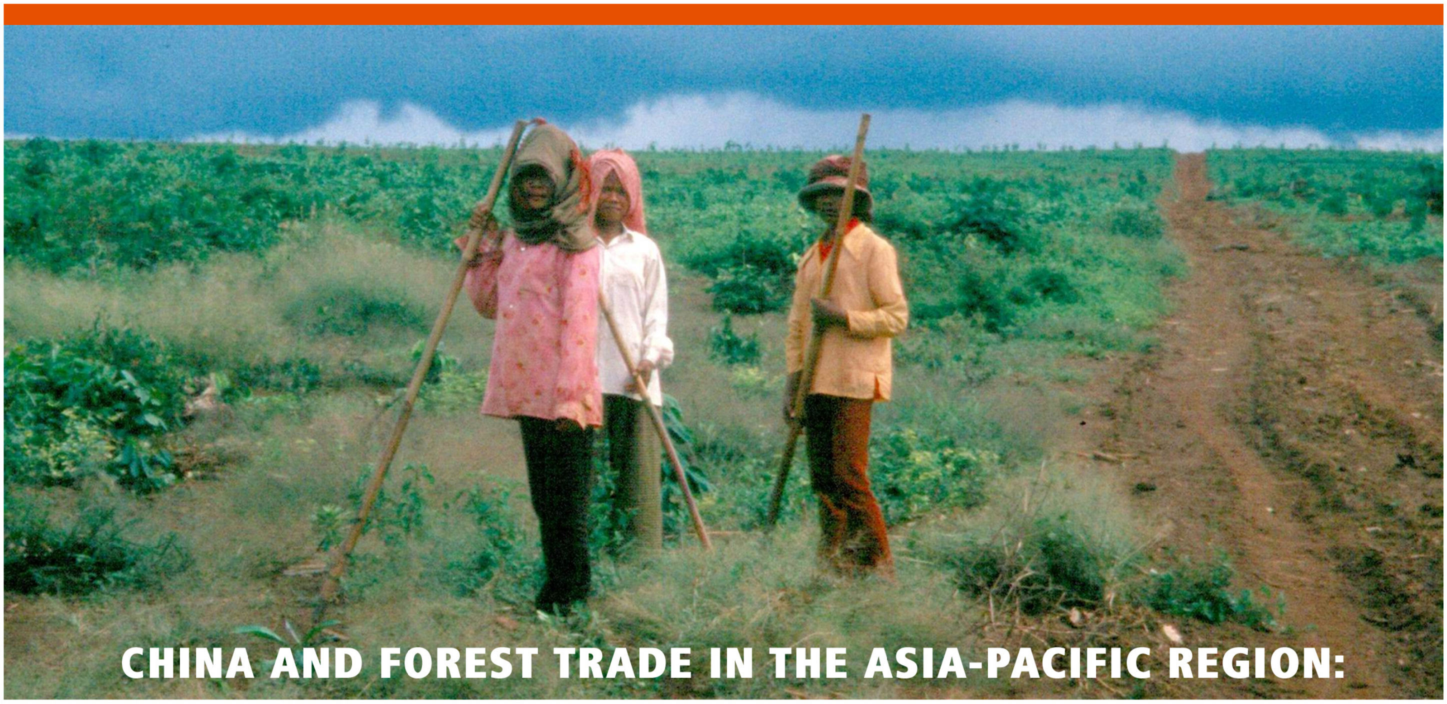

CHINA AND FOREST TRADE IN THE ASIA-PACIFIC REGION:

IMPLICATIONS FOR FORESTS AND LIVELIHOODS

中国与亚太地区国家林产品贸易研究

CUSTOMS, CONCESSIONAIRES AND CONFLICT:

TRACKING CAMBODIA'S FOREST COMMODITY CHAIN AND EXPORT LINKS WITH CHINA

KEITH BARNEY

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CUSTOMS, CONCESSIONAIRES AND CONFLICT:

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by Keith Barney

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OVERVIEW OF CAMBODIA'S NATURAL FOREST SECTOR

CAMBODIAN FOREST POLICY

Cambodia has obviously experienced some difficulty in implementing an effective framework of sustainable forest management. Indeed, the Cambodian forest sector can be considered a paradigmatic example of the close links between vast resource wealth on the one hand, and structural conflict and rural violence on the other (Peluso and Watts 2001). From the early to the mid-1990s, Cambodia's illegal logging sector was a primary source of military financing for both the remaining Khmer Rouge forces in western Cambodia and political actors jockeying for power in Phnom Penh (Le Billon 2000). Rather than ushering in a new era of improved forest governance, the final collapse of the Khmer Rouge instead resulted in a widening and intensification of 'anarchic logging' by an elite network of concession holders with close ties to the upper levels of the Cambodian state. Le Billon (2002) characterizes the Cambodian forestry experience as the 'instrumentalization of disorder,' in which the profits available from the forests came to represent a decisive means for actors to seize and hold political power within a context of conflict and state transition. In this situation, the obfuscation of what was happening to the Cambodian forests (or 'muddying the waters') then becomes linked less to weaknesses in bureaucratic regulatory capacity, as much as a strategy on the part of actors to acquire economic resources and power through a parallel shadow state system (Le Billon 2002). The results of this process are at once clear and unclear. While all agree that natural forest cover has been seriously impacted, the Cambodian Department of Forests and Wildlife (DFW) still places forest cover at approximately 60 percent, while according to some NGOs it has fallen to as low as 20 percent (e.g. Ethical Corporation Magazine 2004).

The broader conditions of violence and displacement of the war years have placed great pressure upon rural communities in Cambodia. Traditional institutions which may have served as a more viable counterweight to unsustainable development interests have been seriously undermined, and the coerce-and-extract strategies of logging firms have placed further pressure upon community governance systems (Bottomley 2002). Although no comprehensive national level data on forest product utilization by local communities have been compiled, there is general recognition that forests represent crucial livelihood resources for a majority of Cambodia's rural population. In response, substantial donor funding has been targeted towards institutionalizing and strengthening community-based forest management practices. While there are many promising efforts behind strengthening local property rights under a new Land Law and land titling programme (see below), and at least a partial political commitment on the part of the ruling party to rein in the timber concessionaries, the fears are that by the time truly effective national to local forestry management institutions are established, there will be little in the way of valuable forest stands remaining. Indeed, according to a recent Independent Forest Sector Review (2004), the end-game of economic resource depletion has already arrived for many of the concession holders.

A chronology of donor-based interventions in Cambodia's commercial forestry policy can be summarized as follows (see also McKenny 2002). In 1996, following an initial World Bank-UNDP-FAO *Forest Policy*

Assessment, the Royal Cambodian Government (RGC) announced a first serious attempt to ban log exports.[1] What followed was the height of anarchic illegal logging. Between 1994 and 1997, in an attempt to centralize and rationalize the logging industry, seven million hectares of forest land were allocated to 30 concessionaires.[2] Four independent consultancies funded by the World Bank *Forest Policy Reform Project* followed in 1997-98, providing technical assistance projects on the forestry sector. The collective conclusion of these reports was grim, "…concession management was abysmal, corruption endemic and logging out of control. They estimated that 4.7 million m^3 of timber had been felled in 1997/8, 95 percent of which was illegal" (Global Witness n.d.).

From the late 1990s, the UK-based environmental NGO Global Witness produced a steady stream of well-documented cases, which pointed to large-scale illegal exporting of logs and sawn timber to Thailand, Laos and Vietnam. In anticipation of a critical 1999 Consultative Group donor meeting which would draw on Global Witness and the Independent Consultant reports, Cambodian PM Hun Sen announced *Declaration No. 1* which represented a renewed crackdown on illegal logging and re-emphasized the original 1996 ban on log exports.[3] This announcement had some effect; in the subsequent five months the Cambodian government closed over 700 small-scale sawmills and seized approximately 14,000m^3 of timber (Global Witness n.d.). However, little was done to directly challenge the interests of the primary concession holders, indeed their position was likely strengthened in that only wood-processing mills belonging to forest concessions and their subsidiaries would now be eligible to receive wood-processing permits.

Post-1999 Consultative Group meeting interventions in Cambodia included the 1999-2000 ADB *Sustainable Forest Management Project* which called for a system review of forest concession performance, the development of a community forestry policy, draft forestry law and a model forest concession agreement. The UK-DfID subsequently funded a joint working group on forest concession management which established a formal relationship between the Cambodian Timber Industry Association (CTIA) and the DFW (Department for Forestry and Wildlife). Also, in 1999, the DFW, with funding and assistance by the UNDP and FAO, initiated the process of drafting a national forest policy.

The World Bank-IDA's next intervention was in 2000, through a 3-year *Forest Concession Management and Control Pilot Project*, which included components to address forest crimes monitoring, forest planning and inventory, forestry concession regulation and control, and project management (McKenny 2001). Global Witness became the Independent Monitor of the Forest Crimes Monitoring and Reporting Project, and was allocated the task of tracking instances of illegal felling and transport of timber, and auditing the activities of the DFW in cooperation with the Department of Inspection of the Ministry of the Environment.

[1] Le Billon (2002) states that between 1992 and 1996 five previous log export bans were declared, although "each ban was lifted within a mater of months if not weeks."

[2] Including over 1.023 million hectares – 5.8 percent of the national territory – to one company, Pheapimex (see below).

[3] More fully, the Declaration of Jan. 1999, '*Measures to Management of Forest and the Elimination of Forest Illegal Activities,*' called for an: Immediate crackdown on trade in illicit logs; no new collection permits for 'old' or anarchic cut logs; DFW as sole agency in charge of forest estate; re-emphasis on log export ban (the first was in Dec. 31, 96); emphasis on need for a review of all concession agreements; ban on hunting of wildlife; ban on forest land conversion; armed forces to assist DFW in law enforcement; fight against corruption; formulation and adoption of new forest law; the MAFF to establish monitoring system over forestry sector (McKenny 2001).

A 2000 ADB-funded Forest Concession Review resulted in an interim moratorium on forest harvesting until the time when new contracts and sustainable forest management plans could be devised. Twenty-two concessions were cancelled as a result of the review exercise, covering an area of three million hectares (Brown and Durst 2003). Furthering the process of controlling timber removals by the concession holders, a *Forest Management Control Sub Decree* announced in February 2000 upheld the "…rights of local communities to participate in decisions concerning the granting of forest concessions, the preparation of forest management plans and the development of systems for monitoring and controlling harvesting operations in forest concessions" (Savet 2002).

Continued reporting of illegal activities by Global Witness and the general failure of remaining concession holders to meet requirements for forest reform and sustainability set out in the concession review contributed to the imposition of yet another moratorium on logging and log transport, instated in December 2001 through the MAFF *Declaration No. 5721* (Savet 2002). The Cambodian government halted the issue of transport permits for logs for which no royalties had been paid, including for those trees cut before the logging moratorium. The December 2001 ban on logging is extended for each individual timber concession until full and acceptable environmental and social impact assessments have been completed and management plans approved.

Also in 2002, coming out of the UNDP-FAO process, Cambodia adopted a National Forest Policy Statement and a Forestry Law. This policy document designates all remaining forest resources as Permanent Forest Estate to be maintained under permanent forest cover and makes overtures towards recognizing the role for decentralized community forest management and collective property rights. Of particular interest, and unlike in neighbouring Laos, Vietnam or Thailand, the Cambodian Forestry Law provides explicit scope for swidden agricultural practices to continue within approved community forest management plans, particularly for self-identified 'indigenous' groups. Quotas are also to be established for the export of timber and non-timber products (Brown and Durst 2003). Under the new law, the Permanent Forest Estate is allocated into the following categories:

- *Production Forest* – maintained in a manner to allow for the sustainable production of timber products and non-timber forest products (NTFPs)
- *Protection Forest* – maintained primarily for protection of the forest ecosystem and natural resources (local communities retain customary user rights to collect timber products and NTFPs within the Protection Forest)
- *Conversion Forest* – forest for other development purposes. This is idle state land, comprising mainly secondary vegetation, not yet designated for use by any sector. It is temporarily classified as Permanent Forest
- *Private Forest* – maintained by the owner of the land with the right to manage and develop, harvest, use, and sell and distribute forest products. (RCG, Brown and Durst, 2003: 32)

Savet (2002) outlines that the Forestry Law includes an extensive institutional reform mechanism, designed to clarify and streamline jurisdiction over the forest estate. The reforms remove the district and provincial forestry offices from the control of local and provincial governments, and for the fist time places the former under the authority of the central DFW while simultaneously devolving responsibilities along decentralist lines.

From 1996, therefore, major international donor organizations have implemented large-budget programs aimed directly at overhauling and rationalizing commercial forest management practices in Cambodia. Despite these efforts, and by many accounts, well-organized illegal logging continues up to the present, albeit at a slower rate than during the height of anarchic logging from the mid to late 1990s.[4] As late as the 2000/2001 logging season, Global Witness was describing "dramatic" increases in illegal logging and large cross-border flows of logs between Cambodia and Vietnam/Thailand (Global Witness 2001). In February 2004 Global Witness (2004a) released a news briefing documenting the continued illegal harvesting, transportation and export of luxury timber species from Kratie, Stung Treng, Oddar Meanchey and Preah Vihear provinces. According to this NGO, illegal timber harvesting and laundering continues to occur under the guise of agricultural land concession development, stump and branch collection permits, and even firewood collection permits, for example at the Tumring Rubber Platation site (Cara Kirkpatrick, pers. comm.).

A primary conclusion reached by both Global Witness and the Cambodian Development Research Institute (CDRI) is that the primary problem with forest management in Cambodia is the very one which has thus far been studiously avoided by donors: the forest concession system itself (Global Witness 2002; McKenny 2002). For Global Witness, the concession system, with its internal networks of patronage and finance leading directly to the highest levels of the Cambodian state, continues to fuel "…corruption, secrecy and fear" (2002). Moreover, Global Witness links the activities of 'legal' concessionaires directly to illegal logging activities – the two spheres in practice become inseparable (Global Witness 1999a). While there is room for cautious optimism, in 2001 Global Witness reached a number of unencouraging conclusions, which are unlikely to have been reversed in the past three years:

- Continued recalcitrance on the part of the Ministry of Agriculture and Forestry, and the Department of Forestry and Wildlife
- Corruption prevalent up to the highest levels of political office
- Lack of information sharing between the DFW and the Forest Crimes Monitoring Unit
- Lack of available information regarding how concessions are granted
- Lack of reliable chain-of-custody log tracking
- Signs that the crackdown on illegal logging and the cross border trade are becoming less effective

McKenny (2002) more directly questions donor support for a mechanism whereby financial resources are expected to flow efficiently from the forests, through concession holders to the central government, back to district governments and on to rural communities in the form of rural development assistance, in what is generally recognized as an abysmally corrupt bureaucratic system. Further and most pointedly, McKenny highlights the limits of implementing a sustained harvest concession arrangement in a context where forests

[4] Some reports suggested that rates of illegal logging have been reduced by 85 percent between 1998-2001 (e.g. see testimony of Taylor 2001).

have been depleted to such an extent that the majority of concessionaires no longer control viable stands of commercial timber,[5] and indeed have a structural incentive to avoid participating in any reforms which would undermine their profitability any further. In summary, it is very likely that the primary force behind forestry sector reform in Cambodia have been conditionalities linked to the release of donor funding. Yet, according to critics, it has also been the very lack of more stringent conditionalities by the ADB, WB and IMF, specifically regarding the dismantling and overhauling of the flawed concession system, which has served to stall more effective changes.

In May 2003, and after years of acrimony, the RGC removed Global Witness as the Independent Monitor to the Forest Crimes Monitoring Unit (Paperloop 2003). At the time, the US State Department stated (ibid.):

> "The Cambodian government has not lived up to its pledge to maintain continuous forestry monitoring by an independent internationally-recognized forestry monitor…We consider independent monitoring of forests a significant factor in future donor decisions and important for multilateral development bank support."

It is unclear at this point what effect the replacement of Global Witness by the Swiss-based Societe General de Surveillance SA (SGS) will have for the monitoring and reporting of illegal activities in Cambodia's forests. While a better working relationship between the DFW and the Independent Monitor could yield some results and improvements, Global Witness (2004b) has already alleged 'serious shortcomings' with the first SGS Forest Crimes Monitoring Unit quarterly update report released in May 2004, with Forest Certification Watch (2004) joining in the criticism.

Not all is doom and gloom with Cambodian forestry however. In late 2003 a Community Forestry Subdecree was passed, which provides a strong legal basis for moving forward with decentralized, local forest management. Various international donors and NGO programs have been working closely with rural villagers in community forestry, recognizing and building local resource management capacities.

The remainder of this report will focus on detailing existing documentation on Cambodian forest resources, timber trade and wood flows for major wood categories, and foreign investments in plantation development. Available statistical information was gathered through a documents search performed in Phnom Penh and through relevant on-line websites. These data are supplemented by author interviews performed in Phnom Penh in July 2003. As the majority of wood flows out of Cambodia are almost certainly missed through the official statistical tracking systems, emphasis is placed on providing the full range of estimates for wood exports from Cambodia to neighbouring countries, and extracting from this which data appears most consistent. Where possible, estimates of timber trade linkages by volume between Cambodia and China are included. However, the suggested route for Cambodian timber exports to China (through neighbouring countries) renders the drawing of definite links between increasing Chinese consumption of forest products and Cambodian timber exports extremely difficult.

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[5] In 1997, McKenny (2002) reports that as little as 6 percent of Cambodia's remaining forested areas held commercially viable timber stands (forest categorized under dense evergreen and mixed-evergreen status).

STATISTICS ON NATURAL FOREST RESOURCES

Reliable statistics on Cambodia's forest resources are sparse. The International Tropical Timber Organization (ITTO 2003:35) reports that along with Myanmar and PNG in the Southeast Asia region, Cambodia had not reported any data to their information gathering efforts through a Joint Forest Questionnaire between 1998 and 2002. Partial and provisional estimates on forest resources and trade can however be gleaned from comparing existing information.

Statistics on natural forest cover in Cambodia generally suggest sharp drops from the 1960s. Among other factors, estimates depend on the percent of canopy cover deemed to represent 'forest.' The Department of Forestry and Wildlife (DFW 2002) estimates that forest cover was reduced from 75.2 percent in the 1960s to 60.2 percent in 1996/97. FAO data for Cambodian forest cover in 1997 provide a figure of 55.7 percent, declining 1.6 percent per year between 1990 and 95 (Gilmour et al 2000). Global Witness (1999b) has placed forest cover as low as 30 percent.

The Cambodian DFW has published comparative information for 1992/93 and 1996/97 by forest type (Table 1). It is important to note that these changes in forest cover by forest type likely would not accurately capture the larger extent of moderate to severe forest *degradation* due to logging:

Table 1: Forest Cover by Forest Type in Cambodia

Forest Type	1992/93 (Hectares)	% of total land area	1996/97 (hectares)	% of total land area
Evergreen Dense	654,442	3.7	625,177	3.5
Evergreen Disturbed	3,255,533	18.4	3,183,395	18.0
Evergreen Mosaic	129,902	0.7	178,147	1.0
Semi-Evergreen Dense	99,124	0.6	95,560	0.5
Semi-Evergreen Disturbed	1,325,353	7.5	1,284,446	7.3
Semi-Evergreen Mosaic	110,066	0.6	125,320	0.7
Deciduous	4,008,000	22.6	3,931,219	22.2
Deciduous Mosaic	342,204	1.9	350,178	2.0
Forest Regrowth	435,618	2.5	374,197	2.1
Inundated Forest	21,623	0.1	20,819	0.1
Inundated Forest	229,266	1.3	219,906	1.2
Mangrove Forest	77,669	0.4	72,835	0.4
Forest Plantation	72,307	0.4	82,425	0.5
Inundated Forest Mosaic	98,587	0.6	94,582	0.5
Total	10,859,695	61.3	10,638,208	60.2

Source: Cambodian Department of Forestry and Wildlife (2002).

LEGAL CUTTING LIMITS IN CAMBODIA

The legal annual allowable cut (AAC) in Cambodia is currently set at 500,000 m^3 per year. Cutting limits in Cambodia are based on estimated growth rates of 0.3 m^3/ha/yr. (Savet and Sokhun 2002), which corresponds to a harvest level of 10.5 m^3 per hectare on 35 year rotations. Thus, a withdrawal of 500,000 m^3 per year suggests a net forest production zone of approximately 1.75 million hectares at the above growth rates. As shown above however, the actual area remaining in Cambodia with dense forest cover under the 'evergreen' and 'dense evergreen' categories had been reduced to 720,000 ha by 1997 and this total has most certainly fallen sharply in the years since. This suggests that even the legal AAC may be too high for Cambodia's remaining forest resources to sustain.

As Castren (1999a) notes, Cambodia has not had a national forest inventory since the 1970s. Thus, the baseline assessments for establishing an accurate AAC are inadequate, particularly after the decade of high extraction in the 1990s. Consequently, research on the growth potential is also inadequate. Castren (1999a) quoted standing stock figures of 20 million m^3 of timber.[6]

ORGANIZATION OF THE FOREST ESTATE

The forest estate is divided into categories of protected forest (1.346 million ha), protected areas (3.273 million ha), valid forest concession areas (3.874 million ha), cancelled forest concession areas since 1999 (3.001 million ha) and forest land under tree planting stations (56,528 ha) (DFW 2002). Protected areas under the Ministry of the Environment have been expanded rapidly in Cambodia, in 2002 amounting to 20 percent of the country's area, although even these areas have been extensively logged according to Global Witness (e.g. 1999b).

STRUCTURE OF FOREST INDUSTRIES: FORESTRY CONCESSIONS HOLDERS

Presently, there are 14 timber concessionaires holding 18 forest concessions in Cambodia, which in effect have timber withdrawal rights to approximately 22 percent of the total land area of the country. In May 2002, the Cambodian Prime Minister Hun Sen signed Decision 27 *Sor Sor Rour* which legislated the additional cancellation of two of the worst concession-holding illegal loggers: Voot Tee Peanich and Hero.[7] There remain serious questions concerning the actual commitment of the Cambodian government to enforce forestry standards and to remove illegal offenders from the list of active loggers. Further, the last logging ban from 2001 remains in effect. The Independent Forest Sector Review (2004) states, unsurprisingly, that many of the concession holders are now operating at a loss, and that "…it is anticipated that only a few of the Strategic Forest Management Plans (SFMPs) will be recommended to go forward to the next stage."

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[6] Castren (1999b) writes: "The total area of non-protected dryland forests is 7.8 million ha and the annual growth is roughly 1 m^3/ha, while in wood and shrublands growth is lower (0.3 m^3/ha). The total wood growth is thus 8.5 million m^3."

[7] According to Global Witness, Hero had actually requested the cancellation, while Voot Tee Peanich had already been bankrupt for several years.

The fourteen remaining active concessionaires (also the same as the 14 remaining members of the Cambodian Timber Industry Association) are given below in **Table 2**.

WOOD PROCESSING INDUSTRIES

Official wood-processing capacity in Cambodia through the 1990s was reported at approximately 1.2 million m^3 per year, mainly focused on the production of veneer and plywood (together representing 55 percent) as well as sawn wood (McKenny 2001). Outside of the official statistics, there were also approximately 1,000 small scale, unregistered sawmills, which were supplied largely through illegal wood volumes (McKenny 2001). These smaller-scale sawmill operations have likely been reduced substantially through subsequent government crackdown efforts.

Castren (1999a) suggests that eventually, the Cambodian wood-processing sector will be largely domestic in orientation. This will occur either through the effective implementation of a sustainable forest management framework or through the exhaustion of the resource. The successive crackdowns on illegal harvesting have likely promoted a certain degree of sustainable management into this process, although at this time the exact extent to which wood processing industry has contracted is unclear.

Table 2: Cambodia's 14 Remaining Active Concessionaires

Company	**Notes**
Cambodia Cherndar Plywood Mfg. Co. Ltd	
Casotim Co. Ltd.	
Colexim Co. Ltd.	- Cambodian and Japanese investment
Everbright CIG Wood Co. Ltd.	- Chinese investors
GAT International Co. Ltd.	- Malaysian firm, concession license was removed in August 2002 for logging after the January 2002 moratorium
Kingwood Industry Co. Ltd.	- Taiwanese investors
Mieng Ly Heng Co. Ltd.	- Cambodian investor
Pheapimex "Cambodia" Fuchan Co. Ltd.	- headed by Ms. Choeng So Pheap, has close links with Hun Sen
Samrong Wood Industries Pte. Ltd.	
Silveroad Woodproducts Ltd.	
Superwood I.P.E.P. Ltd.	- Malaysian firm
Timas Resources Co. Ltd.	
TPP Cambodia Timber Producers Pte. Ltd.	
You Ry Saco	- Cambodian investment

The names of existing forest concessions along with their location and total land area are provided in Table 3 below, based on information from the Department of Forestry and Wildlife (2002).

Table 3: Valid Forest Concession Areas in Cambodia 2002

Name	Province(s)	Approval Date	Area (ha)
Colexim Enterprise	Kampong Thom	12-02-96	147,187
Casotim Enterprise	Kratie	09-04-96	131,380
SL International Ltd. (1)	Kratie, Kampong Cham, Mondulkiri	11-08-94	467,484
SL international (2)	Kampong Speu, Koh Kong	11-08-94	298,598
Mieng Ly Heng Investment Co. Ltd.	Kampong Thom, Preah Vihear	27-02-96	198,500
Pheapimex-Fuchan Cambodia Co. Ltd. (1)	Kratie, Kampong Thom	15-03-96	137,475
Pheapimex-Fuchan Cambodia Co. Ltd. (2)	Stung Treng	15-03-96	221,250
Pheapimex-Fuchan Cambodia Co. Ltd. (3)	Stung Treng, Ratanakiri	08-04-98	350,000
King Wood Industry Pte. Ltd.	Kratie, Stung Treng, Mondulkiri	12-09-95 15-01-98	301,200
Cambodia Cherndar Plywood Mfg. Co. Ltd.	Preah Vihear	03-02-96	103,300
Sam Rong Wood Industry Pte. Ltd.	Siem Reap	22-08-96	200,050
Everbright CIG Wood Co. Ltd.	Kratie, Stung Treng	08-08-96	136,376
Super Wood IPEP Ltd.	Pursat	18-04-96	94,418
Timas Resources Ltd.	Kampong Cham, Kratie, Preah Vihear	14-02-96	161,450- 2 locations
Silveroad Wood Products	Koh Kong, Pursat	08-04-98	215,460
Silveroad Wood Products Ltd.	Koh Kong	08-04-98	100,000
You Ryasco Co.	Pursat, Battambang	02-03-98	214,000
TPP Cambodia Timber Product Pte. Ltd.	Siem Reap, Preah Vihear, Pursat	03-04-98	395,900- 2 locations
Totals			3,874,028 ha

Source: Cambodian Department of Forestry and Wildlife

PLANTATION POLICY AND RESOURCES

PLANTATION POLICY

Tree plantations have been developed sporadically on the Cambodian landscape. Limited tree-planting programs, involving largely eucalyptus and teak, have been continued by the DFW over the past twenty years. The Pheapimex project is the largest private sector plantation program being developed, although the investment does not appear to be progressing at this time. According to one industry informant in Phnom

Penh "…there is nothing specific developing in terms of a policy framework for forest plantations – nobody is seriously looking into this."

According to an official at the DFW (interview July 24, 2003), however, a policy on local people and forest plantations will be developed in the near future. The department is preparing to invite local people to participate in a "labour/rice" program. The returns from plantation establishment will be shared and the department will provide rice for local people. Foreign partners will also be encouraged to invest in forest plantations on degraded lands.

The official stated:

> "We are also pushing awareness of the local people, to join in forest plantation projects through the labour-rice project. With past results, last time people did not want to participate, 'it is useless to plant trees' they said. But now they have companies to buy the products, and now they also have free seedlings. So now, it will be more planting compared to a few years ago."

Directly relevant to this is what a representative of the Cambodia Development Research Institute suggested concerning the potential for smallholder plantation schemes in Cambodia:

> "Getting villagers to plant trees for example in some kind of outgrower scheme…., they are situated so marginally on the edge of food shortage as it is. Right now they already sell in advance their future harvest of rice for the year, at an incredibly low rate, just to squeeze by. To ask them to shift away from something they know how to plant – rice – to something which is completely unknown – and open to failure – they would resist this of course" (Interview July 29,2003).

Tree planting is generally promoted through two strategies: through plantations established by the Phnom Penh DFW or Provincial Forestry Offices and through "Arbor Day" tree planting activities. Statistics are available on tree planting by planting station across the country and through Arbor Day activities; however, the total of plantation area established in Cambodia by the end of 2002 was 11,125 ha It is estimated that of this area, 818 ha are plantation area that has been established by local people with free seedlings provided through the DFW at Arbor Day.[8] The majority of the planted seedlings from these sources are eucalyptus and acacia.

According to the CTIA, to date no companies other than Pheapimex have made forays into developing fast growing tree plantations. The major reasons suggested for this include a number of 'unknowns' relating to investment costs and policies, as well as the unstable situation regarding tenure security. The suggestion was that there was no lack of markets for woodchips or pulp exports, but that the political situation in Cambodia remained too unstable for such an investment.

[8] These area estimates appear to be generated by the number of seedlings distributed.

STATISTICS ON TREE PLANTATION RESOURCES

Much of the focus for development of tree plantations in Cambodia has involved oil palm and rubber schemes, although even these projects remain largely in the 'proposed' phase. There has been a limited area of forest plantation established through the Reforestation Office of the DFW. This data is listed below (DFW 2002). More detailed information on tree planting by species and location is provided in Annex 1.

Table 4: Summary of Tee Planting Activities, 1985-2002 (hectares)

Year	Plantation			Arbor Day		Total
	DFW	PFO	Others	DFW	PFO	
1985	273	16	0	0	0	**289**
1986	317	118	0	0	0	**435**
1987	412	189	0	0	0	**601**
1988	370	206	0	0	0	**576**
1989	513	324	0	30	0	**867**
1990	207	295	0	2	0	**503**
1991	0	176	50	0	0	**226**
1992	572	267	50	20	0	**909**
1993	460	202	50	20	0	**732**
1994	302	231	102	20	198	**852**
1995	290	224	57	20	86	**677**
1996	320	193	0	20	78	**611**
1997	250	137	0	20	78	**485**
1998	0	0	0	2	0	**2**
1999	264	222	0	16	0	**502**
2000	550	315	0	9	110	**983**
2001	555	255	0	20	39	**869**
2002	815	161	0	2	30	**1,007**
Total	6,468	3,531	309	201	617	**11,125**

AGRICULTURAL LAND CONCESSIONS

While many problems remain with Cambodia's forestry and logging sectors, potential new sources of displacement are on the horizon with the agricultural plantation concession system. Between 2000 and 2001, and just prior to the enactment of a new land law, there were more than 40 land concessions awarded (Global Witness 2002). Approximately seventeen of these appear to be actively in process at the present time. Many of these land concessions are over the 10,000-ha limit stipulated in the Land Law, and none of them could be considered as alienated legally, or in consultation with local communities. The concessions were usually mapped and allocated out of designated 'degraded forest' by the DFW in Phnom Penh. As Global Witness (2002) states:

> "Whether or not the forest is degraded in reality is debatable, but more importantly it ignores the fact that these forests play an integral role in sustaining the livelihoods of Cambodia's rural poor."

The problems accompanying land concessions are indicated by recent events in the province of Kampong Thom, when the Chup Rubber Plantation company received 12 square kilometers (over 14,000 ha) for establishing a new rubber tree plantation. According to media reports (Phnom Penh Post 2002), the logging enterprises (specifically GAT and Colexim) that were called in to clear the land removed all the remaining forest, including the village resin trees which were crucial for villager livelihoods.[9] According to many sources, these types of conflicts between villages and plantation companies holding land concessions are becoming increasingly common.

The extent to which the new land concessions are leading to renewed conflict in the forest is indicated in the fact that as of 2003, every one of the 17 agricultural concession holders with signed contracts with the MAFF who had taken action to demarcate their allocation had noted problems with local communities (Fabienne Luco, pers. comm.). The total area of these concession holders ranged over 720,000 hectares; it includes the 315,028-ha eucalyptus plantation concession in Pursat and Kompong Chhnang provinces owned by Pheapimex-Fuchan. An additional six agricultural concessionaires without signed contracts had also noted land conflicts, extending over a further 87,000 hectares.

According to one interview source from the GTZ, approximately 70 percent of the area covered through the economic plantation concessions could be considered as "forested". Indeed, this informant suggested that the *primary* rationale for allocating many of these land concessions was to access the remaining timber resources. The allocation of these concessions would in turn support future political election campaigns for high-level figures in the Cambodian government. For instance, with respect to the 300,000-ha Pheapimex plantation concession, the informant suggested there was a substantial amount of money to be made if this area was clear-felled for plantation development. Further, the informant suggested that none of the land concessions could be considered as "legal". His opinion was that the concessions should be declared as illegal holdings and that then pressure should be placed on the licensees for reform in terms of developing a viable business plan with investment and management strategies and an accompanying social impact assessment. The concessions should then be dissolved if those conditions were not met.

LAND AND FOREST TENURE

A core set of problems in rural Cambodia revolves around land and resource tenure conflicts between communities and forestry or plantation enterprises. This section will outline the major developments with respect to resource and tenure titling in Cambodia with specific reference to the ongoing Land Titling project and the implications for the resolution of company-community forest resource conflict.

[9] However, one informant suggested that the Chub rubber plantation area had not been entirely cleared as of 2003, with the official plantation area listed at 6,200 ha (Cara Kirkpatrick, pers. comm.).

Prior to the 1970s, use rights in essence were equal to ownership rights in rural areas.[10] There was low population density with little land speculation. Post 1979, people began returning to their homes after being displaced during the war years. The Vietnamese regime re-organized villages into communes and in most instances land belonging to individual families prior to the war years was not returned to them. In 1980-81, the commune level of organization was established and land was distributed according to the number of children. By 1989, when the Vietnamese withdrew, it was in essence no longer viable to reclaim rights of ownership prior to 1975.

This basic pattern varied by location however. For example, districts surrounding Siem Reap remained Khmer Rouge-controlled areas, which remained somewhat outside Vietnamese control. Here land was not redistributed and post 1979 people returned and claimed their old lands. In Cambodia generally, there has actually been a quite equal distribution of land ownership as until recently there were still areas of unoccupied land available.

In the mid 1980s, the land system in Cambodia was slowly reverting back to individual tenure rights after the disaster with forced collectivization under the Khmer Rouge, and in most instances people who were able to work received land. In 1989, Instruction #3 from the Council of Ministers re-enshrined private ownership rights in residential land, recognized possession rights in cultivated land and established a Land Titles Department to issue these documents. The 1990s saw a rapid development of land markets in many urban and semi-urban locations. Forced expropriation of land and resources due to the actions of illegal actors and forestry/land concession holders also resulted in serious problems. At the moment, if one has occupied land for five years, it is possible to claim ownership rights. In other areas containing indigenous populations, there are also new forms of land rights being developed which recognize common property patterns of land usage.

More recently, the World Bank, in association with GTZ and the Finnish development agency, has funded a land titling project (the "Land Management and Administration Project") to create a cadastral land-mapping system, speed up the issuance of land titles and implement and enforce land legislation (Council of Land Policy 2002). The project has five priorities: developing the required legal framework including special consideration for indigenous tenure and common property (i.e. involving "flooded forests" surrounding the Tonle Sap); institutional development; systematic land registration using aerial photos; dispute resolution; and a land use management and management component.

There have been various critiques of the Cambodia land titling project. The concerns of the NGO Forum (2002) focus on questions of prioritization within the Cambodian land reform agenda. NGO Forum suggests that priority for land titling should be targeted towards those communities whose resource tenure is most threatened, for example those living near forestry or land concessions along national roads or in semi-urban areas. Further, NGO Forum advocates for more effort behind land *redistribution* for landless farmers and the safeguarding of common property resources. For much of the rural poor in Cambodia, land tenure is not specifically threatened (as a result of the stipulations in the 2001 Land Law) and farmers are not necessarily blocked from access to credit using land as collateral. Thus, while almost every observer decries the loss of resource access due to illegal logging, in some quarters questions remain regarding whether the current land

[10] I thank Fabienne Luco from the UN-HCHR for relating some of the history of land tenure in the following three paragraphs.

policy and titling program is actually the best use of limited funds for poverty alleviation, or whether it is an effort aimed more squarely at developing a rural commercial agricultural sector and an exercise in strengthening government taxation and revenue collection capabilities.

Experience in nearby countries with ongoing land titling programs also shows that much depends on how village land and state land is actually demarcated in practice by rural officials. The Lao experience has raised substantial concerns and criticisms in this regard (Vandergeest 2003). It remains to be seen how the Cambodian titling program will affect local village and common property resource access, although the Land Policy Framework (Council of Land Policy 2002) does appear to hold some potential of the required flexibility for recognizing indigenous and communal resource tenure systems.

The implications of a loss of local forest resource access are often serious. McKenny and Tola (2002:5) write:

> "Case studies and anecdotal evidence indicate that many remaining forest areas are significantly degraded, suggesting a marked deterioration in the historical "safety net" for rural livelihoods provided by forest resources. These studies note that diminishing forest resources in close proximity to villages is forcing villagers to meet needs from areas farther away. The causes of the decline in available resources are reportedly illegal/unsustainable logging practices and restrictions on access to forest concession areas. As scarcity increases the costs of obtaining forest resources (in terms of time, labour, money and risk), rural households must bear these costs because for many forest products there are no readily available substitutes. Case studies also note increased tensions over forest resources. Conflicts typically occur as a result of denied access to forest resources, the loss of forest resources due to logging damage, and/or the climate of intimidation associated with concession security operations."

FOREST PRODUCT TRADE DATA AND LINKS WITH CHINA

There is an extreme paucity of reliable data on the trade in forest products from Cambodia. This section will draw upon existing studies of the extent and direction of wood flows out of Cambodia through the 1990s and up to the present. It is suggested that the data from Cambodian government agencies and the ITTO are less likely to have reliable statistics for this question than the independent consultancies working in Cambodia in the late 1990s.

The illegal nature of the forest sector and the lack of effective state institutions capable of monitoring and recording trade flows represent the two major hurdles for the documentation of timber flows. McKenny (2001) writes:

> "With the implementation of bans on logging in recent years, Thailand, Vietnam and China have been increasingly relying upon imports of timber from Cambodia (and Laos) to meet their domestic demand. However, determining the precise level of trade, export and domestic consumption of Cambodian timber is very difficult due to the extremely high level of illegal logging in Cambodia and poor statistical records."

In a similar vein, a representative from the CDRI suggested the following in an interview (Phnom Penh, July 29, 2005):

> "As far as drawing any linkages of forest products with China, there are just a few people here doing work on the forestry sector as it is. Global Witness and NGO Forum are the two who have networks in rural areas which can feed them information. So this level of detail into the forest products commodity trade has not been done. You can only look at the logic of the macro figures. You have a supposed logging ban in China, in Thailand, and in Vietnam restrictions. So Chinese consumption of wood is coming from somewhere. Other than this, detailed research on where Cambodian timber is specifically ending up, besides at a general scale, for example to the Vietnam furniture industry, or Thailand, or Laos then Thailand, has not been done."

The divergences in estimates on the extent of Cambodian wood flows to neighboring countries through the 1990s is very significant. In effect, the lack of baseline agreement of how much wood was being exported out of Cambodia makes drawing definitive linkages to an importing country such as China very difficult. What follows therefore is simply a comprehensive overview of the range of data gathered on this question.

Cambodian government agencies maintain an official data source on timber production and exports flowing from the country. Data covering the years 1996-2001 is listed in Table 5; it shows that the total estimate for timber exports for these years comes to approximately 920,000 m^3. This figure is substantially lower than other statistics presented below.

The International Tropical Timber Organization (ITTO) tracks global statistics for the production and trade of tropical timber by member countries. Cambodian export data from the 2003 ITTO Annual Review and Assessment of the World Timber Situation is included in the following table, which is in general agreement with DFW statistics for total wood flows for the years covered.

Table 5: Timber Production and Export 1996-2001

Year	Timber Production (m^3)*	Timber Exports (m^3)								Total Exports
		Round Logs	***Sawn-timber***	***Veneer***	***Plywood***	***Furnit-ure***	***Particle board***	***Railway Sleeper***	***Flooring***	
1996	136,026	161,673	69,044	28,491	--	--	--	--	--	259,208
1997	242,463	--	72,566	182,481	--	--	--	--	--	255,047
1998	233,348	--	39,766	180,547	16,419	--	--	--	--	236,732
1999	290,876	--	10,257	68,194	14,868	--	228	--	--	93,547
2000	179,330	--	2,606	44,684	26,507	198	314	--	--	74,309
2001	121,497	--	3,690	23,232	13,612	--	--	145	893	41,572
Total	**1,203,540**	**161,673**	**197,929**	**487,629**	**71,406**	**198**	**542**	**145**	**893**	**920,415**

Source: Savet and Sokhun (2002). [Original Sources: FMO and KANFOREXIM, DFW 2001]
**Excludes timber obtained through purchasing and bidding.*

Table 6: Cambodia Tropical Timber Exports 1997-2003

Cambodia (m3)	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**
Logs	100,000	7,000	0	0	0	0	0
Tropical Sawnwood	71,000	40,000	10,000	3,000	5,000	5,000	5,000
Veneer	182,000	181,000	68,000	45,000	24,000	45,000	45,000
Plywood	10,000	16,000	15,000	27,000	14,000	14,000	14,000
Totals	**363,000**	**244,000**	**93,000**	**75,000**	**43,000**	**64,000**	**64,000**

Source: ITTO (2003).

A third source for harvesting estimates is included in Le Billon (1999), who also drew together data from a range of official and NGO sources. Le Billon reports estimates for wood products exports totaling $US 2.5 billion for the years 1991-1998. In the mid 1990s, Le Billon suggests, these timber-dollar flows would have represented approximately 43 percent of export earnings for the country. Note that for example in 1998 Le Billon's data represents a 300 percent increase over the ITTO and DFW data.

Table 7: Timber Exports and Government Revenues 1990-1998

Year	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Volume ('000 m³)	515	848	1,393	1,360	1,495	1,691	992	1,045	1,090
Estimated Value ($US million)	77	170	348	340	374	423	248	188	218
Forestry Revenues	n/a	n/a	1.5	3.3	39	27	11	12	5

Source: Le Billon (1999). [Original Sources: Reports from the RGC, Thai Forestry Department and Global Witness]

A further data set for historical timber production in Cambodia has been published by Nophea (n.d.) and is included in Table 8 below. Of particular significance here are the data for Cambodian forestry production through the 1980s and early 1990s.

Table 8: Cambodian Wood Production 1967-1997

Year	**Production ('000m³)**	**Sawnwood ('000m³)**	**Fuelwood ('000m³)**	**Charcoal ('000m³)**
1967	384	N/A	N/A	N/A
1980	0.24	N/A	26.0	3.50
1981	11.03	N/A	30.0	8.00
1982	67.70	N/A	84.4	8.50
1983	90.00	N/A	200.0	10.62
1984	73.28	N/A	164.32	21.17
1985	96.53	N/A	84.26	53.10
1986	213.55	N/A	99.06	4.27
1987	306.16	N/A	58.77	7.43
1988	282.94	N/A	96.12	9.38
1989	224.83	283.0	123.45	6.98
1990	257.35	224.0	105.07	6.95
1991	308.81	N/A	62.08	0.36
1992	900	N/A	N/A	N/A
1993	1500	N/A	N/A	N/A
1994	2000	N/A	N/A	N/A
1995	2500	N/A	N/A	N/A
1996	3500	N/A	N/A	N/A
1997	4300	N/A	N/A	N/A

Note: Data of log production from 1992 to 1997 was estimated by World Bank mission to Cambodia in 1996.
Source: Nophea (n.d.). [Original Sources: World Bank et al. (1996); MAFF and FAO (1993); Koum S. (1992); Carle (1998)].

All of the above information must be considered in light of the fact that the period from 1994 to 1998 is generally viewed as marking the height of uncontrolled and illegal logging in Cambodia. Two consultancy studies from the late 1990s attempted to grapple more systematically with the question of timber flows out of Cambodia. The first was a study by Castren (1999), who in turn drew heavily upon research from Global Witness, Development Alternatives Inc. (DAI) and the World Bank's "Forest Policy Reform Project and Log Monitoring and Logging Control Project". Based on these sources, Castren's publication diverges significantly from DFW/ ITTO data, suggesting that through the late 1990s, Cambodia was likely supplying 2 million m^3 RWE of timber per year to Thailand, and 1 million m^3 RWE to Vietnam.

Table 9: Cambodian Wood Export Volume 1997 (from Castren, 1999b)

Logs		**Sawnwood**		**Total**
Thailand	**Viet Nam**	**Thailand**	**Viet Nam**	
– m^3 (roundwood equivalent) –				
458 000	479 000	1 626 000	471 000	**3 052 000**
15%	16%	56%	12%	**100%**

Source: Castren (1999b). [Original Source: Consultant estimates based on DAI (1998). Exports to Thailand include some minor trade with Lao PDR (estimated at 20 000 m^3). Some exports may be re-exported from the adjunct countries to third country markets.]

Castren (1999a) writes:

> "Not only do the independent observers report volumes far larger than DFW but the lowest volumes are reported by ITTO, based on official Cambodian sources. This indicates that even among the officials there is very little information on the actual volumes harvested. Some DFW officials have in private discussions suggested that the figures in Global Witness and WB reports may even be underestimates. If the independent observers' report did indeed reflect the actual volumes currently logged, Cambodia would be by far the most important source of natural forest logs in the GMS [Greater Mekong Subregion]."

Castren's data for total estimated wood removals for the year 1997 are in serious contrast with the previous estimates (see Table 10 below).

Development Alternatives Incorporated (1998) was also in Cambodia in the late 1990s estimating the trade in Cambodian forest products. DAI estimates for the total forest harvest in 1997 come out in the range of 3.2-4.3 million cubic meters. Again, to place these estimates into perspective, the general figure for a sustainable timber harvest in Cambodia is suggested to be in the range of 500,000 m^3 per year.

Table 10: Commercial Logging in Cambodia by Trade Category in 1997

Trade category	Volume (RWE)	
	– thousand m³ –	– % of total harvest –
Illegal		
Log exports by non-concessionaires	903	24
Sawnwood exports by non-concessionaires	955-2,086	41
Unreported concession harvest	166	4
Sub-Total	*2,024 – 3,155*	*70*
Legal status unknown / semi-legal		
Local consumption (not taxed)*	670	18
Taxed collection permits for illegal logs (originally illegally cut)	215	6
Sub-Total	*885*	*24*
Fully legal		
Taxed concession harvest	248	7
Total harvest	3,156-4,287	100
Taxed harvest	463	12
Logging waste	*947 – 1286*	*30*
TOTAL REMOVALS	**4,103 - 5,574**	**130**

Source: Castren (1999b).
Note: Includes domestic commercial sawnwood processing. Rural household fuelwood and other wood consumption are not included.

Table 11: Cambodia's 1997 Forest Product Exports Trade

Trade Categories	Estimated Volumes (m^3 log equivalent)
Direct illegal log exports to adjacent countries from non-concessionaires*	902,500
Direct illegal sawnwood exports to adjacent Countries from non-concessionaires	964,900 - 2,085,900
Production of local consumption from non-concessionaires (uncontrolled, legal status unknown)**	670,000
Unreported concession production***	166,200
Collection permits issued for illegally felled timber (taxed)	214,700
Collection permits for illegally felled timber (untaxed)****	Unknown
Concession harvests reported to DFW and taxed	248,000
Total Estimated Harvest	**3,156,300 – 4,287,300**

Source: Estimates from Development Alternatives, Inc. (1998). Cited in McKenny (2001).
** Adjacent countries are Thailand, Vietnam, Lao PDR.*
*** Based on an estimated annual production from non-concessionaires of .067m³ per capita for local consumption.*
**** Based on evidence that concessionaires under-report production by 40 percent.*
***** Tax-exempt permits have reportedly been issued for a significant volume of illegally felled timber. Some information exists in DFW but was not made available to DAI.*

McKenny (2001) reports that no further estimates of the extent of illegal logging have been developed since the official crackdown on illegal logging in January 1999.

DIRECTION OF TRADE FLOWS

Illegal exports of logs and sawnwood to Thailand have likely decreased substantially since the time of Castren and DAI's studies, as a number of high profile reports published by Global Witness (e.g. 1997) placed the issue of Thai involvement in Cambodian illegal logging on the world stage, and the linkages between the Thai military and remaining KR elements and Cambodian political factions have been removed. Castren (1999: 22) writes: "There is no information on how much of the wood destined to Thailand is directly re-exported to third countries; it may be estimated that the figures for this are higher than in Viet Nam." It is safe to postulate that Vietnam would have picked up much of the drop in Cambodian wood exports to Thailand in the late 1990s, particularly as Vietnam was much less affected by the 1997-98 Asian Financial Crisis (Castren 1999b).

ITTO (2002) reports partial data for Cambodian exports of veneer involving China, with some discrepancy between veneer export figures from Cambodia and import figures from China:

Table 12: ITTO Data on Cambodia's Tropical Veneer Exports to China 2002

	Data from Importing Countries	Cambodia's Exporting Data
Hong Kong SAR	0	0
China	38,879	0

The only other estimates for the broader direction and extent of Cambodian exports to neighbouring countries uncovered in this research were published by Nophea (n.d.). The extent to which these estimates diverge from for example those published by Castren (see above), however, likely render this table of limited usefulness. It may serve however as an indication of the *relative* importance of neighbouring countries for timber exports from Cambodia, but it is worth noting that China is not included in this data set.

Table 13: Cambodia's Timber Exports to Neighboring Countries 1995-97

Country	1995		1996		1997	
	Volume (m^3)	Value (US$ '000)	Volume (m^3)	Value (US$ '000)	Volume (m^3)	Value (US$ '000)
Thailand						
Logs	*170,985*	*22,276*	*50,167*	*8,502*	--	--
Processed Wood	64,807	20,657	52,039	17,983	50,087	17,109
Vietnam						
Logs	*144,186*	*26,230*	*79,122*	*20,523*	--	--
Processed Wood	--	--	1,004	341	25,681	10,547
Laos						
Logs	*8,262*	*1,350*	*8,520*	*1,632*	--	--
Processed Wood	--	--	--	--	--	--
Malaysia						
Logs	*12,999*	*1,843*	*78*	*16,786*	--	--
Processed Wood			137	113	5,060	2,104
Indonesia						
Logs	*16,815*	*2,382*	--	--	--	--
Processed Wood	--	--	--	--	--	--
Singapore						
Logs	*15,576*	*4,072*	--	--	--	--
Processed Wood	15,581	4,760	6	1,989	11,739	5,254
Totals						
Logs	**368,823**	**58,153**	**137,787**	**30,673**	**--**	**--**
Processed Wood	**80,388**	**25,417**	**59,032**	**20,427**	**92,567**	**35,014**

Source: Nophea (n.d.).

GLOBAL WITNESS LOGGING ESTIMATES AND INSIGHTS ON DIRECTIONS OF TIMBER FLOWS

According to Global Witness reports from the late 1990s, a substantial amount of illegally-felled Cambodian timber was then flowing through southern Laos and on to forest-processing firms in northeast Thailand or being imported directly into Thailand, often with the collusion of high level Thai politicians (e.g. Global Witness 1996; Bangkok Post 1998; Global Witness 1999c). The Bangkok Post (1998) reported that in one instance, 100,000 m^3 of timber worth $50 million, felled by Pheapimex, was being exported through Laos and on to a Thai processing company (listed as "Pipat Forestry"). In Thailand, the wood-processing companies were said to be located in the provinces of Trat, Chanthaburi and Si Sa Ket. Global Witness (1999c) also reported that large amounts of logs made their way through Laos and into Thailand in February 1999 after the Thai's reopened a border crossing near Ubon Ratchathani:

> "All three of Cambodia's neighbours are ignoring their public commitments to cooperate with the 31st December 1996 log export ban, although Thailand and Vietnam will undoubtedly claim these are Laotian logs. We want to put it on public record that this is not the case."

In 1996, Global Witness (1997) stated that a minimum of 1 million m^3 of sawn timber was being illegally exported into Thailand through a deal which involved the most senior politicians on both sides of the border

(Global Witness n.d.). Even more damaging was the revelation that Thai cooperation and involvement with the remaining members of the Khmer Rouge had continued right up until the KR disbanded.

> "The Thai loggers claimed that these logs, felled in the past and stranded by the timber export ban would rot if they were not utilised. Global Witness' investigations showed that loggers were, in fact, cutting to order, and paying the Khmer Rouge between US$35-90 per m^3. All along the Thai border log workers were arriving from elsewhere in Thailand, to take part in this bonanza that would earn the Khmer Rouge between US$35-90 million from a deal brokered by the leadership of the government with which they were at war."

With respect to Cambodian exports to Vietnam in the mid 1990s, Global Witness (1997) stated the following:

> "It is a matter of record that log imports into Vietnam are taking place on a massive scale, from Ratanakiri, Mondulkiri and Kratie. As Vietnam's security forces and government apparatus are extremely efficient it must be assumed that the Vietnamese government is a willing partner in these activities, despite their promises of cooperation with the RGC (Royal Government of Cambodia)."

And in a later report aimed explicitly at documenting the Vietnamese use of Cambodian timber in the furniture sector, Global Witness (1999) stated:

> "In early 1998, stockpiles of Cambodian logs held in Vietnam, in the main by garden furniture manufacturers in Pleiku, Qui Nhon, Song Bé and Bien Hoa amounted to approximately 260,000m^3 (90-100,000 logs). This figure does not include the volumes of timber in Kontum, Dac Lac/Buon Ma Thuot or Tay Ninh where it is known that imports of Cambodian timber have taken place.[5] Nor does it include all stockpiles in the areas that were visited. In Qui Nhon, for instance, it was only possible, at the time, to visit the port and one of the many garden furniture manufacturers. The 260,000m^3 figure should, therefore, be taken as a minimum."

According to one informant from the Cambodian-German Forest Project (interview August 1, 2003), the majority of Cambodian exports of veneer, plywood and timber – both legal and illegal – were being exported to Thailand, Vietnam or China, although it is likely that most of the illegal cut was heading towards Thailand. This informant confirmed, however, that there were simply no credible statistics documenting this trade. In terms of links with China, if the estimates for total harvest were 4 million m^3 in 1997, his best estimate would be 1 million m^3 exported to China.

In an interview with the Cambodian Timber Industry Association (July 31, 2003), high Chinese demand for MDF and OSB was reported, mainly for urban construction materials. Veneer and plywood also continued to have strong markets associated; however, more recently, Cambodian timber was being directed into the manufacture of container-flooring for transport containers. Kong noted that China was now the largest manufacturer of container-flooring in the world, with 40 percent of the global market. This product now surpassed the trade for plywood of both 6-mm and 9-mm dimensions. If accurate, these trends of trade linkages with China are not reflected in official DFW export data to China.

Although there have been no further efforts aimed at documenting cross border flows in the years since the ban on transportation of logs and the second moratorium on logging, Global Witness (2002) has continued to document illegal logging activities:

> "The moratorium on logging that took effect on the 1st January 2002 was a much needed intervention by the government, but Global Witness has evidence that several concessionaires are continuing to log and an even greater number are continuing to transport timber in direct contravention of the moratorium."

Considering that in 1998, the ADB review studies reported that 40 percent of the concessions had fewer than five years of harvest remaining, 50 percent had between five and ten years, and 10 percent had between ten and 15 years remaining, it can likely be assumed that the crest of forest logging in Cambodia has passed. Indeed, it is likely that the current logging activity in Cambodia is largely aimed at domestically oriented sawmill production.

DATA FROM CHINESE CUSTOMS

The statistics available from the DFW in Cambodia on exports of timber products are in a high degree of disparity with import statistics from China. To provide two examples, the Cambodian DFW (2002) states that Cambodia exported 6,571 m^3 of veneer to China in 2002. Information from Chinese customs authorities gathered by Sun et al. (2003) for 2002 record over 29,000 tonnes (38,600 m^3) of veneer imports from Cambodia, mainly through Shenzhen, Huangpu and Jiangmen ports. In the same data set, DFW data for 2002 states exports of 121 m^3 of S2S and S4S plywood to China, while Chinese customs data record 9,700 m^3 of plywood imports in 2002 from Cambodia.

Chinese import data from Sun et al. (2003) suggests rather low amounts of hardwood lumber imports from Cambodia in 2002 (5,353 m^3) and zero imports of hardwood logs from Cambodia that year. Chinese customs data suggest imports of Cambodian hardwood lumber in preceding years at: 4,708 m^3 (1997); 890 m^3 (1998); 2,546 m^3 (1999); 11,010 m^3 (2000); and 11,802 m^3 (2001). Sun et al. document total Chinese wood product imports from Cambodia at 129,400 m^3 RWE in 2002. For the years 1997-2000, this figure, as reported on the Chinese side, was somewhat higher, ranging from 287,000 to 358,000 m^3 RWE per year. It is important to recall that the mid to late 1990s represented the height of the anarchic logging period in Cambodia, at a time when best estimates were arriving at harvest figures in the range of 3.1-4.5 million m^3 per year and China was widely considered a key end-market for Cambodian wood products. Chinese logging companies (for example Everbright Co.) were also among the foreign players who entered into the concession agreement system in Cambodia in the mid 1990s. If China was in fact an important end market for Cambodian timber during this time, three alternate scenarios would seem possible: either the Chinese import figures were also under-reported; or the majority of Cambodian wood exports was being imported outside of Chinese customs supervision; or Cambodian timber was arriving at Chinese ports as finished, semi-finished or unfinished products via exporters based in Thailand or Vietnam and recorded as such (Castren 1999a).

Castren (1999b) notes that there are only two official marine export ports for Cambodian shipments: Phnom Penh and Sihaunoukeville. Further research with these respective port authorities may shed further light on the present and historical direction of Cambodian timber exports, although illegal interests may also be utilizing smaller export bases along the coast, or of course transporting overland through Vietnam and Thailand. Indeed, Ingles and Moore (2001) note the existence of unregulated private ports along Cambodia's river and coastal areas operated by timber companies. The authors reiterate: "There is no permanent Customs presence at the private ports."

PROFILES OF EXISTING AND PLANNED WOOD PULP MILLS

There is one full pulp mill investment on the drawing board in Cambodia, the Pheapimex-Fuchan pulp project, which is partly underway in Kampong Chhnang province, south of the Tonle Sap. This plantation and pulp project has attracted local community level protest and the attention of regional and international NGOs. Although the project has been decried by many both inside and outside the country, the actual progress of plantation establishment has to date been slow[11] (but see below for very recent developments).

The Pheapimex-Fuchan plantation and pulp mill project is a cooperative venture between the largest concession holder in Cambodia- Pheapimex and the China Cooperative State Farm Group. Pheapimex holds a 300,000-ha land lease for the purpose of developing a plantation base for the project, including 176,065 ha in Kompong Chhnang and 138,963 ha in Pursat province. The mill component is to be developed at a site in K. Chhnang. Phase 1 of the project, which was signed at a meeting in Phnom Penh in 2001, involves a Chinese investment of US$70 million for the purpose of developing the required tree plantations (Rasmay Kampuchea 2000). Lang (2001) reports that financing for the project is being secured through the Import-Export Bank of China. NGO Forum has also stated that the Cambodian Ministry of Environment was not consulted by the MAFF before granting the Pheapimex concession and no Environmental Impact Assessments were performed, as required by law.

Although no interviews were secured with representatives of the company[12] the following information may be pieced together through a search of the available news media releases and NGO documentation. Global Witness reports (e.g., 2001) state that Pheapimex holds three forest concessions in addition to the two land concessions listed above (Pheapimex also holds a gold mining concession in Kirirom National Park). The total area of Cambodia under Pheapimex totals 1.023 million ha or just below 6 percent of Cambodia's national territory.

[11] An informant from Oxfam UK estimated, based on conversations with local people, that Pheapimex had established approximately 1,500 ha However an informant from the UNHCHR estimated from her interviews that Pheapimex had planted approximately 20,000 ha, with the trees 5-6 inches in diameter (in 2003). An informant from the DFW stated the following about the Pheapimex plantations (interview July 24, 2003): "The company has not been that successful with their planting. They would have come to us if their program was successful, but because it was a failure, they do not say anything."
[12] See Global Witness (1997) for a discussion of Pheapimex's head Ms. Yeay Pho (Chung So Pheap) in relation to instances of illegal logging and her links to Prime Minister Hun Sen.

> "The company [Pheapimex] has perhaps the worst record of logging and bad forest management in Cambodia. In January 2001, it had cutting permits for all three of its concessions – no other concessionaire had been given permission to cut at this time. Such a situation is not acceptable and undermines the government's credibility as an administration interested in forest reform" (Global Witness 2001).

The land concessions for the Pheapimex plantation project in Kampong Chhnang are located specifically in the districts of Toek Phos, Samaki Meanchey and Boribo. The concession is granted for a 70-year period, with no annual fees and with potential rights for renewal. According to the contract, Pheapimex-Fuchan must follow a planting schedule of 11,900 ha per year; although much less has been planted to date (Investment Agreement on Investment of Agriculture and Processing between Ministry of Agriculture, Forestry and Fisheries and Pheapimex Co. Ltd. Jan. 8, 2000).

An initial survey team from the Office of Agriculture, Fisheries and Forestry was sent out to the concession area. Their surveys indicate that the concession area is home to 85 villages in 9 communes in K. Chhnang province.[13] In 2001, a complaint was filed by 703 families in 7 villages, through the NGO forum, against the loss of 6,800 ha of forest land to Pheapimex.[14] The villagers cited the following land complaints:

- They rely on the forest for resin, fruit, creepers, rattan, cassava, mushrooms, housing materials and cattle grazing lands.

- Clearing the forest is against government commitments to protect the forest, which is critical for protection against floods, storms and erosion into Tonle Sap.

- There was no consultation in the planning of the project, which did not examine the location of local villages and farms inside the investment area.

Pheapimex has also been granted a bamboo concession in Banteay Meanchey province of 70,000 ha and in Battambang (230,000 ha) for use as raw material for paper production. Their processing company in these locations is called the Sipang Rifa Wood Industry Co.[15]

Pheapimex re-entered the news again in late 2004, after a grenade was launched into a crowd of 600 community protesters in Ansa Chambok commune, Pursat province (Associated Press 2004). The rally was in opposition to the commencement of Pheapimex land-clearing operations in the area at which six people were reported injured. The AP article notably stated that:

> "Land disputes in Cambodia have heated up in recent years. Last month, Prime Minister Hun Sen called for a review of land concessions, warning that a 'peasant revolution' could occur if land was not redistributed among the poor and homeless."

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[13] Source: Letter from Chhut Sothour, Director of Department of AFF, Chief of Committee of Survey and Assessment of Agricultural Land Use, June 16, 1997.
[14] Source: Letter to NGO Forum by Lek Thung and Um Hourt, People's Representatives of Ansar Chombok commune, Jan. 28, 2001.
[15] Source: Letter from the Council of Ministers to Minister of MAFF, June 8, 1998.

PROFILES OF EXISTING AND PLANNED WOOD CHIP MILLS

The publication on Cambodian Forestry Statistics until 2002 (DFW 2003) mentions one woodchipping facility in Cambodia: the Hilco company. In 2002 Hilco is stated to have harvested some 590 hectares of acacia timber from DFW tree-planting stations at Phnom Tamao and Banteay Angkor. Official statistics also report 8,107 tonnes (it is not specified if this refers to BDT or green tonnes) of acacia and eucalyptus woodchip exports from Cambodia to Japan in 2002. Marubeni Corporation was the suggested Japanese end-purchaser for woodchips exported from Cambodia from an informant at the DFW.

More recently, news releases have reported that Asia Pulp and Paper (APP) has established an investment in southern Cambodia focusing on logging of remaining natural forest and the establishment of a fast-growing plantation operation (Global Witness 2004d; Greenpeace 2004; Asia Times Online 2005). Greenpeace (2004) states the name of the established companies in Cambodia as the Green Elite (formerly Green Rich), now owned in turn by APP Indonesia units PT Arara Abadi and Indah Kiat Pulp and Paper.

For those familiar with the recent history of concessionaire activity in Cambodia, Green Rich is well known as a concession company which benefited out of the parceling and allocation of vast swathes of Cambodia in late 1998. Green Rich was to establish a 60,000 ha eucalyptus project on Koh Kong province, although government records from 2003 suggest that there had been little communication from the company since the signing of the agreement (see Annex 2). Little activity was reported on the concession for some years, although activity was restarted in 2003-04, with movement on an 18,000-ha parcel of forest inside Botum Sakor National Park on Cambodia's southwest coast (Global Witness 2004d).

The position of Global Witness (2004c) on this very recent development is worth citing in full:

> "In common with agro-industrial concessions in forest areas elsewhere in Cambodia, Green Rich has used its acacia plantation development as a pretext for logging. Since March this year, the company has focused on clear-cutting several hundred hectares of Botum Sakor's Melaleuca forest and loading the wood into shipping containers in preparation for export. The Melaleuca and mangrove forests that fringe Koh Kong's coastline are an important breeding ground for fish and their destruction has serious implications for fisheries in the area. Green Rich has also begun logging the evergreen forest that covers much of its concession. In the course of these activities, it has held a workforce of up to 300 in conditions of indentured labour with no adequate food supply or access to medical facilities.
>
> While dozens of the workers managed to escape from the Green Rich site in May with the assistance of NGOs and local authorities, the company shows no signs of ending its operations. On the contrary, technicians employed by Green Rich are currently surveying other areas of southwestern Cambodia for further plantation sites. Replication of the Botum Sakor model will certainly result in large-scale environmental degradation and human rights abuses.
>
> The Ministry of Environment, which has approved the Green Rich and other commercial projects in the protected areas it is responsible for safeguarding, claims that the company's Botum Sakor activities are suspended, pending the firm's production of an Environmental Impact Assessment (EIA). The idea of Green Rich conducting an EIA after already destroying a substantial area of

> forest in a national park is totally absurd. The whole basis for the company's presence in Botum Sakor is illegal and its contract should be terminated without delay. On May 31st, Prime Minister Hun Sen highlighted the role of high-ranking officials and other powerful figures in the clearing of Cambodia's forests. The case of Green Rich is exemplary."

At this point, the relationship between this APP venture in Cambodia and the previously initiated Pheapimex-Fuchan project is unclear. Greenpeace (2004) has reported that chipping machinery has been imported from Indonesia and woodchip production is slated for APP's Hainan operations. Acacia planting for the project is suggested to have commenced in September 2004 (Greenpeace 2004) with further survey work being carried out in Kampot, Kompong Speu, and Sihanoukville municipalities. Ongoing research by CIFOR and Forest Trends has identified serious wood supply constraints developing in southern China associated with large-scale pulp mill development. It appears that the Green Elite plantation venture is one of the strategies by APP Hainan to address this shortfall.

Minor information was gathered in relation to four wood-chipping companies operating in Cambodia, although the actual operations of only one of these could be confirmed. These are the Pailin Peanich Co., Goodhill Co., TR Nimex and Hilco.

According to an informant from the DFW, Pailin Peanich Co. was producing woodchips in Kompot province, although he had no information on their production levels or their supply sources. This informant had also heard mention of Goodhill and TR Nimex, but could not confirm any further information relating to their activities.

According to another source from the Afforestation Office of the DFW, TR Nimex and Pailin Peanich companies were purchasing plantation wood and exporting it to Vietnam without processing for construction poles. Both of these companies were located in Kompot and had been established in the past month, although no information was available concerning their wood consumption. TR Nimex was suggested to be sourcing their plantation wood from local farmers and Pailin from the DFW. This informant also suggested that Hilco was now bankrupt due to a lack of supply, partly because of a dispute between the DFW and Hilco over the price of chipping logs. Also, Goodhill Co. was no longer in operation according to this informant.

A third interview at the DFW provided some further information on wood-chipping and plantation-processing companies in Cambodia. Hilco was suggested to be a Singaporean company, producing woodchips from acacia and eucalyptus, with their mill located in Sihanoukville. The source of their timber may have been from villagers or from DFW provincial forest stations. Hilco were likely sourcing their seedling material from the DFW planting stations in each province. British American Tobacco was also suggested to have a tree seedling and nursery program. This interview confirmed that Hilco was no longer in operation, due to a low quality and supply of trees. It was suggested that Hilco had been seeking a supply of 200,000 tonnes of logs per year from the DFW, however it had not been possible for the department to arrange this supply. In 2002, 8,000 tonnes of logs were suggested to have been sold to Hilco at US$ 20/tonne. No production was suggested to have been sourced from natural forests.

TR Nimex was identified as a local company based in Kompot, also being blocked in terms of expanding their operations due to a lack of raw material supply. The informant reported that the company was seeking to export construction poles to Vietnam. He reported a limited production of 500 tonnes for export in the past 3-4 months, with log supplies sourced form local farmers.

The Pailin Peanich company was also recognized, although the informant stated that the company had not yet begun operations. The company was said to have no source for woodchips, no sawmill and no export facility.

SUMMARY OF LINKAGES TO THE CHINESE MARKET AND MAJOR CHALLENGES TO FORESTS AND COMMUNITY LIVELIHOODS

In terms of the logging of natural forests and exporting of sawn timber and illegally felled logs, China continually emerged in interviews as a suggested export destination, likely via Thailand or Vietnam. Unfortunately, there is very little information from the Cambodian side which tracks wood exports to China; and Chinese import data, while higher than Cambodian figures, may also not capture the extent of this trade. Yet, it is likely safe to assume that wood exports to the Chinese market have been accounting for impacts upon local livelihoods and forests in Cambodia for some years.

A nascent plantations sector in Cambodia is now forming through the agricultural land concession system, particularly involving rubber, oil palm and cashew nuts. After many false stops and starts over the past years, a fast growing chip and pulpwood plantation sector also appears to be moving forward in the form of the Pheapimex-Fuchan project and APP's plantations in southern Cambodia through the Green Rich/Elite concession. The Pheapimex project is being initiated in part through the Chinese partners of the company, and APP's chipping operations have been suggested as slated for Hainan. The author believes that if these China-linked projects were to move forward under the current community tenure security and civil/community rights conditions in rural Cambodia, the impacts on forest-dependent communities in the area would likely be extremely severe. Direct and indirect forms of displacement, loss of access to land and resources, a decline in food security and impoverishment could be expected to occur to the communities living in that area.

In considering the overall implications of forestry and plantation development in Cambodia, Castren (1999) writes:

> "[The] conflict between the rights of the local rural population and forest management authority – mainly concession holders – is more striking than in the other Greater Mekong Subregion countries; the local people have no access to the forests they live in or are adjunct to."

More than any other mainland Southeast Asian country other than perhaps Laos, Cambodia's rural poor are extremely dependent upon forests for a wide range of livelihood resources, including forests for fuel, construction, tools, resins, fruits and vegetables and medicine, as well as non-material aspects based on local cultural practices. Until the concession system is disbanded and the situation with respect to local resource tenure is clarified in a way which fully recognizes (and ideally aims at strengthening) common property resource systems, it is very unlikely that continued commercial activities in forestry and plantations will benefit rural communities in Cambodia. As the logging sector continues its decline, there will likely be increasing interest in developing the potentials for plantation forestry. Continued attention and monitoring of developments in the plantation sector in cooperation with locally-based NGOs and research units would be very worthwhile.

The type of chain of custody insights needed for developing a coherent strategy to reform the sector may come from increased attention given to and resources allocated to tracking log, sawnwood, veneer, plywood and chip exports from Cambodia as they enter through border zones into Thailand, Vietnam and Laos, or as they are shipped out of Phnom Penh and Sihanoukville to overseas markets. This approach becomes even more effective when particular end-purchasers of illegally harvested or shipped Cambodian timber can be identified, targeted and sanctioned through policy channels and/or through NGO-media consumer campaigns.

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ANNEX 1: FOREST PLANTATION BY DEPARTMENT OF FORESTRY AND WILDLIFE, BY TREE PLANTING STATIONS, 1985-2002

Year	Tuek Chhar	Mear Nork	Osandan-Chhuk Sor	Srae Khlong	Phnom Kray	Toul Prich	Phnom Athras	Kamchay Mear	Ba Phnom	Romeas Hek	Krosang	Phnom Tamao	Banteay Angkor	Kbal Chhay	Total
1985						68 E + A			52 E + A	100 E + A			53 E		273
1986						55 E + A			108 E + A	100 E + A			54 E + A		317
1987						56 E + A			120 E + A	130 E + A			106 E + A		412
1988					70 E + A	0		90 E + A	120 E + A	130 E + A			50 E + A		370
1989			53 E + A		105 E + A	20 E + A		28	65 E + A	130 E + A			50 E + A		513
1990			29 E + A	31 E + A	30 E + A	0		E + A	0	29 E + A	30 E + A		30 E + A		207
1991			0	0	0	0		0	0	0	0		0		0
1992			42 E + A	80 E + A	50 E + A	80 E + A		80 E + A	0	80 E + A	80 E , A, P		80 E + A		572
1993			20 E + P	40 E + A	10 E + A	40 A + C		80 E + A	0	80 A + P	80 A + P	20 E + A	90 E + A		460
1994			30 E + A	26 E + A	30 A	32 A	19 A	30 A	0	30 A + P	30 A + P	45 E, A, P	30 A		302
1995			40 E + A	0	40 E + A	0	0	50 A	0	40 A	40 A	40 E + A	40 E + A		290
1996			35 E + A	0	45 E	0	0	50 A + DA	0	40 A + H	40 A,DA,H	65 E + A	45 A		320
1997			30 E + A	0	30 A + E	0	0	30 A	0	30 A	30 A	70 A + E	30 E + A		250
1998			0	0	0	0	0	0	0	0	0	0	0		0
1999	20	225 E	0	0	0	0	0	0	0	0	0	19 A	0		264
2000	0	300 E + A	0	0	0	0	0	0	0	75 A	50 A	50 A	75 A		550
2001	0	150 E + A	0	0	0	0	0	0	0	75 A	50 A	0	80 A	200 A	555
2002	0	350 A + E	0	0	0	0	0	20 A	0	25 A	50 A	7 A	100 A	263 A=200 DA+H= 63	815
Total	**20**	**1,025**	**279**	**177**	**410**	**351**	**19**	**458**	**465**	**1,094**	**480**	**316**	**913**	**463**	**6,468**
Re-marks			143.5 ha damaged	All area deforested before 1998 election	235 ha damaged	68 ha and 55 ha damaged in fire in 1985 & 1986			All area deforested before 1993 election			6.5 ha harvest by Hilco in 2002	584 ha harvest by Hilco in 2002		

Source: DFW (2002). Note: A=Acacia; C= Angkanh; DA= Chhou Teal; E= Eucalyptus, H=Koki, P= Trosek, T=Teak - planting densities are also available

ANNEX 2: INFORMATION ON LAND CONCESSIONS AWARDED WITH SIGNED CONTRACTS

Company	Location, Species, Area, Contract Date	Land Conflict Y/N	Comments Relating to Resource Tenure Issues/Conflicts**
Flower Manufacturing Co.	Stung Treng, Teak 7400 ha 11-13-99	Y	"There used to be a conflict from people living in 2 different communes who living surrounded the concession area and demand for interest from the company but now the problem has been solved."
CJ Cambodia Co. Ltd.	Kompong Speu Tapioca 300 ha 11-15-99	Y	"There were anarchy people who grab the land but all problems have been solved."
CJ Cambodia Co. Ltd.	Kompong Speu Tapioca 500 ha 04-20-01	Y	"In the concession area there are a large number of people grabbing the land, disturbing the process of plantation. Now, the company is in the process of trying to solve the problem."
Ly Hourhong Import-Export Development	Battambang Sugarcane/ Tapioca 8,000 ha 06-07-99	Y	"In the concession area the people clear the jungle and occupied land, the local authorities have solved the land and given the title to the people, which creates more difficulties for the company."
Rotana Visal Development Co. Ltd.	Pursat Cashew Nut 3,000 ha 10-15-99	--	"It has not yet identified the boundary of the concession area and as well the statistic"
Cambodia Eversky	Kompong Thom Cotton 10,000 ha 01-03-98	--	"Later on, the company will make a master plan to identify the plantation to the Ministry."
Talam Plantation Holding Sdn. Bhd.	Koh Kong Oil [Palm?] Coconut/Rubber 36,700 ha 10-05-98	Y	"There are 20,707ha of land being conflict with people and with the Environment (National Park) there are approximately 3,000ha …The company requested to the Ministry to solve the land in the conflict area as occupied by an illegal person."
The Green Rich Co. Ltd.	Koh Kong Oil Plantation/ Eucalyptus 60,200ha 11-25-98	--	"Since after company signed contract they have not contact with the Ministry."

Kimsville Corp.	Kompong Speu Tapioca 3,200 ha 10-24-00	Y	"It has been identified and prepared statistic in the concerned land area "A" that is one part of the total land concession. When company running their project in the "A" land area there were a member of an opposition political party incited people about 250 to 300 to complaint and destruction against the company's property. The complaint have been delayed the activities of investment of the company for a period of time and waiting for legal action. Up till now, there is a committee on the resolution of the land conflict is trying to solve the problem with the people. But the committee has not received any fruitful, yet."
Agrostar	Kompong Cham Cashew Nut 2,400 ha 01-09-95	Y	"It has already been completed the record the conflict land area. The conflict land areas are 400ha."
Mong Rethy Investment Cambodia Oil Palm Co. Ltd.	Sihanoukville Palm Oil 11,000 ha 01-09-95	Y	"The company has cultivated on the size of land 4,000ha. The remaining land the company has tried to solve the problem of the land conflict with people by their own way"
Mong Rethy Investment Tapioca Cambodia	Sihanoukville Tapioca 1,800 ha 03-18-00	Y	"The soil has been conflicted with people but the company tries to solve the problem by their own way. Aside from the 7,000 or 8,000h. of land [? 700 or 800?] those are the lands that still having conflict with company…"
Cambodia Haining Group Co. Ltd.	Kompong Speu Castor Oil 32,000 ha 07-23-99	Y	"Company has been identified the boundary one before, but there were disagreement with the record figures of authority at Phnom Srouch district and the record figures of the Working Group. The process has been suspended since then, and leaving the work to the company to solve with the authority of Phnom Srouch and the people…The concession area anarchy people has occupied the land along the road to National Park Kirirom about 5 km. This issue the ministry also help to solve the problem many times, now the ministry has sent all relevant documents to the provincial and municipal committee of land conflict as the second times and up till now the ministry has not received any information."
Development Industrial Ouk Khun	Kompong Speu Cashew Nut 12,506 ha 05-25-01	Y, with military	"The company requested to be suspended for a while since some part of the land still military occupied, waiting up till the company solve the problem with the military…"

Cam Chi International Agriculture Development	Kompong Thom Tapioca 26,500 ha 03-03-00	Y	"There are 5,835h. in the concession is being conflict. Company can able to work on 20,664h. …The ministry has issued letter 5514/640 dated 29 Nov. 2001 to company to prepare a master plan and pay royalty. But, there is no answer from the company."
China Cambodia State Farm International	Koh Kong Agriculture and Animals 7,500 ha DATE?	Y	"There are 7,500h. of land but conflict land areas there are 1,825h. and mountainous land 4,100h. There are only 1,574 ha left…There are many people grabbing the concession land and those people demand company to pay a hectare of land $2,500."
Henan (Cambodia Economic & Trade Development Zone)	Kompong Speu Agriculture and Animals 4,100 ha 07-29-00	Y	"It has identified the boundary but still not yet recorded the land used since the company needs to solve problem with local authority…Now, the land conflict committee and the Ministry of Agriculture being deal with the concerned authority."
Khemlen Import & Export	Kampot Coconut Oil 16,400 ha 10-26-00	Y	"Since after the signed contract, company never consults with the Ministry of Agriculture to identify of boundary and statistic. But, their company has been contacted with local authorities to identify the land concession and the conflict area. People have occupied the result there are 16,050h. of land and 8,220h. have been issued a land certificate. The remaining 7,830h. in under company occupied. Company is waiting to solve some remaining problem that people occupied, illegally. …"
Pheapimex Co. Ltd.	Pursat/ Kompong Chhnang Planted Wood [Eucalyupts] 315,028 ha 01-08-00	Y	"The land has not identified, there were before a company has cooperated with a ministry to identified a boundary of the land concession and prepared a statistic of the land conflict for the first year on the size of land 6,800h. in the district of Krakor, Pursat province. But the work has been delay since there was many people complaint against company and wanted the back to the community. Company requested to delay a deposit because there were a complaint from people and NGOs."
Sohkimex Investment Rubber Plantation	Kompong Cham Rubber Plantation 9,900 ha 05-27-98	Y	"It has been identified the boundary but not yet prepared a statistic of the land conflict. The company is considering whether to continue or cancel a project because there are many people occupied the land and cultivated in the land concession….Now company is being looking for a new site"

Cambo Victor Investing and Development Co. Ltd.	Kompong Speu Agriculture Products 26,550 ha 08-13-01	--	"…The company plans to measure the land concession and prepare a statistic on the concerned land…"
China National Corporation for Overseas Economic Cooperation Laostar Development Co. Ltd.	Kompong Speu Industrial and Agriculture Products 8,000 ha 09-26-00	--	"…the company has not yet identified land for exploitation…there will be a measuring of land boundary and conduct a statistic on concerned land."
Mithapheap Men Sarun and Rama Khmer	Rattanakiri Coconut Oil 20,000 ha 12-21-99	--	"There has not yet identified the land concession boundary and statistic on the concerned land."
T.T.Y.	Kompong Cham Rubber 1,070 ha 05-02-00	--	"Since it has not yet identified land for exploitation the deposit not yet pay…"
Green Sea Industrial Co. Ltd.	Stung Treng Teak 100,852 ha 10-23-01	--	"The company has not yet paid royalty since the land has not been identified yet. Since after signed the contract they have not contact with the Ministry of Agriculture."
Totals	**723,606 ha**		**17 out of 17 concessions which have taken action to demarcate their concession have noted land conflicts**

Source: Ministry of Agriculture, Forestry and Fisheries, Feb. 25, 2003, Reference #849/232; edited by Keith Barney.
***Note: These quotes stem from the above-referenced original government document and reflect the English language used there.*

ANNEX 3: INFORMATION ON LAND CONCESSIONS AWARDED WITHOUT SIGNED CONTRACTS

Company	Location, Area	Land Conflict Y/N	Comments Relating to Resource Tenure Issues/Conflicts**
Hour Hong Investment	Kompong Speu 2,040 ha	--	- Plan is for mixed fruit cultivation and livestock - 460 ha cleared - Company has requested delay in contract signing
Bopha Angkorimech Trong Kong	Kompong Cham 5,000 ha	Y	"Requested the intervention from the Ministry since many people grabbed the land…submit request asking the forestry officials to measure the concerned land before signing the contract."
Tai Seng Import & Export	Rattanakiri 2,000 ha	Y	"Requesting the ministry for intervention the grabbing land…"
Lim Kry Agriculture Development	Takeo 1,050 ha	Y	"Many people and some provincial powerful men are grabbing the land. Now the Ministry of Agriculture has written a letter to the Ministry of Land Management and Urbanization for intervention."
Cambodia Tapioca Enterprise	Kampot 5,100 ha	Y	"…The company has cooperated with the ministry but still there is no result since the district and the commune authorities have given the land title to those illegal people. The meeting requested company to submit the request to Ministry in order to take further action."
M. Consolidated Plantation	Kompong Speu 12,700 ha	--	"The Ministry referred to the Council of Ministers, but up till now there is no respond from the Council of Ministers"
Shing Yu Commercial	Kompong Speu 10,000 ha	--	"There were not able to call for a meeting since there is no address of the company."
China Factgret Cambodia Agricultural Development	Kampot 4,000 ha,	--	"The company were absented in the meeting on June 7, 02 and the ministry has no address of the company."
Ford Thai	Mondulkiri 200 ha	--	"The company were absented in the meeting on June 7, 02, and the ministry has no address of the company."
Un Bonn Trade Agriculture	Kompong Speu 16,600 ha	--	"The company were absented in the meeting on June 7, 02, and the ministry has no address of the company."
Mieng Lyheng Investment	Kompong Cham 3,000 ha	Y	"According to the letter informing No. 1924/231 dated May 8, 02. First the company requested to solve the land dispute and will sign contract afterward. …the company have not participated in the meeting on June 8, 02. Because there is no address available."
Sour Kear Co. Ltd.	Pursat 300 ha	--	"The company were absented in the meeting on June 7, 02 and the ministry has no address of the company."
Sinthai Kampot Co. Ltd.	Kampot 5,700 ha	--	"The company were absented in the meeting on June 7, 02 and the ministry has no address of the company."
Chung Shing Cambodia	Koh Kong 16,000 ha	--	"The company were absented in the meeting on June 7, 02 and the ministry has no address of the company."
Naco Rice	Battambang 2,000 ha	Y	"The company participated in the meeting on June 7, 02 and there is a problem of land grabbing from the people. Now the company occupied 40h. of land…"
Total	**87,640 ha**		**6 out of 6 companies which have taken some kind of action in their areas have land conflicts**

Source: Ministry of Agriculture, Forestry and Fisheries, Feb. 25, 2003, Reference #849/232; edited by Keith Barney.
***Note: These quotes stem from the above-referenced original government document and reflect the English language used there.*