Summary Report

Research evaluation of economic, social, and ecological implications of the programme for commercial tree plantations: case study of rubber in the south of Laos PDR

Collaboration between
Centre for Research and Information on Land and Natural Resources, National Land Management Authority, Office of Prime Minister, Lao PDR, Faculty of Social Sciences, Chiang Mai University, Thailand, Foundation for Ecological Recovery, Bangkok Thailand.

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Introduction

This research project is a collaboration between the Centre for Research and Information on Land and Natural Resources of the National Land Management Authority, Office of Prime Minister, Laos, the Foundation for Ecological Recovery, and the Faculty of Social Sciences, Chiang Mai University (list of researchers in annex) with the aim of evaluating the economic, social and ecological impacts of large-scale land concessions to plant rubber and making recommendations for the future management of land in Lao PDR. Two provinces were selected in the south of Laos, Champassak and Salavane, to conduct research over the course of one year from July 2007 to July 2008.

Project Objectives

1. To contribute and develop research capacity and information resources on large scale plantations in Lao PDR.
2. To study and analyse the socio-economic and ecological impacts of large-scale plantations in Lao PDR at local, provincial and national level.
3. To initiate and encourage cooperation through collaborative research between different partners, namely the government of Lao PDR (Centre for Information and Research of Land and Natural Resources, National Land Management Authority), Non-Government Organisations (Foundation for Ecological Recovery, Thailand and other NGOs in Lao PDR) and academics (Chiang Mai University, Thailand and other researchers within Lao PDR).
4. To provide the opportunity for exchange forums among the actors impacted or interested in the large scale plantation issues, including government officials at all levels, non-government organizations, local people, academics and plantation companies' representatives.
5. To provide feedback and recommendations for the development of land use policy in Lao PDR.

The research report is divided into three parts. Part I presents an evaluation of the history and development of the rubber industry within the economic and social history of the Mekong region. This section examines the expansion of investment into rubber planting in Laos. Part II turns to the history of land concessions in Laos, with an assessment and review of laws and policies related to forestry and land, and an analysis of the process of authorization of land concessions in Laos. Part III presents an assessment of the economic, social and environmental impacts which have been brought upon the people living in the six villages within the case study areas: Oudomsouk, Lak 19, Nong Nam Khao Yai villages in Bachiangchaloensouk1 District, Champassak province, and Vangkhanane, Nong Ke, and Nong Lao Theung in Lao Ngame District, in Salavane province. During interviews at household level, the research team collected information covering five years from 2003-2007 in order to compare the difference in livelihoods before and after the arrival of the rubber estates, of which the first began to take over land from the end of 2004.

Part IV presents an overall analysis which includes the main findings from the study and presents short, middle and long term recommendations to alleviate the suffering of the people who have lost their land. These propose the establishment of a mechanism for monitoring and investigation of the rubber companies’ operations, as well as forms of assistance and ways to resolve the problems of the people affected, and call for a review of the processes for granting land concessions and related policies for land management.

Part I Laos and the rubber industry

The expansion of the rubber industry in Lao PDR is directly related to the emergence and expansion of capitalism in the Mekong Sub-region. Frontier capitalism, which had become an important pre-condition in the development of the rubber industry since the end of the 1990s, developed through various forms of relations among transnational capitalists, farmers, and local government officials on the borders between China and Vietnam, China and Laos, Thailand and Laos, through to Vietnam and Laos.

Lao PDR has become a strategic area for rubber production between major capital from three countries, China, Vietnam and Thailand. This is a direct result of the increased global demand for natural rubber since 2005. Particularly in China, which is currently the biggest importer of rubber in the world, the demand for rubber has increased steadily throughout the last decade. China, Vietnam and Thailand have expanded their

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1 Referred to locally as Bachieng District, which is the form used throughout this report.
rubber plantations into Laos, which is seen to have abundant fertile soils, and cheap labour. These capital
groups have different ways of operating which creates different impacts for the development of the rubber
industry in Laos, involve different changes in land use, and different impacts for the livelihoods of rural
people who have come to be involved in these projects.

Rubber plantations in Lao PDR have been implemented involving different types and levels of investment:

1. Local capital: involves investment by Laotian investors on a relatively small scale. This is operated
   on both a land concession and contract farming basis.
2. Smallholder capital: refers to investment by farmers in their own fields, whether or not on a contract
   farming basis.
3. Cross-border capital: refers to investment by middle men and traders on the borders, particularly
   with Lao and China. These middle men vary in character, from small-scale investors who provide
   funds and seedlings and buy up latex at an agreed price to traders who scout around the borders to
   buy up produce.
4. Transnational corporations: refers to 100% foreign investment which may be registered as a new
   legal entity or a branch of a foreign enterprise. These are mostly from China, Vietnam and Thai and
   operate via land concessions and contract farming.
5. Transnational joint venture capital: refers to the joint investment between private capital and private
   sector in Laos.

These five sectors use resources differently. The latter two can access the largest areas of land, they
concentrate land capital and earn the highest income. Up to 75% of the investment in rubber in Laos has
been made by foreign companies. A survey by the Ministry for Commerce in 2007 (www.moc.gov.la), found
that 40 companies have come to grow rubber in Laos in a total area of 182,900 ha. This does not include
areas where rubber is planted by local capital and smallholder farmers, as clear figures for small scale
plantations are not available.

These different capital groups mentioned above carry out investments in rubber under four different models
as follows:

1. Rubber plantations under large estates: these use large areas of land and much labour. Mostly these
   are operated by large capital groups. The system of agricultural estates is managed on a similar
   basis to an industrial factory. The owner of the estate is the controller and has a monopoly on the
   management of capital, technology and labour. Production is characterised by mass-production,
   monocropping, the control of technical standards and the recruitment of large numbers of labour
   under strict discipline and controls. Unlike most factories, however, the work is not regular but
   seasonal and temporary. Employment within the rubber estates is highly insecure.
2. Contract farming system: this arises from an agreement between farmers and a company or trader
   to plant, manage and buy up rubber at an agreed price and quantity. In this system, farmers maintain
   rights to use the land and manage the rubber themselves, as they invest their own land and labour
   while the company or traders invest in the supply of seedlings, technology and markets.
3. Labour and income sharing under an agricultural cooperative: where an agricultural group at the
   village level allocates land to farmer members who make an agreement with the group to plant, tend,
   and harvest the rubber.
4. Smallholder rubber farms: where all investment comes from the smallholders themselves. Or
   alternatively, the household invests their land and labour, and a third party assists in the investment
   of other capital and seeking out markets. The latter case tends to be common among ethnic groups
   in the highland areas, located in the northern border regions close to China, who have extended
   families who have already gained experience in growing rubber, and they can help in providing
   technology, funds and knowledge about planting and harvesting rubber, as well as access to
   markets.

Large-scale capital in the Lao rubber sector, whether domestic or external, tends to be invested in large-
scale plantations, under an agricultural estate model. For this companies require large-scale land
concessions from the government of around 30-50 years.

Laos’ boom in rubber, since the turn of the 21st century, differs from the patterns of expansion in other
countries of South East Asia in that there is a tendency towards expansion through large-scale rubber
plantations, led by foreign rather than domestic capital. Although land use planning has not yet been
organised in Laos, large-scale land concessions for rubber have been issued throughout the country. The
different forms of farmer participation in the rubber industry influences the opportunities for economic development for different households. Mostly, rubber plantations have expanded among the communities of the upland and highland ethnic minorities (lao theung and lao soung), partly as a result of the policy to promote the reduction of shifting cultivation, partly due to the climatic and geographical conditions in these areas which are appropriate to the production of rubber. However, participation differs between the minority groups in the north and in the south. While farmers in the north have been able to integrate rubber into their fields as an agricultural alternative and accumulate larger amounts of capital as a result, farmers in the south have been transformed into waged labourers in the rubber estates. These differences are a direct result of differences between the large-scale concessions and small-scale rubber plantations.

In the large-scale land concessions, which exist in the north as well as the south, capital, including land, finance, knowledge, and technology for managing the rubber plantation, is concentrated largely in the company, while peasants become workers and receive a wage for their labour. Investment under a contract farming system and the smallholder plantations involves greater distribution of capital. Smallholder rubber farmers, own their own small plantation plots, and distribute capital in hiring labour, and trading produce. Income from the sale of rubber products goes directly into the hands of the farmers which allows the farmers to accumulate capital and build greater income from the rubber plantations.

Average income estimates of the farmers who own rubber plantations in 2006 revealed that they produce 1,360 kg of rubber per ha, which created an income of around 7.2 million kip per year ($880) (Ketphanh et al 2006). A family growing 3 ha of rubber could have an income of around 21.6 million kip ($2,640), averaging 1.8 million kip per month. There are no available estimates to assess the potential monthly income of a rubber worker once the harvesting begins in the large-scale agricultural estates in the south. The income of plantation workers, of around 400,000-700,000 kip per month in the first years of planting, are discussed below.

Comparing the two, however, the basis for economic security of the farmers entering the rubber industry differs. Among farmers who become labourers working in the rubber estates, their loss of farmland and other sources of food, leaves them with only one means of livelihood, the wages they earn from working in the estate. This source of income is uncertain because work in the plantations is irregular. Meanwhile, the insecurity of farmers who start their own rubber farms derives from a lack of knowledge related to this new crop, which means that they are unable to manage their farms efficiently enough, and are not able to seek out their own markets. This gives them very little bargaining power with the traders, but they do have some alternatives in choosing a trader who gives a satisfactory price. Farmers who participate in the form of contract farming, have less bargaining power, as this tends to depend on the conditions which are fixed by the company that procures the finance and technology for them. While their bargaining power is low, farmers still maintain their land, they gain a higher and more stable income from rubber than the rubber estate workers.

Compared with other countries involved in the rubber industry, Laos came late to the industry, and is the least ready for development. In those countries who have planted rubber for a long time, eg Thailand, China and Vietnam, they have developed considerable resources of science and technology. The fact that the government does not have a policy, strategic measures, or a law for serious support (including finance, technology and science) to the farmers, means that presently Laos has to rely on funds and technology from foreigners.

Many rubber farmers in Laos do not receive support from the government, and lack essential knowledge or information on rubber, eg production, marketing and product processing or selling more latex. They have low production efficiency, often selling only latex, which means Lao farmers alternatives in generating income from rubber is limited.

The lack of development of the rubber processing industry means that Laos’ markets for selling rubber all lie outside the country. Their insufficient capital for production, and the inaccessibility of the market, means that the rubber producers in Laos have low bargaining power, compared with farmers in the other countries. There is no mass cooperation of producers and producer groups aimed at improving their bargaining position. The approach for development of the rubber industry in Lao PDR therefore presents major challenges which must be researched and analysed. Rubber requires a considerable investment even at the smallholder level. The drive to plant economic crops under monoculture may not be the best approach for the eradication of poverty in Lao PDR, when diversified agricultural production appears better placed to ensure food security.
Part II Land concessions in Lao PDR

History and development
The beginnings of the land concessions in Lao PDR are directly related to the change in economic development policy at the end of the 1980s to the beginning of the 1990s, with the first large-scale land concession to plant commercial trees granted in 1994. This authorized the concession of land for commercial trees in Champassak to the Asia Tech company from Thailand (7 December 1994) over an area of 16,000 ha, for a period of 55 years with a total capital investment of 12.8 million US dollars. Since then, the planting of commercial trees and other industrial cash crops in Laos has expanded.

The policy of change of the economic policy of the Lao government was entitled “reorienting the natural economy to a commercial economy” which set the direction for economic development through liberal market mechanisms. This included opening the country up to foreign investors, issuing a law on foreign investment, the amendment of all decrees and laws related to forestry land, with the aim of using forests and land resources for economic development. Investors, foreign and domestic alike, were given the right to request a large-scale concession of land to plant trees or industrial crops for trade.

Concessions were first authorized in law in the Land Decree of 1992, which permitted the granting of lease rights or land concessions to the Lao people, aliens, and foreign individuals. They are subsequently governed in the following decrees and laws on land and forests: the Prime Minister’s Decree on the Management and Use of Land and Forests 1993, the Decree on Land and Forest Classification for planting trees and conservation of the forest 1994, the Forestry Law 1996, the Land Law 1997, the amended Land Law 2003, and the Decree on the implementation of the Land Law 2005.

These legal instruments have revised the regulations giving powers to a succession of different state bodies in authorizing concessions at the central and local level. However, they all share the emphasis that leases or concessions should only be granted over land which is lain waste, or devoid of trees. On the contrary, as has been confirmed in this research, concession rights have been granted over farmland, orchards, and other plots which the state has officially allocated to the people under the Land and Forest Allocation policy. The concession area in the cases studied here has also covered areas for grazing animals and forests used by local people.

Land concession boom for commercial plantations
Since 2000, the rate of expansion of investment by foreign investors in Lao PDR has intensified, through large-scale land concessions for tree plantations such as eucalyptus, rubber, cassava and sugar cane. Most of the investment by foreigners has been concentrated in the central and southern regions of Lao PDR in Bolikhamxay, Khammouane, Savannakhet, Champassak, Salavane provinces.

Presently, investment in tree plantations in Laos comes both from countries within the Mekong sub-region and further afield. For example, the Oji company from Japan, has taken over a 50,000 ha concession previously granted to the BGA company, in Bolikhamxay and Khammouane provinces, the Berla Lao company (Aditya Berla Grasim), from India, has a concession to plant 30,000 ha in Savannakhet province, and the Viet-Lao, DakLak, and Dau Tieng companies have an agreement to invest in and plant rubber over an area of more than 30,000 ha, in Champassak province and Salavane, in the south of Laos.

According to the Committee for Planning and Investment, the total area of land concessions which the Lao government has authorized to foreign companies throughout the country, both for monocrop plantations and cash crops, amounts to approximately 167,000 ha, the target to plant eucalyptus 80,000 ha and grow rubber 46,600 ha. Most of the lands conceded lie in the central and southern part of the country.

The process for granting land concessions
The granting of the land concessions is one measure by which the government aims to draw in investment, particularly foreign investment. The process of authorization of land concessions has always been related directly to the laws and policies to promote investment, and the government units with the primary role, has been the Committee for Planning and Investment (CPI), originally the Committee for Management of

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2 These figures appear to be inconsistent with the figures quoted earlier from the Ministry of Commerce. It has not been possible to clarify this inconsistency.
Investment and Foreign Cooperation. The authorization for land concessions are intended to be implemented in one step, through a one-stop shop process. There are no surveys of land prior to the authorization of the land concession. Concessions may be authorized for a period of between 30-50 years and 75 years in a Special Economic Area. Presently, proposals for a state land concession for foreign investment projects, must carry a minimum investment of 20 million US dollars (Law on the Promotion of Investment 2004).

The approval of many of the land concessions to foreign companies was given before the completion of the economic feasibility study. Furthermore, land concessions have been authorised before a detailed survey of existing land use and physical suitability of the area of land proposed. There were no site specific economic, social or environmental impacts studies before authorizing the land concessions. In the villages studied, the loss of land was abrupt and unannounced. As Mr Kham Ouane Boupha, Minister within the Prime Minister’s Office, and Head of the National Land Management Authority stated in the Meeting on Land Use for Commercial Tree Plantations on 14-15 February 2007

“The issuing of land concessions and leases for tree plantations over large areas and for excessive periods has led to social and environmental problems and required both the resettlement of people and compulsory acquisition of the land which the people farm on. The people have lost their source of daily livelihood and lost their long term rights to use the land”

The process of granting of a land concession has been unsystematic involving several government bodies. The leasing or concession of land is governed by several laws and decrees and each piece of legislation determines a different maximum area threshold for different levels of government to authorize. Authority over land leases and land concessions has passed from the Ministry of Agriculture and Forestry, to the Ministry of Finance to the National Land Management Authority in the space of seven to ten years.

Although on the one hand, the government views its land policy as responding to the need to promote domestic and foreign investments in transforming land assets into capital. On the other hand, it recognises that past implementation of land concessions have created serious social and environmental problems. The overall emphasis on encouraging economic investments has led to overlooking social and environmental impacts. Various investment projects did not have any evaluation studies on the economic, social and environmental aspects and did not prepare a detailed land survey before project development contracts were signed. The contracts themselves only considered the financial investment aspects of the projects. Meanwhile, state bodies with specific duties under the law, for example, the Ministry for Agriculture and Forestry, have participated only as a witness in the signature of the project contract.

As a result of the various social and environmental problems which have arisen from land concessions in several projects, the government resolved in 2007 to suspend the granting of land concessions temporarily to study, monitor and evaluate the root causes of the problems that have arisen in the past.

Part III Rubber estates and transformed livelihoods

The third part of the report, examines the case studies on the expansion of rubber estates in the southern part of Laos with an evaluation of the social, economic and environmental impacts for the people who live in the area and are working with the rubber estates.

Land loss and compensation
All areas that were granted in concession to the rubber companies, were originally agricultural and forest land allocated to the people. The study found that over 90% of the case study households held temporary land use certificates, which had been issued by the state since the Land and Forest Allocation programme in the 1990s, and over 80% of the agricultural land area which was transferred to the rubber companies was in production and subject to a land certificate. Households in the target area with a land title (bai ta din) were also asked to give up their land to the companies. A considerable number of families lost all their farm land to the rubber estates, mostly in the villages of Lak 19, Vangkhanane, Nong Nam Khao Yai and Oudomsouk.

In Nong Nam Khao Yai, villagers were not informed of the project in advance. They learned of the project, when the company brought their tractors into clear their fields. No compensation was paid for the land or the harvest to the villagers, who lost teak plots, coffee orchards, rice fields and broom grass fields. In
Vangkhanane, villagers did not know the total area of land which was given up to the company, while the District officials have only partial records. The lack of basic information prior to the arrival of the company, meant that it was impossible fairly to calculate a sum of compensation. In some villages, land was given up to the concessions more than once, or to more than one company. For example in Vangkhanane, villagers were asked to give an additional area of land to the Dak Lak company, after the initial area was ceded. In Lak 19, one in five villagers lost land to the Dak Lak company in the first round, then later the rest of the village was called on to give up their remaining land to the Dau Tieng company.

<table>
<thead>
<tr>
<th>Village</th>
<th>Year</th>
<th>Company</th>
<th>Total area conceded (ha)</th>
<th>Area after the concession (ha)</th>
<th>Total land given to the company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oudomsouk</td>
<td>2005</td>
<td>Viet Lao</td>
<td>1,319.55</td>
<td>673.55</td>
<td>49%</td>
</tr>
<tr>
<td>Lak 19</td>
<td>2006</td>
<td>Dak Lak</td>
<td>48.00</td>
<td>27.00</td>
<td>90%</td>
</tr>
<tr>
<td></td>
<td>2007</td>
<td>Dak Lak</td>
<td>234.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N. Nam Khao Yai</td>
<td>2004</td>
<td>Dak Lak</td>
<td>555.85</td>
<td>155.85</td>
<td>72%</td>
</tr>
<tr>
<td></td>
<td>2006</td>
<td>Dak Lak</td>
<td>518.20</td>
<td>348.20</td>
<td>73%</td>
</tr>
<tr>
<td>N. Ke</td>
<td>2004</td>
<td>Dak Lak</td>
<td>521.85</td>
<td>110.65</td>
<td>76%</td>
</tr>
<tr>
<td></td>
<td>2006</td>
<td>Dak Lak</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vangkhanane</td>
<td>2004</td>
<td>Dak Lak</td>
<td>140.00</td>
<td>117.50</td>
<td>16%</td>
</tr>
<tr>
<td></td>
<td>2006</td>
<td>Dak Lak</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N. Lao Theung</td>
<td>2007</td>
<td>Dak Lak</td>
<td>140.00</td>
<td>117.50</td>
<td>16%</td>
</tr>
</tbody>
</table>

Many villagers who lost their land received compensation from the companies, however not all households were paid. In the Decree on Compensation and Resettlement of People as a result of Development Projects in 2005, it is stipulated that the people who have derived an impact from a development project, whether they have a certificate or otherwise, must be compensated or assisted, as a guarantee that the quality of their life will not be diminished as a result of the project. However, as information relating to compensation paid to each household has been recorded and kept by the company, the District officials only have sketchy reports of what has been paid. The study team were only able to access information regarding two villages, Nong Ke from District officials, and Lak 19, obtained from the Dau Tieng company.

The payment of compensation in the six case study villages was unsystematic and uncertain. One company paid compensation only for the loss of yield in that year, another company calculated a sum based on the value of the land and yields together, with a sum of compensation per hectare. The average sum per household was similar in both villages, around 1,500,000 kip per household (approximately $176). As for the other four villages, most villagers did not receive compensation. Among those who did receive compensation, compensation was paid at an average rate of 500,000 – 1,000,000 kip per hectare only ($59-$117 respectively). Some received just over 200,000 kip ($23) per hectare. These rates of compensation are extremely low even in comparison with the value of a single year’s crop harvest per hectare. In the case of villagers who lost all their land, the compensation paid was not enough to cover a large household’s food expenses for more than one month.

Livelihoods and land rights before rubber

Before the arrival of the rubber estates, the livelihoods of the people was based on agriculture and gathering forest produce. The agricultural system was mainly based on swidden rice cultivation, paddy rice farming (where possible: paddy land was not available in the case study villages in Bachieng), orchard farming and livestock raising. Most people grew rice to consume within the household, and sold their crop only when there was a surplus. In addition, most farmers in these fertile lands had established orchards to produce cash crops such as coffee, pineapples, ground nuts, cardamom, castor beans, durian and teak, for cash income of the household. The most common type of livestock kept were cattle, buffalo, goats, pigs, which were generally put for sale when it was necessary to access a sum of cash.

Before the arrival of the rubber concession, 80% of the households in case study areas grew rice enough to eat all year round. Households who were not able to produce sufficient rice for the entire year tended to go short of rice during the months of March to August. During these months however, the fruits from the cash crops tended to become available and the money raised from these could be spent to meet the food gap. The loss of dryland rice fields, particularly in those villages with few paddy lands available meant that villagers became more vulnerable to not having enough rice to eat throughout the year. Those that
additionally lost their orchard land, had only one solution for compensating their loss of livelihood, which was to seek work as a labourer in the rubber estates. In practice, however, it was found that employment opportunities were irregular in every village and work in the estates was not available for all of those villagers who lost their land. In addition, the wages were low and were paid late, while the price of rice increased steadily.

**Transformation of the local people’s way of life after the rubber estates**

**Coffee, rice and insecurity**

In three of the case studies (Lak 19, Oudomsouk and Nong Ke), villagers derived their main income from coffee before the arrival of the estates. The price of coffee increased in the period studied, giving the villagers a noticeably increased income. For example in 2005, villagers from Lak 19 had an income from coffee of up to 5,147,000 kip ($606) per household, with yields in all three coffee growing villages at around 2.5-3 kg per tree or 1-1.5 tonnes per hectare. All three villages lost coffee orchards to the rubber companies. Lak 19 village, which gave up all its coffee plantations to the rubber companies, lost the chance to receive income from their crop in the year when prices were at record highs, at up to 18,000-25,000 kip per kg in 2007-2008.

Other cash crops, planted in the case study villages included cardamom, durian, and other types of fruit trees. Growing a variety of plants by households is an agricultural strategy to reduce the risk of market volatility. A variety of choice helps distribute the income of the households more evenly around the year. The loss of these various sources of income has been an important factor in creating economic insecurity amongst landless villagers.

Despite the prevalence and success of growing cash crops in the study areas, villagers still did not abandon rice-growing. Before the establishment of the rubber estates, villagers in the case study areas used to produce rice as their main crop. Of households who were interviewed 90% used to produce rice, while two in five of case study households had sold rice in the past with yields of rice falling from 64 tonnes overall in 2003 to 23 tonnes in 2007. The average income of households who produced rice for sale was 1,800,000 kip ($212) per year, even if this is not a large sum, it represented a supplementary income for households.

In all six villages, total rice yields diminished. Of the households surveyed, 80% used to be able to produce enough rice for their consumption throughout the year in 2003. From 2003-2006, that is in the years up to the establishment of the plantations, the total yields of harvested rice were reduced by one third, from 367 tonnes before the land concession to 240 tonnes. This reflects the initial loss of land from some of the earliest plantations affecting the case study sites. But since the majority of the land was conceded in 2006-2007, rice yields reduced to a quarter in 2007. The amount of rice that villagers had to buy therefore increased, but unfortunately for them this corresponded to the year of starkly increased prices for cereals, with rice prices rising by 140%, compared with the prevailing prices before the land concession. Estimated household expenses for buying rice averaged at 638,000 kip ($75) per year in 2003 and increased to 1,523,000 kip ($179) in 2007. Amongst households without land in Lak 19, it was found that the average expenses on rice increased to 4,647,000 kip ($547) per year. In Oudomsouk expenses in buying rice amongst landless households averaged at a value of 5.9 million kip ($694) per year.

The risk of rice insufficiency is irregular throughout the year. In the period before the rubber concession, rice was in short supply within the poorer households from March onwards, and most families had consumed their annual harvest by July. The times of rice shortages among households surveyed tended to be over the period September-October before the next rice harvest season. The planting of both dryland rice and paddy rice which are harvested two to three months apart, used to help in reducing rice insecurity. Since the rubber concession took over the land, the area of rice was reduced and rice insecurity increased sharply up to the end of 2007, when some relief came for those families who had kept their paddy land, who were able to reap a harvest in December.

The average expenses of households in the years following the land concession, showed the increase in expenses in buying rice and food, which increased overall livelihood expenses. Previously, expenditure on food was virtually unnecessary, and tended to be spent on seasonings, fermented fish (*pla ra*) and meat, but now for most villagers, food expenditure has to cover rice and vegetables, at the very least.

**Undervalued food and resources from forests and streams**

Loss of agricultural and public spaces have brought about changes in the way of life of the villagers in the case study areas. Before the land concession arrived, most public and private lands had been important...
sources of natural resources which were used by the villagers. These wild resources which tend to be called collectively ("non-timber") "forest produce" in English, are in reality not limited to the forest, but are also derived other ecosystem resources, such as streams and marshes etc.

Before the rubber concession arrived, villagers from different villages collected wild produce. For example mushrooms, bamboo, rattan shoots, vegetable leaves, and small animals, insects, fish, shrimps, shellfish for sale and for consumption. Areas which were rich sources of wild produce for people in all six villages studied before the establishment of the rubber estates were the rice fallows and rice fields, the streams and their banks, the deciduous dipterocarp forests (pa khoke), the evergreen rainforests forest (pa dong) and the use forests (pa chai soy). Produce from these areas, which were harvested for sale were useful in supplementing the household economy. Important semi-wild crops included broom grass, which villagers used to reap from the swidden fallows and once a year to make an income. One household in Oudomsouk was able to make 5,000,000 kip ($588) per year from selling dried grasses. Other households could make an income from 1,000,000 – 2,000,000 kip per year income from selling wild produce. This source of income was lost when the rubber company took over the rice fallows and various forest areas within and around the villages.

However it was not only economic income, but also subsistence goods and foods were lost from these areas such as vegetables and herbs and fruits from forest. Many different women from Lak 19 commented on the condition of their way of life from before the destruction of their land and forest, compared with when they were no longer able to collect forest produce. “After working in the coffee fields, we would go together to look for food to eat and to sell” “we used to make our houses from the materials that we cut and shaped for ourselves. We could build our own houses, there was no need to buy”. “Our way of life was comfortable and calm, we never imagined we would have nothing to eat” “Before we used to go up the hillside to find food to eat, we would come down with a basket-full, currently its owned entirely by the Vietnamese company, we can go up there, but there is nothing to collect”.

Environment in the rubber estates
Tree plantations or agricultural estates have a commercial purpose, to capitalize on the highest production capacity potential of a single crop. Large scale monocrop plantations have been compared more closely to a desert than a forest, because of the lack of additional plantlife or fauna in the plantations, and mostly because there are no food or resources which villagers can use therein. In the case of the rubber estates in Laos, 555 rubber trees are grown in a one hectare plot. Each tree is grown from carefully improved genetic stock to produce the highest amount of rubber.

Forests are comprised of a variety of living species with interrelated life cycles, and are eventually self-sustaining. Agricultural estates, on the other hand, begin and end on a defined schedule and are under the control of the estate managers, similar to an industrial estate. The entire area of a rubber estate is cleared of all plants or trees that used to grow on that land. Rubber seedlings are grown in a nursery, and are planted in a field that has been clearcut. The trees are encouraged to grow with fertilizers, and sprayed with pesticides, and herbicides. After around 15-20 years, the trees are cut down, and the soil exposed again to plant anew.

It was not possible to collect primary data concerning the condition of the forests prior to their destruction for the rubber estates, however it was possible to interview households concerning the foods collected from the forest areas around the village. These were clearcut to grow rubber, with consequent problems of erosion of the top soil. All three companies referred to the importance of avoiding the clearcutting of forests around the rivers and streams and not growing rubber in steep slopes. However, these claims have not been monitored or investigated. In the rubber plantation of the Dau Tieng company, it was found that a steeply sloping area was cleared, and serious problems of erosion were seen in the slope above one of the rivers where the villagers used to fish. Chemicals pesticides and herbicides have been flowing from the rubber plantation, since the establishment of the rubber estates etc. Villagers have found that fish in the streams are beginning to disappear. Villagers have noticed diseased fish in pools and streams in some areas, prompting them no longer to dare drink the water or eat the fish there.

Hiring labour
Important claims of the benefit of the rubber estates projects is that they generate employment for the local people. In the first year, the rubber estates required a large workforce to prepare the land, dig holes in which to plant, and control the growth of weeds. The DakLak company stated that this type of work, required at least 60-70 people per ha per day, but in the 2nd-6th year of planting, the demand for labour gradually
reduces. In the 7th or 8th year in which the rubber will be tapped, the need for labour will increase again, however it is unlikely to reach as high as the requirements in the 1st year. Employment in the rubber estates has been advertised as a way to improve livelihoods for local people, but in reality the dearth of labour demand in the four to five years waiting for the rubber trees to mature, has meant that the community has been exposed to the risk of severe poverty and hardship.

The estates have brought in Vietnamese labourers to work in the estates, mostly to work on the technical aspects of rubber production, bringing skills in nursery planting and supervising the workers. The number of Vietnamese workers exceeds the foreign workforce limit (10% of all employees) set in 2004 law to promote foreign investment. In this sense, the company must increase the number of Lao labourers, and could usefully organise training for Lao workers to replace foreign workers to comply with the law.

The hiring of labourers in the rubber estates in the case study areas can be classified into three groups which do not fit neatly within a general understanding of “full time” and “part time” labour; that is “regular workers”, “daily labourers” and “piece rate (mob mao) labourers”.

Regular labourers
Regular workers in all three rubber plantation projects work 6 days a week, 8 hours a day. They are paid wages by the month. Regular workers include guards, tractor drivers, spraying pesticides, spreading fertiliser and pesticides. The age range of regular labourers on average is around 18-40 years old. Those given priority were those who had suffered the most from loss of land to the companies. However, when the demand for labour dropped after the initial two years, the companies did not hire any new labourers. The Viet-Lao company reportedly announced to the villagers that they can only take on around 50-60% of those who were made landless by the company.

Full time labourers are a minority of the labourforce. Less than 5% of the approximately 1,200 labourers hired by the Dak Lak company during peak employment were permanent labourers. Contrary to the research teams’ and villagers’ expectation, full time labourers did not receive a regular monthly salary. Labourers working with the Viet-Lao and Dak Lak companies both said that they did not know in advance how much money they would receive each month. The steady reduction of wages since yar 1 has caused serious problems for a great number of working households. The wages villagers received from the Viet-Lao and Dak Lak companies have reduced each year. In the first year, the wages were between 600,000 – 800,000 kip ($70-$94) and reached over 1,000,000 kip ($117) in some months for the strongest of workers, but subsequently, monthly salaries have fallen to 200,000-500,000 kip ($23-$59). A wage of 200,000 kip per month is only enough to buy a single 50 kg sack of rice. Hired labourers who have lost their land are undergoing severe poverty and hardship.

Daily wage labourers
Data from the survey in 2007 indicate that on average daily labourers were working less than a quarter of the working year. Labourers receive a wage of around 20,000 kip ($2.35) per person per day.

Mob mao Piece rate labourers
The mob mao system, is based on the hiring a household or group to work on a specific task, for example weeding, on a per hectare basis, without a formal time limit for completing the task. If a household unit can call on many labourers, their work may perhaps be finished earlier, but once the wages are shared out per person, the individual sums are very low.

The mob mao scheme in the case of the Dak Lak company is unusual. The company has a policy to reallocate parcels of land in the rubber estate to contracted households, chosen particularly from those families which have lost land and been seriously affected by the plantation. They are required to look after the land as labourers of the company and are paid a mob mao labourer’s wage. They may grow crops in amongst the rubber particularly in the first three years of the tree growth. Households who have joined this scheme are to be permitted to harvest the rubber trees in their parcel once the tapping begins and sell the latex to the company on a sharecrop basis. However, the share of profits between the villagers and the company has not yet been clearly agreed nor have terms been written into a contract of any kind.

Households took part in the Dak Lak scheme in two of the villages in our case study, that is Nong Nam Khao Yai and Vangkhanane. In the former village, the paid work in these plantations for the mob mao workers

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3 The Forest Research Centre of the National Agriculture and Forestry Research Institute has estimated that the labour force needed for a smallholder plot in North Laos is 400 labour days per hectare per year, reducing to 150-200 person days per ha per year in the years when tapping begins.
amounted to only 33 working days per year per household interviewed in 2007. The average total income of such workers was 690,000 kip ($81) per household per year and this has since declined. In Vangkhanane, *mob mao* workers were given work on average for only 15 days per year per household interviewed. Total income for such workers in this village were on average 410,000 kip ($48) per household per year. Villagers saw the low income and insufficient work as the reason for the problems of increased poverty. The lack of farm land has become a major problem in the view of villagers because the rubber project could not respond to the villagers needs, even if there was to be a greater number of people employed than at present.

While in Vietnam there is a minimum wage, there is no such regulation in Laos, which means that companies can set the level of wages per month according to their own assessment. In Vietnam, the law states that all wages paid by a company must come to at least 40% of the profits. Data from the feasibility study of the Dau Tieng company show that the amount of wages budgeted for the project amounted to only 1% of the profits. Even though the regular full-time worker have more security than other labourers, each of the companies have yet to sign contracts with these or any other labourers.

**Strategies in adaptation**

People in the six villages had to make a sudden and fundamental change in their lives as a result of their loss of farmland to the rubber estates, from peasants to labourers. The majority were not able to adapt successfully, because apart from the unfamiliar way of life, families were faced with greater poverty and hardship than before from as a result of rice shortages and insufficient income to make a living. A minority were able to adjust well, people in these latter groups tended to be families with many adults of working age. This meant that, if they were employed, they could gain a working income that was commensurate with their expenses. Others were able to adjust because they had been able to keep some agricultural fields on which they could grow food or cash crops.

Amongst the families who still had a small amount of land left, these tended to become labourers with the rubber estate alongside their dryland rice production. Amongst those families who still had a substantial amount of land left, they were able to farm rice and keep their orchards as before and maintain or increase their standard of life. When their work on the farm was done, they were able to supplement their income by choosing to work on an occasional basis with the rubber estate.

Those people who did not have any farmland, had to adjust by becoming looking constantly for hired work, either with the rubber companies or elsewhere in the local area if available. Some were able to grow rice to eat or other crops to sell in between the rows of rubber trees in the plantation. Some people adapted to another means of livelihood such as the people of Lak 19 who turned to metalwork as their main source of income.

The extent of adaptation by the people depended on the conditions of land and labour within each household. The fact of having a quantity of land left on which to produce, helped people to better adapt their way of life than those families who lost all their land. The fact that the people in the case study villages in Bachieng District had very little paddy land as compared with the villages in Lao Ngam, meant that the loss of all their dryland rice fields had a much greater impact on their livelihoods.

Some people who were made landless tried to find new plots of land on which to grow rice. The most common coping strategy was to plant rice between the rows of rubber trees. This opportunity is no longer available as the rubber tree canopy has now closed in most of the plantations in the case study sites. Others rented dryland rice fields from their relatives in the neighbouring villages, such as in Vangkhanane, and some were able to find land to clear new paddy fields. But in the study villages of Bachieng, the people were not able to find new areas of land to clear, because every village had been affected by the land concessions. These people had only one choice to seek work with the rubber estate.

**Part IV Analysis and Recommendations**

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4 It is not considered advisable to plant trees in land that may be waterlogged, so in general paddy fields were exempt from the land concession area. Of the families interviewed in Bachieng and Lao Ngam, only 4% and 29% respectively had access to paddy land both before and after the concession.
As a means to encourage private sector investment with the promise of large areas of land for commercial tree plantations, particularly rubber, land concessions have been granted in all regions of Laos. Presently the cultivation of rubber under the large-scale land concession system covers an area of over 77% of the total rubber cultivation in the country. Most of this area is in the central and southern regions of Laos. The government has a plan to increase the rubber cultivation area as part of its policy to increase the forest area to 500,000 ha by 2010.

Since 2000, however, the expansion of the rubber estates have instead created a variety of problems. These include land conflicts between the concession companies and local farmers as a result of encroachment of community forests and agricultural land which the Lao people had received under the Land and Forest Allocation Policy. A variety of sources of food from natural spaces have been lost to the community in and near the plantation sites. The low rates of compensation have been inadequate to compensate for the loss of livelihoods and productive lands to the concession.

Reports of such difficulties led the Lao government to announce a temporary moratorium on the consideration of leases and concessions during the National Land Meeting on 7-8 May 2007. In the meantime, studies were to be undertaken to evaluate the causes of past problems and policies and laws should be adjusted as appropriate.

This report presents the findings from the joint research project “Ecological, and socio-economic implications of the large-scale commercial tree plantations in the South of Laos” (July 2007 to April 2008), a collaboration between the Centre for Research and Information on Land and Natural Resources, National Land Management Authority, under the Office of the Prime Minister of Laos, the Foundation for Ecological Recovery, Bangkok, Thailand and the Faculty of Social Sciences, Chiang Mai University, Thailand.

The policy to promote commercial rubber cultivation is consistent with the policy of the state to develop land use to respond to need for expansion of the national and local economy. The objective is to generate employment in the rural sector to relieve the problems of poverty for the people. However sound these principles, they have not been put into practice as intended.

The research project undertook case studies of six villages directly affected by major land concessions in the South: Oudomsouk, Nong Nam Khao Yai, and Baan Lak 19 in Bachiengchaloensouk District, Champassak, and Vangkhanane, Nong Lao Theung, and Nong Ke from Lao Ngam District, SalaVane. An analysis was made to compare between the economic benefits of granting large-scale land concessions for commerce with various impacts upon the communities involved. The research team made a detailed study of the process of change within the communities since the approach of the land concession, from the identification of land, the payment of compensation, to the transition from farmers to labourers in the estates.

The research had three main assumptions.
1. Large-scale land concessions and leases to private companies for the cultivation of commercial tree crops will generate the greatest economic and social benefits to the nation and to local areas when they are granted through a step by step process that is cautious, transparent, clear and accountable, that is based on accurate and comprehensive information from the field and that ensures the participation of all parties including the central government, local government authorities, private sector companies, and local people.
2. In order for the promotion of the rubber agro-industry in Laos to bring the maximum benefits for the nation and the people, local producers must participate in the development of the industry and derive full benefits from commercial agriculture.
3. Supporting the change from traditional production to becoming laborers in the rubber estates will create benefits for the people if their livelihoods and economies are improved without causing a deleterious effect on the ecology and community resource base.

In testing these assumptions, this research paper has presented an analysis of three important factors: the nature of the expansion of the rubber industry in Laos, the process of granting land concessions in Laos and for the case study projects, and the changes which have been brought about for the communities targeted by the rubber estates. The main findings can be summarized as follows.

1. The expansion of the rubber industry in Lao PDR has taken different forms, but the major mechanism has also brought about the most significant land conflicts

The expansion of rubber in Laos counting from the 1990s has taken four major forms:
- Large-scale agricultural plantations by foreign capital through land concessions
- Large- and medium-scale plantations through contract farming mechanisms
- Medium- and small-scale plantations by the village agricultural associations
- Small-scale plantations by smallholder agricultural households.
However, rubber cultivated in large-scale plantations through investment of foreign capital, which covers up to 77 percent of the land under rubber throughout the country, appears to have caused the greatest impacts. Most important among these are land conflicts. The process of granting large-scale land concessions has caused widespread and abrupt loss of land amongst local people. In the case study areas, most of the people become landless farmers, having lost almost all their land to the rubber companies. A variety of issues lie behind the problems manifest by the rubber plantations. These are summarised as follows.

1. The loss of land rights. In the case of the rubber plantations established by contract farming and by village associations, land use rights remain with the existing landholders. In the case of the rubber plantations established through land concessions, the power to make decisions concerning the investment and the production lies with the concession company. The loss of the community’s rights to use land in the areas targeted by the rubber concession has meant the people are no longer able to farm for themselves. This contrasts with the experience of the people in the contract farming areas (also known as the 2+3 system) and those who have planted rubber in small and medium sized farms in the North of Laos, who retain “ownership” over the land and have been able to make a smoother transition from subsistence agriculture towards commercial farming. Agricultural land rights are not only incentives for agricultural investment but also provide essential livelihood security. Their loss has become a major cause of conflict between the people and the rubber plantation companies in certain areas.

2. The process of granting state land concessions is convoluted and inconcise. There are few coherent standards and no appropriate investigation and control systems to oversee company operations

The granting of land concessions to investors is one of the primary strategies of Lao PDR to stimulate foreign investment. However, this process has in the past met with six major problems:

2.1 Most land concessions are agreed and signed without a prior land survey. A survey is generally completed after signature, while the economic feasibility study or “economic critique” (Botwipak setakit) is being undertaken, meaning that the key issue for the concessions - the amount of land which can in fact be granted under concession – is not yet known at the time the major decisions are being made. The Committee for Planning and Investment, the concession company, the Ministry of Agriculture and Forestry and others authorized to sign the concession agreement have not had access to the facts concerning the land that can be granted. This has been a serious limitation. It has meant that local state officials are obliged to look for land to make up the total area specified in the concession contract. When inevitably there is insufficient waste or unused land to provide the company, land that is already used and farmed is taken to meet the quota. This is what happened in the villages under the land concession in Bachieng District, Champassak province, where many villagers lost their productive lands and other resources. In the three cases studied of the companies Viet-Lao Joint Stock Rubber Co, DakLak Rubber Company and Dau Tieng Viet-Lao Joint Stock Rubber Co, it was found that agreement and signature of the land concessions had been granted before the economic feasibility studies had been completed and before the investment was considered.

2.2 Land concessions have been authorized without consideration of the suitability of the area to the crop. A study has been carried out identifying areas that are appropriate and those inappropriate for rubber

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5 In this case the land rights in question are usufruct rights as allocated under the Land and Forest Allocation Programme. Of those households interviewed, approximately 80% of their agricultural land area (land given up to the land concession companies) had been issued with Temporary Land Use Certificates (TLUC) under the Programme.
cultivation throughout the country. However this information has not been put to use in the process of considering land concessions for rubber. As a result many areas, particularly in the South, which have capacity to grow a range of different crops have become extensive rubber estates. Champassak which is a major coffee producing area is now seeing much of its land, including many smallholder coffee plantations being converted into rubber plantation under the land concession. This conversion may turn out to be costly to the country.

2.3 A highly convoluted system of powers exists to authorise land concessions which arises from a variety of inexactely overlapping laws, including the Forestry Law, the Land Law, the Ministerial Regulations etc. In practice, the land concessions studied were based on agreements signed by provincial level officials and their counterparts in the neighbouring country. The confusing provisions of the law and the lack of standard provisions for consistent granting of land concessions has allowed some land concessions to be granted in overlapping areas. Even while there is a moratorium on land concessions and the NLMA has been assigned central authority for land management, it is still unclear what kind of mechanisms will need to be put in place to clarify the system of investigating and controlling the process for granting land concessions. In the case of the Viet-Lao, Dak Lak and Dau Tieng companies, which opereated in Champassak province and Salavane provinces, the research team were not able to obtain clear evidence to determine which state body has approved the concession.

2.4 There are no provisions for social and environmental impact assessments and detailed study of the economic value of the project. Currently there are no clear provisions requiring the large-scale concession projects in Lao PDR to undertake either an Environmental Impact Assessment or a Social Impact Assessment. This has become an important issue because there are no safeguards to prevent large scale projects from creating problems for the ecology and environment, nor if such impacts arise, any regulations clarifying who must take responsibility.

In the case study areas, it was found that the clearing of land for the land concessions in six villages affected important local water bodies, by permanently cutting off local access to water sources or through reduction in water quality. Streams are reported to be drying out and some contamination was reported in streams where the villagers used to drink from.

What is perhaps most surprising is that there has not yet been any detailed economic appraisal of the costs and benefits from the land concessions studied. Concession fees were not linked to the suitability of the land or the nature of the project and there was no study of the distribution of income in the local area.

2.5 Lack of participation by affected people The granting of land concessions for rubber has in the past been a matter decided by national and provincial level officials and the concession company. In most areas, local people have been given no part in the decision making. They had no say in whether to take part in the rubber projects, which areas of land were selected or sought, how much compensation should be paid, nor whether they could work in the rubber plantations. This study found that there were no provisions for participation of affected people within the policies or legislative framework. The discretion thus lies with the local level officials. In those villages where the province or district allowed time and priority to building a participatory process, such as those in Salavane, the seriousness of the impacts from the loss of productive land were somewhat reduced. Compensation rates in these areas were higher. However in those areas where the local officials neglected to consult with local people in the process of procuring land for the concession company, impacts were found to be more widespread and more serious.

2.6 Lack of monitoring, investigation and evaluation mechanisms. Even though large scale land concessions have now been granted in every part of Laos, there are still no clear provisions concerning the mechanisms, units or processes that should carry out the role of monitoring and investigation. There is no mechanism for enforcing the conditions of the contract relating to the areas of the concession, statements concerning employment, fair wages, nor any penalty provisions for breach of contract.

3. Large-scale land concessions to grow rubber have brought more negative impacts to the community than positive economic gains.

There are no standards and regulations for transparency and control in the process for granting large-scale land concessions for rubber. No set of information or field data is collected in advance, and there is generally no participation by the local people. This has led inevitably to serious impacts for the livelihoods
of the local people in the concession areas. Employment in the rubber plantations may be the only livelihood option around for the following reasons.

3.1 Loss of land and land use rights to productive land. The study found that 90% of the households in the case study areas had temporary land rights certificates issued under the Land and Forest Allocation Programme of the 1990s. Over 80% of the production area which was given to the rubber companies was land covered by such certificates. No consideration was made of how the land was used by the local people before their land rights were cancelled. Having received their land rights certificates, and developed their land, they would have been entitled to permanent land use rights according to the 8 steps of the land and forest allocation programme. This study also found that the few households which had already been issued with land titles, were also obliged to hand over their land to the companies. The loss of land use rights has destroyed the livelihood security of the local people and meant that several hundred families, no longer having the means to feed themselves, have no option but to work as labourers.

3.2 Food shortages and loss of cash crop income. The conversion of productive village land - rice fields and various other farmlands and orchards, producing coffee, cardamom, pineapples and timber, etc into rubber plantations has brought about serious food shortages and loss of income from the sale of economic crops. These had been the main source of income for all six villages studied. The study found that the number of households that used to produce sufficient rice all year round reduced from 45 per cent in 2003 to only 9 percent in 2007. Rice yields were down to a quarter of their previous production. The income from selling rice and various market crops dropped significantly. Loss of primary income and rice shortages meant that the costs of living rose sharply. For some households, annual expenditure to buy rice rose to 5,900,000 kip per year, a significant sum of money in the local economy.

3.2 Degradation of the natural resource base. In those villages where the process of procuring the land for the rubber companies was accelerated, such as in Vangkhanane and Oudomsouk, certain forest areas which used to be an important source of natural forest products (NTFPs) and food were completely destroyed. The rice fallows which had previously been a source of both food and income were mostly destroyed. Foods which were derived from natural spaces such as streams and wetlands are now harder to find, their losses partly as a result of the use of chemicals used in the rubber estates. The loss of these three main pillars of the community economy: rice fields, orchards and forest lands is the equivalent of undermining every livelihood path for the local people. This was a major factor in the community’s transformation and engagement as agricultural labourers.

4. Inability to recover the community economy following the loss of land to the companies. Weak mechanisms to manage compensation and ensure fair conditions of employment

The payment of compensation is the main way in which the problems and suffering from the loss of productive land and natural resources might be alleviated. In all six villages, it was found that the payment of compensation did not follow any consistent standard or reasoning. Some companies paid compensation only for the crops that were lost, other companies calculated the area of land and the crops together. Some companies paid compensation for less land than was actually confiscated. In other cases, the level of the compensation depended on the ability to villagers to negotiate. There are no legal provisions to govern this, even though in some cases the government officials at the district level suggested the rates of compensation for the company to consider. In general, the state officials did not help to set up principles so that the people could not be taken advantage of by the company. Generally, compensation paid was around 1-2 million kip (approximately US$100-200) per ha which was many times less than the value of the cash income which the land provided. The low rates of compensation made it difficult for villagers who lost their land to recover from the loss of livelihood resources or to invest in any new occupation.

Employment in all three companies throughout the past 3-4 years has been irregular and insecure. There was plentiful employment only in the first year when the estates were being planted and established. In subsequent years, employment fell to less than half the original level and no longer spanned the entire year. This meant that many villagers became unemployed and suffered considerable poverty. Even among those who had regular full time employment, wages were not regular. Their payments decreased from the first year considerably.

Not all workers employed are from the local villages. Vietnamese workers are also employed by the companies in various capacities. Presently, the number of foreign workers exceeds the limits set out in the law on promotion of investment 2004, namely that the employment of foreigners should not exceed 10 percent of the workforce.
There is no state body or labour law provisions in place to help to manage employment and wages. Employment matters are entirely up to the consideration of the company. There is no mechanism to allow villagers to call for fair wages nor to assist them in ensuring justice.

5. The community’s capacity to adjust and recover from the impacts of the concession depends on the amount of land and labour families have left

Working under unfair conditions and irregular employment, villagers who have lost their land to the companies have tried to find alternatives for their subsistence. This study has found that those households who still had some paddy fields remaining, for example in Nong Ke, Vangkhlanane and Nong Lao Theung were still able to continue farming or able to buy land from neighbouring villages. When they were not engaged in farming they were free to take up work in the rubber estates. While the villagers who lost almost all their land, of which many were in Oudomsouk, Lak 19 and Nong Nam Khao Yai, suffered the most serious impacts. They had to find work in the rubber estates or try to find work elsewhere. In the first year of the land concession, villagers were still able to grow rice to feed themselves in the rows between the rubber in the plantations. However, this was not generally possible afterwards partly because the rubber trees grow quickly and soon the earth was covered beneath shade.

Currently those families who can survive are those who still have land left or else those who have sufficient labour to find income to cover their increased expenses. The group of families who have experienced the most severe problems are the landless and families with few working age adults. To this day, neither the state nor the concession companies have taken concrete steps to alleviate the poverty of these families.

Since the research study period corresponded to the phase of land clearance and rubber tree planting, it was not possible to evaluate the economic benefits that might be derived from the land concession project as a whole. The rubber trees should be able to be harvested in year 7 counting from the date of planting which differs amongst the three companies. In the first 6 years period, the company is exempt from paying land concession fees. In addition, the research team has not been able to access all relevant documents. Only one economic feasibility study concerning one company was made available, and information concerning employment was not provided by the companies. Due to these limitations, the majority of the information presented here is derived from interviews with the affected people. While it may not be possible to undertake a full economic assessment, the research team view that an additional study should be made once the rubber can be harvested.

Recommendations

The research team proposes that future support for the development of commercial agriculture in Lao PDR should change direction. Emphasis should be placed on the generation of direct benefits for agricultural communities rather than the allocation of large areas of land to the private sector. This study has indicated the many problems which have arisen in the case of the major land concessions studied. The projects have not created the kind of economic changes that might benefit local people. As a pathway for resolving the problems arising from the loss of land to the concession companies and as a means of adjusting the direction of land management in Lao PDR, the research team propose the following recommendations:

Short term measures
1. Provide immediate relief for those suffering from the loss of land
   1.1 A rice fund could be established in each community that has already lost a significant area of land to the companies and have consequently experienced hunger and extreme poverty.
   1.2 The compensation payments must be reviewed, so that the people already affected can be compensated in as fair a manner as possible.
   1.3 Land must be found for all those who have lost their land, with a minimum of 1 hectare per family for subsistence production
   1.4 Wage rates for the labourers in the rubber estates must be revised and monitored to ensure that they are sufficient by which to live. Written contracts must be completed for each labourer.

Medium term measures
1. Set up an official committee to monitor and investigate the implementation of all land concessions. This committee should have the following powers and responsibilities:
   1.1 to monitor the companies operations in relation to land and land use, making sure land areas are as agreed.
1.2 To ensure that local land management authorities coordinate with the labour authorities to control, regulate the labour employment fairly, so that the villagers can gain regular work, fair wages and welfare at work.

1.3 To coordinate with other institutions to find alternative occupations, provide assistance and provide some relief for the families who have suffered from the loss of their land and whose wages are too low to live on.

2. There needs to be a land survey and land zoning plan in each province. All areas of land that are genuinely used by the communities and individuals who have been issued with certificates under the Land and Forest Allocation policy should be kept free from land concessions.

3. The mechanisms for the authorization of land concessions should be reformed to reduce the problems of a very complex process.

**Measures for the long term**

1. Large-scale land concessions should no longer be granted to foreign investors for commercial cropping over the long term.

2. Land management policy should emphasise building the capacity of people to develop their land use to increase its economic value, whereby rights to use the land still belong to the people.

3. There should be a plan for land management which considers the balance between the benefits to the national economy, the local economy, a fair distribution of income, ecological benefits and biodiversity.

4. If there are to be more land concessions, they should be small in scale, in land that is not subject to community use. Evaluations should be carried out of the potential impacts on the environment and society before a project is authorized.
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Part I
Laos and the rubber industry

1. Dawn and decline of rubber in the colonial era of Indochina

The rubber crop presents many interesting aspects of social history. In regards to economics, just as with any other colonial crop such as coffee or sugar cane, rubber is a transnational species whose exploitation had an important role in the process of growth of the capitalist system in Europe and America. Rubber was particularly important to the transportation related industries, which provided the basis for a range of other industries. Wealth derived from the rubber trade led to the supreme powers in the Western countries vastly extending their economic and military might. In regards to politics, the cultivation of rubber has been promoted by various political and economic ideologies, from the ideas of civilising the “jungle nations” of the colonies to the ideas of poverty alleviation in the rural highlands today.

In the Indochina region, the rubber industry was established by the French colonial state following in the footsteps of other major colonizing powers, namely the British and the Dutch, already well established in the industry. After a delay to see at first hand the feasibility of this innovation (Robequain 1944; Slocomb 2007:10), the era of Indo-chinese rubber began in the 1900s. Agricultural estates were set up in the Cochinchina area to the south of Indochina (see map), close to the populated areas to the North and East of Saigon in areas referred to as terres grises or “grey lands”.

Following the first world war, French and Belgian capitalists expanded their agricultural estates into the more remote and more fertile “red lands” or terres rouges to the South-East and North-West of Saigon and into Cambodia. Rubber became the primary crop of this region in 1938, when rubber production increased to 60,000 tonnes, enough to meet the demand in France at the time. Rubber soon became the crop with the highest export value throughout Indochina. Thus, by the end of the 1930s, Indochina became the fifth biggest producer of rubber in the world in terms of land area, with the fourth largest export volume, making it the top rubber producer per unit of area (Murray 1992).

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1 Cochinchina is considered to be location of the largest rubber estates, followed by Cambodia and Annam. At its height, its produce had an export value of up to 280 million Francs in 1926, before reducing to the quotas set under the Stevenson Plan to build cooperation against the falling world price of rubber. However the price of rubber in France had always been buoyed up through government support as it was considered an important industrial and military commodity of the nation. The price of rubber hiked during the second world war, once rubber became an important strategic commodity for the military, when even the German Nazi bought from Indochina in Cambodia. The French companies governed the rubber estates continuously right up until the independence of Cambodia in the 1950s. At that time, Cambodia was still the sixth largest producer of natural rubber in the world (Tully 2002: 312-13).
Although the rubber estates were to expand throughout Indochina, in Annam and Cambodia, rubber never took off in Laos, another colony of the French. Rubber cultivation experiments were begun in the south of Laos, but these trials did not result in the extensive investment in rubber seen in Vietnam, or Cambodia. There are many reasons why the French did not invest in rubber estates in Laos. These relate to the policy of France towards its Lao colony, the low population density in Laos, implying a shortage of labour, and attitudes of the French towards the Lao people dating from the annexation of Laos into the Indochina colony in 1893. France did not see Laos as a prefecture or a state unto itself, but saw it as part of Vietnam. In order to exploit its fertile resources, it was seen as necessary first to develop the transport and communications infrastructure. For France, only transport and communications routes between Laos and Vietnam would make an investment in Laotian agriculture or industry viable.

Throughout the period of French administration, the attempt to “unlock” Laos (Stuart-Fox 1995) through various plans for communications routes, was concurrent with the emerging of Laos as Little Vietnam. The French tried every way they could to persuade the Annamese people, whom the French saw as more capable, hard working, and competitive, to cross over into Laos and settle in the lowlands of the Mekong so as to increase the efficiency of local production. Thus, the numbers of Vietnamese people in Vientiane, Savannakhet and the Boloven plateau increased significantly between 1935-

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2 The French experimented with growing rubber in Bachieng, Champassak in 1930. However did not undertake any serious expansion of its four plots of half a hectare each. Villagers in this area refer to rubber as caosu (Ketphanh, Mouluamel and Siksidao 2006).

3 Although coffee did take off, as the Commerciale du Laos company invested in the areas of the Upper Mekong Haut-Mekong and in the Bolovens since 1922 (Stuart-Fox 1995).

4 The perception of Laos as a link to Vietnam has a political significance also as the French sought to separate Laos from Thailand. Laos was seen as an enclosed land, a locked land, without a sea port. This led to the building of the link roads of Indochina.
39\textsuperscript{5}, until the situation changed when the Japanese moved into Indochina\textsuperscript{6} (op. cit.). The French hesitated before investing in rubber estates in Laos, as such investments required high levels of capital, secure trading routes, as well as control over labour. This was because they saw Laos as the hinterland of Indochina. Instead, most of the colonial rubber estates were established in the south of Vietnam and Cambodia.

The history of the expansion of the rubber estates in Indochina did not progress very smoothly, because the process was one of monopolisation, forcing indigenous people from their land to open a way for French international corporations to access the land easily. The system of rights in land was changed to give greater legitimacy to individual private rights over communal rights of the indigenous peoples, which led to regular confrontations between the investors and the indigenous people (Tully 2002; Slocomb 2007). The first French-Indochina Land Code, issued in 1885, gave rights to the colonial investors to request a land concession from the state\textsuperscript{7} on condition that the land in question must not be in use by the people, and that tax be paid continuously to the King of Vietnam as well as the French rulers. This ingenious tactic was to change the land tenure regimes of the people into the ownership of land by the state. During the French take over of Tonkin and Annam, many of the rice farmers abandoned their land and villages to flee the wars, thus they were unable to claim continued use of their land.

However, evidence from the French themselves indicates that the process of transferring these rights or seizing unused land was far from straightforward. In many areas where the French companies tried to seize the land to transform it into an agricultural estate, they were faced with disputes and challenges by large numbers of villagers. This resulted in halting the process of granting concessions by the relevant state agencies. From records in 1912, of 60 concession requests, 18 requests were refused by the Regional Land Office on grounds that the area of the project in question overlapped with the land of the villagers and a negotiated settlement could not be reached (Cleary, op. cit.).

Conflicts tended to be settled with payment of low sums of compensation by the companies, as villagers had hardly any alternatives in negotiation. However, it must be borne in mind that the land policy of the French, was not limited to the giving of large-scale land concessions to investors. The French were equally interested in creating incentives for French farmers to migrate to the region and open up agricultural land in Indochina. Later on, it was planned, this target group could move out to control the Vietnamese farmers and tenant farmers too. Thus, the colonial state gave importance to the ownership of small- and medium-sized areas of land, to allow access to sufficient areas of land for these farmers. At the same time, it was necessary for large areas of abandoned land to be capitalised to create wealth for France. In this way, the balance between the management of smallholdings, medium-sized holdings and largeholdings was an important matter for the colonial state. They could not allow the large-scale land concessions to grow too big to obstruct access to land of the small-scale and medium-scale farmers.

When rubber cultivation expanded into the territories of the southern and western regions, attempts by the colonial state to gain control of land and to prevent speculation also increased in intensity. In 1909, the state issued a regulation limiting the area of land for a land concession to a maximum of 2,000 ha. This limit was reduced to 500 ha in

\textsuperscript{5}In 1939 the numbers of Vietnamese migrants increased to 39,000, leading to some towns, such as Tha Khaek, in the southern Province of Champassak, having a Vietnamese majority.

\textsuperscript{6}In this situation, most of the Vietnamese people, if they did not migrate back to Vietnam, emigrated to the Northeastern region of Thailand.

\textsuperscript{7}Only French citizens had rights to request a land concession. This rule also had the effect of taking away the rights of the Chinese, and the other white settlers living in Indochina.
1916. A rule was issued forcing companies to plant rubber over at least 50% of their land within 5 to 7 years after receiving the grant of concession. They also set up a process for appraisals in which the power to authorize depends on the size of the land concession. These regulations were strongly criticized and challenged by the rubber investors, who tried to demand that the state stop intervening in the market mechanism and let the process of transforming land into capital run freely.

In the period of expansion of the rubber estates into the forest and farmlands used by the ethnic minority groups, most of the conflicts tended to be between the investors (estate owners) and the highland peoples. Attempts were made to reach a decision on which areas were not food production areas, even if, in law, the colonial state was not permitted to grant a land concession over areas already in use. The above regulation became very difficult to implement in the case of hai lao or fallow lands. This is a classification of land within the rotational cultivation system, in which the deciding factor is the age of the field. After how many years do you consider that a fallow field is no longer an agricultural field which can still be put to use at some future point? Towards the end of the colonial period it was considered that the time limit should be 15 years.

From 1932 onwards, in the height of the land rush for rubber production, the colonial state issued a colonial law allowing the indigenous people to buy and sell their farmlands. This policy was in line with the French notions of promoting familiarity with the ideas of individual property amongst the forest-dwelling peoples and destabilising the prevalent system of common property, which the French saw as backward and an obstacle to development (Cleary, op. cit.). They sought to bring the lands of the highland peoples into agricultural production that could generate income under a free market.

However, even though large areas of land were acquired for the French rubber estates, they experienced constant problems and opposition from their labourers. As a result of the brutal oppression of labourers and atrocious working conditions, there were escapes, protests, and demands for better conditions in almost every one of the estates. Moreover, counting from 1929, agricultural estates throughout Cochinchna and in Cambodia, were becoming a base for the dissemination of nationalist ideas and communism. The Indochina Communist Party sought to send their members into the estates on a massive scale, posing as labourers. The French became aware of this and began expelling workers, especially those from Tonkin, using increasingly extreme methods. But the investors and the estate managers were not particularly interested in such issues, and they continued to treat their workers in the same way. The movement of the agricultural estates labourers became particularly intense in 1930 throughout Indochina, with protests in the forms of desertions, slowing down work, and insurgency.

The mobilisation of the agricultural estates movements ground to a halt as the economic depression hit towards the end of the 1930s, and the number of workers in the estates fell. However they became more active again in the 1950s. The fall of the French in the fighting against the Communist Party of Indochina, led French investors to withdraw from the rubber estates in 1954. However, in Cambodia, the French would still operate the rubber estates until the revolution in 1975. This was the last year of France’s

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8 The power to authorize was set out as follows: for land of 300 ha, the power to authorize lies with the province, for land between 300-1,000 ha, the power to authorize lies with the Resident Officer at the provincial level, for land between 1,000-4,000 ha, the power to authorize lies with the Governor General and for land over 4,000 ha, the power to authorize lies with the Minister of the Colonies.

9 In 1930, hundreds of labourers deserted the estates such as Chup, Thmar Pitt and Peam Cheang, which led to the imprisonment of the leaders of the protests. Meanwhile, those suspected of being in the political movement began to be detained.
role in Indochina, before they made their final exit and the curtain closed on the colonial rubber estates which had operated for seven decades in Indochina.

2. Laos and the expansion of rubber in the globalisation era

Since the beginning of the 21st Christian century rubber has once again returned to these areas, now referred to as the Mekong sub-region. This is directly related to the conspicuous rise of the China as an industrialized economy. The expansion of its national road transport industry made China the biggest buyer of rubber in the world. This has shifted the global marketplace for rubber from the US and Europe to China and has affected the development of investments in the production and marketing of natural rubber in the countries around China. Frontier capitalism, which had become an important pre-condition in the development of the rubber industry since the end of the 1990s, developed through various forms of relations among transnational capitalists, farmers, and local government officials on the borders with China and Vietnam, China and Laos, Thailand and Laos, through to Vietnam and Laos.

The strategic area for growing rubber in the Mekong after the colonial period is now no longer Cochinchina or even Cambodia, but Laos. In the era of the “rubber fever”, Laos is no longer considered a hinterland, as the French colonialists viewed it, but is now seen as an area which had the potential for competition, as a playing field between major capitalists from three countries, Thailand, Vietnam and China. Of course, the unbalanced development among the countries of the Mekong region, have meant that Laos does not have a strong industrial and economic power base. In order to understand why Laos has become a strategic area for the rubber industry in the Mekong at present, we must consider the status of rubber in the context of economic growth of the Mekong Region.

2.1 The expansion of the economy in the Mekong region and rubber plantations in China, Thailand and Vietnam.

The rapid growth of rubber in Laos was a result of the increasing demand for natural rubber throughout the world as well as for the economic development in the Mekong

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10 The rapid expansion of the use of rubber in China, particularly for the production of rubber tyres, meant that China’s rubber production had become insufficient to meet the demand. In the short and medium term, China which still had to import large quantities of rubber from various countries. From 2001 onwards, China became the biggest processor of natural rubber in the world and in 2003, China was consuming 1.8 million tonnes of rubber, as China was where the biggest producers of rubber tyres in the world were located. There is still a tendency towards increased consumption of around 10-20 percent per year. The growth in consumption of rubber by China is correlated to the growth in its GDP. Thus if the GDP of China continues to grow at an average rate of around 7.5 percent per year, it is possible to estimate that the increase in China’s consumption of rubber will increase by 10 million tonnes by 2020. The amount of production has increased rapidly since 2002, because it has been supported by government since there is a high marginal demand within the country. However, China only produces around 35 percent of its own domestic consumption and the rate of consumption of China has increased at a rate of 12 percent per year on average since 2003 (data from International Rubber Study Group).

11 Neighbouring countries such as Vietnam, relied on their geographical advantage in exporting rubber to China, as their capital costs were lower than the other exporters. Most of the trade passed through a single border where import taxes were low.

12 In 2005, the rate of increase of the demand for rubber was at 4.7 percent, while the rate of increase of the rubber production was 4 percent. It is estimated that in the next 10 years (2005-
Region, particularly for the soaring industrial development of China which uses natural rubber in enormous quantities, and has increased continuously for the last two decades.

At present, China is the biggest buyer of rubber in the world, and apart from buying the raw materials for processing, it has an important role in supporting the expansion of the rubber plantations throughout the Mekong Region. The spectacular growth of the car industry in China has always had an impact on those countries that export rubber, for example Thailand, and other countries with a history of rubber estates, such as Vietnam. These countries increased their plantation areas to unprecedented levels, and have brought rubber to countries which had fertile land resources and cheap labour, such as Laos. It is important to consider the different characteristics of development of the rubber industry in China, Thailand and Vietnam in analysing the future direction of the rubber-related economy in Laos.

China began to grow rubber since 1904 in the northern part of Yingjiang, but was not successful. Subsequently in 1948, when attempts began again, plantations were set up in Jinghong, in Yunnan, with 20,000 seedlings from Thailand. However they were again unsuccessful. It was in the period 1952-1956 under the recommendations of Russia that China tried again to grow rubber in the lowland hills of Jinghong. Rubber plantations in the form of 22 state farms were set up over 1987-1988, with a total area of 64,000 ha, alongside rubber plantations of small-scale farmers. During that time, 93 percent of rubber production (38,000 metric tonnes) came from state rubber farms, which received funds and support from the state. These differed from the existing rubber plantations on Hainan and Guangdong, in that it was believed that state farms would help control the quality of the latex and technical efficiency so as to make it better than the small-scale production model in Thailand, Malaysia and Indonesia, and in Hainan itself.

The spread of the state farms into the border administration lands of Yunnan, where many ethnic minority groups were living, had a political aim. In supporting the Han peoples to enter into these ethnic minorities areas to farm, the first days of rubber expansion in Yunnan played the role of establishing the security of the state (op. cit, p41). However, after 1984, rubber plantations operated by smallholder farmers expanded quickly and became a popular crop in the Xishuangbanna Dai Autonomous Prefecture.

Under the “Green for Grain” policy, to reduce the extensive rotational rice cultivation areas of the ethnic minorities, the state gave farmers seedlings of economic crops, such as rubber and tea, to replace rice crops in the belief that this amounted to restoring the environment. In the 1990s this was one of the important factors which led the farmers in Xishuangbanna and other highland areas to transform all their food production areas into rubber plantation areas. The expansion of the rubber industry has stimulated investments in over 200 large-scale and small-scale processing factories throughout the Yunnan Prefecture.

Currently, the rubber cultivation area in China is around 6.3 million ha out of a total area which is considered suitable for rubber production of 9.73 million ha. The main rubber growing area is in Hainan Island. China is able to produce half a million tonnes per year making it the 4th biggest producer in the world after Malaysia, Indonesia and Thailand. Yunnan produces roughly 1 in 6 of the country’s total production. Meanwhile, following economic reforms, China’s industrial development soared from 2001 onwards, becoming the biggest processor of natural rubber in the world, and has the biggest tyre producing industry in the world. China’s natural rubber market, can be distinguished into two main markets. One market for rubber tubes (40 percent) and another for rubber tyres (60 percent).

In 2015), the price of rubber should increase thanks to the growth of the car industry in China and the development of new alternative kinds of transport which do not use oil (Tavarolit, 2006).
As the biggest consumer of rubber in the world, the rubber growing area in the country is not enough for its growing industries\(^\text{13}\). It has been estimated that China will consume up to 30 percent of the world’s rubber production in 2020, with an annual demand of 11.5 million tonnes. It overtook the US which had been the biggest consumer of rubber in 2002, when China consumed 3.45 million tonnes of natural rubber or 18.2 percent of the world total consumption. It has been estimated that the demand of China for rubber will have increased to 6.83 million tonnes by 2010. Currently, China only produces 4 million tonnes per year. Meanwhile, the car industry in China is expected to grow spectacularly to an estimated 145 million cars in 2020 (Schipper and Ng, 2007)\(^\text{14}\).

Linked to the above factors, and the limitations of domestic areas suitable for rubber plantations, China had to look around for raw materials from outside the country. Currently China is the largest investor in Laos, with more investment capital than Thailand and Vietnam put together. Most of the investment is in agro-industry, particularly rubber. In 2007, the volume of trade between Laos and China was at 249 million dollars representing a 218.4 percent growth compared with levels in 2004.

Thailand began its first commercial rubber plantations in 1899 after the crop was introduced by Chinese investors from Singapore and Malaysia. Rubber plantations were opened up in the south of Thailand with support from the Siamese government. Subsequently rubber was distributed amongst the various groups of smallholder farmers. Rubber plantations in Thailand are still predominantly smallholdings to the present day\(^\text{15}\).

The state promotes rubber as one of the country’s primary economic crops and it is one of the ten top export commodities of Thailand. The area of rubber production has expanded from the South to the Eastern region, the Northeast and the North. In the Northeast, rubber began replace cassava, which had suffered low prices since the 1970s, with state support under the Greening of Isaan programme in 1980 just like eucalyptus. The price of rubber increased and led the Thai government to set national targets of increasing the area of rubber production in the Isaan region and in the North by 1 million rai (160,000 ha).

In Thailand, rubber is mostly planted as a monocrop, although there are traditional rubber orchards in the southern region which involve intercropping with indigenous wood and fruit species. The Thai government has supported rubber as an economic crop, emphasising the importance of a domestic labour-force, and setting up several institutions to promote the production and development of rubber products. Examples include the experimental stations and rubber nurseries have been set up in every province where rubber is promoted, the Rubber Research Institute\(^\text{16}\), the Office of the Rubber Plantations Welfare Fund\(^\text{17}\), and the Rubber Plantations Organisation\(^\text{18}\) etc.

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\(^{13}\) China’s production capacity expanded during 1998 - 2003 by about 4.20 percent on average, but the rate of Chinese consumption increased by about 12.38 percent per year in the same period. Thus China has always had to import rubber from other countries (China Statistical Yearbook 2004, Rubber Statistical Bulletin of International Rubber Study Group, 2004).

\(^{14}\) Estimates vary considerably, above figure from Schipper L, and Ng W. S. (2007) “Rapid motorization in China: environmental and social challenges”. According to a variety of sources in China Facts and Trends (2008-09 Edition) by Thomas Gladwin and Jonathon Porritt, in the 1980s there were virtually no private cars in China; in 2003 there were 16 million; by 2015 China is projected to have 150 million.

\(^{15}\) Up to 93.01 percent of rubber plantations are small-scale (2-50 rai), while 6.71 percent are medium sized farms (51-250 rai) and only 0.28 percent are large scale (>250 rai) (International Trade Negotiations Department 2004 quoted in Sayamol, 2550).

\(^{16}\) Established under the Office of Agricultural Economics, the RRIT does research work to study and improve rubber varieties.

\(^{17}\) This is a state enterprise, which is under the Ministry of Agriculture and Cooperatives, it was set up under the Rubber Plantations Welfare Fund Act 1960, with the duty of promoting agriculture
Currently, Thailand is the biggest exporter of natural rubber in the world. It has a production area of 13 million rai, yielding 2.9 million tonnes or around 35 percent of the world’s total production. Up to 90 percent of the natural rubber produced in Thailand is exported. Only 10 percent is processed into various products for domestic consumption (Kaiyoorawong, 2007).

However, the price of rubber over the past few decades has not been consistently high. On the contrary it has fluctuated according to global economic conditions. The Thai state has a general policy to support the expansion of the rubber cultivation area and the increase of export volumes, however when the price of rubber was low, the policy extended to controlling standards and production yields (e.g., the Rubber Controls Act of 1999), interventions in the price of rubber, and also support for switching to other economic crops, such as oil palm.

Moreover, an international joint stock company was established among the three leading rubber exporting nations – Malaysia, Indonesia and Thailand - to stabilise export price levels amongst other issues.

Thai rubber capital has expanded its operations into Laos in search of production area for raw materials to supply the rubber industries in Thailand. Companies such as the Thai Hua Rubber Company Ltd which later joined up with a Laotian company called the New Jip Seng Company Holdings Ltd to set up a joint stock company under the name of the Lao Phara Joint Stock Thai Hua company in 2005, to cultivate rubber over 15,000 ha in Savannakhet province, with the aim of hiring farmers in the local area as growers. The family of companies incorporated into Thai Hua company, holds a total of ten production areas in different parts of Thailand, such as Hat Yai, Krabi, Rayong, Trang, and has branch office in Shanghai. In 2007, the Jiangshan Group from China obtained a 20 percent stake in the Lao Phara Joint Stock Thai Hua company to join in the rubber programme in Laos. Most of the produce will be sold to this company in China (Manager Daily, 28 March, 2007). As of 2007, the Lao Phara Joint Stock Thai Hua company has expanded its area for growing rubber in Vientiane province, Bolikhamxay, Savannakhet, Khammouane, and Xayabouli, over an area of 15,000 ha. This area will be acquired under a land concession, and labour will be secured both by hiring workers, as well as a contract farming system where, loans, seedlings will be given to the farmers under a contract to buy the produce.

In Vietnam, where colonial rubber estates had been introduced by the French in 1897, operations were halted with the exit of the French from Vietnam. After 1975, the Vietnamese government revived the rubber industry, and after the economic reforms in 1986 rubber production began to increase rapidly, eventually becoming the third top export commodity in the country. In 2002, Vietnam had a production area of rubber of around 433,000 ha in total, which gave it the 4th largest area under rubber in the world. Most of this is in the southern region of the country. The Vietnamese government developed its technology to improve the quality of the latex so that it reached international standards with 32 million dollars of loans from the World Bank in 1996. Through the expansion of the rubber cultivation area, national natural rubber production grew by 15 percent per year. Currently, Vietnam is able to produce around 300,000 tonnes per year. Most of this is sold to China and the EU, particularly Germany. The

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19 First is Indonesia (33.4 percent), followed by Thailand (20.1 percent) and Malaysia (16 percent)
area for growing rubber in Vietnam is limited (around 4 million rai), thus Vietnamese companies have begun to expand into Laos, crossing the border into the south of the country, acquiring land through large-scale land concessions.

Table 1.1: Area of rubber plantations in Asia

<table>
<thead>
<tr>
<th>country</th>
<th>Large scale plantations (ha)</th>
<th>small scale plantations (ha)</th>
<th>Total (ha)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>549,000</td>
<td>2,823,000</td>
<td>3,372,000</td>
<td>34.81</td>
</tr>
<tr>
<td>Thailand</td>
<td>85,000</td>
<td>1,925,000</td>
<td>2,010,000</td>
<td>20.75</td>
</tr>
<tr>
<td>Malaysia</td>
<td>197,000</td>
<td>1,520,000</td>
<td>1,717,000</td>
<td>17.72</td>
</tr>
<tr>
<td>China</td>
<td>-</td>
<td>618,000</td>
<td>618,000</td>
<td>6.38</td>
</tr>
<tr>
<td>India</td>
<td>69,000</td>
<td>494,000</td>
<td>563,000</td>
<td>5.81</td>
</tr>
<tr>
<td>Vietnam</td>
<td>240,000</td>
<td>35,000</td>
<td>275,000</td>
<td>2.84</td>
</tr>
</tbody>
</table>

Source: adapted from Thai Rubber Research Institute (2002) original figures in rai (1 rai = 0.16 ha). Other countries account for around 12% of rubber plantations in Asia.

2.2 Transnational rubber capital and its operations in Laos

International rubber capital from China, Thailand and Vietnam operate in different ways in Laos. These have different impacts on the development of the rubber agro-industry in Laos, and they instigate different changes in the use of land and the living conditions of the farmers who have become involved with the different international capitalists.

We can distinguish five characteristics of the rubber investors, both national and international, currently operating in Laos, namely local private capital, small-scale farming capital, cross-border private capital, international corporations, and joint transnational partnership capital.

2.2.1 Private local capital

Laotian investors, although not so prevalent, operate both land concessions and contract farming investments. Examples include Siphansalika in Oudomxay province, in the North of Laos. There are also small-scale investors operating various large-scale rubber plantations, such as, 500 ha in Namor District, 207 ha in Xay District etc (Vongkhamor, Phimmasen, Silapeth and Petterson, 2007).

2.2.2 Small-scale farmer capital

This is capital that farmers invest themselves to grow rubber in their own lands, both on a contract farming basis and on an individual basis. Where they are investing their own capital, farmers will obtain seedlings on their own, sort out their own labour, and search
for markets by themselves, generally in areas of between 3-25 ha. In the North of Laos, for example, in Luang Nam Tha province, these farmers tend to have relatives who are living in the border areas of China, which can provide technical help and access to inputs. In Oudomxay province alone, it has been estimated that smallholder farmers who have invested in growing rubber themselves, cover a total area of over 1,000 ha.

2.2.3 Cross-border private capital.
This capital includes investments of middle men and traders in the border areas of Laos. These traders vary in character, from small-scale investors who provide funds and seedlings and buy up latex at an agreed price to those traders who scout around the borders to buy up produce.

2.2.4 International corporations.
Mostly this is corporate capital from Laos’ neighbours, that is China, Thailand and Vietnam. This includes international investors who invest 100%, either by registering as a new legal person or as a branch of a foreign enterprise. These operate plantation activities in two ways: large-scale rubber plantations under state land concessions and contract farming. Most companies will operate in the area close to the borders with their own country, as this is convenient for transport. The international investors mostly tend to invest in large blocks and in large scale land concession over a period of 30-50 years.

Table 1.2: Areas granted to international rubber enterprises in various provinces

<table>
<thead>
<tr>
<th>Province</th>
<th>Area (ha)</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Luang Nam Tha</td>
<td>24,640</td>
<td>7 Chinese companies (Yunnan Natural Rubber Co, Cheungling Rubber Co, LeeSingko Co, Seunjingwa Co, Thayjiang Co, Deeyuan Co, Thingyuan Co)</td>
</tr>
<tr>
<td>2. Bokeo</td>
<td>10,000</td>
<td>4 Chinese companies (Sino-Lao Co, Jinsy Rubber Co, Lihang Biological Technology Development Co, Lialing Co)</td>
</tr>
<tr>
<td>3. Houaphan</td>
<td>100</td>
<td>1 Vietnamese company</td>
</tr>
<tr>
<td>4. Xayabouli</td>
<td>8,500</td>
<td>2 Chinese companies (Yunnan Biological Development Co, Liliang, Yunnan Investment Co) and 1 Thai company (Lao Phara Thailand Co)</td>
</tr>
<tr>
<td>5. Oudomxai</td>
<td>24,100</td>
<td>5 Chinese companies (Jiangfong Co, Sino-Laos Co, Laos China Company, Jongxay Co, Chiantaly Co)</td>
</tr>
<tr>
<td>6. Phongsaly</td>
<td>9,362</td>
<td>5 Chinese companies (no names supplied)</td>
</tr>
<tr>
<td>7. Vientiane</td>
<td>10,000</td>
<td>Chinese company(ies) (no name(s) supplied)</td>
</tr>
<tr>
<td>8. Bolikhaxmaly</td>
<td>3,000</td>
<td>1 Thai company (Thai Hua Rubber)</td>
</tr>
<tr>
<td>9. Khammouane</td>
<td>3,000</td>
<td>1 Chinese company (no name supplied) 1 Thai company (Thai Hua Rubber)</td>
</tr>
<tr>
<td>10. Savannakhet</td>
<td>43,000</td>
<td>1 Thai company (Thai Hua Rubber) 1 Chinese company (Laos China company) and 2 Vietnamese companies (Sowingo company, Danang company)</td>
</tr>
<tr>
<td>11. Salavane</td>
<td>7,000</td>
<td>1 Vietnamese company 1 (Daklak Co)</td>
</tr>
</tbody>
</table>
12. Xekong 11,000 4 Vietnamese companies (Yang Caosu Vietnam, Deedeena Co, Sibee Ab Co, Siba Co)
13. Attapeu 6,000 2 Vietnamese companies (Daklak Co and Guaming Co)

Total 14 provinces 182,902 around 40 companies

source: Ministry of Commerce www.moc.gov.la and Champassak Land Management Authority

2.2.5 Joint transnational partnership capital

This is a partnership between private transnational capital and private sector in Laos promoted under a government scheme. Under the Law on Investment Promotion, international capital must not be less than 30 percent of the total registered capital. In the case of rubber plantation operations, all such investments are in the form of large-scale rubber plantations under land concessions.

These five investment types involve the use of different resources. The fourth and fifth types mentioned above are the largest investments, with access to the greatest amount of land. They also create a great centralisation of capital, both land and income. While the farmers who have small-scale plantations, tend to use a small area of land (between 3-25 ha per household), tend to be more scattered around. The large-scale companies tend to control contiguous areas of land from around 500-10,000 ha per company and receive a long term concession for 30-50 years. Control of large areas of land by a single company has led to the concentration of capital and income while compared to the investments of the smallholders.

3. Production system, management of the rubber plantations, and rubber markets

These five types of capital in Laos tend to employ different forms of production management. Large scale capital, whether it be local or international tends to operate large-scale rubber plantations, while local private capital tends to use the contract farming model to reduce the steps and up-front investment costs of acquiring land. Smallholder capital tends to manage small farms with traditional land and labour relations management. These production systems are discussed below.

3.1 Rubber plantation system

Major rubber capitalists tend to invest in large-scale rubber plantations, which use large amounts of land and labour. They have the advantage in the sense that their investment costs are lower than other capital groups through an economy of scale and can control resources used for production over a long term. The system of agricultural estates is managed on a similar basis to an industrial factory. The owner of the estate is the controller and has a monopoly on the management of capital, technology and labour. Production is characterised by mass-production, monocropping, the control of technical standards and the recruitment of large numbers of labour under strict discipline and controls. These make the estate owner able to control the efficiency of production and keep costs low which should lead to higher profits.
These agricultural estates differ from the factory system in that they do not provide work continuously. Work is irregular and varies according to season. Mostly the work does not require expertise or special skills. In this way, to reduce labour costs, the estates owners use the agricultural nature of the rubber operations to differentiate from the factory system. They avoid the responsibility for welfare and hiring long term labour of the “workers”\textsuperscript{21}. Hiring workers in the rubber estates tends to be on a temporary and irregular basis. Labour wages are paid according to the type of work in each day. Workers in this system tend to receive irregular wages. They have a lot of work in the opening, clearing and planting stages, but then become unemployed during the period when the rubber is growing but is still immature (up to 7 years). The work picks up again when the rubber trees begin to be tapped. The estate does not take any responsibility for any welfare of its labourers.

The hiring in the system of rubber plantation estates thus creates insecurity and there is very high livelihood vulnerability. In the case of Laos, most workers in the agricultural estates are people who lost their land to the estates. They had no alternative but to change their status from farmer to worker. In the context of irregular wages, and no welfare benefits, the livelihoods of these landless peasants have become extremely poor.

The main rubber plantations areas are in the South of Laos, in Champassak, Salavane, and Attapeu, which are run by Vietnamese companies. In the Central provinces, plantations are generally run by Thai companies, and in the North, by Chinese companies. However, in order to reduce the social opposition, the Thai and Vietnamese companies have developed a more complex and mixed system of hiring labour and incentives for the agricultural workers such as allowing households to look after an area of rubber plantation with a promise to allow the household to harvest the rubber trees, to sell and share the profit with the company, as was the case of the Daklak company in Southern Laos. However, this system has still not been clearly elaborated or written into a formal contract.

3.2 Contract farming system

This is a system of rubber plantation management which arises from agreements between a farmer and a company or middle men, such as brokers or traders, to cultivate, manage and buy up the rubber at prices and quantities agreed. This system presents an alternative way of accessing land, in circumstances where it proves difficult to locate large plots of land, because of social and political opposition from farmers and other land users. In these agri-business investments, farmers keep their rights to use land and manage their own rubber plantations. Their investment is represented by their land and their labour, while the company or the middleman invests the seedlings, technology (which is mainly in the form of credit) and makes a promise to buy the produce at a price that may be set in advance. Normally, the contract farming system includes the use of commodity quality standards in the buying the rubber produce from the farmers, and the

\textsuperscript{21} It is interesting that the recruiting and hiring of labourers by the rubber estates in Laos differ from the French colonial period when labour tended to be farmers brought in from far away and worked under a fixed term contract. Thus the estates owners were responsible for the food, health and housing of the workers and a wage was paid according to contract, unless a breach occurred. Thus, the status of the workers in the estates were workers just like in the factories elsewhere, although the conditions of hire and welfare were atrocious in the French rubber plantations. Meanwhile in today’s estates, whether administered by the Vietnamese, Thai or Chinese companies, workers are part-farmers part-labourers. Estates managers use various methods of hire, paying daily, paying as a group, paying over a period of time, and using the status of “landed peasantry” to avoid responsibility for welfare of the workers.
price tends to be determined in advance and not adjusted even though the market price has changed.

In Laos, the contract farming system does not necessarily imply a relationship between just a private businessman and the farmer. It can be implemented in three ways: 1. Contracts between a company, which has obtained a land concession or a land lease, and smallholder farmers, with the permission of the local officials. 2. Contracts between land rights holders and smallholder farmers (through tenancies, including renting from provincial government) and 3. Contracts between traders and the smallholder farmers.

These three systems operate in small and medium sized areas of land and are commonly found in the North of Laos. Investment resources are divided in different ways. In a system known as “2+3”, the farmers are the managers of the land and labour while the investors arrange for the rubber seedlings, technology and markets. However, the proportion of profits to be divided between the capital holders and the farmers differ in each place. In some areas, the profit is shared 50:50, others 30:70 (such as in Luang Nam Tha, Xayabouli) 60:40 (Oudomxay) and 40:60 etc. In the first type, the local government has a mediating role guaranteeing the contractual terms between the company and the villagers. For example in the Namor District, the officials at the District level and the Ying Jiaopa company signed a contract to invest in rubber in the form of contract farming. This formed part of the investment plan of the province. In the contract it was stated that the company will be responsible for obtaining the seedlings and support for technology, and will buy the latex according to a fixed price and the profit will be shared between the villagers and the company in the proportion of 60:40, the lifetime of the contract is 30 years. However, even though this contract would be guaranteed by the local officials, a fair number of farmers were not interested in joining in this contract, since they said that the farmers proportion of sharing the profits was too low and the price too rigidly fixed. Unless the price followed the market, they felt that the farmers would lose out.

3.3 Agricultural associations

Under this system, agricultural associations, which are groups established within the village, allocate a plot of land for a rubber plantation to member farmers, in which the farmer makes a contract with the association, in planting, tending, and harvesting the produce in the plot specified in the contract. When it comes to the period of harvesting, the farmers will receive a portion of the harvest according to the number of seedlings which the farmer managed. A membership fee is taken from this income (McCartan, 2007).

3.4 Small-scale farming system

Small-scale rubber farming tends to be implemented by small-scale farmers which may invest their labour, their own land, and find their own markets. Alternatively, they may only invest their labour and land, and investors are sought to provide technology, capital, knowledge of cultivating and harvesting rubber, as well as to be brokers in accessing markets. This latter case is prevalent among Laotian ethnic highland groups who have relatives living across the borders of northern Laos in China. Those already farming rubber in China provide the Laotian farmers with inputs, investment capital, give planting advice and ensure links to the Chinese market. These farmers tend to grow rubber in a
relatively small area of around 3-25 ha. Agreements in joint investments between the farmers and the Chinese traders may be either verbal (based on trust amongst relatives) or written down and some of the written contracts include the signatures of the local Lao officials.

4. State policy, international institutions and the promotion of the rubber industry

The origins of the promotion of rubber as an economic crop in Laos could be said to have begun with the transformation of the economy, under the New Economic Mechanism in 1986, from a planned economy to a market economy. The National Growth and Poverty Eradication Strategy brought out in 2003 set the target for eliminating shifting cultivation by 2010 and halving the number of households below the poverty line by 2020. Rubber has been identified as one of the strategic cash crops for promoting Laotian farmers to change from a subsistence economy based on rotational cultivation towards a commercial economy based on intensive stabilised cultivation. This tied in with the policy to increase the forest area, and provide a stable permanent allocation of land to the farmers in the country under the Land and Forest Allocation Programme. Thus, the rubber crop was promoted as a means of increasing the forest area and replacing the dryland rice cropping in the highland areas.

The fact that rubber has become a commodity much in demand in this region has led a rush of international companies from various countries to Laos. The Lao government supported the expansion of investment through the policy of land concessions and leases for large-scale rubber plantations under a relatively low rent. The use of tax exemptions to create incentives for investments eg, in investment areas where there is no economic infrastructure, tax is exempted for a period of 7 years, after which, there is a tax of 10% of profits. In areas where there is some economic infrastructure, the exemption period is 5 years, after which there is a tax of 7.5 percent for 3 years, and then full tax at 15%. Where there is good economic infrastructure already in place, there is a tax exemption of a period of 2 years, and the tax will be collected at a rate of 10 percent for a period of 2 years, after which, the tax will be charged at 20%.

However, even though rubber has become the most important economic crop in Laos for around a decade already, and has been promoted as a replacement for the traditional agricultural systems, the government of Laos still does not have a clear systematic development approach for either agricultural production or marketing, nor the development of rubber related industries. The state has set up a research project on rubber in the National Agriculture and Forestry Research Institute (NAFRI), and has set up an experimental station to research rubber in Luang Nam Tha, the above idea has not yet been developed in practice today. As the Minister of Agriculture and Forestry of Laos observed in his report to the government in 2007:

"Problems and weaknesses have arisen as a result of the lack of research in this field and lack of policy and appropriate measures to promote and govern investments in rubber in Laos. In today’s climate, it seems we are running after the demands of the investors, instead of being promoters drawing in investment in the form of mutual benefit, fairly and appropriately shared. The reality is that there are problems related to the knowledge and capacity of the state sector in promoting the cultivation of rubber, that is support, monitoring, and investigation. It is still not possible to respond to the needs to guarantee the quality of rubber varieties and other techniques”.

International institutions, such as the Asian Development Bank (ADB), though not specifically targeting their recommendations to rubber, have supported the system of
large scale plantations as a solution for the reduction of poverty of the country. In the report “Supporting Plantation Development in Lao PDR” by URS Australia Pty Ltd prepared for the ADB in 2001, the authors describe the value of the plantation system as helping in the development of income diversification for poor rice farmers. They state the farmers can grow rice and raise livestock in the areas of the plantations in the first year and that this will distribute incomes to the various sectors in the local level. However, the recommendations on examination do not appear to borne out by the analysis of the facts in local areas of Laos. This study has found the expected economic benefits of large-scale rubber plantations do not arise at the local level. In fact there is a deepening of poverty in the community (see part III). The ADB has accepted, in its report on Governance Issues in Agriculture and Natural Resources (2006) that in future there will be problems arising from the land concession system, relating to the problems of chronic corruption, the intransparent process of allocating land, the lack of process for zoning and classification of land according to objective principles, and pressures exerted by the companies and investors on the process of implementation of the concession.

Concern about the lack of clear and systematic state policy for promoting rubber particularly among agricultural households, as well as the need to draft appropriate measures to control and guide the granting of the land concessions for large scale agricultural plantations, have become important issues raised by not only the international institutions but also academics in Laos. It has become a significant challenge for the Lao government at present.

5. Economics, ecology, and society: changes arising from rubber

It’s really not a surprise that in Laos today, rubber has become the primary economic crop of Laos. It has overtaken the other economic crops which came before it such as eucalyptus. What is interesting in the case of rubber when compared with other economic crops, is the starting point in the 1990s, which began with the small-scale farmers in the North of Laos, without help or support from either the state or the business sector²² (in Hat Yao), before the expansion of rubber into the other regions of the country. In this sense, the history of the beginning of rubber in Laos resembles that of Thailand, in that it developed from small-scale farms with the support of the cross-border merchants, Chinese traders from Malaysia and Singapore in the case of Thailand, and traders from China in the case of Laos.

However, the future expansion of rubber in Laos appears to be different from Thailand and other countries in South East Asia as it is tending towards the expansion of large scale plantations through foreign investment much more than through domestic capital. Large-scale land concessions were authorised for rubber plantations on a broad scale throughout the country, even before the Land Zoning, Classification and Land Use Plan has been completed throughout the country, and apparently without correlation with the Rubber Land Suitability Study conducted by NAFRI.

²² Several case studies of the Hat Yao village in Luang Nam Tha province indicate the importance of the success of the opening up of rubber by the farmers in the village of Hat Yao. This resulted from the conjunction of favourable conditions. That is, the opening of the trade barriers between China and Laos in 1992, which allowed the greater exchange of commodities, capital, knowledge and technology, the economic reforms in China, which led towards the expansion of small holder rubber farming and the boom in the price of rubber. These led to the farmers along the border of Laos becoming alert to opportunities and began to experiment with growing rubber following the example of farmers in Yunnan (Phouyyavong et al. 2004, Alton et al. 2005, Manivong and Cramb 2006). The farmers in Hat Yao were the very first group to experiment with growing rubber which experienced spectacular success generating income from 4 million kip per household in the first year to 8 million kip in the third year. This led to the widespread expansion of rubber cultivation in other villages. This stimulated the state’s interest in rubber as an economic crop for the country.
The economic, ecological and social changes which have arisen as a result of the expansion of rubber differs in the different regions of the country according to the nature of the activities, including how the land is used, who has rights to manage resources, what are the arrangements for profit-sharing, and how the produce is marketed.

The image of rubber in the North of Laos tends to be positive in generating income to small-scale farmers, as many research reports have observed (Sithong and Thumthong 2006). At present, there are still no research reports, or systematic impact assessments of the rubber sector as a whole, but only various case studies. These can be compared to indicate the economic, ecological and social impacts of the rubber system in Laos.

5.1 Centralisation of concession capital in the South of Laos and accumulation of capital by the rubber farmers in the North

The different ways that farmers have joined in the rubber agro-industry in different regions, has created unequal opportunities for economic development among agricultural households. In general, rubber cultivation has spread widely amongst the minority ethnicities, within the Lao Theung and Lao Soung groups, partly as a result of the policy of promoting the reduction of shifting cultivation, but also related to climatic and geographical conditions which are appropriate for the growth of rubber. However the ways in which farmers from the North and South entered the rubber agro-industry have opened entirely different opportunities for economic development. While farmers in the North can grow rubber as one part of their agricultural alternatives and have been able to accumulate greater capital through growing rubber, farmers in the South, have had their status changed to labourer in the rubber estates for a daily wage. These differences, are a direct result of the different models of rubber plantation between large-scale concessions and small scale farms.

The differing models for investment in rubber affect the economic results. In the large-scale land concessions in the North, Centre and the South, capital is generally centralised in the companies. This includes knowledge, technology, and management of the rubber plantation. Farmers participate only through their labour and gain only a labour wage. The contract farming model, and particularly in the small-scale plantations, has been found to involve a greater spread of investment, more hiring of labour, increased selling and purchasing of produce, than in the concession system. Income from selling rubber falls to the farmers directly, which has meant that the farmers can accumulate capital and build up a profit from the rubber plantations.

Important factors in the economic differences of the farmers in the rubber plantations models, relate to the ability to access the land, and markets, the loss of land rights among the farmers in the south to the rubber companies. Land is perhaps the most important factor in the development of rural livelihoods, some farmers lost all their land to the company. Although landless workers may receive a daily wage, this is insufficient to accumulate capital or to transform capital into generating other kinds of income, since the wages they receive are generally just enough to cover food and daily household expenses. This is the opposite of farmers in the Northern Region, who have been able to plan their investments in agriculture themselves from planting to harvesting. Farmers able to accumulate more capital and benefits from the investments than others tend to be those who start off with more land and capital. Where farmers cannot access the market themselves, and do not have knowledge of rubber cultivation, both in terms of varieties, and comprehensive plantation management, they still have to depend on traders from China. However, in comparison, the farmers in the North, who still have land of their own, have been able to build a more stable income from the rubber industry than
the farmers in the south, where income from labour is mostly irregular and is insufficient for their subsistence.

Income estimates of farmers in Hat Yao in 2006, show that plantations yielded on average 1,360 kg of latex per hectare, which generated an income of around $880 per ha (Ketphanh, Mounlamai and Siksidao)\(^{23}\). If a household holds 3 ha, this makes a significant income per year (though still lower than a smallholder rubber plantation owner in Thailand, where sales of rubber sheets accounted for over 80,000 baht or around $2285 per month, in 2006 when rubber prices were at their highest). Meanwhile full time labourers in the large rubber estates in the south, earn an average wage of 400,000-700,000 kip per month ($40-70), though work and wages drop off in the years when the rubber is still immature, and many workers are unemployed until work starts up again, when the trees begin to be tapped. It is not yet known what the average yearly income for a rubber tapper will be in the plantations of the South.

On comparison, economic insecurity of the farmers in the rubber industry also differs. For farmers who change status to become hired workers in the rubber estates, the loss of land for farming and other sources of food has left most of them with only one way to sustain themselves, that is with the wages from working in the estates. These however, are uncertain, and depend on the amount of work in the rubber plantation which is not regular.

Economic insecurity of farmers who own their own rubber plantations arises from their lack of knowledge of these new economic crops. Without this, they cannot manage the plantation effectively nor access the market by themselves. This affords them little bargaining power when selling latex to the traders and middle men. However, they may have alternatives in the choice of traders who give satisfactory prices.

Farmers who grow rubber on the basis of contract farming, have a lower bargaining power. They tend to depend on conditions fixed by the company which has invested the capital and technology. However, while their negotiating power is low, farmers still hold on to their land rights, they tend to have a higher and more stable economic income from the rubber than the labourers in the rubber estates.

5.2 Local ecological degradation from monocrop rubber plantations

The recent growth of the rubber plantations, whether they be large scale plantations or smallholdings, follow the same monoculture model, that is planted only with the rubber tree. There are no local species of any sort in the plantation. However, the rubber plantations under the concession model cause more serious changes to the ecology since they span a much more extensive area than the small plantations.

Rubber and other tree plantations have been proposed as an alternative for ecological recovery in Laos’ Forestry Sector policy to 2020 (FS2020), however this appears to misunderstand the agro-ecology of monocultures, and also overlooks the importance of existing local ecologies. In the large-scale rubber concession areas, the process of transforming the area into a rubber plantation, adapts land which used to be a patchwork of small farms - particularly upland plots of rural households – forests (pakhoke), grassland savannas, into an extensive contiguous rubber plantation.

This process creates at least three significant problems. The first issue is the change to areas which have high ecological diversity, including a great variety of species, towards an area which has only one species, rubber. The destruction of ecological

\(^{23}\) See “Rubber Planting Status in Lao PDR”, Sounthone Ketphanh, Khamphone Mounlamai and Phoui Siksidao, NAFRI
diversity, not only entails the loss of a great many natural varieties, but also generates natural risks from the transformation of the ecosystem into a system which has only one crop.

The second issue is destruction of the primary local economic base, whether it be in the form of food crops, or economic crops, which the community previously harvested and relied on both as a source of food and income. This effectively increases the vulnerability in livelihoods both at the household and the community level.

The third issue is that large-scale monoculture farms tend to need to reduce the plant and animal diversity to the minimum, using pest-control chemicals in large quantities and over a large area, which can become poisonous at dangerous levels for the community, particularly in areas which are waterlogged, or low lying areas.

Clearly, the ecological problems are more serious in the concession area than the area of the small scale plantations, because of the need to seek large areas of contiguous plots. Large plantations inevitably tend to encroach into the areas of fertile forest (such as in the case of the Nam Ha reserve forest in the north of Laos) such as the pa khoke forests typically used by local communities. Small-scale rubber farmers that involve opening new areas tends to be stimulated by high price of rubber in the market. While the policy to devise land zones is still not enforced successfully throughout the country, the inappropriate use of the land, which has been pervasively allowed, has transformed the land use. This leaves the ecology under pressure of market forces.

5.3 Impact on rural society and food security

The arrival of the rubber industry in Laos has been relatively quick. In just a few decades, it has brought significant social change, particularly for rural society. Rubber farms established in different forms have created different impacts for the farmers. They have transformed the conditions of subsistence for upland farmers, who have become entrepreneurial farmers in the Northern region, and landless proletariat in the case of the Southern region. The rubber farming households in the North have been adjusting their economic status upwards, through self-reliance, towards a way of life which is increasingly linked to the market system. While farmers who have become landless workers in the South have, on the contrary, have received few economic benefits. Whether they are under the concession system or a contract farming system, rubber farmers have seen a change in the use of the land, from before when they used to use the land for the production of food crops, to the current production of economic crops to supply the market. The land which is used to grow rubber, is mostly land which had previously been used in the production of food.

Against the global food crisis affecting several countries at this moment, committing a large area of land to grow economic crops, creates at least two economic risks for agricultural society. Firstly, a risk arises from the ever fluctuating price of rubber, which over several decades has been subject to bubbles and busts. Secondly, a risk arises from the lack of readiness to develop and firmly establish the rubber industry in Laos, which has restricted the ability of farmers to improve production quality and rubber processing. It has not yet been possible to generate a domestic market for rubber to accommodate the expansion of rubber.

Rapid expansion of rubber cultivation in Laos is risky. In this sense, it is important to be very cautious in promoting rubber to reduce as far as possible the long term impacts for rural society. In the context of a global food market crisis, food crops are increasingly being seen as having a significant economic value. It will no longer be possible to see food crops as worthless in an economic sense in the way that we have seen in the past. The rural society which used to be self-reliant in terms of food, using food crops as a source of income and exchange in the local market, is becoming an
agricultural society that is fully reliant on economic crops. The state, the relevant government agencies and the farmers themselves, are still not ready for this change either in terms of knowledge, technology, or institutional factors. This creates serious vulnerabilities to social impacts for rural society as a whole.

6. Lack of readiness of the Laos rubber industry

6.1 Science and technology

Compared with other countries engaged in the rubber industry, Laos stepped in latest and was the least ready. Countries which had begun planting rubber for a long time already such as Thailand, China, Vietnam, have developed and advanced their technologies. In China and Vietnam, the state has supported experimentation to develop improved varieties of rubber in state experimental stations as well as subsidising technologies for small holder farmers. In Thailand, for example, Rubber Research Stations have been set up to research, experiment and propagate varieties in almost every province in the South and the East. Legislation has been passed to assist rubber holders with capital to grow improved varieties, such as the Rubber Welfare Fund Act of 1960. Examples of technical support and the establishment of various institutions related to rubber sector development by the Thai government to develop rubber to become a primary industry in Thailand are described in Table 1.3.

Table 1.3: Thai Government support related to Rubber Sector Development

<table>
<thead>
<tr>
<th>Production</th>
<th>Markets and Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960 Entry into force of the Act establishing the Rubber Welfare Fund</td>
<td>1967 Establishment of the Natural Rubber Producers Association</td>
</tr>
<tr>
<td>1961 Establishment of the Office of Rubber Replanting Aid Fund (RRAF)</td>
<td>1980 Establishment of an international trading organisation the International Natural Rubber Organisation</td>
</tr>
<tr>
<td>1965 Establishment of the Rubber Research Station at Hat Yai</td>
<td>1990 Establishment of Thai Rubber Farmers Association</td>
</tr>
<tr>
<td>1997 Strategic Plan for “Field to Factory” development of rubber (1999-2003) and rubber plantation zoning</td>
<td>1991 Establishment of the central rubber market (under the Rubber Research Institute) and local rubber auction (under the RRAF)</td>
</tr>
<tr>
<td></td>
<td>1995 Establishment of the Concentrated Latex Producers and Exporters Club (now the Concentrated Latex Producers and Exporters Association).</td>
</tr>
<tr>
<td></td>
<td>1996 Establishment of the Community</td>
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</tbody>
</table>
Cooperatives of Thailand and Rubber Wood Association of Thailand

1999 Thailand pulls out of International Natural Rubber Organisation

2002 Establishment of International Tripartite Rubber Organisation with Malaysia and Indonesia

As the Lao government still does not have in place a policy, standards or a law for the support of investment in rubber, dedicated technology and agricultural science, at present Lao’s agriculture must rely significantly on external capital and technology from transnational investors.

6.2 Farmers and Negotiating Power

Farmers in Laos have not received adequate support from the state, farmers who grow rubber lack knowledge and information needed for rubber, both in terms of production, markets, and processing of rubber products.

The sale of latex alone means that the channels for generating income from rubber of the Lao farmers are limited. A variety of rubber products that could supply various industries, such as

- rubber sheets: to produce tyres; tubes etc
- rubber cup lumps, to produce shoes, rubber bands, laminate flooring, boxes, electrical equipment and household goods,
- concentrated rubber latex, for producing foam mattresses, rubber gloves, foam products, balloons, toys, face masks,
- rubber wood, for processed wood, construction materials, flooring, picture frames etc,
- rubber bark, used in producing biological fertilisers,
- roots, for producing fibreboard.

The lack of development of the local industry means that all the markets for buying rubber from Laos lie outside the country. Lack of sufficient production capital and poor access to markets means that the farmers and rubber producers in Laos have very weak bargaining power, when compared with farmers in other countries. Without strong local farmers organisations rubber markets will remain under the power of the buyers outside the country.

6.3 Coherent industrial development

Laos does not yet have a coherent rubber industrial development model, whether it is for producing goods from raw rubber sheets or concentrated latex (eg a rubber tyre industry, extruded rubber such as for making rubber gloves, and condoms) or for goods from rubber wood (eg furniture from rubber wood). These types of industries provide significant sums of income in rubber producing countries. Economic growth thus remains in agriculture only and links are not made to domestic industry.
6.4 Control mechanisms determining prices and quality

Without dedicated research for the development of rubber seedlings, and without
devolution of production and marketing, producers end up selling individually. There is
no control mechanism to help in the selection of rubber varieties or to oversee the sale of
latex to ensure quality standards are maintained. The rubber market in this context is a
buyer’s market in which the farmer producers and sellers are not able determine either
quality or price.
Part II
Land Concessions in Lao PDR

The first grant of a land concession in Lao PDR was issued at the beginning of the 1990s. This came about as a result of the economic policy reforms, which sought to bring land into the economic development of the country as part of the approach to draw in investors from foreign countries. Investment by foreign companies in Laos has increased rapidly and concessions have been granted over huge areas particularly for commercial tree plantations. Extensive areas of land have been granted in concession to foreign companies from the central to the southern areas of Laos.

In this part of the report, we seek to understand the context of land concessions in Laos, including the development of the meaning of “land”, the history of the land concessions, from the first beginnings to the present, rights and powers in the management and use of land, and the process of granting land concessions related to the mechanisms and role of state units at various levels. We will examine the function of the land concessions, how they came about and how they have developed. In the context of the management and use of forest and land resources in the midst of the transition process of economic development of the country.

1. Changes in the meaning of “land” in Laos

“Land of the Lao People’s Democratic Republic is the land area which lies within the territory of Lao PDR and includes land surface, underground land, mountains, isles as well as submerged land, water space and air space. Land of Lao PDR is the main national resource which is the place of living and working of the Lao citizens, and is the important means of production, socio-economic development, national defence and security.” Land Law 2003

After the change of governance in December 1975, the government issued the first regulation related to land and forest in 1979 with the objective of protection and preservation of the forest. This Regulation defined land and forest as “land and forest land in the entirety of the territory of the Lao People’s Democratic Republic are the property of the masses, no one has the right to infringe or abuse these, the government has the responsibility for planning and classifying the land use zones for the land and forest land” (section 1, Summarized Decrees, Resolutions and Various Orders related to Forestry, book 1, p.56, own translation).

In 1989, a major National Forest Meeting (28 May 1989) resolved to be the starting point of policy and legal development related to the forest resources and forest land of Laos. This meeting was held on the initiative of the then Prime Minister, Mr Kaysone Phomvihane, to set the vision, direction, and strategy for the management of forest resources of the Lao nation in the new era. The Cabinet Decree on the Management of Forest and Forest Land in 1989 certified the change in objectives for the use of the forest and forest land so that it can be used for the development of the economy, including building roads, hydropower dams, mines, irrigation.

This Cabinet Decree defined “forest and forest land in the territory” as “the property of the national community, of which the state is the representative and carries out its

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1 Determination of the Assembly of Ministers on the protection of the Forest, 74, on 17 July 1979, (Forestry Strategy of Lao PDR 2020, 2005: 3).
2 Decree of the Assembly of Ministers on the management and use of the forest and forest land 117 on 5 October1989
duty of centralised management, and is united throughout the country. The state allocates rights and responsibility to every single member of the population of Laos, has a duty to protect and preserve, integrally regenerate, plant and expand, develop the forest and forest land according to the regulations and laws of the state and guarantees that the forest will increase”.

A new Land Decree was issued in 1992, which defined land as “the property of the national community, in which the state of Lao PDR is the representative, and is the central manager, and is united throughout the country”. Although it referred to land alone, there still appears to be an overlap in definitions of land and forest. The Ministry of Agriculture and Forestry is specified as the management authority for the use of “land in the agricultural and forest zone” which implies that the these land resources were not yet clearly distinguished.

Separate definitions of forest and forest land and the more detailed classification of types of forest appears in the Prime Ministerial Decree on the Management and Use of the Forest and Forest land in 1993 as follows:

“forests are living natural resources, which includes certain plants and trees which occur in nature and are needed intrinsically for the preservation of the environment, water sources, earth, wild animals, and the livelihoods of the ethnic peoples”

“forest land is all areas of land which are in the management of the Minister of Agriculture and Forestry, whether they are forested or not, but not land which has been used or has been designated for permanent agriculture”.

This Decree classified the forest into 5 types - protected forest, reserved forest, production forest, regeneration forest, and degraded forest land (see table 2.1). Each definition of the meaning of forest reflects three approaches towards management of forest and forest land. 1) to allow for conservation: protected forest, reserved forest. 2) to respond to economic development: production forest and regeneration forest and 3) to use for agricultural production and forest livestock rearing: degraded forest land.

Various decrees related to the management of forest and forest land were replaced by the Forest Law in 1996, which defined the forest and forest land separately into three meanings

1. Forest “is the rich natural resource of the nation, which includes plants, variety of trees occurring in nature or planted and the existence of the forest is essential, for the preservation of the environment and human life”.
2. Forest resources “are various resources, living and dead, including the soil, plants, trees, water, wild animals and aquatic species and others which live in the area of the forest land”
3. Forest land “is the area, whether it has forest or not, which the state has determined shall be forest land”.

Each of these definitions are preserved in the amended Forest Law of 2005.

The new elements of this definition of “forest” in this law are the inclusion of planted

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3 Prime Ministerial Decree on the Management and Use of the Forest and Forest Land 169/PMO 1993
trees as forest. This is the result of the endorsement of forest management under the Tropical Forest Action Plan project in 1995, which drew up a national forestry plan. Under the support of the international aid agencies such as the Asian Development Bank and the World Bank, amongst others, this resulted in promoting plantations one of the government’s main avenues for bringing in both domestic and foreign investment.

Table 2.1 Classifications and definitions of different types of forest.

<table>
<thead>
<tr>
<th>Prime Ministerial Decree 1993</th>
<th>Forest Law 1996</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. protection forest</strong> : forest land which has been zoned for the protection of water sources, prevention of soil erosion, sloping land, strategic areas for national defence, protection against natural fires, protection of the environment etc</td>
<td><strong>1. protection forest</strong> : forest and forest land which has been zoned for the protection of water sources, prevention of erosion, strategic areas for national defence, protection against natural disasters, protection of the environment etc</td>
</tr>
<tr>
<td><strong>2. forest reserve</strong> : forest land which has been allocated for the protection and care for living things, nature etc. which have special environmental, education, and cultural value</td>
<td><strong>2. forest reserve</strong> : forest and forest land which has been zoned for the purposes of the protection of wild animals, plants, nature and various things of value in terms of history, culture, tourism, environment, and scientific research and experiments</td>
</tr>
<tr>
<td><strong>3. production forest</strong> : forest land whether it is healthy or not, which has been allocated to respond to the needs of national economic development and the livelihoods of the people related to forest products that are sustainable and do not have a serious impact on the environment.</td>
<td><strong>3. production forest</strong> : forest and forest land which was zoned to respond to the needs of the economic and social development of the country and livelihood of the ethnic peoples related to wood and forest products that are sustainable and do not have a serious impact on the environment.</td>
</tr>
<tr>
<td><strong>4. regeneration forest</strong> : forest lands which are not healthy, which must be regenerated to become production forest or other types of forest.</td>
<td><strong>4. regeneration forest</strong> : forests which are in the condition known as young fallow (palao) which has been set aside for regeneration, to nurture it so as to become old palao and then healthy natural forest.</td>
</tr>
<tr>
<td><strong>5. degraded forest land</strong> : forest land in which the forest has been severely damaged or is land which does not have forest or land that is cleared, or leveled, which was set aside for changes in use or which has been given to the people to use for permanent agriculture, forest, livestock production or other purposes</td>
<td><strong>5. degraded forest</strong> : forest that has been severely damaged e.g. areas where there is no forest or a land area that has been cleared or leveled, which has been set aside for reforestation or given to individuals and (state) units to use in planting trees, permanent agriculture, forest production, livestock rearing, or is to be used for other targets according to the national economic development plan.</td>
</tr>
</tbody>
</table>

The land and forest allocation policy was developed in 1996 to manage and develop the forest, land and water bodies and to stop the people from cutting down trees to carry out rotational swidden farming and to turn instead towards a stabilized agricultural system.

The process of allocation of land and forest to families, villages, and the community, on the basis of a participatory village land use plan, had the aim of promoting
commercial production. Any area of land which was not appropriate for agriculture, could be planted with trees by the families or the community as a whole, but it was strictly forbidden to grow trees on agricultural land. Land already under stabilized production could be registered by villagers immediately. Land with trees, should be designated into three types, watershed forests, reserved forests, and use forests. This was applied mostly to land which has not yet been used for stabilized production.

Under the policy, five types of land were classified, that is:
1) land which is used for stabilized production already, eg paddy land, orchard land, and construction land,
2) land based production which is not stabilized eg hai land, palao, unforest ed land
3) land which is left over after the classification of land for agricultural production, on which families or the private sector can invest to grow commercial trees
4) land which has been set aside as reserve land of the village
5) forest land, this is classified into three types: watershed forest, reserve forest of the village (sacred forest, burial forest, pa mahesak) and use forest.

After the allocation of land, people are given rights to manage and benefit from the land and forest. If they use the land in a stable way continuously for three years, they are entitled to request a land title (bai ta din)⁴. However due to the budgetary and staff limitations, neither the monitoring and investigation of the use of land nor the issuing of the land titles have been completed.

The first Land Law in 1997 was the first instrument to set out clearly the classification of land throughout the country. The Law classified the land in two ways. The first related to geographical and economic regions and the second to classification of land sectors.

1. zoning: the plains, plateaux, mountain regions each comprising of township zone; rural zones; specific economic zones. When the Law was amended in 2003, a new classification of “special economic zone” was created.


The amendment to the Land Law in 2003, is the version used currently. This defines land keeping the same substance as before, that is, land is the property of the state and the state has the central authority in the management of land throughout the country. The government assigned the National Land Management Authority to be the central agency responsible for land management. The Decree on the Implementation of the Land Law which was issued in 2005 defined the granting of lease and land concession for the first time as follows:

“a land lease” is the granting of a land lease by the state, legal persons or individuals to organisation or other individuals, through a legally binding

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⁴ Recommendations on the Allocation of Land and Forest for Management and Use, 822/MAF, on 2/08/1996
“a land concession” means agreement between state and the party asking for a concession, which the state gives an area of land to a concessionary to use to enter a target which the state authorises. The land concessionary must pay a concession fee and pay state royalties.

In sum, counting since the definition of forest and forest land, as specified in the various legal documents, since the first Decree in 1979 to the present, the government has clung unchangingly to the principle of the centralised state management of land, under which the people of Laos have use rights as granted by the state. This has always formed the central core of the definition of land. More recent changes to the definition of land relate more and more clearly to the use of land to respond to the economic development criteria of the country.

2. Development of rights and powers to manage and develop land

2.1 New regime 1975 - 1990

Since 80% of the land area of Laos is mountainous, most of the people make their livelihood from forest swidden farming based on a rotational (hai) rice cropping system and collecting forest products according to their customs and tradition. After the civil war, and change in governance in 1975, the dispersed people came back to resettle and resume their cultivation practices of hai and paddy farming again. People still followed their own customs and traditions in using the forest and land as they had done since the time of their ancestors.

The National Forest Meeting in 1989 raised the importance of the forest for the livelihood of the Lao people, the economic and social development of the country and the warning signals sounding at the destruction of the forest. A resolution was agreed on the strategic direction of the forest management highlighting the importance of conservation of biological forest resources, the efficient development of the forest, and the regeneration of forest resources. These aims were coupled to the needs for food, commercial production, the creation of a new production system and the stabilised settlement of the people.

Local authorities were then given the roles of putting this resolution into practice. They clamped down on cutting down trees, setting fires in forest areas (a feature of traditional swidden practices) and oversaw the experiment with new sedentarised livelihoods of the Land and Forest Allocation programme. The Ministry of Agriculture and Forestry was appointed to disseminate the forestry strategy and undertake research to draft new laws on forestry and the environment.

The Cabinet Decree on the Management and Use of Forests and Forest Land in 1989 specified the allocation of rights to use forest and forest land, including individual rights, that is rights given to families, and common rights given to the village or cooperative (sections 3-5). Farming households were given two to five hectares of forest and forest land each, with rights to use, to develop, to bequeath or transfer to other people according to the regulations of the state. Around 100-500 ha was allocated to each village or cooperative to conserve, regenerate and plant trees on condition that the forest be developed such as to increase the number of trees. It was strictly forbidden to sell forest land which has been allocated by the state. However it was possible for the state to change the objective for the use of the forest and forest land to serve the economic development of the country with the permission of the Ministry of Agriculture and Forestry.
The acquisition of rights by the people either as families or community groups, to use the forest are derived from the state alone. It was possible for an individual to transfer and pass on the land as inheritance, but it was forbidden to sell. The state had rights to transfer or reclaim land from individuals, for example, if an individual had simply reserved the land without having cleared it or begun production of any sort. There was no provision for recompense or alternative allocation.

2.2 Liberalisation, land as capital (1991 – present)

The change in economic development policy of Laos at the end of the 1980s to the beginning of the 1990s brought a subsequent change in direction for the management and use of the nation’s land. The Lao government began to reform its economy since 1986 through the declaration of the “New Economic Mechanism” in its second five year economic plan (1986-1990). The State and Party resolved to follow a new policy of “turning from a natural economy to a commodity economy” in 1988. The main principles in this policy were to relax the grip previously held by the centre and make greater reliance on the market mechanism in economic development.

Central government devolved powers to the provincial level allowing provinces freedom in administration and economic development of their own areas. A new law, the Code on Foreign Investment, was issued in 1988 allowing foreigners bringing in currency to invest in joint ventures from a minimum stake of 30% up to a maximum of 100%.

The third economic development plan (1991-1995) emphasised free trade, economic reforms and further liberalizing laws while the fourth economic development plan (1996-2000) emphasized support for trade and foreign investment. This led to two changes in the law on the promotion of investment in 1994 and 2004 to respond to the economic development approach through the national economic development plan (Surichay Sirikrai, 2005:170,176-178).

Individual property rights are an important component of the system of liberal economics which had a key influence on the Land Decree in 1992. The Decree allowed authorized individuals to transfer and lease of land, use it as collateral for loans, or as a share in an investment project, and even to buy and sell, and change land use too, which had also been prevented originally.

“the state may endorse the rights of management and development of land of the Lao nation and issue authorization papers to assign, bequeath, transfer, give, or lease, for land to be used as collateral, as a shareholding, the purchase and sale of rights of management and use of developed land, as well as change the target use of other types of land as according to the regulations”

Another important change brought about by the Land Decree is the granting of rights to lease or concede land to resident aliens and foreigners (sections 2 to 4). Concerning land related to investment, the Decree provides that state shall be the party to decide (section 13). In all, five ministries were given powers and duties related to different types of land: the Finance Ministry, which had duty to issue regulations and collect land tax; the Ministry of Agriculture and Forestry, for...

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5 Sections 4, 22, State Property Law 1990
6 Prime Ministerial Decree 03/PM on Land and Forest Allocation Policy
agriculture and forestry land, and natural water bodies; the Ministry of Industry, for land related to mining, industry and energy sources; the Ministry for Public Relations, Culture and Information, for land in a designated archaeological zone; and the Ministry for Telecommunications, Transport, and the Post, for construction land and urban planning. Of these, the Ministry of Agriculture and Forestry has rights and powers to manage natural resources which are the basis for livelihoods of the majority of the Lao people, that is forests, land and water.

The Decree did not specify which types of land foreigners are allowed to gain under a lease or concession. The Prime Ministerial Decree on Management and Use of the Forest and Forest Land in the following year, however, stipulated that the land for lease or concession must be “degraded forest” which was interpreted as “forest land where the forest is severely damaged or unforested land or cleared or levelled land, where development has been permitted or which has been given to the people to use in stable agriculture, forestry and livestock production or for other objectives” (section 11, Various summarised Decrees, Resolutions and Orders related to Forestry, Book 1, p.33).

The PM Decree of 1993 certified rights to individuals, common institutions or legal persons for the possession and use of trees, natural forest and forest land, on prior authorization from the Ministry of Agriculture and Forestry. This Decree also acknowledged rights established by tradition of the villagers in the use of the forest and forest land. “The state recognizes rights to use forest, forest land and forest products according to traditions of the villagers eg collecting firewood, collecting certain species of forest products, hunting animals in forest land and elsewhere, which have been set down in detail in the village level forest regulations” (section 4).

According to this Decree, people have rights to cultivate or graze livestock on the land which has been defined as “degraded forest land”. The Ministry of Agriculture and Forestry, had the duty to define and fix the boundaries and size of this area, and set out the methods for declaration, monitoring and reclassifying forest and forest land throughout the country.

Three types of contract were established under which people could acquire rights to manage and use forest land. The Decree defined these different types of contract (see table 2.2 and figure 2.1.). Even in collective and family contracts, the rights of the state are clearly acknowledged. In the third type of contract, individual private rights are given to Laotians and foreigners alike to use the forest land for commercial plantations.

<table>
<thead>
<tr>
<th>Table 2.2. Purpose of contracts for forest management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collective forest management contract</td>
</tr>
<tr>
<td>To extend rights to the people in the participatory management and use of the forest and forest land for their livelihoods.</td>
</tr>
</tbody>
</table>
The Land Decree 1992, and the PM Decree on the Management and Use of Forest and Forest Land 1993, indicated the beginnings of the state’s transformation of land into capital as a means to draw in foreign investment. The area of degraded forest and *palao* fallows were clearly identified as the type of land from which the state must generate the greatest benefit. Thus rights were to be granted to the people for agriculture, livestock and tree production and land leases and concession rights to plant trees were to be granted to foreign businessmen.
The powers and duties of the state under the Forest Law are described in fig 2.2. This system of management changed however in 2003 when central rights and powers in the management of land were taken from the Ministry of Agriculture and Forestry and transferred to the National Land Management Authority (NLMA), newly established under the Land Law of 2003. Approvals of lease and concession of land now must be coordinated through the Authority. The Ministry of Finance no longer held responsibility for titling and signing leases over state assets. The various other powers in the management of land held by other ministries, however, were still kept as before (see fig 2.3).
The government assigned rights and powers to the National Land Management Authority in the management of land all over the country. It has the duty to draft policy, laws, decrees etc, surveying, allocating land, land use planning, granting of leases or land concessions, resolution of conflicts, setting up an information and news system related to land etc in coordination with relevant government bodies (section 10). The NLMA comprises the Centre for Research and Information on Land and Natural Resources, the Department of Land Use, Planning and Development, the Department of Land Administration, the Department for Policy and Inspection, and an Secretariat Office, (see figure 2.4).

Although the Land Law of 2003 specified the establishment of a new land management authority, the NLMA was only able to be established at the end of 2006. In the recent past, the granting of leases or land concessions did not go according to law, and the Authority has not yet authorized any leases or concessions. The Authority is in the process of drafting a decree on leases or land concessions and constructions as a guiding framework for the process of granting land concessions.
2.3 Land use rights of villages and the people

The rights of the people were underpinned by law for the first time, when the state issued a Decree on the Protection of the Forest in 1979. People were allowed rights to use forest resources and forest land under the control and direction of the state. Local authorities determined the area of *hai* land. It was forbidden to open up swidden fields (*hai*) in the watershed areas, or in sloping lands. The cutting of wood to build houses or hunt wild animals, had to be authorised by the Forestry Division at the district level and upwards. Thus people had rights of access and use but did not have rights to manage the forest and forest land. Even if this decree is no longer quoted in practice it is a basis for acknowledging the rights of the people to use forest and forest land.

At the policy level, the government recognized the importance of rights to use land for the people and the village, as evident in the National Forestry Meeting in 1989 and various important decrees related to the management and use of land and forest land described above.

The policy of allocating land and forest to the village and the community really began in earnest when the government issued two important decrees. These were the Prime Ministerial Order on continuation and extension of the land and forest allocation (03/PMO on 25/06/1996) and the Recommendations of the Ministry of Agriculture and Forestry related to land and forest allocation to manage and use of forest and forest land in 1996 (822/MAF on 2/08/1996). The Recommendations specify the objectives, principles and types of land which will be granted under the Land and Forest Allocation (LFA) programme.

There are two main components of the programme. The first is the granting of agricultural land and degraded forest land to families for planting crops and trees or livestock rearing. The state grants temporary land use certificates, for a period of three years. If the families or the people granted the land, abide by the specifications in the certificate, they have the right to receive a land title. The second component
relates to the granting of forest to the village. The type of forest that may be used by
the village forest are use forests (chomchai) protected forests (pongkane) regeneration forests (fuenfu) and other types of forest. The village must deliberate
and agree to a plan for the management, care and use of each type of forest in the
village.

The Government began to implement the Land and Forest Allocation programme in
1994 through pilot projects in Xayabouli and Bokeo provinces\(^7\), and was extended
throughout the country since 1996\(^8\). Over the period 1995-2004 the programme
succeeded in allocating land and forest to a total of 7,130 villages throughout the
country (see Figure 2.5).

**Figure 2.5 Land and Forest Allocation Programme, villages reached 1995-2004**

![Figure 2.5 Land and Forest Allocation Programme, villages reached 1995-2004](image)

Source: National Land Management Authority

According to the Land Law, each labour unit (individual of working age) in the family
can be given up to one hectare of agricultural land to grow rice, and raise livestock.
A maximum of three hectares can be allocated for each labour unit per family to grow
industrial crops, annual crops, or fruit, and a maximum of 15 hectares of land to each
labour unit per family of cleared or grassland (pa ya) to grow fodder for raising
livestock. One labour unit can be allocated many types of agricultural land. Anyone
needing to use additional agricultural land can request a lease or concession from
the state. In a separate section of the land law it is also stipulated that in the case of
forest land, that is forest which is cleared or degraded, each labour unit can be
allocated a maximum of 3 ha.\(^9\)

District and municipal authorities (together with the village authorities in the case of
granting rights to develop forest land) must consider and may agree to the granting of
rights to individuals and organisations to develop agricultural land, by issuing a land
certificate. This certificate is valid for 3 years. If during this period, the land has
been used in conformity with purpose and regulations and there are no objections,
then land users have the right to ask the land management authorities of the
province or city for a land title.\(^10\)

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\(^7\) Prime Minister Decree on the classification of land and forest for tree planting and forest
conservation 186/PMO on 12/10/1994

\(^8\) Recommendations of the Ministry for Agriculture and Forestry on the Allocation of Land and
Forest for Management and Use, 822/MAF, on 2/08/1996

\(^9\) Land Law 2003, sections 17, 18, and 21

\(^10\) Land Law 2003, section 22
There are six types of property rights related to the development of land and forest of the Lao people as follows: (1) rights to use (2) rights of usufruct including the right to acquire the land as collateral (3) rights to transfer or grant a lease (4) rights to preservation (5) rights to inherit and (6) rights to receive compensation where land has been requisitioned. Village organisations to have rights to manage, use and preserve land. The different official documents for management and use of land are presented in Table 2.3.

### Table 2.3 Different land certificates and rights to use land

<table>
<thead>
<tr>
<th>Documents certifying property and land use</th>
<th>Term of use</th>
<th>Rights held</th>
<th>Type of land</th>
<th>Land user</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Land title</strong> issued by the provincial or municipal land management authorities</td>
<td>Permanent land use right</td>
<td>1. rights to protect 2. rights to use 3. rights to benefits 4. rights to transfer 5. rights to inherit 6. rights to compensation (This can be used as collateral)</td>
<td>- construction land  - permanent agriculture land, paddy fields, orchards</td>
<td>Villagers</td>
</tr>
<tr>
<td><strong>2. Land map sheet</strong> registered by the land management authorities of the province/city or of the district / municipality</td>
<td>Permanent land use right</td>
<td>1. rights to protect 2. rights to use 3. rights to benefits 4. rights to transfer 5. rights to inherit 6. rights to compensation (This can be used as collateral)</td>
<td>- construction land  - permanent agricultural land, paddy fields, orchards</td>
<td>Villagers</td>
</tr>
<tr>
<td><strong>3. Temporary land use certificate</strong></td>
<td>Land use deed for 3 years and then can apply</td>
<td>1. rights to protect 2. rights to use 3. rights to benefits</td>
<td>- temporary production land: hai swiddens</td>
<td>Villagers</td>
</tr>
</tbody>
</table>

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11 Constitution, section 17; Land Law sections 5,53,70,71; Forest Law, sections 49,52,63; MAF Agreement 0054/MAF 1996 section 9 quoted in the Village Rights and responsibilities to manage and use land and forest resources, Department of Forestry 2007

12 Forest Law, sections 49,51,52,53,54; Land Law, sections 13,18,22,44,48,49,71,72; PM Decree 192/PMO, sections 1,3,5,6; MAF Regulations 0377/MAF.96, section 5; Recommendations 0822/MAF.96 section 3 quoted in the Village Rights and responsibilities to manage and use land and forest resources, Department of Forestry 2007

13 A land title (bai ta din) is the only document which is considered as the main evidence for permanent land use rights. It is filled out based on information in the land register in one copy only and is handed over to the land owner who shall keep it as long-term evidence until there is a change according to the conditions prescribed in the laws. (Land law, section 49).

14 Land map sheet (bai phen thidin) is a document to be annexed to the application for land registration. The owner of land map sheet which has been properly registered at the Provincial/City or District/municipal land management authorities can use this as if it was a land title however it must have been inspected and validated by land officials before it can be used (Decree 101/PMO, section 13).

15 A temporary land use certificate (bai yangyuen thidin) is an official document that certifies the rights on agricultural land or forestry land for temporary use which is issued by the district,
<table>
<thead>
<tr>
<th>Certificate</th>
<th>Permanent Land Use Right</th>
<th>Villagers</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Certificate of original acquisition of land 16</td>
<td>- explains the historical evolution of the preservation and use of land</td>
<td>- temporary production land: hai swiddens</td>
</tr>
<tr>
<td>issued by the Agriculture and Forestry Sector</td>
<td></td>
<td>- degraded forest land which is reserved for forest regeneration and planting trees</td>
</tr>
<tr>
<td>5. Land development certificate 17</td>
<td>- used to certify that the land parcel in question is already developed</td>
<td>- temporary production land: hai swiddens</td>
</tr>
<tr>
<td>issued by the provincial Agriculture and Forestry Sector</td>
<td>- required for application for land registration</td>
<td>- degraded forest land which is reserved for forest regeneration and planting trees</td>
</tr>
<tr>
<td>6. Village land and forest management agreement 18</td>
<td>Considered on a case by case basis</td>
<td>- forest land zone established in the village’s administrative area</td>
</tr>
<tr>
<td>issued by the district authorities through the land use planning and land allocation process</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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16 A certificate of original acquisition of land (bai yangyuen khaomulthidin) is a certificate related to the acquisition of land to indicate the history of conservation and use (Decree 101/PMO, section 13).
17 A land development certificate (bai yangyuen kanephattanathidin) is an official document which the Agriculture and Forestry Division issues to certify a parcel of land has been developed. This certificate is one of the set of documents needed for the application to register land according to sections 18 and 43 of the Land Law.
18 A village land and forest management agreement is a document related to the management of land and forest of the village which is signed by the village and the District Office for Agriculture and Forestry. The contents include rights and responsibilities of each party in carrying out activities, regulations in managing the land and forest resources in the village.
7. Land lease contract\(^{19}\) certified by the village administrative office

| 30 years maximum | 1. rights to use according to purpose  
| - degraded forest land or cleared land | Lao citizens |

Source: Adapted from Manual of rights and responsibilities in the management and use of land and forests, VFI (forthcoming)

People have legal rights to complain or propose their points of views to the relevant state organisations or to the People’s Court if there is any problem affecting their rights and benefits related to the management of land and forest resources by the village.

However, people are still not aware of the rights gained under the law, because information about the land policy is still not disseminated broadly enough or with sufficient detail. The tenth year anniversary of the implementation of the land and forest allocation programme in 2006, emphasized the numbers of people reached, more than the quality of implementation process. The LFA process has in fact yet to be completed and scientific recommendations for land use, promotional activities, and monitoring and assessment have still to be carried out.

Our study areas in Bachieng District in Champassak province and Lao Ngame District in Salavane province, described in detail in part III, have already been covered by the LFA programme. Many of the people living there did receive land certificates and did use the land in a stable way, for example establishing paddies, orchards which were thriving for more than 3 years. With the exception of a few villagers located close to the urban areas, most people did not receive property or land titles according to the law.

3. History of land concessions in Lao PDR

3.1 Land concessions in the 1990s (1990-2000)

The starting point for land concessions in Lao PDR was at the beginning of the 1990s following Laos’ progression into the liberal economic system of commerce and investment since 1986. Granting land concessions was one of the factors that drew in foreign investors as permitted by law on the promotion of investment and the consecutive decrees and laws on the forest and forest land described above.

The concession of a large area of land first occurred in 1994, when the government authorized a land concession to plant commercial trees in Champassak province to the Asia Tech company from Thailand (signed on 7 December 1994). The following excerpt is from the documents relating to this concession,

> “the Asia Tech company is the first company which must respond to the investment policy of the government of Lao PDR that will bring long-term benefits for economy of the country. The investment in the planting of

\(^{19}\) Land lease contract (senya chao) refers to a document related to the lease of land by the state, legal persons, or individuals to organisations or other individuals, with legally binding provisions (Decree 101/PMO, section 2).
commercial trees in the Boloven plateau, Paxong District in an area of 16,000 hectares will be a starting point for the new development approach. This includes the planting of economic trees which have a benefit of conserving the water in the soil for the dams to produce electricity through hydropower. This approach to development will make Laos a resourceful country created by correct development, such as has already occurred in New Zealand. It is hoped that in future, the Boloven plateau of Paxong District will be named internationally as the “New Highland”.

The Asia Tech company received permission to invest in Lao PDR on 13 December 1991. General Khamthay Siphandone, then Chairman of the Foreign Investment Management Committee signed the investment permission, on the basis of an investment plan to invest 20 million US dollars. In 1994, Mr Silavan Savatvong, then Deputy Head of the Forestry Department, Ministry of Agriculture and Forestry, signed a land lease contract on behalf of the government to allow the planting of trees over 16,000 ha.. The lease was for a period of 55 years the value of the lease was 12.8 million US dollars.

In 1995, Champassak province were able to procure 12,404 ha for the company. The Ministry of Agriculture and Forestry sent a letter to the Governor of Champassak province requesting them to supply the outstanding area of land. Asia Tech paid the Ministry of Finance a total sum of 37,212 US dollars rent for the lease of 12,404 ha. However, the Asia Tech company failed in planting trees in Laos, since the company suffered financial problems from the economic crisis in Thailand in 1997. The company was not able to commence the plantation and eventually the land concession was cancelled.

A further land concession was then granted to BGA Laos Plantation Forestry Ltd. in the central region of Laos. The company had began operating since 1993, hiring Jaako Poyry, a forestry consulting company from Finland, to do its feasibility study. In 1997 the company signed an MOU with the Lao government (Lang, 2003) and a land concession agreement in on 1 February 1999 with rights over 50,000 ha in Khammouane and Bolikhamxay provinces extending to 50 years.

The BGA company, established with capital of 30 million US dollars, was a conglomerate of the Brierley company from New Zealand, General Finance company, from Thailand and the Asia Tech company (the Asia Tech company withdrew its stake in BGA in 1998). BGA obtained a loan from the Industrial Tree Plantation Project of the Asian Development Bank in 2000. BGA planned to build a sawmill and pulp factory in Lao, with a view to exporting pulp and woodchips to Japan(Lang 2003).

In March 2005 the Japanese Corporation, Oji, bought the rights of land concession from BGA. This was specifically allowed under the land concession contract between BGA and the Lao government, which states that the “concessionary has the right to allow other people to sub-lease to plant trees or may sub-let one part of the land concession or existing constructions within the lease area, either in entirety or in part to a third party, on advance written approval from the Lao government”.

Currently, Oji has taken over the eucalyptus plantation in BGA’s land concession area from the Lao government. The extent of Oji’s eucalyptus plantations at present covers an area of 5,300 ha, although the land area that has been surveyed and registered under lease extends to 18,900 ha.20

20 Data from the re-submission of the Oji company at the meeting on “Use of land for commercial tree planting” 14-15 February 2007, Vientiane Capital
As mentioned above, the granting of the large-scale land concessions to Asia Tech and BGA were the first of the land concessions in Lao PDR in the 1990s. International finance institutions such as the Asian Development Bank (ADB) had a very important role in the financing commercial tree plantations by foreign investors in Lao PDR. In 1993, the ADB authorized a loan to the Lao government of 11.2 million US dollars to begin the first phase of the Industrial Tree Plantations project from 1994-2003. This was aimed at promoting tree plantations, particularly on abandoned forest land, *palao*, degraded forest, grasslands, as the raw material for the industrial factories to process domestic timber for export. The project also sought to develop policies, plans, laws, various regulations to develop long term commercial tree plantations.

The project set up a target area of 9,600 ha for plantations from 1995-2000 in 8 Districts of 4 provinces (Vientiane Capital, Vientiane province, Bolikhaxay province and Savannakhet province). The loan for the ADB’s industrial plantations project, issued through the Bank of Agricultural Promotion. Companies that borrowed money in the first phase, included BGA, Burapha, Lung Khian, Thongsylavong, Manivone and Khamdaeng.

The ADB authorized mini loans for growing eucalyptus under the Industrial Tree Plantations project of 5 million US dollars to up to 12,500 people in an area of around 10,000 ha. Under this project, households obtained 30 percent of the loan funds while investors and companies receive the bulk of the funds (70 percent). The BGA company was allocated the most: 1.5 million US dollars. After the first phase of the project, the ADB’s own evaluation report specified that the project “was not successful” because the implementation of the project had caused greater poverty and resulted in landlessness by the people.

In spite of this, in 2006 the ADB Board authorized a further loan for phase two of 4.9 million US dollars including an initial grant of 3 million US dollars. The target was for Lao PDR to become the source of pulp to produce paper for the region. In order to achieve this Laos must have 500,000 ha in 2015 and pulp mills must be built in Lao PDR. However, eventually the ADB board resolved to withdraw financial support for the second phase of the project.

### 3.2 The land concession boom (2001-2007)

Over 2004-2006, investment in tree plantations for trade in Lao PDR of foreign investments in the form of land concession from the government greatly expanded (see tables 2.4 and 2.5). According to the Committee for Planning and Investment, 167,000 ha have been granted to foreign companies under large-scale land concessions. Just three companies have land concessions amounting to 100,000 ha - Oji company from Japan, to grow eucalyptus in Bolikhaxay and Khammouane provinces; Berla Lao (Aditya Berla Grasim) from India, to grow eucalyptus in Savannakhet province; and Thai Hua from Thailand to grow rubber in Savannakhet province. The largest area is dedicated to eucalyptus plantations which is to be

21 Forestry Department, mimeograph, 1995
22 Interview with Director, Lao-ADB Plantation Forestry Project, 2003
23 “Development of tree planting and industrial crops in Lao PDR”, Recommendations from the Timber and Industrial Crops Association to the National Trade Sector Meeting on 1 February 2008 by Manivone Viravong, Chairman of the Timber and Industrial Crops Association.
24 Note there is a discrepancy between the figures from different government departments.
planted in 80,000 ha. Land concessions for rubber account for around 46,000 ha (see table 2.6).

Most of the large-scale land concessions of the commercial tree plantation companies are located in the central and southern provinces of Bolikhambhay, Khammouane, Savannakhet, Champassak, and Salavane. In Savannakhet province alone, which is crossed by Highway 9, the commercial trade route linking Thailand, Laos and Vietnam, private companies have received land concessions from the central government to start commercial tree plantations over an area of 87,213 ha.

The greatest area of land concessions in 2006-2007 were for agriculture and forestry in Lao PDR with an investment value of 110 million US dollars. Concessions for industry were smaller but had a investment value of 441 million US dollars. The government authorised 122 projects by foreign investors, of which there were 28 rubber plantation projects mostly by investors from China, Vietnam or Thailand.

On the one hand, the government sees that land policy can help to promote domestic and foreign investment in transforming land assets into capital. The following quote from a senior official indicates that government sees Laos as having the capacity to foster agricultural investment because it has a small population, and therefore has a sufficient area of land left over for foreign investors. Investment in agriculture and forestry requires large areas of land.

“The government of Lao PDR has placed great emphasis on the adjustment of policies for promotion of investment e.g. regulations, laws and processes for appraisal of investment proposals. Importantly, Lao has a stable political system, is peaceful and secure, and crucially there is still a lot of land which has never been developed, although it is appropriate for agriculture. Lao wages and income taxes are low.” Thongmy Phommixay, Deputy Chairman Committee for Planning and Investment inviting Chinese investors to invest in Laos during the Fourth Investment Summit of China-ASEAN in Guanxi Prefecture, China, (Lao News Agency, 29 October 2007).

On the other hand, the government sees that past implementation of land concessions policy has had discouraging results and worrying social and environmental impacts. The value of benefits which the state derives from this investment is low and it has an effect on the rights of the people.

“The authorization of land concessions for tree plantations, have not been carried out according to the processes specified in our rules and laws, the authorization of land has not gone through a clear or detailed survey, allocation, zoning, and classification process. This has resulted in people taking liberties to transform primary forests into tree plantations or other industrial crops. This means that areas of forest have been destroyed which has a follow on effect on the eco-system and the environment.

“The issuing of land concessions and leases for tree plantations over large areas and for excessive periods has led to social and environmental problems and required both the resettlement of people and compulsory acquisition of the land which the people farm on. The people have lost their source of daily livelihood and lost their long term rights to use the land”

25 New Vientiane, newspaper, 20 September 2007
Mr Kham Ouane Boupha, Minister within the Prime Minister’s Office, Head of the National Land Management Authority, Opening Address of the meeting on Commercial 14-15 February 2007, Vientiane.

The first National Meeting on Land was held on 7-8 May 2007 under the Chairmanship of Prime Minister Bouasone Bouphavan. A resolution was passed on the indefinite suspension of consideration and approval of all long-term leases and land concessions to investors, to allow time for the studies, information and monitoring to assess, the impacts and reasons and problems which have arisen in the past.

Two important weak points were raised in relation to leases and land concessions:26

- The process of approval of land concessions has not been carried out in accordance with the regulations. For example, often surveys were lacking, the process of allocating land to people had not been completed, zoning, or classifying of land types had not been properly carried out. Land development plans were missing, along with project feasibility studies and social and environmental impact assessments. So the land authorized in concession has encroached on agricultural fields, watershed conservation forests, reserved forests and has an impact on local economies society and the environment as a consequence.

- Land concession areas were too big and concession periods were too long. Concession fees are low and poorly organized, allowing advantage to be taken for logging in the natural forest, watershed protection forests and reserve forests.

In order to standardize the proper implementation of land concessions according to laws and regulations, prevent environmental impacts, and increase the benefits for the state and the people, the National Land Management Authority has drafted a Decree on Land Leases, Land concessions and Constructions. This will provide the legal basis for the approval of land concessions in future. At time of going to press, this Decree has still not been formally approved.

### Table 2.4: Approved FDI for Agriculture Projects

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of projects</th>
<th>Investment Value (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>13</td>
<td>18,616,250</td>
</tr>
<tr>
<td>2002</td>
<td>6</td>
<td>13,988,000</td>
</tr>
<tr>
<td>2003</td>
<td>16</td>
<td>17,321,800</td>
</tr>
<tr>
<td>2004</td>
<td>19</td>
<td>75,704,017</td>
</tr>
<tr>
<td>2005</td>
<td>21</td>
<td>17,352,240</td>
</tr>
<tr>
<td>2006</td>
<td>39</td>
<td>458,578,711</td>
</tr>
<tr>
<td>2007 *</td>
<td>9</td>
<td>67,338,533</td>
</tr>
</tbody>
</table>

**Pending proposals** *26 figures approved and pending for 2007 are for projects approved to mid-February 2007 when the information was first presented by the Committee for Planning and Investment Laos PDR at the Meeting on Industrial Tree Plantations, 14-15 Feb 2007, NLMA Report on 10 years of implementation of the land y and the land titling policy, and Five year plan for period 2006-2011."

### Table 2.5: Major Agro-Forest Projects in Lao PDR

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Land Area (ha)</th>
<th>Investment Value (M.US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oji Lao Plantation (Japan)</td>
<td>50,000</td>
<td>49</td>
</tr>
<tr>
<td>Grasim (India)</td>
<td>30,000</td>
<td>350</td>
</tr>
<tr>
<td>Lao-Thai Hua Rubber (Thailand)</td>
<td>15,000</td>
<td>34,5</td>
</tr>
<tr>
<td>Daklak Rubber (Vietnam)</td>
<td>10,000</td>
<td>30</td>
</tr>
<tr>
<td>Saha Company (Vietnam)</td>
<td>10,000</td>
<td>22</td>
</tr>
<tr>
<td>Mith Lao Sugar Co. Ltd. (Thailand)</td>
<td>10,000</td>
<td>22,5</td>
</tr>
<tr>
<td>Savannakhet Sugar Corp. (Thailand)</td>
<td>10,000</td>
<td>10</td>
</tr>
<tr>
<td>BIDINA (Vietnam)</td>
<td>9,485</td>
<td>24</td>
</tr>
<tr>
<td>Bio and Alternative Energy (Lao)</td>
<td>42</td>
<td>4,5</td>
</tr>
</tbody>
</table>

Source: Committee for Planning and Investment, 2007, Laos PDR
Table 2.6 Current status of major land concessions for tree plantations and industrial crops in Central and Southern regions of Laos PDR

<table>
<thead>
<tr>
<th>Major concession companies, period of concession</th>
<th>Location</th>
<th>Type of crop</th>
<th>Area authorized (ha)</th>
<th>Area planted so far (ha)</th>
<th>Year of authorisation (level of government authorisation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oji (Japan) 50 years</td>
<td>Hinboun, Khammouane, and Pakkading District, Bolikhamxay</td>
<td>Eucalyptus</td>
<td>50,000</td>
<td>5,300</td>
<td>1999* Central government</td>
</tr>
<tr>
<td>Birla Lao (India) 75 years</td>
<td>Xaybouoli District, Savannakhet</td>
<td>Eucalyptus</td>
<td>30,000</td>
<td>-</td>
<td>2006 Central government</td>
</tr>
<tr>
<td>Savannakhet Sugar (thai) 30 years</td>
<td>Atsaphangthong District, Savannakhet</td>
<td>Sugar cane</td>
<td>10,000</td>
<td>265</td>
<td>2006 central government</td>
</tr>
<tr>
<td>Mitr Lao Sugar (Thai) 40 years</td>
<td>Champhone and Xaybouli Districts, Savannakhet</td>
<td>Sugar cane</td>
<td>10,000</td>
<td>600 100 (contract farming)</td>
<td>2006 Central government</td>
</tr>
<tr>
<td>Teng Hui Trading (China) 20 years</td>
<td>Palanexay District, Savannakhet</td>
<td>Cassava</td>
<td>7,000</td>
<td>-</td>
<td>2006 Central government</td>
</tr>
<tr>
<td>Henan Tianguan (China) 20 years</td>
<td>Palanexay District, Savannakhet</td>
<td>Cassava</td>
<td>14,000</td>
<td>-</td>
<td>2006 Central government</td>
</tr>
<tr>
<td>Thai Hua (Thai) 35 years</td>
<td>Xayabouli and Utumphone Districts, Savannakhet</td>
<td>Rubber</td>
<td>16,213</td>
<td>-</td>
<td>2006 Central government</td>
</tr>
<tr>
<td>Viet-Lao (Vietnam) 50 years</td>
<td>Bachieng District, Champassak</td>
<td>Rubber</td>
<td>10,000 200</td>
<td>7,162 190</td>
<td>Central govt, provinces 2004</td>
</tr>
<tr>
<td>DakLak (Vietnam) 50 years</td>
<td>Bachieng District Champassak, Lao Ngame District, Salavane</td>
<td>Rubber</td>
<td>3,200 7,000</td>
<td>2,250 1,000</td>
<td>2004 Central government</td>
</tr>
<tr>
<td>Dau Tieng (Vietnam) 40 years</td>
<td>Bachieng District Champassak</td>
<td>Rubber</td>
<td>10,000</td>
<td>550</td>
<td>2005 Central government</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>167,163</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* authorized area to BGA, Oji took over in 2005
After 2000, the real boom period in land concessions began with a steady stream of foreign companies investing in Lao PDR, particularly from the neighbouring countries that have borders with Lao PDR - China, Vietnam and Thailand. These countries were facing their own limitations in relation to the land, in that they could no longer obtain large areas of land on which to plant commercial tree crops and large-scale industrial crops in their own countries. While Laos aims at trying to generate foreign investment for value-added production within the country to enable as much of the economic benefits as possible to stay with the Lao people, it cannot be denied that the majority of investors have the objective of using Lao resources as raw materials for production to send back for processing in their own countries and re-export later.

4. Process of granting a land concession

4.1 Mechanism and roles of state agencies in land concession

The granting of rights of land concession is one measure by which the government seeks to draw in foreign investment. The process in the past was directly related to the law and policy to promote foreign investment. For all foreign investors in Lao PDR, the investment will have to receive a permit from the Committee for Management of Investment and Foreign Cooperation, set up under the Law on the Promotion and Management of Foreign Investment 1994. The Committee was required to coordinate with the relevant Ministry or government department, e.g. an investment in agriculture will be coordinated with the Ministry of Agriculture and Forestry.

According to the 1994 investment law, foreign investment projects with a value of 10 million US dollars or more, or that require concession rights to land in Lao PDR, or that are related to rights over natural resources, must first be discussed between the Committee and the investor, and a memorandum of understanding must be drawn up. This is then proposed before the meeting of the Committee to consider granting approval in principle. If this is granted, the proposal will be submitted to the government to consider the authorization of a land concession27.

According to the Law on Promotion of Investment 2004, foreign investment projects requesting land concessions must be worth 20 million US dollars or more. The Committee for Management of Investment and Foreign Cooperation has changed its name to the Committee for Planning and Investment (CPI) although it kept the same acronym in Lao. Foreign investors requesting a land concession must negotiate with the government, following which a legally binding memorandum recording the result of negotiations will be drawn up. A business development contract must be concluded28.

In 2000, the Ministry of Agriculture and Forestry issued regulations for the development, and promotion of long-term tree plantations (196/MAF on 15/08/2000) setting up the procedures following the signature of the memorandum of understanding with the CPI. Foreign companies or investors must discuss with the Ministry of Agriculture and Forestry before discussing with the local authorities to enable a feasibility study of the project. The economic and technical analysis must be submitted to the CPI to request an investment license. The author does not have clear and specific information whether or not this regulation is in fact put into practice

27 Process articulated in Agreement by the Chairman of the Committee for Management of Investment and Foreign Cooperation 013/CPI on 27/02/2002
28 Sections 25, 40 of Prime Ministerial Decree on the implementation of the Law on Promotion of Foreign Investment 301/PMO
in the process for approval of a land concession.

In the past, the division of responsibilities between the central and local authorities in relation to granting land concessions depended on the size of the land area. These thresholds changed over time (see table 2.7). The Land Decree 1992 gave rights to Laotians and foreigners to obtain leases or land concessions but did not specify areas of land. In 1993, a Prime Ministerial Decree gave the Ministry of Agriculture and Forestry the power to authorise land concessions over 1,000 ha with the approval of the government. The following year, the Land and Forest Classification Decree 1994 No.186/PM gave authorization powers to the district and province and central authorities according to specific thresholds (see table 2.7 below).

The Forest Law in 1996 specified the powers and duties of government organisations at the central and local level to authorise the transformation of forest or forest land for another purpose. These apply both to those areas managed by the state as well as those areas the state had already assigned to individuals or organisations. Individuals and enterprises may ask for a lease or concession to plant, preserve, or uproot trees. The Ministry of Agriculture and Forestry may authorize an area of 100-10,000 ha with the approval of the government, and the government may authorize areas of over 10,000 ha with the approval of the National Assembly. It is notable that the Forest Law does not have specific rules on leases or land concessions to foreign investors.

Although the Land Law of 1997 granted authority to the Ministry of Finance to issue state land leases29, it appears that the approval of land concessions was still based on the Forest Law 199630. As far as we have been able to find out from investment contract documents in the rubber sector, the Ministry of Finance does not appear to have played any role. Moreover, in the last 2-3 years, provincial level authorities have approved land concessions of greater than 100 ha. If we consider the limits under the Forest Law, then we can say that this is more than is legally allowed.

In 2000, the Ministry of Agriculture and Forestry issued a Regulation to specify the powers for approving the area of a land concession to plant trees for domestic investment. This regulation authorized foreign companies to ask permission to invest in tree plantations, but did not specify clearly the area limits in the same way as the area limit for investments.

Various decrees and laws confirm that land concessions are intended to be granted in either cleared land, degraded forest land, abandoned land, or state land.

Looking at past experience of the approval process for land concessions in agriculture and forestry (see table 2.8), we find that the first investment project to receive its investment permits was the Asia Tech company. The Department of Forestry authorized a land concession as representative of the government, after the CPI signed the investment contract. In other cases, the approval of the land concession was granted by the CPI in the same step as the investment project contract, that is BGA, DakLak, MitLao Sugar, Savannakhet Sugar, and Berla Lao.

Since the research team still lack information relating to certain projects, we cannot

29 According to the Land Law 1997, the Ministry of Finance had the authority to grant land leases according to the national economic and social plan (but there is no provision concerning land concessions) in areas of over 10,000 ha (with the approval of the National Assembly).
state at which level the approval of a land concession was given in the case of the Viet-Lao, DakLak and Dau Tieng companies. The approval of a land concession may have arisen in the agreement between the provinces of two countries: Lao PDR and Vietnam.

In the past, the CPI took responsibility for both domestic and foreign investment at the central level. However, in certain projects in the southern provinces of Laos, the investment contracts and land concessions are founded on the bilateral Cooperation Agreement between the governments of Lao PDR and Vietnam in 2004.

Presently, the government may give rights of lease or land concession up to a maximum of 50 years to various individuals, whether they may be resident aliens, stateless peoples or foreigners, including companies they have set up. In the case of foreigners investing in Lao PDR, concession rights can be extended by approval of government. In the case of investment in a Special Economic Area, the period of the lease or concession can be up to a maximum of 75 years, and this can be extended with the endorsement of the National Assembly. For leases over an area of 10,000 ha or more, approval must be given by the National Assembly. Leases can be granted for a maximum of 30 years and can be extended in the same way (see table 2.9). The Land Law of 2003 does not specify any powers of authorization of land concessions by the provincial and district management authorities.

The National Land Management Authority is now the central authority in the management of land and has the authority to approve land concessions. There has been a temporary suspension of the granting of land concessions according to the major land meeting on 7-8 May 2007. While the moratorium has been in effect, the NLMA has drafted a new Decree on Leases, Land Concessions and Constructions to clarify procedures in those areas where the present law is still unclear, such the powers for the approval of a land concession. The details of the powers and duties of the National Land Management Authority and local authorities related to a land concession are specified in the draft Decree.

In summary, the granting of the land concession in the boom of foreign investment, that is after 2000 arose from the economic policy of needing to attract foreign investment to Lao PDR. Several foreign investment projects got approval for both investment and land concession in a single process. However, none of the projects had yet carried out any survey of land prior to signing the project investment agreement. The overall economic slant favouring investment meant that there was a lack of consideration of the social and environmental impacts. Various investment projects do not include economic social and environmental impact assessments and lacked a detailed land survey prior to the signing of the development project contract. The proposal appraisal process considers only the value of the investment of the project, while the relevant legally appointed organisations such as the Ministry of Agriculture and Forestry only played the role of witness in signing the project contract. The roles and responsibilities of the provincial and district authorities are discussed in the following section.

31 “Land lease” means the lease of land by the state, legal persons or individuals to organisations or other individuals with legally biding provisions, a “land concession” means an agreement between the state and the grantee which the state gives a certain area of land to the grantee to use for a specific purpose authorised by the state. The grantee must pay concession fees and pay royalties (Decree on implementation of the Land Law, 2005)
### Table 2.7 Changing terms of decrees and laws on forest and land related to land leases and land concessions before Land Law 2003

<table>
<thead>
<tr>
<th>Legislation</th>
<th>Right to authorise</th>
<th>Area threshold (ha)</th>
<th>Right to request</th>
<th>Type of land</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Decree 99/PMO on 19/12/1992</td>
<td>Government</td>
<td>Not specified</td>
<td>Lao population, resident aliens and foreigners</td>
<td>Land related to investment, embassy land, international organisations</td>
</tr>
<tr>
<td>Decree on the Management and Use of Forest and Forest Land 169/PMO. 03/11/1993</td>
<td>Ministry of Agriculture and Forestry</td>
<td>&lt; 1,000</td>
<td>Families, individuals, or legal persons foreigners</td>
<td>Forest land or land without forest</td>
</tr>
<tr>
<td></td>
<td>Ministry of Agriculture and Forestry with endorsement of government</td>
<td>&gt; 1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decree on Land and Forest Classification for Plantations and Preserving the Forest 186/PMO on 12/10/1994</td>
<td>District government authorities</td>
<td>1-100</td>
<td>Families, individuals, legal persons, domestic and foreign private enterprise*</td>
<td>Forest land which has <em>palao</em>, waste land, <em>padong</em>, degraded forest land</td>
</tr>
<tr>
<td></td>
<td>Provincial authorities</td>
<td>101-1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>government</td>
<td>&gt; 1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forestry Law 1996</td>
<td>District government authorities</td>
<td>&lt; 3</td>
<td>Families, individuals, legal persons, enterprises</td>
<td>Degraded forest land, cleared land</td>
</tr>
<tr>
<td></td>
<td>Province authorities</td>
<td>&gt; 3 - 100</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ministry of Agriculture and Forestry with endorsement of government</td>
<td>&gt; 100 – 1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Government with endorsement of National Assembly</td>
<td>&gt; 10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land Law 1997</td>
<td>Finance Ministry</td>
<td>Not specified</td>
<td>Lao population, foreigners</td>
<td>Land of the people who have been given rights of possession according to the law, state land</td>
</tr>
<tr>
<td></td>
<td>Finance Ministry with endorsement of National Assembly</td>
<td>&gt; 10,000</td>
<td>foreigners</td>
<td></td>
</tr>
<tr>
<td>Regulations of the Ministry for Agriculture and Forestry on the development and promotion of long term plantations 196/MAF on 15/08/2000</td>
<td>District Governor</td>
<td>&lt; 100</td>
<td>individuals or domestic companies**</td>
<td>Land which is not allocated rights of possession</td>
</tr>
<tr>
<td></td>
<td>Provincial / city, Governor, head of the special area</td>
<td>101 – 500</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minister, Ministry of Agriculture and Forestry</td>
<td>501 – 1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>government</td>
<td>&gt; 1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land Law 2003 and Decree on the implementation of the Land Law 2005</td>
<td>Local Land Management Authorities</td>
<td>Not specified</td>
<td>Lao people (lease), resident aliens, stateless persons, foreigners and organisations</td>
<td>State land, and land which is already developed that is held by Lao people</td>
</tr>
<tr>
<td></td>
<td>National Land Management Authority</td>
<td>Not specified</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NLMA with endorsement of National Assembly</td>
<td>&gt; 10,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*palao*: *padong*: degraded forest land.
Table 2.8: Permissions for investment and approval of land concessions in Agriculture and Forestry, selected cases

<table>
<thead>
<tr>
<th>Company</th>
<th>Documents quoted in the permission to invest / Memorandums</th>
<th>Signatory approval of land concessions</th>
<th>Value of investment</th>
</tr>
</thead>
</table>
| Asia Tech (currently not in operation) | - Investment permit, Prime Minister General Khamthay Siphandone, Chairman of the Committee for management of foreign investment on 13 December 1991  
- Contract, Committee for management of investment on 1 July 1994 | Silavanh, Savadvong, Deputy Head of the Forest Department, representative of the Ministry of Agriculture and Forestry on 7 December 1994. Area: 16,000 ha. | 20 million US dollars |
| BGA (currently Oji) | Memorandum, Committee for management of investment and foreign cooperation, as representative of government (1997) | Bountiam Pidsamay, Minister within the Prime Minister’s Office, Deputy Chairman of committee for management of investment and cooperation, government representatives on 10 February 1999. Area: 15,000 ha. | 30 million US dollars |
| Viet-Lao | - Economic, Cultural, Technical and Scientific Cooperation Agreement and Memorandum of Cooperation between Vietnam and Lao on 10 May 2004  
- Meeting between the Deputy Head of Department for Promotion of Foreign Investment  
- Committee for Planning and Investment Lao PDR with the General Rubber Corporation of Vietnam on 21 June 2004  
- Notice by the district authorities specifying that an area of land can be given to the Viet-Lao company no. 120 on 27 October 2004 | Agreement between the Lao government and GERUCO on 18 January 2005 specifying an area of 10,000 ha | 34.7 million US dollars |
| DakLak | - Economic, Cultural, Technical and Scientific Cooperation Agreement on 10 May 2004  
- Memorandum between Chairman of the Provincial Governing Party of DakLak province with 4 southern provinces on 14,16,17, July 2004  
- Memorandum between the deputy provincial party secretary / Provincial Governor Dak Lak and Lao Secretariat Committee for Planning and Cooperation on 20 July 2004 | - Thongloun Sysoulid, Deputy Prime Minister and Chairman of the Committee for Planning and Investment on 2/6/2004  
- Agreement of the Champassak provincial governor on 4 January 2005 Area 3,000 ha  
- Agreement of Provincial Governor of Salavane on 27 January 2005 area 7,000 ha. | 30 million US dollars |
- Memorandum of negotiation between the leaders of two countries (03/04/2006) | Memorandum between leaders of Binh Duong province and Champassak province (13/11/2006) 20,000 ha. | 35.3 million US dollars |
MitrLao sugar  
- Agreement of the committee for the promotion and management of investment (20/12/2005)  
- contract to develop a project  
Thongmy Phomvichay, Deputy Chairman Committee for Planning and Investment government representatives (14/03/2006)  
Thongmy Phomvichay, Deputy Chairman Committee for Planning and Investment, government representative (14/03/2006)  
10,000 ha.  
22.5 million US dollars

Savannakhet Sugar  
Contract to develop a project, Dr Lian Tykeo, Deputy Chairman Committee for Planning and Investment government representative (16/02/2006)  
Dr Lian Tykeo Deputy Chairman Committee for Planning and Investment government representative (16/02/2006)  
10,000 ha.  
10 million US dollars

Berla Lao  
- Contract to develop a project,  
Thongmy Phomvichai, Deputy Chairman Committee for Planning and Investment government representative (16/03/2006)  
- Resolution of the national assembly (19/05/2006)  
Thongmy Phomvichay, Deputy Chairman Committee for Planning and Investment government representatives (16/03/2006)  
50,000 ha.  
350 million US dollars

Source: Information from Committee for Planning and Investment, and National Land Management Authority

Table 2.9 Current framework of authorizations for granting leases or land concessions

<table>
<thead>
<tr>
<th>Lease or concession holder</th>
<th>State land</th>
<th>Already developed land to be leased from Lao people</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>term</td>
<td>Unit of authority</td>
</tr>
<tr>
<td>Lao citizen (lease)</td>
<td>30 years maximum can be extended depending on the circumstances</td>
<td>Local Land Management Authorities</td>
</tr>
<tr>
<td>Resident aliens, stateless peoples, and foreigners whether individuals or organisations (lease or concession)</td>
<td>30 years maximum can be extended on a case by case basis with government agreement</td>
<td>Local Land Management Authorities</td>
</tr>
<tr>
<td>Foreigners who have come to invest in Lao PDR (lease or concession)</td>
<td>50 years maximum can be extended on a case by case basis with government agreement</td>
<td>Local Land Management Authorities</td>
</tr>
</tbody>
</table>

If the land is located in “specific” and “special” zones, the term of land lease or concession may be signed for a maximum of 75 years. This can be extended with approval of the National Assembly.

If the land area is greater than 10,000 hectares, the lease or concession requires the approval of the National Assembly.
Source: Land Law 2003 (articles 13, 64 and 65) and Decree on the implementation of the Land Law 2005

4.2 Case studies of land concessions in Champassak and Salavane provinces

The largest land concessions to plant commercial trees in the south of Lao PDR are located in Champassak province which has seen the development of a total of 32,043 ha of plantations. Of these, rubber is the most prevalent crop accounting for 26,193 ha. Much of this is in land concession areas in Bachieng District 23,653 ha. The vast majority of this, 87%, is conceded to foreign companies (see table 2.10 and 2.11). In Salavane province, the total land concession area is 7,480 ha of which foreign companies account for 7,000 ha and domestic companies have 480 ha.

Three foreign companies have the greatest land concession areas, that is the Viet-Lao, the DakLak rubber company and the Dau Tieng company, all are Vietnamese companies, with a total land concession area of 31,900 ha or 80% of the land concession in both provinces together. Around 62% of their total contractual concession area (or 19,893 ha) had been surveyed and the acquisition negotiated with the previous landholders by 2007 (see table 2.12).

The arrival of the investment by Vietnamese companies in the south of Lao, was heralded and underpinned by two bilateral treaties, an Economic, Cultural, Technical and Scientific Cooperation Agreement, and a Memorandum of Cooperation between Vietnam and Lao signed on 10 May 2004. This Agreement and Memorandum were referred to in the rubber plantation project documents of all 3 companies.

| Table 2.10: Land concession area of Champassak province |
|-------------------|----------|---------|--------------|
| District          | Total authorised | Rubber | Other plants and livestock |
| Bachieng          | 23,653    | 23,653  | 453          |
| Pathumphone        | 3,054     | 2,439   | 614          |
| Paxong            | 5,236     | -       | 5,236        |
| Pakse             | 100       | 100     | -            |
| Total             | 32,043    | 26,193  | 6,304        |

Source: Data from the Provincial Land Management Offices of Champassak and Salavane and from the Report on the Allocation of Land for the Project to Plant Rubber in 4 provinces of the South by the Dak Lak Rubber Company 2007
Table 2.11: area of land concession to foreign and domestic companies

<table>
<thead>
<tr>
<th>District</th>
<th>Foreign</th>
<th>Domestic</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachieng</td>
<td>23,653</td>
<td>-</td>
<td>23,653</td>
</tr>
<tr>
<td>Pathumphone</td>
<td>2,113</td>
<td>941</td>
<td>3,054</td>
</tr>
<tr>
<td>Paxong</td>
<td>2,175</td>
<td>3,061</td>
<td>5,236</td>
</tr>
<tr>
<td>Pakse</td>
<td>-</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>27,941</strong></td>
<td><strong>4,102</strong></td>
<td><strong>32,043</strong></td>
</tr>
</tbody>
</table>

Source: Data from the Provincial Land Management Offices of Champassak and Salavane and from the Report on the Allocation of Land for the Project to Plant Rubber in 4 provinces of the South by the Dak Lak Rubber Company 2007

Table 2.12: Land concession areas to wholly-owned foreign rubber companies, Champassak and Salavane provinces

<table>
<thead>
<tr>
<th>Company</th>
<th>Location</th>
<th>area (ha)</th>
<th>survey (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viet-Lao</td>
<td>Bachieng District, Champassak</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>DakLak</td>
<td>Bachieng District (3,200 ha), Champassak Pathumphone (1,700 ha), Champassak Lao Ngame District, Salavane</td>
<td>4,900</td>
<td>4,900</td>
</tr>
<tr>
<td>Dau Tieng</td>
<td>Bachieng District, Champassak</td>
<td>10,000</td>
<td>7,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>31,900</strong></td>
<td><strong>2,315</strong></td>
<td><strong>19,839</strong></td>
</tr>
</tbody>
</table>

Source: Data from the Provincial Land Management Offices of Champassak and Salavane and from the Report on the Allocation of Land for the Project to Plant Rubber in 4 provinces of the South by the Dak Lak Rubber Company 2007

The processes for obtaining a land concession for the investments in rubber by the Vietnamese companies varied for different companies under different local administrations. From studying the documents of DakLak (see figure 2.6) we can see that after signing the project contract with the Lao government, land surveys were undertaken. It took a total of 35 days to survey and negotiate with the people living and farming in 3,500 ha of Bachieng District, Champassak province up to the beginning of 2007. Based on the survey, the provincial and district authorities able to supply 3,000 ha of land in Bachieng District and another 1,700 ha in Pathumphone District. As for Salavane province, the survey and negotiation with the people took approximately two years, and a total of 2,678 ha were identified after survey by technical officers appointed from the province and district and Agriculture and Forestry Offices. The area of land was authorized by the Provincial Governor.

After the field survey, officials from the province and district, went with company representatives to meet with the village head and the village authorities first, to explain to the people the reasons for the development of the rubber plantation project. They were told that the people would have work to do. The government had authorized the land concession with the company already. The representatives told the village authorities they would like people to give the land to the company to plant
rubber. However, in some of the villages studied, people did not know what a land concession was, and only knew that the company had got a land concession in their land when the company came in to clear the land and destroy their crops. Some villages had only a very short time to do the survey and measurement of individual land parcels. Within total of 15 days of surveying the entire village’s lands, immediately after the first meeting, as soon as people had identified the plot as theirs, and compensation was paid, the land was no longer in their hands.

In Salavane province, as the land concession was implemented in one village, conflict rapidly ensued (see Part III). The district and province officials drew out the lessons learned and in the next set of villages, they implemented a new process, allowing the villagers to come to take greater part in the decision making. Several meetings were held in the village which included not just the village authorities, the local organisations representatives, but the villagers too. People were able to participate in the survey of land and crops, and could participate in assessing the compensation. Critically, people were given rights to decide whether or not to give to give away their plots of land.

In the words of local informants, “the district and province drew the lessons from the Vangkhanane village, because there were many land conflicts, the lessons were that there must be land left for the people to farm on” (provincial official). “The village gave according to the capacity of the village, so that there was land left for the people to farm” (villager).

After they had agreed to give up their land to the concession and after the survey of land and crops were accepted by the villagers, the District issued a certificate to the company. The certificate specified that the company should take on the villagers to work in the project area to create employment and income for the people in the project area. The certificate of land allocation to the company was issued by the District Governor Lao Ngam province Salavane (see box 2.2 and figure 2.7).

In the case of the Dau Tieng company (see figure 2.8), a memorandum of negotiations between the leaders of Lao PDR and Vietnam was drawn up and two Agreements were signed by the Provincial Governor of Champassak in April and May 2006. The province authorized the company to survey an area in Paxong District and Bachieng District. The survey was completed in one month. After that in November, a Memorandum was signed between the leader of Binh Duong province in Vietnam and Champassak province granting a 20,000 ha land concession to the Dau Tieng company to survey and plant rubber at the beginning of 2007. State officials together with the company had a meeting with the village authorities and the people in Lak 19, (one of the case study villages chosen for our research), to ask the people to give their land to the Dau Tieng Rubber company. The survey was carried out immediately after the meeting. In total the land survey and payment of compensation to the people took 3 months. As soon as a plot was compensated, the company began to clear the land.

Box 2.2 Certificate of land allocation to Dak Lak Rubber Co Ltd

“The District Governor of Lao Ngam certifies that 1. it is agreed to approve 143.64 ha areas of land, of which 102.52 ha of rotational fallows, in the zone of Nong Ke, which the technical team have surveyed. The land authorities and other relevant organisations, including the people in the village agreed to allow the DakLak Rubber Company Ltd to develop [the land] into rubber plantation according to the authorisation of the Lao government

2. it is recommended that the company has a policy to provide the people in the area of the project with hired work and work with the company according to the regulations and real ability of the people, to create employment and the income for the people...”
In the case of the Viet-Lao company, the research team was only able to obtain the smallest amount of information. The documents which we were able to obtain from the Viet-Lao company, that is the “Summary feasibility study report, for the development of growing rubber over 10,000 ha in Bachieng District, Champassak province in 2005” (19 pages) and the “land survey for a concession area of 4,752.9 ha of the rubber company (December 2005-2006)”. The company refused to be interviewed by the research team stating that the head of the main office was not available at the time arranged for interview.

Information from Obein (2007) indicates that the Lao government signed an agreement with Vietnam’s General Rubber Corporation (GERUCO) on 18 January 2005 based on the following meetings and agreements.

- The General Rubber Corporation of Vietnam met with the Prime Minster of Lao PDR in relation to the rubber industry on 5 May 2004.
- The Deputy Head of the Department for Promotion of Foreign Investment and the Committee for Planning and Investment met with the team from the General Rubber Corporation of Vietnam on 21 June 2004 related to the implementation of the rubber plantation.

It is interesting to note that there were preparations to find land at the provincial level before the authorization of the land concession at the central level as indicated by the Notice on 27 October 2004 of the authorities of Bachiengchaloensouk District Champassak province specifying that there is land to be given to the Viet-Lao Joint Stock Rubber Co. to implement the setting up of a project to develop rubber (Notice by the district authorities no. 120 on 27 October 2004). The Viet-Lao company is the only company so far, for which the province and district have been able to supply sufficient land to make up the full land area according to the concession agreement.

In summary, process for granting the large scale land concessions in Champassak and Salavane provinces given to the three Vietnamese rubber companies can be divided into 3 steps corresponding to the different levels:

1. National level: Agreement between the governments - in the case of these three companies, the bilateral agreements between the governments of Lao PDR and Vietnam
2. Provincial level: Memorandum of Understanding between the leaders of the province of the investors from Vietnam with Champassak and Salavane provinces
3. Local level: Survey of the general area by the provincial and district authorities together with the companies, followed by agreement to the land concession by the Provincial Governor, after which negotiations will begin with the people to grant the land to the company. The precise implementation of this step differs in Champassak and Salavane provinces, depending on the judgement of the provincial authorities in how to go about identifying the land.
Figure 2.6: Land concession of the DakLak company, Nong Nam Khao Yai, Bachieng District, Champassak province, and Nong Ke and Vangkhanane villages in Lao Ngam District, Salavane province

**National Level Agreements**

**10/05/2004** Cooperation Agreement between Vietnam and Laos

**14/7/2004** Memorandum of Understanding between the Chairman of the Party of DakLak province and Champassak and Salavane provinces

**20/7/2004** Memorandum of Understanding between the Deputy Secretary General of the Party, DakLak province and the Governor of Champassak province, and the Planning and Cooperation Commission of Laos, and Memorandum of Understanding between Chairman of the Party of DakLak province and 4 provinces in the South of Laos

**19/11/2004** Contract between the Dak Lak company and Laos PDR to grow rubber in 4 southern provinces of Laos (Champassak, Salavane, Sekong, and Attapeu)

**6/12/2004** Committee for Planning and Investment issues the investment license

**Champassak province**

**Date not available...** Agreement of the Planning and Cooperation Division of Champassak province to assign the Provincial Forestry Division to survey an area of 3,500 ha for planting rubber.

**09/9/2004** Contract between the Provincial Forestry Division of Champassak and the Dak Lak company to survey 3,500 of land

**15/9/2004** Agreement to appoint technical officials to undertake a field survey

**20/9/2004 – 25/10/2004** Field survey 35 days in 15 villages (including Nong Nam Khao Nyai)

**11/11/2004** Survey report

The land in Nong Nam Khao Nyai was cleared for planting in 2004 and planted in 2005. Villagers did not know in advance that the company needed their land. They found out when the company arrived to clear it. Most of the land was already occupied by villagers for farming and 1,000 ha was in the production forest area.

**4/1/2005** Agreement of the Provincial governor or Champassak authorising an area of 3,000 ha to the DakLak Rubber Company

**Salavane province**

**27/1/2005** Agreement of the Provincial governor for 20,500 ha to be designated for promotion of various industrial crops and rubber plantations. A land concession will be granted in 7,000 ha of land of 24 villages in Lao Ngam, Wapi, Kongxedone Districts. The remaining 13,500 ha shall be targeted for the promotion of rubber planting by the people.

**Vangkanane village zone 2005**

A coordination unit was set up to discuss with the District and then conduct a field survey of the land area. Most of the land was already occupied by villagers for farming and 1,000 ha was in the production forest area.

**2005** Provincial and district officials meet with the village authorities for the first time at Nong Song Hong Nyai to ask for contribution of land for the building of a seed store

**2005** Provincial and district officials held a meeting with 5 village administrative authorities in Nong Song Hong Nyai to ask if the 5 villages would contribute to the area for rubber plantation (Na Sae, Vangkanane, Song Hong Noy, Song Hong Nyai, Nong Lao Thuen). The request was approved in principle to give land to the company.
Two contrasting consecutive experiences: Vangkhanane and Nong Ke villages, Lao Ngam District, Salavane province

2005 The villagers in Vangkhanane still did not know anything about the land concession.

2005 Survey to measure and determine the boundaries of the land concession (right side of Vangkhanane village).

Beginning of 2006, district officials go to motivate people asking them to contribute land in Vangkhanane village (left hand side of the village). 13 families (later increased to 16 families) of a total of 35 agreed. The remaining 19 families did not agree to give up their land. The company was told to clear only the land which had been agreed, and to exempt the land which was not agreed. However the company drove their tractors through the whole area destroying crops that were near harvest.

2006 District officials make a visit to resolve the problems of the loss of crops of the villagers. The company accepted they must compensate at 500,000 kip/ha (approximately US$50 per hectare).

7/3/2006 the Committee for Planning and Investment sent a notice to the Governor of Salavane province to accelerate the allocation of 7,000 ha of land to the DakLak Company.

10/6/2006 the office of Salavane province sent a notice to the District governor of Lao Ngam, the Head of the Planning and Investment Division and the Agriculture and Forestry Division assigning the District and the relevant officials to consider the supply of 1,700 – 2,000 ha of land to enable the establishment of one estate.

Officials of the province and district met with the village administrative authorities of Nong Ke “to motivate them to contribute land to the government”

17/8/2006 Agreement of the Lao Ngam District Governor authorising the company to survey 2 areas of land covering 15 villages including Nong Ke.

District officials met with all villagers in Nong Ke village to disseminate the policy of the party and the state.

District officials met again with all villagers in Nong Ke related to the compensation for crops in the villagers fields.

9/10/2006 The Committee for Planning and Investment notified the Provincial Governor of Salavane of their approval of the transfer of 1,000 ha of land in Nong Ke.

7/11/2006 the Committee for Planning and Investment sent a notice to the Governor of Salavane province to accelerate the allocation of 7,000 ha of land to the DakLak Company.

22/11/2006 the District Governor of Lao Ngam issues a second certificate for an area of 216.95 ha in Nong Ke.

Survey and measurement of orchards before clearance.

Dated information derived from documents examined by research team or documents cited within these documents. The team have not been able to access the documentary record for authorising land acquisition in Vangkhanane, local officials believe there are no such records. Information that is not dated is sourced from village focus groups.
**Figure 2.7 Documents attesting to process of authorisation of land concessions for rubber plantations of Dau Tieng company**

<table>
<thead>
<tr>
<th>State level agreements</th>
<th>Province level agreements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>10/05/2004</strong> Cooperation Agreement between Laos and Vietnam and Economic Cultural Technical and Scientific cooperation Agreement  2004</td>
<td><strong>09/05/2006</strong> Agreement no. 439 by the Provincial Governor of Champassak authorising Bin Duong to survey land for planting industrial trees</td>
</tr>
<tr>
<td><strong>03/04/2006</strong> Memorandum of negotiations between 2 leaders of two countries related to the allocation to the party from Bin Doung province of rights to survey an area of 130,000 hectares , to invest in rubber plantations and other industrial tree crops in Champassak province</td>
<td><strong>22/05/2006</strong> Agreement no. 511 of the Governor of Champassak province to survey 10,000 ha of land in Khong District from km 115 to km 130 along route 13</td>
</tr>
<tr>
<td><strong>06/10/2006</strong> Memorandum between the Bin Duong Import Export production company, the Dau Tieng rubber Co and Champassak province agreeing to the two companies carrying out an initial survey of around 10,000 ha in 2 areas: 1) 5,000 ha in Paxong District from km 14 to km 28. 2) 5,000 ha in Bachieng District</td>
<td><strong>13/11/2006</strong> Memorandum between leaders of Bin Duong province and Champassak related to the allocation of 20,000 ha land for concession to the company Bin Duong Import Export Production Company, Bin Duong province and the the Dau Tieng Rubbr Co in Bachieng District and Xanasomboun to survey and plant rubber.</td>
</tr>
<tr>
<td><strong>14/06/2007</strong> the Committee for Planning and Investment , Vientiane Capital issued a foreign investment license to the Dau Tieng Lao-Viet Joint Stock Rubber Company Ltd</td>
<td><strong>29/05/2007</strong> Governor of Champassak, and Chairman of the Committee for Promotion and Management of Investment, Champassak province issued a foreign investment license to the Dau Tieng Lao-Viet Joint Stock Rubber Company</td>
</tr>
</tbody>
</table>

**Beginning of 2007** state officials and the company went to meet with the villagers of Lak 19. They made a survey and paid compensation within a period of 3 months and began clearing the land.
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Foreign investment certificate MitrLao Sugar Company Limited 011-06/ on 17/02/2006
Foreign investment certificate Savannakhet Sugar Corporation 017-06/ on 01/03/2006
Foreign investment certificate Lao Thai Hua Rubber Company Limited 095-06/ on 03/10/2006
Foreign investment certificate Birla Lao Pulp & Plantation Company Limited 050-06/ on 31/05/2006
Foreign investment certificate Henan Tianguan Enterprise Co., Ltd 084-05/ on 28/10/2005
Foreign investment certificate Tenghui Trading Co. Ltd 083-05/ on 28/10/2005
Foreign investment certificate Dau Tieng Viet Lao Rubber Joint Stock Development Co., Ltd 060-07/ on 14/062007
Viet-Lao joint stock rubber company
Summary feasibility study to develop rubber plantations of 10,000 ha in Bachiangchaloensouk District Champassak province Lao PDR
Economic analysis study, Development project to plant rubber and industrial crops 4 province in the south of Laos of the DakLak Rubber Company Limited
Concession agreement, for the planting of trees, between the government of Lao PDR and BGA Holdings Asia company Limited on 10 February 1999
Development contract, sugar plantation development and sugar mill project in Savannakhet province between Lao PDR and the Mitr Phol granulated sugar corporation Limited, Vientiane on 14 March 2006
Development contract, sugar plantation and mill construction project in Savannakhet province between the government of Lao PDR and Khon Kaen Sugar PLC, and the Baan Phong intertrade company limited, Vientiane on 16 February 2006
Concession agreement to develop a project to plant trees and saw mills between the government of Lao PDR (representative of the Committee for Planning and Investment ) and the Grasim Industries Limited Company, India, Thai Rayon PLC, Thailand and PT Indo-Bharat Rayon, Indonesia on 16 March 2000
Part III
Transformed livelihoods in the major rubber plantation areas of the South

Today, the people of the south of Laos find themselves in the midst of major policy and market changes which will shape the context of their lives, for the next twenty to thirty years, or more. As the provincial economies of the south are more and more successful in drawing in new investments, the ‘new poverty’ identified by Chamberlain in the first Participatory Poverty Assessment Report appears, five years later, to have persisted, and in some cases deepened (PPA, 2006).

This study is aimed at providing a detailed assessment of one particular policy, that of promoting tree plantations, and the related instrument of large-scale land concessions to foreign companies. In part I, the history and development of rubber plantations in geo-political context was assessed, and the country’s state of preparedness to step into this industry. Part II provided a brief legal and policy history relating to the management of forests and forest lands in Laos, with emphasis on the changing interpretation of land tenure rights and the rather murky legal basis underpinning the development of land concessions over the last 20 years.

In this part, we will present case studies of the rubber plantation projects as implemented in the South of Laos, through a study of the socio-economic and environmental impacts upon the people living in the plantation areas and working for the plantation companies.

Section one will look at the recent socio-economic developments specific to the south of Laos to help situate the rubber plantations projects in their contextual and historical landscape. Following this, we will introduce the companies which have begun to establish rubber plantations in Champassak and Salavane provinces and examine the ways in which the companies have gained access to land in the project areas.

The next section (two) will look at livelihoods and land tenure before the advent of the rubber plantations. This aims to provide an understanding of the baseline conditions and livelihood strategies of the people in the villages before they were incorporated into the rubber plantation projects.

Following on from this, the report turns to look at the ways in which people’s livelihoods have been affected and transformed by the rubber plantation projects. This section (three) will begin by examining some of the main livelihood changes which have occurred, related to people’s access to land, security of rice supplies, disruptions to local farming and cash economies, the impacts that environmental changes have brought, and the new system of labour and land management in the affected villages. We will then discuss (section four) how villagers have adapted to these changes, and discuss the strategies that have been used by different sets of people to cope with the challenges they face. In particular, we will identify patterns in the people’s different concerns and perspectives. In conclusion, we will seek to highlight those families who appear to have fared best under this type of development, and those who are in greatest need of support.

A detailed methodology is contained in the annex along with a concise description of the context of each of the villages studied. However, it is appropriate to provide a brief summary here.

Selection of case studies
The largest of the concession areas in Laos under rubber plantations are to be found in Champassak province. After four years of operation, these projects also offer the longest-running case studies of large-scale rubber plantations in the country. Neighbouring Salavane province has also been targeted for the expansion of major rubber plantations, however to date a much smaller area has been developed. During a scoping visit with the National Land Management Authority (NLMA) inventory team, in which interviews were made with provincial land management officials from Champassak and Salavane, it became clear that interesting lessons could also be learned from the different processes adopted in the two provinces, particularly as one rubber company was investing in both provinces and could provide some useful comparisons.
A wide variety of government documents, media articles, academic research and development project documentation related to the land concessions in Laos and the region was reviewed in the initial stages of this research. In addition, the research team relied on primary documents prepared by the companies, and provided by the provincial authorities for official data on the rubber plantation projects.

Project team
Field work was an important component of the research, and was carried out in collaboration with all the main parties to the research. The project team leader was from the Centre for Research and Information on Land and Natural Resources of the NLMA, and the central team was made up of two external experts, three junior members of the CRILNR. At the province level, the team was made up of 12 officials, 6 forming part of a steering committee, and 6 forming a technical and scientific committee. The central team and the technical committee from the province level carried out three separate extended field visits from July 2007 to March 2008 in collaboration with the district authorities of Bachieng and Lao Ngam.

Field study sites
The project team requested that the provincial authorities propose one village which might represent some clear case studies of positive gains, such as employment in the rubber plantation projects, one village which might represent some clear cases of negative impacts, such as significant land loss, and a third village which might represent experience that is significantly different from the first and second villages selected.

Three villages were thus selected for in-depth study in each province. In the case of Champassak, the Provincial Land Management Authority proposed the large village of Oudomsouk, which is located close to Nikom 3 of the Viet-Lao Joint Stock Rubber company, on the main road just north of the district town of Bachieng. Oudomsouk was chosen on the basis that many of the villagers here had become labourers in the plantation. The second village, Baan Lak 19, was chosen because the village had lost a significant area of its land to the rubber plantations of two companies - the DakLak Company and the Dau Tieng Company. A third village, Nong Nam Khao Yai, is located close to the entrance to the Viet-Lao Company plantation, and has also given land to another rubber company DakLak. This village was chosen by the provincial staff on the basis that a significant number of families here are labourers and many are involved in the 4+1 scheme.

In Salavane, the provincial land management authority proposed Vangkhanane as one of the villages which lost the most amount of land to the rubber plantation projects being right at the heart of the rubber plantation and closest to the offices of DakLak’s third estate rubber plantation project. It was the largest of the first villages to be targeted in Lao Ngam and a significant number of villagers have taken part in the 4+1 scheme. The second village chosen was Nong Ke, one of the second batch of villages to be targeted in Lao Ngam, which went through a very different land acquisition process, and has few labourers in the rubber plantation and. The third village, Nong Lao Theung is one where the land acquisition process has only just begun.

Study methods
The three field visits took different formats, the first was based on focus group discussions with representatives of the village authorities. Representatives were grouped into four thematic focus groups, to understand the history and geography of the villages, the current context of land holding and the process of land acquisition, the current experience of employment and the diversity of contractual arrangements, and finally the existing agricultural production methods and nature of non-timber forest products.

The second visit was to conduct household interviews based on a quantitative questionnaire. Issues covered in the questionnaire included personal data including ages and occupations of the household, landholding and land use before and after concession, tax payments, certification, crop production, values and income over the last five years, months in which rice had to be bought, loci, diversity and value of NTFPs collected before and after the concession, livestock rearing, agricultural calendar, household expenses, purchases of rice, debt, labour
wages and conditions, reasons for working or not working with the companies, and general comments concerning the project.

It was not possible to interview all household heads in each village. A proportion of roughly just over a third of households within the six study villages were selected, with a balance of poor, middle and better off villagers, including men and women, labourers and non-labourers, making a total of 262 households. The collection of quantitative data was a new exercise for many of the field research team, with the result that much cross-checking had to be carried out to ensure the soundness of the findings presented here. A certain amount of primary quantitative data had to be discarded, and results are qualified accordingly in the respective sections of the report. For this reason, survey results must be considered indicative rather than conclusive, and where possible they are presented in correlation with official records and other data.

The third visit sought to examine ways in which villagers had adapted to the changes in their lives. This time, we separated the men and women into two groups each of around 15-20 villagers and invited them to discuss and share their experiences with the research team in each village. Where changes had occurred, we wanted to explore how villagers perceived the changes to their routines, and to their way of life. Which were the positive and the negative consequences of these changes, and how did they adjust their patterns of work and living in order to cope with the changes experienced. We also used the information gained earlier about the village environment to ask further about the present condition of the natural resources in and around their village. In two villages, we spent additional time to obtain quantitative household data from 58 families who have taken part in the 4+1 scheme of the DakLak rubber company.

In Lao Ngam District, the majority of respondents were Lao Loum, reflecting the prevalence of these groups in the three villages selected. In Bachieng District, however, the minority ethnicities predominate. In Oudomsouk village, most of those interviewed were Ong, in Lak 19 the majority were Lave, while in Nong Nam Khao Yai of the minority groups most prevalent were Nhe and Arak.

Section One: Planting rubber in context in the South of Laos

The southern provinces have a relatively long recorded history, being the stronghold of a major principality which maintained its symbolic power through the Indochine administration and was finally unseated in the revolutionary war. The fighting was particularly fierce in Salavane province, where the main town was almost destroyed, and villagers from Lao Ngam in Salavane and also Paxong district of Champassak were forced to flee these areas and settle in districts such as Bachieng.

After 1975, many refugees returned to their original lands, but a substantial number remained to settle more permanently, enticed by the highly fertile soils they had begun to exploit. In line with the radical economic restructuring in other socialist countries, a New Economic Mechanism was constructed in Laos in 1986 and the transformation from a centrally planned economy to a market-oriented economy was tentatively begun. The first decree on land and forest allocation was passed in 1989, and was soon linked with the policy to limit shifting cultivation in 1991 (see part II).

The south of Laos experienced a boom in coffee production, which can be traced back to this period, in the context of a shift in national agriculture policy from subsistence farming to commercial production, and new promises of secure land certificates to all under the land and forest allocation programme. The rich volcanic soils and stable climes of the Bolaven plateau were seen as particularly suitable for coffee, although originally low population density and distance from markets kept the production relatively low. Other commercial crops thrived such as teak and cardamom.

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1 In Salavane, Lao Ngam district was selected as one of the pilot areas for the Land and Forest Allocation programme as early as 1993, while in Champassak areas such as Bachieng went through the allocation process from 1997.
At the turn of the millennium, the economy of the south is changing once again, as Champassak, in particular, has seen a massive increase in foreign direct investment in agricultural commodity production and tourism. The province has become a significant tourist draw, in large part due to the unique Khone Falls region on the border with Cambodia and the world heritage listing in 2001 of the thousand year old Wat Phou complex. Oil and gas deposits are being explored with a Vietnamese company in Xanasomboun district in the north west of Champassak and several companies have become interested in exploiting bauxite deposits under the Boloven plateau.

The official statistics show the total amount of domestic and foreign investments from 2001 – 2005 increasing steadily particularly in Champassak. Foreign companies remain the main source of investments in 2005, with domestic investors providing less than 5% of the total. Within the agriculture and forestry sector, the rubber companies are the largest investors in Champassak.

The Gross Domestic Product (GDP) per capita in the southern provinces are relatively high in comparison with the national average and have increased over the last five years, indicating that the combination of provincial consumption, investments, state spending and the trade balance has increased. The overall economy of major provinces like Champassak therefore appear relatively healthy. However, the overall figures do not represent the reality in all districts. Indeed, Bachiengchaloensouk in Champassak province, one of our case study districts (see map), is included in the list of 47 poor districts to be given priority in poverty alleviation measures.

Salavane on the other hand has a much less favourable economic position. Although, the GDP lies close to the national average, data for 2002-2003 show that the highest levels of poverty in the country are in Salavane where more than 54 percent of the people live below the poverty line. Equally, the Lao Comprehensive Food Security and Vulnerability Assessment report (2007) ranks Salavane as one of the provinces with largest proportion of food insecure households (30%) in the country.

Like many other parts of Laos, the South abounds with fertile natural resources. The River Mekong, after shaping the Lao-Thai border for much of the southwest of the country, takes a turn away from the border in Champassak, and heads towards the world-rekowned Siphandone area of rapids and seasonally flooded forests. The Mekong itself and its many tributaries host fisheries that are

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2 Most recently, the area under the Boloven plateau has been found to be rich in bauxite, and a Chinese–Australian joint venture company is in the process of securing licences to mine this resource under a concession area of 6,600-8,670 ha on the plateau (http://www.mineweb.com/mineweb/view/mineweb/en/page36?oid=52176&sn=Detail ). Ital-Thai have also announced exploration of Bauxite in Paxong district of Champassak, which if approved will require a concession over a land area of 24,600 ha (VT 18.4.08).

3 In overall terms, Champassak has had a surplus production of rice with a trade surplus of 11,135,558 tonnes (FAO 2005). While Salavane has fluctuated from rice surplus to deficit since 2000, the latest figures showed a nominal trade deficit in the province in 2005 of 428,222 metric tonnes of rice.

4 Phonethip Phetsomphou, Deputy Director of Environment Technology Center, Environment Research Institute, “Environmental Management in the Lao PDR Mining Sector: Keeping Pace with a Rapidly Growing Industrial” International Conference “ A Greater Mekong? Poverty, Integration and Development” at the University of Sydney, Australia, 26-27 September 2007
among the most productive in the world. Another distinction is the Bolaven plateau, whose rich soils rival the productive plains of the Mekong basin.

Spanning into three provinces, Champassak, Xekong and Salavane, the Bolaven plateau rises suddenly to an uneven height of over a thousand metres above sea level. Rainfall is abundant for almost half the year, reaching 3,000 mm which is higher than the national average. Here the soils are enriched by prehistoric volcanic activity, and despite clearings for coffee production and other crops, there appears to be still a substantial area of old-growth primary and secondary forests. The fertile soils of the Bolaven are now highly sought after for investment and over the last fifteen to twenty years it has become the iconic source of Laos’ coffee beans.

The question of the optimal use of the plateau has come to national attention. According to the Vientiane Times, during the 2007 National Land Meeting at which the concessions moratorium was announced, Prime Minister Mr Bouasone cited the examples of the rubber plantations in Lao Ngam district in Salavane province and Bachiang district in Champassak province, both in the area of the Bolaven Plateau, which have been “plagued by land disputes, and had high quality soil that would be suitable for crops other than rubber”.

### The introduction of Yang Cao Su in south of Laos

#### Bilateral relations – centre and province

Laos has nurtured strong political and economic relations with its eastern neighbour since the revolutionary war. While changing geopolitical contexts have influenced new, less exclusive, relationships between the two countries over the last 31 years, the alliance underpinned by Lao-Vietnamese Treaty of Friendship and Cooperation appears to remain strong. In addition to the many military, political and economic ties, ongoing scientific and technical education and training opportunities for select Lao students in Vietnam have also helped to foster sustained civilian ties between the two countries.

An Economic, Cultural, Technical and Scientific Cooperation Agreement was signed between the Laos and Vietnam on 10 May 2004. This agreement forms the starting point for the process of promoting Vietnamese investment in rubber in Laos. Following this diplomatic framework agreement, in October 2004, the Deputy Prime Minister of Foreign Affairs, Dr Thongloun made an official visit to Vietnam to woo investors to Laos.

A memorandum of negotiations between delegates of the leaders of the two countries was signed on 3 April 2006, authorising the survey of an area of 100,000 ha in Laos for growing rubber and 30,000 ha for other industrial tree plantations.

In both countries, provincial governors are given relative autonomy to pursue their own diplomatic and trading links. Champassak province has direct bilateral relations and MoUs with 16 individual provinces in Vietnam mostly in the field of agricultural production, but also including education and tourism. Several senior members of the provincial staff can communicate in Vietnamese and Champassak is keen to foster relations with

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5 This is the term used for rubber in the south of Laos taking its name from the term for rubber that is used in Vietnam
Vietnamese investors. Thus, many of the early negotiations between companies and Champassak province were underpinned by a series of diplomatic arrangements between provinces (see box).

The most surprising thing about the project documents we have been able to access in the case of the three concessions studied, is that it appears that the land concessions do not appear to have been granted by the correct authority. The granting of a land concession should, according to the Land Law, be issued by a relevant central authority, in cases where the concession concerns foreign companies gaining access to a large area of land (see Part II). The researchers are not aware of any record of a land concession by the Ministry of Agriculture and Forestry to the Viet-Lao Company, nor the DakLak company, nor the Dau Tieng company. Licence to invest however were duly granted prior to beginning their operations. In the case of all three companies, business plans have been duly authorised by the central level Committee for Planning and Investments (CPI).

An agreement apparently authorising a concession was issued by the Champassak provincial governor in January 2005 to provide 3,000 ha to the DakLak Company. A few days later in the next province, another agreement was issued to the DakLak company by the Salavane provincial governor, not “conceding”, but “certifying” an area of 7,000 ha to promote rubber. This was to prove a significant difference. In the case of the papers of Dau Tieng company, the only reference to a land concession in the documents made available to the research team appears in a Memorandum of Understanding signed in November 2006 between the provincial leaders of Binh Duong and Champassak authorising the survey and planting over an area of 20,000 ha. Since we could not access the project contract of the Dau Tieng company, we are not able to be certain which authority at which level made the concession grant.

Introducing Vietnamese rubber
There are five Vietnamese rubber companies already operating in Laos. Four of these are joint ventures involving several company subsidiaries of the major consortium Vietnam Rubber Group (VRG, formerly GERUCO). A fifth company investing in Laos is a state-run company from DakLak province in the centre of Vietnam by the name of the DakLak Rubber Company. In Vietnam, the VRG is one of the largest business enterprises in the country and membership also extends to professional bodies such as Vietnam’s Rubber Research Institute. In 2005, it ranked third in the list of top companies in Vietnam, and is reported to produce 60% of the nation’s crude rubber production (roughly 326,000 tonnes in 2006).

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6 Note that there are more Thai companies than Vietnamese companies investing in Champassak and other foreign investments/ concessions involve companies from Korea and Japan.
7 An “Authorisation and Licence Agreement” was authorised by the Lao Government in the case of the Lao-Viet company in January 2005 (Obein, 2007) which is purported to grant concession rights to 10,000 ha, but the terms of the Agreement are conditional “on carrying out a technical feasibility study and submitting this to the Ministry of Agriculture, prior to concessionary approval”.
8 The Salavane provincial and district authorities thus reserved the power to halt the process of land acquisition after initial problems were notified by villages.
9 The four VRG related companies operating in Laos are the Viet Lao Joint Stock Rubber Company, the Dau Tieng Viet Lao Joint Stock Rubber Production Company, the Quang Minh Rubber Production Joint Stock Co, and the Quasa Genuco Joint Stock Rubber Co.
Background of three companies

Viet-Lao Joint Stock Rubber Company

The Viet-Lao Joint Stock Rubber Company was the first company to start rubber planting activities in Laos. It was set up in 2005 as a joint venture between six subsidiaries of the Vietnam Rubber Group (VRG) including the Dau Tieng rubber company as main shareholder. Its project in Bachiang District, Champassak, the most extensive plantation established so far, is the flagship programme of the VRG in Laos.

The Viet-Lao Joint Stock Company was authorised in 2004 to plant rubber in Champassak province over an area of 10,200 ha which was to extend for a period of 50 years. The land is located in a large contiguous area in the north west of Bachiang district. Within the boundaries of target area drawn on the map by the provincial authorities (see photo), over 20 villages are clearly visible. The area also encloses the agricultural lands of villagers whose houses are located outside or adjacent to the concession area.

The value of the investment is 34,730,604 US dollars, of which it appears that a loan was expected from AFD 18,782,043 USD (54.08%) and the rest was to be brought as shareholder capital of 15,948,563 USD (45.92%).

Three years after the project began, it has planted 8,000 ha, and the company still aims to increase its area to 10,000 ha by 2010. Standing in an observation tower roughly in the middle of the plantation, the blocks of rubber trees extend almost as far as the eye can see.

DakLak Rubber Company

DakLak is a large province in the central highlands of Vietnam. Much of its population belongs to ethnic minority groups. The DakLak Rubber Company is state owned, specialising in planting, cultivating, exploiting, processing and exporting natural rubber, and in other activities, including producing export woods from rubber trees, tourism, warehousing.

Since 2004, the Daklak Rubber Company has planted a total of 3,250 ha, of rubber trees including land in both Bachiang district of Champassak, and LaoNgame district of Salavane. This amounts to just under a third of its present target area in Laos. The company plans to construct a processing factory with a capacity of 10,000-20,000 tonnes/year.

In addition, the company has a unique proposal to develop a joint investment with the people, loosely termed in this report as a “4+1 scheme”. This essentially involves selected local households “borrowing” seedlings and other project investment costs, and planting the rubber according to company guidelines. As the rubber grows, they work for a fee to tend the rubber crops, then eventually tap the trees, selling the latex to the company for a discounted price.

Dau Tieng Viet-Lao Joint Stock Rubber Company

In Vietnam, the Dau Tieng Rubber Company (DRC) was set up in 1978 in the province of Binh Duong lying immediately to the north of Ho Chi Minh city in the South. The Dau Tieng Viet-Lao Joint Stock Rubber Company was formally established in Laos in January 2007. In Champassak, people and officials alike commonly refer to the company by the name of the province from which it originates. It is a joint venture between the Dau Tieng Rubber company (55%) and the Production Import-Export Company of Binh Duong (40%). A private financier was also originally registered as a minor shareholder (5%) but has recently pulled out.

The six shareholders are Dau Tieng Rubber (50%), Baheuy Rubber (10%), Binh Long Rubber (10%), Fuhiang Rubber (10%), Tainin Rubber (10%), Kwangji Rubber (10%).
The project originally included US$ 19,254,658 in the form of a loan from French Agency for Development (AFD), but this loan has not been granted, reportedly following concerns about the impacts of the project which were raised by AFD officials. It is not clear where alternative funds are being raised.

By June 2007, the company had acquired an area of 2,315 ha in Bachieng, of which 1,305 ha had been planted with rubber by early 2008. An area to the north of Bachieng, just across the border with Lao Ngame was in the process of being cleared by the Dau Tieng company in March 2008. The original target was an area of around 10,000 ha by 2009, but company officials reported that there appears to be no land left for them.

In total, Vietnamese companies have been given approval to conduct their operations to plant rubber in an area totalling 42,050 ha. However in reality the amount of land obtained under their various concession agreements does not reach one third of the target area. Despite this, it has been reported in the Vietnamese press, that Vietnamese businesses plan to expand the acreage of rubber trees plantations in Laos to 58,600 in the near future to help fulfill their targets. The Vietnam Rubber Group plans to build a rubber processing plant with a capacity of 18,000 tonnes per year in Champassak. Neither the Lao government nor Lao businesses have any share in these investments, they are 100% Vietnamese backed.

**Capital concerns - Questioning the abundance of land**

Currently, for the companies, the most difficult problem experienced in the establishment process, is the difficulty in identifying enough land to meet their expected target area. Interviews with representatives of the DakLak company and the Dau Tieng company revealed that they were unaware before they began to invest that the government had not determined how much land in total was available for them in practice. Both companies have experienced the problem that “there is no land left”. This makes it very difficult, company staff told us, to plan ahead for the financial, labour, and land management of the project. The companies acknowledged they had no right to choose their land and insisted that they kept to the areas which the state had allocated land to them.

Champassak is one of largest provinces in Lao PDR with one of the highest population densities. While official figures put this at 39 persons per sq.km, if we take an assessment of provincial population to cultivated area in 2005, we can see the real population density stands at around 260 people per sq.km. The difference between these figures is significant and may provide some basis for challenging the prevailing idea that there is plenty of land available to be shared out to foreign investors.

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11 Other problems referred to by companies interviewed were the lack of available labour during the intensive first year, when establishing the plantation. The DakLak company calculated that they needed 60-70 local people per ha (see section three re labour issues). The status as foreign investors with diplomatic backing proffers an strong advantage to the companies, nevertheless there still are problems of language, and legal obstacles were highlighted too. “We don’t know enough about [the Lao laws]. This makes it really hard to prepare all the right documents, etc.” said representatives of the DakLak company.

12 figures for 2005 from www.dpichamp.gov.la. In 2001, UNDP used this basis to assess the ratio of people to cultivated cropland throughout the country at 550 persons per square kilometre – resulting in land pressure that is considerably higher than neighbouring Thailand (HDR 2001). Generally, Laos’ mountain topography constrains the availability of productive land, only a third of the country has less than 20% slope, while another 1/3 lies between a 20-30% slope. However other reasons for the lack of availability of productive land include reservation for conservation and land concessions.
Comparable figures are not available for Salavane\textsuperscript{13}. However, interviews with provincial officials who have carried out exhaustive surveys on behalf of investing companies, show that there is in fact very little land available in the province which might be suitable for large scale agricultural projects. Salavane’s remote border districts with Vietnam (Taoy and Samoey) are the least populated. However investing companies often dismiss these areas for development: they are generally considered unsuitable due to their distance from markets and the continued danger of unexploded ordinance still found there.

Where the trees stand
The concept of a land concession in Lao law from the Land Decree 1992, the Forest Management Decree 1993, the Land Zoning Decree in 1994, to the Forest Law in 1996\textsuperscript{14} kept the idea that a concession was to be granted over “undeveloped” “state land”, “degraded forest land” “vacant land” or “waste land” (see part II). However, the areas where the companies were directed to establish their plantations is mostly land that is already used, farmed, and managed by local communities. The vast majority of land taken over by the rubber companies, in the village studied was not forest land, not abandoned land, not empty land and not degraded land.

As much as ninety percent of our sample, had been issued with a temporary land certificate over their agricultural lands since the process of land and forest allocation in the 1990s\textsuperscript{15}. Around 83\% of the plots handed over to the rubber plantation companies had been developed and issued with a temporary land certificate\textsuperscript{16}. Data on land holding, tax payments, and certificates was obtained from the tax assessors in each village. Had the 8-step process of the Land and Forest Allocation programme been completed as planned, temporary land use certificates would have been exchanged for permanent titles several years before the plantation companies arrived. Households who had paid tax and developed the land as stated in the certificates, should have been entitled to receive a \textit{bai ta din} (akin to a land title). However, it is doubtful whether this would have afforded protection, for even those who had a \textit{bai ta din} title were asked to give up their land if it lay within the target plantation area. Villagers in many of the villages studied were often treated as if they had no security of tenure at all.

Thus, households lost a significant amount of their land to the rubber plantations and an alarmingly large number have been left landless. The total numbers of landless families in the villages studied varies from the vast majority of households in Lak 19 to a handful of families in Nong Lao Theung. Correspondingly, in our survey, 85\% of interviewees in Lak 19 had lost all their land, the majority lost their land in Vangkhanane, while none of the interviewees in Nong Lao Theung were left completely landless. The overall percentage of the interviewees who were landless (46\%) is not necessarily a significant figure given the wide variation in experiences between the villages and that villages were chosen to explore these different experiences. What is perhaps more useful is the differences amongst the villagers which lost land, which will be discussed later in this section.

Entering the land - persuasive arguments
As the land targeted for rubber development was already occupied and cultivated by dozens of communities, the companies had to get involved in a trial-and-error land acquisition process to obtain the land from the villagers.

Introductions

\textsuperscript{13} However, official figures indicate there Salavane’s population density is slightly below average at 20 persons per square kilometre, with the average for Laos as a whole at 23 km per square kilometre.

\textsuperscript{14} The Land Law as amended and in original is silent on the matter of which land may be conceded.

\textsuperscript{15} 7\% of our sample had land titles. The Department of Lands had visited the village closest to Pakse, Nong Nam Khao Yai, in implementation of its systematic land titling programme, and many villagers had taken the opportunity and paid the fees to obtain a land title.

\textsuperscript{16} This figure covers the land that was given away, if we look at the overall data from villagers concerning the status of each agricultural plot, amounting to some 365 plots in the six villages, only 3\% were not covered by some form of certificate.
Villagers interviewed report having no knowledge about the new projects to be carried out in their village at the time they were being considered at the national and provincial level. Meetings to discuss the project were mostly held after the project had been approved and the green light had been given for planting in the territorial area of the village.

The first villages to be targeted for rubber were those in the region to the north west of the main road through Bachieng. One such village was Oudomsouk, near the district town of Bachieng. Here villagers explained that officers from central, provincial and district authorities came to meet with the village authorities and the village headman. Through a presentation aimed at persuasion and motivation, referred to as pluk radom, they announced that they had come to bring development for the people. This message was common to all the villages. In some cases the argument was put comparatively - that the plantations would bring about greater development than swidden farming and fruit orchards. In Vangkhanane, villagers recall they “were told that if we continued as before, with our basic elementary farming, we would never have enough to eat. If we gave up our land, it would be a move towards commodity production, and development”.

In most villages studied, it was reported that the project was introduced as part and parcel of the policy of the State and the Party. Officials made it clear that the State had already authorized the concession in the name of development. The projects would benefit national development, through the production of export commodities, and introduction of new techniques. This would develop Lao expertise in rubber production, and strengthen the cooperation between Laos and Vietnam.

Villagers or their representatives were also told of the local benefits which the officials professed would be gained from the project. The project would allow the people to have work to do, it was said. Labour wages were presented, in some cases with examples, though rates were reneged later (see below). All companies set out their plans to improve roads, build community amenities such as schools, hospitals, and provide electricity, water. In many cases, the offer of compensation for certain crops was discussed from the first meeting.

In the case of villages within the DakLak company area, villagers were given the incentive that if they gave up their land, the company would not only give them work in the plantations, but also share some of the land with them to allow households to plant crops within the plantation land.

When advertising the new projects to the villagers, no potential problems were mentioned. It was not explained how many people from each village would get jobs in the plantation, which set of people would get jobs, what the nature of the work would be, how secure the jobs would be, nor that the rates of pay might change. Few questions of this nature were asked by the villagers. There was usually little time to present questions, but also, on the basis of interviews with key informants, villagers and especially leaders appeared to have trusted that the State would look after them, and ensure a positive outcome for the community.

Generally, the first meetings were with the village authorities, certainly including the village chief, and his deputies as well as the tax assessor. Sometimes the full group of village representatives (jad tang baan) were present, such as the security officers, the village party secretariat, the head of the Women’s Union, as well as the representatives of the elders and the youth. In Lao Ngame, representatives of many villages were called together at once.

Agreements
In all cases, agreement to hand over land to the rubber plantations was sought from the villagers. However, all of the weight attached to this pluk radom process – official representation, state policy directives, concessions already granted, and the speed at which the land had to be acquired – made it difficult for the village authorities and people to assess fully how they would be able to carry on their lives without their land and to express any concerns.

Typical comments from our respondents included “In reality, people did not want to give their land to the company, because there would be nowhere left to farm”. “I didn’t know where I would make my living, but we could not say anything, because we are with the Party and with the state”. “If you ask me, did I want to give [up our land], well I didn’t want to give [it up], but that
was the directive, so I had to give it up”. “We didn’t want to go against the Party, against the State, and we were told that if we gave up our land, the company would allocate some land within the plantation for us to farm”. In one village, respondents were reportedly told “whether you give up your land or not, the concession will take this land”.

In Nong Lao Theung, the women of the village explained that there was no willingness to give up even a small amount of land, but it was thought the few who were eventually dispossessed in this village could manage to overcome the initial problems, as long as there were no further land clearances in their village. A compromise was achieved.

Land surveys and clearings
In three of the villages studied (Oudomsouk, Lak 19, and Vangkhanane), the survey and transfer of the land was carried out immediately or shortly after the first meeting with the people. In the most extreme example of haste, Lak 19, state officials, together with the village head, the village tax assessor, and the company representatives went straight to the fields after the first meeting to measure the area where the people grew their coffee. The whole surveying process took a total of 15 days. Half the area - around a hundred hectares - was cleared immediately after survey. By contrast in two of the villages, Nong Ke and Nong Lao Theung, the survey came at the very end of a long process of building understanding and arriving at a considered agreement. (see box for the example of Nong Ke village).

Officials in Lao Ngame explained that they had made mistakes when they went through the land concession process for the first time, and unfortunately for Vangkhanane it was one of the first villages to be targeted in the district. Serious land conflicts has arisen in Vangkhanane, causing the provincial officials to call a halt to the expansion of the plantations in Lao Ngame. Mr Somjai Ounjit, Head Land Management Authority in Salavane Province explained “the District and Province met together and drew out the lessons learned from Vangkhanane village. There had been many land conflicts. The lesson learned was there must be land left for the people to farm and make their living”. Rather than rushing the expansion, time was taken to develop a new method and the next batch of villages in Lao Ngame, including Nong Ke and Nong Lao Theung, were approached over a year later.

The survey had different purposes in different villages. Where the purpose was simply to identify the land to be used by the company, the landholders were not involved. Elsewhere, where the survey was understood as a process to verify the current holder of the land within each village in order to calculate compensation, the villagers were asked to accompany the surveyors. It was taken as read that the ‘owner’ would not be reliably determined from either the tax records or the dusty land and forest allocation map. In all cases, the rough area to be handed over to the company had already been decided prior to a detailed survey.

Serious misunderstandings
In one village, Vangkhanane, at one stage in the acquisition process, 16 families agreed to transfer their land to the company, while 19 families held their ground. Interviewees told us, these nineteen refused because “they were afraid they would become poor”. An agreement was reached between the people and the company: those who were not happy to give up their land, would be exempt. However, on the day of the clearance, all the land was torn up. The company had hired Vietnamese people to drive the tractors to clear the land, who, it appeared, could not understand the villagers shouting at them repeatedly to stop the clearing. Villagers watched as their crops were dug up and destroyed.

In the case of Oudomsouk also, there was some unauthorised clearing of the land belonging to families in KhumBan Dong. A survey had to be made after the fact, and the Viet-Lao company was required to calculate and pay damages to the affected landholders. There was no discussion of returning the already-cleared land to the villagers.

Absence of process
In Nong Nam Khao Yai, the people were not told about the project in advance. They learned that the company had come to grow rubber, only when the company tractors drove in to clear the land. Unbeknownst to the villagers, a technical team from the forestry department of the
province and district had been sent to survey the area for the company. When the company cleared the land, they brought the documents notifying authorisation to clear the land. This was marked with the stamp of the province and was read out for the people to hear. No compensation was paid to the people who previously used the land. Teak plantations were chopped down, coffee gardens, yakha gardens were cleared by the tractors, while the villagers pleaded with them to stop.

In Vangkhanane, no prior survey was carried out. The people do not know how much land area in total has been given to the company from this village. The district officials only have partial records on this point. The confusion which reigns over the baseline data from this village prior to the arrival of the company, made it impossible to assess subsequently fair compensation.

<table>
<thead>
<tr>
<th>Process</th>
<th>Bachieng, Champassak</th>
<th>Lao Ngame, Salavane</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Oudomsouk Lak 19</td>
<td>Nong Nam Khao Yai</td>
</tr>
<tr>
<td>Decision to target village</td>
<td>Not involved</td>
<td>Not involved</td>
</tr>
<tr>
<td></td>
<td>Village authorities only</td>
<td>Village authorities only</td>
</tr>
<tr>
<td>First decision meeting at village level</td>
<td>No subsequent village meetings</td>
<td>Several involving entire village</td>
</tr>
<tr>
<td>Subsequent decision meetings at village level</td>
<td>Insufficient data</td>
<td>Several involving entire village</td>
</tr>
<tr>
<td>Presence during survey</td>
<td>Insufficient data</td>
<td>Landholders not present</td>
</tr>
<tr>
<td></td>
<td>Landholders not present</td>
<td>n/a (No survey)</td>
</tr>
<tr>
<td>Presence during clearances</td>
<td>Some landholders not present</td>
<td>Present but protests ignored</td>
</tr>
<tr>
<td></td>
<td>Landholders not present</td>
<td>Initially not present</td>
</tr>
<tr>
<td>Decisions regarding compensation</td>
<td>Not involved</td>
<td>n/a (No compensation)</td>
</tr>
<tr>
<td></td>
<td>Villagers allowed to negotiate</td>
<td>n/a (Decisions not yet taken)</td>
</tr>
</tbody>
</table>

**Incremental landlessness**

In three of the villages, the authorities came to ask the villages for land more than once. In Vangkhanane, villagers were first asked to provide 5 ha for the company to establish a nursery. Later, they were asked for all the village land on one side of the road, and later still, most of the land on the other side of the road. In Lak 19, the villagers lost a fifth of their land at the first request by DakLak and much of their remaining land to the Dau Tieng company a year later. Another large village in Bachieng, Phonexay, was noted to have given a total of 809 ha of land to the three companies, - Viet Lao in 2005, DakLak in 2006 and Dau Tieng in 2007.

**Cancelling certificates**

In many cases, the land was transferred directly to the company. There was no formal process of villagers transferring the land back to the state, in order for the state then to concede "state land" to the company. In the case of the Viet-Lao company, documents in Vietnamese were signed by villagers relinquishing their land rights, in order to be paid compensation. Villagers fingerprinted documents they couldn’t read and had their picture taken next to their plot, villagers were asked to hand over their land certificates to the company.
Participation within limits - Nong Ke village, Lao Ngame district, Salavane province

Following initial problems in Lao Ngame, the provincial authorities and district governor decided to try a more participatory approach in subsequent land acquisitions for land concessions. In contrast to the rather unorganized approach in Vangkhanane, where a hasty process meant that no survey had been carried out prior to the land clearance and compensation payments were not made or unevenly applied, Nong Ke had the benefit of lessons learned from the Vangkhanane experience.

The process to explain to the people of Nong Ke village, that a land concession had been granted to the DakLak company to grow rubber in their territory, and obtain their agreement on all aspects took around one year in total.

In total, four meetings with the entire village were held to discuss which areas of land the people could give up, and where would the villagers farm once the rubber is grown. A consensus was eventually reached with the district and the company. The people agreed that they could give up their fallow land and some of their crop land on condition firstly that there be a survey of the land, identifying clearly the ‘owner’ of each parcel, and secondly that the landholder and company must negotiate and agree the amount of compensation before any clearing took place. The villagers developed a common principle that those whose crops were still young and not yet ready for harvest should not receive the same as those whose crops were already harvestable.

After these meetings, a survey was carried out of the area cultivated by the villagers. The surveyors used GPS equipment and the process took about a month and a half to complete. Participants in the survey included representatives from the village organisations, three technical officers from the district, two deputy village heads, two heads of the production units, the village police/security officer and the relevant land owners. The ‘ownership’ of every plot was recorded. The rice growing and fallow areas were measured first then the coffee, cardamom, teak and fields of other crops, with the owner identifying the extent of their fields and their expected yield from the existing crop.

Once the surveying was complete, and the compensation agreed, the land was cleared. The former ‘owners’ went to witness the clearing by the company to ensure that they did not exceed the bounds of the agreed land transfer. In total, in Nong Ke, 26 families gave up all their land, out of a total of 171 families who contributed fields to the DakLak company. Of these, six families used their compensation money to buy paddy fields in neighbouring villages. Others went to ask for the use of swidden fields, from neighbouring villages, agreeing to pay the land tax in those areas. Some accepted the offer to manage land within the rubber plantation under the “4+1” scheme.

The period between the moment when the people agreed to give up their land and the time the compensation was agreed, varied from 10 days to 4 months. At the time of our study, one year after the rest of the village had closed their deals, one family had still not transferred their land to the company. This family was the owner of 2 ha of a high yielding coffee crop, and was asking for 50 million kip in compensation.

The land acquisition process in Nong Ke appears overall to have been managed with the relatively full involvement of villagers. Not everything, however, about the way the project has been carried out was to the satisfaction of all villagers. One problem noted was that initially the land clearances were carried out at night, when the villagers were not present. However over our series of discussions with villagers in this village about the process, views ranged from satisfaction to ambivalence. On balance, respondents here held a moderately positive perspective on the rubber projects. Other villages studied presented a different picture.

Although the terms of what could be agreed and what must be done were set by outsiders – “there must be some transfer to the company, there must be some compromise” - within these constraining limits, the villagers were brought into a process that allowed time to reflect and discuss as a community the impending changes to their lives. In most cases, households in Nong Ke were ‘allowed’ to keep land that was considered essential to them, and given the chance to negotiate upwards their compensation payments.
Land holding and land loss
There is a wide difference amongst the villages in terms of the types of land which were transferred to the company, and how much land the average family was left with.

In lowland and some upland villages, it is common for a family to have a patchwork of different plots representing three or four main types of land on which to farm (see section two). This indeed is recognised under the Land Law which entitles each household to be allocated land for rice production, annual crops, tree orchards, and grazing in proportion to the number of labour units in the family (see part II). In the villages studied, prior to the land concession, villages such as Nong Ke had sufficient land and labour so that a third of households interviewed held paddy, as well as dryland rice fields (hai) and croplands/orchards (souan). Paddy land, however, was uncommon in the villages studied in Bachieng. Most households interviewed in Oudomsouk and Lak 19, started off with two types of land, hai and souan. Other large villages such as Vangkhanane and Nong Nam Khao Yai had a much less fortunate starting point - the majority were depending only one type of land, most commonly hai.

Lao Ngamne
In Nong Ke, 170 ha of land was given to the Dak Lak company by 171 families. Overall 26 families were left landless by the land concession. Of these we know that some have subsequently obtained alternative land in neighbouring villages and some asked for land in the rubber plantation in which to intercrop. From our survey we found that a quarter of families interviewed in Nong Ke still had a mix of swidden, paddy and cropland following the concession. Around a quarter kept two types of land, and a quarter were reduced to just one type of land. Roughly one in five of the households interviewed in the village lost all their land to the concession. Most of the land that was lost was swidden rice land (hai), or fallows (pa lao), but many households lost their coffee plantations, cardamom fields and teak stands. On average, families surveyed in this village only lost about ¼ of the area of their total landholding.

In Nong Lao Theung, very few farmers have been affected by the land concession yet, although according to the company plan, further land will be requested from this village. So far, 9 families have given away a total of 22 ha, only three of these gave away all their land. However, the village appears to have come to a collective agreement to share ‘excess’ land belonging to other families amongst those who sacrificed their land to the company. All families now have land on which to farm.

In Vangkhanane, it is not known how much land was taken from this village as the record is incomplete. However most fallow land and all croplands have been transferred to the DakLak company and all villagers lost some land to the company. Of those interviewed, two thirds became entirely landless. Taking an average of all respondents, each family in this village lost around 80% of their land area. However, according to village authorities, almost all families, approximately 93 households, have been given around 1 ha each under DakLak’s “1+4” scheme (see section three) and many families now depend on the land in the rubber plantation for their rice.

Bachieng
In the large village of Oudomsouk, 646 ha or around half the village land was transferred to the Viet-Lao Joint Stock company. The most prevalent land holding pattern used to be that families had both swidden rice fields (hai) and croplands (souan). Paddy fields are a rarity here. Following the land concession only one in ten families still had two types of land left. Just over half the families had one type of land left (souan). One in four households have become landless. The average family surveyed in Oudomsouk lost 70% of their land area.
In Lak 19, a first tranche of 48 ha was given up to the DakLak Rubber company and the following year in 2007, another 202 ha was handed over to the Dau Tieng rubber company. This made a total of 250 ha, or 88% of the total land area of the village. A small minority held hai or souan land following the land concession. The vast majority (just over 80%) of households have become landless.

In the large concerted village of Nong Nam Khao Yai, a total of 1,400 ha of land was given up to the DakLak company. Overall data on landlessness throughout the village is not available. Just under three quarters of those interviewed lost all their land. In this village, the DakLak company assigned 456 ha of land to 182 families under the “4+1” scheme.

Compensation – concepts and practice

In recognition that loss was incurred by the villagers, a sum of compensation was paid to families who had lost certain land assets, but there were several exceptions.

Compensation is required under law, however under the early establishment of the rubber plantations, this was overlooked. The Compensation Decree (art 6) requires that people who suffer an impact from development projects in rural areas or remote areas, whether they have a land certificate or not, need compensation or additional help to guarantee that the quality of their livelihood does not decrease as a result of project implementation.

Reports on how much compensation was paid to each household do not appear to have been kept at the District level. It is the companies who hold the information on the exact amounts of compensation paid to each family. The district offices hold partial information. We have been able to obtain the full official record concerning only two villages Lak 19 and Nong Ke. District

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17 This village is made up of 4 large khumban: Khiangtangle, Thamdin, Nong Nam Khao Yai and Nong Nam Khao Noi
18 The Compensation Decree (Decree of the Prime Minister on Compensation and Resettlement of People Affected by Development Projects No.192/PM, dated 7 July 2005). The rubber plantation projects, while they have clearly commercial objectives, do also make reference to social purposes, and are named in the official documents as development projects.
19 As mentioned above, At first, Vangkhanane and Nong Nam Khao Yai, the majority of households were not compensated at all for the loss of their land. Later, the same company in the same villages compensated other households for loss of their lands and crops, after the government authorities had made it clear that compensation should be paid prior to accessing land.
officials have been trying to obtain the official record of payments made by the Viet-Lao company however the companies have so far not cooperated with this request.

Practice in the villages studied appear to differ widely (see table below). There was no standard approach, different companies applied different formulae in different villages. Some companies paid compensation for the foregone harvest only, others made an assessment based on the area of the land and unit of crops together, some paid per hectare of land only. In some villages, rates were fixed by the companies, occasionally the district proposed the appropriate rate, in others, much depended on the ability to negotiate of each villager, which varied greatly from person to person.

Compensation rates, generally, were low to very low. If we look at the official record in Lak 19, we can see that villagers were paid on average just below 1,000,000 kip per ha of land lost. In addition, crops were compensated at a fixed rate per tree or crop. Coffee trees, however old or profitable, were compensated at 500 kip ($0.05 US) per tree, as were durian. Each pineapple plant was compensated at 200 kip ($0.02). The much rarer jack fruit and rambutan were paid at 5,000 kip per tree. When you calculate the total compensation per ha to the villagers in Lak 19 (including compensation for both land and crops), the total figure comes to just over 1,200,000 kip on average per ha.

In Nong Ke on the other hand, different principles were applied. The district took the initiative in proposing the rates of compensation, but it was understood that the final rates would depend on satisfaction of the villagers. Nonetheless, there were a number of objections that the rate for orchards/croplands was originally set too low. Compensation for newly established coffee areas was calculated per tree at rates of 500-1,000 kip per tree, while coffee areas which were already fruited were proposed a flat rate per hectare at 1,000,000-1,800,000 kip / ha. By way of contrast, villagers had been earning up to 9,000,000 kip per ha per year from their coffee orchards in 2007, even before world coffee prices started to increase (see section three). The Chairman of the Coffee Producers Association, Mr Sinouk Sisombat said "this year [2008, village coffee producers] were receiving 30 million kip per hectare [but those who lost their land] only received around 1 million kip in compensation per ha." This emphasizes the poor correlation of compensation to actual income values from coffee growing land.

<table>
<thead>
<tr>
<th>Lak 19, Dau Tieng JS Co</th>
<th>Compensation based on area</th>
<th>Compensation based on crops</th>
<th>Compensation total</th>
</tr>
</thead>
<tbody>
<tr>
<td>137,620,000 kip</td>
<td>44,290,700 kip</td>
<td>180,028,700 kip</td>
<td></td>
</tr>
<tr>
<td>147.78 ha</td>
<td>107,193 trees</td>
<td>118 families</td>
<td></td>
</tr>
</tbody>
</table>

20 Additional reports by the Dau Tieng company dated 11 June 2007 referring, not in detail but in overall, to all (8) villages whose land has been acquired, state that the total compensation for Lak 19 was 214 million kip for an area of 162 ha. This works out at an average of 1.3 million kip per ha. The total land grant has been 2,316 ha. The total area compensated is 1,165, to a total value of 2,204 million kip. This works out as an average sum of 1.8 million kip per compensated hectare.

21 NLMA INGOs Joint Conference on the “Implications of Land and Natural Resource Management in Rural Areas” April 2008
Villagers were paid on average 936,190 kip per ha and 414 kip per tree, which amounts to 1,525,667 kip per family.

<table>
<thead>
<tr>
<th>Villagers were paid on average</th>
<th>211,974,000 kip</th>
<th>14,903,000 kip</th>
<th>249,121,000 kip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nong Ke, Daklak Co</td>
<td>80.87 ha</td>
<td>7,891 trees</td>
<td>172 families</td>
</tr>
</tbody>
</table>

Source: Information for Lak 19 supplied by Dau Tieng company and for Nong Ke by the officials of Lao Ngame District. For the most part, in Lak 19 villagers were given compensation for both land and crops, in Nong Ke, villagers compensated either for land (such as coffee orchards) or crops (in the case of various other crops).

The official records however show that there was no uniform formula applied in Nong Ke. There was great variation in the payments to individual households. In the case of coffee, we can see a difference between the amounts paid at the beginning of the negotiation process and the amounts paid at the end. Initially, the villagers who were compensated for coffee were systematically paid less than those who held their ground, averaging at 1,250,000 kip per ha.

Some villagers however were not willing to give up their high-revenue earning resources for such a paltry sum. As the negotiations drew on, the pressure to obtain the land appear to have persuaded the company to offer higher rates. Villagers with coffee lands were beginning to get around 2.6 million kip per ha, and in April 07 the average had risen to 4.5 million kip per ha. From the final available record dated May 07, we can see that payments were eventually being made of up to 10.2 million kip per ha.

Other crops were generally compensated on a per tree basis, including teak, cardamom, castor beans, jackfruit, different types of bamboo, agarwood, and banana. Although the company claims that they used the same principles in all villages, in both provinces, the majority of villagers in Nong Nam Khao Yai do not appear to have received any payment yet. While there was considerable discussion about the value to compensate for the main cash crop, there was no attempt to negotiate payment for the swidden lands.

As explained earlier, in contrast to the experience in Lak 19, the period to agree to the hand over of land in Nong Ke, was significantly longer. Between the period when the people signed their agreement to give up their land, to the moment of agreement of compensation varied from 10 days in the case of the first villagers to 5 months after which, according to our focus group, there was only one household, who was still holding out for a higher payment. This household was the owner of a two hectare high yielding coffee crop, who was asking for 50 million kip in compensation. At the time of our survey, the compensation had not been agreed and the transfer of land was still not effective.

Total compensation for land in Lak 19 is approximately 180 million kip, or 141 dollars per ha at today’s exchange rate (8,647 LAK to the dollar). In Nong Ke, the cost to the DakLak company was higher at 170 dollars per ha. Compensation is understood as a one and for all payment.

Other villages

In Vangkhanane, no compensation was paid on the original clearance for rice land and fallow land, banana, rice, castor beans, bamboos. However, 2,000 kip per teak tree was provided along with the offer of land within the plantation under the “1+4” scheme. On the second land clearance, the district took a record of those who newly suffered losses to ensure that they would be paid compensation for their losses. The DakLak company agreed to pay 500,000 kip per ha. This was an average assessment because there was no survey of the crops grown before the land clearance. However this immediately created a problem because those who originally gave up their land did not get any compensation at all. In our household survey, we

22 The area of land compensated on a per tree basis is 90 ha.
23 There are 18 households for which there is no information given as to how the compensation was calculated.
Viet Nam is interested in the land of Champassak, Salavan, Atopu and Sekong provinces of Laos, currently used for growing vegetables and forest trees. Therefore, Viet Nam rubber corporations need to produce a more reasonable compensation plan for the landowners if they want to entice them to change their land-use. They must also develop a better investment strategy if they wish to earn the trust of the local people, helping them to develop their country’s economy. \footnote{Article posted on website of Vietnam’s Ministry of Foreign Affairs 20 July 2007}

Obtained data concerning compensation from 24 villages who lost land, the average paid to them was only 236,000 kip per ha. Only two families were paid 500,000 kip per ha, the rate advised by the company. Three families were paid nothing at all.

In Oudomsouk, the villagers were ‘compensated’ with the offer of a job clearing their crops to prepare the ground for the rubber plantation. They were paid 30,000 kip per ha. However, according to our household survey, villagers did eventually get compensation. The people had made a complaint through the village head to the District to come down and resolve the problem. The figure per ha varies enormously and the basis for calculation is not known. For crops such as teak, the compensation depended on type and age of the tree, however in general they were very poorly compensated at 500-5,000 kip / per tree (0.05-0.5 US$). On average, amongst the 29 families who provided us with information, the total figure paid in compensation was 471,000 kip per ha. There was no compensation for dryland rice.

As mentioned above, in Nong Nam Khao Yai, most villagers did not receive any compensation at all. Although from our survey of thirty families, it appears that three families in NNKY did in fact receive payment of around 500,000 kip per ha. It is not clear why these families were paid when there appears to be no difference from the great majority who were left unpaid.

In some villages, swidden fields were compensated at an average of 500,000-1,000,000 kip per ha (50-100 US$), while in other villages no compensation was given. Groundnuts, which are often grown in the swidden fallows and all the multiple benefits drawn from the fallows (see below) were not compensated. In general, losses derived from produce which the villagers had not planted themselves, were not assessed, for example, thatching grass (ya kha), which the villagers allow to grow and consider to be gardens (souan). Yakha is used for thatching in the village, but in certain villages such as Oudomsouk they provide a significant harvest for sale (see section three below). Equally, the economic and other values of sources of food or grazing areas in the pa khoke (deciduous dipterocarp forests) were not assessed for compensation.

Mostly the villagers used the compensation for expenses in the family, such as buying rice, or other food. In some villages such as Nong Ke, six families from our survey used their compensation payment added to their savings to buy paddy fields in neighbouring villages or to borrow the land on a tax paying basis. However this was relatively uncommon. Villagers reported that the money that they had received in compensation was spent quickly, and in some cases the compensation was so low it was only enough to purchase rice for the family for two months.

Project monitoring

One serious problem that is raised given the paucity of baseline data available prior to conceding land in Bachien and Lao Ngame Districts is that it will be very difficult for the authorities to carry out proper monitoring of the rubber projects throughout out their lifetime. In addition, the main selling points of the projects (commitments concerning employment, responsible land use, development gains) were not enshrined in contracts with the company so it would be very difficult to hold the company to their commitments if monitoring were carried out.

Despite the legislation in force, no Environmental Impact Assessment (EIA) or Social Impact Assessment (SIA) was carried out. These assessments appear to have been either overlooked altogether or considered inapplicable to agricultural projects. Thus, not only was there no proper understanding of environmental and social implications of the projects prior to their planning and implementation, but also there will be no reliable data of this nature in the vast project areas with which to compare, contrast and analyse in the later stages of the project.
What is even more surprising, perhaps, is that even the economic benefits to the villagers were not independently studied or assessed by the provincial or other authorities. The prospect of local employment in the rubber plantation appears to be the only economic issues raised by the provincial authorities with respect to the direct impacts at the village level. Perhaps because this was the only analysis available within the investment proposals. However, the Department of Labour appears to have been kept out of the loop in all prior consideration of each project. The figures provided by the companies painted a positive picture for the future of the labourers in the plantations, however information was not fully available to understand the reality represented by these figures. For example, how many persons would get full time jobs in a given year under their expansion plan, how many temporary workers were needed and how many days on average they would work.

Furthermore, the economic impacts upon those who would not be able to gain employment in the plantations, but who would nevertheless lose their land, who would lose their trade, who would lose their ability to produce, who would lose their food forages, were never assessed.

The lack of baseline data is not the only obstacle however. When we met with officials in both Champassak and Salavane, officials with responsibilities relevant to the monitoring of the projects frequently expressed their eagerness to learn more about the broader context of the projects. Few had had the opportunity to examine anything other than the documents presented by the companies. Even a visit to the plantations, a short half an hour drive away, is not an easy prospect for a local official. Operating budgets of the different offices concerned are always tight, and petrol prices are more and more forbidding. In particular, officers expressed curiosity about the overall prospects for rubber and the potential benefits to be gained. Access to information about the future markets for the crop was extremely limited.

Without a significant input of resources to the departments with responsibility for monitoring these projects and trying to ensure maximum benefits for the local people, it is likely that the capacity to carry out the ongoing monitoring of these projects will continue to depend on external support.

Summary and Analysis concerning process of land acquisition

Clearly there is strong political and diplomatic cooperation paving the way for Vietnamese business to invest in Laos. This has given confidence and support to the establishment of the rubber projects. Economic support to the two areas in question is much needed given the high levels of poverty noted in each district. However the process by which such economic support is introduced is critically important. As Mr Nouphan Mahaphan, Director General of the NLMA’s Department of Land Policy and Land Use said during the National Land Meeting of May 2008, “our government is always concerned about protecting the rights and interests of local people, with a focus on investment projects that will be beneficial to people in the area”

Full documentation about each project has not been made available to the study team. However, it also seems that there is a more general paucity of baseline data about the pre-rubber livelihoods of the people in the many villages affected by these projects. It will be very difficult for the authorities to carry out proper monitoring of the rubber projects throughout out their lifetime without this. No Environmental Impact Assessment (EIA) or Social Impact Assessment (SIA) have been carried out. However, the economic benefits to the villagers were also not independently assessed, in particular it seems that there was no prior assessment of the numbers of people who would benefit from full-time employment in the rubber plantations and the numbers who would suffer from full loss of land. The economic impacts upon those who would not be able to gain employment in the plantations, but who would nevertheless lose their

“Reducing poverty, or perpetuating it?” 23 Apr 2007
land, their trade, or their ability to produce, who would lose their food forages, were never assessed.

The way in which the land has been acquired for the land concession however has varied considerably in the different villages studied. Participation in the process is limited in four of the six villages. The transfer of land had already become seen as a provincial obligation before villagers in the target area were brought into the process. Full information about the terms of the benefits, and any information at all about the terms of the pitfalls of the project was lacking. Villagers were mostly brought into the process with the intention of persuading them to part with most or all of their land. The speed at which the process was completed in many villages made for a very abrupt adjustment to a very different way of life. Some villagers were given no warning of sudden landlessness, that is, the destruction of the previous basis for their livelihood. The consequences of this are discussed in sections three and four.

As lessons were learned from the first experiences of implementing the rubber projects, in two villages, the state authorities adapted their approach to that of brokering a mutually beneficial deal. This approach emphasised discussion amongst villagers and allowed time for more communication of information about the operation of the project. This process took much longer than before, but allowed the community time to take on board the changes that the land concession would bring. Villagers were still encouraged to make a sacrifice for longer term benefits to the community and the country, but they were also allowed to decide individually how much land they could contribute to the project and how much land must be exempted as being essential to their livelihood security. The more participatory approach appears to have helped in minimising some of the main negative impacts as discussed in the following section. Householders in these villages interviewed during the course of this study have expressed higher levels of satisfaction with the rubber project than the majority of villagers in the other four villages.

In practice, the payment of compensation was haphazard and the principles by which they would be determined did not appear to have been clearly arranged in advance. Rates were extremely low, mostly the value of the harvest per ha in one year exceeded the amount of the compensation per ha, in some cases the sum of compensation payment was barely enough to be able to feed a family for one month. In the case where villagers have lost access to land, this alienation from the land is, to all intents and purposes, permanent. As we will see in section three, the low level of compensation payments have not guaranteed against the deterioration of the quality of life of those people worst affected by the projects.

section two: livelihoods and land tenure in pre-rubber era

Having briefly described the first steps in the introduction of the rubber projects to the South, and the process by which land was acquired in different villages, we will go on to describe the impacts that the projects have had on lives of the people in the next section. However, it is important that we provide some notes on the contextual background to the area in which the villagers live, and the pre-rubber livelihoods of the villagers. This aims to describe some baseline conditions and livelihood strategies of the people in the villages before they were incorporated into the rubber plantation projects.

Village ecological knowledge and cultural practices

While extraordinary long term plans for investment are being developed both overhead and underfoot, villagers living in the Boloven area, like elsewhere in Laos, often have a daily dependence on the natural resources to be found on the land and rivers of the area.

It has been estimated that more than four out of five Lao people rely on forests resources for essentials like food, shelter, fuel, tools, and crafts. In the rural areas studied, the villagers used to collect an abundance of forest products including darmar resin, rattan shoots and stems to sell. Mushrooms, vegetables, bamboo shoots and insects collected from the forests form part of
the regular diet. The streams, rivers and the pools provide many different types of freshwater species, including fish, frogs, whelks, crabs.

Many of the Lao Theung groups follow animist religious practices, although Buddhism is also widely practiced. Animist practices, vary according to the distinct culture and tradition of each ethnic group and evolve over time, making each tradition a matter that requires detailed study. Generally, it can be said that they are based on the respect and invocation of the spirits who are believed to reside in past and present individual living things as well as landscapes such as rice fields, forests, mountains and rivers. Spirits may be called upon at various times of the year to bestow fertility and protection for agricultural cultivation and spirit beliefs are often integrally linked to the ecological knowledge of the people.

Merit-making ceremonies on behalf of people within the community or to mark important events are also a sporadic part of village life. People generally stop working on their own fields in order to contribute foods, leaves, cash, alcohol, etc and take part in the ceremonies. These can be announced with short notice, and are usually held since early morning, regardless of the day of the week.

Traditional Agricultural systems

**Hai**

The practice of cultivating dryland rice and collecting food from the land in rural parts of Laos is based on centuries-old traditions, practiced by most if not all ethnic groups in Laos. Traditional rice farming systems in the areas studied were founded on an extensive swidden rotation, with one or sometimes two years of rice cultivation, then a fallow of around 7-10 years, varying on the local environment and the agri-cultural knowledge of the particular ethnic group. A minority used to farm on a shifting cultivation basis, opening a new area of land each year. The area farmed depended on the amount of labour in the household.

Typically the term *hai* is used for the area of land which is being cultivated with dryland rice or secondary legumes and the terms *lao, hai lao,* or *palao* for the same area of land when it is left fallow to regenerate. However the *hai* provides much more than dryland rice, it is an important source of firewood in the year it is cleared for rice production. Often chillies and a range of vegetables are encouraged to grow semi-wild in the fallow years and the *hai* becomes a source of many other wild foods such as mushrooms, bamboo shoots, berries, and insects, birds, and small rodents. Some households also sold these products to supplement their income. Now that rice rotations have been reduced to 3-4 years, the *hai* is often planted with a nitrogen-fixing crop in the year following rice cultivation, most commonly groundnuts or soya.

Swidden rice farming remained a significant element in the household economy prior to the advent of the rubber concession in all of the villages studied. However many villagers referred to the problem of declining fertility as swidden rotations were reduced to three years following the Land and Forest Allocation programme, with detrimental effect on livelihood security. This is a problem that has been recognised by the Ministry of Agriculture and Forestry (MAF). A report co-authored by JICA and MAF (2001) acknowledges that “while the majority of upland families now have been allocated land, they have been unable to adapt their farming systems as rapidly as their access to land has decreased. As a result they have not maintained productivity and living standards under the shortened fallow regimes. It is evident that many upland farmers are now caught in this vicious circle of decreasing production and increasing poverty. Therefore many families are forced to continue swidden rotations on un-recorded greater areas than they are allocated”.

Shortages of home produced rice were not uncommon in three of the villages studied: Oudomsouk, Lak 19 and Vangkhanane. With many areas of fertile natural resources around the villages, villagers often derived additional income from harvesting and selling forest products as mentioned above to buy rice. Sales of livestock provided a buffer in lean years. In Oudomsouk, villagers reported that the eradication of shifting cultivation reduced village allocations of *hai* to less than 1 ha per family and rice yields decreased. However, most families
succeeded in diversifying their production, transforming some of their hai into permanent souan (see below) of various kinds. In the case of Vangkhanane, in Lao Ngame, on the other hand, located deep along a dirt track with poor access to markets however, options were limited. Only one supplementary crop, groundnuts, was significant in Vangkhanane, making it one of the most vulnerable villages prior to the arrival of the rubber plantation.

**Na**

Paddy rice farming is also a feature of agricultural systems in the south, particularly among the lowland Lao, although it has also been adopted by other groups. In our study areas, where suitable land was available, paddy farming was practised by a few Arak, Souay, Laven, and Brao households as well as Phou Thai and Lao Loum. Very few villagers in Bachieng had access to paddy land, while in Lao Ngame, paddy fields constituted an important production area, particularly in Nong Ke and Nong Lao Theung. Apart from the yearly production of rice, paddy fields were also listed by our survey respondents as sources of other foods such as pakkadone vegetables, bamboo shoots, frogs, and molluscs.

**Souan**

Villagers were encouraged to transform their agricultural practices in the mid 1990s through several policy measures, including the land and forest allocation programme, mentioned above. At first many villagers adapted their newly restricted swiddens to the production of short cycle annual crops, however changing economic factors, and favourable environmental conditions led them to begin planting longer term tree crops in orchards or gardens known as souan, such as grow durian, rambutan, jack fruit, sisiaid, as well as teak.

Souan production did not usually replace all hai production, mostly each household kept some hai fields but in certain villages like Lak 19, those with hai became the minority. Villagers in Lak 19 began to plant coffee around 1997, influenced the boom in production in neighbouring Paxong, but others also diversified into pineapple and durian. In Nong Nam Khao Yai a similar picture emerged with villagers diversifying into teak, coffee, banana, pineapple, durian, rambutan, and lamyal.

Villagers interviewed in Nong Ke and Nong Lao Theung were in perhaps the least vulnerable position to start with, generally having not only both hai and paddy land available, but often additional souan land too. This included small individual plots of coffee, cardamom, teak, castor beans, jackfruit, bamboo, agarwood, and banana. Pigs were seen rummaging freely below the coffee trees within the villages here, and cattle are also seen grazing in amongst the established orchards further afield.

**Livestock**

Before the rubber plantations, herds of cattle in these area of Bachieng and Lao Ngame were said to be very large, although officials told us that the real herd sizes were under-reported by villagers to avoid paying tax. Comments from villagers in Bachieng indicated a typical family used to have 6-10 head of cattle including buffaloes. Cattle were often left to graze in the common lands such as the dry forests, pa khoke, as well as in the palao and in the paddies after the harvest. Villagers tend to sell their livestock primarily when a large sum of money is required such as occasions of ill-health, buying land, or building a house. Thus ownership of livestock provided a range of services, such as fertilising the rice fields and draught power but also savings for unexpected or large expenses. Looking after the larger animals was a task for the men, and the boys often took sole charge during the school holidays.

Pigs and goats were also commonly kept although the latter were not reported in Lak 19 and Nong Nam Khao Yai. Smaller livestock, such as ducks and chickens, was the responsibility of the family, but in some households it was specifically the chore for grandmothers who generally minded the house and looked after the very young children, while the middle generations were out working.

**Agricultural calendar**
According to our respondents, work in the fields was both their livelihood and way of life. Men and women would generally go to their fields early in the morning immediately after breakfast was finished, while temperatures were still cool. Some villagers referred positively to the social aspects of neighbours and family members working together in the hai, although we did not inquire into the extent to which shared labour systems exist and are still operational. Both men and women were involved in the clearing, burning, secondary clearing, weeding, planting and harvesting of the hai, paddy and souan lands. Normally the men of the household would be given the additional duties of heavy clearing and ploughing, and similarly transporting produce back to the store or for sale. While they are still healthy, and provided there is someone to look after the house and young children, villagers would go out to the fields every day well into their 60s and 70s.

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</tbody>
</table>

* Hai (dryland rice fields/swiddens)
* Na (paddy rice fields)
* Souan (orchards/croplands)

Taking a composite of all of responses from our survey, the above calendar gives some broad indication of the busiest times of the farming year: April to June for those with hai; March and April for those with coffee orchards; and May to October for those with paddy fields.

**Rice self-sufficiency, nutrition and risk**

According to the World Food Programme’s 2005 report, in normal conditions, more than one third of the population of Laos experiences rice shortfalls for two to six months a year.

Across the very different villages facing different conditions in terms of landholding, employment opportunities and crop choices, the risks of rice insecurity differ considerably. Households which have access to several types of land, and the labour to be able to tend to them, can be expected to be in a more secure position being able to rely on different streams of income and staple food production at different times of the year. For example in the case where a household has access to paddy, hai and souan land. The months of plenty traditionally begin when the rice is harvested. It should be noted that in the villages studied there appears to a general absence of debt outwith the family (see below). If the harvest is favourable, and the family is not large in comparison to their landholding, farmers may produce rice to eat all year and generate a surplus. In our household survey, out of a total of 189 families, 150 families produced enough rice to be able to eat from their own stores all year round. That is 80% of the households surveyed were self-sufficient in rice prior to the land concession.

Given that March to August is potentially a lean period for rice producers, growing additional crops, or combination of crops, which can be harvested and during these months becomes an important factor in the food security of the household (see harvest calendar below).
It can be seen that the majority of the cash crops grown in the villages studied are productive at just the period of greatest rice vulnerability (shaded in yellow). The loss of dryland rice land, particularly in areas with little or no paddy land such as the villages studied in Bachien, places the family at risk of not having enough rice to eat throughout the year. The additional loss of souan land increases the vulnerability considerably. The only means of survival becomes the search for hired work, however as we will see in the following sections, employment opportunities are not equally available in each village. As discussed later in the next section, work in the plantations has not been available to all villagers who lost their land to the concession, wages are often low and late, and rice prices have been increasing.

**Off-farm livelihoods and changing dependencies**

It is clearly the case that householders in both Lao Ngame and Bachien sought additional work and means of generating income well before the arrival of the rubber plantations. The easiest recourse is look for work within the village to help out other villagers in the busy times of the agricultural calendar. This was hired work for which payment was made. Households with some means of transport were able to look for work further afield. Although households expressed these off-farm livelihood activities as secondary to farming, they occasionally provided a significant income for the family (see section three below).

The villages studied in Bachien are all located along the main road, and while increasing transport and diesel costs are a deterrent, villagers did take advantage of the links to work several kilometres away. In Oudomsouk, one worker told us he went all the way to the Dao Rouang coffee depot and factory located in Lak 20, every day, a good 20 kilometres away. Others in the same village told us that prior to the establishment of the rubber estate, there was no alternative employment available to them.

In Lak 19, before the land concession, villagers had already established a trade in making machetes that are in high demand for agricultural clearing. The iron is fired up in small kilns built under individual shelters throughout the town off the main Pakse to Paxong road. The iron is recycled from old truck and car parts bought in Pakse, and the kilns are powered by charcoal made from the wood traditionally collected while clearing the swiddens. The wood for the handles is whittled from branches in the local forests and *palao*. In the past, knives were sold both wholesale and retail at the roadside in the village.

The villages studied in Lao Ngame, are all off the main road, along a dirt track that used to deteriorate quickly as the rains progress. This road has since been improved by the DakLak rubber company, and, while still rutted and muddy, has cut journey times considerably. A teak sawmill owned by a Chinese businessman is located near Nong Ke. It is considered to pay well, and villagers report working there as a supplementary occupation after they have finished planting their own dryland rice and paddy fields.

In other villages such as Vangkhanane there are next to no alternative employment opportunities available. The price of fuel makes travelling to work regularly by motorised vehicle, even when shared, prohibitively expensive.
Migration of family labour represents another livelihood option. However, we were unable to investigate this issue in the course of this research. Existing research indicates that there are considerable income streams being injected into family and community economies in the central belt of Laos in the form of remittances from younger family members working in Thailand. It is known that there are a considerable number of Laotians who cross at the official border into Chong Mek every month. Most parts of western Champassak have a land border with the Thai province of Ubon Ratchatani, through which people may walk even without papers to look for paid work in the agricultural sector or urban areas. Such illegal migration however brings with it new vulnerabilities over and above the poverty that migrants are trying to overcome. A few respondents in our survey did refer to migration of members of their family to look for paid employment, in Vientiane and in Bangkok.

Section three: tumultuous changes

In section one we saw that the different villages studied lost different amounts and different types of land to the plantations. The loss of land in agricultural communities can have significant impacts on the stability of the communities that go well beyond the material loss of productive assets and sources of food. However for the purposes of this section, we will concentrate on the tangible impacts of the loss of land, which we will divide into three main areas. The first focuses on the production economy, particularly of rice and coffee, the second on non-timber forest products and the environment, the third on employment revenues and working conditions in the plantations.

Production losses in the context of commodity price readjustments

Since the first half of the present decade, world commodity prices have begun to rise. Land scarcity has its part to play in these price rises, as do complex variables such as climate and speculative market interest in biofuels, etc. The market price of rice and coffee, two important market crops in the south, have escalated. As unprecedentedly high oil prices add a new premium to each and every transported good, prices of even those commodities which do not have an international trade value, are also beginning to float upwards. Thus small scale producers face not only a rise in farm gate prices, but a rise in food and commodity expenses too. Whether higher prices are a boon or a curse depends on the balance of farmers’ production for the market and his or her family’s consumption from the market.

Coffee, cardamom and other cash crops

The area of the Boloven is particularly noted for the quality of the coffee produced there. According to statistics from the Department of Agriculture, the national coffee production area (largely on and around the Bolaven plateau) expanded from 6,451 hectares in 1980 to 36,624 hectares in 2002. Coffee now represents one of Laos’ top export commodities. Three of the villages in our study derived a significant income from coffee production, Lak 19, Oudomsouk and Nong Ke. While some families among those surveyed first started planting coffee in the late 1980s, the vast majority took up coffee from the mid 1990s. Gradually over a number of years households expanded their production. The size of the area for coffee depends on the availability of labour units in the family. One farmer in Lak 19 told us how it took nine years for him to expand his coffee plantation little by little each year to 2 ha.

During the first two years it is possible to intercrop dryland rice in the orchard, while the coffee trees are still young. Once the coffee is around 4 years old, it is possible to harvest the beans, but the canopy will be too thick to allow the farmer to grow any more rice under the branches.
The beans can be harvested every year for 20-30 years requiring relatively simple maintenance of manual weeding twice a year.

Coffee has proven an attractive crop for smallholders in this region, not only because of the relatively early yield and thus the potential for gradual adoption and expansion, but because of the well established and increasingly favourable market for the crop. The Dao Rouang company, one of the largest traders in the region, has a depot located in Lak 20, a kilometer up the road from Lak 19.

From the table below it can be seen that incomes in Lak 19 are consistently higher than in Oudomsouk and Nong Ke. This is likely attributable to the latter’s distance from the market, given that prices quoted and average area planted otherwise seem comparable. Yields in the three villages were reported at around 2.5-3 kilos per tree and a good harvest yielded around 1 to over 1.5 tonnes per ha.

<table>
<thead>
<tr>
<th>year</th>
<th>village</th>
<th>total income</th>
<th>no of households</th>
<th>average income per coffee grower</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>Lak 19</td>
<td>83,327,000</td>
<td>30</td>
<td>2,777,567</td>
</tr>
<tr>
<td></td>
<td>Nong Ke</td>
<td>76,584,200</td>
<td>36</td>
<td>2,127,339</td>
</tr>
<tr>
<td></td>
<td>Oudomsouk</td>
<td>41,100,000</td>
<td>24</td>
<td>1,712,500</td>
</tr>
<tr>
<td>2004</td>
<td>Lak 19</td>
<td>109,016,000</td>
<td>34</td>
<td>3,206,353</td>
</tr>
<tr>
<td></td>
<td>Nong Ke</td>
<td>78,353,000</td>
<td>38</td>
<td>2,061,921</td>
</tr>
<tr>
<td></td>
<td>Oudomsouk</td>
<td>40,270,000</td>
<td>21</td>
<td>1,917,619</td>
</tr>
<tr>
<td>2005</td>
<td>Lak 19</td>
<td>174,998,000</td>
<td>34</td>
<td>5,147,000</td>
</tr>
<tr>
<td></td>
<td>Nong Ke</td>
<td>82,366,900</td>
<td>37</td>
<td>2,226,132</td>
</tr>
<tr>
<td></td>
<td>Oudomsouk</td>
<td>32,480,000</td>
<td>16</td>
<td>2,030,000</td>
</tr>
<tr>
<td>2006</td>
<td>Lak 19</td>
<td>105,934,000</td>
<td>22</td>
<td>4,815,182</td>
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<td></td>
<td>Nong Ke</td>
<td>113,583,700</td>
<td>31</td>
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<td></td>
<td>Oudomsouk</td>
<td>29,505,000</td>
<td>13</td>
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<tr>
<td>2007</td>
<td>Lak 19</td>
<td>37,750,000</td>
<td>4</td>
<td>9,437,500</td>
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<tr>
<td></td>
<td>Oudomsouk</td>
<td>3,600,000</td>
<td>3</td>
<td>1,200,000</td>
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</tbody>
</table>

In 2003, coffee prices were around 3,000-7,000 kip per kilo. By 2005, prices had increased and at their peak villagers were earning 10,000-13,000 kip per kilo. The 30 smallholder coffee producers in our household survey in Lak 19 reported earnings come to approximately 5,147,000 kip per grower in 2005, the year before the DakLak company came for a part of the village land. One successful example, Mr Bounlay’s household in Lak 19 gained a good harvest that year earning a total of 24,000,000 kip from just under 2.75 ha of coffee fields. It should be noted that all four remaining households in Lak 19 shown in the table have since lost their land to the Dau Tieng company.

As world commodity prices have seen an upturn, the international trading price of coffee has risen, pulling prices in Laos to rise sharply in 2007-8. Since prices have risen, the coffee would have fetched between 18,000-25,000 kip per kilo according to the price of raw coffee announced by the Association of Coffee Exporters earlier this year 25(see box).

25 Roughly 90% of the villagers in our study villages grow robusta, although a small minority produce arabica. It is not clear from the article, but the prices quoted are likely to be for graded...
Villagers in Lak 19 have now foregone up to two years of income just as the rising price would have made them a large sum of money. They will have watched as others cash in. The table below represents the potential yields based on the tonnage yielded in the year before concession land decimated coffee production. A representative of the coffee producers association also expressed concern during the NLMA-INGO Land meeting of April 2008 that the rubber plantations were being promoted on traditional coffee farming land, and that the domestic coffee harvest was suffering as a consequence.

Other cash crops grown in the study areas included cardamom, durian, sisiad, and a variety of fruit trees. Unlike the case of the most dedicated coffee farmers, none of the villagers who planted these cash crops abandoned rice farming. Cardamom was grown in four of the villages studied, Oudomsouk, Nong Ke, Vangkhanane, and Nong Lao Theung with an average annual income among 28 families of over 1,164,000 kip per year. Last year only 7 families interviewed were still able to plant cardamom.

It appears that durian orchards have been exempted by the rubber companies. Of the 10 households interviewed in Lak 19 who held durian orchards, only two lost their orchards to the rubber concession. Small durian orchards can still be seen located next to the houses in the village. Amongst the families in Lak 19 who have durian orchards, incomes range from 800,000-1,200,000 kip per year. Durian were also grown in Nong Nam Khao Yai and Oudomsouk. One farmer in Oudomsouk, managed to generate an income of 4,000,000 kip in 2003, selling 800 durian fruits. However, over the period 2003-2006, her average earnings from durian amounted to 1,725,000 per year.

It is not possible to provide details of the very diverse set of crops that used to be produced in the six villages studied. However it is important to note the diversity of their planting strategies which can help to reduce vulnerability to market variations and that often crop choices are made to allow income to be spread more evenly throughout the year. The loss of diverse sources of income is one important factor in the rise in economic insecurity of the landless villagers.

**Rice economy, and rice insecurity**

The vast majority of families studied used to produce rice prior to the establishment of the rubber projects. In the pre-rubber period, ninety percent of the families we studied produced rice, while only around two fifths engaged in selling rice. Most of those who sold their rice harvest were in the villages in Lao Ngame District, and in these cases, families generally kept a portion of their harvest for their own consumption, and sold the surplus. The rest generally produced rice for their own consumption. Households interviewed in Oudomsouk, Lak 19, and Nong Nam Khao Yai, did not generally yield enough to generate an income from their rice.

Of the minority who used to take their rice to market in Vangkhanane, Nong Lao Theung and Nong Ke, around half had stopped selling rice by 2007. The graph below shows the reduction in sales of rice from 2003-2007 among the households surveyed. The overall tonnage sold dropped from 64.110 tonnes in 2003 to 23.090 tonnes in 2007. The sale value of the harvest sold by 49 families in 2003 was 89,501,000 Kip, while in the 24 families who sold at higher prices in 2007 netted only 44,870,500 kip.

The average annual income from rice production of around 1,800,000 kip per household per year. While this may not seem a lot in overall terms, this is a supplementary annual income for families, who used to have most of their food needs already covered. One woman in Nong Nam Khao Yai explained that in the past income from selling rice was useful in that it could send her children to school “I future I would like my children and grandchildren to learn to a high level at school, but they cannot because we don’t have any money. In the past we had rice to sell so that we could send our kids to school”

The overall production of rice in the six villages has decreased. Comparing production figures for coffee beans. However they can give some indication of potential income for a dedicated coffee farmer.
2003 and 2006 in the six rice producing villages, the total harvest of dryland rice declined by a third from 366,887 to 239,946 tonnes. Preliminary figures for 2007 indicate that the harvest of dryland rice amongst the families surveyed has been decimated to a total of 28,404 tonnes. Prior to the advent of the land concessions, 80% of households surveyed produced enough rice to be able to eat from their own stores all year round. Following the land concessions, in 2007, this aggregate figure dropped dramatically to less than a quarter (see graph).

It is notable that during the same period, the harvest of paddy rice increased moderately by 26 tonnes from 175,500 to 208,500 tonnes. Paddy land is not suitable for rubber plantation and has not been taken up into the land concession. This increase in paddy production, is seen mainly in Nong Ke and Nong Lao Theung. It is not generally attributable to an increase in yields per hectare but an increase in land area, as some villagers who lost their hai or souan land used their compensation payments and savings to open up new paddy fields in neighbouring villages. In addition, it was reported that a few villagers made landless by the concession in Nong Nam Khao Yai and Vangkhanane also opened up new paddy fields on the banks of the local streams to grow rice.

The lack of rice production in rural families has a significant impact on their lives. When people must buy their rice to feed themselves, their vulnerability increases. With market prices being readjusted upwards, the problems become more acute. The worst affected villagers are now fully dependent on opportunities to earn wages, which must be sufficient to cover their costs and must be regularly available. As will be discussed later in this section such opportunities are now extremely limited. Families in hardship report that they eat sparingly. A woman in Oudomsouk who has experienced poverty in the past, said “in the past the elderly used to be able to stop working, but these days the older people have to go out looking because there is not enough to eat. If they don’t go to work, its even more difficult than before (we are even poorer than before). We have rice to eat for every meal but we are not full, now our family has cleared some lands near the streams to grow rice”.

In Lak 19, even before the company came to clear the land under concession, some people had gone through crises of not producing enough rice to eat throughout the year, either due to poor rains, an outbreak of pests, or insufficient labour. Others had switched entirely to coffee farming. However after the two companies got the land concession, in 2006 and 2007, the number of families who were self sufficient in rice throughout the year decreased drastically (see table). This figure has since decreased close to nil in 2008.

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26 Data from 237 families. The total harvest figures include the areas planted with dryland rice in the rubber plantation, under DakLak’s intercropping scheme (see section on “1+4” below). The Viet-Lao Joint Stock company has also in certain areas allowed villagers to intercrop in the rubber plantation on request. We do not have any information on this practice as we have not been able to interview the Viet-Lao company.

27 Household survey took place in September 2007. Figures for total harvest of rice in 2007 are estimates.
Rice security of households in Lak 19

<table>
<thead>
<tr>
<th>Year</th>
<th>Families without rice harvest</th>
<th>Families self-sufficient in rice for 11-12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>14%</td>
<td>45%</td>
</tr>
<tr>
<td>2005</td>
<td>21%</td>
<td>39%</td>
</tr>
<tr>
<td>2007</td>
<td>55%</td>
<td>9%</td>
</tr>
</tbody>
</table>

With the overall decrease in rice production, correspondingly, the amount and value of rice which villagers now have to buy, comparing with the period before the land concessions, has increased by over 140% overall. The series of graphs (below) indicate the substantial increases in the amount of rice bought.

Certain periods of the year present greater risk of vulnerability. Prior to the loss of land to the rubber concession, rice began to run out for the most vulnerable families during March with numbers increasing in July. The peak of rice vulnerability in the households surveyed, used to be in September/October, just before the harvest of dryland rice. Growing a combination of dryland rice and paddy (which is harvested two to three months later) helped to shorten the period of rice insecurity for a family in a given year.

However, following the land concessions, with so little hai land left, few households have any prospect of stocking up their stores any more, and rice insecurity has shot up through to the end of 2007 (see graph), tempered only with the new harvest of paddy rice in December. Given the continuing loss of land in 2007, the figures for numbers of households in 2008 that are not self-sufficient in rice all year round are likely to have risen even further.

An overall assessment of the increased expenditure on rice per household shows an average of 638,000 kip per year spent on rice in 2003 increasing to an average of 1,523,000 kip in 2007. However when we examine the cost of buying rice among the landless families the increased annual costs are substantial. Amongst the newly landless families in Lak 19 the average household expenditure on rice each year has increased to 4,647,000 kip per year. In Oudomsouk expenditures on rice by landless farmer households (of around 5-7 members) averaged 5,900,000 kip per year.

From the responses in our survey we can estimate that the small households (3-5 people) in Bachieng and Lao Ngame eat around 50-100 kilos of rice per month, while the slightly more
common larger holds (6-10 people) eat around 100-200 kilos of rice per month. A 50 kilogram sack of rice costs around 230,000 kip.

An assessment of average basic household expenses in the years before and after the concessions, shows that the increase in expenditure on rice and other food has exceeded every other increase in living costs. Whereas before food expenditure at the market generally covered the price of pladek, meat and condiments; now, rice, and even vegetables, must also be bought in. Villagers in Lak 19 reported that nowadays, on average, they eat meat or fish around 2-3 times a month.

As mentioned above, in the worst affected areas, average expenditure on rice can reach around 6 million kip or more per household per year. To this must be added the cost of other foodstuffs which according to our expenditure survey across all six villages averages at 2,400,000 kip per year. Average health costs amount to an additional 900,000 Kip, bringing basic survival expenses up on average to an additional sum of 3,300,000 kip per year.

Debt does not appear to have greatly increased, around 9-16% of the families interviewed reported being in debt over the last five years, with an average debt of around 1,500,000 kip mostly (60%) loaned from within the debtor’s extended families.

Some borrowing was not in cash form but in sacks of rice, which had to be returned as rice. Villagers referred to the reduced possibility to borrow money and rice from families in latter years after their land was conceded due to reduced surpluses and the tight financial situation most families had begun to face.

Other minor sources of funds included the Agricultural Promotion Bank (7%), neighbours (20%), the village fund (4%), and the remainder from people in neighbouring villages. Purposes for borrowing money in 2007 were mostly for household expenses including food, and health expenses each of which represented a third of the value of loans in that year, although money was also borrowed to fund house construction, and vehicle payments.

**Unvalued foods and resources from forests and streams**

The loss of farmlands and common spaces caused another change in the pattern of livelihoods for villagers in the areas studied. Prior to the land concession, most of the common and privately managed lands within a village area and occasionally common lands elsewhere were the source of a range of natural products of use in the daily lives of villagers. These are generally referred to as non-timber forest products (NTFPs) not least because it is easier to describe what they are not than to find a category that encompasses such a wide array of natural produce from the forests and other related ecosystems such as rivers and swamps.

Before the land concession, villagers from all villages were active in collecting NTFPs for both sale and consumption. The households surveyed, identified 12 broad types of forest products.

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28 Villagers in Oudomsouk explained to us that, at first, they received good wages from work in the rubber plantation in 2005-2006 and many people in the village found themselves able to make a down payment for a motorcycle especially as prices for the new Chinese imported motorcycles had, that year, become lower than ever. However as wages decreased, villagers have been unable to keep up the payments and the traders have begun to seize them back.
collected from the common areas at that time. The most commonly collected were different kinds of mushrooms (particularly hed khaw, hed bot, hed puak, hed din), a variety of different vegetables and leaves, while 80% of families reported harvesting bamboo and bamboo shoots prior to the land concession. Other commonly gathered resources included rattan stems and rattan shoots, and giant banana leaves. Ninety four percent of the households in our survey which collected forest products, did so for household consumption.

Sources of NTFPs

The areas most commonly cited by respondents in all six study villages were areas in and around streams (khem houay). There are a great many streams in the area. From here a great variety of fish, freshwater crabs and shrimps, molluscs, frogs, insects, and other animal species were sought. Water from various streams are used for drinking, washing, and irrigating the paddy fields. In addition, the stream ecology provided a habitat for various edible vegetables, particularly pak kud, and pak nam, and rattan shoots. The riparian woods, which are essentially mixed deciduous forest, are important because of the distinct species of plants that grow in the moist river areas. People are still able to collect foods from these areas but quantities have reduced. While the plantation project managers have generally respected guidelines on preserving an area of wood and scrub from the banks of the rivers, not all streams have been left unscathed by the plantation (see below).

The second most common area was the old swidden fields (palao) which, when left fallow for several years, develops into a deciduous forest. The palao were cited as the source of yakha, bamboos, bamboo shoots, different kinds of mushrooms, rattan, all types of game and wild rodents, red ants eggs, and dead wood for making charcoal. Since the establishment of the rubber plantations, 73-94% of households in Oudomsouk, Lak 19 and Nong Nam Khao Yai respectively no longer have access to palao from which to collect NTFPs. A third of the families studied in Lao Ngame, have also lost access to the palao for NTFPs, but families in these villages report they still have access to a variety of other lands from which to collect NTFPs.

Similarly, the hai were also quoted as an important source of wild produce. Speaking in a group, one woman from Oudomsouk told us “We used to have a very rich diet, when we went to the hai we went to look for things in the hai. For breakfast, lunch and dinner, for example, chillies, pumpkin, okra, tobacco.” Indeed, when women in Nong Nam Khao Yai told us that the hai were important to them because it was where they made their living, one woman gave as her example, not the dryland rice that was produced there, but “we used to collect the wood from the swidden, there were mushrooms there, we didn’t have to buy them to eat, there was so much food, we normally never lacked food to eat”.

Thirdly, villagers have recourse to the dense forests of the area. The people in the study areas told us that the forest condition in the present has been seriously degraded in the last 30 years, particularly during the wartime destruction of the 1970s. However, there was still secondary forest left to the present time. The forests in the study area can be identified as Mixed Deciduous Forest (such as pa lao and riparian woods), as well as Deciduous Dipterocarp Forest (pa khoke), Dry Evergreen Forest (pa dong). The latter two types of forest include various species which provide an array of foods and products on which the people rely for their livelihoods, eg, vegetables such as pak kadone, pak samek, pak luu, pak wan, which can be grown in the pa khoke, and vines, animals, insects, and darmor resin from the pa dong. It is notable that people reported much greater use of the pa khem houay, the pa lao and the pa khoke forests than the pa dong.

In most of the study areas, villagers have been allocated an area of forest which they maintain for use (pa chomchai) or conserve for spiritual and related reasons (pa mahesak, pa cha). These are generally not very large areas, although Vangkhanane had a relatively large

29 There may be a bias in our numerical survey responses concerning NTFPs towards the types of NTFPs which men will collect, given that three quarters of our survey respondents were men. Issues concerning changing availability of NTFPs were discussed with women’s groups in subsequent focus groups, however numerical data could not be obtained at that stage.
chomchai forest area of 50 ha. The areas of pa chomchai of Vangkhanane and Oudomsouk have been entirely conceded to the rubber companies. But in some villages such as Nong Ke, there is still forest left. The pa cha and pa mahesak, which are “belief forests”, tend not to have been conceded.

Households collecting NTFPs from different location

Before concession
After concession

Old Swiddens (1)  Streams (2)  Dong Forest (3)  Khoke Forest (4)  New Swidden (5)  Farmlands (6)  Rubber Plantation (7)

Income generated

Wild and semi-wild products that were gathered for income did provide significant additional sums for the household economy. Most valuable was the yakha or thatching grass, which was collected particularly in Oudomsouk and Nong Nam Khao Yai. It can be harvested annually. As you pass by the village on the main road to Bachieng town you can still see large bales of yakha for sale in front of the houses of those families who still have access to grasslands. The processing of yakha tended to be managed by the girls and women within the household. One family in Oudomsouk used to be able to add as much as 5,000,000 kip to their yearly income from the simple collection, parcelling and selling of the yakha from their gardens, until 2006 when they lost their land to the rubber company.

As mentioned earlier, no compensation was given for the loss of yakha. Officials told us that this was because the yakha grew by itself. Several respondents, on the other hand consider the yakha to be a garden product. Yakha indeed is not planted, but it is encouraged to grow in small fields (often called souan) in amongst the rice swiddens. It tends to grow best in certain areas, particularly in areas with gravelly soils. In many cases, yakha gardens were first reserved a generation ago, and parents have passed them down to the present holders. From the point of view of villagers, therefore, the yakha gardens are therefore seen as assets, belonging to individual households.

In villages located inside the Viet Lao plantation area, one villager described the importance of yakha. “in the past, there was a large savannah of yakha, which we could sell, and we could still grow rice, we could collect NTFPs, it was enough to live by. Now however, NTFPs have reduced and there is only about 4% of the previous amount. Our main income used to come from yakha. Almost every family had a yakha garden”.

In the yakha gardens, and other wild and semi-wild spaces, it was possible to collect mushrooms. Mushrooms were another important tradable forest product for certain households although the vast majority of our respondents collected mushrooms for consumption in the household. According to our survey, the sale of mushrooms by one family alone could reach 1,000,000 kip per year. Since the concessions, mushrooms have been seen to be sprouting up in the rubber plantation but these days, many villagers do not dare to collect them for fear that the weedkiller sprayed in the rubber plantation will make them poisonous (see below).

Households who collected NTFPs for sale would collect a variety of wild products from the same area, so the sum total of forest goods for a single household could be considerable. In
Oudomsouk, the average harvest for sale amongst those few engaged in trading NTFPs was around 2,000,000 kip per household. For the households surveyed, this income dwindled to nothing after the rubber company took over the swiddens and common lands of the village.

But the potential for economic benefit from these spaces is dwarfed by the nutritional and dietary benefit of having recourse to a variety of vegetables, herbs and other semi-wild foods and animals from the natural environment. Talking in general about the overall lack of lands in which to forage for food, several women in Lak 19 told us about their livelihood before the concession in terms that emphasized the importance of natural resources to their daily lives. “After working in the coffee fields, we would go to look for food, we would eat plenty.” “When there is something to be fixed in the house, we would look for materials to fix it from our environment. We never needed to buy these things”. “Our lives used to be comfortable, we didn’t think we would ever run out of food”. “In the past, when I would go to the foot of the mountain, I came back with a whole bagful of food, nowadays I don’t get anything at all, that area belongs to the company”.

While we did hear from villagers who, prior to the land concession, were not successful in farming hai - citing hard work for poor yields from rice farming (see above) – it is interesting that by contrast there were no voices that referred to the difficulty involved or the time spent in collecting NTFPs in the past.

The plantation environment

Industrial tree plantations are commonly touted as environmental improvements on the dual premise that growing a tree represents a natural enhancement of its environment and conversely that it cannot be harmful to nature. On this basis, it is often considered unnecessary by commercial companies to assess or present any evidence that a tree plantation project does indeed improve the environment. The Dau Tieng company, for example, told us that it seeks to “grow rubber in the area of degraded forest where there are no trees. When the rubber trees are bigger around 4-5 years, they will become a rubber forest. This will improve the environment, and the fertilizers which we will use, will improve the soil”. However, just as with any major project involving several thousand hectares of land in one continuous plot, there are several environmental issues to be concerned about.

A collection of trees does not make a forest. A tree plantation and a forest are quite distinct biomes. The latter is understood as an area of diverse tree and plant species that provides a habitat for a diversity of mammals, birds, insects and reptiles. As such, forests have become an important resource for local communities, who develop knowledge and sometimes agreements to preserve their bounty and usefulness for the future. Large areas of forest have also been found to perform a complex range of environmental services, including the regulation of temperature, storage and cycling of carbon, that have general implications for the wider environment. Forests can be both degraded and regenerated.

A plantation is on the other hand a commercial venture aimed at the maximisation of productive potential in a single species. Large scale monoculture plantations have been likened to a desert, due to the paucity of other species allowed, and the general absence of food and other forest resources therein. In the case of the Vietnamese rubber plantations in Laos, 555 rubber trees are planted per hectare, each grown from the same parent stock, under carefully selected criteria for optimal and accelerated latex production. Companies have permitted and encouraged farmers to grow additional crops (rice, groundnuts or cassava) in between the rows, but only while the trees are young and spindly. These crops are restricted and regulated, and do not increase a plantation’s resemblance to a forest.

A final important difference is in the life cycle of a plantation. Whereas a forest is built up with a diversity of species, with different lifespans, that become inter-dependent and eventually is capable of self-regeneration, a plantation has a defined beginning and end and must be kept uniform by human intervention. It has much more in common with an industrial farm than a forest. Initially, the establishment of a plantation involves the complete destruction of all former crops and tree species on the land, and the consequent destruction or evacuation of all living things dependent upon them. Seedlings are developed in a nursery and transplanted on land that has been completely laid bare. The tree crops must be managed through their immature
stages, to replace the loss of nutrients and add organic matter to the soils and to prevent intrusions of pests and weeds. After the requisite number of years - in the case of commercial rubber, 15-25 years - the trees are eventually chopped down the soil is exposed again and made ready to be replanted, perhaps with the same species.

In brief, a plantation has a different composition, character and function from a forest, but on the other hand it is no simple collection of trees either. The first important change to the environment is in the clearing of land. Several forest lands were included in the cleared area, however, data has not been made available to assess the extent of dense forestland which has been destroyed in establishing the plantations. Village reports of NTFP collection indicate that village forest areas were spared where soils were gravelly or otherwise not suitable for rubber production. In most areas lands were clearcut and the vegetation residue burnt. The research team, on inspection of newly cleared lands, saw that even large trunks were simply burnt. Villagers in Lak 19 reported that one of the companies burnt all the wood that was cleared in preparing the land for the plantation. So much so that there was no more fuelwood left for them to fire their metalwork kilns. “The way they burnt it was just by pouring petrol all over it, after they had torn through the land with the tractors. When they were there with their tractors, they had no interest in the pleas of the villagers at all.”

A second important problem to be guarded against is soil erosion. As the soil is exposed there is a heightened risk that strong rains will wash away the valuable top soils, leaving the soils impoverished and the undermining the structure of the soil. All three companies say they have taken this issue very seriously. They say that they have exempted the soils near the streams, and avoided planting on steep slopes. However it appears that these claims have not been independently monitored. In an area belonging to the Dau Tieng rubber company, a steeply inclined slope of roughly 50%, has been clear cut (see photo). Serious erosion has been allowed to develop there, immediately above a stream used by villagers. Gully erosion such as this renders the soil irrecoverable for farming and, once established, it is very difficult to prevent its spread and intensification.

The area in question used to be farmed as hai and the head of the village reported that there had never been erosion in this area prior to the clearing by the rubber concession. In contrast to the practice of large scale monocropping, swidden farming on slopes involves a system of coppicing that does not kill or uproot the existing trees. The roots of the trees remain alive and help to hold the soils together as the field is cleared. Once the grains are scattered the top soil is very quickly revegetated, unlike a plantation where large areas of soil can be exposed for a year or more, and whose tree roots extend more slowly.

Given the rate of growth of the trees and the lack of natural supply of organic matter, fertilisers must be added to the soils to avoid nutrient depletion. The plantation companies apply fertiliser twice a year using two types of chemical fertiliser30. As for weed management, while people have been hired to manage the weeds manually over the extensive plantation areas in the early years of the plantations, glyphosate weedkiller has also been used to combat the sprouting of weeds such as yakha. Companies have told us it is cheaper to spray weedkiller, although it is not advisable while the rubber seedlings are still weak and while the villagers are planting crops

30 Fertilisers used include Komix, Urea, Sunfat, P2O5, Kali NPK. For the Viet-Lao company concession see Obein, 2007
in between the rows of rubber. In the DakLak plantation weedkiller is sprayed in two ways, the Vietnamese workers use a vehicle with a pump, while the Lao workers are given a back pack. They spray in June and October for around 5-6 days at a time. Villagers from Nong Nam Khao Yai reported that a worker with the backpack had developed skin disease with painful sores running down the torso and arms. He had to leave work immediately and paid his own doctors fees. The company has not taken responsibility for this occupational accident.

Since the establishment of the plantation, villagers have found that there are less fish in some of the streams, and in Nong Nam Khao Yai, Oudomsouk as well as Vangkhanane have seen diseased fish covered in sores which they associate with the leaching of chemicals from the plantation. One villager in Oudomsouk reflected her perception that "the rubber plantation has had an impact on our environment, as it is located very close to the streams. I don’t dare use the water any more, because the water runs off down. I don’t dare to drink it, because the weedkiller, the termite pesticide31, and the fertilisers all run down into the streams. The environment has changed a lot, its not like before, everything has been ploughed up for several years now and the stream has also become drier". It was not possible within the scope of this research to verify independently the causal link between the environmental problems experienced by the villagers and the rubber plantation, however, the DakLak company representatives acknowledged to us that the company is conscious that problems have been created and they expressed their intention to reduce chemical use in its plantations.

Company officials also acknowledged that there might be additional problems during the rubber processing stage, after the trees can be tapped, because in order to preserve the rubber, they will have to use strong chemicals. The company stated that they will ensure that the impact is minimal. When the time comes, however, for the processing of rubber, the state and the company will have to prevent these problems together.

Table 3: Differences noted in streams and wetlands since rubber plantation established

<table>
<thead>
<tr>
<th>Village</th>
<th>Name of stream/marsh</th>
<th>Observations of villagers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nong Nam Khao Yai</td>
<td>Houay Wang Liang Houay Nam Ome Houay Lavein Houay Lomsak Houay Yang Houay Ngou Leum Houay Soud Houay Pha Houay Maibak</td>
<td>Each of these streams have begun drier compared with previous years. Eroded soils from the rubber plantation are increasing sedimentation. Leaching of chemicals into the streams. Villagers no longer dare to drink the water in these streams. Villagers still reluctantly drink from Houay Lomsak, when they are working near there, because there is no alternative. Less fish noted in Houay Nam Ome, Lomsak. Diseased and dead fish found in Houay Ngou Leum and Houay Maibak.</td>
</tr>
<tr>
<td>Lak 19</td>
<td>Houay Leusy Noy Houay Leusy Yai Nong Kasae Nong Khanhlay</td>
<td>These streams are still used by villagers as before (drinking, washing, fishing, collecting vegetables)</td>
</tr>
<tr>
<td></td>
<td>Nong Koy</td>
<td>Previously an abundant source of fish for villagers, now incorporated into project area and used exclusively by the plantation company</td>
</tr>
</tbody>
</table>

31 Pesticides used include Sulox 80 wp, Anvil, Sunfat, Vazlin, BasuDin
and area is still a source for collecting vegetables

| Houay Yo | River clogged up with waste from the time of clearing the rubber concession. Chemicals leaching from plantation and/or Dao Rouang Coffee Depot have leached into Houay Yo and Houay Nam Ome. |
| Houay Sy |
| Houay Noy |
| Houay Nam Ome |

| Oudom souk | Houay Jampy | Still used but fish numbers have declined. Headwaters are still drinkable, some villagers no longer dare to drink downstream, but vegetables still collected. |
| Houay Long |

| Houay Kwang | Villagers no longer dare to drink the water from here. Fish numbers have declined. |

| Nong Seuy | Fish in this stream have been found with sores. |

| Nong Mak Ngeo | Wetland where previously used to collect vegetables and shellfish (women and men give different responses, women report it is no longer usable). |

| Vang khanane | Houay Phuen | River has become drier than before the concession. Harvests from the river have declined. |

| Houay Nam Kham | Still used for fishing and collecting ferns, vegetables, bamboos. |

| Houay Khampom | Fish here with sores, but water still used to irrigate new paddies. |

| Nong Jan | Stream has dried up but it can still be used in the rainy season. |

| Nong Ke | Houay Ten | Still used, though stream has become drier than before the concession. |

| Houay Tan | Still used, though less fish than before the concession. |

| Hong Toh | Reduction in forest area at the spring appears to have influenced the reduction of water levels. |

| Hong Kadengjan |

| Hong Kajid | Still used as before. |

**Livestock**
A reduction in the herds of cattle for which this area is well known was inevitable with the loss of *palao* and other grazing lands, as the rubber plantations extended into former fallows. Indeed cattle raising was one way in which villagers could make up the shortfall in earnings as their land was taken out of household production, with some villagers earning from 1,500,000 kip up to 3,000,000 kip per head from the sale of their cattle. The income was used to buy rice and other food.

In 2007, villagers, not knowing that there had been spraying of weedkiller, went to collect the grasses for their cattle to eat. Four cattle are said to have died as a direct result and the carcasses were not eaten. No compensation was payable. Similar stories are reported elsewhere.³²

**Employment and empowerment**

³² For instance in Vangkhanane, weedkiller was reportedly sprayed by company workers directly on to 10 cattle that came close to the plantations, which animals later died.
The great benefit claimed by proponents of plantations is the local employment that they are said to create. There is little evidence to back up such claims, particularly in the case of plantations of timber species. Rubber however is in some ways an exception. Once the rubber is productive, there is no mechanised way to harvest the rubber, it must be collected by manual labour. The latex itself drips slowly from the tree and small amounts needs to be collected from dozens of trees to produce a single rubber sheet.

Rubber can be tapped from productive trees every day in the dry season, although normal practice varies and for optimal yields trees may be left alone up to every alternate day. Labour demand is therefore relatively high throughout the dry periods of the year. The demand for labour only becomes relatively constant once the trees are mature and ready to be harvested.

It is fairly normal for rubber to take a full 7-8 years to become productive, however, the DakLak company have used a variety specially developed by the Rice Research Institute of Vietnam, which they say will be ready after 6 years. There is a steep drop in the number of employees taken on throughout the 6-8 year post-planting stage of a rubber plantation. In the first year, a very large labour force is required to help prepare the ground, dig the holes, plant the seedlings, and control the weeds by hand. The DakLak company stated that they needed 60-70 people per ha per day during the peak periods in the first year, a demand which, they noted, the local labour supply could not meet. The Deputy Headman of Nong Nam Khao Yai told us that virtually every family in the village sent members of their family to work in the plantation at some point in the first year.

In the second year, however, the labour requirements drop sharply, and tasks involve mainly applying fertiliser two a year and regular weeding. Weeding requires a lot of hands during the rainy season. Once the rubber seedlings are established and strong enough, weeds may be controlled by a much smaller number of labourers using chemical sprays. As the canopy closes over head, in year 3-4 weeds begin to be overshadowed and even less management is required. Finally, when the rubber is ready to be harvested, then a large labour force must become available again although it is likely that the numbers employed will not return to the levels of the first year. The Dau Tieng company reported that if the full 10,000 ha area is planted, at a future time when all the trees can be tapped, 4,000 workers will be required. Dau Tieng company representatives have told us that they will require workers for around 6 months of the year once tapping begins.

In a large plantation, not all areas may be planted at once. The 6-8 year rhythm may be restarted in another newly cleared area, and the employment requirements may therefore be staggered. In this way, there have been around two years of relatively high labour requirements as the plantations have expanded in a given concession area. However as the plantation expands more villagers become landless and join the ranks of those in desperate need of employment. In practice, after the first year there has followed a lull in each area when increasingly less employment is available from the company, a lull which might extend to five years. This is a substantial period of potential plantation unemployment of which the state must be aware.

Labour within the plantation was heralded to provide the local communities with new and improved livelihoods. This dearth of labour demand, the more than four year gap, puts such communities at serious risk of impoverishment and vulnerability. The DakLak company expects to harvest the first trees in 2010. Thus, there are still at least two more years of lean times ahead for the landless farmers in Bachiang and Lao Ngame.

Foreign labour and capacity building

33 The Forest Research Centre of Lao PDR’s National Agricultural and Forestry Research Institute has estimated that rubber tapping in the smallholdings in the north require a total of 400 person days per ha per year in the first year, compared with 150-200 person days per ha per year in the rubber harvesting years.
The DakLak company has hired 430 permanent labourers, of which 57 are Laos, and 373 are Vietnamese, there are 620 families who are given piece work (both in Champassak and Salavane) and the 400-600 daily labourers are also employed at certain times of the year. The full-time Vietnamese workers are mostly scientific and technical officers who do the skilled work of managing the nursery, budding and grafting, and planting the seedlings in the holes prepared by the unskilled labour. Further down the years, during the tapping stage, the company told us that they plan to hire additional labourers of which 40% will be Vietnamese. In the case of office staff, the DakLak company sent Lao people to learn in Vietnam, the company representatives told us that there is also “a plan to provide training in methods of tapping rubber for the labourers of whom 60% will be local labour from Laos. If it is not necessary, we will not bring in foreign labour.” The Dau Tieng company hires a total of 240 Lao workers in the rubber plantation, and an additional 60 Vietnamese staff, representing 20% of the workforce.

It may be noted that such a large foreign workforce appears to exceed the legal limit under the Labour Law (10%). It may be advisable to encourage the rubber companies to hire more Lao workers, and to offer technical training to replace the dependency on foreign labour. This would not only redress the balance between domestic and foreign workers but encourage the developing of capacity of the Lao workers, and increasing their earning potential.

In Vietnam, company representatives told us, there is a minimum labour wage for each zone. But in Laos, there is still no minimum wage. This allows the companies to set and vary the wage rates by themselves.

**Employment arrangements**

Employment in the rubber plantations involves a complex set of arrangements and dependencies. Rubber plantations are divided into estates, each of which manages their own labour force. There are three main types of employment arrangements which do not necessarily correspond to the customary understanding of permanent and temporary engagement.

**Permanent workers**

Permanent work in all three rubber plantations is normally based on an 8 hour day, a 6 day week. Workers are paid a monthly wage. Workers from each village are organised under the management of a hua na ju, (work unit supervisor) recruited from that village. Work for permanent workers includes guard duty, driving tractors, spraying weedkiller, etc. as well as general tasks of applying fertiliser and weeding.

All three companies recruit permanent workers, in principle, within the general age range of 18 to 35-40 years old. Clearly plantation work is heavy work, hard labour, and companies are looking for fit and able employees. In all three cases, however, it is company policy to be flexible, in the case where families are extremely poor. In our survey, we found a quarter of full time workers were aged over forty, with the oldest full time worker aged 53. The average age of those surveyed was 33.

Villagers confirm that priority hiring was given to those who were worst affected when the companies came to take their land. However it is also clear that, following the initial high labour demand of the first year, there has not since then been enough work available to employ all those looking for an income from the plantation. In Oudomsouk, the Viet-Lao company told villagers that they could only employ around 50-60% of those who no longer have any land on which to farm. In Nong Ke, only 2-3% of the adult working population of the village have been employed.

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34 There are four contiguous estates in the Viet-Lao company plantation. So far, the DakLak company has set up two estates, one in Bachieng and one in Lao Ngame, but is hoping to set up a third estate in Pathumphone district. The Dau Tieng company has established one estate in Bachieng and has recently cleared another estate in northern Bachieng bordering Lao Ngame District.

35 Younger workers between the age of 15-17 are also being called on to work the same hours which is not legally permitted under the Labour Law. Some more senior workers in the DakLak company have been allowed to work a 5 day week with commensurately lower wage.
given jobs, well below the proportion of poor families in the village. In Nong Nam Khao Yai, in the first year, almost all the people in the village went in as labourers. However currently, only around 40% of our interviewees still work with the company.

Permanent labourers do not represent the majority of employees. The Dak Lak company currently hires a total of 57 full time Lao workers (ages 18-40) on its plantations in both Bachieng and Lao Ngam. This is just under 5% of the total Lao workforce of around 1,200 it employs in peak periods of the year.

Contrary to expectations, permanent workers do not receive a regular salary. Workers for both the Viet Lao company and the Dau Tieng company told us that they do not know how much they have earned until they receive their monthly pay. This has left workers demoralised and the reduction in income has created serious problems for their families (see section on adaptation below). Wages reported by villagers working for the Viet-Lao and DakLak companies indicate a progressive reduction in the monthly wage year by year.

According to DakLak company officials the permanent labour rate varies between 800,000-1,200,000 kip per month. This would represent an attractive wage for the local people. However this figure does not appear to correspond with the reports from the villagers according to our survey and to our focus group discussions who regularly receive 600,000 kip per month.

Similarly, when the Viet Lao company initially came to meet with the villagers, they announced that they would provide a salary of 1,200,000 kip per month. When the project was put into practice, permanent workers were in fact offered 800,000 kip per month, however the most hard working of villagers could earn bonuses in the first year which would take their salary to a high of 1,700,000 kip per month.

Since the first year, however, salaries have plummeted. These days, rates of salary for permanent workers in the Viet Lao company vary month by month, workers could get anything from 500,000 to 200,000 kip per month. At 200,000 kip per month, villagers effectively bring home an amount equivalent to 7,000 kip ($0.70) per day, an amount that could barely feed even the smallest families.

In addition to the decrease in monthly rates, villagers working with both companies report that payments are regularly several days late, in the worst cases, permanent workers have been made to wait up to 2 months late. Workers have had to resort to making a complaint to the estate office in order to receive their salaries. They were met with helpless staff who did not have the money to pay the wages. Officials of the DakLak company explained that the estates offices had to wait for transfers of funds from Vietnam before any due payments could be made.

Daily wage labourers
From our household survey of labourers in 2007, the average number of working days a year for non-permanent labourers was around 60 days or less than a quarter of the working year. Daily wage labourers get around 20,000-23,000 kip per person per day. There is a system of labour brokers (naaynaa) to recruit daily workers who take a percentage of around 10-20% from the labour. Sometimes this deduction was described as a labour tax to be paid to the district. In some villages, the village head got 2% of the villagers wages for his role in recruiting labour.

Mobmao (Assigning piecework)
All three companies have another system of employment, which is not on a personal contract but rather it is based on an arrangement with a household or a group. The mobmao system was described by one respondent as a means by which older people could be hired. As the employment was arranged with a household, the household is free to decide who will work on a given day and may bring several workers to alleviate the workload. This has its advantages in that the workload is not too heavy for individual older workers, but it also means that when wages are shared out, the total amount paid per person per day is reported to be exceedingly low. Given the lack of alternative employment, it is not so easy for workers to find work at a
standard per person wage rate. In the case of each company, labourers may be engaged mob-mao on a piece work basis (weeding a certain number of hectares or digging a certain number of holes). In the case of the DakLak company, mob-mao refers to the assignation of a certain area of land to individual families to look after on a semi-permanent basis.

DakLak: Assigning the land to the villagers – a form of “1+4”

The DakLak Company has a policy of assigning the maintenance of a certain area of its plantation to households who have been particularly badly affected by the loss of land. In this land, households may request authorisation to plant crops in between the rows of rubber trees, and there has been some indication that the company will allow these families to harvest the rubber when the trees are mature under some form of profit sharing. While the trees are still young, the villagers are expected to look after the rubber trees in their lots and are paid an income for the occasional work required.

This experiment is may be compared with the Lao government’s contract farming policy often referred to as the 2+3 model policy. This has been so-called with reference to the contributions of the two parties (land and labour + inputs, technological know how, and markets), the first two being derived from the villagers, the last three from the company).

It does appear to be an initiative of the company, based on its own experience of contract farming in DakLak36, and was apparently introduced independent of government promotion. The scheme would more correctly be referred to as a “1+4” scheme. In a true 2+3 scheme, the land is held by the villagers, in this case, the villagers give away the land and the company gains a concession right to the land37. Thus, as the contract is made, the villagers only contribute their labour.

As the Laos government has taken a particular interest in monitoring the effectiveness of the 2+3 model and its many variations, the following section seeks to look in some depth at how this system functions in practice and draw some initial lessons for wider application.

Excerpt from “Report on the allocation of land use Investment Project of the Dac Lac Rubber Company Ltd”
Director of DacLac Rubber Company Ltd
Own translation

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36 In Vietnam, the DakLak company has managed its rubber plantations using this model through the allocation of 15,000 ha to 1,100 local growers. The company extends financial as well as technical assistance to rubber growers by dividing them into three groups; the first includes fairly well-off farmer households, who already have capital and are capable of setting up a rubber plantation. These are allotted 10 to 50 ha of land and are given 70 per cent of the capital and technology needed for developing rubber cultivation. Growers with modest capital and little technical know-how are in classified in a second group, and are given three to five ha of land as well as financial and technical support for cultivation. The third group includes farmers without capital and little knowledge about farming techniques receive between 1.7 and 2 ha. The company helps local rubber growers to market all of their products. In Vietnam, farmers are encouraged to cultivate coffee and pepper in their plots.

37 The assignment of the land to the villagers for maintenance and tapping does not make the villagers owners of the land. However, the status of the landholding under the 1+4 scheme is far from clear in the mind of the villagers (see below).
Who gets involved?
According to company representatives, the company has allocated around 1,200 ha of their rubber plantation land in Laos to 620 families (see inset). This policy was not put into practice, however, until the second year. One reason for this according to the company was that a significant amount of time was spent in talking to people “to get them to understand that the income will be returned to the people”. The company carried out an initial survey of 100 farmers to assess how many households were interested in taking part in the 1+4 scheme with the company. They found that 30% of the people had an interest in joining the scheme. The company representatives told us that the remainder were not interested because “they had previously worked on hai and paddy, and are still not thinking of doing business. Very few people want to be wealthy.” This is interesting because it displays a very different perspective between the company and the villagers (see below).

Of the villages studied in this project, only two villages stood out as having many participants in the 1+4 scheme, Nong Nam Khao Yai and Vangkhanane. We interviewed 31 family representatives in the former and 28 in the latter who had joined the scheme. Of these households, 42% had no land of their own left, 39% had access only to paddy land. However there were a small number of householders (14%) who joined the scheme even though they still had retained access to more than one type of land (paddy/hai/souan). Equally in Nong Nam Khao Yai, a third of households who joined the scheme also have family members working in Pakse, whereas in Vangkhanane only one family derived additional income from work in the local town.

Intercropping
One reason for villagers taking part in this scheme is the ability to plant crops in between the rows of rubber trees. In both villages, the third year of the plantation, 2008, is the last possible year in which this planting can take place before the rubber trees grow too big to allow intercropping.

In Nong Nam Khao Yai, 23 households around three quarters of those studied, were engaged in planting rice in the plantation in 2005. This number fell to half in 2006 and fell by one more family in 2007. It is not entirely clear why farmers chose not to plant in subsequent years. However of those who did not intercrop in the plantation, most had alternative land upon which they could farm. For others, there may have been other deciding factors, two describe themselves as too old at around 60 years old and one widow referred to health problems. In other cases, workers who have given up intercropping are also able to rely on their children who have found work in Pakse. In two cases, respondents told us that they were no longer allowed to intercrop as the rubber trees in their patch were already too big.

Of those planting rice in the rubber rows in Nong Nam Khao Yai in 2005, only five households sold the rice they produced there38. The average income derived from such sales was around 1,300,000 kip per household. The remainder of families kept the rice for their own consumption, on average yielding around 680 kilos of rice, enough to keep a small family fed for several months. No family in Nong Nam Khao Yai grew other crops in the rubber plantation.

In Vangkhanane, families in the scheme grew not only rice but also other crops such as groundnuts and cassava. However, only half the families we studied had taken up this opportunity in 2005. These families produced a similar yield to Nong Nam Khao Yai with an average of 670 kilos of rice each, most of which was produced for family consumption. Only two families sold their rice harvest, earning around 1,400,000 kip in 2005, but the following years chose to keep their harvest for their own consumption.

Of those who chose not to intercrop in the plantation, relatively common in 2005 and 2006, most had alternative recourse to other plots of land, and a minority had family members who were permanent labourers with the plantation. Two years on, more village land had been incorporated into the concession, and almost all families had now chosen to do intercropping. By

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38 As above, this number fell to 3 in 2006 and 1 in 2007. Average landholding among this group was 1.3 ha.
end of 2006, led by the substantial increase in prices on the international markets for biofuels, the company was promoting the adoption of high-yielding cassava in the 2+3 area. Around two thirds of families borrowed cassava seedlings from the company, grew them over a period of around 11-12 months, and earned an average of around 1,600,000 kip from their tubers. All produce was sold to the company which has a cassava flour processing plant in the area.

Ground nuts were also grown by a third of households in 2007, mostly in addition to rice and/or cassava. These did very well, achieving incomes of around 2-3,000,000 kip per household on an average within plots of less than 1 ha.

Wages for tending rubber crops
Households taking part in this scheme are charged with the maintenance and care of the rubber plantation and are generally paid a fee on a per hectare basis known as a “mobmao basis”. Families may call in as many people as they have available to complete the task within the given area. The fee is paid some time after completion and it is the family’s responsibility to share this out amongst those who took part in the work.

According to Daklak, this will create income for the people of 650,000 – 800,000 Kip / person / month, however the remuneration reported in our household survey appears to be much lower and the system a lot more complex. We asked families about the work that they were called to do in the plantation in 2007. Families told us that they were not employed every month. There are peaks of work, particularly during the months of the rainy season from June to October, when the weeds grow thick. But throughout the year, there were always some families who were not given work to do (see plantation calendar below).

In Nong Nam Khao Yai work includes weeding, applying fertiliser and digging holes, while the tasks appear much more uniform in Vangkhanane, where villagers report that they are rarely given work other than manual weeding. Permanent labourers are called in to do the work instead of the mobmao workers. This was referred to as a cause of despair for the 1+4 scheme workers in Vangkhanane, who are desperate for paid work. Weedkiller is also occasionally sprayed in the 1+4 areas, which also results in less manual weeding work.
The number of days worked by the mobmao families in Nong Nam Khao Yai ranged from 4 to 108 days, with an average of 37 days per year per household. That is the equivalent of less than two working months per year. The range was much smaller in Vangkhanane (2-53 days), with an average of only 15 days of employment per family per year.

Weeding in the dry season attracts wages of around 25,000-50,000 kip per ha. Weeding in the rainy season is calculated at approximately 65,000-100,000 kip per ha although rates of up to 160,000 kip per ha were reported by two respondents in Vangkhanane. Applying fertiliser is paid at around 25,000-30,000 kip per ha. The most laborious work is the digging of holes in which to plant the trees, this is paid per hole, usually at a rate of 500 kip per hole, but occasionally less.

Not all workers are as strong or efficient as others, however, and it is particularly difficult for the more aged workers to complete their task quickly enough to earn as much as a normal worker who is paid per day. Families tended to call in extra hands to do the occasional work, and the wages received by households are thus divided amongst many people. This often meant that the resulting wage packet amounted to an extremely small amount per person. Experience varies considerably.

For weeding work in the dry season, wages shared out in practice ranged from as low as 1,000 kip per labourer per day to 20,000 kip per labourer per day. For weeding in the rainy season, although the company paid more, many more hands were needed to complete the task over many days. Once the wages were shared out in practice, household labourers in Nong Nam Khao Yai were left with a range of below 1,000 kip to 8,500 kip per labourer per day. The Vangkhanane data however ranges from 6,250 to 80,000 kip per labourer per day.

For applying fertiliser, workers received a much more favourable net benefit. This work was comparatively highly paid and did not require as much individual effort as weeding. Once the wages were shared out, labourers were left with a range of less than 4,000 to 60,000 kip per labourer per day. However, this work was fairly rare (see plantation calendar above). In the case of digging holes, the families interviewed managed from 8 to 23 holes per day, which represents a daily wage of around 3,200 kip to 15,000 kip.

In general these rates are extremely meagre by any standard, and are the source of much concern amongst householders taking part in the scheme. In addition to the low rates, and the low number of working days, there are also reports that wages are deducted, sometimes without explanation. In Vangkhanane, there appears to be generally a re-calculation of the area worked, so that the weeds in one hectare of rubber land are considered to cover only 0.91 ha, and a deduction in wages is made accordingly. Other issues raised include some cases where wages were offered for digging on a unit basis (per hole), encouraging a major effort to dig as many as possible, but were later recalculated at a flat rate per ha that amounted to less than expected. These seemingly small variations from the promised rates can make a significant difference to an already underpaid worker, and do nothing to motivate the workers or build trust with the company.
Wages for this type of work appear regularly to be paid late. On average, wages are delayed 18-26 days after the work has been carried out, with some households reporting delays of 2 to 3 months before they receive payment.

**Profit sharing arrangements**

The contract farming scheme that the DakLak company applies in Vietnam is based on a 70:30 or alternatively 60:40 profit sharing arrangement, in which the farmers receive 60-70% of the rubber price, while the company collects 30-40%.

Although the future income to be generated from the rubber is an important factor in the villagers’ interest in staying with the scheme, the actual benefits of the system remain obscure and do not appear to have been clearly explained to the villagers. When asked about the details of the arrangement, only three householders in Vangkhanane could give us an answer. They were under the impression that once the rubber was harvestable, the produce would be theirs to sell. In one case, the householder thought that this meant that they would be given the land with all the rubber trees in it. The rest responded that they did not know. Similarly in Nong Nam Khao Yai, almost all respondents did not have any idea how the profit would be shared. Two respondents referred to knowledge of a profit sharing arrangement, one of whom mentioned the 20/80 share, but provided no further details. One respondent was, on the contrary, sure that the profit would not be shared, while another two had heard that the company would not share the profit but instead pay wages of 2 million kip per month.

**Institutional status of the land**

Another issue that is not entirely clear to villagers is the ownership status of the land which they have been “reassigned”. Two fifths of the villagers interviewed in Nong Nam Khao Yai consider that they themselves are the owners of this land (see diagramme), although the number is less than a fifth of respondents in Vangkhanane.

**Good points and the bad points of the 1+4 system**

When asked to assess the good points of the 1+4 scheme, a third of villagers talked of the income that they earned from working in the scheme. In many cases, villagers depend on this income no matter how small. “It gives me money to use. When there is work to do, I don’t have to look elsewhere for work, I can walk to work, it is very close to the village” said one villager. Another responded “Its good enough if they hire us often, because if they don’t hire us very much we cant make ends meet”. Future income is greatly anticipated and valued. Typical views in this group included: “The company says we will be the owners, when the rubber is tapped we can sell it to the company. Currently they don’t hire us to do the weeding any more,” and “Our family can have an income in future, that’s if the company really gives us the land, we will be able to escape poverty”.

Other villagers were most happy with the fact that they were permitted grow their own crops in the plantation. A surprising large percentage (17%) responded that the thing they are most glad of is that they have something to do as they would otherwise be unemployed.

Finally, two villagers in Vangkhanane suggested the benefits of development were the most important aspects of the scheme. “[The company] have come to develop our village to have food

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39 Around 20% of respondents said there were no good points and an additional 8% gave no response. On the other hand 7% said there were no bad points and 7% gave no response.
They promote crop production, they increase the income of the country by coming to invest. It allows the people to have food and benefits, prevents against poverty.”

When asked about the bad points, just under half of the respondents referred to the fact that they do not gain sufficient income from the scheme. Various people within this group also mentioned problems of late payment of wages, not enough work and overall poverty within the village.

Referring to the land concession in general, rather than the 1+4 scheme itself, around a fifth of all respondents told us that the lack of their own farming land was the biggest problem they faced. Some said directly they would prefer to have their own land back than to continue working with the project. In this group, villagers thought that the project would not be able to respond to their needs even if they were employed more often. Several asked that the government help address their needs by providing more land to replace what was lost.

Similarly, one in six people referred to the lack of compensation which is another problem related to the land concession in general, rather than the 1+4 scheme. Some people were not compensated at all.

Satisfaction
Few of the voices from our household surveys and focus groups expressed greater satisfaction with the new way of life as plantation labourers. Those that did express the good points of working in the plantation, included one in Nong Nam Khao Yai who found constantly clearing hai land each year to be very heavy work without significant yields.

Working as labourer was seen as positive because it brings in money in hand, not subject the vagaries of market negotiations and climate problems. Several voices did express satisfaction with the employment in the plantation because they need the job to survive. Satisfaction was particularly high, however, amongst the young, who shared their income with their parents but also kept a share for their own savings. Several of the young people saw working in the plantation as fun and valued the comraderie of working together with their friends.

Mostly, however, villagers saw the plantations as hard work under the sun for little pay. “The wages do not match our expectations. We worked our hears out, but this wasn’t reflected in our wages. [The rate] is just not appropriate. We will work to our deaths. We have to be under the discipline of the company. These days, we cant just have a seat and take a rest. If I worked as hard before as I have been working for our Vietnamese comrades I would have been very rich”. (Oudomsouk)

One labourer put several issues together as follows, “the Vietnamese workers have a salary, but the Lao workers are daily workers. We don’t know [about our wages] the company does not tell us how much we will get. If we get a monthly wage of 500,000-600,000 kip it is enough to be able to buy rice [food] to eat. The Lao workers are dying day by day. I have been a labourer now for three years, at the beginning, I used to get 700,000-800,000 kip, in some months I even got over a million kip. Not like now, the company says it does not have any money, and the rubber trees are grown already. But what will the labourers eat? We have no land left, these days we have to buy everything. With earnings of only 200,000 kip, what will I eat? Just one sack of rice is already 200,000 kip. When someone is ill, where will we find money? Then there is the petrol, I have to bring my own motorbike to work. In the past the company used to hire a truck to come to pick us up at the village, now I have to use my own bike. Its only those who have a motorbike who can work here. Those who are poor cannot work. I would like the district to help sort out this problem, the people are dying, they are working but they don’t have any money”.

The Dau Tieng company told us that the labourers may be right to complain about their labour wages, because the expenses of the labourers is increasing every day, the company said that will try to respond in an appropriate way. It is acknowledged that in future the labour wage must increase. As to how far it will increase, the representative was unclear. He explained that in Vietnam there is a minimum labour wage for each zone. But in Laos, there is still no minimum
wage, which means the company may set the monthly wage by itself. In Vietnam, they reported, the total wages of the company by law must be set at 40% of the net profit. According to Dau Tieng’s own investment feasibility study the total estimated Lao labour costs of the project are just over 1% of the total estimated net profit. It is not known how much the Vietnamese workers and staff of the Dau Tieng are paid.

Job security

The companies reserve the right to sack workers. Villagers from one of the villages in Bachieng, located inside the Viet Lao area, reported that the Viet Lao company has sacked almost all its permanent labourers in the village, saying that they are not effective. The company has hired labourers from elsewhere, through middle men [labour brokers], when they were not happy with local labour.

The rubber plantation company have mostly not yet signed labour contracts with their permanent workers. In Nong Ke, the company told the workers that they have just begun their work, they cannot sign a labour contract yet.

There seems to be some instances of job swapping within the DakLak company workers. When, for example, a worker cannot work for a day, if he or she can organise a substitute, this temporary absence been accepted without undue fuss. In some reported cases, the company has encouraged children over 15 to work permanently in the place of their parents. In general, a permanent jobholder has a certain degree of job security. However, the jobholder may volunteer to give up their place temporarily or permanently.

Section four: Adaptation

Adapting to new livelihoods

The rather abrupt change from peasants to landless labourers has had a major impact on the way of life of villagers in Bachieng and Lao Ngame. The majority of the villagers in the 6 villages studied were not able to adjust to the changes involved in the transformation from smallholder agricultural producers to workers in the plantation. They are facing up to an unfamiliar livelihood and experiencing greater poverty and want than ever before. The wages they earn are not sufficient to match the value of the resources that they have lost. A villager in Nong Nam Khao Yai explained:

“In the past I farmed hai and souan, there was money to spend on our daily expenses. We could raise cattle and buffaloes and we had food to eat and the means to live by. We were comfortable in our swidden and crop farming, I’ve done this since I was a child. These days I can’t adjust [to the changes]. The money earned from working in the plantation is low, and paid late…. Mostly it’s not enough to buy rice, because nowadays we have to buy our rice. In the past we had hai it was enough to produce rice. We would produce in our hai and souan and find food in nature. It was tiring, but I was proud to do it because I had enough to eat and live by. I could eat whatever I wanted. These days I have to do heavy work, but the money is not enough to buy food. Part of the money we have to buy rice, as well as other food. In the past we had savings and never lacked for anything. I could sell bananas, sugar cane, chillies, I use to sell all of these things. I could be ill because I had savings. These days, if I get ill I have to go into debt. These days, I have to go out to work [every day], if I don’t go, we don’t eat.”

A minority, on the other hand, have been able to adjust. This group of people are generally those who, today, still receive an income as a labourer that is sufficient to cover their expenses, such as those families who have more than one worker in the plantation, or who work in the plantation as a supplement to other primary livelihoods, particularly farming. A worker from Vangkhanane explained “Our lives changed for the better, there is a change from the old to the new, working for the company, they provide a wage which covers my needs. My family has
Means and conditions for adaptation

From our household survey and focus group discussions, we can identify 8 types of adjustments amongst the people in the project areas, which can be classified in two groups.

Group 1: those whose agricultural land was taken entirely

1) Working as labourers of the rubber company only
2) Working as labourers in the rubber plantation and intercropping rice between the rubber rows.
3) Not working in the rubber plantation but intercropping rice or groundnuts in the rubber plantation.
4) Not working as a labourer in the rubber plantation company but trying to find new land on which to grow rice, eg renting land in another village to farm hai, clearing new land, or buy new paddy.
5) Not working as a labourer in the rubber plantation company, but working in another factory close to the village
6) Not working as a labourer, switching from farming to metalwork or trying to find other occupations instead.

Group 2: those who still retain agricultural land

7) Working as a labourer with the rubber company as primary occupation
8) Farming hai, souan, paddy as primary occupation. Work with the rubber plantation when not busy with farming.

The choice of a particular pattern of adaptation depends on three important conditions: land, labour and opportunity.

1) Land
Those whose land was conceded entirely, were mostly found in four villages: Nong Nam Khao Yai, Lak 19, Oudomsouk and Vangkhanane. This group experienced greater difficulties in adjustment to the changes brought about by the rubber plantation, than the people who still had some land left. The reason why the villagers chose to work with the rubber plantation was because they didn’t have land and don’t have any alternative.

“My son in law went to work with the company, it was enough to get money to use in our family. If we didn’t go to work with the company, we would not have any alternative, working iron is not something I can do, our livelihood depends on getting work as a labourer, when there is a lot of heavy work, we get a lot [of money], but when there is little work we get a little. If [they call us and] we don’t go to work 2-3 times, they sack us. Its just not worth it, we have to pay for pladek, MSG, fuel.” Villager from Lak 19, 2008.

“In the past we used to farm the hai every year, we produced lots of rice. Once the Vietnamese came, it became very difficult to live and eat. We had to buy our rice, if we cannot earn money we don’t have any food. I prefer things like they were before. I don’t like the present day, I don’t want to work as a labourer, but I have to, because if I didn’t I wouldn’t have anything to eat. If I want the Vietnamese’s money, I have to work very hard”. Villager from Vangkhanane, 2007.

In the first three years of growing rubber, the companies allowed the villagers to grow short term crops in the rubber rows. The people who do not have land on which to farm in the 6 villages chose to grow rice to eat, and cassava or ground nuts for sale. But they were only allowed to grow these in the first two years, because the company gave permission after the growing season so they had to wait one year. After three years, when the rubber trees are grown, it was not be possible to intercrop any more. Presently, the villagers of Oudomsouk can no longer
continue to intercrop because the rubber is over 3 years old, and they are beginning to face the problem of reduced wages and lower labour requirements. Those who don’t have any land left and must depend only on their wages are beginning to experience serious poverty because the wages are not enough to buy rice to eat.

The possession or lack of paddy land is an important factor in terms of capacity to adjust of the villagers. The food insecurity of those families who had paddy land was less than those who had no rice land left.

Some of the people who gave up all their land, try to find additional land to grow rice. Mostly, land was found in the company plantation in between the rows of rubber trees. The second most common is to rent land (hai) or ask for help growing rice for relatives in nearby villages. Many in Vangkhanane (around 25% of householders surveyed) or cleared new paddy fields in nearby areas. Others bought paddy in a new village. On the other hand, all 3 villages in Bachieng had little chance to access to new land because all the land in their village and nearby villages have had all their land taken by the concession.

Families who have land left, eg Nong Ke and Nong Lao Theung had more opportunity to choose whether or not work with the company. As one farmer put it “I don’t work with the company, because I have a contention with the wage and if I was a full time worker, I’d be afraid of my wages being docked. Because in any case I would have to look after my hai and paddy fields, and I have to rest. I don’t like working under orders. I like working as I like. If I am tired I can take a rest. If I was to work with the company, I cannot rest even if I am tired.” Villager in Nong Ke, 2007)

2) Labour

The number of labour units in the family, is one of the most important factors in the ability to adapt successfully to the new circumstances of the rubber plantation. Based on information from our focus groups, families who have many adults of working age in the family, particularly within the workers age range specified by the companies, appear to adjust better than those who had less labourforce but had many members in the family who needed to be looked after.

The fixing of the employment range of the rubber plantation company has an effect on the management of labour in the family. In the past, those in the 35-60 years age group can still work in the hai and souan. However, the company does not generally take this group on as permanent labourers. Although the company does take them on as mobmao labourers, many have become unemployed, with nothing at all to do, they have to depend on their children who are labourers.

“the people who don’t have land on which to farm, must find hired work. The company can take on around 50-60%. The company says there is no more work to do. At the beginning the village authorities selected the families who were poor first… families who have 2-3 three workers as plantation laborers said they have sufficient income to cover their expenses, but those families who only have one labourer [in the plantation] their income is not enough.” Villager from Oudomsouk, 2007

In the 1+4 experiment in Nong Nam Khao Yai and Vangkhanane, the DakLak company has given land to families look after with the idea that they will be labourers to tap the rubber once the trees are ready. These participants give as their reason for taking up the task, that there is not enough land left to farm, and do not have any alternative, and they maintain hope of returns once the trees are ready to be harvested. “we have to do it, if we did not do this, we don’t have any land on which to farm, because we do not have any hai left… in the future, when we harvest rubber, we will have work to do and have an income from tapping rubber” Villager from Vangkhanane, 2007
3) Alternatives in adaptation
If we compare between the people who retain land on which to farm, who have more than one source of employment, or have a secondary source of income, and those whose only hope is to become labourers for the rubber plantation companies, the former group have adapted better.

Villagers from Lak 19 switched to metalwork as a main occupation, after their productive land area was given up to the land concession. This used to be a secondary source of income, however more and more people have turned to metalworking. On average, a family can earn an income of 800,000 – 1 million kip per month according to one villager, but this is mostly an occupation for the men. When there is no land the women then come to help the men make knives. "people are not lazy, we don’t work cos we don’t have any land. Our livelihood these days is to find somewhere to sell knives. sometimes we go to try to sell our knives until we are despondent sometimes it is very hard to sell they tell us they don’t what it they will not buy. Its embarrassing, but we have to put with this, because we need rice to eat," Villager, Lak 19.

Nong Nam Khao Yai and Nong Ke both have sawmills located close to their village. Thus, the villagers have some alternative employment available to take on village labour. In the case that the rubber company does not take them on, or if after working there for a bit they find it is not worth it. Some families who have enough labour, can work both with the rubber company and the sawmills.

In the families which have a trading occupation, state officials, house builders, of which there are few they have an own income without having to depend on the company. The people in this group can adjust better. The people who must depend on only on agricultural production and some families think that if they do not have any alternatives, then they may go to work in Vientiane or Thailand where they have relatives.

Recommendations expressed by interviewees

“I would like to call on the Prime Minister concerning poverty, please don’t allow our children and grandchildren to be hungry, in need, don’t allow the Vietnamese to take everything from us. Any way in which you can help us, please help. We cannot even go to dig koy to sell any more. There is also no koy. Anyway in which you can help the children, with rice with water. The first thing is we need help with rice, because we are starving, we need rice to eat. If we let the children scrabble around breathlessly asking from other villages, in other districts, other provinces? Wont we be embarrassed? Why is it I am starving? The Vietnamese came and took all my land, I have nothing on which to grow rice, the Vietnamese did not give me a job, they told me I am too old. Now, today, my children don’t have any thing to eat” Villager, Lak 19 , 2008

Presently, the first thing interviewees in the focus groups stated they need is to recover their livelihoods in three areas that is insufficient rice to eat, insufficient land for production, and the problem of labourers wages

The people who lost all their hai and souan to the land concession, would like the state to help provide rice. They proposed the state should allocate land - at least 1 ha per family - to be able to grow rice.

Concerning wages, it was proposed to regulate the labour wages at a rate that is sufficient income to make a living. Officials should monitor and inspect the company plantations to ensure that workers have regular work to do throughout the year. Respondents in Oudomsouk also proposed that the Viet Lao company assign the rubber plantation for the people to tend to the trees and tap the rubber so that the older people in the family have work to do.

Finally it was requested that a fund be set up for the financial assistance of the people who lost their land.
Aside from their immediate needs, the villagers proposed that any investment project which the government has already authorized and notified to the province and the district to implement should go through a consultation process with the people on the jointly agreed principle that “the village gives up land according to the capacity of the village”. There must be a process of allocation and zoning of villager’s land first, and at least half of the land that the people used in reality, or not less than 1 ha, should be retained by each family. Only after that should the community be asked to giving up of remaining land to the company.

Summary

In rural society which depends on natural resources as the primary basis for their livelihood, the loss of natural resources is a great change for people. Those who lose their production land and who lack labour have experienced serious problems in adjustment.

In the six study villages, it was found that the loss of farmland, was the biggest factor in the adjustment of the people, followed by labour availability in the family, and lastly the existence of alternatives in the adjustment of the people.

Those who lost all their land and who have few workers in the family experienced the worst problems in the adjustment. Their income is no longer sufficient to cover their rising costs, to buy the rice and food which was previously covered by produce and income from their fields. Those families which had many workers in the family within the right age range could go to work as permanent labourers with the rubber plantation company or the nearby sawmills. These families still had income sufficient to cover their expenses, particularly in the case where there was more than one labourer in the family who was accepted as a permanent worker. These families had a total income of over 1 million kip per month.

Correspondingly, those who had the greatest alternatives are the group who have hai land soun or paddy left. That is they have land on which to grow rice, for eating and selling, and they had fruit producing orchards. When their seasonal work from agriculture was completed, they would go to work as labourers and gain a supplementary income. In the case of Lak 19, the secondary source of income of making machete knives, has become their primary occupation after losing all their land. The proximity of a wood processing factory in Nong Ke and Nong Lao Theung similarly, presents an alternative for the local people to get hired work. When workers here saw that the wage from with the rubber plantation company was not commensurate with the work, people in this village had an alternative choice.

Amongst labourers, those with no alternative employment, are the least secure as they do not have any power to negotiate a fair wage. There is still no state mechanisms to inspect and look after the interests of the labourers.

Finally, reflecting on the problems which arise from the land concession, the communities point to three important issues which need to be resolved. These are the problems of not enough rice to eat, not enough land to farm and the irregularities of the labour wages. The government should try to resolve the problems urgently, addressing all three issues together. That is to find land on which to farm for the people to grow rice and the adjustment of wages to a rate which is fair and has clear standards in order to give the people a sufficient income for a sustainable livelihood.

Section five: Summary and Analysis

Summary

Before the advent of the concessions, the vast majority of villagers in the six villages studied were self-sufficient in rice for 11-12 months of the year. Almost all villagers interviewed in
Oudomsouk, Lak 19, Nong Ke and Nong Lao Theung also used to produce commercial crops for sale, such as coffee, fruit trees, teak, pineapples etc. High income crops such as coffee were bringing in incomes of around 5,000,000 kip per household per year in the past and would be commanding incomes of over 12,000,000 kip in the last year if the coffee lands were still in production. Where commercial crops were grown in addition to rice production for domestic consumption, villagers were seeing their families prosper and grow.

Nong Ke and Nong Lao Theung had the advantage of having a more diverse livelihood base in that they possessed paddy land as well as swiddens and orchards. They also benefited from the more participatory land acquisition process, losing less land to the company than in other villages. The majority of villagers who lost land in these two villages held on to a small proportion on which they could still depend or made alternative arrangements to access rice producing land. Where commercial incomes were lost, as croplands were given up to the plantation, they were still able to feed themselves. Those who were fit and able could benefit from occasional employment in the plantation.

Villagers interviewed in Vangkhanane and Nong Nam Khao Yai were less well endowed with commercial crop lands (and Vangkhanane had poor access to markets), however generally used to be self-sufficient in rice. After the land concession their loss of rice producing land has created serious hardship. A minority have gained permanent employment and have managed to earn wages of around 600,000 kip per month from employment in the plantation.

Some of the most serious impacts have fallen on those families who can no longer produce rice. The value of the unsold harvest of previous years is now becoming painfully clear as families have to pay market prices for the poorest quality rice of around 230,000 kip per sack. One adult, villagers calculate, eats one sack of rice per month. In a typical family of 6-7 this can add up to a cash requirement of over 10 million kip per year, although in reality our respondents have not reported buying that much, in an effort to keep their expenditures to a minimum. Given the paucity of regular employment in most of the villages, compared to the need for work, villagers without rice producing land are now living a hand to mouth existence. The lack of domestically produced rice, in Vangkhanane, Lak 19, Nong Nam Khao Yai and Oudomsouk particularly, has been compounded by the reduction in spaces for collecting wild foods, such as mushrooms, vegetables, insects, aquatic species and reptiles and amphibians. Diets have been pared to a minimum. Some villagers have begun to complain of stomach ulcers from going without food for certain meals, and undernourished labourers are finding the work in the plantations exhausting.

Various foods and other useful resources from nature such as yakha used to bring in a significant income of up to 5 million kip per year for some families prior to the land concessions. However these lands were given up without compensation as the value of these harvests were not recognised by either the companies nor the state officials. Livestock herds have been reduced, as a result of the loss of grazing lands and in some cases due to poisoning arising from the use of chemicals in the plantation. In the former cases they could be sold, but in the latter they were simply lost without compensation.

This study has confirmed that serious erosion has occurred in at least one steeply sloping site belonging to the Dau Tieng company which has had a detrimental impact on the river below. Villagers report of siltation, clogging up and drying of many rivers, large and small in the area due to run off erosion and discarded branches and other waste from the clearances. Fish catches have been seen to decline. The DakLak company has acknowledged that use of agro-chemicals must be reduced in future.

Employment promises have failed to live up to expectation. Permanent workers are very much in the minority amongst the Lao workforce. Generally, only young adults aged 18-35/40 have been given permanent jobs with the three companies. This leaves most of the older generation who previously were productive for another 20 years or more with little prospect of full employment. Wages were substantial in the first year, from 800,000 kip per month upwards, but have declined sharply, to 200,000 kip per month at the lowest. Wages fluctuate month by month in the case of the Viet-Lao and Dau Tieng companies, and all three companies have been known to pay late, in some cases up to 2 months.
Of those who gained work with the plantations, most are temporary workers. From our household survey on average temporary workers are given paid work for less than a quarter of the year. There is no security of employment and wages are not seen to be commensurate with the amount of work and are not enough to be able to live on.

Complete employment figures have not been made available to the research team from all three companies. From overall information in the villages surveyed it appears that households who gained work with the rubber companies are now in the minority in Lak 19, Nong Nam Khao Yai, Oudomsouk, Nong Ke and Nong Lao Theung. Overall figures are not available for Vangkhananale however only a third of households interviewed in our household survey were employed by the company.

An interesting experiment has been proposed by the DakLak company to reassign the management of a plot of land to farmers who will be given rights to tap the rubber once the trees mature. This can be termed a 1+4 scheme. Participants in this scheme are mostly grateful to have a plot of land within the plantation on which to intercrop rice up to this year, but stress that it does not compensate for the loss of their own land. Moreover, as it will not be possible to intercrop in the plantation in the next period, participants have stated that they would prefer to have full control of land as they did before, than to manage the rubber land for the company. They are concerned because they have no other land on which to produce rice and they are rarely called on to work in their rubber plot. Wages are low. Their hopes for the future are sustained, however, by the thought of being able to tap rubber in two–three years time. The conditions under which the future harvest will be shared with the 1+4 participants have yet to be clearly explained to the participants.

Exchanges – land loss for development

The plantations were introduced with the discourse of poverty reduction. The plantations were proposed with a view to finding a way out of suffering. There were three ways in which this was supposed to work. Firstly, companies were encouraged to give priority to the poorest in the villages, when hiring permanent workers. Several accounts confirmed that this principle was generally observed in practice during the first years, where the villagers in question fell within the right age range for that company’s labourforce. However employment levels are too low now to employ all those who are in need of work.

Thus, there was in some cases a direct exchange: land loss for employment. In the case of the Viet Lao company in Bachieng, for example, the company did not hire people from the villages unless they had given land up to the concession. One villager in Oudomsouk told us that he had been wary of giving his land to the plantation at first, but when he saw that his neighbours children were getting good wages in the plantation, up to 1 million kip per month, he offered his land willingly to the company, in order for his son to get a job with them. The wages were only high in the first two years however, and they have since dropped to 200,000-300,000 kip per month. He now regrets his decision to give away his land, but cannot now recover it.

In fact after the first few years, it became impossible to hire all of those made redundant by the land concession. Firstly the upper age limit of 40-45 excluded large numbers of those who are still able-bodied and seriously affected by the loss of land. Even villages such as Baan Thi 4 which were located right in the heart of the Viet Lao plantation, and whose land was entirely swallowed up into the concession, began to be overlooked as the company had many places to look for workers. For those who lost their land but did not get jobs, their loss is absolute.

Secondly, there is the issue of the future income from the rubber. Villagers are waiting for the rubber tapping to begin, they are hopeful that their lives will change. The DakLak company estimates that the annual output of latex would be 16,000-19,000 tonnes from 10,000 ha. With the maximum output expected in the 10th year counting from the time of planting. Daklak says wage will be around 2,000,000 kip per month. We have not been provided with sufficient information to assess future wages from the other two companies, however, the current practice of all three companies in setting low wages, changing the rates, and paying late, does not build
confidence that promises of this kind will be met in the future. In the meantime, villagers must wait two-three more years before they can see any wages from tapping.

Thirdly, the company would bring additional development gains. The Daklak company has told us that in addition to estate offices and housing for the Vietnamese labourers, it has also provided a health station, as well as two schools. In extending the electricity lines to its estate offices, it has enabled villages who previously did not have electric power to gain access too. Similarly, the Daklak company improved the road to the plantation in Lao Ngame which made a considerable difference in journey times to villages like Nong Ke and Vangkhanane. Given the heavy traffic to and from the plantation this was essential for the implementation of the plantation project, however this was also perceived as of benefit to the community by a number of respondents.

The Dau Tieng company, was also keen to develop good relations with the village. They discussed with the villages what the company could provide in terms of electricity, water, roads, etc. Electricity was connected to each village, and an artesian well was dug for each village. The company told us that a water runoff channel was constructed for the people, although this is not strictly a development gain (defined as additional to the project, a sweetener) but a necessary part of the water management of the project. The Dau Tieng company has also promised that it will construct a hospital at some time after the project has begun to make profit.

Additionally, a comparison was also made between ‘elementary ways’ and ‘better development’. Industrial plantations are believed to be ‘better’ than swidden farming. In this way the choice offered to villagers, such as it was, was to give up or sacrifice their land in exchange for a better life, ‘better development’ of the community and of the nation.

We did find some evidence of villagers accepting this view in our discussions with the groups and individual interviews. One woman in our study in Vangkhanane did in fact claim that she had equivocal feelings about her life before the concession and after it, but expressed satisfaction that the village was now developed. Another man in his fifties, who preferred his new life as a labourer, and whose son was also working for the company in Vangkhanane also referred to the previous farming ways as ‘basic’ and ‘elementary’.

However the overwhelming majority of male and female respondents in all the villages (with the exception of the female labourers in Vangkhanane) were more satisfied with their previous lifestyle involving swidden farming and collecting food from nature. Few voices if any spoke of the inappropriateness or backwardness of swidden farming. On the contrary many spoke of their pride in their own farming methods, the skills involved and the deliciousness of produce they yielded which could feed the family throughout the year.

Those who did speak of problems associated with swidden farming mentioned the difficulty of having to clear land each year. This was true of families who lacked sufficient labour to manage this heavy work and those who did not have enough land to produce rice all year round to feed large families for example in Vangkhanane village. The most vulnerable before were those who have fared the best in the new plantation economy. That is, those who had a small area of land but a large family to feed in the context of few sources of employment. Families were not well off to start with but they were farmers and the owned their own land and most of them could see progress from their work over the years.

In evaluating the implications of the projects, losses of the project must be weighed up against the benefits, however in considering poverty and justice, the state has a duty to look after those who have been dispossessed of their land and who are suffering serious hardship and facing probable starvation. In Lak 19 “The government said the project was here to eradicate poverty. Originally around 40% of the people in the village were poor, but now the figure has risen to 80%. The people wish for satisfaction and contentedness, without this, it is not possible to progress. Some of our comrades are discouraged, they have had to move out of the village” In Oudomsouk, while interviewing the people about their evaluation of the plantation, the village head talked to the villagers to remind them that the village had many developments from the rubber plantation project, and it is the intention of the Party and the state for the people to emerge from poverty. Following which, one of the villagers said: “I like things the way they are
today, because we are leading the way for Laos to have an export economy, but what I don’t like is that we have to do exhausting, laborious work but don’t earn enough to live by.”
Part IV

Summary and conclusions

As a means to encourage private sector investment with the promise of large areas of land for commercial tree plantations, particularly rubber, land concessions have been granted in all regions of Laos. Presently the cultivation of rubber under the large-scale land concession system covers an area of over 77% of the total rubber cultivation in the country. Most of this area is in the central and southern regions of Laos. The government has a plan to increase the rubber cultivation area as part of its policy to increase the forest area to 500,000 ha by 2010.

Since 2000, however, the expansion of the rubber estates have instead created a variety of problems. These include land conflicts between the concession companies and local farmers as a result of encroachment of community forests and agricultural land which the Lao people had received under the Land and Forest Allocation Policy. A variety of sources of food from natural spaces have been lost to the community in and near the plantation sites. The low rates of compensation have been inadequate to compensate for the loss of livelihoods and productive lands to the concession.

Reports of such difficulties led the Lao government to announce a temporary moratorium on the consideration of leases and concessions during the National Land Meeting on 7-8 May 2007. In the meantime, studies were to be undertaken to evaluate the causes of past problems and policies and laws should be adjusted as appropriate.

This report presents the findings from the joint research project “Ecological, and socio-economic implications of the large-scale commercial tree plantations in the South of Laos” (July 2007 to April 2008), a collaboration between the Centre for Research and Information on Land and Natural Resources, National Land Management Authority, under the Office of the Prime Minister of Laos, the Foundation for Ecological Recovery, Bangkok, Thailand and the Faculty of Social Sciences, Chiang Mai University, Thailand.

The policy to promote commercial rubber cultivation is consistent with the policy of the state to develop land use to responds to need for expansion of the national and local economy. The objective is to generate employment in the rural sector to relieve the problems of poverty for the people. However sound these principles, they have not been put into practice as intended.

The research project undertook case studies of six villages directly affected by major land concessions in the South: Oudomsouk, Nong Nam Khao Yai, and Baan Lak 19 in Bachiangchaloensouk District, Champassak, and Vangkhanane, Nong Lao Theung, and Nong Ke from Lao Ngame District, Salavane. An analysis was made to compare between the economic benefits of granting large-scale land concessions for commerce with various impacts upon the communities involved. The research team made a detailed study of the process of change within the communities since the approach of the land concession, from the identification of land, the payment of compensation, to the transition from farmers to labourers in the estates.

The research had three main assumptions.

1. Large-scale land concessions and leases to private companies for the cultivation of commercial tree crops will generate the greatest economic and social benefits to the nation and to local areas when they are granted through a step by step process that is cautious, transparent, clear and accountable, that is based on accurate and comprehensive information from the field and that ensures the participation of all parties including the central government, local government authorities, private sector companies, and local people.
2. In order for the promotion of the rubber agro-industry in Laos to bring the maximum benefits for the nation and the people, local producers must participate in the development of the industry and derive full benefits from commercial agriculture.

3. Supporting the change from traditional production to becoming laborers in the rubber estates will create benefits for the people if their livelihoods and economies are improved without causing a deleterious effect on the ecology and community resource base.

In testing these assumptions, this research paper has presented an analysis of three important factors: the nature of the expansion of the rubber industry in Laos, the process of granting land concessions in Laos and for the case study projects, and the changes which have been brought about for the communities targeted by the rubber estates. The main findings can be summarized as follows.

1. The expansion of the rubber industry in Lao PDR has taken different forms, but the major mechanism has also brought about the most significant land conflicts

The expansion of rubber in Laos counting from the 1990s has taken four major forms:
- Large-scale agricultural plantations by foreign capital through land concessions
- Large- and medium-scale plantations through contract farming mechanisms
- Medium- and small-scale plantations by the village agricultural associations
- Small-scale plantations by smallholder agricultural households.

However, rubber cultivated in large-scale plantations through investment of foreign capital, which covers up to 77 percent of the land under rubber throughout the country, appears to have caused the greatest impacts. Most important among these are land conflicts. The process of granting large-scale land concessions has caused widespread and abrupt loss of land amongst local people. In the case study areas, most of the people become landless farmers, having lost almost all their land to the rubber companies. A variety of issues lie behind the problems manifest by the rubber plantations. These are summarised as follows.

1. The loss of land rights. In the case of the rubber plantations established by contract farming and by village associations, land use rights remain with the existing landholders. In the case of the rubber plantations established through land concessions, the power to make decisions concerning the investment and the production lies with the concession company. The loss of the community’s rights to use land in the areas targeted by the rubber concession has meant the people are no longer able to farm for themselves. This contrasts with the experience of the people in the contract farming areas (also known as the 2+3 system) and those who have planted rubber in small and medium sized farms in the North of Laos, who retain “ownership” over the land and have been able to make a smoother transition from subsistence agriculture towards commercial farming. Agricultural land rights are not only incentives for agricultural investment but also provide essential livelihood security. Their loss has become a major cause of conflict between the people and the rubber plantation companies in certain areas.

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1 In this case the land rights in question are usufruct rights as allocated under the Land and Forest Allocation Programme. Of those households interviewed, approximately 80% of their agricultural land area (land given up to the land concession companies) had been issued with Temporary Land Use Certificates (TLUC) under the Programme.
2. The size of the land concession area. Almost all concessions propose to take over large areas of land, generally over 10,000 ha of contiguous land. In reality, a single vast plot of abandoned land without any existing exploitation is extremely difficult to find in Lao PDR. Exceptions may exist in former war-torn areas, where unexploded ordinance are still lying uncollected, for example in areas of Ta Oy and Samoey Districts of Salavane on the border with Vietnam, and where there have been fewer settlements. However companies tend not to be interested in such areas, given that they are remote and far from the market trading routes, as well as carry dangerous risks for workers and must involve expensive mine-clearance. Most of the large-scale concession companies have chosen instead to request land which is already being used for agriculture by local people.

2. The process of granting state land concessions is convoluted and inconcise. There are few coherent standards and no appropriate investigation and control systems to oversee company operations.

- The granting of land concessions to investors is one of the primary strategies of Lao PDR to stimulate foreign investment. However, this process has in the past met with six major problems:

2.1 Most land concessions are agreed and signed without a prior land survey. A survey is generally completed after signature, while the economic feasibility study or "economic critique" (Botwipak setakit) is being undertaken, meaning that the key issue for the concessions - the amount of land which can in fact be granted under concession – is not yet known at the time the major decisions are being made. The Committee for Planning and Investment, the concession company, the Ministry of Agriculture and Forestry and others authorized to sign the concession agreement have not had access to the facts concerning the land that can be granted. This has been a serious limitation. It has meant that local state officials are obliged to look for land to make up the total area specified in the concession contract. When inevitably there is insufficient waste or unused land to provide the company, land that is already used and farmed is taken to meet the quota. This is what happened in the villages under the land concession in Bachieng District, Champassak province, where many villagers lost their productive lands and other resources. In the three cases studied of the companies Viet-Lao Joint Stock Rubber Co, DakLak Rubber Company and Dau Tieng Viet-Lao Joint Stock Rubber Co, it was found that agreement and signature of the land concessions had been granted before the economic feasibility studies had been completed and before the investment was considered.

2.2 Land concessions have been authorized without consideration of the suitability of the area to the crop. A study has been carried out identifying areas that are appropriate and those inappropriate for rubber cultivation throughout the country. However this information has not been put to use in the process of considering land concessions for rubber. As a result many areas, particularly in the South, which have capacity to grow a range of different crops have become extensive rubber estates. Champassak which is a major coffee producing area is now seeing much of its land, including many smallholder coffee plantations being converted into rubber plantation under the land concession. This conversion may turn out to be costly to the country.

2.3 A highly convoluted system of powers exists to authorise land concessions which arises from a variety of inexactely overlapping laws, including the Forestry Law, the Land Law, the Ministerial Regulations etc. In practice, the land
concessions studied were based on agreements signed by provincial level officials and their counterparts in the neighbouring country. The confusing provisions of the law and the lack of standard provisions for consistent granting of land concessions has allowed some land concessions to be granted in overlapping areas. Even while there is a moratorium on land concessions and the NLMA has been assigned central authority for land management, it is still unclear what kind of mechanisms will need to be put in place to clarify the system of investigating and controlling the process for granting land concessions. In the case of the Viet-Lao, Dak Lak and Dau Tieng companies, which operated in Champassak province and Salavane provinces, the research team were not able to obtain clear evidence to determine which state body has approved the concession.

2.4 There are no provisions for social and environmental impact assessments and detailed study of the economic value of the project. Currently there are no clear provisions requiring the large-scale concession projects in Lao PDR to undertake either an Environmental Impact Assessment or a Social Impact Assessment. This has become an important issue because there are no safeguards to prevent large scale projects from creating problems for the ecology and environment, nor if such impacts arise, any regulations clarifying who must take responsibility.

In the case study areas, it was found that the clearing of land for the land concessions in six villages affected important local water bodies, by permanently cutting off local access to water sources or through reduction in water quality. Streams are reported to be drying out and some contamination was reported in streams where the villagers used to drink from.

What is perhaps most surprising is that there has not yet been any detailed economic appraisal of the costs and benefits from the land concessions studied. Concession fees were not linked to the suitability of the land or the nature of the project and there was no study of the distribution of income in the local area.

2.5 Lack of participation by affected people. The granting of land concessions for rubber has in the past been a matter decided by national and provincial level officials and the concession company. In most areas, local people have been given no part in the decision making. They had no say in whether to take part in the rubber projects, which areas of land were selected or sought, how much compensation should be paid, nor whether they could work in the rubber plantations. This study found that there were no provisions for participation of affected people within the policies or legislative framework. The discretion thus lies with the local level officials. In those villages where the province or district allowed time and priority to building a participatory process, such as those in Salavane, the seriousness of the impacts from the loss of productive land were somewhat reduced. Compensation rates in these areas were higher. However in those areas where the local officials neglected to consult with local people in the process of procuring land for the concession company, impacts were found to be more widespread and more serious.

2.6 Lack of monitoring, investigation and evaluation mechanisms. Even though large scale land concessions have now been granted in every part of Laos, there are still no clear provisions concerning the mechanisms, units or processes that should carry out the role of monitoring and investigation. There is no mechanism for enforcing the conditions of the contract relating to the areas of the concession, statements concerning employment, fair wages, nor any penalty provisions for breach of contract.
3. Large-scale land concessions to grow rubber have brought more negative impacts to the community than positive economic gains.

There are no standards and regulations for transparency and control in the process for granting large-scale land concessions for rubber. No set of information or field data is collected in advance, and there is generally no participation by the local people. This has led inevitably to serious impacts for the livelihoods of the local people in the concession areas. Employment in the rubber plantations may be the only livelihood option around for the following reasons.

3.1 Loss of land and land use rights to productive land. The study found that 90% of the households in the case study areas had temporary land rights certificates issued under the Land and Forest Allocation Programme of the 1990s. Over 80% of the production area which was given to the rubber companies was land covered by such certificates. No consideration was made of how the land was used by the local people before their land rights were cancelled. Having received their land rights certificates, and developed their land, they would have been entitled to permanent land use rights according to the 8 steps of the land and forest allocation programme. This study also found that the few households which had already been issued with land titles, were also obliged to hand over their land to the companies. The loss of land use rights has destroyed the livelihood security of the local people and meant that several hundred families, no longer having the means to feed themselves, have no option but to work as labourers.

3.2 Food shortages and loss of cash crop income. The conversion of productive village land - rice fields and various other farmlands and orchards, producing coffee, cardamom, pineapples and timber, etc into rubber plantations has brought about serious food shortages and loss of income from the sale of economic crops. These had been the main source of income for all six villages studied. The study found that the number of households that used to produce sufficient rice all year round reduced from 45 per cent in 2003 to only 9 percent in 2007. Rice yields were down to a quarter of their previous production. The income from selling rice and various market crops dropped significantly. Loss of primary income and rice shortages meant that the costs of living rose sharply. For some households, annual expenditure to buy rice rose to 5,900,000 kip per year, a significant sum of money in the local economy.

3.2 Degradation of the natural resource base. In those villages where the process of procuring the land for the rubber companies was accelerated, such as in Vangkhanane and Oudomsouk, certain forest areas which used to be an important source of natural forest products (NTFPs) and food were completely destroyed. The rice fallows which had previously been a source of both food and income were mostly destroyed. Foods which were derived from natural spaces such as streams and wetlands are now harder to find, their losses partly as a result of the use of chemicals used in the rubber estates. The loss of these three main pillars of the community economy: rice fields, orchards and forest lands is the equivalent of undermining every livelihood path for the local people. This was a major factor in the community’s transformation and engagement as agricultural labourers.
4. Inability to recover the community economy following the loss of land to the companies. Weak mechanisms to manage compensation and ensure fair conditions of employment

The payment of compensation is the main way in which the problems and suffering from the loss of productive land and natural resources might be alleviated. In all six villages, it was found that the payment of compensation did not follow any consistent standard or reasoning. Some companies paid compensation only for the crops that were lost, other companies calculated the area of land and the crops together. Some companies paid compensation for less land than was actually confiscated. In other cases, the level of the compensation depended to the ability to villagers to negotiate. There are no legal provisions to govern this, even though in some cases the government officials at the district level suggested the rates of compensation for the company to consider. In general, the state officials did not help to set up principles so that the people could not be taken advantage of by the company. Generally, compensation paid was around 1-2 million kip (approximately US$100-200) per ha which was many times less than the value of the cash income which the land provided. The low rates of compensation made it difficult for villagers who lost their land to recover from the loss of livelihood resources or to invest in any new occupation.

Employment in all three companies throughout the past 3-4 years has been irregular and insecure. There was plentiful employment only in the first year when the estates were being planted and established. In subsequent years, employment fell to less than half the original level and no longer spanned the entire year. This meant that many villagers became unemployed and suffered considerable poverty. Even among those who had regular full time employment, wages were not regular. Their payments decreased from the first year considerably.

Not all workers employed are from the local villages. Vietnamese workers are also employed by the companies in various capacities. Presently, the number of foreign workers exceeds the limits set out in the law on promotion of investment 2004, namely that the employment of foreigners should not exceed 10 percent of the workforce.

There is no state body or labour law provisions in place to help to manage employment and wages. Employment matters are entirely up to the consideration of the company. There is no mechanism to allow villagers to call for fair wages nor to assist them in ensuring justice.

5. The community’s capacity to adjust and recover from the impacts of the concession depends on the amount of land and labour families have left

Working under unfair conditions and irregular employment, villagers who have lost their land to the companies have tried to find alternatives for their subsistence. This study has found that those households who still had some paddy fields remaining, for example in Nong Ke, Vangkhanane and Nong Lao Theung were still able to continue farming or able to buy land from neighbouring villages. When they were not engaged in farming they were free to take up work in the rubber estates. While the villagers who lost almost all their land, of which many were in Oudomsouk, Lak 19 and Nong Nam Khao Yai, suffered the most serious impacts. They had to find work in the rubber estates or try to find work elsewhere. In the first year of the land concession, villagers were still able to grow rice to feed themselves in the rows between the rubber in the plantations. However, this was not generally possible afterwards partly because the rubber trees grow quickly and soon the earth was covered beneath shade.

Currently those families who can survive are those who still have land left or else those who have sufficient labour to find income to cover their increased expenses. The group of families who have experienced the most severe problems are the landless and
families with few working age adults. To this day, neither the state nor the concession companies have taken concrete steps to alleviate the poverty of these families.

Since the research study period corresponded to the phase of land clearance and rubber tree planting, it was not possible to evaluate the economic benefits that might be derived from the land concession project as a whole. The rubber trees should be able to be harvested in year 7 counting from the date of planting which differs amongst the three companies. In the first 6 years period, the company is exempt from paying land concession fees. In addition, the research team has not been able to access all relevant documents. Only one economic feasibility study concerning one company was made available, and information concerning employment was not provided by the companies. Due to these limitations, the majority of the information presented here is derived from interviews with the affected people. While it may not be possible to undertake a full economic assessment, the research team view that an additional study should be made once the rubber can be harvested.

**Recommendations**

The research team proposes that future support for the development of commercial agriculture in Lao PDR should change direction. Emphasis should be placed on the generation of direct benefits for agricultural communities rather than the allocation of large areas of land to the private sector. This study has indicated the many problems which have arisen in the case of the major land concessions studied. The projects have not created the kind of economic changes that might benefit local people. As a pathway for resolving the problems arising from the loss of land to the concession companies and as a means of adjusting the direction of land management in Lao PDR, the research team propose the following recommendations:

**Short term measures**

1. Provide immediate relief for those suffering from the loss of land
   1.1 A rice fund could be established in each community that has already lost a significant area of land to the companies and have consequently experienced hunger and extreme poverty.
   1.2 The compensation payments must be reviewed, so that the people already affected can be compensated in as fair a manner as possible.
   1.3 Land must be found for all those who have lost their land, with a minimum of 1 hectare per family for subsistence production
   1.4 Wage rates for the labourers in the rubber estates must be revised and monitored to ensure that they are sufficient by which to live. Written contracts must be completed for each labourer.

**Medium term measures**

1. Set up an official committee to monitor and investigate the implementation of all land concessions. This committee should have the following powers and responsibilities:
   1.1 to monitor the companies operations in relation to land and land use, making sure land areas are as agreed.
   1.2 to ensure that local land management authorities coordinate with the labour authorities to control, regulate the labour employment fairly, so that the villagers can gain regular work, fair wages and welfare at work
   1.3 to coordinate with other institutions to find alternative occupations, provide assistance and provide some relief for the families who have suffered from the loss of their land and whose wages are too low to live on.
2. There needs to be a land survey and land zoning plan in each province. All areas of land that are genuinely used by the communities and individuals who have been issued with certificates under the Land and Forest Allocation policy should be kept free from land concessions.
3. The mechanisms for the authorization of land concessions should be reformed to reduce the problems of a very complex process.

**Measures for the long term**

1. Large-scale land concessions should no longer be granted to foreign investors for commercial cropping over the long term.
2. Land management policy should emphasise building the capacity of people to develop their land use to increase its economic value, whereby rights to use the land still belong to the people.
3. There should be a plan for land management which considers the balance between the benefits to the national economy, the local economy, a fair distribution of income, ecological benefits and biodiversity.
4. If there are to be more land concessions, they should be small in scale, in land that is not subject to community use. Evaluations should be carried out of the potential impacts on the environment and society before a project is authorized.