

Emerging Pulp and Paper Industry in Thailand

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Abstrak

Tulisan ini menggarisbawahi diskusi singkat mengenai reformasi ekonomi pada tahun 1970-an hingga 1990-an yang mengubah hubungan ekonomi luar negeri Thailand melalui implementasi strategi ekonomi yang membuka kesempatan bagi para investor untuk menanamkan modalnya. Upaya ini memengaruhi peningkatan *Foreign Direct Investment* (FDI) yang merupakan hasil kerjasama antar investor domestik, bahkan ada perusahaan seratus persen kepemilikan dimiliki oleh perusahaan asing. Implikasi dari reformasi ekonomi ini menunjukkan suatu yang positif. Para investor menanamkan modalnya dalam berbagai sektor, seperti minyak, pertambangan, petrokimia, otomotif, perbankan, infrastruktur perumahan, industri perhutanan, dan sebagainya. Tulisan ini berfokus pada *pulp* dan industri kertas. Pada dua dekade terakhir (1980-an sampai 2000-an), terlihat peningkatan jumlah *pulp* dan industri kertas di Thailand. Tulisan ini bertujuan untuk menelaah kebijakan pemerintah Thailand terhadap perkembangan ekonomi, implikasi dari kebijakan *pulp* dan industri kertas, dengan mengambil dua perusahaan *pulp* dan industri kertas, yaitu Advance Agro dan Siam Cement Groups sebagai contoh kasus bagaimana mereka mengelola industri tersebut, masalah kepemimpinan di dalamnya, dan bagaimana mereka merevitalisasi perusahaan agar terus berkembang.

Kata kunci: Kebijakan reformasi ekonomi, Royal Forest Department (RFD), *pulp* dan industri kertas, Advance Agro, Siam Cement Group, manajemen.

Introduction

Thailand is the second largest producer (4.3 million m³ ton) after Indonesia (7.6 million m³ tons)¹ of paper production in ASEAN countries in 2007. In the last two decades (1980s-2000s) there have been an acceleration of emerging pulp and paper industries in Thailand. There are two main driving factors that highlight these emerging industries. Firstly, the government readily welcomed *foreign direct investment* (FDI) in many fields, including forest industries (pulp and paper) and approved joint ventures and even 100 percent ownership owned by foreign companies of domestic ventures. Secondly, the Thai government actively supported the development of the industry through easy access to credit, *infrastructure* (port and highway) construction, and subsidies to plantation owners, tax relief and favorable import duties on machinery.

1 *The Japanese Pulp and Paper Industry in Charts and Figures* (2005), published by Japan Pulp and Paper Co., Ltd, pp. 45.

These policies encouraged a positive response from domestic and foreign private companies to invest their capital in establishing pulp and paper factories and plantations for the raw material in Thailand in the 1980s. Among those investors are some famous companies, such as Siam Cement Group (SCG), who established Siam Pulp and Paper; Soon Hua Seng Group (SHS) with Advance Agro (AA); The Phoenix Pulp and Paper Company, owned by the European Overseas Development Corporation (EODC); Ballarpus industries, an Indian Industrial conglomerate; Suan Kittu Corporation, Hi-tech Paper; Shin Ho Paper Co; from South Korean conglomerate, Thai Cane Paper Co, etc (Soonenfeld, 1996; Carrere and Lohmann, 1996).

As result, the pulp and paper, plywood, veneer, sawmill and furniture industries were expanded and demand for timber significantly increased. The question is how to maintain a sustainable supply of wood? In order to answer this, the government and private sector carried out two separate activities. First, the government invited other stakeholders (private companies, local farmers, FIO (*Forest Industry Organizations*)) to manage forest plantations. 4.8 million hectares of plantations, or about 38 percent of total forest coverage (16.2 million ha), were managed in Thailand in 2000, consisting of rubber (2 million ha), Eucalyptus (1.9 million ha) and others (FAO, 2001). Second, they carried out importing log and sawn timber from overseas. The positive impact of plantation forestry by the private sector and under 'contract farming' between private sector companies and local farmers, contributed to job creation in rural communities and empowering local farmers socio-economically. Although some scholars and NGOs criticize the impact of plantations on the ecology, through soil erosion and too much water absorption that subsequently affects surrounding crops, generally farmers and private companies were accepted and rapidly developed 'Eucalyptus camaldulensis' as commercial trees for farmers in Thailand.

Hence, this paper aims to clarify the dynamic process of emerging pulp and paper industry in Thailand by examining government's policy on economic development (*macro economics policy*), the impact's of policy toward development of pulp and paper industry, appealing two companies Advance Agro (AA) and Siam Cement Group (SCG) as case studies, how they developed and managed their companies, and conclusion as noted major findings.

Government's Policy on Economic Development

1. Capital accumulation

The attitude of the Thai government toward *Foreign Direct Investment* (FDI) has been generally positive, though it has varied somewhat over time. For instance, in the early 1960s, the government welcomed foreign direct investment in the manufacturing industry and approved even 100 percent ownership in the import substitution industry. However, the government usually encouraged foreign investors to enter joint ventures with domestic

partners; FDI also became part of this process (Pasuk and Baker, 2000: 19). In the 1980s, Thailand also invited more investments from East Asian countries such as Japan, Taiwan and Hong Kong. Taiwanese companies, mostly producing labor-intensive products, invested in Thailand for reasons similar to that of the Japanese. Whereas Hong Kong companies were involved in because of the uncertainty regarding the future of the territory shortly after the political instability of the country had been overcome, in the early 1980s. The unstable democratic period was ended by the military coup of October 1976 and a system of government established, in which the military and politicians shared power, which lasted until the late 1980s, although the balance of power was in favor of the former.²

During the 1980s, the Thai economy experienced massive expansion and restructuring that profoundly impacted on the strategies and influence of the leading strategic groups. By the end of the 1970s, agro-industry-led economic growth began to enhance products, partly because of substantial drops in the world market prices of such goods due to overproduction. After a slump in the Thai economy in 1984, a period of unprecedented boom based on the export of *manufactured goods* occurred. Between 1985 and 1995, GDP increased from 1,191 to 2,912 billion Baht, an annual growth rate of 9.4%. The proportion of manufactured exports, reached 39% in 1984, increased 67% in 1987 and reached 84% of total exports in 1995. While in 1980, the major export were rice and cassava, by the late 1980s textiles and cheap-labor manufactures were exported and by the early 1990s computer parts and electronics (Pasuk and Baker, 1996). Hence, until the early 1990s, there were two main sources of capital formation: the Thai commercial banks and foreign direct investment.

The expansion of *agro-industry* had already led to a massive accumulation of capital and to the formation of powerful corporate conglomerates that were economically independent of the state. This concentration can be seen as the fact that in 1985, the 641 companies with over 200 employees (representing 1.6% of the total number of companies) employed 41% of the workforce and held 54% of fixed assets. Ninety percent of capital of the top seventy Thai financial firms were owned by sixteen conglomerates, which controlled fifty of these firms (Suehiro, 1989: 218-219). This trend increased after 1985. Gross Capital Formation increased from 346 to 1,215 billion Baht, that is, from 29% to 42% of GDP between 1985 and 1995. The Thai economy had been dominated by groups of companies, which incorporated finance capital, agro-industry and manufacturing.

The following discussion focusing on agro industry which consist of plantation forestry and lead to the pulp and paper industry, driving factors of emerging, and how the government's policy encouraging and giving access to other facilities for investors.

2 See "Foreign Direct Investment (FDI) in Thailand, in Yoshihara KUNIO, *the Nation and Economic Growth: Korea and Thailand*, Kyoto University Press. 1999, pp. 32-33.

2. Development of the Pulp and Paper

The forestry sector was associated with agro industry and mainly covered plantation forestry such as *Eucalyptus*, *Acasia mangium*, and *local tree species*. This sector grew up in 1980s and was predominantly occupied by government agency (FIO: *Forestry Industry Organization*) and big paper companies such as Siam Cement Group (SCG), Advance Agro (AA), Phoenix, etc. In forestry, the old state-dominated *timber industries* declined as forest resources were depleted. During the period from 1980-1984, export revenue from logs and sawn wood dropped to an annual average of 22 million Baht. Whereas imports increased over 2 billion Baht a year (Oliver, 2005:81-82). This trend was finally completed by the end of the decade with the general ban of logging in 1989. However, a new corporate group within forestry emerged in the form of conglomerates, interested in *pulp and paper* production. The increase of manufacturing and the export boom led to a huge increase in the demand for paper for communications, printing, writings, administration and packaging.

The discussion focuses on the development of pulp and paper companies in Thailand by exploring case studies in terms of strategy to obtain capital, procurement of raw material, production and market of two emerging companies: Advance Agro and Siam Pulp and Paper. The Thai pulp and paper industries can be looked at in terms of the economic and political analyses of power relationships, capital movement and institutional structures and regulations, stressing the dynamic interaction between states and markets on national, regional, and global levels.³ In this sense, Siam Cement Group (SCG) is closely linked with the royal family, political elites and high-level banking officers. Also, within Advance Agro, the chairman of the company was the former advisor to the Bangkok Bank, Virabongsa, and had close ties with the Prime Minister, General Chavalit Yongchaiyudh. The company has received loans to a total of US\$ 850 million from the government bank.

3. The Impact of Government's Engagement

The Thai government actively supports the development of industry, through credit, subsidies, pro-cash crop and plantation policies, tax relief and favorable import duties on machinery imports. The *Royal Forest Department* (RFD) issued a policy on the provision of subsidies for seedlings and fertilizers to tree plantation farmers. In the period from 1981-1984, the government invited local farmers to plant *eucalyptus* on their land, providing subsidies of approximately 1,500-2,000 baht per Rai.⁴ The response from farmers was

3 For further information, see Takashi Shiraishi, "Introduction: States, Markets and Societies after the Asian Crisis", in SHIRAISHI, Takashi & Patricio N. ABINALES (ed.) *After the Crisis: Hegemony, Technocracy and Governance in Southeast Asia*. Kyoto University Press and Trans Pacific Press, 2005, pp. 1.

4 An interview with Veirapol Suthiponpalangkul, Royal Forest Department (RFD Officer) on July 3, 2009 in Bangkok.

positive. However, the unstable political condition in the country led to inconstancy in the provision of subsidies during the 1990s. Hence, in order to continue sustainable plantation forestry and to empower the socio-economic strength of farmers, the government requested large companies such as Advance Agro, Siam Cement Group (SCG), Phoenix, Panjapol, etc., to create contracts with farmers under the scheme "Contract farming". Thus, providing the seedlings, fertilizers and a guaranteed market through private companies would grant profit from this scheme at harvest time. This program eventually categorized as success achievements to provide 'raw material' (timber supply) to the company. Besides, farmers could earn income generating to lift up their socio-economic condition and provide job creation for rural communities.

Domestic Capacity of Pulp

Total production capacity for short fibre pulp increased by 86 percent from 331,000 to 615,000 dry tons per year in 1996. The additional capacities were from two new pulp producers, Advance Agro Company Ltd, with 175,000 tons per year and Panjapol Paper Company, with 99,000 tons per year. Meanwhile, Phoenix Pulp and Paper Ltd increased to its full production capacity of 210,000 tons. The existing three pulp mills, Siam Pulp and Paper, Siam Cellulose Co and Bang Pa-in Pulp and Paper Mill still maintained their capacities of 68,000, 60,000 and 3,000 tons per year, respectively (Table 1).

Table 1. Pulp Companies' Production Capacity (1,000 tons)

Company	Year	Year
	1995	1996
Phoenix Pulp and Paper	200	210
Advance Agro	-	175
Panjapol Pulp Industry	-	99
Siam Pulp and Paper	68	68
Siam Cellulose	60	60
Bang Pa-in Pulp and Paper	3	3
Total	331	615

Source: FAO (2004).

In contrast, from the first to the third quarter of 1996, Thailand imported 282,000 tons of short fibre and long fibre pulp, mainly from USA, Canada, Chile, Brazil, New Zealand, Sweden and Indonesia. At the same time, Thailand also imported 464,000 tons of wastepaper during the same period from USA, Singapore, Germany, the Netherlands, and New Zealand. The major kinds of imported wastepaper were old corrugated containers (OCC), representing 65 percent of the total imported amount. But, in the same period, 88,000 tons of

pulps were exported. The main destinations were mostly in Asia, in particular, India, China, South Korea, Indonesia, Taiwan, Japan and Italy (FAO, 2004).

Domestic Capacity of Paper

In 1996 there were 47 paper mills registered, with a combined annual capacity of 2,842,000 tons, a 16.3 percent increase compared to the 2,444,500 tons in 1995, including the new pulp and paper mill, namely, Advance Agro Company Ltd, with 217,000 tons per year. The total paper capacities in 1996 could be categorized into 1,625,000 tons for kraft paper, 631,000 tons for printings and writings paper, 264,000 tons for paperboard, 110,000 tons for newsprint paper, 132,000 tons for household and sanitary paper and 80,000 tons for gypsum plaster board liner (other papers) (Table 2).

When the economic crisis hit Asia in 1997, there was a reduction in domestic consumption of paper and board in Thailand. Consumption decreased from 2,042,000 tons in 1997, to 1,604,000 tons in 1998. Domestic pulp consumption also decreased from 802,000 tons to 644,000 tons (FAO,1998). Meanwhile, imports of pulp and paper in 1998 decreased to 43 percent of 1997 levels. At the same time, production capacity increased. Exports increased, partly because of the surplus created by reduced domestic demand, but also because companies were desperate to earn hard currency in order to repay foreign loans after the collapse of the value of the Baht. In 1997, around 525,000 tons of pulp and paper were exported, while the 1998 figure almost doubled to 971,000 tons.⁵ Advance Agro and Phoenix currently have ambitious plans to increase capacity, driven by their needs to repay debt and by the demand for cheap pulp price internationally.

Table 2. Paper Production Capacity (1,000 tons)

Various Paper	Year	Year	Percentage
	1995	1996	%
Kraft paper	1,416	1,625	57
Printing&Writing Paper	465	631	22
Paperboard	264	264	9
Household and Sanitary	110	132	5
Newsprint paper	110	110	4
Other papers	80	80	3
Total	2,445	2,842	100

Source: FAO, 1996.

⁵ For more information, see Paperloop (2000). *Country Spotlight: Thailand. Economic growth fuels rise in demand*. Web-site: http://www.paperloop.com/newsinfo/regional/asia_australia/thailand_spotlight.shtml accessed 12 January 2001.

Other Pulp and Paper Companies

Six companies with production capacities over 100,000 tons controlled another 37% of production. These companies are: Phoenix Pulp and Paper Company, owned by the European Overseas Development Corporation (EODC); Ballarpur Industries, an Indian Industrial conglomerate, the largest producer of bleached virgin pulp; Soon Hua Seng (SHS) Group, the largest rice-exporting and agro-industry conglomerate in the country, which moved into the industry in the late 1980s with its plantation company Suan Kittu Corporation and Hi-tech Paper Co.Ltd (33,000 tons of printing and writing paper) and Advance Agro (175,000 tons of pulp and 217,000 tons of paper) in 1994, with major shareholders being the Japanese multi-national New Oji paper and Shin Ho Paper Co.Ltd from a Korean conglomerate (100,000 tons newsprint); Thai Cane paper Co., Ltd (100,000 tons kraft paper) and United Paper Co., Ltd (99,000 tons kraft paper) (Sonnenfeld, 1996; Suehiro, 1989; Carrere and Lohmann, 1996). From this description, the growth of the pulp and paper industry can be seen in Table 3.

Table 3. Production, Export, and Import of Pulp and Paper
1979-1994 (1,000 tons)

Year	Production		Export		Import	
	Paper	Pulp	Paper	Pulp	Paper	Pulp
1975-79	275.2	30.8	8	-	115.2	94.2
1980-84	374.8	45.2	8.2	0.8	171.6	96.0
1985-89	574.4	131.8	44.2	17	234.4	118.1
1990-94	1,221.0	202.2	94.6	30	470.8	289.8

Sources: TDRI (Thailand Development Research Institute), 1989; RFD 1986; 1990; TPPIA (Thai Pulp and Paper Industries Association), 1987, 1997.

The development of paper production was increased by an annual 10% between 1976 and 1984, and pulp production by an annual 27%. Between 1980 and 1984, pulp production increased significantly at 45%. Throughout the 1980s, production expanded, with paper production in the early 1990s over three times the volume of the early 1980s, and pulp production over four times larger. However, this increase did not cover domestic demand. In the early 1980s, paper imports were at around 46% of production and pulp imports were more than double domestic production.

During the 1980s, a concerted effort was made to increase the supply. As Sonnenfeld (1996) puts it: "expanded pulp and paper production was a national development objective, to lessen dependency on outside suppliers, decrease imports, and provide intermediate goods to growing, export-oriented industries". The stated aim was to gain self-sufficiency but also to expand

into export markets and this was apparent in the policies for the paper and pulp industry. Although 70% of the Thai industry's fibre requirements are supplied by *wastepaper* (in particular, for products like kraft paper for export packaging), virgin pulp is a necessary ingredient and high pulp price increases in the 1980s made dependence on imports especially painful. Therefore, a growing international market for pulp and woodchips (for pulp production) made it attractive for Thai conglomerates to produce pulp for export (Table 4). Multi-national firms also started taking an interest in Thailand as a possible producer of eucalyptus pulp.

The government promoted the nascent Thai pulp industry through the following means:

- 1) Increasing the import duty for pulp from 1-10% in 1982;
- 2) Placing four annual levies of an extra surcharge of 20% for imported pulp during 1982-1986;
- 3) Providing exemptions from corporate income tax for three to eight years after a company starts earning income. Losses occurring during the exemption period could be deducted from revenue for five years after the exemption period (TDRI 1989) (Oliver, 2005:88).

Several companies were given preferential treatment by the BOI (*Board of Investment*) (item 3) (Table 5).

Table 4. BOI-Promoted Pulp Manufactures by 1988

Company	Year Approved	Capacity (tons)	Investment (ml. baht)
Kimberley-Clark	1984	5,952	18.00
Panjapol Pulp&Paper	1978	50,000	235.00
Pech Paisal Industry	1984	5,952	50.00
Phoenix Pulp&Paper	1982	50,000	735.00
Siam Pulp&Paper	1979	na	500.00

Source: Charit 1989; Oliver, 2005: 88.

BOI (Board of Investment).

Table 5. Firms with BOI Privileges for Wood Chips Production

Name of Company	Year appr.	Capacity (tons)	Export (%)	Investment (ml baht)
Siam Vana Forestry Co	1986	510,000	100	70.02
Siam Agrotex Co.,Ltd	1986	561,000	100	77.94
Thai Wittawat Corp	1988	65,280	100	65.00
N.R. Eucalyptus Agr Co	1987	65,000	80	50.00
Thai United Chip wood	1988	100,000	100	53.26
C. Nakon International	1986	150,000	100	29.25
Siam Forestry Industrial	1986	255,000	100	40.02
Thai Wood and Pulp	1988	46,000	100	15.44
Kitti Garden Co	na	65,000	na	70.00
V.P. Eucalyptus Chip wood	1987	240,000	na	185.00
Total		2,057,280		655.93

Source: Charit 1989; Oliver, 2005: 89.

Abbreviation: appr: approved;

Government policy sought to protect the infant pulp industry in order to establish a competitive domestic basis from which it could begin export as well as in the promotion of wood chip production. Projections were made by the pulp and paper industry itself in 1989 showing confidence in an increasing demand and capacity (Table 6). Domestic demand of pulp was expected to reach 426,000 tons in 1993; 487,000 in 1995; 548,000 in 1996 and estimated reach 712,000 in 2004, and slightly developed to become 780,000 in 2006. Production capacity was expected to reach 152,000 tons in 1990 and rapidly developed to reach 717,000 tons in 1996, 1,180 million tons in 2003 and 1,169 million in 2007 (Table 7). Meanwhile, domestic production of paper reached 2,698 million tons in 2001, 3,795 million tons in 2004 and rapidly developed 4,516 million tons in 2007.⁶ To cover the demand for wood-chips, about 482,000 ha of plantations was required in 1990, rapidly growing to 4,920 million ha in 2000 (FAO 2001). However, the projected rise in production capacity could only be met if a sufficient supply of raw material for wood chips and pulp was made available. For this reason, the industry stepped up its efforts to achieve a substantial increase in the area of fast-growing tree plantations.

⁶ Regarding total paper production comprises such as newsprint, printing and writing paper, kraft paper, paper board and packaging paper, and household and sanitary paper (see *Forestry Statistics of Thailand*, 2007, pp.28.

Table 6. Projected Development of Pulp Demand, Production Capacity, and Plantation Area Required in Thailand (1,000 tons)

Year	Domestic pulp demand (TDRI)	Domestic pulp demand (TPPIA)	Pulp Capacity (TPPIA)	Plantation area required (TDRI) 1000 rai
1988	-	185.50	110.50	389.25
1989	-	196.30	140.50	437.69
1990	118.00	268.00	152.00	482.84
1991	133.60	303.00	153.00	533.62
1992	149.20	340.00	203.00	590.02
1993	164.80	426.00	253.00	652.05
1994	180.40	480.00	552.00	719.69
1995	196.00	487.00	717.00	792.96
1996	214.40	548.00	717.00	879.11
1997	232.80	-	-	978.15
1998	351.20	-	-	1,090.06
1999	269.60	-	-	1,214.86
2000	288.00	-	-	1,352.54

Sources TDRI 1989; TPPIA 1989, 1990a,1990b; 1991. TPPIA 1987; TPPIA 1990.

Table 7. Domestic Production of Paper and Pulp (1,000 ton)

Year	Paper	Pulp
2001	2,698	919
2002	2,517	953
2003	3,598	1180
2004	3,795	1000
2005	4,308	1,061
2006	4,308	1,129
2007	4,516	1,169

Source: *Forestry Statistics of Thailand*, 2007.

Case Study of Two Emerging Paper Company

The discussion focuses on two emerging paper companies namely *Advance Agro and Siam Cement Group (SCG)*. There are two main reasons for both successful companies. Firstly is that both company officers actively engage with political elites in the government by making “political collusion” in order for accessibility to facilities such as credit and loan. Secondly, the Thai’s government launched ‘affirmative policy’ for attraction to investors such as tax holidays, relief of tax for machinery import, provide good infrastructure

(port and high way), easy access of getting raw material (timber) for company, etc.

1. Profile of Advance Agro

Advance Agro (AA) in the branch of Soon Hua Seng Group (SHS). The company is the biggest fully integrated pulp and paper manufacture in Thailand. Advance Agro's mill opened in 1996, and the second opened in 1998, at Tha Toom in Pachinburi province, 120 kilometers from Bangkok. The Company has two pulp mills with a total production capacity of 580,000 tons a year and three paper plants with a total capacity of 600,000 tons a year. All short-fibre wood comes from eucalyptus trees grown in a 150-kilometers radius of Tha Toom mills. Soon Hua Seng (SHS) Company established a laboratory for carrying out research into *Eucalyptus camaldulensis* and other fast-growing tree in 1982. Today, SHS Group's 67 hectares complex of greenhouse and nursery plots churns out 65 million hybrid clone seedlings every year. The company distributes pulp and printing and writing paper in Thailand and exports to Europe, Asia, USA, Africa and in the Middle East. Seventy per cent (75%) of the company's production of paper is exported to overseas, the two largest markets being China and Japan (Woranuj, 2000).

The company is a part of the agribusiness Soon Hua Seng (SHS) Group, which was founded in the 1950s by members of the *Dumnerchanavit* family. SHS started growing *eucalyptus* on a commercial scale in the late 1980s. Advance Agro's and SHS Group's management are well connected with Thailand's political elite. Virabongsa Rmangkura, chairman of the company, acted as an economic advisor to General Prem Tinsulanonda, Thailand's prime minister in 1980s. In the mid-1990s, he was the finance minister during General Chatchai Choonhaven's administration and was a deputy premier in charge of economic affairs under Prime Minister General Chavalit Yongchaiyudh (Chris Lang, 2002). Virabongsa is an advisor of Bangkok Bank, which has outstanding loans US\$ 850 million with the SHS Group (AA www 1).⁷ Advance Agro was incorporated in 1989, and listed on the *Stock Exchange* of Thailand in February 1995. The major share holders are Soon Hua Seng Group (47.1 per cent), officers and directors of Advance Agro (8.9 percent), Stora Enso, Finland (19.9 percent), Oji Paper (5.5 percent) and the Commonwealth Development Corporation (1.1 per cent) (AA www 2).⁸

Hence, among the companies recently making large new investments in pulp and paper is the *Soon Hua Seng Group*, one of Thailand's leading rice traders. In the late 1995 the firm's subsidiary Advance Agro brought a new 217,000 tonnes per year Mitsubishi-Beloit paper machine on stream in east

7 See AA (www 1) in Advance Agro web-site: <http://www.advanceagro.com> accessed 8 July 2000.

8 AA (www 2) Advance Agro Shareholders and Lenders. Website: <http://www.advanceagro.com/company/shareholders.html> accessed 8 July 2000.

Thailand, with an integrated 175,000 tonnes per year. Defibrator eucalyptus kraft pulp mill following shortly thereafter. The Siam Cement Group, a company associated with the Crown Property Bureau and which holds eleven companies producing paper and pulp, has been recently boosted its production capacity to around one million tonnes per year of pulp, paper and converted products, with three new machines slated to come on line in 1997. Hiang Seng and Panjapol have also added new capacity.⁹

Advance Agro was hit hard by the 1997 *economic crisis*, when the currency value of the Thai Baht collapsed. Advance company left debts of 22.6 billion baht, only 7 billion of which was baht-denominated debt. Advance company subsequently breached the financial covenants on its loans. In November 1997, the company became the first Thai company to issue high-yield bonds with a US\$ 111.35 million bond offering on US markets. The company raised more money by selling 19.9 percent (US\$ 82 million) of its shares to *ENSO (which merger with Stora in 1998 to become Stora Enso)* and 5.5 per cent (US\$ 22 million) to *Japan's Oji Paper*. Oji Paper won the deal of exclusive rights to sell Advance Agro paper in Japan. In May 1999, Masahiko Ohkuni of Oji Paper became a board member of Advance Agro (*Bangkok Post*, 7 May 1999). The company exported 60 per cent of its paper products to Hong Kong, China, Australia, and Europe.¹⁰ In 2003, Advance Agro used 50 per cent of its pulp to produce paper. Five per cent were exported Thailand and the rest to Australia, China, South Korea, and Malaysia.

The response from local people

Villagers living near Advance Agro's pulp mill complain of ash from factory chimneys being deposited in their gardens. Some villagers have suffered itchy skin and the pulp mill often smells. In August 2000, black, stinking water from piles of wood and charcoal in Advance Agro's factory compound, leaked into a neighboring canal and killing a large number of fish. The cause was a collapsed dyke inside the factory compound. The company routinely pours its waste water from pulp mill between the rows of eucalyptus trees. The filthy and green water flows through channels of the stony infertile soil. People also supposed that Advance Agro's plantations have been one of factors caused the 'deforestation' of large areas of eastern Thailand. Other factors include road building (partly build during the war in Indochina to link bases for US troops with the port as Chon Buri and also to access Cambodia's forests), and promotion of large-scale industrial agriculture by the government with support from the World Bank. One of the beneficiaries of these policies was

9 Carrere Ricardo & Lohmann Larry. 1999. *Pulping the South: Industrial Tree Plantations and the World Paper Economy*. London and New Jersey: Zed Books Ltd. pp. 229-230.

10 "Thailand's Advance Agro rating raised to 'B', after completion of debt restructuring", Thai Press Reports, 10 June 2004.

Soon Hua Seng, Advance Agro's parent company.¹¹

The company responds to minimize water pollution by buying water treatment equipment and installed it around factory. The company launched policy on 'Eco-friendly products' by implementing sustainable forest management focused on three elements namely economics, social and ecological aspects in realizing timber plantation.

Company's procurement of raw material

Advance Agro does not actually own any of its own plantations, instead purchasing the wood from Agro Lines, another member of the SHS Group. Agro Lines obtains its wood from four sources: 1) from its own plantations (which in 1997 covered 31,000 hectares); 2) from plantations owned by the SHS Group; 3) from local farmers under "contract farming" with Agro Lines (in 1887, 46,000 hectares), and 4) from individual farmers.

As one of the largest pulp and paper industries, the company needs sustainable supply of raw material (*eucalyptus*). To provide this needs, Advance Agro planted timber plantation in some districts and launched policy to have 'contract farming' about 46,000 ha with local people. The concentration area is located in East region of Thailand such as: Pacinburi, Sakei, Chunbury, Cucunsaw, etc. Besides, the company had plantation concession around 40,000 ha from Royal Forest Department (RFD) to be planted eucalyptus trees.¹² In harvesting time, the logs are transported to the mill either by farmers or by a truck of company which is also part of the SHS Group, working under subcontract to Agro Lines.

When Advance Agro's subsidiary Agro Lines started establishing its *eucalyptus plantations*, villagers found they could no longer grow rice in neighboring fields. The company bought villagers' farmland in Prachinburi to convert the land to plantations. Allegations of intimidation of villagers surrounded the company's plantation in eastern Thailand throughout the 1990s. Canadian academic Keith Barney notes that "Thai NGOs have organized in opposition to the land displacement resulting from eucalyptus farming in eastern Thailand associated with the mill".¹³ Obviously, due to a rising and huge protest from Thai's NGO, one of possible sources to obtain new raw material for Advance Agro is from overseas. Laos and Cambodia are neighboring countries, one of the options for expanding eucalyptus plantation in the near future.

11 Chris Lang (2003) "Thailand: Eucalyptus, encroachment, deforestation and pollution linked to pulp and paper company", World Rainforest Movement Bulletin No. 70, May 2003. <http://chrislang.org/2003/05/10/thailand-eucalyptus-encroachment-deforestation-and-pollution-linked-to-pulp-and-paper-company/>.

12 The discussion about procurement of raw material of Advance Agro in eastern region of Thailand had been interviewed on July 3, 2009 with Dr. Pasuta Sunthornhao, lecturer of Department of Forest Management, Faculty of Forestry, Kasetsart University.

13 Keith Barney (2005) "At the Supply Edge: Thailand's Forest Policies, Plantation Sector, and Commodity Export Links with China", *Forest Trends*, Center for International Forestry Research, The York Center for Asian Research, pp. 2. <http://www.forest-trend.org/documents/publications/Thailand>.

2. Development of Siam Pulp and Paper

Siam Pulp and Paper (SPP) is one of holding companies of the Siam Cement Group (SCG). The SCG Company is very well-known in Thailand, established by Royal decree in 1913 and it is today one of Thailand's largest industrial conglomerates. The SCG included more than 16 branches of companies. One of them is Siam Pulp and Paper. In the line of SCG, Siam Pulp and Paper is categorized as the third largest division of Siam Cement, after Cement and construction materials. In 1993, Siam Pulp and Paper produced half of all the packaging paper sold in Thailand, and around 40 percent of all printing and writing paper (Chris Lang, 2002).

The SCG Company is closely linked to Kingdom family, among the greatest part of share holders¹⁴. Due to this relation,, the company has great accessibility in obtaining credit from national bank, cash capital in stock exchange market in Bangkok and eventually could expand other businesses. Currently, SCG develops business such as pulp and paper, cement, construction, container for packaging, polyester, chemical, distribution, etc. Focusing on pulp and paper, this business sector consists of the Siam Forestry Co, pulp and printing & writing paper, containerboard, corrugated containers and paperboard. As an illustration, SCG paper in 2008 increased sales in 2007 from 7.3% to 47,110 million baht, while net profit after tax declined from 30.1% to 1,454 million baht (Figure 1) (*The profile of SCG Group, 2008*). But, it is very optimistic of paper business development in the future as told by Promotion Department Manager, because paper is one of the necessary items of daily needs. The usage will rapidly increase in the future. In spite of consumption amounts to an annual average of 58 kilograms per capita, and will be boosted double based on the economic development. Paper, consequently, may be considered as an index of prosperity. Table 8 shows the contribution of SPP Company to total production of Thai pulp reached 414,000 tonnes (37 percent) and paper products 1.6 million MT in 2008 or equivalent with 40 percent of whole domestic production about 4.2 million MT.

Historically, the SCG moved into pulp and paper almost accidentally. In the 1970s, Siam Kraft Paper produced sack kraft for Siam Cement in its 25,000 tonnes per year mill, located in Ratchaburi province. Siam kraft was Thailand's first modern pulp mill, established in the late 1960s. Raw material for the mill came from *baggase*, the residue from sugar case processing. Because Siam Cement is dependent on regular supply of *cement sacks* products. Therefore Siam Cement loaned money to Siam Kraft Paper to maintain the operation to produce cement sacks. In 1976, Siam Cement took over Siam Kraft Paper,

14 The King Bhumibol Abdulyadej which currently reaches age 84 years old is the world's largest-reigning monarch in Thailand. He is the central figure of beyond Thailand politics and widely respect- ed by Thai people and political elite. Therefore the role of Kingdom is very strategic position, SCG Company that most share holders own by Kingdom family has great accessibility to obtain cash 'credit' from bank institution and could expand easily her holding business in many leading sectors (interview with SCG Officer, July 9, 2009).

which at that time had 50,000 tonnes a year mill at Ratchaburi. Siam Cement discovered that producing kraft paper from waste paper was cheaper than using *bagasse*. Then the company continued to produce *bagasse* pulp, but with a new bleaching line so that the pulp could be sold. *Yuen Foong Yu*, a Taiwanese Company has experience in producing and selling *bagasse* pulp. Siam Cement made cooperation with Yuen Foong Company to sell it. In 1982, Siam Cement, Siam Pulp and Paper and Yuen Foong Yu established a new company, Thai Paper. In 1983, the three companies bought a 51 per cent share in Thai Union Paper, one of Thailand's oldest paper makers (Chris Lang, 2002). Siam Pulp and Paper in November 1992 officially opened three new affiliated pulp and paper in Kanchanaburi: 1) Siam Cellulose (capacity 50,000 tonnes of bleached pulp per year; 2) Thai Kraft Paper (capacity 250,000 tonnes of kraft paper a year; and 3) Thai Union Paper (capacity 70,000 tonnes coated paper and gypsum paper per year (*Bangkok Post* 17 November, 1992).

The rapid development of Siam Pulp and Paper was in the mid-1990s, the Company has a capacity of more than one million tonnes a year of pulp, paper and converted products. Industrial paper accounted for 46 percent of 1999 revenues; printing and writing paper, 36 percent; packaging and printing, 18 percent, and a nominal amount from paper pulp.

Its market

The success in domestic market, Siam Pulp and Paper expanded in abroad and approached the Lao government with a US\$ 250 million project to establish a 150,000 tons-per year pulp mill. The mill was supplied from 32,000 ha of plantations in Savannakhet province in central Laos (Carrere and Lohmann 1996: 241). In 1996, Siam Pulp and Paper also bought of 30 percent of Nityasa Prima Company, and proposed US\$ 520 million, 350,000 tonnes a year pulp plant in East Kalimantan, Indonesia. The Indonesian company Suryaraya Wahana, part of the *Astra International Group*, owns 60 percent of the venture, with local investors holding the remaining 10 per cent. For this reason, Chumpol Nalamlieng, Siam Cement's president told the *Financial Times* his company had to buy pulp overseas because Thailand's supply was limited due to deforestation and government restrictions on tree farming. "Indonesia has huge wood resources-biggest than the (*Association of South East Asian Nations*) region combined," Mr. Chumpol said. "Clearly it is going to be cheaper to produce pulp in Indonesia for the foreseeable future" (Barnes, 1996). Unfortunately, a year later, this project was also cancelled (Saragosa, 1997).

Asian economic crisis in 1997 was disadvantage for Siam Cement. The company was caught with US\$ 4.2 billion of foreign loans and Siam Cement suffered the biggest ever deficit by a Thai company-recording a loss of US\$ 1.3 billion in 1997. The solution was only increasing the valuation of its assets

by 75 per cent and the company could avoid posting a negative net worth (Pasuk and Baker, 2000: 224). The company responded by hiring Mc Kinsey Consulting, who drew up a plan to sell one-third of Siam Cement's assets (Barnes, 1998). Apparently over the next two years, Siam Cement managed to increase its exports, convert some of its dollar to baht and properly managed to make a profit. The sell off was scaled down to a 13 percent asset-scale (Pasuk and Baker, 2000: 224). Siam pulp and Paper exports around 50 percent of its production to more than 40 countries. The amount is one-third of its industrial and packaging products to export to China and Malaysia (Umesh Pandey, 1999).

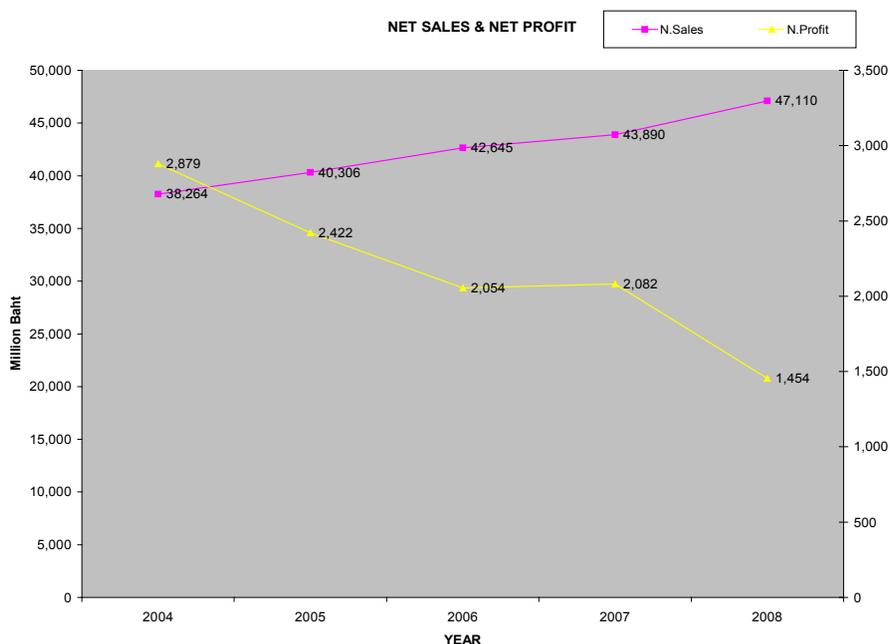
Strategy to expand company

The strategy to obtain 'cash capital' in January 2000, that Siam Cement was to issue up to US\$ 1.34 billion of domestic bonds. Wongbuddhapitak, Siam Cement's chief financial officer, told Reuters "We have a foreign exposure of about US\$ 1.8 billion, while our foreign exchange revenues are about US\$ 1 billion. We need to lower this gap to lower the risk of volatility" (Reuters, 2000).

In October 2001, Siam Pulp and Paper bought 24.98 per cent of Phoenix Pulp and Paper from Janpath Investment. In January 2002, Siam Pulp and Paper bought a 20 per cent stake from Thai Farmers Bank raising its holding to 44.98 per cent. After a tender offer, which finished early in January 2002, Siam Pulp and Paper owned more than 61 percent from the Phoenix. Siam Pulp and Paper plans to go ahead with planned expansion of Phoenix, including a US\$ 30 million upgrade of the pulp mill and US\$ 60-80 million on new facilities.¹⁵

On the other hand, SCG Company has demonstrated leadership and commitment to uphold *sustainable forest management policy*, in keeping with the globally certified standards of *Forest Stewardship Council* (FSC). In this sense, SCG Company could be categorized as the first Thai paper company to be recognized for the FSC standards, including pulp product that has been certified FSC Chain-of-Custody (Coc); tracking of FSC certified material through the production processes all the way to the store. Apparently, these certifications offer consumers new and better environment-friendly choices.

15 See Siam Pulp and Paper takes over Phoenix, Reuters, 4 January 2002, web-site: http://www.pponline.com/inside/stories/wk_12_31_2001/r36.shtml accessed 11 January 2002.

Figure 1. Net Sales and Net Profit after Tax of SCG

Source: The SCG Company's Profile in 2008, pp. 26.

Abbreviation: N : Net

N. Profit : Net Profit after Tax

Table 8. Total Production of Thai Pulp and Paper Industries
Year 2007-2008 (Unit: thousand tons).

Products	2007	2008	SCG Paper Prod in 2008	% of share in Domestic Prod
Pulp	1,169	1,106	414	37%
Paper	4,322	4,235	1,687	40%
Printing Writing & Paper	1,108	1,014	390	38%
Paperboard	348	369	147	40%
Kraft Paper	2,625	2,604	1,150	44%
Others (Newsprints & Sanitary Paper)	241	248	-	-
Total Pulp and Paper	5,491	5,341	2,101	39%

Source: The Thai Pulp and Paper Industries Association (TPPIA), 2008.

Concluding Remarks

1. The spectacular impact of more than three decades (1970s-2000s) of economic reform in Thailand is impressive. The reform transformed Thailand's foreign economic relations through the implementation of a radical open-door strategy. This development affected to the increase in foreign direct investment (FDI) in cooperation with domestic investors in joint ventures and even one hundred percent foreign-owned companies. Also, the Thai government established *infrastructure (ports and highways)* and other facilities for investors: easy accessibility to credit, access to the stock exchange, tax relief and favorable import duties on machinery and so forth. These activities allowed a great development on many sectors and affect on emerging of the pulp and paper industries in Thailand. For instance, the paper industries expanded in the end of 1980s, with paper production in the 1990s-2000s over four and five times the volume of early 1980s. As an illustration, paper companies grew from the 21 registered and its produced 574,000 tons in 1985-1989, rapidly developed to become 47 units in 1996 (2.8 million tons) and 58 companies (4.3 million M3 tons) in 2007.
2. The rapid development of pulp and paper factories and plantation forestry (*Eucalyptus camaludulensis*) as 'commercial trees' was eventually accepted by local farmers and the private sector as a lucrative business to boosting income and job creation in rural areas of Thailand. Apparently, better socio-economic incomes subsequently affect to strengthen 'purchasing power' among local communities and people at large. It also could affect on domestic 'economic development' of Thailand in 1990s. However, the negative impact on the environment in the form of *toxic pollution* of rivers and *dried land* on cash crops surrounding eucalyptus plantations, invited critics from academics and NGOs. At the end of the 1990s, NGOs and locals in the northeast of Thailand launched a huge protest to close factory operations, requesting water treatment facilities, because Phoenix Pulp and Paper mills disposed of toxic pollution into the Phong River in Khon Kaen province, killing the fish and shell species and contaminating down river agricultural farmland. These NGOs and northeastern locals refused the planting of monocultures and promoted the substitution of multi-tree plantations, with local tree species, providing for a greater biodiversity, as well as proposing new areas for community in the forests.
3. The strategies of pulp and paper companies to obtain credit, raw materials, management and marketing are very greatly. These companies have access to political elites, such as Advance Agro (AA) and Siam Cement Group (SCG). However, they are more than the exception rather than the rule, with the royal family holding major shares in SCG and the president of Advance Agro being Virabongsa Rmangkura. Virabongsa was one of

the economic advisors to General Prem Tinsulanonda as Prime Minister in the 1980s. From this point of view, both companies Advance Agro and Siam Cement Group achieved the progress and good performance based on two rationale requirements First, the company officer could keep in touch for maintaining 'power relationship' with political elites to have accessibility for credit and economic facilities. Second, the companies could manage and ability to keep their leadership, networking, obtain certification such as FSC (*Forest Stewardship Council*) to expand their products for overseas market, especially in Europe, United States, and Japan.

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