PROVINCE 2010b. Savannakhet Province, Potential and Investment Opportunities. In: DEPARTMENT OF PLANNING AND INVESTMENT OF SAVANNAKHET PROVINCE (ed.). Kaisorn Phomviharn: Department of Planning and Investment of Savannakhet Province.,

DIOKNO, M. S. I. & VAN CHINH, N. 2006. Introduction: Mother of Waters. In: DIOKNO, M. S. I. & VAN CHINH, N. (eds.) *The Mekong Arranged & Rearranged*. Chiangmai: Mekong Press.

DOUANGSAVANH, L., SYSANETH, S., CHANPHENGXAY, M., LADAVONG, P. & BOUAHOM, B. 2009. Rubber in the GMS: An Integrated Research Exercise on Rubber Development in Lao PDR. Vientianne City.

DOUANGSAVANH, L., THAMMAVONG, B. & NOBLE, A. 2008. Meeting Regional and Global Demands: A Key to Poverty Alleviation in Lao PDR? Bangkok: The Sustainable Mekong Research Network (Sumernet).

DWYER, M. 2007a. Turning Land into Capital (Part 1 of 2): A review of recent research on land concessions for investment in Lao PDR Land Issues Working Group (LIWG).

- DWYER, M. 2007b. Turning Land into Capital (Part 2 of 2), A review of recent research on land concessions for investment in Lao PDR, Part 2 of 2 – Gaps analysis and recommendations for future research
- EVANS, T. P., PHANVILAY, K., FOX, J. M. & VOGLER, J. 2010. An agent-based model of agricultural innovation, land-cover change and household inequality: the transition from swidden cultivation to rubber plantations in Lao PDR. *Land Use Science* 6 (June 2011): 151-174.
- FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS 2003. Trade Reforms and Food Security: Conceptualizing the linkages. Rome: Food and Agricultural Organization of the United Nations.
- FOPPES 2008. Fish, frogs and forest vegetables: Role of wild products in human nutrition and food security in Lao PDR. Vientianne City: International Union for Conservation of Nature.
- FUJITA, Y. & PHENGSOOPHA, K. 2008. The Gap between Policy and Practice in Lao PDR. *Lessons from forest decentralization - money, justice and the quest for good governance in Asia-Pacific*. UK and USA: Earthscan.
- FULLBROOK, D. 2009. Development in Lao PDR: The Food Security Paradox. *Working Paper Series, Mekong Region*. Vientianne: Swiss Agency for Development and Coorperation Vientiane.
- GOVERNMENT OF LAO PDR 1998. Law on Agriculture. In: OFFICE OF THE PRESIDENT (ed.). Vientianne: Government of Lao PDR.,
- GOVERNMENT OF LAO PDR 2003. Decree on the Amended Land Law. GoL.
- GOVERNMENT OF LAO PDR 2006. Lao PDR National Social-Economic Development Plan (2006-2010).
- GOVERNMENT OF LAO PDR 2009. Law on Promotion of Foreign Investment,. In: INVESTMENT, M. O. P. A. (ed.). Vientianne: Government of Lao PDR.
- GUTAL, S. 2011. Whose Lands? Whose Resources? *Society for International Development* 54 (2011): 91-97.
- KITTIPHOL, L. 2010. *CSR and Thai Rubber Industry* [Online]. Thai Rubber Association. Available: http://www.thainr.com/th/message_detail.php?MID=115 [2011, September 10].
- LALL, S. 1976. Theories of Direct Private Foreign Investment and Multinational Behaviour. *Economic and Political Weekly* 11 (1976): 1331-1345.
- LAOS NEWS AGENCY. 2005. Rubber company stretches into Savannakhet. *Intelasia News Online*.

- LAO STATISTICS BUREAU. 2005. *Population Census* [Online]. Vientianne City: Lao Statistics Bureau. Available: <http://www.nsc.gov.la> [2011, July 18].
- LAO-THAIHUA RUBBER n.d. Lao-Thaihua CDM Report.
- MAF/NAFRI/NLMA/NAFES/LIWG/IUCN/IRD/GTZ 2009. Rubber Development in the Lao PDR: Ensuring Sustainability. Rural Research and Development Training Centre.
- MANAGER ONLINE. 2006. Thaihua-New Jip Xeng landed in Savannakhet - Over 16,000 ha. *Manager Daily*, 1 December 2006.
- MANIVONG, V. & CRAMB, R. A. 2008. Economics of smallholder rubber expansion in Northern Laos. *Agroforest System*. Springer Science+Business Media B.V.
- MANN, C. C. 2009. Addicted to Rubber. *Sciencemag* 325 (July 2009): 564-567.
- MINISTRY OF AGRICULTURE AND FORESTRY 2005. Forestry Strategy to the Year 2020 of the Lao PDR. In: FORESTRY, M. O. A. A. (ed.).
- MINISTRY OF AGRICULTURE AND FORESTRY 2010. Participatory Agriculture and Forest Land Use Planning at Village and Village Cluster Levels. In: DEVELOPMENT, L. P. A. (ed.). MAF.
- MONEMANY NHOYBOUAKONG, SIVANNAKONE MALIVARN, DAOVINH SOUPHONPHACDY, ALOMLANGSY RAJVONG, MALABOU BAYLATRY, SOUPHANHDONE VORAVONG & KHAMPHANH, S. 2009. Rubber: Costs or Benefits to the Lao PDR? . Sumernet.
- NANTHAVONG, V., SCHOENWEGER, O., ANOUVONG, V., KHIAMSOMBATH, C., THAINGTHAMMAVONG, L. & LATHSAVONG, S. 2009. Findings of the State Land Lease/Concession Inventory Project in the Pilot Province of Vientianne, Lao PDR. Vientianne City: National Land Management Authourity.
- NATIONAL ASSEMBLY OF LAO PDR 2003. Land Law. Vientianne City: Government of Lao PDR.
- NATIONAL ASSEMBLY OF LAO PDR 2004. Law on the Promotion of Foreign Investment. Vientianne City: Government of Lao PDR.
- PHANVONGSA, V. 2008. *Lao-Thai relations: A Case study of Thai Foreign Aid, 1975-2007*. Master, Chulalongkorn University.
- REGIONAL NEWS TEAM. 2011a. Krabi Vice Governer vowed to close down the famous rubber factory after emitting discharges. *Thairath*, 27 August 2011.
- REGIONAL NEWS TEAM. 2011b. Temporary close down of Rubber factory after polluting canals. *Thairath*, 22 January 2011.

- RURAL RESEARCH AND DEVELOPMENT TRAINING CENTRE 2009. Impacts of Land and Forest Policies on Livelihood of Ethnic Minorities. Lao PDR: Rural Research and Development Training Centre.
- SCHOENWEGER, O. & ÜLLENBERG, A. 2009. Foreign Direct Investment (FDI) in Land in the Lao PDR. Germany: GTZ.
- SHI, W. 2008. Typology of Rubber Investments in Luang Namtha. GTZ.
- SUWANNAKIJ, S. 2010. *Rubber Futures May Reach Two-Year High on Supply Shortage, Von Bundit Says* [Online]. Bangkok: Bloomberg Available: <http://www.rubbermarketnews.net/2010/08/rubber-futures-may-reach-two-year-high.html> [2011, May 21].
- THANSETTHAKIT EDITORIAL UNIT. 2011. Thaihua Rubber in Full Swing. *Thansetthakit*, 13 May 2011.
- THONGMANIVONG, E. A. 2009. Concession or cooperation? Impacts of recent rubber investment on land tenure and livelihoods: A case study from Oudomxai Province, Lao PDR. Bangkok.
- TSUNEISHI, T. 2007. The Regional Development Policy of Thailand and Its Economic Cooperation with Neighboring Countries . *Discussion Paper. No. 32. 2005.7.* Chiba: Academic Research Repository at the Institute of Developing Economies.
- UNDP-UNEP POVERTY-ENVIRONMENT INITIATIVE (PEI) LAO PDR, IUCN & GROUP, L. I. W. 2010. Economic, social and environmental impacts of investments in plantations. Vientianne City.
- UNITED NATIONS DEVELOPMENT PROGRAMME 2010. Accelerating Progress Towards the MDGs, Innovative options for reaching the unreached. Vientianne City: United Nations.
- VAUGHAN, R. 2006. *Special Economic Zone Project Assessment in Savannakhet, Lao PDR: An Application of Human Security Framework.* Master of International Development, Chulalongkorn.
- VOLADET, S. 2009. Sustainable Development in the Plantation Industry in Laos: An Examination of the Role of the Ministry of Planning and Investment. Winnipeg: International Institute for Sustainable Development (IISD)
- WORLD BANK 2006. Lao PDR Economic Monitor. Vientianne City: The World Bank.
- WORLD BANK LAO PDR 2011. Robust Growth Admist Inflationary Concern. Vientianne City: World Bank.
- WORLD FOOD PROGRAMME. n.d. *Food Security at a Glance* [Online]. Rome: World Food Programme. Available:

<http://www.foodsecurityatlas.org/lao/country/food-security-at-a-glance> [2011, September 9].

XIAOFEI, Z. 2008. A Study on Countermeasure for Labor Force Shortage in Natural Rubber Industry with Reference to China-ASEAN Regional Integration. *China-ASEAN Regional Integration: Political Economy of Trade, Growth and Investment*. Auditorium, University of Malaya.

ZIEGLER, A. D., FOX, J. M. & XU, J. 2009. The Rubber Juggernaut. *Science* 324 (May 2009): 1024-1025.

APPENDICES

APPENDIX A

GUIDELINES OF QUESTIONS ASKED DURING FIELD VISIT

Key Variables:

- 1) Costs/ benefits of rubber (company, Thai gov, GoL, provincial, communities):
 - a) Land (ownership/access)
 - b) Employment
 - c) Alternative livelihood
- 2) Power relations (among the actors)
- 3) Investment incentives
- 4) Strength of existing protective regulations
- 5) Changes in relationship between land/communities (land tenure security, land access, farming on land, collection of NTFP, fishing, livelihood changes)

Central level/Provincial (NLMA or MAF & DFFI)

General Information on Land:

- 1) Which department/ministry decide on how much land can a company takes to operate industrial plantations such as Thaibua rubber plantations? Is there a limit?
- 2) Did the approval consider the actual land availability on the ground?
- 3) Is there centrally controlled land availability information on the ground?
- 3) What is the progress of land use and land allocation in Laos PDR? In Savannakhet?
- 4) Who is responsibility to allocate land on the ground for Thaibua rubber?

Strength of existing regulations:

- 1) Was there an environmental assessment done?
- 2) Are foreign companies required to do any CSRs for affected communities?
- 3) Do companies have to have “Authorisation and License Agreement” ALA?

- 4) What are the company's obligations related to industrial-scale rubber plantations? (Who determine the conditions/requirements within ALA? Are they "generic" for same types of plantations?)
- 5) Does the company have the Advisory Committee to monitor the project?

Opportunities and Costs:

- 1) What do you think are the incentives for Thai companies to invest in Savannakhet?
- 2) What are the potential opportunities for such plantations for the gov economically, socially, environmentally? for communities?
- 3) What are the potential challenges for GoL economically, socially, and environmentally? For communities?
- 4) What is the forest cover goal in Savannakhet? And what is the status now?
- 5) Which departments are responsible to collect revenues from the plantations? Concession fees? Tax fees?
- 6) Do you get informed of company's future plan?
- 7) Do you know how many plantations the company has in your district?

Thai Authourities:

- 1) How has Thailand facilitated Thai foreign investment in Lao PDR?
- 2) Do you in particular for Thaibua rubber, has the government assisted in negotiation process?
- 3) Within the foreign investment policy, do companies have any environmental and/or social obligations towards the host country?

District: (District Officer)

General info on Atsaphone District

- 1) What the people groups in your district? Where are they from?
- 2) How many foreign plantations are established in your district? What types?
- 3) How many villages and people groups are in your district?
- 4) Are there any major agricultural products in your district?
- 5) Do most people grow crops for their food or as cash crops?

Land:

- 3) Who decide on which land and how much land should be given to the company?
- 4) Did the district take part in land negotiations?
- 5) Did you have any authority to direct where land should be allocated?

Opportunities and risks of rubber plantations on communities

- 1) Who decide on how much compensation should be given?
- 2) Did any communities/villages require to move or relocate?
- 3) What do you think would be the advantage of rubber plantations for your communities?
- 4) Do you think the presence of rubber plantations could increase people's income and/or more job opportunities?
- 7) Have there been more roads, schools or hospitals being built by the company

Local NGOs:

- 1) What do you see changes within the locality since the plantations?
- 2) What do you think should be the major concerns in food security as a result of the rubber plantations?
- 3) What would be the most benefit that communities can gain out of their involvement with the rubber plantations?

Local Company:

- 1) Does the company have transition plan for the villages eg. Income generating activities, alternative livelihood options eg. livestock production to ensure no disruption to livelihood?
- 2) What is the stage of plantations now?
- 3) Does the company have a plan to expand the investment?
- 4) How many local workers do you need now?
- 5) What are the challenges working with the local communities?
- 6) Do you issue contracts to your workers?
- 7) Are most workers day workers? What percentage of local permanent vs. temp workers?

Village head:

- 1) What are the customary practices in your village in finding food?
- 2) How have customary practices in your village change since the establishment of rubber plantations?
- 3) How much agricultural land does your village have?
- 4) How much land gained by company?
- 5) Did anybody have to move or relocate as a result of the investment?
- 6) Did the company communicate their plans with you?
- 7) Are most people in your village receive schooling?

To consider – human, financial, social, economic capital influence their vulnerability towards food security

Food security implications at household level:

General:

- 1) Where were the major sources of food in this area/village? (to draw map if necessary)
- 2) What were your daily meals before plantation? Any change after plantation? (utilization)

What are the threats:

- a) resource (land/NTP) depletion or lack of access?, no mitigation procedure or outside assistance to mitigate risks
- b) Economic risks: absence of safety net (livestock), instability of income eg. below minimum income, employment insecurity eg. lacking of contract, irregular work given
- c) Social-Health risks – discrimination at work (age, sex etc.), social disintegration (relocation), available time for food utility, health problems/risks due to handling of chemicals, water pollution etc., change of lifestyle

Benefits:

- 1) Increase in productivity? Eg. labour, employment security, diversification (off-farm activities) – note: if priorities given to HH who lost their land
- 2) Natural resources stability i.e. natural resources maintained even after investment. Additional productive assets gained as more money available?
- 3) Income: purchasing power (income/month, per day), savings?
- 4) Intra-household food distribution, increase of food variety, quality?
- 5) More time/knowledge/skills/ use of indigenous knowledge to utilize food available
- 6) Men versus women's involvement with rubber plantations

How threats and benefits influence food security:

- 1) Level of food availability
- 2) Level of food access (economically, physically)
- 3) Level of food utility

Coping strategies:

Resource:

- Diversification of livelihood

Economic:

- Alternative source of food and income eg. off farm activities

Social/health:

- Men/women's role within the household
- Migration
- Changes in existing livelihood eg. change of diet, amount and types of cooking, time change

Self-observation:

- local food markets (picture)
- prices of food
- people's way of life
- local food dishes

APPENDIX B

THE CHANGING CONCEPT OF FOOD SECURITY

Year	Agency	Definition	Focus/Rationale
1974	World Food Summit (The Committee on World Food Security) by OECD countries	“availability at all times of adequate world food supplies of basic foodstuffs to sustain a steady expansion of food consumption and to offset fluctuations in production and prices” (UN, 1975)	Volume and stability of global food supply
1983	FAO	”ensuring that all people at all times have both physical and economic access to the basic food that they need” (FAO, 1983)	Demand (at the household level) and supply of food
1994	UNDP	Households’ entitlement to food (arise as the component of Human Security proposed by Ogata & Sen.)	Linkage of human rights, development and traditional security
1996	World Food Summit	”Food security, at the individual, household, national, regional and global levels [is achieved] when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life” (FAO, 1996)	Expanding levels of food security and adding the emphasis nutrition, sanitation as well as food choices.

1999	United States Department of Agriculture (USDA)	Availability & Distribution	Measurement of shortfall between supply and consumption as well as nutritional gap at the national level
2001	FAO	“Food security [is] a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (FAO, 2002)	Added the “social” element of access
2001	Ministerial Declaration of the WTO Doha Conference	Linkages between food security and trade liberalization	Attempts to find linkages between the level of openness to trade among different countries and the corresponding national food security status
n.d.	International Development communities	Embrace the concepts proposed by FAO	Linkage between food insecurity to poverty. Nutritional status of individuals, income generating activities, crops diversification

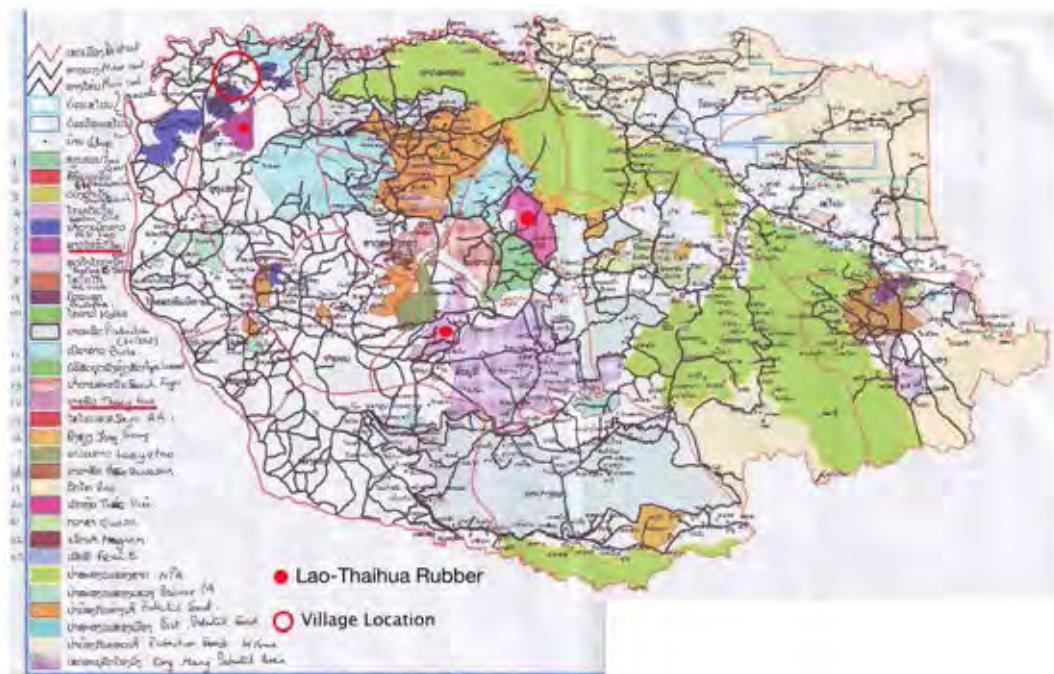
Source: FAO, 2003

APPENDIX C
MAP OF LAO PDR



APPENDIX D

MAP OF LAND USE AND LAND PLANNING IN SAVANNAKHET



Source: Provincial Department of Planning and Investment, Savannakhet

APPENDIX E

RUBBER PLANTATION INVESTMENT MODELS

Model	Strength	Weaknesses
Large-scale concession	<ul style="list-style-type: none"> • Capital resources • Government support • Job creation • Economic development 	<ul style="list-style-type: none"> • Food security of local communities • Need large landholdings • Social reaction due to loss of communal land. • Need a lot of labor Expensive fire prevention and fertilization • Lack of standard agreements • Environmental: less diversity, questionable watershed functions
Contract farming	<ul style="list-style-type: none"> • Poverty alleviation • Economic development Inputs (seedlings, training) ensured • Marketing • Environmental services 	<ul style="list-style-type: none"> • Unclear contracts • Difficult contract enforcement • Uncertainty of household labour • Uncertain profit share • Enforcement of contracts
Smallholders	<ul style="list-style-type: none"> • Cost-effective: intercropping ensures tree survival, growth and weeding costs Multiple production (crops, timber, etc.) • Economic development & Poverty alleviation • Environmental services: landscape, • watershed functions 	<ul style="list-style-type: none"> • Lack of knowledge on proper management • Lack of quality germplasm • Produce small amounts/volume • Lack of market prices and linkages

Source: Asian Rubber Conference (2009)

APPENDIX F

PICTURES OF PLANTATION AND VILLAGE IN ATSAPHONE DISTRICT, SAVANNAKHET PROVINCE (FIGURE 7 – 18)



Lao-Thaihua Company sign at Dong Khouang Plantations, close to Kang Tiew Village, Atsaphone district, Highway No.10



View of Dong Khouang Plantations from the outside, Highway No.10



Rice planting season, flat land and rice-growing area on Highway No.10



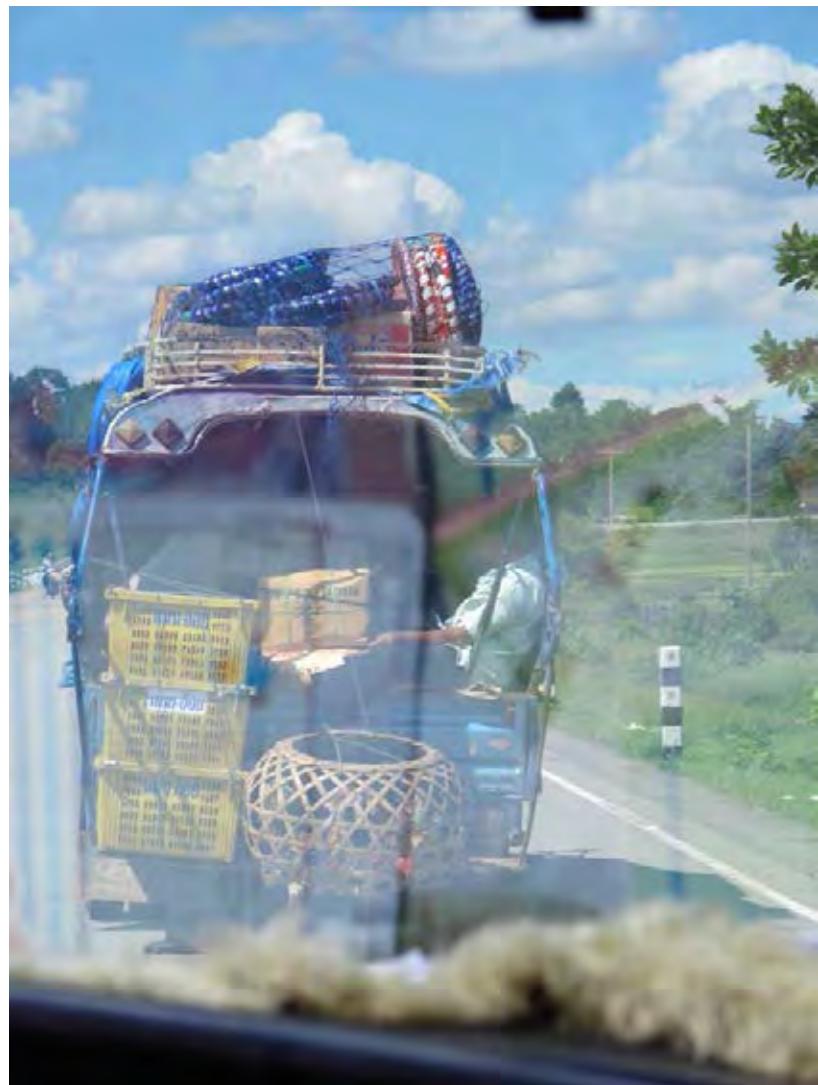
Nearby large sugarcane plantation by Mitr Lao Sugar on Highway No.10



Surrounding forest close to Kang Tiew village, Highway No.10



Land-use and land boundary sign in Kang Tiew Village by NORMAI



Mode of transportation from Savannakhet town to Atsaphone district



Mode of transportation (goods and people) between the villages



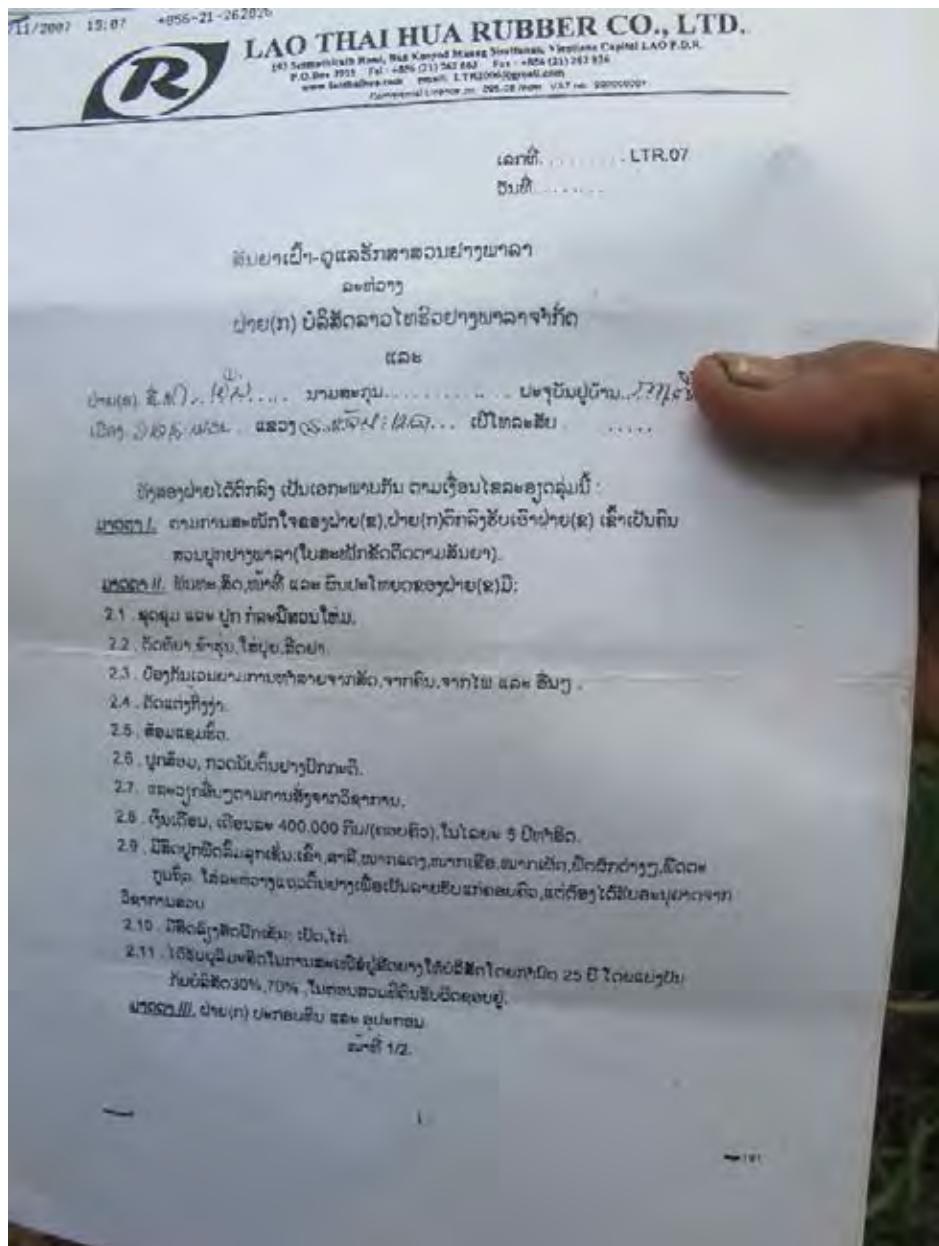
Typical permanent housing in Kang Tiew village



Typical livestock in Kang Tiew village, Atsaphone district

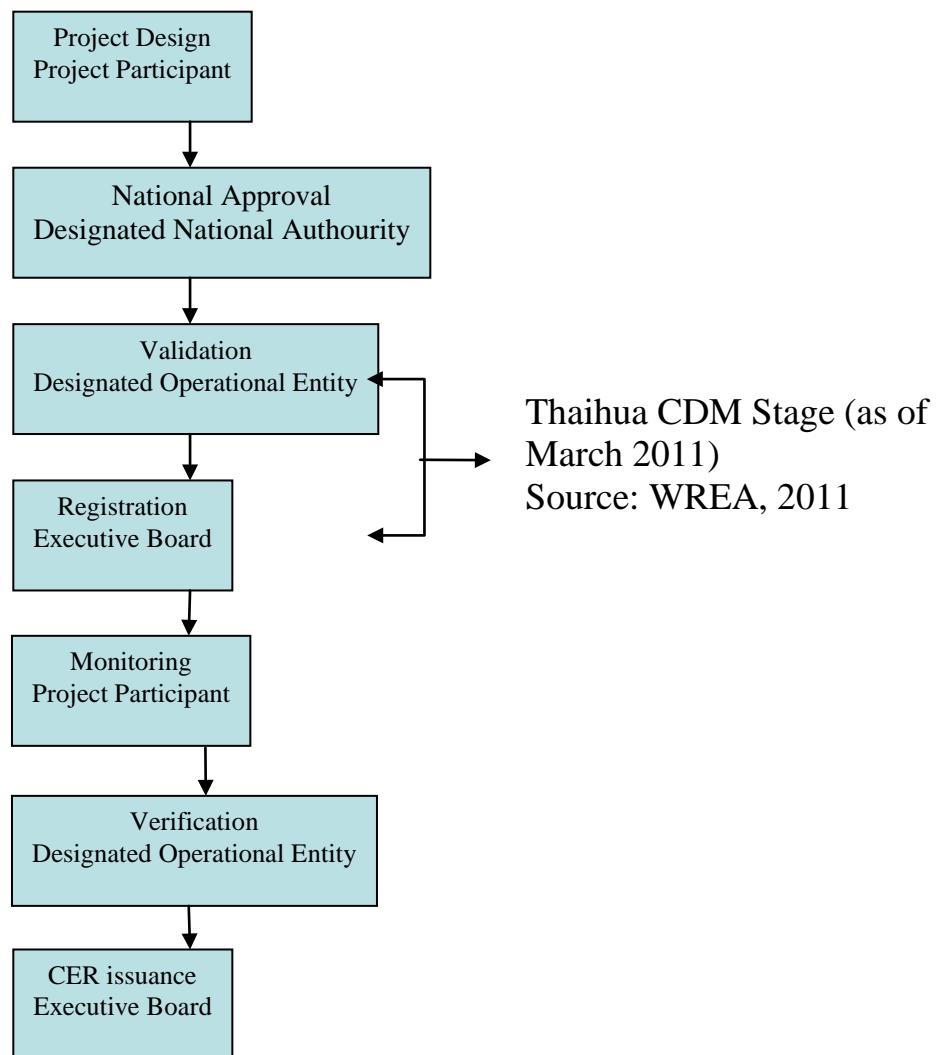
APPENDIX G

SAMPLE OF LAO-THAIHUA CONTRACT AGREEMENT



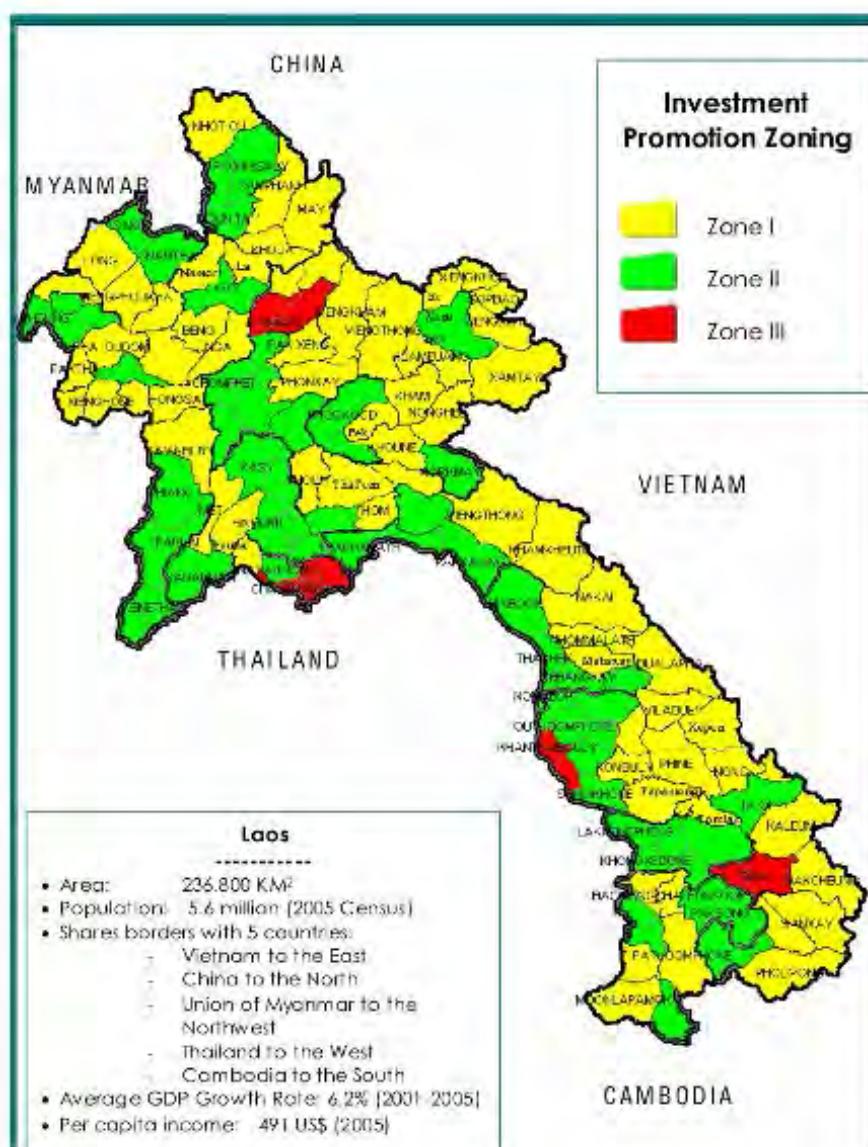
APPENDIX H

CDM APPROVAL PROCESS



APPENDIX I

MAP OF INVESTMENT & INCENTIVES ZONING



Zoning of Foreign Investment Incentives

Zone	Exemption Period	Reduced Tax Rate	Regular Tax Rate
Zone 1	7 years	None	10%
Zone 2	5 years	7.5% for 3 years	15%
Zone 3	2 years	10% for 2 years	20%

Zoning and classification of state land for lease and concession is based on the geographical landscape, socio-economic situation in each zone, and the government policy for sectoral promotion, which is divided in three areas, as follows:

Zone 1: Upland area, plateau area, plain area where the economic infrastructure is not convenient for investment.

Zone 2: Upland area, plateau area, plain area where the economic infrastructure can partly facilitate investment.

Zone 3: Upland area, plateau area, plain area where the economic infrastructure can fully support investment.

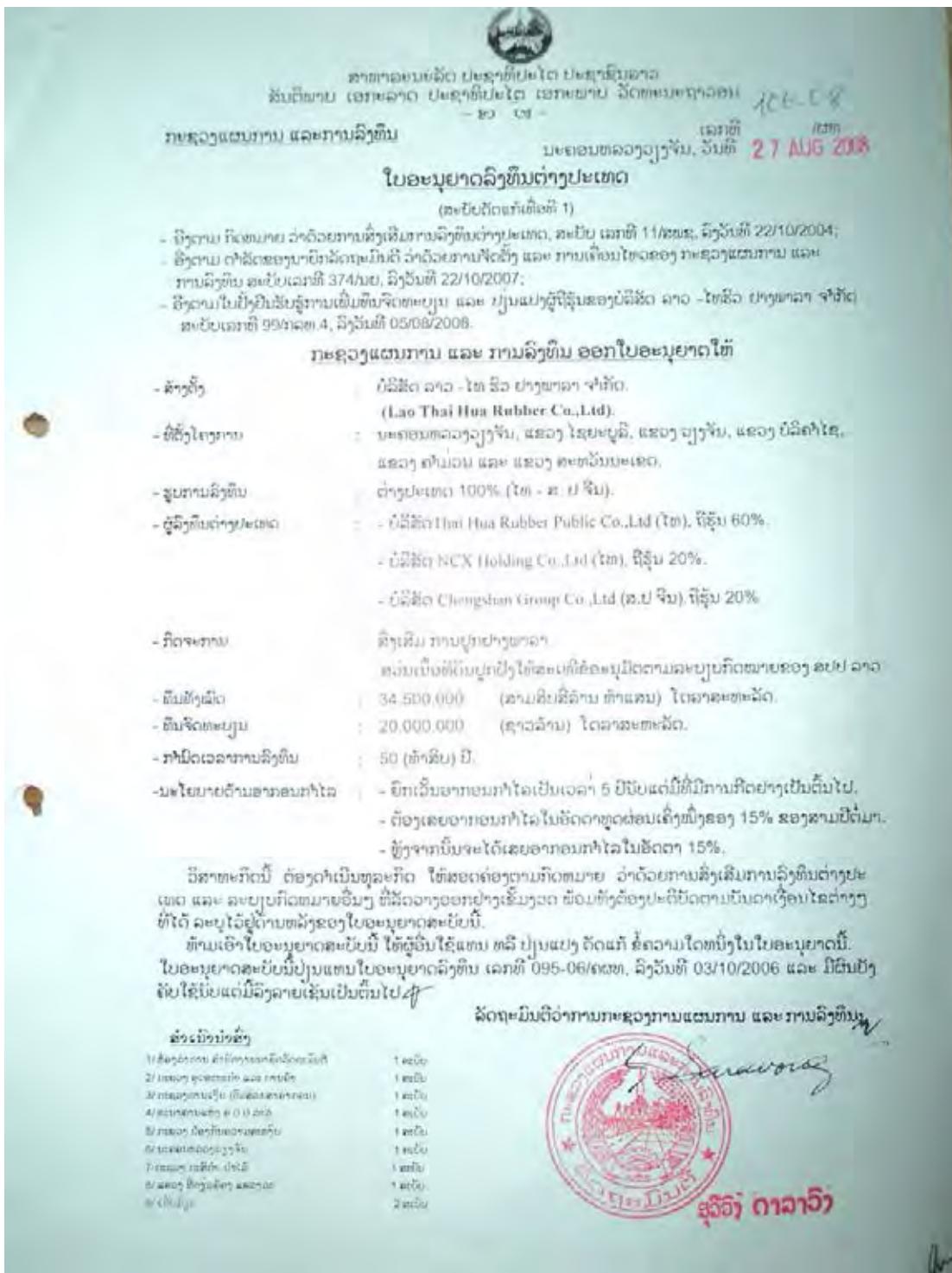
Source: Department of Domestic and Foreign Investment (DDFI), Lao PDR (<http://www.invest.laopdr.org>)

Other Investment Incentives in Lao PDR

- Exemption of import duties and taxes on raw materials and capital equipment;
- □□Exemption of export duty on export products; 10% personal income tax on expatriate employees;
- □□Additional tax holidays, reduced tax rates for large projects with special concession are available upon negotiation

APPENDIX J

LAO-THAIHUA INVESTMENT LICENSE



BIOGRAPHY

Sawapa or Mary Tangsawapak was born in Bangkok, Thailand. She graduated from Assumption University in 1997 with a BA (Hons) in communication arts (Advertising). After pursuing the business world for a few years, Sawapa turned to the development world to follow her passion in assisting the underprivileged communities. She worked for migrant populations in Thailand with the trafficking project in the north of Thailand as well as a Global-Fund initiative (GFATM) under World Vision Foundation of Thailand as the Programme Officer for tuberculosis control among migrant populations in Thailand. Prior to that, she worked for the Australian Embassy in Bangkok as a Consular Officer and as Field Coordinator in the Tsunami Relief project in southern Thailand.

Without formal training in the Social Sciences or in the development sector, she undertook MAIDS, a master programme in International Development with the expectation to equip her to further compliment her practical skills in the development sector.