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**MARKET INTELLIGENCE REPORT ON
FORESTRY AND WOOD-BASED INDUSTRY
IN INDONESIA**

AUGUST 2006

PT DATA CONSULT
BUSINESS SURVEYS AND REPORT

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INVESTMENT OUTLOOK IN INDONESIA

The sign of investment recovery already showing

The sign was quite distinct in 2005. The Capital Investment Board (BKPM) reported the realization of foreign investment projects increased by no less than 93.8% by value and 67.1% by number of projects. Domestic investment was no less spectacular which increased by 100.9% by value and 65.9% by number of projects.

Table – 1
Trends of investment realization
2000 – 2005

Year	Domestic Investment		Foreign Investment		GDP	Inflation
	Project	Value (Rp Billion)	Project	Value (\$ Million)	Growth (%)	Rate (%)
2000	308	22,038	638	9,877	4.3	9.4
2001	160	9,891	454	3,509	3.8	12.6
2002	108	12,500	442	3,090	4.4	10.0
2003	119	11,890	570	4,450	4.7	5.1
2004	129	15,265	544	4,601	4.6	8.4
2005	214	30,606	909	8,915	5.6	17.1
2005 Δ%	65.9	100.9	67.1	93.8	-	-

Source: BKPM

This development took place when the GDP grew quite favorable (5.6%) but interestingly it occurred under high inflation pressure (17.1%). Further investigations revealed that the high investment growth rate was enjoyed by the investment in non – oil mining sector which covers coal and metal minerals in line with their highly hiking prices in global market.

The year 2005 was also marked by a very significant increase in the value of foreign investment in non-oil mining approved by BKPM, which was by almost ten times over 2004. This increase was spurred by very highly rising prices of coal and metals in the last two years in the world market, partly due to highly rising demand in China. The value of approved foreign investment projects in transportation and communication also increased very significantly by no less than 150.7%. Construction investment projects performed no less significantly

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by an increase of 84.3%. It is particularly interesting to see agricultural sector was able to attract many foreign investors and the value of their projects increased by 77.2%, which used to be rather neglected in previous years. Palm oil plantation is believed to be the mosy attraction for foreign investors.

Table - 2
Trend of investment project approvals, by value
(US\$ million)

Economic Sector	2000	2001	2002	2003	2004	2005	Δ% 2005
1. Agriculture	536	392	459	179	342	606	77.2
2. Mining	59	120	49	18	68	776	941.2
3. Manufacturing	10,760	5,149	3,258	6,574	6,357	6,028	5.2
4. Electricity, gas and water	1	37	90	363	276	23	-91.6
5. Construction	195	48	282	857	964	1,777	84.3
6. Trade and Tourism	2,259	7,233	1,131	972	624	646	3.5
7. Transportation and Communication	1,163	376	3,713	4,340	1,240	3,107	150.7
8. Financial and housing services	175	178	7	10	340	134	-60.7
9. Public & Community Services	928	1525	805	282	231	233	2.1
TOTAL	16,076	15,058	9,794	13,595	10,442	13,330	27.9

Source: BPS/Investment Coordinating Board (BKPM)

In the first half of 2006, the recovery sign is still showing, although there are some doubts, because Indonesian economy is slowing down in the first half 2006 as indicated by low GDP growth rate and high inflation rate. In this regards, however, BKPM is still optimistic. In its report, BKPM disclosed that realized domestic investment in the first half of 2006 increased by 43.6% in term of value to Rp 11.2 trillion from Rp 7.8 trillion in the same period last year. Comparable figures for foreign investment increased by 6.9% to US\$ 3.62 billion from US\$ 3.29 billion.

Recent interests by foreign companies indicate that Interest in investment continued to simmer. The Malaysia's Khazanah Nasional Bhd has expressed its interest to invest in infrastructure projects including toll road and power plants. Talks had already been held with PT. Jasa Marga, the state owned toll road company.

South Korea's Daeju Construction Engineering disclosed that it will invest US\$ 500 million in a shipyard project in Karimun island in Riau Province.

Daeju is one of seven local and foreign companies that signed investment agreements recently with the government of Riau Island province. The seven companies plan to invest a total US\$ 543.2 million in the islands of Batam, Bintan, and Karimun. Singaporean Tiong Woon Co. Ltd. will invest \$20 million in projects ranging from port management services, logistics, warehousing and shipping services to manufacturing. Five remaining projects will be set up in the area's main island of Batam, with the development of a US\$ 15 million shipyard by Indonesia-Singapore joint venture firm, PT Indo Multi Sarana the largest investor in Batam island.

The signing of joint operation agreement (JOA) in September 2005 was marking the beginning of cooperation between the giant oil company ExxonMobil and the state owned oil-gas company Pertamina to operate Cepu oil-gas field in East Java. This was a very important investment development for Indonesia because of two reasons. At peak production, Cepu would provide Indonesia's government about US\$ 2 million in revenue and add 180,000 barrels oil per day in production and eliminate gas shortage in East Java for petrochemical industries and power plants. More importantly, this occasion is expected to improve foreign investors' confidence to invest in Indonesia.

Foreign investors' confidence in 2006 has been also shown by several other major foreign companies, such as Freeport, Newmont, Inco and Newcrest which continue performing profitable operations and increasing their investment in their mining projects.

Economic outlook in 2006 – 2010

Despite all natural disasters, political as well as economical problems and obstacles faced and experienced in 2005, Indonesian economy was expanding by 5.6% compared to 4,1% in 2004, although in 2005 it was peculiarly hampered by high inflation (17.1%) and high interest (12.7%) rates.

In early 2006, however, economic activity slowed down again as a result of fuel price and interest rate adjustments implemented in the fall of last year in order to restore financial market confidence. After peaking at 18% in October 2005, inflation has moderated as the tight monetary stance has constrained domestic demand growth. High interest rates also triggered significant capital flows in early repayments to the IMF. While Indonesia was initially hard hit by the turmoil in emerging markets in May/June, the rupiah and stock prices have recently recovered a part of their losses.

Real GDP is projected to pick up in the second half of the year and for the entire 2006 the GDP growth will be 5.2 percent. Supported by a gradual reduction in

interest rates and an acceleration in government spending from the very low levels in 2005; the central government's deficit is expected to reduce by 1 percentage point to 1.2 percent of GDP. At the same time, inflation is on track to reach the lower bound of Bank Indonesia's 7-9 percent target range. The current account is expected to remain in surplus in 2006, partly as a result of lower oil imports following the fuel price increase which has resulted in reduced fuel consumption.

In the meantime, there are some short-term downside risks to this generally favorable outlook. Further tightening in global financial markets could prevent the planned easing in domestic interest rates and the government needs to substantially accelerate spending in support of domestic demand. Higher international oil prices could also have an unfavorable impact on the budget, growth and inflation.

In the banking sector, performance has been on a steadily improving trend and private banks appear to have weathered the recent slowdown in growth and rise in interest rates quite well. Banks are on average well capitalized. However, nonperforming loans (NPLs) at the two largest state-owned banks rose substantially in 2005 and governance remains weak. To address weaknesses in the financial system, the government released in July a package of financial sector reforms that will help resolve state banks' NPLs, foster improvements in banking supervision, and facilitate the development of the nonbank financial sector. For the medium term, the government has adopted a comprehensive reform agenda to strengthen public institutions, improve the business climate and boost growth. If implemented, these reforms will remove some of the main obstacles to private investment, and contribute to a more flexible labor market and more efficient public administration, thus contributing to an acceleration in growth.

To reach Indonesia's potential GDP growth rate of 6 – 7% per year in the following years, it is important to implement statement reforms to enhance the investment climate. In this regard, the IMF supports Government's efforts to enhance infrastructures investment, improve tax administration, simplify custom procedures and faster greater labor market flexibility, which are the key components of the strategy to strengthen investor confidence and attract new domestic and foreign investment.

IMF expects oil prices to remain in the \$65-70 dollar per barrel range for the foreseeable future, although with continuing geopolitical tensions, there is a risk of even higher prices. If prices were to rise significantly further, pressures on inflation, the budget, and the balance of payments in Indonesian economy could reemerge, requiring timely policy adjustments. Recent, financial market developments also provide an indication of the kind of impact a tightening in

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global financial market conditions could have. According to IMF, a further significant tightening could put further downward pressure on the rupiah and international reserves, as well as on domestic equity and bond prices. While the risks described above should be manageable with prompt policy action, especially in view of increased foreign exchange reserves, they would inevitably result in a higher inflation rate and lower growth. On the domestic policy side, lack of progress in implementing structural reforms is a key risk to growth over the medium term. IMF forecast of Indonesia's mid term economic development as presented in the following table.

Table – 3
Indonesian Medium – Term Macroeconomic Forecast, 2006 – 2010

Item	Unit	2005 Actual	2006 Estimate	Projection			
				2007	2008	2009	2010
1. Real GDP growth	% p.a.	5.6	5.2	6.0	6.5	6.7	6.7
2. Inflation Rate	% p.a.	17.1	7.0	6.0	5.0	4.0	4.0
3. Domestic Demand	%	4.4	5.3	5.7	7.3	7.6	7.6
a. Private	%	4.0	3.0	4.5	5.8	6.0	6.0
b. Gross Fixed Investment	%	9.9	5.0	8.1	10.8	11.9	11.9
c. Net export	%	(2.2)	(0.5)	1.0	0.8	(0.1)	(0.3)
4. Saving and Investment							
a. Gross investment	% of GDP	22.5	23.2	23.6	24.5	25.7	26.9
b. Gross National Saving	% of GDP	22.9	23.6	34.1	24.4	25.1	25.1
c. Foreign Saving	% of GDP	(0.3)	(0.4)	(0.5)	0.1	0.6	0.8
5. Public Finance (State Budget)							
a. Central Government Revenue	% of GDP	18.1	18.9	18.6	18.0	17.9	18.0
b. Central Government Expenditure	% of GDP	18.5	20.3	19.3	18.9	18.4	18.3
c. Central Government Balance	% of GDP	(0.3)	(1.3)	(0.7)	(0.8)	(0.9)	(0.1)
d. Central Government Debts	% of GDP	46.5	40.1	36.3	33.0	27.4	24.7
6. Balance of Payment							
a. Oil and gas (net)	US\$ Bill	4.0	7.0	6.1	4.6	4.3	5.4
b. Non – Oil Exports (FOB)	US\$ Bill	66.2	73.1	80.4	86.3	93.0	100.4
c. Non – Oil Imports (FOB)	US\$ Bill	(47.9)	(53.1)	(57.4)	(62.7)	(70.0)	(78.6)
d. Current Account Balance	US\$ Bill	0.9	1.6	1.9	(0.6)	(2.7)	(4.3)
e. Direct Foreign Investment	US\$ Bill	1.8	2.1	3.1	6.1	6.7	7.4
f. Overall Balance	US\$ Bill	(0.5)	11.1	4.6	6.1	5.1	6.8

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Table – 3 cont'd

Item	Unit	2005 Actual	2006 Estimate	Projection			
				2007	2008	2009	2010
6. Balance of Payment							
a. Oil and gas (net)	US\$ Bill	4.0	7.0	6.1	4.6	4.3	5.4
b. Non – Oil Exports (FOB)	US\$ Bill	66.2	73.1	80.4	86.3	93.0	100.4
c. Non – Oil Imports (FOB)	US\$ Bill	(47.9)	(53.1)	(57.4)	(62.7)	(70.0)	(78.6)
d. Current Account Balance	US\$ Bill	0.9	1.6	1.9	(0.6)	(2.7)	(4.3)
e. Direct Foreign Investment	US\$ Bill	1.8	2.1	3.1	6.1	6.7	7.4
f. Overall Balance	US\$ Bill	(0.5)	11.1	4.6	6.1	5.1	6.8
7. Gross Reserves							
a. In billion of US Dollars	US\$ Bill	34.7	44.5	47.5	51.9	55.9	61.9
b. In Months of Imports	Month	4.2	5.0	4.9	4.9	4.8	4.9
c. As a percent of short term debt	%	114.0	144.9	149.3	157.9	160.7	175.1
8. Total External							
a. In billion of US-Dollars	US\$ Bill	133.8	140.1	135.0	133.9	132.9	129.5
b. In percent of GDP	%	47.6	38.8	33.7	30.5	27.7	24.5
9. Memorandum Items							
a. Oil Production	000 Bill	999	1,000	1,000	1,000	1,050	1,199
b. Indonesia Oil Price	US\$ Bill	50.8	65.5	68.5	67.0	65.8	64.5
c. Nominal GDP	US\$ Bill	281	361	401	439	480	527

Source: IMF (data from Indonesian Government, BPS and IMF staff)

Investment outlook and Prospect

Unfavorable investment climate has been always branded as main obstacles to expand investment in Indonesia.

The government of Indonesia has realized its shortcomings, and it has set up a draft a package of investment policy improvement since early 2005.

The long awaited investment policy package that was promised to boost investments was announced on 2 March 2006. Presidential Instruction No. 3 of the year 2006 aims to strengthen services provided by investment institutions; synchronize laws and bylaws between the national government and local governments; improve rules and regulations pertaining to tax, customs, manpower, and Small and Medium Scale Enterprises (SMEs) and cooperatives;

as well as ascertain rules and regulations on the environment. The package specifies target dates and clear measures to be taken by government to improve Indonesia's investment climate.

The new policy includes the simplification in processes to establish a new company and to obtain an operating license. This targets a gradual cut in the entire red type, to be considerably shortened from a lengthy 150 days to a mere 30 days. And, in order to achieve this target, the government decided to delegate authority to approve company license to the Provincial office of the Department of Law and Human Rights.

The minister in Finance explained through simplifying customs regulations it is hoped to fast track the creation of a single window service, through modernization efforts.

Which will include increasing the number of companies to be given the green line priority, that will greatly reduce inspection of goods. Other measures include: a) strengthening the role of bonded areas; b) continue the fight against smuggling; and c) further reduce bureaucratic intervention in customs.

In the area of Taxation, measures include:

- a) tax incentives for investments;
- b) implementation of the self-assessments system to be executed more consistently;
- c) revise value-added tax to promote exports;
- d) protect the rights of companies and persons being taxed; and
- e) promote transparency and disclosure.

In the area of Manpower, measures include: a) create an improved industrial climate to support expansion for increased labor opportunities; b) protect and increase placements of workers overseas; c) solve industrial conflicts fast, cheaply and fairly; d) accelerate the process in the issue of permits for labor; f) create breakthroughs in the development of transmigration projects, aimed to increase and expand opportunities for labor.

In the area of Small and Medium Enterprises and Cooperatives, the government will further empower and increase the units of small and Medium Enterprises and Cooperatives.

The new policy package has been well responded by business community. Foreign investors, however, are still waiting for the issuance of new investment law.

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Under improved investment climate after the implementation of the new policy, investment is expected to grow faster. The Chairman of the Investment Board

forecasts an investment growth of 15.2% in 2006, higher than the initial estimate of 8%. Japanese Manufacturing Companies made a forecast that the best investment in Indonesia at present would be in automotive and chemical industries.

Data Consult's mining industry surveys conclude that in 2006, foreign investors are more optimistic to invest in metal mining industries as disclosed by Freeport, Newmont, Inco and Newcrest, as their operation have been profitable and they have been able to overcome protests and criticisms from different parties.

Infrastructure projects started attracting foreign investors, such as in Cileunyi - Sumedang and Sadang Dawuan toll road projects, in a number of gas pipeline projects. Dubai Islamic Bank is interested in a number of various development projects, including the Jakarta Monorail project.

Huge investment will be realized geotherplant in North after the signing of ExxonMobil – Pertamina cooperation in exploiting Cepu oil and gas fields is expected to boost investment in oil and gas exploration and exploitation after the slump development in the last 5 years.

Last but not least, huge investment of around US\$ 600 million will be installed to build a huge Sarulla geothermal power plant by a consortium led by Medco Energy International in North Sumatra. There are more investment to be made to build other geothermal power plants, including Darajat III and Lahendong.

Improvement of investment climate is the key to favorable investment development. Therefore it is essential for the Government to stick to its investment policy package.

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INDUSTRY PROFILE

FORESTRY AND WOOD-BASED INDUSTRY IN INDONESIA

INTRODUCTION

Indonesia's forestry industry has been badly hit by the protracted crisis since 1997/1998 that the country has lost its role as a major player in timber trade in the world.

Many large forestry companies have been beset by heavy debt burden worsened by growing scarcity of raw material from forests destroyed mainly by rampant illegal logging. A large part of trees illegally cut is smuggled abroad. Extensive destruction of the forests has resulted in sharp decline in forest productivity.

In addition, the country's products of processed timber are less competitive as most of the factories are no longer efficient.

As a result many companies operating in the forestry sector have stopped or nearly stopped operation. Many concessionaire have failed to repay their debt in reforestation fund resulting in the revocation of their business licenses. And plywood companies laid off many workers as they could not continue normal operation with scarcity in raw material supply.

The government, concerned with the condition seeks to encourage development of plantation forests (HTI) to reduce the pressure on natural forests. However, many HTI projects could not be carried out because of financial difficulty.

The prospects, however, are still good for forestry industry. Many units of HTI are expected to start producing logs in the coming several years. HTI is expected to be the main source of log raw material.

Meanwhile the country still has large natural forests. They are still highly potential provided that they well managed to be sustainable.

There are various factors hampering expansion of plantation forests such as protests over losses of various living matters, forest fires, degradation of forest quality and financial difficulty. However, development of HTI is the only viable concept to restore the condition of the country's forestry industry.

In this report, we try to study various related aspects of the forestry industry to identify problems and see any opportunities as well as risk of venture in forestry industry.

FOREST CONCESSIONS (HPH)

Forest management in Indonesia

Earlier especially at the start of the Suharto regime in the 1970s, the forestry sector was a major contributor to the country's economic development, and forest concession (HPH) was a dominant system of exploiting natural forests.

HPH system was first introduced in 1967 under the Forestry Law issued that year. HPH holders were required to preserve the forests by observing a number of regulations such as on method of selective cutting, method of using forests (TGHK) and provincial area layout plan (RTRWP).

Sumatra and Kalimantan were the main targets of exploitation as the two islands have large forests with valuable tree species. Many large companies were licensed to exploit forests under 20-year contract. In the 1970's logs became a major export earner contributing substantially to economic development.

However, only a few, which held the HPH license, enjoyed the natural wealth from the Sumatra and Kalimantan forests.

Poor management system marked by arbitrary felling of trees and corruption involving the HPH holders resulted in extensive damage to the tropical forests especially in the middle of the 1980s'.

HPH Companies

In less than 15 years, there was a sharp decline in the size of the country's forests. Illegal logging was rampant especially during and after the economic crisis that followed the monetary crisis in 1997/1998. Illegal logging was out of control amid the political instability that followed the crisis.

Politicians in Jakarta were too busy consolidating themselves to pay attention to handling illegal logging. As a result many HPH companies could not continue operation. In 2005 only 257 units including integrated ones of 594 HPH companies remained active. The other 337 companies were no longer in operation.

The number of active HPH companies declined so was in the width of forest concession. In 2001, there were 375 HPH companies with 46.2 million hectares of forest concession. In 2003, the number dropped to 267 companies with 27.8 million hectares of concession. In 2005, there only 257 active HPH with 24.8 million hectares of concession.

Industry Profile

East Kalimantan has the largest number of HPH companies with 53 units followed by Papua with 48 companies, and Central Kalimantan 43 companies. Papua, however, leads in width of HPH area totaling 8.1 million hectares, followed by East Kalimantan's 5.2 million hectares and Central Kalimantan's 3 million hectares.

Table - 1
Development of HPH companies

No	Province	2001		2003		2005	
		Unit	Width (ha)	Unit	Width (ha)	Unit	Width (ha)
1	Aceh (NAD)	12	900,544	8	524,644	7	435,784
2	North Sumatra	9	608,281	4	196,200	4	196,200
3	Jambi	13	792,594	8	545,559	8	762,810
4	Riau	25	1,628,594	15	889,992	14	849,805
5	West Sumatra	6	333,256	5	299,556	5	420,580
6	South Sumatra	6	819,650	2	190,000	2	213,000
7	Bengkulu	2	90,375				
8	West Kalimantan	26	1,993,139	18	1,125,400	18	1,911,800
9	South Kalimantan	5	602,670	4	302,931	4	265,190
10	Central Kalimantan	63	5,203,256	44	3,444,215	43	3,017,950
11	East Kalimantan	74	8,168,217	61	5,891,306	57	5,210,503
12	Maluku*)	28	2,257,942	23	1,816,710	22	1,654,980
13	Papua	50	10,751,613	49	10,646,613	48	8,062,255
14	South Sulawesi	6	338,602	5	287,802	5	287,802
15	Central Sulawesi	14	1,011,445	11	844,835	10	771,579
16	Southeast Sulawesi	2	416,000	2	416,000	2	392,000
17	North Sulawesi	9	470,384	3	148,650	7	298,600
18	Gorontalo			4	195,500		
19	West Nusa Tenggara	1	31,550	1	31,550	1	31,550
	TOTAL	351	36,418,112	267	27,797,463	257	24,782,388

Source: Data Consult, Forestry ministry

There are two categories of HPH namely one integrated with timber processing industry such as plywood factories and sawn timber factories; and one not integrated with timber processing industry. Among the 257 HPH companies only 68 having integrated HPH units with 7.02 million hectares of concession. Most or 189 companies operate non integrated units totaling 17.76 million hectares.

Part of the integrated units are integrated with plywood factories, block board factories and particle board factories and the rest with sawn timber, wood working and moulding factories.

Industry Profile

Table - 2
Number of active integrated and non integrated units
of HPH by provinces

No.	Provinces	HPH non-integrated		HPH integrated		Total active units of HPH	
		Unit	Width (ha)	Unit	Width (ha)	Unit	Width (ha)
1	Aceh	3	252,500	4	183,284	7	435,784
2	North Sumatra	3	137,610	1	58,590	4	196,200
3	Jambi	6	535,810	2	227,000	8	762,810
4	Riau	12	762,785	2	87,020	14	849,805
5	West Sumatra	3	211,980	2	208,600	5	420,580
6	South Sumatra	1	79,000	1	134,000	2	213,000
7	West Kalimantan	13	1,271,500	5	640,300	18	1,911,800
8	South Kalimantan	1	80,000	3	185,190	4	265,190
9	Central Kalimantan	36	2,357,323	7	660,627	43	3,017,950
10	East Kalimantan	43	4,001,278	14	1,209,225	57	5,210,503
11	Maluku	16	983,585	6	671,395	22	1,654,980
12	Papua	33	5,643,040	15	2,419,215	48	8,062,255
13	South Sulawesi	1	35,162	4	252,640	5	287,802
14	Central Sulawesi	10	771,579			10	771,579
15	Southeast Sulawesi	2	392,000			2	392,000
16	North Sulawesi	6	248,100	1	50,500	7	298,600
17	West Nusa Tenggara			1	31,550	1	31,550
	Total	189	17,763,252	68	7,019,136	257	24,782,388

Source: Forestry Ministry, Data Consult

HPH holders and width of areas

The following table shows holders of integrated and non integrated units of HPH. Among the holders of non-integrated units of HPH, 50 largest companies control 55.6% of the total areas of non-integrated HPH

Table - 3
List of holders of integrated and non-integrated HPH, 2005

50 largest holders of non-integrated units of HPH- 2005			
No.	Name of company	Province	Width of HPH (ha)
1	Anuraga	West Kalimantan	691,700
2	Membramo Alaa Mandiri,PT	Papua	691,700
3	I T C I,PT	East Kalimantan	470,200

Industry Profile

Table – 3 cont'd

50 largest holders of non-integrated units of HPH- 2005			
No.	Name of company	Province	Width of HPH (ha)
4	Hanurata Coy Ltd (Sorong)	Papua	417,570
5	Essam Timber	East Kalimantan	355,000
6	Intisixta,PT	Southeast Sulawesi	296,000
7	Rimba Megahlestari	Papua	250,000
8	Teluk Bintuni Mina Agro Karya	Papua	239,000
9	ITCI Kayan Hutani (IKANI),PT	East Kalimantan	218,375
10	Daya Sakti Krida Unggul	Central Kalimantan	212,000
11	Wana Galang Utama	Papua	212,000
12	Jati Dharma Indah,PT	Papua	207,410
13	Diadyani Timber	Papua	206,000
14	Wanatirta Ediwibowo,PT	Papua	206,000
15	Belayan River Timber	East Kalimantan	204,000
16	Dalek Hutani Esa (Eks PT. Dalek Esa Raya), PT	Jambi	200,000
17	Mugitriman Internasional,PT	East Kalimantan	200,000
18	Prasarana Marga,PT	Papua	200,000
19	Tunas Sawaerma	Papua	200,000
20	Bangun Kayu Irian	Papua	191,000
21	Hanurata Coy LTD (jayapura)	Papua	188,500
22	Kamundan Raya,PT	Papua	187,800
23	Yotefa Sarana Mandiri,PT	Papua	182,000
24	Digul Daya Sakti	Papua	178,800
25	Irma Sulindo,PT	Papua	174,540
26	Kayu Perkasa Bumi Makmur	Papua	171,100
27	Damai Setia Tama Timber	Papua	160,000
28	E.KAL. Utama (WAPOGA II),PT	Papua	155,000
29	Mangole Unit VI/PT. Phonik Harapan Tbr,PT	Papua	150,000
30	Wukira Sari Bhakti	Papua	150,000
31	Gema Hutani Lestari (d/h PT. Gema Sanubari),PT	Maluku	148,450
32	Nusantara Plywood IV	Central Kalimantan	140,000
33	Multi Wahana Wijaya	Papua	139,000
34	Bina Daya Tetra	Central Kalimantan	134,000
35	Siberida Wana Sejahtera	Riau	132,500
36	Telagamas Kalimantan,PT	East Kalimantan	124,675
37	Porodisa Trading & Industrial Company Ltd	East Kalimantan	122,524
38	Balantak Rimba Rejeki,PT	Central Sulawesi	122,524
39	Krueng Sakti,PT	Aceh	115,000
40	Akhates Plywood	Central Kalimantan	112,000
41	A.O.I. UNIT IV,PT	PAPUA	110,700
42	Giri Ekawana,PT	East Kalimantan	110,000
43	Maruwai Timber (Barito Pacific Timber IV)	Central Kalimantan	105,000

Industry Profile

Table – 3 cont'd

No.	Name of company	Province	Width of HPH (ha)
44	Sumalindo Lestari Jaya V (Eks PT. Madyakara Pacific),PT	East Kalimantan	100,000
45	Sumalindo Lestari Jaya V,PT	East Kalimantan	100,000
46	Darmali Mahkota Tbr	PAPUA	100,000
47	Wahana Sari Sakti,PT	Central Sulawesi	100,000
48	Tunggal Pemenang	Central Kalimantan	99,800
49	Roda Mas Timber Kalimantan Coy	East Kalimantan	99,520
50	Karda Trades,PT	Central Kalimantan	98,400
	Sub Total (50 companies)		9,879,788
	Others (139 companies)		7,883,464
	Total (189 companies)		17,763,252
 Holders of integrated units of HPH 2005			
No.	Name of company	Province	Width of HPH
1	Wapoga Mutiara Industries (Wapoga III),PT	PAPUA	407,350
2	Intimpura Timber	PAPUA	333,000
3	Prabu Alaska	PAPUA	319,600
4	Duta Rendra Mulia Sejahtera	East Kalimantan	215,000
5	Rimba Kayu Arthamas	PAPUA	204,000
6	Benua Indah	West Kalimantan	197,000
7	Risana Indah Forest Industries	PAPUA	197,000
8	Prima Maluku Timber	MALUKU	191,000
9	Erna Djuliawati	Central Kalimantan	184,206
10	Wapoga Mutiara Timber I	PAPUA	178,800
11	Suka Jaya Makmur	West Kalimantan	171,300
12	Tunggal Agatis Indah Wood Industries	MALUKU	160,000
13	Agoda Rimba Irian	PAPUA	155,000
14	Andalas Merapi Timber	West Sumatra	150,000
15	Asia Log	JAMBI	140,000
16	SBA Wood Industries	South Sumatra	134,000
17	Kartika Kapuas Sari	West Kalimantan	131,000
18	Indowana Arga Timber	East Kalimantan	127,000
19	Limbang Ganeca	East Kalimantan	123,200
20	Hasrat Wiramandiri	PAPUA	119,700
21	Rante Mario	South Sulawesi	114,000
22	Susukan Agung	East Kalimantan	107,200
23	Mangole Timber Producers/Mangole Timber II	MALUKU	101,800
24	Budhi Nyata	PAPUA	100,000
25	Hutan Domas Raya	Central Kalimantan	99,870
26	Kodeco Timber	South Kalimantan	99,570
27	Inhutani II	East Kalimantan	99,100
28	Tri Tunggal Eboni Corporation	Central Kalimantan	98,000

Industry Profile

Table – 3 cont'd

No.	Name of company	Province	Width of HPH (ha)
29	Gunung Meranti	Central Kalimantan	95,265
30	Budhi Nyata	MALUKU	89,595
31	Rimba Karya Indah	JAMBI	87,000
32	Batasan	PAPUA	87,000
33	Segara Timber Co Ltd	East Kalimantan	85,725
34	Arfak Indra	PAPUA	83,330
35	Gunung Gajah Abadi	East Kalimantan	81,000
36	Jati Subur Raya	MALUKU	81,000
37	Aceh Inti Timber Company Ltd, PT	ACEH	80,804
38	Bintuni Utama Murni Wood Industries	PAPUA	76,925
39	Kurnia Kapuas Plywood Industrial Co. Ltd	West Kalimantan	75,000
40	Kayu Tribuana Rama	Cental Kalimantan	73,017
41	Kedungmadu Tropical Wood	East Kalimantan	71,000
42	Sari Bumi Kusuma	West Kalimantan	66,000
43	Wana Rimba Kencana	East Kalimantan	65,000
44	Dharma Mukti Persada	PAPUA	65,000
45	Austral Byna	Cental Kalimantan	63,440
46	Duta Maju Timber	West Sumatra	58,600
47	Keang Nam Dev. Co. Ltd	Nort Sumatra	58,590
48	Jaya Timber Trading & Industrial Co. Ltd	East Kalimantan	53,200
49	Alas Aceh Perkasa	ACEH	52,040
50	Inimex Intra	North Sulawesi	50,500
51	Aya Yayang Indonesia	South Kalimantan	49,500
52	Dharma Satya Nusantara	East Kalimantan	49,000
53	Inhutani I	South Sulawesi	48,640
54	Nanjak Makmur	RIAU	48,370
55	Hasil Bumi Indonesia	MALUKU	48,000
56	Bade Makmur Orissa	PAPUA	47,915
57	Meranti Mustika	Cental Kalimantan	46,829
58	Meranti Sakti Indonesia Plywood (Meranti Sakti Indonesia II)	East Kalimantan	46,200
59	Panca Usaha Palopo Plywood	South Sulawesi	46,000
60	Artika Optima Inti Unit II	PAPUA	44,595
61	Lamuri Timber	ACEH	44,400
62	Suwaran Jaya Kusuma	East Kalimantan	44,000
63	Sampaga Utama Sakti	South Sulawesi	44,000
64	Balikipapan Forest Industries Ltd	East Kalimantan	42,600
65	Siak Raya Timber	RIAU	38,650
66	Sumpol Timber	South Kalimantan	36,120
67	Veneer Product Indonesia	West Nusa Tenggara	31,550
68	Wiralanao Ltd	ACEH	6,040

Source: Forestry Ministry, Data Consult

Industry Profile

Slashing of HPH licenses

The government has started reducing the number of HPH holders and their HPH areas since 2000. Production forests have been reduced in width that the number of trees ready for harvest has also declined. The government, therefore, decided to gradually reduced the number of HPH units and areas given to a company group.

In 2005 and 2006 the government launched anti illegal logging operations twice respectively called conservation forest operations I and II (OHL I & OHL II) The government also adopted firmer measure against failure to observe forestry regulations such as in the payment of reforestation funds. Those having arrears are strongly warned and failure to heed the warning could face their licenses revoked.

Among large company groups having their HPH units reduced include the Barito Pacific Group, Kalimantan Group and Kayu Lapis Group. The number of HPH units of the Barito Pacific group, was reduced from 29 with concessions totaling 3.02 million hectares to 18 with areas totaling 1.61 million hectares.

Table - 4
Slashing of HPH number and width
HPH areas of large company groups slashed until 2005

No	Name of Group	License 2001		Reduction		HPH area remaining by 2005	
		Number of HPH	Total (000 ha)	Number of HPH	Total (000 ha)	Number of HPH	Total (000 ha)
1	Barito Pacific	29	3,017	11	1,405	18	1,612
2	Kayu Lapis Indonesia	18	2,733	10	1,295	8	1,438
3	Korindo	4	1,181	0	-	4	1,181
4	Budhi Nusa	7	1,138	0	-	7	1,138
5	Prabu	4	1,086	0	-	4	1,086
6	Wapoga	3	1,031	0	-	3	1,031
7	Kalimanis	9	1,866	4	957	5	909
8	Alas Kusuma	13	1,543	1	782	12	761
9	Hanurata	3	758	0	-	3	758
10	Bumi Raya Utama	2	234	1	168	1	750

Industry Profile

Table – 4 cont'd

No	Name of Group	License 2001		Reduction		HPH area remaining by 2005	
		Number of HPH	Total (000 ha)	Number of HPH	Total (000 ha)	Number of HPH	Total (000 ha)
11	Sumalindo	8	870	2	175	6	696
12	Kalamur	3	504	0	104	3	400
13	Djajanti	9	1,112	6	731	3	381
14	Daya Sakti	6	876	3	568	3	318
15	Mujur Timber	7	441	2	142	5	299
16	Bina Samakhta	4	379	2	135	2	244
17	Benua Indah	5	563	2	323	3	240
18	Tanjung Johor	2	292	1	60	3	232
19	Hutan Raya	5	528	2	328	3	200
20	Raja Garuda Mas	4	389	2	200	3	189
	Total	145	20,538	49	7,371	99	13,861

Source: Forestry Ministry, Data Consult

HPH in Papua

As forests have dwindled in size in Sumatra and Kalimantan forestry companies move to Papua. Among large companies having HPH units in Papua include Barito Pacific Group, Djajanti and Alas Kesuma.

Barito Pacific Group

This company is owned by tycoon Prayogo Pangestu. The company's daily operation is run by, Prayogo's son Agus Salim Pangestu. The group's logging subsidiaries in West Papua are :

- PT Mangole Timber Unit VI having 150,000 hectares of HPH
- PT Barito Cendrawasih having 228,000 hectares of HPH

Djajanti Group

This company group is owned by tycoon Burhan Uray alias Wong Ming Kiong alias Bong Sung On alias Swan An Bong/Sun On Bong/Sun On Hwang etc.. The group has logging concession under subsidiaries including PT Artika Optima Inti,

Industry Profile

PT Sagindo Sari Lestari, PT Budi Nyata (owned by Soejono Varinata, son of Burhan Uray), etc..

Table - 5
Logging subsidiaries of the Djajanti Group in Papua

Name of HPH Holder	Area (ha)
Artika Optima Inti Unit II	170,000 ha
Artika Optima Inti Nusantara III	106,000 ha
Artika Optima Inti Nusantara Unit I *)	435,000 ha
Sagindo Sari Lestari	960,000 ha
Artika Optima Inti Nusantara Unit VI (previously PT Perdana Waropen)	150,000 ha
Budi Nyata	300,000 ha
Kamundan Raya	187,300 ha
Teluk Bintuni Mina Agro Karya	239,000 ha
Agoda Rimba Irian	155,000 ha

Notes: *) Cancelled in October 2004

Source: Forestry Ministry, Data Consult

Wapoga Group

The Malaysian-based company is controlled by Tan Eng Kwee and Fredy Tang. PT Wapoga Mutiara Timber has three timber concessions covering approximately 800,000 hectares located at the Gulf of Cendrawasih, Manokwari and at Jayapura, all of which are located in Papua (formerly known as Irian Jaya). PT Wapoga Mutiara Industries has an integrated timber complex based in Biak, which operates downstream industry producing plywood, block-board, film face, sawn timber moulding products.

- PT Wapoga II = 155,000 ha
- PT Wapoga Mutiara Timber = 407,350 ha
- PT Wapoga Mutiara Timber Unit I = 178,300 ha

Korindo Group

Korindo is the fourth largest forestry company group in Indonesia, owned by South Korean In Young Sun. The group has two logging companies with concessions in West Papua as follows:

- PT Tunas Sawa Erma 244,850 ha, acquired in February 1993.
- PT Bade Makmur Orissa 462,600 ha, acquired in March 1993.

Industry Profile

Alas Kusuma Group

The group is owned by PO Suwandi and Ibnu Hartomo, brother of deceased wife of former President Soeharto. Prabu Alaska is an affiliate of the Alas Kusuma. Group PT Prabu Alaska has HPH totaling 319,600 ha.

Hanurata Group:

Linked to Soeharto family and Indonesian military.
- PT Hanurata Coy Ltd 188,000 ha

PLANTATION FOREST (Hutan Tanaman Industri = (HTI)

In the middle of the 1980s' the government launched an ambitious program to build plantation forests (HTI) in a bid to preserve natural forests. HTI units were built especially in Sumatra and Kalimantan. The program is aimed at reducing dependence on natural forest for wood raw material needed by timber processing industry.

HTI units were built on denuded forest lands. HTI companies were offered subsidy by the government with interest free loan from Reforestation Fund, which was collected from HPH as fee to finance reforestation.

HTI concession was mainly to grow trees for pulp and wood works industries. HTI could be built in cooperation with HPH companies or independently. There were also HTI units called HTI-Trans built in transmigration areas built by migrant families. In Sumatra there were many transmigration centers with migrant families from Java and Bali. HTI-Trans grew mainly trees for woodwork industry.

Forest destruction rate, however, was faster than HTI development. In addition, the program came too late after large parts of forests had been destroyed. As many timber processing factories, which relied on logs from legal sources, could not continue operation for shortage of the raw material.

HTI Development

Until April 2006, the government issued licenses for 248 units of HTI covering a total area of 10 million hectares including 5,963 hectares for pulp HTI and 3,741 hectares for non pulp HTI.

Until the end of 2005, there were 229 licensed HTI companies but only 209 of them were operational covering a total area of 8.04 million hectares. The other 20 companies were no longer active for financial problem.

Industry Profile

Table - 6
Number of Plantation forest HTI companies in operation
by provinces, 2005

No.	Provinces	Number of companies	Area (ha)
1	Aceh	3	20,500
2	Jambi	15	742,980
3	West Kalimantan	20	1,155,949
4	South Kalimantan	18	320,775
5	Central Kalimantan	24	587,855
6	East Kalimantan	36	1,057,873
7	Lampung	6	131,467
8	Maluku	7	78,306
9	West Nusa Tenggara	1	48,000
10	East Nusa Tenggara	1	6,880
11	Papua	10	1,560,000
12	Riau	31	800,459
13	South Sulawesi	5	76,883
14	Central Sulawesi	4	69,260
15	Southeast Sulawesi	4	94,945
16	West Sumatra	4	66,420
17	South Sumatra	9	481,806
18	North Sumatra	11	738,331
	Total	209	8,038,689

Source: Forestry Ministry, Data Consult

Development of HTI in concession areas, however, was too slow. Until 2005, the government issued licenses for HTI covering 8.04 million hectares but development in the past 10 years totaled only 3.41 million. Every year, only 100,000 – 200,000 hectares of HTI were built by the HTI licensees.

After the monetary crisis, development of HTI units declined sharply. In 1997, development covered 300,000 hectares, but the completion shrank to only 100,000 hectares in the following year and in 2001 it was only 67,000 hectares.

Industry Profile

Table - 7
Plantation forest (HTI) development,
1989 - 2005

Year	HTI - Pulp PP (ha)	Woodwork (CWP) (ha)	LSS (ha)	Other	Self manage ment	Total HTI
1989	29,160	102,495	0	0	0	131,655
1990	65,661	104,213	0	0	0	169,874
1991	104,222	109,769	0	0	0	213,991
1992	83,962	150,891	0	0	0	234,853
1993	113,066	188,646	71,895	0	0	373,607
1994	117,940	100,873	77,973	0	0	296,786
1995	162,200	103,000	61,248	0	0	326,448
1996	172,320	123,897	94,324	0	0	390,541
1997	100,883	77,184	88,542	0	2,500	269,109
1998	82,604	52,366	45,536	0	2,072	182,578
1999	85,744	51,749	*)	0	1,169	138,662
2000	58,152	21,597	*)	0	2,569	82,318
2001	56,299	10,673	0	0	500	67,472
2002	87,614	13,873	0	1,121	15,900	118,508
2003	100,497	18,755	0	1,456	3,983	124,691
2004	112,714	19,200	0	0	0	131,914
2005	142,598	20,527	0	0	0	163,125
Total	1,675,636	1,269,708	439,518	2,577	28,693	3,416,132

PP = Pulp Plantation

CWP = Construction Wood Plantation

LSS = Local Specific Species

Source: Forestry Ministry,
Data Consult

Government wants to speed up development of 5 million hectares of HTI

Most HTI projects are joint ventures between state forestry company PT INHUTANI I-V and private companies. Out of 4.26 million hectares of HTI areas to be built 3.26 million hectares are under PT Inhutani and its joint venture partners. Most of forest areas managed by PT Inhutani are formerly HPH areas left idle by HPH companies or left by HPH companies not having their license renewed.

Inhutani later formed joint ventures with private investors to develop the forest areas.

Industry Profile

Table - 8
50 HTI companies with largest concessions

No.	Name of company	Province	Width Concession
1	Permata Wanatimur Lestari	PAPUA	300,000
2	Wanakerta Eka Lestari,PT	PAPUA	300,000
3	Finnantara Intiga	West Kalimantan.	299,700
4	Eucaliptus Tanaman Lestari,PT	PAPUA	298,900
5	Musi Hutan Persada	South Sumatra	296,400
6	Inti Indorayon Utama Tbk/Toba Pulp Lestari	North Sumatra	269,060
7	Sumatera Sinar Plywood Ind.,PT	North Sumatra	250,000
8	Inhutani V (2),PT	JAMBI	243,620
9	Maharani Rayon Jaya,PT	PAPUA	206,800
10	Okaba Rimba Makmur,PT	PAPUA	206,800
11	Wira Karya Sakti,PT	JAMBI	191,130
12	Tanjung Redep Hutani	East Kalimantan	180,330
13	Kertas Basuki Rahmat,PT	West Kalimantan	173,938
14	ITCI Hutani Manunggal	East Kalimantan	161,127
15	Riau Andalan Pulp & Paper	RIAU	159,500
16	Inhutani III (Nanga Pinoh), PT	West Kalimantan	119,080
17	Nityasa Idola,PT	West Kalimantan	113,196
18	Inhutani III (Sanggau), PT	West Kalimantan	101,800
19	Korintiga Hutani, PT	Central Kalimantan	92,150
20	Satria Perkasa Agung	RIAU	76,017
21	Simalungun Karet Lestari, PT	North Sumatra	74,899
22	Ceria Karya Pranawa, PT	Central Kalimantan	74,730
23	Mayangkara Tanaman Industry	West Kalimantan	73,160
24	Sinar WEST KALIMANTAN. Raya	West Kalimantan	72,315
25	Sumalindo Lestari Jaya (eks Birawa dan E.KAL.ur),PT	East Kalimantan	70,300
26	KOPSIMER	East Kalimantan	70,000
27	Fajar SuryaSwasembada,PT	East Kalimantan	66,659
28	Inhutani V (Eks. HPH PT. Loka Rahayu & PT. Sadarnita	JAMBI	65,925
29	Inhutani III (Muaratewah),PT	Central Kalimantan	65,000
30	Daya Tani Kalbar.	West Kalimantan	56,060

Industry Profile

Table – 8 cont'd

No.	Name of company	Province	Width Concession
31	Inhutani-V (Way Rebang - Muara Dua), PT	LAMPUNG	55,157
32	Perawang Sukses Perkasa Industri	RIAU	50,725
33	Inhutani-I (Longnah),PT	East Kalimantan	50,295
34	Inhutani II (Semaras),PT	South Kalimantan	50,000
35	Source Mitra Jaya,PT	Central Kalimantan	49,800
36	Inhutani V (1),PT	JAMBI	49,500
37	Darnmore Bayu Permai,PT	PAPUA	49,500
38	Kalimantan Hampanan Sawit,PT	PAPUA	49,500
39	Mitra Jaya Agro Palm,PT	PAPUA	49,500
40	Source Mitra Jaya,PT	PAPUA	49,500
41	Sungai Rangit,PT	PAPUA	49,500
42	Fendi Hutani Lestari	West Nusa Tenggara	48,000
43	Mentarmulti Sarana Abadi,PT	Central Kalimantan	47,280
44	Rimba Abadi Inti Jaya,PT	Central Kalimantan	46,500
45	Mapala Rabda/KTH Tuah Sekato	RIAU	46,330
46	Riau Timas,PT	East Kalimantan	45,000
47	Guhara Cellulosa,PT	North Sulawesi	45,000
48	Pakerin	South Sumatera	43,700
49	Sumatera Sylva Lestari,PT	North Sumatera	42,530
50	Dharma Hutani Lestari	LAMPUNG	41,210

Source: Forestry ministry, Data Consult

PT. Barito Pasific Timber Tbk.

PT Barito Pasific Timber Tbk has submitted applications for license to build HTI in Samarinda or Banjarmasin, but the answer is not forthcoming. The HTI project is expected to support its wood working industry to be expanded in Kalimantan. The location is selected on the river side areas of Mahakam and Barito rivers as the rivers will facilitate transport to HTI and factories.

Sinar Mas Forestry to build 1 million hectares of HTI

Sinar Mas Forestry (SMF) will build 1 million hectares of HTI until 2009 to guarantee feedstock for its pulp factories. Currently SMF has only 600,000 hectares land for HTI in five provinces - Jambi, Riau, West Kalimantan and East Kalimantan.

In its early phase, the group will build 100,000 hectares in South Sumatra. It will set aside US\$ 1,200 in fund to finance every hectare of the project.

Industry Profile

A director of Sinar Mas Forestry, Soebardjo said if SMF has 1 million hectares of HTI it will be self sufficient in raw material for its pulp industry. Currently the 612,000 hectares of HTI to be built in five provinces will be enough only to supply 50% of raw material needed by its pulp factories.

Sumalindo to rely more on HTI for raw material

PT Sumalindo Lestari Jaya Tbk is set to reduce dependence on natural forests for raw material and rely more on this.

Currently, PT Sumalindo Lestari Jaya Tbk (SLJ) has ecolabel certificate from Smart Wood, the Indonesian ecolabel agency (LEI), WWF – Indonesia, for its timber products. Company deputy director David said HTI trees grow much faster than natural forest trees. HTI production, therefore, is much higher.

PT SLJ has been able to produce logs from HTI having the same diameters with trees from natural forests in shorter time.

LOG PRODUCTION

Log Production fluctuated

There have been fears over the past several years that the country's natural forests would no longer be able to feed its timber processing industry. Log supplies have become scarce after the country's forestry industry especially plywood industry was developed in 1981.

Previously logs for plywood were supplied from forest concessions (HPH) owned by forestry industrialists. However, since early the 1990s many plywood factories could no longer rely on their HPH for logs. They have to buy logs from other places or island. Plywood factories in Sumatra, for example, have to buy logs from Kalimantan, but log supplies in Kalimantan have also been dwindling fast.

Until 1997 when the crisis began to hit the country, the country's log production was relatively high averaging 29 million cu.m a year, but after that year the production dropped to 19 million cu.m and then to 8 million cu.m at present.

The condition was worsened by rampant illegal logging especially after the monetary crisis. The lifting of log export ban on recommendation of the IMF, which was invited by the government to find the panacea for the crisis, contributed to rampant illegal logging. Indonesia has openly accused Malaysia and China of accepting illegally cut trees or smuggled logs from the country.

Industry Profile

It is estimated that more than 7 million cu.m of logs were smuggled out of the country every year resulting in rapid rate of destruction of its rain forests. Based on data at the Forestry Ministry, around 7 million-8 million cu.m of trees were illegally cut . Part of the illegally cut trees are sold to local timber processing factories and the rest are and smuggled out of the country every year.

Tabel - 9
Log production Development, 1993 - 2005

Year	Log (cu.m)	Growth (%)
1993	26,848,011	
1994	24,027,277	-11
1995	24,850,061	3
1996	26,069,282	5
1997	29,520,322	13
1998	19,026,944	-36
1999	20,619,942	8
2000	13,798,240	-33
2001	10,051,480	-27
2002	8,659,968	-14
2003*)	11,423,501	32
2004*)	13,548,938	19
2005**)	24,192,173	79

Note: *) revised figures; **) provisional figure

Source: Directorate General of Forestry Production

Log Production by Sources

The country's production of logs from natural forests has declined since 2001. In 2000, the country's log production totaled 13 million cu.m including 2.45 million cu.m from natural forests and 4.56 million cu.m from conversion forests. In 2000 and 2001, there were wide forests converted mainly into oil palm plantations.

Many of the companies holding the conversion license have been known to misuse the license. They failed to grow oil palm trees or other crops in the lands already cleared from trees. They were interested only in the trees from the forests and had no intention of cultivating the land with oil palm trees or other commercial crops. As a result wide forest lands were left nude land unused in Kalimantan and other islands. In Kalimantan alone there were around 2 million hectares of formerly forest lands have become bush land. Since 2002, tree supply from conversion forests has declined sharply foreign timber processing factories to use stolen logs or illegally cut trees.

Industry Profile

Plantation forests or industrial timber estate (HTI) have become more important. Since 2000, their contribution to the country's log production has increased substantially partly offsetting a decline in supply from conversion forests. In 2003, log production from HTI and plantation forests of state-owned forestry company Perum Perhutani began to exceed log production from natural forests. Contribution from Perum Perhutani is especially teakwood from Java.

Table - 10
Log production and sources of
supply in the past 5 years

(000 cu.m)

Source of production	2000*	2001	2002**	2003	2004	2005 *)
Natural forests	3,450	1,809	3,020	4,105	3,511	5,690
Conversion forests	4,565	2,324	183	956	1,632	3,614
People's forests	489	0	0	60	154	1,312
Perum Perhutani's HTI	1,511	1,455	1,559	977	924	758
Other timber estate (HTI)	3,784	5,567	4,243	5,326	7,329	12,818
Total	13,798	11,155	9,004	11,424	13,549	24,192

Note: *) provisional figure; HTI = Plantation Forest

Source: Directorate General of Forestry Production

Log Production by Provinces

The province of Riau has become the largest producer of logs in the country in the past several years. Its log production totaled 6.97 million cu.m in 2005.

Riau could maintain high production of log as it has long expanded HTI especially to feed its pulp industry.

However, the largest producer of logs from natural forests is Central Kalimantan, which produced 2.53 million cu.m, followed by East Kalimantan with production of 1.59 million cu.m in 2005. Log production in East Kalimantan is largely from forest conversion mainly into oil palm plantations. In Central Kalimantan log production comes mainly from production forests.

Overcrowded Java still produces considerable quantity of logs mainly teak wood logs also due to plantation forests, which have been developed since the Dutch colonial time. Now the teakwood forests in Java are managed by Perum Perhutani. Java produces around 978,000 cu.m of logs a year as against Papua's 700,000 cu.m and Sulawesi's 50,000 cu.m. In Papua, illegal logging has become rampant in the wake of the financial crisis, therefore, log production from that region is estimated to reach more than 1 million cu.m a year.

Industry Profile

Table - 11
Production of logs by sources, 2005 *)

Provinces	Natural forests(cu.m)		Plantation forests (cu.m)		People's forests (cu.m)	Total
	AWP	TUS	Perhutani	HTI		
Aceh	1,182	36,931	0	303	494	38,909
North Sumatra	66,552	0	0	1,079,797	191,525	1,337,874
West Sumatra	100,407	143,286	0	0	0	243,693
Riau	97,395	266,119	0	6,607,860	0	6,971,374
Jambi	77,864	21,232	0	1,708,945	37,894	1,845,935
South Sumatra	0	170,126	0	2,122,952	51,722	2,344,800
Bangka Belitung	0	0		0	12,523	12,523
Bengkulu	13,207	0	0	0	16,728	29,935
Lampung	0	0	0	84,804	311,532	396,336
West Java	0	0	180,853	0	0	180,853
Central Java	0	0	310,059	0	0	310,059
East Java	0	0	267,081	0	0	267,081
Bali	0	0	0	0	23,298	23,298
West Nusatenggara	0	0	0	0	3,947	3,947
East Nusatenggara	0	0	0	0	475	475
West Kalimantan	255,644	0	0	194,387	0	450,030
Central Kalimantan	2,537,402	1,523,548	0	0	152,801	4,213,751
South Kalimantan	54,508	25,293	0	162,033	328,952	570,786
East Kalimantan	1,588,639	1,173,105	0	777,136	0	3,538,880
North Sulawesi	7,076	44,567	0	0	4,217	55,860
Gorontalo	0	0	0	0	10,940	10,940
Southeast Sulawesi	5,457	0	0	0	45,222	50,679
South Sulawesi	0	0	0	0	81,431	81,431
West Sulawesi	60,135	5,985	0		5,320	71,440
Maluku	81,167	0	0	7,473	0	88,640
North Maluku	308,874	156,307	0	72,509	32,561	570,250
West Irian Jaya	239,129	0	0	0	0	239,129
Papua	195,415	47,848	0	0	0	243,263
Total	5,690,050	3,614,347	757,993	12,818,199	1,311,584	24,192,173

Note: *) revised figures **) provisional figure; AWP = Annual Work Planning
Source: Directorate General of Forestry Production; TUS = Timber Utilization Concession

CASES INVOLVING HPH COMPANIES

Arrears in Reforestation Fund (DR)

Until the end of 2004, there were 24 HPH companies still having arrears in reforestation fund (DR) and resource royalty provision (PSDH) located in Papua,

Industry Profile

Maluku, Central Kalimantan, West Kalimantan, Southeast Sulawesi and Nanggroe Aceh Darussalam with total arrears of US\$ 15.3 million and Rp 10.6 billion in reforestation fund and Rp 53 billion in PSDH.

Nine HPH companies having PSDH arrears warned

Nine HPH companies have received a third warning from the Forestry Ministry for failure to settle arrears of Rp 49.61 billion in PSDH and Rp 109.6 billion in reforestation fund. The companies are:

- PT Artika Optima Inti II
- PT Artika Optima Inti IV,
- PT Gunung Meranti,
- PT Benua Indah,
- PT Membramo Alas Mandiri,
- PT Budhi Nyata,
- PT Ketapang Indah Plywood,
- PT Kartika Kapuas Sari dan
- PT Trisetia Intiga.

The forestry minister said apart from the nine companies there are 13 other having arrears of Rp 24.3 billion in reforestation fund and PSDH. The arrears were reduced from Rp 1.3 trillion in Dec. 2003 to Rp 186.55 billion in Dec. 31, 2004, but the amount rose later to reach Rp 241 billion at present..

PT Gunung Meranti and Trisetia fully repaid DR arrears

PT Gunung Meranti and PT Trisetia Intiga fully repaid their DR debt in June to avoid the sanction by the government. With the repayment, they were safe from having their license revoked.

PT Gunung Meranti repaid Rp 178.4 million (US\$ 20,000) and PT Tisetia Intiga repaid Rp 354.15 million in PSDH and US\$ 223,708 in DR.

The license of two of those failing to repay their PSDH and DRD debts have been revoked. They were PT Artika Optima Inti I in Papua with unpaid debt of US\$ 808,015 in DR and Rp 3.9 billion in PSDH and PT Bina Mahawana Wisesa in North Sulawesi with arrears of US\$ 67,274.97 in DR and Rp 38.44 million in PSDH.

HPH companies having their licenses revoked

Apart from PT Artika Optima Inti I and PT Bina Mahawana Wisesa the government has revoked the license of 9 HPH companies in the past two years for DR and PSDH arrears.

Industry Profile

Table - 12
11 HPH companies having their licenses revoked,
2004 – 2006

HPH Holder	Province
2004	
PT Wana Yasa Kahuripan Indonesia	Center Kalimantan
PT Rimba Karya Indah	Jambi
PT Wanakrida Utama	Maluku
PT Mutiara Kalja Permai	East Kalimantan
PT Rimba Baru Lestari	Papua
2005	
PT Seberidawana	Riau
PT Budhi Nyata	Maluku
PT Bina Mahawana Wisesa	Southeast Sulawesi
PT Prima Bumi Sakti Daya	Maluku
2006	
PT Artika Optima Inti I	Papua
PT Bina Mahawana Wisesa	Southeast Sulawesi

Source: Forestry Ministry, Data Consult

Forestry Minister hands over 8 new IUPHHK and extension

Forestry Minister M.S. Kaban has handed over 8 licenses for forest wood utilization (IUPHHK) both for natural forests and plantation forests to support the program to revitalize the country's forestry industry. Four of the licenses are for

new companies and the rest for renewal of old licenses. Six of the licenses are for exploitation of natural forests totaling 318,065 hectares and two for plantation forests totaling 138,500 hectares.

Table - 13
New IUPHHK and extension

Companies	Width (ha)	Location
IUPHHK for natural forests		
PT Nusa Niwe Indah *	73,500	North Maluku
PT Dharma Satya Nusantara *	35,000	East Kalimantan

Industry Profile

PT Sulwood	21,080	South Sulawesi
PT Graha Sentosa Permai	44,970	East Kalimantan
PT Wana Inti Kahuripan Intiga *	92,475	Central Kalimantan
PT Intrado Jaya Intiga *	51,040	Central Kalimantan
IUPHHK plantation forests		
PT Aceh Nusa Indrapuri	111,000	NAD
PT Inhutani III Pelaihari	27,500	Kalimantan South

Note: *) Extension

Source: Forestry ministry

STATE FORESTRY COMPANIES

There are six state companies operating in the forestry sector. They are PT Inhutani I - V with concessions outside Java and Perum Perhutani controlling all forests in Java.

PT Inhutani I – V

HPH units operated by PT Inhutani I - V total 4.24 million hectares and of which 964,000 hectares are managed alone by the companies and the remaining 3.27 million hectares are managed through joint ventures with private companies or cooperatives.

HTI units operated by PT Inhutani I-V total 3.26 million hectares including 611,000 hectares managed alone by the companies and 2.65 million hectares managed in joint venture.

Table - 14
Width HPH and HTI operates by
PT Inhutani I-V

State Companies	Joint Venture (ha)	Managed Alone (ha)
HPH		
PT Inhutani I	387,669	822,017
PT Inhutani II	1,672,593	142,167
PT Inhutani III	822,375	
PT Inhutani IV	271,212	
PT Inhutani V	122,490	
Total	3,276,339	964,184

Industry Profile

HTI		
PT Inhutani I	1,130,584	96,816
PT Inhutani II	116,946	94,800
PT Inhutani III	597,625	363,300
PT Inhutani IV	321,563	-
PT Inhutani V	481,450	56,547
Total	2,648,168	611,463

Source: PT Inhutani I-V

The condition of many units of HPH operated by PT Inhutani's is bad after being fully exploited by HPH companies. As a result PT Inhutani's have reported large losses in the past several years.

Credits Rp 5.8 trillion for timber factories of PT Inhutani III, IV and V

Forestry Minister MS. Kaban has proposed special credit scheme to revitalize money losing PT Inhutani III, IV and VI. Kaban suggested the use of Rp 5.8 trillion of reforestation fund held by state Bank Mandiri.

The fund will be used to build acacia tree processing factories to produce veneer that is expected to turn out larger profit for the companies.

The three companies need additional capital and change in their business culture. Support in capital, however, is not easy to come from banks or other financiers. They need to change their business first from logging to processed timber industry to increase the added value of their products. The prices of logs range only from US\$ 20 to US\$ 30 per cu.m as against US\$ 70 - US\$ 80 per cu.m of veneer.

Perhutani asks government to allow it to determine its felling quota

Perum Perhutani has urged the government to allow it to determine its annual production of logs as the forests under its management are plantation forests the harvest of which has been planned before they are built. Perum Perhutani, therefore, knows the potential of its forests.

In 2005, log production of Perum Perhutani totaled 739,487 cu.m consisting of 344,204 cu.m of teakwood and 395,283 cu.m jungle forests trees. Log requirement in Java totals more than 2 million cu.m a year.

Silviculture, which requires felling and replanting could not properly be implemented with the annual felling quota system.

Industry Profile

Perum PERHUTANI

Perum Perhutani manages all state forests in Java. Until 2005, its forest concession totaled 2.51 million hectares consisting of 1.84 million hectares of production forests and .0.67 million hectares of other forests.

Table - 15
Forest areas under Perum Perhutani

Unit	Production forests (ha)	Protected forests (ha)	Other forests (ha)	Total (ha)
Unit I Central Java	573,242	73,478	877	647,597
Unit II East Java	812,950	315,505	233,053	1,361,508
Unit III West Java and Banten	453,556	283,179	333,611	1,070,346
Total	1,839,748	672,162	567,541	3,079,451

Source: Perum Perhutani

Perum Perhutani continues to report losses

President of Perum Perhutani Transtoto Handadhari said the company posted a loss of more than Rp1 trillion a year as a result of falling prices of logs, illegal logging, and weak security. Weak security causes potential income of Rp 1 trillion a year.

Table - 16
Losses recorded by Perhutani as a result of weak security,
2000 – 2004

Description	Unit	2000	2001	2002	2003	2004
Tree stealing	Thousand tree	257	2,675	1,539	502	325
	Rp million	569,757	613,924	248,619	109k741	71,918
Stealing of woodworking	CU.M	11,974	2,597	725	1k700	
	Rp Million	2,326	2,489	592	812	
Other tree stealing	Thousand trees					
	Rp Million	90	2,146	16.8	4.5	10.6
Forest bibrikan	hectare	9,900	12,122	9,328	2k117	1,023

Industry Profile						
	Rp Million	4,635	2,896	4,034	784	334
Arbitrary felling of tree	Ha	60.7	1,204,0	390.7	1,138.5	295
	Rp Million	7,289.8	8,616	1,404	9,303	49
Forest fires	Ha	45.210.0	154,224	471,191	13,732	7,531
	Rp Million	1,201.0	3,970	8,338	3,050	1,420

Source: Long term plan of Perum Perhutani

An official of Perum Perhutani acknowledged poor and corrupt management had contributed to the loss suffered by the company every year in the past. He said the company produces 800,000 cu.m of wood a year and the trees were sold at a low prices by degrading the quality of the tree causing loss of a potential income of Rp 400 billion a year. The losses did not include potential income if security is good.

Table - 17
Production of teakwood and forest trees
of Perum Perhutani

Description	Units	2001	2002	2003	2004
Teakwood					
Width	Ha	82,690	88,671	54,091	26,046
Production	CU.M	654,802	668,404	427,847	384,373
Forest trees					
Width	Ha	44,245	43,757	21,985	6,130
Production	CU.M	800,601	816,487	549,649	219,940

Source: Long term plan of Perhutani

Central Java Perum Perhutani reported loss of Rp 130 billion in 2005 for illegal logging of 65,000 cu.m. The loss was 50% smaller than in 2004 when around 130,000 cu.m of trees were lost stolen.

Forestry minister reviews state cooperation between state forestry companies

PT Inhutani I and PT Intracawood Manufacturing

The government will review cooperation among state companies in the forestry sector considering continued losses reported by PT Inhutani I to V including in the handover of concession between PT Inhutani I and PT Intracawood Manufacturing in Kalimantan.

Industry Profile

The forestry minister said he will review all cooperation involving state companies and private companies including between PT Inhutani I and PT Intracawood Manufacturing. Based on data at the forestry ministry, PT Inhutani has been given rights to manage 2.2 million hectares of forests in East Kalimantan, according to a decision of the forestry minister in 1976 which was revised in 2004. One of its units of HPH covering 243,920 ha, was managed in cooperation with PT Intracawood Manufacturing. On Oct. 18 n 2002, PT Intracawood Manufacturing proposed to establish the units under its management as a separate IUPHHK.

In 2004, the then forestry minister issued a license for PT Intracawood Manufacturing with a concession of 45 years with production quota of 104,817 cu.m a year.

However, M.S. Kaban said the IUPHHK held by PT Intracawood is not valid as it was given not through auction as required by the regulation.

President of PT Intracawood Siti Hartati Murdaya agued the decision of the forestry minister is valid and has been confirmed by state administrative court with a decision No. 168/G.TUN/2004/PTUNJKT on March 8, 2005, saying the procedure is not against the regulation.

WOOD PROCESSING INDUSTRY

Wood processing industry facing bankruptcy

Almost all timber processing companies in the country are on the brink of bankruptcy because of the difficulty in securing the raw material amid high credit

interest rate. Only around 40% of 115 plywood factories and 30% of 2,600 sawn timber factories remain in operation and they are operating much below their installed capacity.

Scarcity of raw material, financial problem and old machines worsen the condition of the country's timber processing industry facing competition in international market.

Those remaining in operation could not operate at full capacity. They are operating only at around 50% of heir installed capacity.

In 2004, the remaining 55 plywood factories in operation with an annual capacity of 5.52 million cu.m produced only 4 million cu.m of plywood.

Industry Profile

Table - 18
Plywood companies still active in 2005

No.	Name of Company	Status	Location	Production Capacity	Group
1	PT Andatu Lestari Plywood	PMDN	Lampung	83,000	
2	PT Antang Permai Plywood Industry	PMDN	Central Kalimantan	39,450	
3	PT Asia Forestama Raya	PMDN	Riau	40,000	Asia Forestama Group
4	PT Austral Byna	PMDN	South Kalimantan	104,950	
5	PT Bade Makmur Orissa	PMDN	Irian Jaya	100,000	
6	PT Balikpapan Forest Industry	PMA	East Kalimantan	76,000	
7	PT Barito Pacific Timber	PMDN	West Kalimantan	107,100	BARITO PACIFIC
8	PT Barito Pacific Timber	PMDN	South Kalimantan	165,000	BARITO PACIFIC
9	PT Basirih Industrial	PMDN	South Kalimantan	35,700	
10	PT Central Carda	PMA	Central Kalimantan	60,000	KORINDO GROUP
11	PT Dharma Wood Agung Ind.	PMDN	East Kalimantan	35,000	
12	PT Duta Rendra Mulia	PMDN	West Kalimantan	208,628	
13	PT Erna Juliawati	PMDN	West Kalimantan	100,000	
14	PT Harjon Timber Ltd.	PMDN	West Kalimantan	54,200	ALAS KUSUMA GROUP
15	PT Hendratna Plywood	PMDN	South Kalimantan	24,000	HENDRATNA GROUP
16	PT Henrison Iriana	PMDN	Irian Jaya	198,000	KLI GROUP

Table – 18 cont'd

No.	Name of Company	Status	Location	Production Capacity	Group
17	PT Idec Abadi Industries Plywood Indust.	PMA	East Kalimantan	47,000	
18	PT International Timber Corp. Indonesia	PMDN	East Kalimantan	157,150	
19	PT Intra Wood MFG	PMDN	East Kalimantan	134,663	
20	PT Katingan Timber Co.	PMDN	South Kalimantan	62,662	
21	PT Kayan River Indah Plywood	PMDN	East Kalimantan	50,000	SUMBER MAS GROUP
22	PT Kayu Lapis Asli Murni	PMDN	East Kalimantan	118,393	

Industry Profile

23	PT Kayu Lapis Indonesia	PMDN	Central Java	432,000	KLI GROUP
24	PT Ketapang Indah Plywood Industri	PMDN	West Kalimantan	90,000	BUMI RAYA GROUP
25	PT Korindo Abadi	PMA	Riau	119,000	KORINDO GROUP
26	PT Korindo Aria Bima Sari	PMA	Central Kalimantan	130,000	KORINDO GROUP
27	PT Kurnia Kapuas Plywood Industries	PMDN	West Kalimantan	66,800	BUMI RAYA GROUP
28	PT Kutai Timber Indonesia	PMA	East Java	100,000	
29	PT Mangole Timber Prodecers	PMDN	Maluku	216,000	BARITO PACIFIC
30	PT Melapi Timber Industri	PMDN	East Kalimantan	59,700	
31	PT Meranti Mustika	PMDN	Central Kalimantan	143,000	
32	PT Mulya Karya Jayaco	PMDN	North Sumatra	5,200	
33	PT Panca Eka Bina Plywood Industry	PMDN	Riau	120,000	
34	PT Panca Usaha Palopo Utama Damai	PMDN	South Kalimantan	22,810	PALOPO GROUP
35	PT Putra Source Utama Timber	PMDN	Jambi	60,000	PALOPO GROUP
36	PT Raja Garuda Mas	PMDN	North Sumatra	83,000	
37	PT Rimba Kayu Arthamas	PMDN	Irian Jaya	100,000	
38	PT Rimba Ramin	PMDN	West Kalimantan	57,000	
39	PT Sari Bumi Kusuma	PMDN	West Kalimantan	40,000	ALAS KUSUMA GROUP
40	PT Satya Raya Indah Wood	PMDN	West Java	71,428	SRI Group
41	PT Segara Timber, Co.	PMDN	East Kalimantan	57,500	
42	PT Sola Gratia Plywood Industry Co. Ltd.	PMDN	Riau	70,000	ASIA FORESTAMA GROUP

Table – 18 cont'd

No.	Name of Company	Status	Location	Production Capacity	Group
43	PT Suka Jaya Makmur	PMDN	West Kalimantan	81,300	ALAS KUSUMA GROUP
44	PT Sukses Sumatera Timber	PMDN	South Sumatera	90,000	SRI Group
45	PT Sumalindo Lestari Jaya	PMDN	East Kalimantan	160,200	
46	PT Sumatera Timber Utama	PMDN	Jambi	104,000	
47	PT Source Mas Indah Plywood	PMDN	East Java	100,000	
48	PT Surya Dumai Industri	PMDN	Riau	140,000	SURYA DAMAI

Industry Profile					
					GROUP
49	PT Surya Satria Timur, Co	PMDN	South Kalimantan	64,000	
50	PT Tanjung Raya Plywood	PMDN	South Kalimantan	148,660	TANJUNG RAYA GROUP
51	PT Tanjung Selatan Makmur Jaya	PMA	South Kalimantan	105,000	TANJUNG RAYA GROUP
52	PT Tirta Mahakam Plywood Timber Indust.	PMA	East Kalimantan	102,840	
53	PT Tjipta Rimba Jaya	PMDN	North Sumatra	150,000	
54	PT Tunggal Agatis Indah Wood Industries	PMDN	Maluku	154,800	BARITO PACIFIC
55	PT Warna Rimba Kencana	PMDN	East Kalimantan	80,000	
	Total Production Capacity cu.m/year			5,525,134	

Source: MOF, Data Consult

Almost half or 26 of the 55 remaining plywood factories in operation are integrated with HPH, but they still could not rely fully on the HPH for the raw material.

Table - 19
Plywood factories integrated with active HPH

No	Name of Company	Location	Production Capacity	Group
1	PT Antang Permai Plywood Industry	Central Kalimantan	39,450	
2	PT Austral Byna	South Kalimantan	104,950	
3	PT Bade Makmur Orissa	Irian Jaya	100,000	
4	PT Balikpapan Forest Industry	East Kalimantan	76,000	

Table – 19 cont'd

No	Name of Company	Location	Production Capacity	Group
5	PT Barito Pacific Timber	West Kalimantan	107,100	BARITO PACIFIC
6	PT Dharma Wood Agung Ind.	East Kalimantan	35,000	
7	PT Erna Juliawati	West Kalimantan	100,000	
8	PT International Timber Corp. Indonesia	East Kalimantan	157,150	
9	PT Intra Wood MFG	East	134,663	

Industry Profile

		Kalimantan		
10	PT Kurnia Kapuas Plywood Industries	West Kalimantan	66,800	BUMI RAYA GROUP
11	PT Mangole Timber Prodecers	Maluku	216,000	BARITO PACIFIC
12	PT Meranti Mustika	Central Kalimantan	143,000	
13	PT Mulya Karya Jayaco	North Sumatra	5,200	
14	PT Panca Usaha Palopo Utama Damai	South Kalimantan	22,810	PALOPO GROUP
15	PT Putra Source Utama Timber	Jambi	60,000	PALOPO GROUP
16	PT Raja Garuda Mas	North Sumatra	83,000	
17	PT Rimba Kayu Arthamas	Irian Jaya	100,000	
18	PT Satya Raya Indah Wood	West Java	71,428	SRI Group
19	PT Segara Timber, Co.	East Kalimantan	57,500	
20	PT Suka Jaya Makmur	West Kalimantan	81,300	ALAS KUSUMA GROUP
21	PT Sukses Sumatera Timber	South Sumatra	90,000	SRI Group
22	PT Sumalindo Lestari Jaya	East Kalimantan	160,200	
23	PT Sumatera Timber Utama	Jambi	104,000	
24	PT Surya Satria Timur, Co	South Kalimantan	64,000	
25	PT Tunggal Agatis Indah Wood Industries	Maluku	154,800	BARITO PACIFIC
26	PT Warna Rimba Kencana	East Kalimantan	80,000	

Source: MOF, Data Consult/ICN

A number of large plywood factories have collapsed as a result of economic crisis in 1998-2000.

The Barito Pacific Group still managed to continue to become the largest plywood producer although its factories have been reduced from 8 to 4 units with an annual production capacity of 642,000 cu.m.

The factories of Kayu Lapis Indonesia Group has also been slashed from three to two units with an annual production capacity of 630,000 cu.m.

Alas Kesuma Group originally had 5 factories with an annual capacity of 349,000 cu.m, but now the number has been reduced to 3 with an annual capacity of 175,000 cu.m.

The South Korea's Korindo Group maintained three factories with an annual capacity of 309,000 cu.m from originally five factories with an annual capacity of

Industry Profile

409,000 cu.m. This group has started diversified its business to agribusiness sector by building oil palm plantations.

Other ailing giants include the Djajanti Group now facing revocation of its license over failure to repay its DR debt. Its attempt to diversify business to fishery sector also failed in Papua and Maluku.

The Kalimanis group owned by tycoon Bob Hasan, who has served jail term for corruption has been virtually non existent.

Table - 20
Production capacity of plywood companies

Name of Group/Company	Location	Production Cap. (cu.m./year)
ALAS KUSUMA GROUP		
PT Suka Jaya Makmur	West Kalimantan	81,300
PT Harjon Timber Ltd.	West Kalimantan	54,200
PT Sari Bumi Kusuma	West Kalimantan	40,000
	Sub total	175,500
ASIA FORESTAMA GROUP		
PT Asia Forestama Raya	Riau	40,000
PT Sola Gratia Plywood Industry Co. Ltd.	Riau	70,000
	Sub total	110,000
BARITO PACIFIC		
PT Barito Pacific Timber	West Kalimantan	107,100
PT Mangole Timber Prodecers	Maluku	216,000
PT Tunggal Agatis Indah Wood Industries	Maluku	154,800
PT Barito Pacific Timber	South Kalimantan	165,000
	Sub total	642,900

Industry Profile

Table – 20 cont'd

Name of Group/Company	Location	Production Capacity (cu.m./year)
BUMI RAYA GROUP		
PT Kurnia Kapuas Plywood Industries	West Kalimantan	66,800
PT Ketapang Indah Plywood Industri	West Kalimantan	90,000
	Subtotal	156,800
HENDRATNA GROUP		
PT Hendratna Plywood	South Kalimantan	24,000
	Subtotal	24,000
KAYU LAPIS INDONESIA GROUP		
PT Henrison Iriana	Irian Jaya	198,000
PT Kayu Lapis Indonesia	Central Java	432,000
	Subtotal	630,000
KORINDO GROUP		
PT Central Carda	Central Kalimantan	60,000
PT Korindo Abadi	Riau	119,000
PT Korindo Aria Bima Sari	Central Kalimantan	130,000
	Subtotal	309,000
PALOPO GROUP		
PT Panca Usaha Palopo Utama Damai	South Kalimantan	22,810
PT Putra Source Utama Timber	Jambi	60,000
	Subtotal	82,810
SRI Group		
PT Satya Raya Indah Wood	West Java	71,428
PT Sukses Sumatera Timber	South Sumatera	90,000
	Subtotal	161,428
SUMBER MAS GROUP		
PT Kayan River Indah Plywood	East Kalimantan	50,000
	Sub total	50,000
SURYA DUMAI GROUP		
PT Surya Dumai Industri	Riau	140,000
	Subtotal	140,000
TANJUNG RAYA GROUP		
PT Tanjung Raya Plywood	South Kalimantan	148,660
PT Tanjung Selatan Makmur Jaya	South Kalimantan	105,000
	Sub total	253,660

Source: MOF, Data Consult

PRODUCTION DEVELOPMENT OF WOOD PROCESSING INDUSTRY

A decline in production was recorded by timber processing industries both in the upstream to downstream sectors. The monetary crisis left timber processing companies beset by heavy debt burden that some of them have to stop operation.

Wood Panel Industry

A drastic fall was recorded in the country production of wood panel such as plywood, block board and particle board in the wake of the crisis as many plywood companies were forced to stop operation. Illegal logging became out of control with weak law enforcement as a result of vulnerable political instability in the process of transition toward greater democracy in the country.

While attentions were focused on overcoming political upheavals and security problem illegal logging that has caused extensive destruction to the environment and the tropical forests, escaped the spotlight. The problem faced by timber processing industry become worse than ever.

In 1996, the country's production of wood panel totaled 12 million cu.m including 10.2 million cu.m of plywood. In 2001, the production hit the rock bottom of 2.9 million cu.m. Many factories stopped production as log raw material became scarce while smuggling of logs was rampant.

Illegal loggers had contracts to supply buyers abroad leaving the domestic market short of the raw material. Countries such as China and Malaysia that used smuggled logs are able to sell plywood at more competitive prices.

Table - 21
Production of wood panel (Plywood, Block-board, Veneer,
Particle board), 2000 - 2005

(cu.m)

Year	Plywood	Block Board	Veneer	Particle Board	Total
2000	4,442,735	321,125	668,842	200,034	5,632,736
2001	2,101,485	388,004	94,228	296,877	2,880,594
2002	1,694,405	121,560	4,361,044	6,731	6,183,740
2003*)	6,110,556	436,418	289,191	83,642	6,919,807
2004*)	4,514,392	277,396	155,374	244,070	5,191,232
2005**)	4,533,749	403,160	1,012,205	124,768	6,073,882

Note: *) revised figures

**) provisional figure

Source: Directorate General of Forestry Production ,Data Consult/ICN

Industry Profile

Plywood Production by Provinces

The country's production of plywood has declined in the past three years. Many provinces have ceased to become plywood producers in 2005 such as Banten, East Java, West Irian Jaya Barat, and Maluku, which were previously major producers of plywood.

East Kalimantan and South Kalimantan remain the largest producers of plywood in the country. Log production in South Kalimantan has declined sharply forcing plywood producers in that province to buy logs from other areas.

Table - 22
Production of plywood by provinces

(c.u.m)				
No.	Provinces	2003	2004	2005*)
1	North Sumatra	244,857	74,171	153,345
2	West Sumatra	56,053	13,925	548
3	Riau	303,665	274,744	176,826
4	Jambi	422,219	425,264	364,748
5	South Sumatra	39,693	37,103	36,475
6	Lampung	156,180	31,080	82,717
7	Banten	62,167	58,716	0
8	Jakarta	0	273	0
9	Central Java	264,115	207,727	201,924
10	East Java	114,155	211,559	0
11	West Kalimantan	794,593	644,634	558,133
12	Central Kalimantan	331,110	232,307	231,421
13	East Kalimantan	1,600,745	933,447	1,357,314
14	South Kalimantan	933,370	858,153	927,960
15	North Sulawesi	0	0	5,406
16	South Sulawesi	215,394	135,587	167,460
17	Maluku	112,036	54,656	0
18	North Maluku	158,917	102,605	101,684
19	Papua	194,144	133,667	167,787
20	West Irian Jaya	107,144	84,774	0
21	Total	6,110,557	4,514,392	4,533,748

Note: *) provisional figure

Source: Forestry Production Directorate General, Data Consult/ICN

Industry Profile

Sawn wood and other processed timber

The country's production of sawn timber has declined from year to year in the past several years. Many sawn timber factories have no more forest concession to rely on for logs.

Many of sawn timber producers are small companies that could not easily buy logs from other provinces. Therefore, many of them rely on illegal loggers.

In 2000, the country's production of sawn timber totaled 2.7 million cu.m, but in 2001, the production fell to 674,000 cu.m. In 2005, the production began to scale up after the government launch anti illegal logging drive.

It is not easy to determine the country's production of sawn timber as they are located in remote areas and many of them do not want to report their production as they use illegally cut trees for raw material.

Table - 23
Sawn timber production,
2000 - 2005

Year	Sawn Timber (cu.m)	Wood Working (cu.m)	Moulding (cu.m)	Dowels (cu.m)
2000	2,789,543	299,412	160,336	2,640
2001	674,868	278,088	139,134	542
2002	623,495	71,681	161,833	0
2003	762,309	161,814	321,653	0
2004	432,967	387,503	238,743	0
2005*)	1,471,614	131,297	272,668	3,680

Note: *) provisional figure

Source: Forestry Production Directorate General, Data Consult/ICN

Production Of Sawn Timber By Provinces

There is no province dominant in sawn timber production. The producers are found in various areas.

Five largest producers are East Kalimantan, Central Java, West Kalimantan, Lampung, and South Kalimantan. Central Java is a major producer processing teakwood logs.

Industry Profile

Table - 24
Production of sawn timber in 5 past 5 years

Provinces	2001 (cu.m)	2002** (cu.m)	2003 (cu.m)	2004 (cu.m)	2005 (cu.m)
Aceh (NAD)	29,015	0	0	0	21,288
North Sumatra	23,187	37,432	7,556	19,915	51,368
West Sumatra	5,098	0	16,450	19,631	743
Riau	2,420	0	102,010	19,222	25,212
Riau Islands			0	0	0
Jambi	141,543	0	80,412	48,704	101,225
South Sumatra	171,001	50,490	9,402	18,802	3,126
Bangka Belitung			0	0	0
Bengkulu	0	0	0	16,172	23,152
Lampung	0	0	8,025	2,658	178,006
Jakarta	0	0	295	24,102	0
West Java	0	0	0	0	0
Banten			0	0	0
Central Java	0	4,707	15,340	44,781	190,979
Yogyakarta	0	0	0	0	0
East Java	0	215,649	72,596	20,193	5,232
Bali	276	222	0	0	0
West Nusatenggara	8,986	3,964	10,612	5,758	0
East Nusatenggara	3,137	0	0	0	18,171
West Kalimantan	36,046	0	59,139	27,333	183,833
Central Kalimantan	54,210	3,898	36,804	31,708	91,188
East Kalimantan	129,298	206,097	198,279	20,193	276,668
South Kalimantan	37,492	55,607	38,276	43,730	167,270
North Sulawesi	0	279	0	995	0
Gorontalo	0	5,121	0	6,156	7,166
Central Sulawesi	0	21,877	2,410	7,643	10,924
Southeast Sulawesi	5,797	10	0	18,640	44,994
South Sulawesi	9,451	12,457	10,353	18,942	4,907
West Sulawesi			0	0	19,706
Maluku	888	0	23,394	3,078	0
North Maluku			47,204	1,579	17,429
West Irian Jaya			8,878	11,061	0
Papua	17,024	5,683	15,169	2,425	29,027
Total	674,868	623,495	762,601	433,419	1,471,614

Source: Forestry Production Directorate General, Data Consult/ICN

Exports of Processed Timber

The country's exports of processed timber has dropped sharply over the past several years to follow the growing scarcity in supply of log raw material. In addition the prices of plywood declined in international markets.

Industry Profile

Indonesia lost an opportunity to gain from an increase in the prices of plywood rose in 2004 and 2005 as it could not increase its production because of the scarcity in raw material supply.

Japan still is the largest buyer for Indonesian plywood though exports to that country have also declined from 1.46 million tons in 2001 to 687,000 tons in 2005. Other major buyers are the United States and China.

The largest buyer for sawn timber is China to which exports totaled 7,800 tons in 2005. The figure is much smaller than the official figure recorded by China. The difference raised suspicion that illegal exports of timber has continued to that country.

Table - 25
Exports of processed timber

Year	(tons) (US\$ '000)						
	Sawn timber (Ton/ US\$ 000)	Plywood (Ton/ US\$ 000)	Chip-wood (Ton/ US\$ 000)	Pulp (Ton/ US\$ 000)	Veneer (Ton/ US\$ 000)	Hard/Soft Board (Ton/ US\$ 000)	Particle board (Ton/ US\$ 000)
2001	194,246	3,898,332	320	1,780,602	5,344	200,619	103,293
	90,841	1,837,915	177	564,028	2,049	42,243	19,533
2002	358,710	3,584,237	288	2,245,180	3,316	198,675	111,335
	125,462	1,748,310	142	706,929	1,652	44,142	24,118
2003	204,053	3,306,448	264	0	5,403	170,862	126,676
	86,744	1,662,911	172	791,215	2,944	34,552	25,837
2004	66,567	2,603,043	668	1,676,962	55,058	200,694	48,133
	27,427	1,576,874	370	588,744	33,099	47,223	11,630
2005	10,650	2,168,422	139	2,552,966	3,982	234,789	30,177
	3,680	1,374,670	8	932,708	9,317	55,093	5,376

Source: BPS, Forestry Ministry, Data Consult/ICN

Log Consumption

Log consumption for timber processing industry in the country was estimated at 39.97 million m³ in 2005. The estimate is based on assumption:

- The average content for plywood is 55%
- The average content for sawn timber is 62%
- 1 ton pulp will need 4.73 m³ of log

Pulp industry was the largest user of logs with consumption of 25.89 million m³ in 2005. Consumption for plywood and other wood panel industries totaled 11.04 million m³.

Industry Profile

Pulp industry uses wood of various types in quality or sizes that almost all parts of trees could be used by pulp industry.

The ratio of plywood to log is the lowest as most of plywood factories in Indonesia use old machine which are no longer efficient. The machines leave too much waste in the process of production.

Plywood and sawn timber industries use only the tree trunks, but pulp industry also uses the branches. Therefore, pulp industry is more efficient in the use of trees.

Table – 26
Log requirement of timber
processing industries

(cu.m)

Year	Wood panel	Sawn Timber and woodworking	Pulp	Total
2000	10,241,338	5,245,050	19,357,326	34,843,714
2001	5,237,444	1,762,310	22,088,465	29,088,219
2002	11,243,164	1,382,273	23,523,246	36,148,682
2003	12,581,467	2,009,316	24,589,864	39,180,647
2004	9,438,604	1,708,408	24,657,891	35,804,903
2005	11,043,422	3,031,063	25,894,980	39,969,465

Source: Data Consult/ICN

Supplies of wood logs for timber processing industries are much larger than reported by the forestry ministry.

In 2005, log requirement totaled 39.97 million m³, as against official supplies of 24.19 million m³ from HPH and HTI as recorded by the ministry.

The difference of 15.78 million m³, therefore were supplied from other sources including illegal sources involving in illegal logging.

Before the government launched intensive anti illegal logging operations, the deficit believed to be covered by illegal suppliers totaled 27 million m³ in 2002 and 2003.

The decline in supply from illegal sources indicated decline in illegal logging as a result of the anti illegal logging drives by the government.

Industry Profile

Table - 27
Log requirement and supply for timber processing industry
(cu.m)

Year	Requirement	Supply from official sources	Deficit
2000	34,843,714	13,798,240	21,045,474
2001	29,088,219	10,051,480	19,036,739
2002	36,148,682	8,659,968	27,488,714
2003	39,180,647	11,423,501	27,757,146
2004	35,804,903	13,548,938	22,255,965
2005	39,969,465	24,192,173	15,777,292

Source: Data Consult/ICN

CONCLUSION

- The country's production forests have been reduced in size in the past several years forcing the government to downsize the concessions of HPH companies.
- The number of HPH companies have been reduced from 594 to 189 remaining active in operation until now controlling 17.76 million hectares of forests. Among the HPH units, 68 controlling 7.02 million hectares of forests are integrated with timber processing industries.
- Almost all logging companies have had their concessions reduced especially with the tighter regulation on extension of HPH license in the past five years. The Barito Pacific group, which has been the largest logging company, has its HPH areas cut from 3 million hectares to 1.6 million hectares.
- Not all of the remaining HPH companies could operate well. Many of them are burdened with large debt in DR that some of them have received or are facing sanctions from the government. Meanwhile logs are scarce from legal sources while illegal logging is rampant as HPH companies could not compete well in prices facing illegal loggers that could afford to sell their logs at much cheaper prices as they do not pay tax and other levies. Growing scarcity of logs affected the operation of timber processing companies such as plywood factories.
- From 115 plywood factories in 2001 only 55 remaining in operation at present and most of them are operating much below their installed capacity
- The Kalimantan Group, which is owned by Bob Hasan, was formerly a large plywood producer, but all of its plywood subsidiaries have stopped operation.
- Many plywood companies have laid off workers because of difficulty in securing raw material and failure in facing competition against Chinese and Malaysian suppliers.
- With dwindling production forests, the country will rely much on plantation forests (HTI) as the main source of raw material for timber processing industry. In the past three years, the government has sought to boost development of HTI by issuing new licenses. However so far only 1.2 million hectares of 8 million hectares of forests lands reserved for HTI projects have been planted with tree seedlings. Every year, planting is completed over 100,000 – 120,000 hectares of HTI land. Financial difficulty remains the main factor slowing progress in the development of HTI projects. Among those succeeding in developing HTI include Sumalindo and Barito Pacific. In the future only timber processing companies having HTI are expected to survive in the country. * * *

COMPANY PROFILE

BARITO PACIFIC GROUP

The Barito Pacific Group is a large Indonesian business group, active in chemicals, forestry, wood processing, banking, plantations, and mining. It is controlled by Prajogo Pangestu and his family. As many business tycoons in Indonesia, Pangestu is an ethnic Chinese who based his business empire on close relations with the Suharto family.

The Barito Pacific Group ran into serious financial trouble during the financial crisis of 1997/1998. The Barito Pacific Group now is among the largest corporate debtors to the IBRA, owing 7,500 billion rupiah. Of this debt Rp 4,300 billion is connected to the ethylene plant PT Chandra Asri, which was built in the early 1990s with the backing of Marubeni (Japan) and an investment firm established by Japanese lenders.

The central holding company of the Barito Pacific Group is PT Barito Pacific Timber Tbk. This company is Indonesia's biggest integrated timber company, processing logs into higher value-added wood-based panel products. During the 1990s the company produced more than 1 million m³ of wood products annually, but the past 5 years the volume has been much reduced.

After restructuring, the number of subsidiaries of the Barito Pacific group has been reduced to 17 companies under the holding company PT Barito Pacific Timber Tbk. and 32 under PT Barito Pacific Lumber Company. Among the subsidiaries merged into other companies include PT Tunggal Yusi Timber, PT Hutrindo Palaran Plywood and PT Limbang Praja Timber, which operated in plywood and logging industries. They were merged into PT Tunggal Yudi Sawmill Plywood.

PT Barito Pacific Lestari Wood products and PT Hima Barito Forest Product and PT Barito Sinar Lestari were merged into publicly listed PT Barito Pacific Timber Tbk. PT Taliabu Pacific Forestry Industry, which operated in wood-based industry and PT Taliabu Timber, which operated in logging industry were merged into PT Mangole Timber Producers, which operates in plywood, block-board, particle board and woodworking industries.

The Barito Pacific Group is facing problem especially in scarcity of log raw material to feed its plywood factories. The difficulty followed especially after the slapping of logging quota. The logging quota forced it to slow down production by 50%.

Originally its five plywood factories had an annual production capacity of 2.5 million cu.m of plywood and wood panel.

Company Profile

Currently around 85% of its production of plywood, block-board, woodworking and particleboard is exported. Its factories hold quality certificates from Japan Plywood Inspection Cooperation (JPIC), Japan Agricultural Standards (JAS), International Hardwood Products Associations (IHPA-USA) and CE Marking (Europe) and the Quality Management System with ISO 9001 : 2000 certificate.

Table - 21
Subsidiaries of PT Barito Pacific Timber Tbk
in plywood industry

Name of company	Location	Industries
PT Barito Pacific Timber Tbk	Banjarmasin & Pontianak ** Kendari, Southeast Sulawesi	- Logging - Plywood - Block-board - Particle board - PFF Plywood - Sawn-timber - Laminated Particleboard - Woodworking - HTI
PT Tunggal Yudi Sawmill Plywood **	Kampung Kanas - Samarinda, East Kalimantan	- Logging - Plywood - Block-board - Sawn-timber - Woodworking
PT Anangga Pundinusa		- HTI
PT Mangole Timber Producers	Desa Falabisahaya, Mangole, North Maluku	- Logging - Plywood*) - Block-board*) - Particleboard*) - Woodworking
PT Kalpika Wanatama	Maluku	- HTI
PT Tunggal Agathis Indah Wood Industries	Sdangoli, Halmahera, North Maluku	- Logging - Plywood - Block-board - Sawn-timber - Woodworking
PT Kirana Cakrawala	Halmahera, North Maluku	- HTI

Company Profile

Table – 21 cont'd

Name of company	Location	Industries
PT Rimba Equator Permai	Sintang, West Kalimantan	- HTI
PT Sumalindo Lestari Jaya Tbk	Samarinda, East Kalimantan	- Logging - Plywood

*) Stopping activity since Nov. 29, 1998, as a result of earthquake excepting in saw milling and moulding restarting in 2000. Its plywood mill resumed operation in July, 2002.

**) Factory in Pontianak was closed in June, 2005 for scarcity in raw material supply.

***) PT Tunggal Yudi Sawmill Plywood stopped operation in July, 2005 over scarcity of raw material supply.

In 2005, the company's sales totaled 313,017 cu.m, down 35.5% or 172,355 cu.m from its sale in the previous year. The decline was a result of the closing of two factories in Pontianak and Samarinda in June and July, 2005, due to the shortage of logs supply.

Table - 22

Production development of wood panel by
PT Barito Pacific Timber, 2001 – 2005

(000 cu.m)

Year	Plywood	Blocboard	Particle Board
2001	564.8	65.1	32.5
2002	631.5	76.4	41.1
2003	566.4	75	38.2
2004	399	50.5	57
2005	236	24.5	43

Source: Barito Pacific Annual Report

* * *

PROFILE OF PULP & PAPER INDUSTRY

INTRODUCTION

The country's pulp and paper industry has survived amid the heavy slump besetting the forest-based industries such as plywood industry. A number of plywood factories have been forced to stop operation for scarcity in supply of log basic material. The Trade Ministry even puts pulp and paper industry among the major export earners. The Forestry Ministry also said that the prospects are still encouraging for pulp and paper industry. Development of pulp and paper industry, which is required to have plantation forests, will contribute to reforestation or replanting of trees in denuded forest lands. Development of HTI units is to adopt sustainable forest management.

Pulp and paper industry is still facing a host of problem with government policies not entirely favorable and banks still reluctant to lend help. However, the industry has managed to go through all the difficulties in the past several years. Indonesian pulp and paper industry has comparative advantages with the availability of forest land totaling 120 million hectares that could be transformed into HTI to guarantee supply of tree basic materials in the future. In addition, trees grow three times faster in tropical countries than in non tropical countries. The production cost is also cheaper in tropical countries like Indonesia.

In the past 5 years, the country's production of pulp has increased 3.75% annually - from 4.67 million tons in 2001 to 5.47 million tons in 2005. Paper production also rose by 4.5% annually from 6.95 million tons in 2001 to 8.21 million tons in 2005.

Exports have also increased in volume. Based on official data at the Indonesian Association of Pulp and Paper (APKI) pulp exports totaled 2.43 million tons in 2005, up from 1.7 million tons in 2001. The increase showed that Indonesia is still quite competitive in the world pulp market.

North America and Scandinavia have dominated 50% of the world pulp and paper market. Lately however, a number of pulp and paper producers in North America have decided to close down their factories as they are no longer competitive in prices. The world consumers, therefore, began to turn to Asia including Indonesia for supply. The condition opens an opportunity for Indonesia to increase its role in the world market. The market condition is favorable. The prices are good. After the closure of a number of factories in North America, the prices of pulp and paper begin to scale up from US\$ 400 per tons to US\$ 700 at present.

Industry

APKI said rising production cost has forced many pulp and paper companies in North American to close down their factory early 2006. Increase in production cost made them less competitive in the world market. The prices of wood basic material are much higher in that region. Fluctuation of exchange rate and soaring energy cost also contributed to rise in production cost.

Pulp and paper industry in Indonesia also faces problem with the fluctuation of the rupiah exchange rate and a surge in energy prices but the prices of wood basic material are relatively cheap. Pulp and paper investors, therefore, are expected to turn to Indonesia.

In addition, Indonesian share of pulp and paper market in the world has expanded by 3% annually and the opportunity is wide open especially with growing paper requirement in China that needs around 7 million tons of that material a year.

High demand for pulp and paper in the world opens an opportunity for pulp producers in Indonesia to boost production. However, it seems it is not that easy as there are still a host of problems to be coped with.

STRUCTURE OF PULP AND PAPER INDUSTRY

Status of pulp and paper industry

Based on official record of APKI, the country has around 80 pulp and paper companies consisting of 10 integrated pulp and paper factories, 67 paper factories and 3 pulp factories. Few of them are categorized as large and modern factories. Most of them are old and small factories.

In 2006, the country has a total installed capacity of 6,447,000 tons a year with integrated factories accounting for 81.2% or 5,232,000 tons and the three pulp factories accounting for the rest or 1,215,000 tons.

The 80 pulp and paper producers include 64 companies with the status of domestic investment (PMDN) companies accounting for 43.4% or 2,797,100 tons of the country's total production capacity of pulp and for 47.1% or 4,913,380 tons of the country's total production capacity of paper.

Those with the status of foreign investment (PMA) companies are 13 or much smaller in number but they contribute larger to the total capacity. PMA companies have a total capacity of 3,410,000 tons of pulp or 52.9% of the country's total capacity and 4,800,300 tons of paper or 49.4% of the total capacity.

Industry

The remaining three companies are BUMNs namely PT, Perusahaan Paper Lece, PT. Paper Padalarang and PT. Paper Kraft Aceh. The three have small production capacity - 240,000 tons (3.7%) for pulp and 337.900 tons (3.5%) for paper.

Table – 1
Production capacity of pulp and paper companies by status, 2006

Status of companies	Number of companies (units)	Pulp		Paper	
		Capacity (tons/year)	%	Capacity (tons/year)	%
BUMN	3	240,000	3.7	337,900	3.5
PMDN	64	2,797,100	43.4	4,913,380	47.1
PMA	13	3,410,000	52.9	4,800,300	49.4
Total	80	6,447,100	100.0	10,051,580	100.0

Source: APKI

Factory Locations

Most paper factories are located in Java, which is the country's economic and business center. In Java mostly in West Java and East Java, there are 64 pulp and paper companies with pulp factories having an annual production capacity of 340,000 tons or 5.3% of the country's total capacity and paper companies with an annual capacity of 8,550,440 tons or 85.2% of the country's total capacity. Large paper factories in Java include those of PT. Indah Kiat in Serang and Banten, and PT. Tjiwi Kimia in Sidoarjo.

Sumatra is the production center for pulp with 14 companies having an annual production capacity of 5,552,000 tons. Its paper companies have a total annual capacity of only 1,491,140 tons. Large pulp makers in Sumatra include PT. Riau Andalan Pulp & Paper in Riau.

The government has banned construction of new pulp factory in the crowded Java. Sumatra, Kalimantan and Papua, which have ample land, therefore, are potential production centers for pulp industry in the future.

Table – 2
Locations of pulp and paper factories

Area	Number of companies (unit)	Pulp		Paper	
		Capacity (tons/year)	share (%)	Capacity (tons/year)	share (%)
Java	64	340,000	5.3	8,550,440	85.2
Sumatra	14	5,542,000	86.0	1,491,140	14.8
Kalimantan	2	564,000	8.7	-	-

Source: APKI, Data Consult/ICN

Industry

Production Capacity of Pulp and Paper Industry

The country's production capacity for pulp has continued to increase in the past ten years (1995-2005) – up 10.4% annually on the average. The highest annual growth was recorded in 1997 surging to 4.27 million tons from 2.74 million tons. In 2003 and 2004, there was no increase in production capacity. In 2005, there was an increase of 3% to 5.23 million tons.

The production capacity for paper also surged in 1997 to 7.12 million tons in 1997 from 5.6 million tons in the previous year. Now the country's production capacity reaches 10.05 million tons a year.

Table – 3
Pulp and paper production capacity,
1995 – 2005

Year	Pulp		Paper	
	Production capacity (000 tons)	Growth (%)	Production capacity (000 tons/year)	Growth (%)
1995	2,610	---	4,470	---
1996	2,740	5.0	5,600	25.0
1997	4,270	56.0	7,120	27.0
1998	4,320	1.0	7,480	5.0
1999	4,540	5.0	9,100	22.0
2000	5,230	15.0	9,120	0.0
2001	5,590	7.0	9,900	9.0
2002	6,090	9.0	10,046	1.0
2003	6,290	3.0	10,046	0.0
2004	6,290	0.0	10,046	0.0
2005	6,450	3.0	10,052	0.0
Average growth (%)		10.4		8.9

Source : APKI

Production capacity for cultural paper

Paper products consist of cultural paper (writing and printing paper, newsprint, etc.), industrial paper (liner, kraft, board, etc.) and specialty paper (tissue, cigarette paper, money paper, etc.).

Based on data at APKI in 2004, cultural paper dominates paper production capacity. Cultural paper accounts for 42% or 4.184 million tons of the country's total annual capacity of 10.046 million tons.

Industry

Table – 4
Production capacity for paper by types, 2004

Types of paper	Capacity (tons)
Newsprint	749,800
Writing and Printing Paper	4,184,000
Sack Kraft Paper	158,400
Fluting and Kraft Liner	2,479,200
Boards	1,852,300
Wrapping Paper	91,900
Cigarette Paper	40,800
Tissue Paper	272,600
Specialty Paper	13,400
Joss Paper	204,180
Total	10,046,580

Source: APKI

RAPP, the largest pulp producer

PT. Riau Andalan Pulp & Paper (RAPP) operates an integrated pulp and paper production facility with an annual production capacity of 2 million tons making it the largest pulp maker. The pulp producer, which is owned by Asia Pacific Resources International Limited (APRIL), a subsidiary of the Raja Garuda Mas Group, in Riau is the largest pulp producer in Asia.

The second largest pulp producer is PT. Indah Kiat Pulp & Paper (IKPP) a subsidiary of the Sinar Mas Group. IKPP operates an integrated pulp and paper industry with three factories having a total annual production capacity of 1.82 million tons. In 2005, IKPP produced p 1.866 million tons of pulp and 618,000 tons of paper and 1.268 million tons of packaging paper.

The Sinar Mas Group has other major paper producers namely PT. Lontar Papyrus Pulp & Paper Industry (LPPI) in Jambi with an annual production capacity of 665,000 tons. In 2005, LPPI produced 608,700 tons of pulp and 51,200 tons of tissue paper. It exports part of its production.

Table - 5
Producers of pulp and
production capacity, 2005

Name of company	Location	Capacity (tons/year)
Riau Andalan Pulp & Paper, PT	Riau	2,000,000
Indah Kiat Pulp & Paper, PT	Riau	1,820,000

Industry

Table – 5 cont'd

Name of company	Location	Capacity (tons/year)
Lontar Papyrus Pulp & Paper Industry, PT	Jambi	665,000
Tanjung Enim Lestari, PT	South Sumatra	450,000
Toba Pulp Lestari Tbk, PT	North Sumatra	250,000
Paper Kraft Aceh, PT	Aceh	165,000
Kiani Paper, PT	Berau, South Kalimantan	525,000
Total		5,865,000

Source: APKI/Data Consult

Indah Kiat, the largest paper producer

PT. Indah Kiat Pulp & Paper Tbk (IKPP) of the Sinar Mas Group is the largest producer of paper with production capacity of 2,111,000 tons. IKPP has three factories including one in Tangerang with an annual capacity of 106,000 tons, in Bengkalis 700,000 tons and in Serang 1,305,000 tons. With that capacity, IKPP is the largest paper producer in Asia.

After IKPP, other major producers of paper include PT. Pabrik Paper Tjiwi Kimia Tbk also of the Sinar Mas Group. Tjiwi Kimia has an annual capacity of 1,412,000 tons after expansion in 2005. The total capacity consists of 1,014,000 tons of paper, 78,000 tons of packaging paper, and 320,000 tons of stationery. Its factory is located in Sidoarjo, East Java producing various types of paper and stationery including writing books, memo, envelopes, computer paper, gift paper, shopping bags, etc..

PT. Kiani Paper, which is now in the process of being sold, is another large producer of paper with an annual capacity of 525,000 tons. The company plans to expand its capacity to 1,125,000 tons. Kiani is being offered at a price of around US\$ 220 million not including its debts to creditors mainly Bank Mandiri with potential buyer United Fiber System (UFS) from Singapore.

Table - 6
Producers of paper in Indonesia, 2005

Name of company	Location	Capacity (tons/year)
Indah Kiat Pulp & Paper Tbk, PT	Riau, Tangerang, Serang	2,111,000
Pindo Deli Pulp & Paper Mills, PT	Karawang, West Java	1,465,000

Industry

Table – 6 cont'd

Name of company	Location	Capacity (tons/year)
Pabrik Paper Tjiwi Kimia Tbk, PT	Mojokerto, East Java	1,044,000
Pabrik Paper Indonesia (Pakerin), PT	Mojokerto, East Java	700,000
Kiani Paper, PT	Berau, East Kalimantan	525,000
Fajar Surya Wisesa, PT	Cikarang , Bekasi	500,000
Surabaya Agung Industri Pulp & Paper, PT	Gresik, East Java	486,800
Aspex Kumbong, PT	Cileungsi, West Java	430,000
Riau Andalan Pulp & Paper, PT	Palelawan, Riau	350,000
Lontar Papyrus Pulp & Paper Industry, PT	Jambi, Sumatra	225,500
Paper Leces, PT	Probolinggo, East Java	195,000
Paper Kraft Aceh, PT	Nangroe Aceh Darusalam	165,000
Pelita Cengkareng Paper, PT	Tangerang, Banten	157,800
Papyrus Sakti, PT	Bandung, West Java	150,500
Adiprima Suraprinta, PT	Gresik, East Java	150,000
Bekasi Teguh, PT	Bekasi, West Java	150,000
Ekamas Fortuna, PT	Malang, East Java	150,000
Jaya Paper, PT	Nganjuk, Central Java	150,000
Suparma Tbk, PT	Surabaya, East Java	150,000
Surya Pamenang, PT	Kediri, East Java	150,000
Other companies		646,400
Total		10,052,000

Source: APKI

PRODUCTION

Pulp production up

The country's pulp production has increased by 3.75% annually in the past five years (2001-2005). In 2005, production totaled 5.47 million tons or up 5% from the previous year.

Industry

The increase has been boosted by growing demand on the domestic market as well as in international market. Exports have continued to increase in the past three years notably to China.

Similarly, the country's production of paper also increased – up 4.5% annually in the 2001-2005 period – from 6.95 million tons in 2001 to 7.68 million in 2004. In 2005, production surged again because of growing demand in the general elections that year to 8.21 million tons.

Paper demands in the world market to reach 360 million tons in 2005.

Table - 7
Pulp and paper production, 2001 – 2005

Year	Pulp (‘000 tons)	Growth (%)	Paper (‘000 tons)	Growth (%)
2001	4,670	---	6,950	---
2002	4,970	6.0	7,210	4.0
2003	5,190	4.0	7,270	1.0
2004	5,210	0.0	7,680	6.0
2005	5,470	5.0	8,210	7.0
Average growth		3.75		4.50

Source: Forestry Ministry and APKI

Paper production by types

Cultural paper including writing and printing paper, is the largest in production. In 2001, production of cultural paper totaled 2.6 million tons, up to 3.1 million tons in 2004.

The second largest is kraft liner and fluting with production totaling 2 million tons in 2004 up from 1.9 million tons in 2001.

Production of specialty paper totaled only 6,000 tons in 2004, down from 7,000 tons in the previous year. See the following table.

Table – 8
Production of paper by types, 2001 – 2004

Types of paper	2001	2002	2003	2004
Newsprint	510,800	537,725	558,630	564,090
Writing and Printing Paper	2,696,100	2,736,875	2,742,080	3,160,460
Sack Kraft Paper	53,580	78,510	90,700	9,100

(Tons)

Industry

Table – 8 cont'd

Types of paper	2001	2002	2003	2004
Fluting and Kraft Liner	1,974,260	2,010,280	2,011,370	2,050,000
Boards	1,349,480	1,486,750	1,495,120	1512790
Wrapping Paper	76,240	75,530	76,030	81970
Cigarette Paper	25,010	25,340	28,950	29040
Tissue Paper	175,080	180,310	181,120	184110
Specialty Paper	5,430	7,150	7,160	6610
Joss Paper	85,260	74,500	78,720	81650
Total	6,953,241	7,214,972	7,271,883	7,681,824

Source: APKI/Data Consult

Some Producers expanding production capacity

Predicting growing demand for pulp and paper in the world, a number of producers in Indonesia are expanding their production capacity. Currently, the country's pulp and paper industry is operating at 70%-80% of its installed capacity.

PT. Toba Pulp Lestari Tbk (TPL) plans to increase its production of pulp to 200,000 tons this year under its program to optimize its installed capacity of 250,000 tons. In 2005, its production totaled 180,000 tons down from 189,500 tons in the previous year. The factory underwent repair causing the decline in production.

The company management said it is not easy to increase production to full capacity of 250,000 tons. There are many factors determining success in the program including market condition, availability of basic material, etc..

Earlier TPL produced only pulp as paper basic material, but starting 2005, around 25% of its production is for rayon basic material. The price of basic material for rayon fiber (dissolving pulp) is much more expensive in the world market namely US\$ 600 per ton as against the price of paper basic material (bleached kraft pulp) at US\$ 500 per ton. Now, however, TPL no longer produces rayon.

TPL has 269,000 hectares of plantation forests (HTI) in Aek Nauli, Tele, Tarutung/Humbang, Habintaran and Sarulla. TPL needs only to cut trees in 6,000-7,000 hectares of the HTI a year to feed its factory.

Meanwhile, Riau Andalan Pulp and Paper (RAPP) is looking for a partner to build 15,000 hectares of HTI to grow acacia trees to guarantee supply of basic material for its pulp factory. The company plans to expand its factory.

Industry

RAPP President Irsan Syarief said the company already has 25,000 hectares of HTI built in cooperation with local farmers. It has a target to build 40,000 hectares of HTI in cooperation with local partners. He said local farmers in Riau and North Sumatra are eager to cooperate and become partners in HTI development.

RAPP is optimistic production this year will reach more than 2 million tons of pulp and 350,000 tons of paper. Altogether RAPP operates 330,000 hectares of HTI. Irsan said 85%-90% of its pulp and paper production is exported to Europe, South Korea, China and a number of other Asian countries.

PT. Tanjung Enim Lestari Pulp & Paper (TELPP) has the capacity to produce 500,000 tons of pulp per year. In 1998, its factory operated at 40% of its capacity, but in 1999, the capacity utilization was 100%. TELPP targets to export 90% of its production to Europe, and 7% to China and sell 3% on the domestic market. TELPP's wood raw material is supplied by PT. Musa Hutan Persada (MHP), which as a 20,000 hectare HTI with an annual production capacity 2,5 million m³ of acacia trees. MHP plants 20 million seedlings of *acacia manginum* per year. Originally the company imported acacia tree seedlings from Papua New Guinea, Australia and Brazil, but now it grows its seedlings.

Similarly, PT. Lontar Papyrus Pulp & Paper (LPPI), based on its annual report in 2005, has increased its pulp production capacity to 680,000 tons a year.

PULP INDUSTRY'S BASIC MATERIAL REQUIREMENT

Types of basic material

The first basic material used to produce paper pulp in Indonesia was rice straw and then corn trees, bagasse, etc.. With the growing cellulose requirement as basic material, pulp producers began to use wood as the main basic material.

Basically, there are two types of pulp – long fiber and short fiber pulp. Almost all pulp producers in the country produce short fiber pulp. Only PT. Paper Kraft Aceh produces pulp from long fiber wood to be used as cement sacks. Pulp producers choose to short fiber wood as harvest takes shorter time, therefore, production is faster.

In Indonesia, short fiber trees will be ready for harvest after 7 years. In North America and Scandinavia, it takes 22-30 years to grow tree to be ready for harvest. Long fiber trees will take 15-30 years to be ready for harvest in tropical countries as against 50-100 years in non tropical countries. Short fiber trees are acacia and eucalyptus. Waste paper is also used widely as the basic material for paper pulp. Around 50% the world's paper production is from waste paper.

Industry

Sources of basic materials

A government regulation requires all pulp factories to have plantation forest to guarantee supply of wood basic material. The government offers concession of lands for plantation forests for pulp producers. The lands could be natural forests, denuded forest lands and bush lands.

Pulp industry does not need trees with large diameter and the trees do not have to be straight. Pulp factories could use the tree trunks and the branches even the twigs either straight or bending.

According to APKI, currently there are 3.3 million hectares of land provided as concession by the government for pulp producer to grow plantation forests (HTI), but based on official record of the forestry ministry, there are already 4.4 million hectares. Trees from the 3.3 million hectares will be enough to feed the existing 7 pulp factories with a total capacity of 5.9 million tons. More HTI units, therefore, will be needed in the coming years.

So far conversion of the 3.3 million lands into HTI is not yet entirely finished. Only 70% of the land have been converted or grown with new tree seedlings. So far only PT. Tanjung Enim Lestari has fully completed planting its HTI.

The forestry minister has warned the other six pulp makers to immediately carry out their HTI projects according to licenses granted to them in 2003 as by 2009 pulp producers are no longer allowed to use trees from natural forest as the basic material. The six companies are PT Paper Kraft Aceh, PT Toba Pulp Lestari, PT Riau Andalan Pulp & Paper, PT Indah Kiat, PT Lontar Papyrus dan PT Kiani Paper.

Table – 9
Pulp HTI areas owned by 7 pulp factories

Name of company	HTI (ha)
PT. Indah Kiat	567,000
PT. Riau Andalan Pulp & Paper	415,000
PT. Tanjung Enim Lestari	296,000
PT. Toba Pulp Lestari	269,000
PT. Lontar Papyrus Pulp & Paper	270,000
Industry	
PT. Kiani Paper	181,000
PT. Paper Kraft Aceh	97,000
Total	2,095,000 *)

Source: APKI

Note: * latest data from APKI, pulp HTI units total 3,352,000 hectares

Industry

So far, no pulp factories have faced problem in supply of wood basic material from their own HTI's or HTI's of other companies.

However, a non governmental organization has accused PT. Riau Andalan Pulp & Paper of using stolen trees or illegally cut trees from natural forests. Investigations made by the law proved the allegation false.

APKI said no pulp makers would use trees from illegal sources as it is not very difficult for pulp factories to secure wood basic material legally with relatively cheap prices. Wood prices are relatively cheap with large stocks following the log export ban.

Estimate of wood requirement

If the HTI projects of the seven pulp producers are carried out and are ready for harvest, there is no more need to use trees from natural forests for basic material. The trees from HTI units will even be more than enough.

Based on data from APKI, currently here are 2 million hectares of lands made available for HTI that could produce up to 46 million m³ of wood a year or exceeding the 27 million m³ requirement of the 7 factories per year. There will be exportable surplus of 19.10 million m³. See the following table.

Table – 10
Wood procurement for 7 pulp factories

Description	Detail
Requirement	
Capacity of 7 pulp factories	5.9 million tons
Basic material needed to produce 1 ton of pulp	4.5 m³
Wood needed by 7 pulp factories	5.9 million x 4.5 m³ = 26.60 million m³
Supplying capacity	
Width of pulp HTI	2 million hectares (gross) 1.6 million hectares (net)
1 hectare of forest produces	200 m ³ per 7 year (period until harvest) or = 28.55 m ³ /year
Capacity to produce wood	1.6 million ha x 28.55 m ³ = 45.70 million m ³
Capacity to supply wood	45.70 million m ³
Excess in wood supply	45.70 million m ³ – 26.60 million m ³ = 19.10 million m ³

Source: APKI

EXPORTS AND IMPORTS

Pulp exports tend to rise

In the past five years, 2001- 2005 , the country's exports of pulp have fluctuated but tended to rise. In 2004, exports fell to 1.6 million tons valued at US\$ 588 million, but rose in 2005 to 2.5 million tons valued at US\$ 932 million. In 2001, exports totaled 1.7 million tons valued at US\$ 564 million. Demands in 2005 increased mainly from China, South Korea, Japan and Italy.

Table - 11
Pulp exports, 2001 – 2005

Year	Pulp	
	Volume (tons)	Value (US\$ 000)
2001	1,780,602	564,028
2002	2,245,179	706,928
2003	2,315,323	791,214
2004	1,676,962	588,743
2005	2,552,966	932,708

Source: Forestry Ministry

The main market of Indonesian pulp in the past 5 years have been other Asian countries and Europe. China has been the largest buyer. China accounted for 44% or 743,000 tons of the totals exports of 1,676,000 tons in 2004. In 2005, exports to China rose to 1,021,000 tons or 42% of the total exports of 2,431,000 tons.

Producers predicted exports to China will continue to rise to reach 80 million tons in 2010 and 100 million tons in 2015.

The second largest buyer is South Korea to which exports totaled 713,000 tons valued at US\$ 253 million in 2005. See the following table.

Table – 12
Pulp exports by Indonesia by countries of destination, 2001 - 2005

Countries	2001	2002	2003	2004	2005
	Tons/ US\$ 000	Tons/ US\$ 000	Tons/ US\$ 000	Tons/ US\$ 000	Tons/ US\$ 000
China	713,121	1,074,744	1,096,076	748,369	1,021,090
	238,521	342,738	364,432	262,820	380,487
South Korea	328,286	453,622	461,816	324,196	713,642
	111,437	139,824	154,151	111,276	253,295
Japan	111,705	148,849	143,726	99,091	143,409
	38,971	50,361	53,768	38,399	56,712

Industry

Table – 12 cont'd

Countries	2001	2002	2003	2004	2005
	Tons/ US\$ 000	Tons/ US\$ 000	Tons/ US\$ 000	Tons/ US\$ 000	Tons/ US\$ 000
Italy	106,226	133,739	141,113	99,451	152,755
	28,458	38,606	43,124	33,928	49,547
Taiwan	89,981	77,145	96,173	88,948	11,337
	28,254	24,139	31,547	31,326	44,554
India	42,251	96,593	92,655	64,612	133,021
	14,856	29,394	29,871	22,346	47,390
The Netherlands	89,656	82,542	87,154	40,685	55,813
	26,686	24,319	28,637	13,636	19,385
France	41,437	46,830	77,796	61,903	65,322
	15,336	15,263	26,058	22,495	23,544
Germany	702	18,277	3,599	25,478	22,488
	233	7,092	13,629	9,442	9,438
Vietnam	9,382	2,712	41,836	62,654	44,192
	331	941	12,896	21,294	15,109
Australia	34,246	52,787	27,323	16,958	3,986
	13,018	16,412	8,979	5,817	1,491
Other countries	133,604	55,298	46,056	44,616	64,269
	44,899	17,836	24,123	15,961	24,978
Total	1,700,597	2,243,138	2,315,323	1,676,961	2,431,324
	547,982	690,513	782,236	582,923	924,439

Source: Forestry ministry

Pulp Imports

Indonesia's imports of pulp are relatively small, totaling 735,560 tons valued at US\$ 358.98 million in 2003 , up to 899,050 tons valued at US\$ 511.65 million in the following year. In 2005, imports fell to 890,000 tons.

Table – 13
Pulp imports, 2001 – 2005

Year	Volume (tons)	Value (US\$000)
2001	564,130	260,320
2002	825,700	373,080
2003	735,560	358,980
2004	899,050	511,650
2005	890,000	N.a

Source: APKI

Paper exports up

The country's paper exports rose in the 2001-2005 period to follow the trend in pulp exports. In 2003, exports fell to 2.1 million tons valued at US\$ 1,128 million from 2.4 million tons valued at US\$ 1,332 million in the previous year. In 2005, exports rose again to 2.9 million tons valued at US\$ 2,040 million. The increase followed stronger demand from a number of countries especially China.

The closure of a number of pulp and paper factories in North America and Scandinavia, which are the largest suppliers of paper in the world, resulted in a decline in supply while demand has continued to rise. The condition provides an opportunity for Indonesia to boost production and exports.

Table - 14
Paper exports, 2001 – 2005

Year	Volume (tons)	Value (US\$)
2001	2,409,429	1,358,828
2002	2,444,265	1,332,045
2003	2,128,726	1,238,383
2004	2,535,434	1,690,876
2005	2,955,798	2,040,955

Source: Forestry Ministry

Exports have been dominated by cultural paper, newsprint and carton boards. In 2004, exports of cultural paper total 1,840,080 tons or 71% of the total exports. Exports of newsprint totaled 250,180 tons, carton boards 175,920 tons.

Export destinations have been China, Japan, South Korea, India, Australia and the United States. Indonesian paper products especially writing paper also dominate market in Middle East.

Table – 15
Paper exports by types, 2003 – 2004

Types of paper	2003	2004
News Print Paper	227,270	250,180
Writing and Printing Paper	1,393,230	1,840,080
Sack Kraft Paper	3,500	2,120
Fluting and Kraft Liner	109,030	151,900
Boards	251,480	175,920

(Tons)

Industry

Table – 15 cont'd (Tons)

Types of paper	2003	2004
Wrapping Paper	4,520	6,010
Cigarette Paper	8,800	9,520
Tissue Paper	74,270	61,780
Specialty Paper	17,280	5,930
Joss Paper	71,000	73,200
Total	2,162,383	2,578,644

Source: Forestry Ministry

Dumping allegation in the United States

Early 2006, the U.S. Department of Trade accused five paper subsidiaries of the Sinar Mas Group of dumping certain lined paper products. The U.S. government also accused the government of subsidizing the Sinar Mas Group. The allegation said the subsidy included plantation forest, log export ban and price fixing subsidies.

The U.S. government followed the allegation with the slapping of anti dumping imports duty of 118.63% and countervailing duty of 33.31% on products of the five companies - PT. Pabrik Paper Tjiwi Kimia Tbk, PT. Purinusa Ekapersada, PT. Indah Kiat Pulp & Paper Tbk, PT. Lontar Papyrus Pulp & Paper Industry and PT. Ekamas Fortuna.

The government denied the subsidy allegation saying the export ban is to save the country's forest from rampant smuggling and that it is not against the rules of the WTO (World Trade Organization). As for the price, the government it is fixed based on an agreement with timber associations and the Sinar Mas Group is not the only one enjoying low prices of logs in the country.

The Indonesian government said it is considering bringing the case to the WTO. The Sinar Mas subsidiaries rejected demand by the U.S. government to hand over their documents of cost structure which is confidential and said they are ready to stop exports to the United States if necessary and turn to other markets such as Japan and Europe.

In the past two years, the paper division of the Sinar Mas Group has faced dumping allegations in two other countries – Australia and South Korea, but Sinar Mas won in the two cases.

Industry

Imports small

Paper imports by Indonesia are small compared with exports. Imports average 200,000 – 300,000 tons a year. The largest annual imports were 306,970 tons valued at US\$ 260.42 million in 2004.

Imports are made only for high quality cultural paper and the types not yet produced in the country. High quality paper is used generally for printed materials, magazines and exclusive brochures.

Table – 16
Imports of paper, 2001 - 2005

Year	Volume (tons)	Value (US\$000)
2001	199,840	164,625
2002	249,695	198,640
2003	206,880	175,900
2004	306,970	260,420
2005	300,000	N.a

Source: APKI

The following table shows that imports of cultural paper totaled 82,620 tons or 27% of the total imports.

Table – 17
Imports of paper by types, 2001 - 2004

Types	2001	2002	2003	2004
Newsprint	4,170	890	2,530	18,660
Writing and Printing Paper	30,855	78,000	47,980	82,620
Sack Kraft Paper	78,490	69,320	56,220	78,500
Fluting and Kraft Liner	44,870	46,490	41,520	69,420
Boards	24,835	30,740	23,120	24,550
Wrapping Paper	4,410	8,580	13,030	9,980
Cigarette Paper	6,240	7,860	7,910	11,210
Tissue Paper	1,320	2,100	920	6,360
Specialty Paper	4,650	5,715	13,650	5,670
Joss Paper	0	0	0	0
Total	201,841	251,697	208,883	308,974

Source: APKI

Industry

DEMANDS

Pulp consumption up

It is assumed that consumption is equivalent to domestic production plus imports minus exports.

Based on that assumption, the country's pulp consumption in 2001-2005 was stable at around 3.46 million tons – 3.79 million tons.

In 2005, domestic consumption totaled 3.79 million tons and exports totaled 2.56 million tons.

Table - 18
Pulp consumption, 2001-2005

(000 tons)

Year	Production	Exports	Imports	Consumption
2001	4,670	1,700	0.560	3,460
2002	4,970	2,250	0.830	3,550
2003	5,190	2,380	0.760	3,550
2004	5,210	2,480	0.900	3,630
2005	5,470	2,560	0.890	3,790

Source: APKI

Consumption of paper up

Consumption of paper is assumed to be equivalent to domestic production plus imports minus exports.

Based on that assumption, paper consumption in 2002 totaled 5.02 million tons, up from 4.81 million tons in the previous year. In 2005, consumption totaled 5.51 million tons. See the following table.

Table - 19
Consumption of paper, 2001 – 2005

(000 tons)

Year	Production	Exports	Imports	Consumption
2001	6,950	2,350	0.200	4,810
2002	7,210	2,450	0.250	5,020
2003	7,270	2,160	0.210	5,310
2004	7,680	2,580	0.310	5,410
2005	8,210	2,990	0.300	5,510

Source: APKI

Industry

Paper consumption per capita in Indonesia low

Based on data at APKI, the country's per capita consumption of paper in 2000-2005 grew 2.5%-3% annually. In 2000, per capita consumption of paper was 20.8 kg, up to 26 kg in 2005. See the following table.

Table – 20
Per capita consumption of paper
2000 – 2006

Year	Consumption per capita (kg)
2000	20.8
2001	23.3
2002	24.0
2003	24.5
2004	25.2
2005	26.0
2006 *)	26.5 – 27.0

Source: APKI

Note: *) estimate

In 2003, per capita consumption in Indonesia was only 24.5 kg as against Singapore's 165 kg in the same year indicating that the country is still lagging far behind in the level of public welfare, education and interest in reading.

In Indonesia, an increase of 1 kg per capita consumption a year, will mean an increase of 220,000 tons in paper requirement a year. This also means that the country needs to build a large factory every year.

Indonesia, however, is still ahead of the Philippines, which has a per capita consumption of only 15 kg, India (10 kg) and Papua New Guinea (3 kg). World wide, the United States has the highest per capita consumption of 301 kg.

Table – 21
Consumption of paper per capita, 2003

Countries	Consumption per capita (kg)
The United States	301
Japan	242
West Europe	229

Industry

Table – 21 cont'd

Countries	Consumption per capita (kg)
Canada	222
Taiwan	216
Australia	202
South Korea	174
Singapore	165
Malaysia	104
Thailand	46
China	36
Russia	31
Indonesia	24.5

Source: APKI

Prices

The prices of pulp in the world market began to move upward in September to around US\$ 600-US\$ 700 per ton following a shortfall in supply from major producers. The price rose from only US\$ 500 per ton early this year.

The prices of pulp in areas in Asia, the United States, and Europe were around US\$ 550, US\$ 700 and US\$ 650 per ton respectively with an increase of US\$10-US\$ 30 per ton in April.

European producers also are burdened with rising production cost - up 3.3% in January-February this year from the same period last year.

The price in Indonesia is based on the prices in the world market, now raging from US\$ 700 to US\$ 800 a ton.

The increase in the prices in the world market, however, failed to attract investors to the country where the basic material is easily available.

The trees grow faster in the country, therefore, production cost is much cheaper in the country than in other countries such as Europe and North America.

APKI hopes that the government seeks to attract foreign investors to invest in the industry in the country.

In 2006, the country's production of pulp and paper is forecast to rise slightly or by 2.5% from last year.

Industry

Table – 22
Pulp prices in the world market, 2005 - 2006

2005	Asia (US\$/Ton)	Europe (US\$/Ton)	America (US\$/Ton)
February	500	540	585
March	540	580	615
April	570	600	635
2006			
February	500	530	615
April	540	620	670
May	550	650	700

Source: APKI/Data Consult

INVESTMENT

Investment sluggish

APKI complained about lack of support from the government for the expansion of the country's pulp industry, which is a priority in the country long term development plan. Greater support from the government is needed as the industry has the potential to become a much larger export earner and provide many jobs, it said. There has been no significant new investment in the pulp industry in the past several years despite the good prospects. APKI said any investment made in 2005 was only for revitalization of machines not construction of new factories or for expansion of capacity.

However, based on record of Data Consult, there was new investment in pulp industry by PT. Marga Buana Bumi Mulia (MBBM), which is owned by United Fiber System (UFS), a forestry company from Singapore. MBBM has an annual production capacity of 600,000 tons of pulp. Its pulp factory is located in Satui, South Kalimantan. It is to start operation in 2007. In addition, UFS also invested in wood chip industry through PT. Mangiun Anugerah Lestari (MAL) which has an annual capacity of 700 tons. Its factory, which was built with an investment of US\$ 45 million is located in Kota Baru, South Kalimantan. It started operation in 2006.

UFS also is in the process of acquiring the whole shares of PT. Kiani Paper at a price of US\$ 220 million not including payment for the debt of the paper company to creditors led by state owned Bank Mandiri. According to the capital investment coordinating board (BKPM), there were a number of investors planning investment in paper industry in 2005. Implementation of the plans will require larger supply of pulp. Therefore, it is feared there will be problem in pulp supply as there is no plan to build new pulp factories.

Industry

Table – 23
New investment in pulp and paper industry, 2005

Name of company	Line of business	Capacity (year)	Status	Location	Investment	Completion schedule
New Investment :						
Marga Buana Bumi Mulia, PT	Pulp industry	Pulp – 600,000 tons	PMA	Satui, South Kalimantan	N.a	2007
Mitra Prodin, PT	Industrial paper manufacturing	Cigarette wrapping paper – 50 million pcs	PMA	Denpasar, Bali	US\$ 200,000	July 2007
San Fu Indonesia, PT	Cultural paper industry	Cultural paper (joss paper) – 9,000 tons	PMA	Purwakarta West Java	US\$ 170,000	September 2007
Newel Paper Industry, PT	Industrial paper manufacturing	Gift paper – 6,000 tons	PMA	Bandung, West Java	US\$ 1,000,000	November 2007
Global Pack Indonesia, PT	Carton packaging & box Industry	Box packaging from carton paper – 100 tons	PMA	Bekasi, West Java	US\$ 231,000	May 2008
Expansion:						
Indah Kiat Tbk, PT	Pulp and paper industry	Test liner corrugated medium – 350,000 tons	PMA	Serang, Banten	Rp 1,677,500 million	April 2008

Source: BKPM

Few investors can afford to build a pulp and paper factory as it will need large investment. Fund is the main problem in building new pulp factories in the country. Based on data at APKI, production of a ton of pulp will need an investment of US\$ 200-US\$ 250. Therefore, a factory with an annual capacity of 1 million tons will need an investment of US\$ 1 billion. Construction will take around 2 years. Pulp is sold at a round US\$ 500-US\$ 700 a ton at present. Paper production cost in the country is US\$ 400 - US\$ 450 per ton, and the selling price is around US\$ 800 per ton. In Canada, the world's largest producer of pulp and paper, the production cost for paper is US\$ 400 per ton.

Some observers said that the country could become a net importer of paper in the next 10 years. If per capita consumption of paper rises to 50 kg a year, Indonesia will need to import US\$ 2 billion worth of paper a year. Assuming that there is no new investment in the next 10 years, imports would rise to US\$7 billion a year.

Industry

Investment cost

Pulp and paper industry is capital intensive. According to APKI, a new pulp factory with an annual capacity of 1 million tons will cost around US\$ 1 billion not including US\$ 200 million needed to build around 200,000 hectares of HTI to support the factory.

That means if Indonesia wants to expand its production capacity to 60 million tons a year, it will need to invest US\$ 54 billion to build new factories with a total capacity of 54 million tons.

Table – 24
Estimate of cost to build new pulp factory and HTI

Description	Capacity	Investment
1 unit of factory	1 million tons/year	US\$ 1 billion
HTI	200,000 hectares	US\$ 200 million

Source: APKI

Cost Structure of Pulp and Paper Industry

The production cost of pulp consists of basic material accounting for 78%, chemicals accounting for 8%, energy 4.5%, packaging 0.5% and overhead cost making up 9%.

Basic material costs include 88% for pulp wood, and 12% for white liquor. Energy costs include electricity cost making up 32%, steam energy cost making up 58% and water energy cost 10%. Overhead costs include labor 12%, maintenance cost 20%, depreciation 55% and other costs 18%. Pulp is made up of fiber 99% and chemicals 1%.

Table - 25
Cost structure of producing pulp

• COST STRUCTURE		
- BASIC MATERIAL		78%
• Pulp Wood	88%	
• White Liquar	12%	
- CHEMICAL		8%

Industry

Table – 25 cont'd

• COST STRUCTURE		
- ENERGY		4.5%
<ul style="list-style-type: none"> • Electrical • Steam • Water 	32% 58% 10%	
- PACKAGING		0.5%
- FACTORY OVERHEAD		9%
<ul style="list-style-type: none"> • Labor • Maintenance • Depreciation • Others 	12% 20% 55% 18%	

Source: APKI

Paper production costs consists of basic material cost making up 50%, chemical costs making up 10%, energy 5%, packaging 7.5% and overhead cost 27.5%.

Basic material costs include pulp (LBKP) cost making up 80% and pulp (NBKP) cost 20%. Energy costs include electricity cost making up 65%, steam energy cost 33% and water energy cost 2%. Overhead costs include labor cost making up 10%, maintenance cost 25%, depreciation 40% and other costs 25%. Paper is made up of fiber 85% and chemicals 15%.

Table – 26

Cost structure in paper production

• COST STRUCTURE		
- BASIC MATERIAL		50%
<ul style="list-style-type: none"> • Pulp (LBKP) • Pulp (NBKP) 	80% 20%	
- CHEMICAL		10%
- ENERGY		5%
<ul style="list-style-type: none"> • Electrical • Steam • Water 	65% 33% 2%	
- PACKAGING		7.5%
- FACTORY OVERHEAD		27.5%
<ul style="list-style-type: none"> • Labor • Maintenance • Depreciation • Others 	10% 25% 40% 25%	

Source: APKI

Market prospects of pulp and paper in the world

Indonesian and world consumption pulp

Based on official record of APKI, the country's consumption of pulp totaled 3.46 million tons in 2001 up to 3.79 million tons in 2005.

Table – 27
Indonesia's consumption of pulp, 2001 - 2005

Year	Consumption (000' tons)
2001	3,460
2002	3,550
2003	3,550
2004	3,630
2005	3,790

Source: APKI

The United States is the largest consumer of pulp. In 2003 its consumption totaled 53.46 million tons. The second largest consumer is China with consumption totaling 21.636 million tons, followed by Canada with consumption of 15.228 million tons.

Smaller consumers include India, South Korea, Australia, with consumption at 3.123 million tons, 3.06 million tons and 1.409 million tons respectively or smaller than Indonesia's consumption.

Table – 28
Larger consumers of pulp in the world, 2003

No.	Countries	Consumption (000' tons)
1	The United States	53,460
2	China	21,626
3	Canada	15,228
4	Japan	13,110
5	Finland	9,849
6	Sweden	8,335
7	Germany	5,898
8	Brazil	5,047
9	Russia	4,677
10	France	4,122
11	Italy	3,637
12	Indonesia	3,550

Source: APKI

Industry

Trend of world's paper industry

Norscan (North America and Scandinavia) countries have been the largest suppliers of pulp and paper in the world accounting for 70%. In North America, producers include Canada and in Scandinavia there are Sweden, Norway and Finland.

However, Norscan countries could no longer increase their production of pulp and paper, as they could no longer expand their forest lands. Forest lands in Norscan have all been fully utilized. Meanwhile, world's demand for pulp and paper continues to rise.

Consumers, therefore, have to look for other sources and expansion of forests has to be made in other regions in the world to increase supply of wood basic material to keep pace with the growing demand for pulp and paper.

Countries that have the potential for expansion of their forests are only Indonesia in Asia, Russia in Europe, and South American countries like Chile, Brazil and Uruguay.

Table - 29
Producers of pulp and paper in the world by countries, 2003

Pulp			Paper		
No.	Countries	Production (000' tons)	No.	Countries	Production (000' tons)
1	America	53,639	1	America	80,871
2	Canada	25,505	2	China	37,800
3	China	16,365	3	Japan	30,674
4	Finland	11,730	4	Canada	20,078
5	Sweden	11,354	5	Germany	18,526
6	Japan	10,670	6	Finland	12,776
7	Brazil	8,127	7	Sweden	10,724
8	Russia	6,496	8	South Korea	9,811
9	Indonesia	4,969	9	France	9,798
10	India	2,810	10	Italy	9,273
11	Chile	2,697	11	Brazil	7,774
12	France	2,432	12	Indonesia	7,212

Source: APKI/Data Consult

Companies in Norscan post largest sales in value. With sales valued at US\$ 23.089 billion, the International Paper from the United States topped other companies in the world in sales in 2004, followed by Stora Enso from Finland with sales valued at US\$ 12.805 billion.

Industry

Asia Pulp and Paper of Indonesia's Sinar Mas group, which is a holding company for pulp and paper producers - Indah Kiat, Tjiwi Kimia, Lontar Papyrus Pulp & Paper – was the 23rd largest with sales valued at US\$ 3.47 billion in the same year.

Table - 30
Producers of pulp and paper in the world
by companies, 2004

No.	Name of company	Countries	Sales (US\$ billion)
1	International Paper	United States	23,089
2	Stora Enso	Finland	12,805
3	Svenska Cellulosa SCA	Sweden	12,241
4	Georgia Pacific	United States	12,212
5	Procter & Gamble	United States	10,720
6	UPM	Finland	10,265
7	Oji Paper	Japan	9,611
8	Kimberly Clark	United States	9,301
9	Nippon Paper	Japan	9,216
10	Weyerhaeuser	United States	8,650

Source: APKI/Data Consult

A number of factories in North America and Scandinavia closed down

Information available to Data Consult, pulp and paper production capacity of Norscan countries have declined. Pulp production shrank by 6 million tons and paper production fell by 5 million tons as a result of the closure of the factories early 2006.

The factories were closed down as a result of growing scarcity of supply of wood basic materials, high cost of chemical procurement, increase in energy cost and labor cost, and growing inefficiency of old machines, etc. Pulp and paper producers in Norscan are no longer competitive facing producers from other countries such as South America and China.

Emergence of new producers in Asia and South America

Asia notably China, and South American countries such as Chile, Brazil and Uruguay, have been prompted to expand their capacity after the closure of factories in North America and Scandinavia. New factories have been built in the Asian and South American countries using modern machines with large capacity.

Industry

Currently there is a shift in concentration of pulp and paper production to developing nations. The concentration is shifting from Western Europe to Eastern Europe namely Russia and from North America to South America and Asia namely China.

In 2006, South American countries commissioned new pulp factories with a total capacity of 4.5 million tons a year bringing the total production capacity of South America to 6.2 million tons with market target mainly China.

The contribution of West Europe and North America to the world's total production of paper was estimated to shrink from an estimated 56% in 2005 to only 44% in 2020. In long term prospects, paper industry of North America, West Europe and Japan is forecast to grow only moderately. Asian countries led by China and East Europe led by Russia will play a greater role in the world's paper industry and market.

The world's consumption of paper is predicted to rise 490 million tons in 2020 from an estimated 360 million tons in 2005. Asia will account for 53% or 260 million tons of the total consumption. Paper requirement in developing nations is predicted to rise 4.1% annually until 2020 as against an annual growth of only 0.5% in advanced countries.

PROSPECTS OF PULP AND PAPER INDUSTRY IN INDONESIA

Opportunity for Indonesia to increase supply

In 2005, the world had a population of 6.5 billion and the figure is expected to swell to 9.1 billion in 2050. With consumption rising by 2%-3% annually, the world's consumption will rise from an estimated 360 million tons in 2005 to 490 million tons in 2020 and to 620 million tons in 2030.

Meanwhile, supply from Norscan, which has traditionally supplied 70% of the world's requirement, will decline after a number of factories were closed down in that regions. Indonesia, therefore, with an annual capacity of 6 million tons of pulp and 10 million tons of paper a year will have the opportunity to cover the shortfall in supply from Norscan. Currently Indonesia is the world's ninth largest producer of pulp and the 12th largest in paper production.

APKI, said South America now sees Indonesia as a powerful rival in the Chinese market. Indonesia has advantages over South America of being closer to China that transport cost will be lower. In addition Indonesia has large forests and the production cost is lower in the country.

Industry

In pulp industry Indonesia has to face China in tight competition. China is very advanced in paper industry but not in pulp industry. The difficulty in China is that HTI development is very costly that the price of pulp is expensive. The land in China is made of granite soil, which is less fertile. Indonesia is blessed with fertilize land made of volcanic soil. In addition, lands in China are owned by the people that land negotiations will be a lengthy process as have to be made with individuals. In Indonesia most lands are owned by the state.

Projected production and consumption of pulp and paper

Based on the growth rates in the past five years, the country's production is predicted to reach 6.782 tons of pulp and 10.677 million tons of paper in 2010.

Table – 31
Projected production and consumption of pulp and paper,
2006 – 2010

(000' tons)

Year	Production		Consumption	
	Pulp	Paper	Pulp	Paper
2005	5,470	8,210	3,790	5,510
2006	5,688	8,620	3,865	5,730
2007	5,915	9,051	3,942	5,959
2008	6,151	9,503	4,021	6,197
2009	6,459	10,073	4,142	6,507
2010	6,782	10,677	4,266	6,832

Source: APKI/Data Consult

Bottlenecks in investment

Investment financing

Until now banks have not been fully ready to provide loans for pulp and paper industry although the price of that commodity has increased to an encouraging level of around US\$ 700 per ton.

Banks have seen the forestry industry including pulp and paper sector as a sunset industry and not safe for investment.

Banks still are cautious because of the traumatic experience of high non performing loan (NPL) including in pulp and paper industry although not all of pulp and paper producers are bad debtors. Some of the pulp and paper companies have been cooperative in finding a solution to their debt problem such as the Sinar Mas Group. The Sinar Mas Group already completed the process of its debt restructuring in 2005.

Similarly, foreign investors are still reluctant to invest in the pulp and paper industry. They still complained about the investment climate being not conducive. However, if the country succeeds in implementing its program in HTI development that will guarantee supply of wood basic material for pulp and paper factories, the country is expected to become an interesting destination of foreign investment.

Regional levies

After the implementation of the regional autonomy in 2000, the regions have issued their own regulations on levies to increase regional income. Investors find many of the regulations not acceptable or rational and the levies make them less competitive. Many of the regions are not aware that their regulation would discourage investment.

For example, a regional regulation of the Kudus regency No. 3/2000 requires companies, which already hold the building license (IMB), to have a license to use their buildings with a levy of 50% of the IMB. A regional regulation of the Riau regency No. 31/2003 charges levy in the form of fee for using public facilities on timber transportation, although the timber is properly covered with document certifying that it is legal.

APKI, therefore, sent a letter in February, 2006 to the president urging the government to help create favorable investment climate in the regions such as by reducing the red tape especially regulations related to regional levies.

Licensing red tape

Another impediment is time consuming licensing procedure. A prospective investor will have to spend at least 6 months to secure a license for the expansion of HTI. Investors complained much about the red tape in licensing and strongly asked the government to simplify the procedure.

Industrial risks

Availability of basic materials

Currently wood basic material for pulp industry is supplied from HTI units of 7 pulp makers, which have concession totaling 3.3 million hectares, which will have a capacity to produce 45.7 million m³ of wood. The seven factories will need only 26.6 million m³ of wood basic material. There will be a surplus if the

Industry

entire HTI units have been ready for harvest expected in 2009. The forestry minister targets to see development of HTI to a total of 5 million hectares in 2009. Failure to meet the target will risk shortage in supply of wood basic material if new factories are coming on line.

Environmental issue

Pulp and paper industry is a potential cause of environmental pollution. Therefore, the industry must be properly managed observing the concept of friendly environment by using machines and equipment that cause as little pollution as possible.

Pulp industry with the HTI program will transform non productive forest lands into productive areas in the form of plantation forests. HTI forests are to be managed with sustainable forest management concept.

Security issue

Many investors have shown strong interest in venturing in pulp and paper industry but they need guarantee for the security of their investment. The security could be given in the form of legal certainty and consistency of government policy.

Prospective investors also are discouraged by too frequent labor protests and sometime violent demonstrations, rife illegal levies and rampant corruption. Availability of skilled human resources is also an important factor to attract investment.

Legal status of land for HTI project

There are cases of overlapping licenses for HTI concessions. For example, concession licenses for the same land are given to two different companies. There are also cases of lands appropriated for HTI projects grabbed by local people who claimed right over the land as traditional land property. HTI forests have also been target of illegal logging involving local people.

Conditions set for world pulp and paper trade

The world market has set a condition pulp and paper factories use only tree from plantation forests. Some consuming countries refuse to accept pulp and paper products from natural forest trees. Pulp and paper factories which are potential causes of pollution are required to be managed properly with waste treatment equipment.

Industry

In Indonesia, requirement to have ecolabeling certificate from the Indonesian Ecolabeling Agency (LEI) is not yet effectively implemented. In the world market, the ecolabeling certificate has been made a condition.

Conclusion and Recommendations

Conclusion

In general, the country's pulp and paper industry is still well competitive and the prospect of the industry is still encouraging. Success in maintaining the condition, however, will depend much on the ability the pulp producers to guarantee the availability of their wood basic material through the expansion of HTI projects. Currently only 1.67 million hectares of 3.3 million hectares of land appropriated for HTI have been grown with trees. Meanwhile, the Forestry Ministry has a target to develop up to 5 million hectares of HTI in 2009. It is not easy, however to bring the target to reality. Investors would be more encouraged to develop HTI if they are allowed to export logs from HTI.

Under the present regulation HTI companies are allowed to sell their trees to local consumers that the selling prices will not follow the prevailing price in international market.

One advantage adding to the competitiveness of Indonesian pulp & paper industry is the availability of ample lands for HTI expansion. New units of HTI do not have to be developed by clearing forests but they could use denuded forest lands. Weather and fertility of soil are also important factors for HTI fiber productivity. In Indonesia, fiber productivity is 10 times higher with shorter planting rotation and lower production cost compared with in North America and Scandinavia, which are the world's largest suppliers of pulp and paper.

Unfortunately realization of investment in pulp and paper industry has been very low. In the past several years there was almost no investment both for new factories and expansion of capacity. If the country is to remain competitive, the government has to address the problem in the industry more seriously and issue favorable policies to attract investment. The licensing procedure needs to be simplified for HTI development. Now it takes at least 6 months to secure a HTI license.

The pulp and paper industry in the country has been dominated by the Sinar Mas group through its subsidiaries including PT. Indah Kiat, PT. Tjiwi Kimia, PT. Pindo Deli, PT. Lontas Papyrys Pulp & paper Mills. Another major outside the group is PT. Riau Andalan Pulp & Paper.

Industry

New investment of the paper and printing sectors will require larger supply of pulp. Without additional pulp capacity through new factories or capacity expansion of the existing producers, shortage is feared in pulp supply in the future.

Indonesia has comparative advantages that will make it attractive for investors. It has large tropical forests. However, the riches in natural resources are not enough to attract investors. The government has to be consistent in its policy and firm in its drive to stamp out illegal logging and smuggling and eliminate illegal levies and prune regional levies. The regions have issued many restrictive regulations discouraging investors.

Banks also not yet ready to extend credits to pulp and paper industry. The fact also could be a potential factor causing the failure to bring to reality the target of the forestry ministry to have 5 million hectares of HTI by 2009. Failure to reach the target could mean failure to supply sufficient wood basic material for pulp and paper factories in 2009. The government has announced that pulp and paper factories may not use trees from natural forest in 2009.

Recommendations

- The government needs to improve investment climate with better political stability and security.
- Restrictive regulations/policies have to be revised. Overlapping is often found in HTI licensing with two different license holders for a HTI area.
- Involvement of foreign companies (PMA) is needed as pulp and paper industry needs large investment. Financially powerful investors, which are scarce in the country, are needed.
- Banks and other financial agencies could take a major role in the development of pulp and paper industry. Banks have to be convinced that pulp and paper industry is by no means a sunset industry. The trade ministry has even said that pulp and paper industry is a potential export earner. Sustainable forest management concept through HTI program should be implemented as ruled by the forestry ministry.

* * *

CORPORATE NEWS IN BRIEF

PRIME HORIZON PTE LTD TO ACQUIRE ALFA RETAILINDO. PT Alfa Retailindo (ALFA) reported that Prime Horizon Pte Ltd of Singapore will acquire 34.05 percent stake in ALFA which have been controlled by PT Sigmantara Alfindo, a spokesman said. PT Alfa Retailindo had received a letter from Prime Horizon which stated that the latter had started negotiations with Sigmantara Alfindo on the plan to take over 34.05 percent stake in ALFA', ALFA corporate secretary Surjadi Budiman told the Jakarta Stock Exchange here Wednesday. Surjadi said the acquisition constituted Prime Horizon's strategic financial investment in the trade sector. The acquisition was carried out provided the relevant agencies have all the necessary documents.

RAJAWALI GROUP TO DEVELOP SEMEN GRESIK TO BE A REGIONAL CEMENT PLAYER. The Rajawali Group plans to develop PT Semen Gresik, in which it holds a 24.9 pct stake, to become a regional cement maker in future, Rajawali managing director Daryoto Setyawan said. Setyawan, who was appointed the new deputy chief commissioner of Semen Gresik, said there was no firm timetable for the regional expansion plan though he hoped to get it underway by next year. July, Rajawali acquired its stake in Semen Gresik from Mexican cement maker Cemex SA for 337 mln usd. To expand regionally, Semen Gresik, could either acquire existing plants or start its own plants in neighbouring country Malaysia or Thailand, Setyawan was quoted by XFN-Asia as saying. The firm is presently Indonesia's largest cement maker with a market share of about 45 pct.

MANDALA AIRLINES TO REPLACE ITS AIRCRAFT FLEET BY AIRBUS. Following the purchasing of 49 percents stocks of pt Mandala Airlines by US's Indigo Partners LCC., PT Mandala Airline will replace the Boeing 737 series aircrafts by six Airbus A-320 aircrafts this year. Since April 17, 2006, 100 percents of the Mandala's stocks have been bought by PT.Cardig International from Kostrad Foundation as much as Rp300 billion. After that, about 49 percent of Cardig's stocks were bought by Indigo. Indigo, a company having stocks in some international airlines in Europe, Asia and US, based in Phoenix, Arizona, US, with its branch office in Singapore to manage its business in Asia Pacific. Cardig International is a holding company having experiences in service areas with 10 subsidiary companies relating with flight industry from main stream to down stream. While, Indigo has a lot of experiences in financial management specially related with investment in international flight industry. PT.Mandala Airlines up to now had operated as many as 14 aircrafts, mainly were Boeing 737-200 servicing flight routes in 18 destination cities.

FJ BENJAMIN TO EXPAND GAP FRANCHISE TO INDONESIA. Singapore-listed FJ Benjamin Holdings Ltd (SGX:F10) announced on Tuesday that it has signed a deal to expand its existing franchise agreement with US-based Gap Inc to bring Gap and Banana Republic-branded clothing and accessory stores to Indonesia. Under the agreement, FJ Benjamin, through its associated company in Indonesia, will open 15 Gap, BabyGap and GapKids stores in Jakarta, Surabaya, Bandung and Bali, and five Banana Republic stores in Jakarta and Surabaya by 2011, the company said in a statement. Signed by GPS, a wholly owned subsidiary of US-based Gap Inc, the deal is an extension of FJ Benjamin's plan to open 30 Gap and Banana Republic stores in Malaysia and Singapore over the next four years. ***

ECONOMIC NEWS IN BRIEF

INDONESIA AUGUST CPI UP 0.33 %. The consumer price index (CPI) in August was up 0.33 pct from the previous month and rose 14.9 pct year-on-year, led by increased costs for education, recreation and ports. In July CPI rose 15.15 pct year-on-year and was up 0.45 pct month-on-month. Analysts polled by XFN Asia had predicted August CPI to have risen 14.7-15.27 pct year-on-year and 0.2-0.65 pct from the previous month. Overall food prices though softened, falling 0.34 pct from the previous month which helped trim the headline CPI rate from the July level. Prices for processed food, beverages and tobacco were up 0.35 pct month-on-month, housing prices inched up 0.3 pct, clothing was up 0.35 pct; healthcare up 0.33 pct; and transportation, communication and financial services were up 0.01 pct. Core inflation in August rose 0.78 pct month-on-month and was up 9.68 pct year-on-year. The overall inflation rate in the first eight months of the year reached 3.67 while core inflation for the same period was at 3.9 pct.

INDONESIAN MOTORCYCLE MARKET BEGINS TO RECOVER. The market for motorcycles in Indonesia has begun to recover with sales rising 19 per cent in August from the previous month. Based on data from the Association of Motorcycles Industry (AISI), production totaled 443,964 units in August, up from 373,092 in the previous month. Sales of motorcycles have fluctuated and tended to decline after the 100 per cent hikes in the prices of oil fuels in October 2005 when motorcycle sales peaked at 491,563. Sales in the first 8 months of this year totaled 2,646,503 units, down 23.12 per cent from the same period last year.

INDONESIA AUGUST TRADE SURPLUS \$3.27 BILLION. The trade surplus fell to US\$ 3.27 billion in August from US\$ 3.44 billion in July as imports growth outpaced exports, even as the latter hit a new monthly record, Central Bureau of Statistics (BPS) chief Rusman Heriawan said. He said exports hit a new all-time high of 8.89 bln usd in August compared to the previous record of 8.82 bln usd in July, and 7.27 bln usd in the year earlier month. However imports also grew to 5.62 bln usd in August from 5.38 bln usd in July, trimming the surplus. In the year earlier month, imports totaled 5.49 bln usd. The surplus fell within the range of 2.95-3.65 bln usd given by nine economists polled by XFN-Asia.

GOVT LOWERS PRICES OF GENERIC DRUGS AGAIN. The government has once again lowered the prices of generic drugs with the aim of putting them within the financial reach of all segments of the Indonesian public, a senior health ministry official said. "The prices of generic drugs have been lowered again. The Health Ministry has issued a decree on the matter effective October 1, 2006," Director of Public Medicinal Affairs at the Health Ministry Bahron Arifin said here on Tuesday. He said based on the newly-issued ministerial letter, the prices of 159 generic drugs have been lowered by 0.05 percent to 70.82 percent. "The price cuts are quite significant, namely about 40 percent on average," Bahron said. Earlier, the Health Minister in Decree No. 487 /Menkes/SK/VII/2006 in lieu of Health Minister's Decree No.336/Menkes /SK/V/2006 dated in order to make keep safe and quality drugs within the financial reach of the people at large, the government had also issue a regulation allowing branded drugs to be marketed at prices that were at most three times as high as common generic ones.

* * *

APPENDICES

DIRECTORY OF FORESTRY AND WOOD-BASED COMPANIES IN INDONESIA

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Management	Mr. Amir Sunarko (President director)
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Plant location :	Desa Jelapat, Kec Tamban, Kab. Batola, Kalimantan Selatan
Location/Area	Kalimantan
Phone No. :	(62-21) 385 9000
Fax No.:	(62-21) 350 5381
E-mail:	harjo@dsuc.co.id (corporate secretary) marketing@dsuc.co.id (Marketing Dept.)
Contact person	Mr. Harjo
Management	Mr. Budhi Surya (President commissioner) Mr. Bonifasius (President director)

Appendices

Table Cont'd

BARITO GROUP	
Address :	Wisma Barito Pacific Lt. 8 Tower B, Jl. S. Parman Kav. 62-63, Jakarta
Location/Area :	Jambi, West Kalimantan, South Kalimantan, East Kalimantan
Phone No. :	(62-21) 530 6711
Fax No.:	(62-21) 530 6680; 5306683
Web-site :	www.ebarito.com
E-mail :	wisma@barito.co.id
PT. KAYU LAPIS INDONESIA GROUP (KLI)	
Address :	Idola Tunggal Office Park, Jl. S Parman Kav. 67 Slipi, Jakarta 11410
Location/Area :	East Kalimantan, Papua
Phone No. :	(62 21) 5306448; 3905751; 3148505
Fax No.:	(62 21) 3908469; 3908470
E-mail:	marketing@kli.com
WAGOPA MUTIARA TIMBER	
Address :	Gajah Mada Tower 19 th floor # 01, Jl. Gajah Mada No. 19-26 Jakarta Pusat 10130
Phone No.:	(62-21) 633 8165; 633 9153
Fax No.:	(62-21) 633 9157
DJAJANTI GROUP	
Address :	Wisma Jayanti Plaza, Jl. Fachrudin No. 19 Jakarta 10250
Location/Area :	Maluku
Phone No. :	(62-21) 337 339; 390 7001
Fax No.:	(62-21) 330 048; 320 812
Contact person	Mr. Nindiyo
SUMBER MAS GROUP	
Address :	Jl. Gunung Sahari Raya No. 28 D – Jakarta
Phone No.:	(62-21) 659 6346; 659 6365; 6289201
Fax No.:	(62-21) 628 0355
AUSTRAL BYNA, PT	
Address :	Menara Global, 7 th floor Suite 701, Jl. Jend. Gatot Subroto Kav. 27 Jakarta 12950
Phone No. :	(62-21) 527 0504
Fax No.:	(62-21) 527 0501
	(62-21) 527 0502 (Marketing)
E-mail	ausbyn@cbn.net.id bynawood@cbn.net.id (marketing)
ASIA FORESTAMA RAYA (AFR) GROUP	
Address :	Jl. Laksda Yos Sudarso No. 30A (Bypass Sunter) Jakarta 14350
Location/Area :	Riau
Phone No. :	(62-21) 314 9688
Fax No.:	(62-21) 3190 6063
Plant location :	Jl. Terminal Lama No. 75, Desa Limbunagn Rumbai, Pekan Baru
Phone No. :	(0761) 51422
Fax No.	(0761) 52937
Contact person	Mr. David

Appendices

DIRECTORY OF PULP AND PAPER COMPANIES

<i>INDAH KIAT PULP & PAPER Tbk., PT</i>	
Address :	Plaza BII Menara II, Lt. 9, Jl. M.H Thamrin No. 51, Jakarta 10350 Indonesia, P.O Box 4295 JKT 10001
Plant location :	Tangerang, Banten
Phone No. :	(62 21) 392 9001-3 (hunting)
Fax No.:	(62 21) 392 8875
Management :	Mr. Yudi Setiawan Lin (President Commisioner) Mr. Ir Gandhi Sulistiyanto Soeherman (Vice President Commissioner) Mr. Teguh Ganda Wijaya (President Director) Mr. Chen Wang Chi (Vice President Director)
<i>PINDO DELI PULP AND PAPER MILLS, PT</i>	
Address :	Plaza BII Menara II, Lt. 9, Jl. M.H Thamrin No. 51, Jakarta 10350 Indonesia, P.O Box 4070 JKTP- Jakarta 1140
Plant location:	Kelurahan Adiarsa, Karawang (Pindo 1) Desa Kuta Mekar, Karawang (Pindo 2)
Phone No.:	(62-21) 392 9266-69
Fax No.:	(62-21) 392 9276-78
Management	Mr. Teguh Ganda Wijaya (President commissioner) Mr. Yudi Setiawan Lin (Commissioner) Mr. Tsai Huan Chi (President director) Mr. Muktar Widjaja (Vice president director)
<i>PABRIK KERTAS TJIWI KIMIA, PT</i>	
Address :	Plaza BII Menara II, Lt. 9, Jl. M.H Thamrin No. 51, Jakarta 10350 Indonesia, P.O Box 4295 JKT- Jakarta 10001
Plant location:	Desa Kramat Tumenggung, Kec. Tarik, Sidoarjo, Jawa Timur
Phone No. :	(62-21) 392 9266; 392 9269 (hunting)
Fax No.:	(62-21) 392 9276
Management	Mr. Teguh Ganda Wijaya (President commissioner) Mr. Ir Gandhi Sulistiyanto Soeherman (Vice President commissioner) Mr. Yudi Setiawan Lin (President director) Mr. Muktar Widjaja (Director)
<i>LONTAR POPYRUS PULP & PAPER INDUSTRY, PT</i>	
Address :	Plaza BII Menara II, Lt. 9, Jl. M.H Thamrin No. 51, Jakarta 10350 Indonesia, P.O Box 4070 JKTP- Jakarta 1140
Phone No. :	(62-21) 392 9266-69; 392 9001
Plant location :	Desa Tebing Tinggi, Kec. Tungkal Ulu, Jambi, phone (62741) 62646
Fax No.:	(62-21) 392 9276-78
Management	Mr. Teguh Ganda Wijaya (President commissioner) Mr. Drs. John Ferdinand Pandelaki (Vice President commissioner) Mr. Lin Fu Li (President director) Mr. Hendra Jaya Kosasih (Vice president director)

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Appendices

ECONOMIC INDICATORS

1. CONSUMER PRICE INDEX IN INDONESIA (2002 = 100), IN AUGUST 2006 CHANGE AGAINST PREVIOUS MONTH AND DECEMBER 2005

Sector	August 2006	Change (%)
GENERAL INDEX	141.88	0.33
1. FOODSTUFF	133.94	-0.34
- Cereal roots and products thereof	158.62	2.49
- Meat and products	124.82	-0.10
- Fresh fish	132.43	1.12
- Processed fish	128.04	0.50
- Egg, milk, and products	115.13	-1.51
- Vegetables	130.42	-0.93
- Beans	138.37	0.64
- Fruits	125.96	-0.46
- Spices	119.15	-12.20
- Fat and oil	127.39	0.92
- Foodstuff others	119.94	1.76
2. PREPARED FOODS, BEVERAGES, CIGARETTE & TOBACCO	136.68	0.35
- Prepared foods	139.16	0.42
- Non-alcoholic beverages	139.31	0.18
- Tobacco & alcoholic beverages	128.67	0.38
3. HOUSEHOLD	146.03	0.30
- Housing cost	140.29	0.39
- Fuel, light and water	183.88	0.08
- Household equipment	111.96	0.25
- Household maintenance	125.28	0.45
4. CLOTHING	127.33	0.35
- Clothing for men	119.21	0.08
- Clothing for women	114.11	0.25
- Clothing for children	118.34	0.12
- Personal effects	170.73	0.77
5. HEALTH	124.45	0.33
- Medical care	138.84	0.65
- Drug	118.81	-0.45
- Baby care	136.08	0.34
- Cosmetics	116.26	0.34
6. EDUCATION, RECREATION & SPORT	144.74	4.77
- Education	179.23	7.35
- Course / training	118.44	0.35
- Education equipment	117.95	2.15
- Recreation	106.08	-0.04
- Sport	113.95	0.43
7. TRANSPORTATION, COMMUNICATION & FINANCE	166.50	0.01
- Transportation	187.58	-0.01
- Communication & Send	120.64	-0.01
- Transportation support	135.81	0.33
- Transportation support	150.52	0.03

Source: Central Bureau of Statistics

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Appendices

2. OIL PRICES

I T E M	Market	Latest		1 month	3 months	One year
		Date	Price	ago	Ago	ago
1. CRUDE OIL SPOT PRICE (US\$/Barrel)						
- Sumatran Light 1)	Tokyo	09/29/2006	52.26	56.10	53.22	39.15
- Arabian Light 2)	Europe	09/29/2006	54.43	58.32	56.46	46.40
- Arabian Heavy 2)	Europe	09/29/2006	56.19	60.46	59.10	49.23
- Brent 2)	Europe	09/29/2006	69.36	73.93	66.27	54.29
- W. Texas 2)	-	09/29/2006	62.72	68.54	67.35	49.55
2. REFINED PRODUCT (US\$/Gallon)						
- Fuel Oil 2)	New York	09/29/2006	.5555	.5665	.5642	.5767
- Gasoline, Premium 3)	New York	09/29/2006	.4442	.4462	.4440	.4623

Sources: 1) FEER - Telerate, 2) AWSJ- Dow Jones International Petroleum Report, 3) AWSJ - Oil Buyer Guide * * *

3. FOREIGN EXCHANGE AND GOLD PRICE IN JAKARTA

I T E M	Today 09-29-2006	1 month ago	3 months ago	One year Ago
buying				
A. FOREIGN EXCHANGE (RUPIAH)				
selling				
US\$	8,705	8,640	8,895	9,330
	9,705	9,640	9,895	10,330
Pound.	16,439	16,319	16,449	16,237
	18,333	18,212	18,357	17,982
Aust. \$	6,534	6,547	6,608	7,021
	7,290	7,310	7,352	7,777
Sin. \$	5,484	5,469	5,598	5,518
	6,118	6,105	6,231	6,111

Appendices

Foreign exchange and gold price in Jakarta cont'd

I T E M	Today 09-29-2006	1 month ago	3 months ago	One year ago
buying				
A. FOREIGN EXCHANGE (RUPIAH)				
selling				
Mal. \$	2,480	2,420	2,425	2,573
	2,495	2,435	2,700	2,599
Hk. \$	1,117	1,110	1,146	1,199
	1,245	1,239	1,274	1,328
Yen	74.08	73.72	78.24	82.58
	82.63	82.28	87.06	91.46
Euro	11,070	11,035	11,368	11,277
	12,346	12,317	12,648	12,490
B. GOLD PRICE (RP/GRAM)				
Gold 24 carat	175,500	179,500	186,500	132,000
C. AVERAGE INTEREST RATE				
- Call money	6.5	15.5	14.4	6.0
- S B P U				
a. 7 days	-	-	-	-
b. 1 up to 3 months	-	-	-	-
c. 3 up to 6 months	-	-	-	-
- SBI (Primary market)				
a. 7 days	-	-	-	-
b. 31 days	6.7	11.7	12.2	9.0

Notes : SBI = Bank Indonesia Certificates, SBPU = Money Market Securities

n.a. = Data not available

Source: Data Consult

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Appendices

4. THE INDONESIAN ECONOMIC TRENDS

Items	2002r)	2003r)	2004r)	2005r)	2006 e)
1. The growth rate of GDP (% p.a.)	3.6	4.0	5.1	5.6	6.0
- GDP per capita (US\$)	810	1,116	1,207	1,305	1,356
- GNP per capita (US\$)	760	1,072	1,165	1,224	1,250
2. Total export (US\$ bill)	57.2	61.1	71.6	85.5	86.4
Total increase (%)	-1.6	-6.8	-9.3	-19.5	-
Non-oil/gas(US\$ billion)	45.0	47.4	55.9	66.3	67.2
Non-oil Increase (%)	-3.0	-5.3	-17.9	-18.5	-
3. Total import (US\$ bill)	-31.3	-32.6	-48.4	-58.6	-57.2
Total increase (%)	1.6	4.1	4.5	26.0	-
Non-oil/gas(US\$ billion)	-24.8	-24.9	-34.5	-43.4	43.1
Non-oil increase (%)	2.0	0	18.2	24.7	-
4. Current account (US\$ bill)	5.8	6.1	5.9	8.0	6.5
5. Reserve assets (US\$ bill) (End of the year)	32.0	36.2	36.3	34.7	35.8
6. Total money supply (Rp trill.)	191.9	223.7	253.8	281.9	290.0
Increase in 12 months(%)	8.0	16.6	11.8	12.9	-
7. Bank credit (Rp trill.)	410.3	477.2	595.6	730.1	846.2
Increase in 12 months(%)	18.8	19.8	26.4	20.2	-
8. Comm. bank deposit (Rp trill.)	845.0	902.3	963.0	1,030.4	1,142
Increase in 12 months(%)	4.9	6.8	6.7	7.0	6.6
9. Average interest rate (% p.a.)					
a. 3 month time deposit					
-State bank	13.5	7.31	7.2	8.4	9.0
-Private bank	13.7	7.2	6.9	7.9	9.0
b. Short-term credit					
-State bank	17.2	17.9	16.4	15.0	11.8
-Private bank	18.3	15.7	14.0	17.2	12.9
10. Inflation rate, % p.a	10.03	5.06	6.40	17.11	8.0
11. Population (million peoples)	208.1	211.6	214.4	216.6	217.3

Notes : r) Revised figures

e) Estimate by Data Consult

p) Projection revision figures

n.a. = data not available

Source: Bank Indonesia, Central Bureau of Statistic and Data Consult * * *