

# Regional perspectives on plantations

## An Overview on the Mekong Basin



## **Plantations in the mekong region: overview**

**WRM Briefing, December 2008**

Eucalyptus, oil palm, rubber and jatropha monoculture plantations are expanding onto local communities' lands and forests in the Mekong region's countries. Promoted under the guise of development, poverty alleviation and even climate change mitigation, such plantations are resulting in severe social and environmental impacts. In spite of the difficult political scenarios in which they are established, local peoples are resisting through whichever means are available to them, ranging from broad alliances against plantations (such as in Thailand) to nascent clusters of local resistance against plantations in Cambodia and Laos. The aim of this briefing is to provide a broad picture of the on-the-ground reality of plantations in the region's six countries – Burma, Cambodia, China, Laos, Thailand and Vietnam – as a means of generating awareness on the issue and, more importantly, to assist in making local peoples' voices heard. At the same time, we hope that this information will serve as a useful tool for strengthening resistance against these types of plantations, both within and outside the Mekong region.

### **- No more frontiers to cross: Life of Mekong people in the plantation era**

Welcome to the Mekong region! Sharing a linguistic heritage, the same ancient word is still used across the region, particularly in Laos, Thailand and Cambodia, to describe this place as “*suvarnabhumi*”, a golden land.

With tremendous natural resources from their rivers, forests and lands, people of the Mekong were seen as more than wealthy, as most of the people live by their capacity to work together with nature. While rivers and forests are places to hunt, fish and gather, the land is gold in itself, producing rice, a variety of crops and providing a home. While in other

parts of the world, people have found the need to keep crossing “new frontiers”, trying to push beyond the current limits, to find a better life, to live off a better land. Except when forcibly displaced, the Mekong peoples have rarely had a history of moving away because they have their own golden land. That may be the reason explaining why local people cannot understand the arrival of eager investors that rush into the area to exploit their land to make their own wealth to take back home.

Private companies are aiming to take over 180,000 hectares in Laos and over 800,000 hectares of land in Cambodia. Some of those companies are local, but most are international. The governments of the lower Mekong countries award concessions to companies whose main aim is to grab the largest possible piece of land, and later on to introduce large-scale plantations. The first time the plantation may fail, but this doesn't matter, as long as they own the large piece of land along the main road, paying very low land taxes, and having plenty of time to try planting again.

Two of the biggest threats for the Mekong's peoples and resources – large-scale plantations and hydropower dams – share many common characteristics, including those related to the role of the private sector, the lack of clear policies for making the process transparent and accountable and lack of people's participation. However, large-scale plantations have pushed ahead over the past 10-15 years and as a result many people have lost their land, even before they knew if they had any legal right over the land at all. The promotion of those schemes has made the gap between people and policy makers wider, and people still have no chance to make their own voices heard in decisions about their future on their own land. Taking the land away from people means taking away their rice, their crops and their families' food security. This can turn out to be a disaster for the countries in many senses, if an urgent reconsideration of these policies is not achieved in time.

As all the Mekong countries – Burma, Cambodia, China, Laos, Thailand, and Vietnam – are presently providing soils for large scale plantations including rubber, eucalyptus, jatropha and palm oil, at the same time

investors from within the region are also playing a power game over the less strong countries. Chinese, Thai and Vietnamese companies and their state enterprises are now rushing in to push beyond their frontiers to satisfy their own industrial needs in neighboring countries such as Cambodia and Laos.

Over the past decade, the struggle to monitor and campaign on plantation issues in the region has had little success. However, the emergence of the land network and their campaign on land concessions in Cambodia, for instance, has resulted in increased awareness within society as a whole. In spite of that, plantation proponents keep advertising large-scale plantations using endless and ever more complicated reasons, ranging from 'shifting cultivation stabilization' and 'poverty reduction' 20 years ago, to plantations now aimed at carbon credits and biofuel production. Throughout the years, the reasons given to the local people have kept changing, but something that has not changed is that people of the Mekong countries have continued to be pushed to the frontiers of their own land.

In November 2006, a statement of unity came out from a Mekong Regional Conference on Tree Plantations, held in Kratie province, Cambodia where people from five Mekong countries shared their experiences and the lessons they had learned on the issue of industrial tree plantations and their impacts on local peoples' livelihoods. The people stated that *“Contrary to government claims that plantations contribute to national economic development and poverty alleviation, plantations have increased poverty by displacing entire communities, destroying crucial livelihood resources and preventing the access of communities to natural resources”*. Their conclusion was that *“In all cases the only way to create change has been through peoples' struggles. Struggle does not mean violence; it means the different ways that local people adopt to secure and defend their rights”*.

In order to avoid having to move away and to change their lives, people in the Mekong region now need to turn around and state clearly to the plantation proponents that there are no more new frontiers for the companies to cross. Instead, the people wish to remain and regain their

lives in their own land that they have been using for generations. That is to say, they wish to stay in their “Suvarnabhumi”, their golden land.

Premrudee Daoroung – Director, TERRA

## **- Mono-crop trees find more room over the borders in the Mekong region**

The inter-meshing of the six economies in the Mekong Basin since the 1990s has been fostered under the Greater Mekong Sub-region economic cooperation programme. This was aimed at increasing the flow of cross-border investment from countries with considerable economic might such as China, Thailand and Vietnam into neighbouring countries such as Laos PDR and Cambodia, which have a 'doors wide open' approach calling for foreign companies to come to invest. Extensive land and cheap labour have been used as an incentive for drawing in investors to develop commercial tree plantations in the form of hundreds of large-scale land concessions in the period of the last 4-5 years.

We can distinguish four forms of investment in monoculture tree plantations in the Mekong: investment of foreign capital from outside the Mekong region, cross-border investment of capital from within the Mekong region, domestic investment by major capital groups, and household investment by small-holder farmers on their own land. In this article we will emphasise the first two types, since these tend to involve the greatest concentration of land use and have brought the most serious impacts for local communities. We can identify the main actors in the different countries as follows.

### **Laos**

Investments in plantations in Laos are mostly in the form of large-scale state land concessions, particularly for growing eucalyptus and rubber. These draw on investment from countries outside as well as within the Mekong region. Major investing companies include Oji from Japan, with extensive plantations underway and seeking a total of 50,000 ha of

eucalyptus in Bolikhamxay and Khammouane provinces. Another is Birla Laos (Birla Grasim) from India who have a concession of 30,000 ha to grow eucalyptus in Savannakhet province. Actors within the region include the Vietnamese rubber companies, Viet-Lao, DacLac and Dau Tieng, which have agreements to invest in rubber over an area of more than 30,000 ha in the southern part of Laos or Champassak and Salavane provinces. Reports indicate that, in total, Vietnamese companies are seeking to expand rubber investments in Laos to 100,000 ha within the next twelve years. The two largest pulp companies in Thailand, Advance Agro and Phoenix Pulp and Paper, are also seeking to use Laos's land to grow eucalyptus as a raw material to supply their factories back in Thailand.

So far, the Lao government has authorized an area of around 167,000 ha to foreign companies to invest in monoculture economic trees and crops throughout the country. Of this area, 80,000 ha is allocated for eucalyptus and around 46,600 ha for rubber. Most land concessions are located in the central region down towards the southern part of the country.

The Lao government resolved on May 2008 to suspend the issuing of land concessions throughout the country. Despite this, continued pressure from foreign investors and keenness to encourage investment within certain sections of the government have apparently led the Committee for Planning and Investment (CPI) of Lao PDR to continue to issue investment licenses, even for commercial plantations which require access to large areas of land. While the concession moratorium stands, companies cannot legally gain access to more than 100 ha of land. However it is clear that some companies are being given local authority permission to access land, based on investment authorisation from the CPI amongst other things. The present convoluted legal framework, with rules that are inconsistently applied, creates confusion amongst investors, government officials and locals alike. In this context, villagers are insufficiently protected against loss of their land to powerful and influential wealthy concessionaries.

## **Cambodia**

The extent of land alienation in Cambodia is much greater. Information from the Council of Ministers in February 2003 specified that the government of Cambodia authorized 40 economic concessions covering an area of 809,296 ha. Since then, official figures have been hard to come by, but recent reports indicate that during the global economic boom since the turn of the century up to half the land area of the country had been assigned to foreign investors either through land concessions or long leases.

The major investors in Cambodia tend to have strong links with senior politicians in government. The law states that economic land concessions cannot extend beyond 10,000 ha, and that larger pre-existing concessions must be reduced accordingly. Nevertheless the government has not taken action to recover land from powerful companies who hold much bigger areas of land under concession (link to Fast-wood Plantation Economic Concessions and Local Livelihoods in Cambodia, 2006; Land concession and forest concession map in Stung Treng province, 2006). The Wuzhishan L.S. Group from China have a 199,999 ha concession to grow pine trees in Mondolkiri province. Initial exploitation of 10,000 ha has been authorised, but the status of the rest of the land is unclear. Other foreign owned plantation companies with large concessions include the Green Rich Company growing acacia and oil palm over 18,300 ha in Koh Kong province, the Cambodia Haining Group which has acquired 21,250 ha in Kampong Speu province to grow cassava, palm oil, and raise livestock, and three companies -Asia World Agricultural Development Co, Global Agricultural Development Co and Great Wonder Ag Dev Co- have been granted around 10,000 ha each to grow teak in the same district of Kratie province, with most of their various permits granted on the same days.

In March 2006, the representatives of the Hainan Natural Rubber Industry Group Corp which is the largest rubber producer in China and the Suigang Investment Development Co Ltd in Cambodia signed an agreement for a rubber investment project covering an area of over 60,000 ha and

including the establishment of a processing factory in Cambodia. There are additional reports that two companies from Vietnam received authorization for a rubber plantation in around 16,000 ha of Mondolkiri province. As in Laos, the Vietnamese rubber industry has set a target of obtaining 100,000 ha for extensive plantations in Cambodia. News reports from November 2007 (Manager online 28 November 2007) specified that three government rubber plantations over 22,000 ha were 'sold' to 3 private companies from China on 99 year leases.

Not all foreign companies access land directly via state authorities. Over 200,000 ha of land in Stung Treng province has been acquired by 11 local companies, which have invited foreign companies to invest as secondary investors.

### **Burma**

Accurate reporting of plantations development is very difficult to come by in Burma. Sporadic news reports often indicate planned targets and very little data is published on the actors involved. Xinhua News Agency reported in May 2007 that according to the Myanmar Ministry of Agriculture and Irrigation, up to 3.24 million hectares of agrofuel crops will be grown to realize the projected increase of the agrofuel up to 20 million tons a year. Official statistics appear to show that there were 302,000 ha of land under rubber plantation in 2007 (Myanmar Times, 2007).

### **China Vietnam and Thailand: New actors**

These three countries are increasingly taking on the role of investors in their neighbouring countries. Private companies in these countries have increasing capacity for investment. It will not be necessary in future for them to rely on grant money or loans from international financial institutions, such as the ADB. Owing to the limited scope for expansive plantation development in their own country, groups of investors from China, Vietnam, and Thailand are scrambling to invest in large plantations in Laos and Cambodia.

But behind the scenes of large scale land concessions are the loss of farmland, orchards and community areas for food collection and animal grazing. In Laos and Cambodia, over 80% of the people live and rely on such resources for their livelihood. In the midst of the increase in prices of food crops recently, villagers who have lost their rice growing land experience suffering and poverty. Those who lose their land often become dependent on obtaining work with the plantation companies, but full time jobs tend to be available only for a tiny minority, particularly the able-bodied young, leaving the rest of the family unemployed. Income from labouring with the companies is rarely enough to feed the landless families.

In the context of complex economic and political differences among the countries in the Mekong watershed, civil society actors hardly have any spaces in which to play their public role. Political and communications limitations in countries like Laos and Cambodia, make public discussion difficult, and harsh repression in Burma stifles public comment. Of the countries which have superior economic and political power, like China, Vietnam and Thailand, it looks as though countries such as Thailand opens the most amount of space for civil society. However, many civil society leaders, and people in wider society, still do not have sufficient interest in or awareness of the cross-border impacts of the profit seeking of national investors on neighbouring countries.

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For further information about plantations in the region please link to: [Mekong plantations page](http://www.terraper.org) on [www.terraper.org](http://www.terraper.org)

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### **- The ADB is destroying the Mekong's forests and the planet's climate**

Just outside the climate change conference in Poznan this morning, Friends of the Earth held a demonstration against the World Bank's funding of coal-fired power plants. World Bank figures on stilts wearing

black suits fought against polar bears, throwing pieces of coal at them. "This is a typical example of how European NGOs just don't get it on climate change," someone behind me said. It turned out he worked with the Asian Development Bank in the Bank's climate change unit. He told me that climate change is going to be decided in India and China, where we need to develop "clean ways of burning fossil fuels". By this he meant carbon capture and storage - and he admitted that no such technology exists today.

I pointed out that the World Bank and the ADB continue to fund coal-fired power plants, suggesting that it is the Banks, not the NGOs, that "just don't get it". He mentioned that the ADB had last year agreed a US\$900 million loan for a coal fired power plant in Vietnam. "I'm probably more critical of the ADB than you are," he said.

A major focus of the discussions in Poznan has been on forests and their role in addressing the climate change crisis. The banks, corporations, financiers, governments and UN agencies who are suddenly enthusiastic about how forests can save the planet have played a major role in destroying the forests they now claim they want to preserve.

Earlier this year, the Greater Mekong Subregion Working Group on Environment produced a video with funding from the ADB. The Video, titled "Forest for the Future", explains that burning fossil fuels is not the only way that carbon is released to the atmosphere: "Valuable forests are being felled for timber and making paper, for grazing and farming and for plantations to supply a growing demand for energy." In case we weren't sure about the ADB's green credentials, the Bank's press release tells us that "The forests act as lungs for our planet and can store the carbon that is emitted into the atmosphere today."

But ADB loans have had a major impact on the forests of the Mekong Region, which shrank by 68,000 square kilometers between 1990 and 2000. The ADB has funded roads that have opened up areas of forests and facilitated exports of timber. For example, Route 9, which runs from the Vietnamese port of Dong Ha to Savanakheth in Laos, is one of the roads

used by Vietnamese logging companies to export timber from Laos - much of it illegally. The road passes close to two National Biodiversity Conservation Areas. Before agreeing to finance the project, the ADB admitted that the road would "exacerbate illegal trade of wildlife and log export".

Plantations are another source of ADB-funded deforestation. In Laos, the Bank acknowledges that its Industrial Tree Plantations Project created and increased poverty. Under the project, eucalyptus plantations replaced forests important to the livelihoods of local communities. Reports produced for the Bank acknowledge that "Plantation establishment has not always been consistent with environmental care," and "healthy forest" was converted to tree plantations under the project.

Nevertheless, the Bank planned to carry out another tree plantations project in Laos, which was eventually cancelled as the issue of industrial plantations in Laos became more controversial and the ADB knew that it was being watched closely by NGOs in Laos and internationally.

In Vietnam, the ADB gave a US\$33 million loan for a project aimed at rehabilitating degraded forests. As is often the case with ADB and government statements on forests, farmers are blamed for deforestation, while the history of logging, and destructive development projects is downplayed or ignored completely. The project was explicitly aimed at "reducing slash-and-burn cultivation practices which jeopardize forests," according to an ADB project document.

The ADB is a major funder of Vietnam's 5 million hectare "reforestation" programme, which includes one million hectares of industrial tree plantations to feed the pulp and paper industry. Another ADB-funded project, the "Forests for Livelihood Improvement in the Central Highlands", includes 30,000 hectares of "high-yielding plantations" - industrial monocultures, in other words.

As part of a Special Export Zone on the border of Laos and Vietnam, the ADB is considering funding a wood processing plant in Lao Bao. The

plant would buy eucalyptus and acacia plantation timber from Laos and Vietnam and produce "knock-down furniture, wood chips, and construction materials". A Bank project document notes that "at present [there is] some concern about increasing areas of monoculture tree areas in Viet Nam." Of course it doesn't mention the Bank's role in promoting these monocultures.

It seems unlikely that little good will come out of the Poznan climate negotiations - whether for people, forests or climate. The UN fails to discriminate between plantations and forests, meaning that ADB-funded forest destruction to make way for plantations could be included under programmes for Reducing Emissions from Deforestation and Forest Degradation. The ADB, of course, will not be protesting.

By Chris Lang, <http://chrislang.org>

## PLANTATIONS IN THE MEKONG REGION: BY COUNTRY

### - **Burma: The military's forced labour jatropha campaign**

In December 2005, Burma's Senior General Than Shwe ordered the start of a nation-wide campaign to plant *Jatropha curcas* for biodiesel production. The country was to plant eight million acres [3.2 million hectares], or an area the size of Belgium, within three years. Each of Burma's states and divisions, regardless of size, were expected to plant at least 500,000 acres. In Rangoon Division, 20% of all available land will be covered in jatropha.

The recent explosion of oil prices, the diminishing reserves of fossil fuels and concerns about greenhouse gas emissions affecting climate change, have all spurred a growing biofuel industry. Global production of biofuels – fuels made from biomass or plant matter – has doubled in the last five years, and is expected to double again in the next four years.

A radical program was started in Burma to plant jatropha, despite growing international concern about the negative impacts of biofuel production, especially when implemented rapidly or on a large scale.

*Jatropha curcas* is a small tree - or shrub - in the family of Euphorbiaceae. *Jatropha* originates from Mexico and Central America, but has spread all over the world and is mostly used for hedges to protect crops from animals. The tree can grow up to 6 meters in optimal conditions; it has a straight trunk with thick branches and green leaves. It has been called the "biodiesel tree" due to the production of biodiesel from oil in the seeds of its fruit. *Jatropha* seeds yield more oil per hectare than other biofuels while *jatropha* oil produces one-fifth the carbon emissions of traditional fossil fuels.

Since 2006, all sectors of Burma's society have been forced to divert funds, farm lands, and labor to growing jatropha. Teachers, school children, farmers, nurses and civil servants have been directed to spend working hours planting along roadsides, at schools, hospitals, offices, religious compounds, and on farmland formerly producing rice.

*"Every hospital employee is required to plant jet suu [jatropha]. We were out pulling weeds the whole day. Each of us is supposed to plant 500 seedlings, but no one can grow that many."* (Nurse from Kachin State)

*"All of us from Grade 5 to Grade 9 had to sow the seeds in the school compound and the football ground. Our teacher told us it was an order from the headmistress."* (Student from Kachin State)

*"A younger sister of mine is a school teacher. She has to grow the plant and submit progress reports every month. The statistics are a headache for her and her fellow teachers. The authorities told them that they would not be paid their salaries if the plantations are not successful."* (Rice farmer from Karenni State)

Field research from 32 townships in each of Burma's states, including 131 interviews with farmers, civil servants, and investors, reveals how people have been fined, arrested, and threatened with death for not meeting quotas, damage to the plants, or criticism of the program. One result of the excessive demands for farmlands and labor is a new phenomenon of "jatropha refugees" of whom nearly 800 have already (as of April 2008) fled from southern Shan State to neighbouring Thailand.

*"In 2004 my village had over 800 villagers from 240 households. Now in my village there are 130 villagers from 40 households. Since 2004, eighty percent of the people in my village have run into Thailand because of the SPDC [State Peace and Development Council]."* (A village headman from Shan State)

The plant can grow on marginal soils and therefore does not necessarily need to directly compete with food crops. However, the implementation of the jatropha campaign in Burma is threatening the food security of farmers. First, jatropha is being cultivated on existing farm lands and in house gardens, directly competing with food crops in terms of soil and water resources. Second, the confiscation and use of lands near population centers for jatropha forces farmers to seek cultivation areas further from their homes, decreasing productivity and putting new pressures on the environment. Third, due to the requirements on farmers to leave their own fields to establish and tend jatropha plantings, farmers have less time to spend tending their own crops. Some also report that other crops grown too close to jatropha do not grow well.

*"We have 47 villages in our township. In every village each household must grow half an acre of jatropha, so they lose part of their paddy fields."* (A civil servant from Karenni State)

Villagers across Burma are forced to "contribute voluntary labor" to jatropha plantations and highway plantings on a one person-per-household basis. They must bring their own food and tools for the day and face

reprisal for refusing to go. Most often if they cannot go they have to pay someone else to go as a replacement.

*"In our village one member from each household must go and plant jatropha. The community leaders said that those who failed to go would be fined. I had to leave my own farm work to go there. Some old people who could not go by themselves sent their grandchildren. We had to grow the plants in straight lines as they installed the sticks. Before planting, we had to clear the bushes and vines to make the ground ready."* (Farmer from Mon State)

*"The community leaders called me and said they would fine me 3,000 kyat (US\$2.50) if I failed to turn up. We were forced to plant the whole day and we had to bring our own lunch from home."* (An upland farmer from Kachin State) (For relevance of the fine - an average daily wage is 1,500 kyat)

Forced labor is utilized not only for planting jatropha, but also for the construction of oil processing factories. On August 3, 2007, Infantry 524 summoned local residents and forced them to clear the land along the highway between Kali and Ta Kaw villages in central Shan State for the construction site of a jatropha oil factory. Although the villagers had to provide fuel for lawnmowers to clear the ground, the army collected additional money for fuel.

However, villagers are still finding ways of avoiding or defying orders. A high-ranking civil servant in Karenni State admitted that many people refuse to grow the plant. Some buy seedlings as ordered but then don't plant them, others plant less than ordered. Signboards promoting jatropha have been defaced.

Villagers also take advantage of the inability of authorities to check certain areas. One farmer explained *"Since our ward is not near the main roads, many people don't grow the plants."* (Farmer from Mon State)

Agriculture is the backbone of Burmese society and economy. Policies impacting the sector should be considered carefully and implemented cautiously. World leaders and scientists are saying the same of biofuel initiatives. However, Burma's dictatorship is forging ahead recklessly with a jatropha campaign that is unprecedented in scale. Not only is the campaign showing signs of failure, it is threatening the livelihoods of farmers.

In order to realize a better development process, the rights to manage natural resources and to participate in decision-making about sustainable development projects, need to be ensured in Burma. Sustainable agricultural policies are needed that can ensure land rights and human security and allow communities to manage their own natural resources. The rights of women and indigenous peoples must also be ensured.

Excerpted and adapted from the report: "Biofuels by Decree. Unmasking Burma's bio-energy fiasco", by The Ethnic Community Development Forum (ECDP), that was released in May 2008, e-mail: [unitedecdf@gmail.com](mailto:unitedecdf@gmail.com). The full report is available at: [http://www.terraper.org/file\\_upload/BiofuelbyDecree.pdf](http://www.terraper.org/file_upload/BiofuelbyDecree.pdf)

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### **- Cambodia: Monoculture plantations bring land conflict**

Ask any Cambodian what s/he considers to be the foundation of society and life in Cambodia and the answer is likely to be "land." Land is livelihood. But equally, land is valued as an emblem of rootedness, belonging and stability, and is widely regarded as the very basis of social organisation in the country. A family's attachment to its piece of land has particular significance in a society that over the past hundred years has hurtled through successive periods of civil conflict, war, massive displacement, forced collectivisation and genocide, and finally into an unregulated, capitalist, market economy.

Over 80% the country's population lives in rural areas. Cambodia's terrain allows for both sedentary and shifting (swidden) cultivation;

whatever the mode of cultivation, rural communities rely greatly on surrounding woodlands, forests and water bodies for food and non-timber forest products for household use and income. The poorest in any village are usually those without land and in fact, not having agricultural land or the means to purchase land can be considered a reliable indicator of poverty in Cambodia.

In the 1960-s, it was estimated that 73 % of Cambodia's territory was covered with forests and rural communities could clear forests as needed to bring more land under cultivation without significant ecological impacts. Land was not traded, there were no formalised land markets and those who actually used the land also defined ownership and control. In the 1990-s, Cambodia was catapulted into a free market economy, private property regimes started to define land use and ownership, and an unregulated land market started to burgeon.

Landlessness and inequalities in land holdings are growing rapidly in Cambodia among both rural and urban communities. Landlessness is higher among female headed households compared to male headed households. Added to this are growing numbers of "near landless," i.e., those with plots of land too small to eke a living out of. Since over a decade, large tracts of land in Cambodia have been given away to private companies for economic land concessions –contractual agreements between the government and private entities for commercial exploitation of land, mainly for commercial/industrial forestry and agriculture, mining, oil exploration, fishing and tourism. Although economic concessions originated in the late 19<sup>th</sup> century under French colonial rule (mostly for rubber plantations), their recent resurgence was in the early 1990-s, when the Royal Cambodian Government (RCG) started to grant forest and land concessions to private companies ostensibly to stimulate private enterprise, contribute to state revenues and reduce poverty in rural areas. It is estimated that by the end of the 1990-s, more than a third of Cambodia's rural communities were alienated from their lands because of land and forest concessions.

Economic concessions include industrial tree plantations of mainly rubber, pine, acacia, oil palm, teak, coconut and eucalyptus, and agro-industrial production of cash crops. They provide investors with exclusive rights over land in the concession areas for up to 99 years. In some areas, communities have been evicted to make way for plantations and companies have bulldozed the forests on which communities depend for their livelihoods. Village residents living in areas adjacent to concession areas in Kratie, Stung Treng and Mondulhiri provinces (among others) reported that they are not permitted to use the forests and so called “wastelands” now included in the concession areas, despite the fact these lands have been under their stewardship for generations, are home to their spiritual and sacred sites, and are crucial sources of food and income for them. Communities adjacent to many concession areas also report that companies have expanded the areas claimed in their contracts and encroached on village lands and commons.

Plantations are mono-cultures of specific tree or crop species and repeated planting of the same crop/tree in close cycles requires intensive use of chemical fertilisers, pesticides and herbicides, which leach into the soil and ground water, reduce the fertility of surrounding areas, contaminate the soil and lead to illness among village residents. Eucalyptus plantations have created aridity, depleted the soil of moisture and nutrients, and contributed to the lowering of underground water and drying up of streams. The Tonle Sap lake in northwest Cambodia is one of the most important freshwater eco-systems in the country and supports millions of Cambodians through its aquatic biodiversity. The lake is threatened by pulp mills that release toxins and chemicals into water bodies that drain into the lake. In Koh Kong and other areas forested by deciduous trees, the planting of mono-culture trees such as acacia and pine destroy spawning grounds for fish in what are locally called “flooded forests” during the monsoons.

In addition to economic and ecological damage are human rights abuses. Village residents are routinely intimidated by armed security guards hired by concessionaires if they try to enter into commons

areas, or protest against encroachment. In several areas, the actions of armed guards have resulted in violence, injury and death of village residents. In many areas—for example, Pursat, Stung Treng, Kompong Speu, Mondulhiri and Koh Kong—communities have organised themselves to protest the loss of their lands and natural resources and the actions of concessionaires. They have appealed to local, provincial and national authorities for help, which unfortunately has not been forthcoming. Instead, public officials have generally shown a bias in favour of companies and have attempted to intimidate village residents to stop making complaints.

Cambodia's rural poor have benefited little from the country's economic growth. Not only is poverty *not* being alleviated, on the contrary, more people are becoming impoverished and economically vulnerable. The destruction of bio-diversity and loss of access to forest products, fish and other aquatic sources are severely compromising food security at local levels. Distress migration from rural to urban centres—especially Phnom Penh—is increasing. But those who find their way to cities do not find secure employment or shelter; many live on the streets or in squatter settlements and continue to remain vulnerable to further eviction and displacement.

In the international development world, Cambodia is regarded as a post-conflict country now in an era of peace, stability and economic and social development, which broadly translate for much of the development establishment as an absence of war and the adoption of an economic policy package aimed at facilitating market capitalism. But the growing number of land conflicts and increasing alienation of communities from their lands and resources can hardly be considered indicators of peace, stability or well being.

Excerpted from: “Land and Natural Resource Alienation in Cambodia,” by Shalmali Guttal, Focus on the Global South, December, 2006. The full document is available at: <http://focusweb.org/land-and-natural-resource-alienation-in-cambodia.html>

## **- Attempts at regulating agro-industrial plantations in Cambodia**

Since 2002, when all forest management concessions were suspended, the Cambodian Government has moved to granting Economic Land Concessions to private companies, primarily for the development of agro-industrial cultivation of crops such as rice, cassava, rubber, acacia and agro-fuels. These plantations are intended to not only generate state revenue and develop intensive agricultural activities, but also reduce poverty by promoting local employment opportunities. However from the very beginning these large-scale plantations have failed to adequately meet these objectives and as a result, the Government has been under pressure to better regulate and monitor their operations.

The legal framework governing Economic Land Concessions (ELCs) centers on the 2001 Land Law and the 2005 ELC sub-decree. They include requirements for the contracting and monitoring of operations, provide for protection of the rights of local communities living around these plantations and prevent environmental impacts. They also include penalties for companies found not complying with these requirements. However, many concessions have been granted in violation of this legal framework, have had severe impacts on local communities, and have failed to meet to the promise of economic benefits<sup>1</sup>.

One reason for these problems was the lack of transparency during the contracting process and lack of accountability once the companies began operations. Under pressure from donors and civil society, the Cambodian Government agreed in June 2007 to establish and regularly update a public

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<sup>1</sup> NGO Forum (2005) *Fastwood Concessions: Economic Concessions and Local Livelihoods in Cambodia: field investigations in Koh Kong, Kampong Speu, Pursat, Monduliri, Prey Veng and Svay Rieng provinces*. Environmental Forum Core Team, Phnom Penh, August 2005; UN-OHCHR (2007) *Economic Land Concessions in Cambodia: a human rights perspective*. UN Cambodia Office of the High Commissioner for Human Rights; NGO Forum (2007) *NGO Position Papers on Cambodia's Development in 2006: monitoring of Joint Monitoring Indicators and Implementation of National Strategic Development Plan 2006-2010*. Phnom Penh, June 2007.

log-book of ELCs granted across the country. This log-book intends to make public the records of the ownership, location, status and operations of each concessionaire and is hosted on the website of the Ministry of Agriculture, Forestry and Fisheries. In addition, the Government pledged to review a small number of concessions which were granted above the maximum 10,000ha size limit and place greater priority on ensuring companies operated in compliance with Cambodian Law.

However, a review by NGOs working on land and natural resource management issues found that by November 2008, progress to improve transparency and accountability through these measures had been very disappointing<sup>2</sup>. The public log-book had not been regularly updated, especially in terms of information relating to provincially authorized concessions. There are contradictions in the data currently available – between the different sections of the website, and with information circulated by other Government Agencies. Additionally, the concept of a “public log book” has been interpreted by the Government to be an English-language, internet-based medium, which is inaccessible to communities affected by these plantations who are in most need of this information. A genuinely “public” log-book should be available in Khmer language at the local level, in a non-electronic format.

The progress to improve operations on the ground has been even more unsatisfactory, according to NGOs. Of the nine ELCs listed in the public logbook as being larger than the legal limit, only 2 have been reduced so far. Three other companies are refusing to re-negotiate their contracts. In the meantime, the Government has continued to grant ELCs which are larger than the maximum size limit. In April 2008, Kenertec Co. Ltd, a South Korean company was given a concession for 6 times the legal limit for agro-fuel production and processing. In September 2008, the Governor of Stung Treng Province publicly endorsed the intention of Greensea Industry Company Ltd to expand agro-fuel production across its concession, which is more than ten times the maximum legal size limit.

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<sup>2</sup> NGO Forum (2008) *NGO Position Papers on Cambodia's Development in 2007-08: monitoring of 2007 CDCF Joint Monitoring Indicators and the National Strategic Development Plan 2006-2010*. Phnom Penh, November 2008.

NGOs working on land and natural resources continue to receive complaints from local communities about ELC companies which violate the law and agencies of the Royal Government of Cambodia failing to sanction those breaking the law. Contracts are issued before the land has been legally registered and as a result many concession areas include land lawfully possessed by local farmers. NGOs are not aware of any cases in which a company has adequately consulted with local communities or conducted a comprehensive Environmental and Social Impact Assessment before the concession is granted.

Many ELCs violate provisions in the Cambodian legal framework which guarantee indigenous people's traditional use of forests and protect their communal land. One company with a pending ELC application for a 10,000 ha rubber plantation in Mondulokiri province is alleged to be forcing indigenous people in the neighboring commune to "rent" their land to the company for between \$25 and \$250 for up to 99 years<sup>3</sup>. Some community members even reported being forced to sell their land to the company for this amount. The transactions are alleged to be arranged by local policemen who informed villagers that if they didn't agree to this offer, the company would take the land anyway. This case is not considered to be an isolated example; intimidation of local people is seen around the country.

In preparation for the annual meeting between the Cambodian Government and its Donors, NGOs compiled the following recommendations for change required during the next 12 months which will genuinely improve the transparency and accountability of the governance of agro-industrial plantations:

- Update the public logbook on a quarterly basis and make the information available in Khmer language at the local level to communities affected by ELCs;

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<sup>3</sup> Diokno, M (2008) The Importance of Community: issues and Perceptions of Land ownership and Future Options in 5 Communes in Mondulokiri Province, Cambodia. NTFP-Exchange Programme and NGO Forum on Cambodia, Phnom Penh, October 2008.

- Cancel all concessions which have not met the requirements of the sub-decree (which states that, before a concession can be granted, the land must have been registered, Environmental and Social Impact Assessments and public consultations must have occurred, and resettlement issues resolved);
- Clarify the legal basis on which the three remaining oversized ELCs are able to continue their operations and release all information relation to the revision procedures, especially the results of public consultations with affected communities. Ensure that these ELCs don't move forward until these issues are addressed.

Cambodian Civil Society has successfully used these Government-Donor meetings in the past as an opportunity to influence policy. However, the changing Government-Donor relationship resulting from new bi-lateral aid agreements between Cambodia and its regional neighbors is challenging this status quo. The question for NGOs concerned about the future governance of land and natural resources is how to engage with these "emerging donors" whilst maintaining relationships with traditional donors and at the same time creating opportunities for dialogue with the concessionaires themselves.

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### **- China: The vicious circle of tree plantations, GM trees, pulp-mills and wasteful paper consumption**

China's growing pulp and paper market is being the world's fastest. Although per capita paper consumption is less than ten per cent of the amount consumed in the US, China accounts for 14 per cent of global paper consumption. Jaakko Pöyry has estimated that paper consumption in China would increase at 4.4 per cent a year between 2000 and 2015. Much of that "consumption" is used in packaging of goods for export, which means that real per capita paper consumption in China is actually much lower.

Such growth has its toll: under the advice and the money of the World Bank, a large-scale pulp and paper polluting industry that consumes vast amounts of water, employs few people and relies on vast areas of monoculture plantations to supply its raw materials has developed. The modern industry is replacing the old pulp and paper industry which - though polluting- had a number of positive aspects: it operated on a small-scale, used non-wood raw material like residues from rice and wheat crops, employed large numbers of people and supported millions of farmers for whom the sale of wheat straw to local paper mills was an important source of income. (See WRM Bulletin N° 83).

Bad news for the weak, good profits for consulting firms, machinery suppliers and paper companies that make up the global pulp and paper industry: Finnish-Swedish paper giant Stora Enso announced that it would increase the capacity of its Suzhou mill from 160,000 to 240,000 tons a year; Stora Enso has eucalyptus plantations in Guangxi province in south China; Finland's UPM Kymmene's Changshu mill started operations in 1999 and today produces 800,000 tons of paper a year, with pulp imported from Indonesia; Indonesia's Asia Pulp and Paper has plans to build a 600,000 tons pulp and paper mill in Qinzhou, Guangxi province, fed on the company's eucalyptus plantations in south China; APP aims to establish 600,000 hectares of plantations in China; Japan's largest paper company, Oji Paper, plans to establish a total of 200,000 hectares of fast-growing tree plantations in China.

The increase in pulp and paper capacity leads to more industrial scale tree plantations that result in a large number of documented environmental and social impacts. Their aim is consumption and for the industry to be profitable, artificial consumption needs are created for “vital” paper stuff such as bags, brochures, business cards, catalogues, cellulose sponges, cigarette inner liner, cigarette wrappers, clothing tags, cosmetic and luxury packaging, facial tissue, fast food bags, giftwrap, hand towels, kitchen towels, lottery tickets, menus, pet-food bags ... (as can be seen in a long list of end-use products of the pulp and paper Sappi company at Corporate info, <http://www.sappi.com/SappiWeb/Home+Page>).

The Chinese government aims at occupying between 2001 and 2015 some 6 million hectares with industrial tree plantations, apparently to reverse decades of deforestation that have left China facing serious environmental problems, including droughts and deadly floods. However, the so called “reforestation plan” implies indeed monoculture tree planting including plantations of GM trees. Chris Lang quoted Wang Lida, Han Yifan and Hu Jianjun of the Chinese Academy of Forestry (see WRM Bulletin N° 35) writing: "The first step is to raise plantations using fast-growing species such as poplar and larch". Though initially poplar trees might be aimed at soil erosion protection they eventually may well serve as a raw material for the pulp and paper industry.

China has received the help from Western funds either to plant trees and do research on GM trees. Since 1980, the World Bank has lent China more than US\$600 million to establish tree plantations. According to a 2006 FAO Executive summary by Nicholas Wheeler, “Worldwide, more than 210 field trials of genetically modified (GM) trees exist in 16 countries” but “only China has reported the commercial release of GM trees (ca 1.4 million plants on 300–500 ha in 2002).”(1)

In the late 1990s, the first field trials for GM trees were carried out on the headwaters of the Yellow and Yangtze rivers and Xinjiang province in the arid north-west. In 2002, China's State Forestry Administration authorised the first Bt poplars for commercial cultivation.

Two GM poplar clones –Populus nigra and Populus hybrid– have been developed and named Poplar-12 and Poplar-741. According to officials from the Chinese Academy of Forestry, “both commercialized species are female poplars with altered fertility”. Genetic transformations were aimed at giving resistance to leaf-eating insects (Bt) and modified wood properties.

According to an article of Katie Shafley, “Trees with increased levels of BT result in the 'natural' selection of insects that are more resistant to the BT pesticide. This, in turn, necessitates higher pesticide levels, which can

inadvertently kill non-target species."(2) With GM trees the risk of contamination is a real major threat, warn chief scientists from the Chinese Academy of Forestry: Huoran Wang clearly stated in a 2004 report for the UN Food and Agriculture Organisation that "(P)oplar trees are so widely planted in northern China that pollen and seed dispersal can not be prevented", and that maintaining "isolation distances" between GM and non-GM poplars is "almost impossible."(3) The Nanjing Institute of Environmental Science has already found genes from the GE poplars in Xinjiang appearing in natural varieties.(4)

There has been quite a lot of interest in Western countries to help China develop GM trees: the United Nations Development Project handed out 1.8 million US dollars for a FAO-run project on GM poplar trees which provided capacity building, technology transfer and laboratory support; the German Federal Research Centre for Forestry and Forest Products at Waldsiedersdorf has maintained close contact with Chinese forestry scientists working on GM trees, even hosting Chinese scientist Hu Jianjun. The Chinese Academy of Forestry and the Hebei University at Baoding are playing a crucial role in the development of the Bt poplars and have carried out the research.(5)

Regulation of genetically modified organisms in China is covered by the Biosafety Act for GMOs in Agriculture, adopted by the State Council in May 2001. However, no regulations specifically cover GM trees and the decision on whether to approve the GM trees for release relies on an expert panel organised by the State Forestry Administration. According to declarations of Xue Dayuan of the Nanjing Institute of Environmental Science, the GMO Safety Administration Office of China's Ministry of Agriculture has no control over GM trees because they are not classified as crops. But the State Forestry Bureau, which oversees tree plantations, does not have a licensing system like the one run by the ministry.(6)

"The accurate area of GM plantations cannot be assessed because of the ease of propagation and marketing of GM trees and the difficulty of morphologically distinguishing GM from non-GM trees," wrote Huoran

Wang in the FAO report. "A lot of materials are moved from one nursery to another and it is difficult to trace them."

Growing wasteful paper consumption results in the huge expansion of industrial pulpwood plantations. The rapid growth of the plantation trees is achieved at the expense of soil, water, biodiversity and local communities' livelihoods. The need to increase profitability makes higher productivity necessary, which itself leads to the release of dangerous GM trees for feeding ever bigger pulp mills. A vicious circle which can only end in destruction.

(1) Executive summary, Nicholas Wheeler, FAO document, <http://www.fao.org/docrep/008/ae574e/AE574E03.htm>

(2) "The New Chainsaw. Genetically engineered trees are the new threat to Canada's forests", by Katie Shafley, [http://www.dominionpaper.ca/author/katie\\_shafley](http://www.dominionpaper.ca/author/katie_shafley)

(3) "The state of genetically modified forest trees in China", Huoran Wang - Chinese Academy of Forestry, Beijing, FAO report, <http://www.fao.org/docrep/008/ae574e/AE574E08.htm>

(4) "China's GM trees get lost in bureaucracy", Fred Pearce, New Scientist, <http://www.newscientist.com/article/dn6402-chinas-gm-trees-get-lost-in-bureaucracy.html>

(5) "Cultivation of Bt poplars in China", GMO Safety, <http://www.gmo-safety.eu/en/wood/poplar/325.docu.html>

(6) Op cit 4

## **- Rural livelihoods made vulnerable as rubber investments take over land in Laos**

Investments by foreign companies in commercial tree plantations in Laos PDR increased sharply during 2004-2006. Large scale plantations are promoted through state land concessions. Currently, an area of 167,000 ha has been transferred to foreign companies under large scale land concessions in the central and south regions of Laos. Of these,

48% or 80,000 ha are dedicated to rubber, and 28% of 46,600 ha are allocated to growing eucalyptus. However, the total area for growing rubber throughout the country has increased to 182,900 ha. (Ministry of Industry and Commerce and Land Management Authority of Champasak province)

The expansion of the rubber industry in Laos, is directly related to the growth of the Chinese car industry. China has now become the biggest rubber consuming country in the world. Companies from China have expanded their rubber crop area in Laos, mostly in the northern region where the two countries share a border, mostly through contract farming. Commonly, the Chinese trader or company will provide capital, seedlings and will buy the produce from the farmers, while the land and the labour are supplied by the farmers; however many variations in arrangements exist. Vietnamese and Thai companies have also invested extensively in rubber, predominantly in the central and southern regions. These companies have acquired land through a land concession model. Currently, there are five Vietnamese companies in the south of Laos, four of which are companies from the major Vietnamese Rubber Group (Viet-Lao, Dau Tieng, Quang Minh, Quasa Geruco) and another provincial state company called the DakLak Rubber Group. In total, the area where they have been authorized to grow rubber in Laos is 42,050 hectares.

### ***Land loss and poor compensation***

The land concessions for rubber plantation of three Vietnamese companies resulted in some people living in the project area losing almost all their farming land. Only the paddy fields, of which there were relatively few, were salvaged along with the village housing area. Most of the areas which have been included in these land concessions are swidden fields, crop fields.

Some villagers expressed their confusion and frustration at their loss of land. One explained *“In the beginning, villagers didn’t understand what a land concession was. The village authorities and the upper authorities came to explain the benefits that the villagers would gain. For example,*

*they explained that the villagers would gain work with the companies and get a monthly wage. The entire land of our village is in the land concession area. There was no point in saying if we were satisfied or not satisfied, because the concession is in accordance with the national government’s policy.”* Another said *“Some people had only 1-2 ha of land, which they had to give to the companies. After that they didn’t have any land left, this meant that the villagers had no rice to eat. Having to depend on the company, they will not survive.”*

In general, compensation was made to the people who lost their land, but there were several exceptions and the rates were exceedingly low. Reports on compensation were not made as required in the Compensation Decree. Some companies paid compensation for the foregone harvest only, others assessed the land and crops together, others still paid for the land only. Much depended on the ability to negotiate of each villager, which varied greatly from person to person. On average, families interviewed received compensation for their losses of around 1.5 million Kip (US \$150) per family.

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 were not compensated. For the crops such as teak, the compensation depends on type and age of the tree at 500-5,000 kip / per tree (0.05-0.50 US\$). Losses derived from produce which the villagers had not planted themselves, were not assessed. For example, broom grass (*ya kha*), which the villagers harvest for sale, or sources of food or grazing areas in the *pa khoke* (deciduous dipterocarp forests). Families who have broom grass gardens, used to be able to gain an income from selling *ya kha* alone of around 1.6 million kip per family per year.

### ***Living under greater vulnerability***

The livelihoods of the villagers who lost land to the company changed. From being a community that used to make their living from swidden farming, cropping, raising cattle and buffaloes, and finding food in the *pa*

*khoke* forests, villagers now rely on hired work as labourers with the company to earn money to buy rice to eat. They have had to sell almost all of the cattle and buffalo that they used to keep for farming and for meat.

From a sample of 189 interviewees in 6 villages, it was found that the people who grew enough rice to eat for 11-12 months in a year fell from 4 in 5 in 2003 to 1 in 5 in 2007. There was a stark increase in the number of months without home grown rice, and the overall number of households lacking rice to eat in 2007.

For those who lost their land, if the rubber company does not hire local people to work, then there are few alternative employers to whom they could turn for help. They become dependent only on one source of income, which makes most more vulnerable than their original way of life with diversified livelihoods. Mostly villagers are hired on a daily basis rather than on a permanent basis. The companies pay differing wages, but generally pay an average daily wage of 20,000-25,000 kip (US\$ 2-2.5) per day. The average number of working days a year for non-permanent labourers amongst those interviewed worked out as less than a quarter of the working year.

Labour requirements are high in the first year but there is little work available thereafter until the rubber is harvested. The permanent workers' salaries were irregular with a tendency to decrease after the first year. Permanent workers often do not know how much they earn until they receive their monthly pay.

In some villages, the company sacked all its permanent labourers, 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. As one provincial official of the Land Management Authority commented "*the villagers cannot picture what their future holds, as their land has been given up for concession. What will their children and grandchildren do? The older people who don't*

*have the strength to work, what will they do? If the price of rubber falls, isn't there going to be an impact?"*.

### ***Concluding remarks***

Laos has a forestry strategy which promotes the expansion of commercial tree plantations to the year 2020 but has not yet made an overall strategy concerning land resources as a whole. The promotion of commercial tree plantations appears to be given more importance than the preservation of rice growing areas and other livelihood resources for use by the people.

In the review of major investments for large-scale monoculture plantations, a great many issues must be considered. In the light of poor financial resources and other capacity problems within several layers of government, decisions have been made without sufficient analysis, and without protection of the interests of the nation and the majority of the people of Lao PDR. As a result, the country is facing very rapid loss of primary resources into foreign hands.

Despite efforts to clarify and determine the land rights of the people, confusion reigns even among those who were allocated land certificates under the Land and Forest Allocation Programme. Villagers were under great pressure to hand over their certificates to allow in the plantations. As in many countries around this region, the swidden fields, *pa khoke* areas or other forest area where the villagers collect their food and other products of the forest, raise their livestock, etc, are considered under the law as land of the state. The value and benefit of these lands to the local people are well-studied but are rarely taken into account in planning and decision making. The losses of these lands and forests to the people are devastating.

Based on a research report by Pinkaew Luangaramsi, Rebeca Leonard, Pornpana Kuaycharoen (2008), "Socio-economic and Ecological implications of large scale industrial plantations in the Lao PDR, Case Study on Rubber Plantation", Chiang Mai University, English edition forthcoming. Based on research work cooperation between the Centre for

Information and Research on Land and Natural Resources, Laos National Land Management Authority, Office of the Prime Minister; Foundation for Ecological Recovery and Faculty of Social Sciences, Chiang Mai University, Chiang Mai, Thailand

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## **- Plantations Development in Laos – The scramble for a piece of the Lao pie**

Since 2006 the small landlocked South East Asian nation of Laos has seen an explosion of small, large and medium scale plantations, particularly rubber, eucalyptus and biofuel crops. This increase in industrial tree plantations has not come about by itself however, but has been promoted by IFI's over the past decade as a means to increase Lao GDP. Foremost among the promoters of plantations development in Laos is the Asian Development Bank. Despite being one of the most corrupt countries in the world (Laos ranked 163 out of 171 in 2007 on transparency international's Corruption Perceptions Index), the Asian Development Bank has been fervently promoting agro-forestry investment for many years. Their sordid history of plantations promotion is perhaps best known for the disastrous 11 million dollar loan project running from 1996 to 2003 with the express purpose of promoting plantations in Laos. That project alone has left large numbers of impoverished farmers with an unpayable debt, has nearly bankrupted the government run Agriculture Promotion Bank, and has facilitated large scale plantation operations in Laos.

Despite the lack of secure land tenure arrangements and a lack of capacity within the government to monitor and regulate plantations investment, the ADB had no qualms about actively promoting Laos as a destination for trans-national agro-forestry companies, inviting large agro-forestry investors to advertise Laos as an ideal plantations investment destination in the capital Vientiane in 2004. These promotion activities undertaken by the ADB appear to have worked, as in 2005 the Japanese pulp and paper giant Oji Paper became the first major multi-national to invest in

plantations in Laos (acquiring a 50,000 hectare concession). Following the entry of Oji, investments in the Lao agro forestry sector have skyrocketed. Figures from the Ministry of Planning and Investment show a doubling of the number of agro-forestry investments from 2004 to 2006 with a corresponding increase in total investment value from 75 million dollars in 2004 to 458 million dollars in 2006. While there are numerous small and medium sized plantation operations, particularly from neighbouring countries, at the moment large scale investors comprise Grassim-Birla Group of India who followed soon after Oji, securing a 50,000 hectare concession, and more recently Finnish pulp and paper giant Stora Enso has been working to sign a 35,000 hectare concession agreement to plant eucalyptus in Southern Laos. Finally, Oji Paper is pursuing a further 30,000 hectare concession in the south of the country.

Yet in a country where government salaries are only \$30 a month, and capacities of government staff to monitor concessions are weak, natural resource loss and the disruption of traditional livelihoods has invariably accompanied plantations development. Reports by the German Development Agency GTZ reveal a near total lack of regulation of land concessions in Laos. Among the many damning findings of a 2006 GTZ report are that there is little to no understanding of the extent of concessions that have been issued across the country due largely to a decentralised and unregulated process of handing out land concessions. Not only are different government agencies able to grant land concessions, but both national, provincial and district branches of the government can allocate land for plantations development without consolidating this information in any one place. This aspect alone has led to a situation whereby concession areas allocated to different companies now overlap with one another meaning that plantation companies are now scrambling to secure their concession areas before they are lost to other companies.

Despite the extraordinary growth of agro-forestry investments in recent years, the process for allocating land for concessions remains woefully inadequate. Reports from some disgruntled government staff and from villagers themselves indicate that companies are in effect allowed to allocate themselves land by putting local government officials on the

company pay role, with the express purpose of securing land for the company. And in a system where there are many more impoverished officials to replace those that can't or won't find land, it is not surprising that there are frequent reports of manipulation, exaggeration of benefits, and forced coercion of villages to hand over land to plantation companies.

While theoretically the previous forestry law stipulated that only "degraded land" could be used for plantations development, time and time again dense tropical forest has been logged to make way for plantations development (providing handy income from log sales at the same time). In Central Bolikhamxay Province several large scale logging operations disguised as palm oil and coconut oil plantations were reported by local development agencies, and independent researchers have documented the clearing of rich areas of primary and secondary forest for Oji Paper's 'flagship' eucalypt plantations.

For the rural communities who remain largely dependent on forest resources for their livelihoods the picture is grim. Village communities presently have no secure land tenure under the law, as all forest land is recognised as the property of the state. Plantations development have been used by the government of Laos for many years as a tool to physically disrupt shifting cultivation systems curtailing fallow periods and reducing food security. Furthermore, rural communities, despite often losing hundreds of hectares of forest land to plantations often derive only very minimal benefit from plantations operations. Tree planting periods coincide with the rice planting season meaning that jobs often go to outside contract labourers. When work is available to villagers it is mostly irregular and mainly only accessible to a small number of villagers at any one time.

By May 2007 the government of Laos had lost control of the situation with land concessions and as more and more reports were emerging (even in the usually placid state run media) of hardships faced by villagers in relation to plantations, the Prime Minister of Laos announced a nation-wide moratorium on land concessions. However, even this moratorium has failed to stem the tide of land concessions across the country, as it is either

ignored by local elites, or circumvented through loopholes in the moratorium that allow companies who have already signed concession agreements to continue to fill those concessions, or by allowing multiple 100 ha concessions to be issued to the same company.

While there have been some recent positive movements by the Lao government and donor agencies to both acknowledge and address the serious failings of plantations investment in Laos, only time will tell if the government of Laos is able to reign in runaway plantations development and protect the natural resources so important to villagers and the stability of the country.

Report compiled by visiting WRM researchers during 2008

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### **- Thailand: Rubber prices fluctuate, how can farmers benefit?**

Rubber is one part of life of the people of the South, related both to the culture and economy of the last 108 years. The monoculture production system has replaced a traditional system of rubber forests, where rubber used to be grown in amongst fruit orchards and natural forests known as a *suan somrom* or "integrated garden". Rubber plantations have been promoted through the government's Welfare Fund for Rubber Plantations. The promotion of the expansion of the rubber area by the Rubber Welfare Fund Office, an increasing price for rubber, and the strong global market demand for natural rubber for industrial processing into a variety of industrial rubber goods has led to the expansion of the rubber plantations area and an encroachment into the forests of the South and also into the woodlots of the North Eastern region which make up a large part of the natural forest of the East. Rubber is a non-native species which the government has promoted, and both the Royal Forest Department and the Forest Industry Organisation aim to generate economic income to the organisation from commercial plantations of rubber.

What factors are involved in setting rubber prices in Thailand? Certainly, the demand of the market for rubber and global production output are core factors. The price of rubber is also linked to the fluctuating price of oil which is a major factor in the production of synthetic rubber. When oil prices are high, the production costs and price of synthetic rubber will also increase, which leads countries to switch to use more natural rubber. However, if the natural rubber price rises too high for the various industrial producers, they will return to using more synthetic rubber which will lead to a downward adjustment of the price of natural rubber.

However, prices are also set by a number of hidden hands. The rubber market in Thailand is controlled by Singaporean and Malaysian investors, and also by Thai investors. The rubber goods industries on the other hand are dominated by industrial countries such as Germany, Italy, UK, and USA, whose trading chain then doubles back to link with industrial traders in Thailand.

Currently, the price of rubber is also subject to intervention by the global rubber stock controllers. If too much rubber is accumulated in the warehouses, countries will sell their stocks to rubber product producers and will buy up less of the rubber which has been produced in that year. This affects the price of rubber. If there is a phenomenon of excessive demand for rubber over a long time, the rubber producing countries will pressure for a concerted reduction in the quantity of production.

The speculation in the futures market is another factor in the rubber price. The markets with the greatest influence are the Japanese and Singapore markets. Ninety percent of the Japanese market transactions (Tokyo and Kobe) can be described as speculative dealings, the remainder are trade deals for importers and middlemen.

Likewise, 80% of the trading in the Singapore market are dealings in the futures market, the rest based on physical transfer of goods. The Singapore market is a long established market, it is a transport hub, and a financial and banking centre amongst other things. It is close to the three most important sources of production of rubber in South East Asia, ie

Thailand, Malaysia and Indonesia. These three countries together produce approximately 70% of global production.

Thailand is the world's biggest rubber producer. However, prices are determined in the Singapore and Japanese markets. The Thai government has never developed Thailand's role in influencing prices of the global rubber markets. The government administers and controls the rubber price bending to pressure from foreign countries and international agencies. The government regularly uses a domestic interventionist approach to keep prices stable as a means to gain votes from the rubber farmers. For example, in the successive governments of Chuan Leekpai and General Chavalit Yongchaiyut, there were interventions in the rubber prices 6 times, buying a total of 1.3 million tonnes, for a total of 25,394 million baht. One result of this action was to bring the government budget into deficit of 6,267 million baht, mostly as a result of Ministerial corruption. They used methods of lobbying, hoarding, misappropriating, price-smashing as well as mis-selling, that is, for example, where contracts were made to sell the same stock of rubber over 50 times without ever making delivery.

Furthermore, the government passed a law to control the rubber price, limit the areas where rubber could be grown, and place controls on the varieties grown. Farmers were not allowed to develop the production of rubber themselves. These controls were put in place to enable Thai rubber to be competitive in the world market. However, structural problems mentioned above led to the monopolization of the market by investors who control the production and marketing of rubber, while the farmers became orderlies supplying rubber to the internal and external markets.

It is clear that the rubber farmers are only upstream suppliers of the rubber produce, who do not have any influence in setting the price of the rubber. In 2007, the production costs of raw rubber sheets and fresh latex of the Thai farmers averaged at around 35 baht per kilo, not counting land or labour costs. Thus, while the prices of raw rubber sheets and fresh latex fluctuated around 50-100 baht per kilo, the rubber farmers had a relatively good price.

Certainly, when comparing the local prices of raw rubber sheets with the marketplace, the provincial market prices are higher. Last year, the local price of the raw rubber sheets were 47.14 baht per kilo, while the price in Had Yai was 73.05 baht per kilo and the auction price was 74.57 baht (19 October 2007). This year, smoked rubber sheets grade 3 were priced at only 35.73 baht per kilo at Hat Yai this year (4th December 2008).

The question is therefore, now that the price has fallen again this time, will the government use the old interventionist methods to resolve the problems at the downstream end, and to use the taxpayers money to do nothing more than “row a boat in a bathtub”?

Meanwhile the rubber farmers try to find their own way out of the problem. In the case of Mai Reang community, farmers have developed a community industry network with 11 neighbouring villages to process rubber. At the same time, rubber farmers carry out diversified farming to prevent them facing problems of relying on the rubber cash crop only. They farm both rubber and fruit trees, they have paddy fields and they do a variety of small-scale businesses. For the rubber producing areas, the growing of other plants as well as rubber is one way to improve the ecology of the soils. Farmers in the group use biological instead of chemical fertilizers which reduces their household expenses. They also have a variety of food to eat. This mixed solution has been put forward by the families which have to practice self-reliance as well as work within the capitalist system.

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### **- Thailand's big plans for agrofuel plantations face uncertainty**

Thailand is making big plans, in particular for the next ten years, to boost agrofuel production particularly through expansion of oil palm plantations.

However, the plans are not going anywhere yet due to the price volatility of agrofuel feedstock like palm oil and sugar as well as growing environmental concerns.

Thailand has two types of agrofuels: gasohol (mixture of gasoline and ethanol) and biodiesel. Gasohol made by mixing gasoline with 10% ethanol is called E10 (Gonsalves 2006).

Close to 90% of ethanol in Thailand comes from molasses (a fermented by-product of sugar manufacture) and the remaining from cassava. In 2007, Thailand's ethanol production was 192.8 million liters (APEC 2008).

However, the production cost of sugarcane is high and the volume diverted for ethanol is low since sugarcane is mainly for sugar production. Thus Thailand, Asia's largest producer of cassava with an average cassava root production of 20 million tons a year, is increasingly looking to cassava as the raw material for ethanol production (Artachinda, Gonsalves 2006).

Biodiesel is produced by the “transesterification” of vegetable oil by an alcohol, usually methanol, and then blended with diesel. The most commonly used vegetable oil in Thailand is palm (soybean, canola or rapeseed, sunflower and peanut can also be used). B2 is 2% biodiesel with 98% diesel; a 10% blend with diesel is called B10 (Gonsalves 2006). In 2007, Thailand's biodiesel production was 58 million liters. At present, Thailand has nine biodiesel plants with a total production capacity of 655 million liters annually (APEC 2008).

Palm oil is the main raw material for biodiesel in Thailand. One hectare of palm oil can produce 4 to 5 tons of crude palm oil which is 5 to 10 times more than the yield of any commercially grown oil crop (Gonsalves 2006).

Thailand's palm oil economy is third in the world after Indonesia and Malaysia. The current area of oil palm is 320,000 hectares in Thailand (IPS, 2008b) of which more than 40 percent is in the southern provinces especially Krabi followed by Surat Thani and Chumphon. The

northeastern region (Isaan) has about 2,362 ha mainly in Kalasin and Nakhon Ratchasima provinces (Nok Sayamol, pers. comm.)

Annual crude palm oil output totals 1.3 million tonnes with about 800,000 tonnes going to the food sector. Of the 500,000 tonnes remaining for non-food businesses, 420,000 tonnes will be needed to make B2. For B5, at least 600,000 tonnes would be required.

The government has set up a working group in the Ministry of Agriculture and Cooperatives and the Ministry of Energy, called “Committee on Biofuel Development and Promotion” (CBDP) (Preechajarn et al. 2008). The committee has targeted, in the five years starting from 2008, the expansion of oil palm cultivation area by 2.5 million rai (400,000 ha) (APEC 2008).

For developing biodiesel, the Thai government has announced the “Strategic Plan on Biodiesel Promotion and Development” in January 2005. The plan aims to replace 10% of diesel consumption by increasing palm oil cultivation, and promoting community-based and commercial biodiesel production in 2012. Moreover, the government introduced a B2 mandate in February 2008 to require the production of approximately 420,000 tonnes of biodiesel per year (APEC 2008).

The government’s biodiesel strategy is to develop oil palm and jatropha plantations with a total estimated investment of 70 billion Baht (\$1.75 billion) (Gonsalves 2006, IPS 2008a). In particular for the southern provinces, an area also designated as a special Board of Investment (BOI) zone, the government has budgeted US\$50 million for palm oil cultivation (Griggers 2004).

Thailand’s long-term plans for agrofuel plantations:

1. Expansion of domestic oil palm plantations covering a total area of 4 million rai (0.67 m ha) to provide 4.8 m litre/day of biodiesel
2. Establish oil palm plantations covering a total area of 1 million rai in a neighboring country to yield an additional 1.2 m litre/day of biodiesel.

3. Establish combined jatropha and oil palm plantations to produce a further 2.5 m liters/day. It is expected that jatropha plantations with an area of 1 million rai and oil palm plantations of about 1.2 million rai will provide 2.5 million liters/day of biodiesel (Gonsalves 2006).

However, the expansion of the oil palm areas has not taken place as planned. According to an US Department of Agriculture (USDA) report, “increasing palm plantings to meet demand has been challenging. In 2006, increased palm acreage was only 48,000 hectares, 40 percent below the annual target” (Preechajarn et al. p. 5). The failure is attributed to rubber giving more attractive returns plus the relative lack of incentives for the palm crop. The government has thus decided to promote oil palm plantations in the non-rubber areas in the north and northeast regions of Thailand (Gonsalves 2006).

Whether the government’s agrofuel expansion policy takes place as planned depends on the economic competitiveness of agrofuels, in particular, the price of ethanol. Since cheaper ethanol relative to gasoline is crucial to the Thai government’s plan to substitute ethanol in gasoline octane 95.

An economic analysis study states, “the largest portion of the total ethanol production costs heavily depends on feedstock prices, which is generally highly volatile and are subject to the demand and supply of foodstuffs in the world markets, and the seasonal local supply variations” (p. 78, Yoosin and Sorapipatana 2007).

Feedstock availability like sugar and palm oil varies from season to season and with geographic locations as well as future anticipated demand. For instance, an anticipated increase in demand for crude palm oil recently pushed up domestic prices for fresh palm. Domestic prices for fresh palm fruit increased sharply in late 2007, reaching a record high of 6-6.3 Baht/kg (\$190-\$206/ton) in January 2008 (Preechajarn et al. 2008).

This has already affected nearly all of Thailand’s existing agrofuel plants that faced supply surpluses as well as increased input prices by mid-2008;

nearly all ethanol plants were running at only 70 percent of their production capacity while some either suspended production or switched to non-ethanol products (Preechajarn et al. 2008).

Environmental concerns about toxic pollution of soil and water surround Thailand's agrofuel plantations: the herbicides Paraquat and Glyphosate are used on the soil in the oil palm plantations; the insecticide Furadan is applied in the oil palm nursery (Pleanjai et al. 2004). Furadan is the brand name of the pesticide Carbofuran that has faced controversy since the 1980s after the US Environmental Protection Agency (EPA) Special Review estimated that over a million birds were killed each year by the granular formulation. Subsequently, the granular formation was cancelled in the US in 1994, but the liquid form remains in the global market.

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### **- Vietnam: Paper shortages, price increases, new mills and more plantations**

Every year for the past decade or so, Vietnam has faced paper shortages. This year is no exception. In May 2008, Vietnam's newspapers reported that publishing houses and printers were facing difficulties in buying supplies. The shortages were happening even though the country's two biggest pulp and paper mills, Bai Bang and Tan Mai were operating at full capacity and paper imports had increased sharply during the first months of the year.

One possible explanation for the shortages was that importers were storing paper, waiting for the price of imported paper to increase before selling it. In March, one ton of Indonesian paper could be imported to Vietnam for US\$650. By May, the price reached US\$800. Meanwhile imports of paper from China decreased, increasing the potential demand for imports from Indonesia.

In June 2008, publishers increased the price of books. Bestsellers like "The Endless Rice Field" by Nguyen Ngoc Tu increased in price by 20 per cent.

In September 2008, the Ministry of Finance reduced the import tax on paper by between 7 and 12 per cent, depending on the type of paper. The Vietnam Paper and Pulp Association's position on the cuts is not clear. Several newspapers reported that the tax cuts were a result of proposals by

the Association. But the Association's secretary general Vu Ngoc Bao told the Vietnam News Agency that the "reduction would seriously affect local paper producers, who were having difficulties reducing production costs in face of rising material costs. Foreign giants such as Japan, China, the US and South Korea challenge the competitive capacity of local producers."

Meanwhile, the Association is lobbying for government subsidies to encourage domestic investment in the paper industry. The industry can currently supply about two-thirds of the demand for paper and the country is expected to import about one million tons of paper this year, an increase of 200,000 tons over 2007.

A series of new pulp and paper mills are either planned or under construction in Vietnam. In September 2008, PÅŕly won a contract to build a 250,000 tons-a-year pulp line at the Bai Bang pulp and paper mill in north Vietnam. The pulp line is due to start operations in 2010.

Also in September 2008, the Tan Mai paper company got permission to build four new pulp and paper operations: a paper mill in Dong Nai province; a pulp and paper mill in Quang Ngai province; a pulp mill in Lam Dong province; and a pulp and paper mill in the Central Highlands of Vietnam. The projects will produce a total of 550,000 tons of paper and 460,000 tons of pulp per year.

The Tan Mai paper company has established 10,000 hectares of plantations in Lam Dong province to feed its pulp and paper operations. The company is also carrying out a US\$30 million plantation project in Di Linh district in Lam Dong province. In May 2008, the Lam Dong Paper Materials Enterprise, part of the Tan Mai paper company, got permission to build a US\$54 million "ecotourism resort" in Di Linh district. The Kala Lake Resort will include an "underwater complex, an entertainment area, park, golf course, hotel, top class restaurant and a trade village of the local ethnic minority", according to the Vietnam National Administration of Tourism.

In March 2008, Kontum province licensed a US\$67 million project to establish plantations of 65,000 hectares of land. The company behind the scheme, InnovGreen, has plantation projects in five provinces in Vietnam and aims to plant a total of 300,000 hectares with "high-quality plantations of acacia and eucalyptus" on what it describes as "vacant, unproductive land".

The company is using the Forest Stewardship Council (FSC) to greenwash its operations. "International forest plantation standards under the Forest Stewardship Council, a stakeholder-owned system for promoting responsible management of the world's forests, will be applied," InnovGreen chief executive officer Wu Dean said, about the company's plantations in Nghe An province. None of InnovGreen's plantations are certified under the FSC system.

Eucalyptus planting has long been controversial in Vietnam. Professor Vo Quy of the Vietnam National University is often described as the father of Vietnam's environmental movement. "It is an urgent matter now to carry further research for gradually replacing the 'current basket of eucalypt' by another mix of tree species more suitable to the localities in which plantation operations are badly needed," he said in 1991, at a seminar on the impacts of eucalyptus plantations in Hanoi.

Seventeen years later, Vo Quy's statement is more urgent than ever. But this is not just about eucalyptus. While Vietnam imports paper products, wood chips exports from a series of wood chip mills along the coast have increased rapidly in recent years. The pulp and paper industry is a major driver of the expansion of monoculture tree plantations in Vietnam. The winners are the pulp and paper companies, but the losers are local communities who lose their land and see their streams and wells dry up.

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