

Australian economic links with the oil palm sector of Papua New Guinea

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Summary

The development of the oil palm sector in Papua New Guinea (PNG) started in the 1960s. At this moment the mature area of the PNG oil palm plantations totals 73,000 hectares, which is 1.0% of the global total. With an annual production of 330,000 tonnes of Crude Palm Oil (CPO) in 2001, Papua New Guinea accounts for 1.4% of the global CPO production. PNG ranks as the 6th largest producer in the world and the 3rd largest exporter, as almost its entire CPO production is being exported.

At this moment the PNG production figures still lag far behind those of the market leaders, Malaysia and Indonesia. But now CPO prices are rising again, renewed domestic interest in expanding the oil palm sector in PNG is apparent and more foreign interest can be expected.

The export of oil palm products is getting increasingly important for the PNG economy. The CPO export value increased from 32.7 million kina in 1990 to 290.5 million kina (US\$ 78.5 million) in 2001. CPO now is the most important agricultural export product of PNG, before coffee and cocoa. The export of oil palm products now accounts for around 6% of total merchandise exports of PNG.

Originally, the entire oil palm sector in PNG was controlled by joint-ventures between British companies and the government. But since the mid-1990s this situation is changing as some British companies and the government are pulling out of the sector, while other domestic and foreign companies are moving in. At this moment, the three existing oil palm plantation groups are owned by CDC Group (United Kingdom), Johor Group (Malaysia) and Sipef (Belgium).

Apart from crude palm oil (CPO), oil palm plantations also yield palm kernel oil (PKO) and palm kernel meal (PKM). The entire CPO and PKO output of the PNG producers is exported to the European Union. The main markets are the United Kingdom, Italy, Germany and The Netherlands.

The main market for PKM, which is mainly used in animal feed, is Australia however. As PNG is the sole supplier of PKM to Australia, all PKM consumed in Australia is originating from PNG.

Although the country has 3.5 million inhabitants, PNG does not even have a domestic palm oil refinery to date. But this situation is now changing: oil palm company NBPO is building a refinery with an annual capacity of 100,000 tonnes, which will be commissioned in October 2002. A small part of the refined palm oil will be sold on the domestic market, and 90% will be exported to Europe as well as to Australia.

Economic links between Australia and the PNG oil palm sector are expected to increase in the coming years. At present, these links can be summarized as follows:

- Australia is the main export market for the PKM produced by the PNG oil palm sector;
- Australia is one of the main export markets for the refined palm oil which will be produced by PNG's first oil palm refinery starting operations this year;
- A number of Australian companies and institutions have provided services to PNG oil palm companies in the recent past. These include:
 - ANZ Bank
 - Australian College of Tropical Agriculture
 - Fisher Stewart
 - Institute for International Development
 - Macquarie Equities Capital Markets
 - Meridian GIS
 - Southedge Seeds

Introduction

This report is written on behalf of the Humane Society International. It aims to provide an overview of the economic links between Australia and the oil palm sector of Papua new Guinea (PNG).

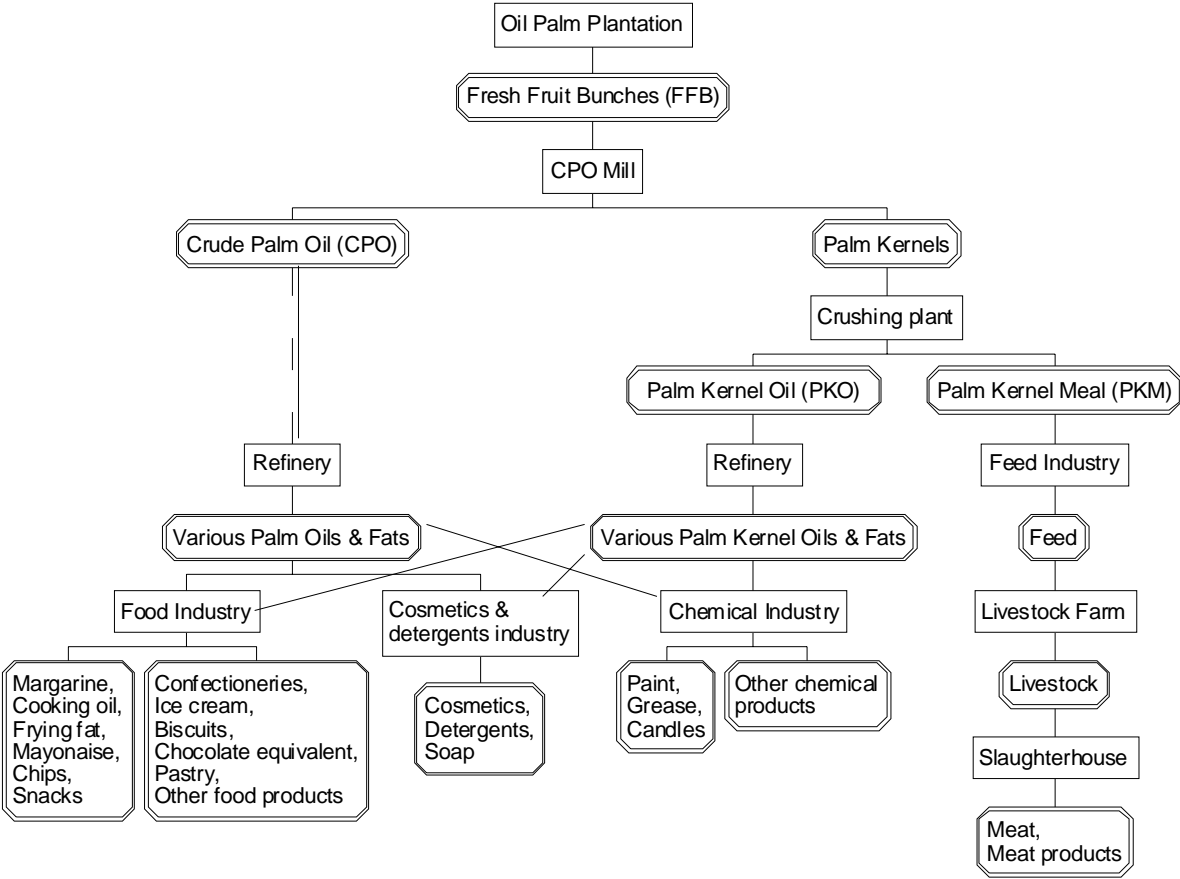
In chapter 1 the development of the oil palm sector of PNG is discussed, including an overview of the various actors in the oil palm production chain. Chapter 2 provides profiles of the three business groups active in the PNG oil palm sector. Australian companies and institutions which have provided services to the PNG oil palm sector in the recent past, are listed in chapter 3.

A summary of the findings of this report can be found on the first page of this report.

Chapter 1 The oil palm sector of Papua New Guinea

1.1 The oil palm production chain

The following diagram gives a schematic overview of the oil palm production chain, from the oil palm to the end-consumer.¹



The principal stages in the oil palm production chain, as shown in the figure above, will be described below.

1.1.1 Oil palm plantations

The oil palm (*Elaeis guineensis*) finds optimal growing conditions in a tropical climate at latitudes between approximately ten degrees north and south of the equator. The main producing countries are Malaysia and Indonesia, followed at long distance by Nigeria, Thailand, Colombia, Papua New Guinea, Ivory Coast and Ecuador.

Crude Palm Oil (CPO) production per country (in 1,000 MT)									
Country	1995	1996	1997	1998	1999	2000	2001	Growth	Share
Malaysia	7,811	8,386	9,057	8,315	10,553	10,840	11,804	51%	50%
Indonesia	4,220	4,540	5,380	5,100	6,250	7,000	7,700	82%	33%
Nigeria	660	670	680	690	720	740	770	17%	3%
Thailand	354	375	390	405	495	525	550	55%	2%
Colombia	388	410	441	424	501	524	547	41%	2%
Papua New Guinea	223	272	275	210	264	336	330	48%	1%
Ivory Coast	285	280	259	275	282	266	247	-13%	1%
Ecuador	180	188	203	205	240	238	240	33%	1%
Others	1,089	1,161	1,206	1,224	1,274	1,354	1,387	27%	6%
World total	15,210	16,282	17,891	16,848	20,579	21,823	23,575	55%	100%

Source: Oil World Annual 2001, ISTA Mielke, Hamburg, May 2001; Oil World Statistics Update, ISTA Mielke, Hamburg, 28 June 2002.

The oil palm tree reaches maturity in three years, and peak production is reached after eight years. This means that investments in establishing an oil palm plantation are only earned back after a number of years, which is the main reason why many oil palm plantations look for external financing.

When the palm tree is mature, each year large bunches of palm fruits (with the size of small plums) grow in the armpits of the palm leaves. A so-called *Fresh Fruit Bunch (FFB)* can contain up to 2,000 individual fruits, together weighing 10 to 20 kilograms. Every oil palm tree produces several bunches per year. The yield per hectare therefore is enormous: 10 to 35 tonnes per hectare. An oil palm can be harvested for up to 20 to 30 years, after which it normally is replaced.

1.1.2 CPO mills

After harvesting, the Fresh Fruit Bunches (FFB) have to be processed within 24 hours, to avoid the rapid build-up of free fatty acids in the harvested fruit. This implies that the processing mills have to be located close to the production sites, which is the second reason to look for external financing for the establishment of oil palm plantations: every cluster of oil palm plantations needs its own CPO mill.

In the CPO mill, the flesh of the palm fruit is sterilised and mechanically separated from the kernel. The kernel is shipped to a crushing plant, and the fruit is mechanically pressed to extract the Crude Palm Oil (CPO). The CPO then is clarified and purified.

The average recoverable palm oil content of FFB is about 20 percent, so the CPO yield per hectare is about 2 to 7 tonnes. This is much higher than any other oil crop in the world.²

The residues of the FFB (70% of the gross yield) are used as fuel and for mulching.

1.1.3 Crushing plants

The palm kernels are being crushed in crushing plants. These can be dedicated palm kernel crushing plants, but palm kernels can also be crushed in general oilseed crushing plants which also process soybeans and other oilseeds.

The crushing process yields two products: 45% Palm Kernel Oil (PKO) and 55% Palm Kernel Meal (PKM). One hectare of oil palms therefore yields three different basic products: CPO (around 82% of net yield), PKO (8%) and PKM (10%).

The chemical composition of PKO is very different from CPO. Palm oil contains mainly palmitic and oleic acids and is about 50% saturated, while palm kernel oil contains mainly lauric acids and is more than 80% saturated.

1.1.4 Refineries

Most of the CPO as well as most of the PKO is processed further in refineries. This processing includes refining, bleaching, deodorizing, splitting, fractioning and hydrogenating. These processes result in numerous forms of oils and fats, each with their own chemical and physical properties. One important process is fractioning, which splits CPO or PKO in two fractions. At normal temperatures, the olein fraction is liquid and the stearin fraction is solid. Both fractions are of course used for different end-products.

1.1.5 Final processing industries

The different forms of oils and fats coming out of the CPO- and PKO-refineries, as well as the palm kernel meal (PKM), are being used to process a broad range of final products in four industrial sectors:

- **Food industry**

Oils and fats derived from CPO and PKO are used in the food industry for a large variety of products, including margarine, cooking oil, frying fat, mayonnaise, chips, snacks, peanut butter, fried nuts, instant soup, confectioneries, biscuits, bakery, pastry, ice cream, coffee whitener, chocolate equivalent, and many others.

Of all edible oils, around 80% is processed into food products.

- **Cosmetics industry**

Oils and fats derived from CPO and PKO are used in the cosmetics & detergents industry for a large variety of products, including soap, cosmetics, detergents, and many others.

- **Chemical industry**

Oils and fats derived from CPO and PKO are used in the chemical industry for a large variety of products, including lubricants, grease, candles, paint, and many others.

- **Compound feed industry**

All palm kernel meal is processed and blended into compound feed for the livestock industry. Also, some of the oils and fats derived from CPO and PKO are used for compound feed, to increase its energy content.

Globally, these industries increasingly use palm oil, PKO and PKM. The global consumption of palm oil and PKO is growing faster than that of any other edible oil. In the last five years palm oil enforced its position as the second most consumed edible oil in the world, behind soybean oil. Palm oil now accounts for 19% of the total world consumption of oils and fats, and palm kernel oil adds another 3%.³

1.2 The oil palm boom in South-East Asia

The oil palm is not an indigenous species in Asia, it originates in Central Africa. The first oil palm seeds were transported from Africa to South-East Asia at the end of the 19th century. Already in the beginning of the 20th century oil palm plantations were established in Malaysia and Indonesia by the colonial powers. Since then, oil palm production has been growing at a moderate pace in both countries.

A more rapid phase of expansion started in Malaysia in the 1950s and 1960s. Final processing industries in the industrialized world discovered that oil palm could be a cheap alternative for crude oil (for instance in detergents), butter (margarine), and other edible oils. World demand for palm oil therefore increased substantially. The traditional small-scale oil palm producers in Africa and Latin America were not able to expand their production output in such a rapid phase, and especially Malaysia filled the gap. By converting huge forest areas in large, efficient oil palm plantations, Malaysia could emerge as the dominant global oil palm producer from the 1960s onwards.

But already in the 1980s it became apparent that the expansion opportunities of the Malaysian oil palm sector were limited. At this moment Malaysian oil palm plantations collectively occupy more than 3 million hectares, and areas suitable for expansion are limited. Also, labour costs are relatively high in Malaysia.

At first, Indonesia wasn't able to follow the growth path of the Malaysian oil palm industry. The Dutch colonial plantations were nationalized in 1957, after which they suffered a period of declining production. But from 1968 president Suharto started to invest again in the expansion of the state-owned plantations. And from 1979 the development of private plantations and smallholder estates was stimulated as well, partially with World Bank aid.⁴ As the world demand for oil palm continued to grow in a rapid pace, the Suharto regime and its cronies recognized the possibilities of further developing the oil palm sector during the 1980s. Labour costs are much lower in Indonesia, and land is available abundantly. The average cost of producing one ton of crude palm oil in Malaysia is roughly US\$ 250 in Malaysia, compared to US\$ 150 in Indonesia.⁵

The Indonesian government formulated the goal to overthrow Malaysia as the world's largest palm oil producer. To achieve this goal, the Indonesian acreage planted with oil palm has increased considerably during the past fifteen years. Large parts of the Indonesian forests were converted in oil palm plantations. Starting from about 600,000 hectares in 1985, the planted area reached approximately 3 million hectares in 1999.⁶

1.3 History of the PNG oil palm sector

Five oil palm plantations have been established in PNG from the mid-1960s until the early-1990s, in a collaborative effort between the PNG government, the World Bank and a few companies from the United Kingdom, among which where the Commonwealth Development Corporation (CDC), and Harrisons and Crosfield.

All oil palm plantations in PNG are set up in the form of a *Nucleus Estate Scheme*, whereby the oil palm plantation and the accompanying CPO mill (together forming the *Nucleus Estate*) are jointly owned by a plantation company and by the government. The areas around the plantation were allocated to small farmers, which were encouraged to grow their own oil palms. Seeds, credits and other inputs are supplied by the plantation companies in cooperation with the government. The smallholders sell their FFB crop to the plantations, which produce and market the CPO.⁷

The locations of the five plantations companies, their year of establishment and their present owners are listed in the following table:

Oil palm plantations in PNG: Location and ownership			
Company	Location	Year	Owner
New Britain Palm Oil Development	Kime, West New Britain province	1967	Kulim
Hargy Oil Palm	Bialla, West New Britain province	1972	Sipef
Higaturu Oil Palm Plantations	Popondetta, Oro province	1976	CDC
Milne Bay Estates	Alotau, Milne Bay province	1990	CDC
Poliamba Estates	Kavieng, New Ireland province	1992	CDC

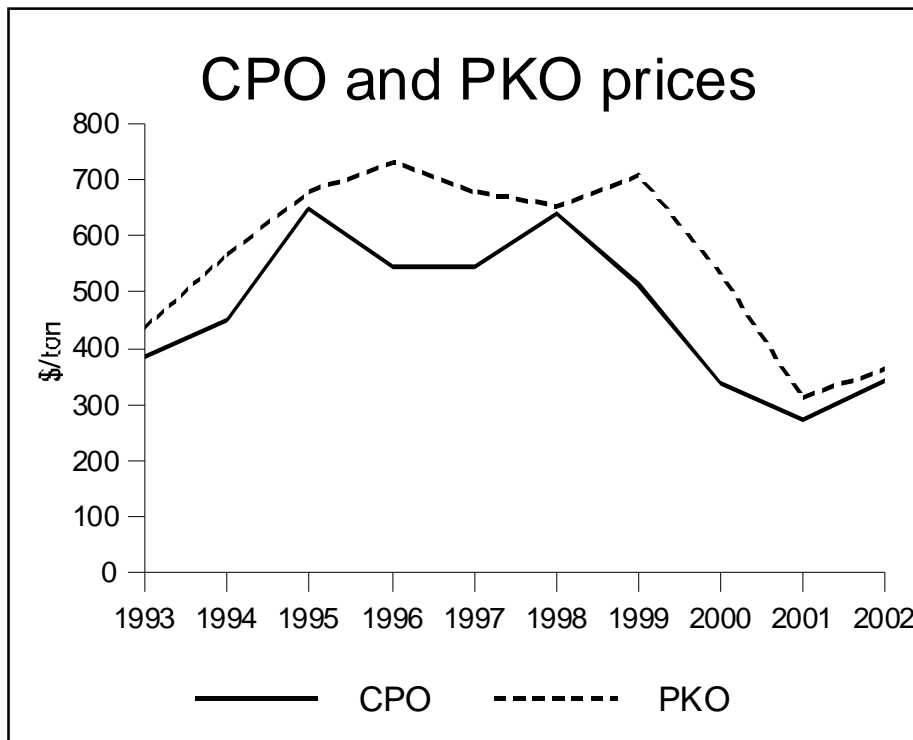
To assist the 12,000 smallholder farmers, the Oil Palm Industry Corporation (OPIC) was established by the PNG government. The OPIC provides the extension service for the smallholders and is largely funded by them through a production levy. The OPIC also receives funding from the European Union.⁸

Because of the heavy dominance of British capital in this first phase of oil palm plantation development in PNG, the entire output of the PNG oil palm sector was sold to the United Kingdom. Over the years, output increased only moderately.

A new phase started in the mid-1990s. While the South East Asian oil palm boom was at its top and CPO prices peaked, foreign interest in the oil palm sector of Papua New Guinea increased. The government began to sell its shareholdings and Harrisons and Crosfields pulled out, while the CDC stepped up its investments and other foreign companies seemed ready to move in. Especially for the Malaysian oil palm companies, hampered by land scarcity and plagued by high labour costs, PNG offered an interesting alternative. A number of Malaysians, Indonesians, and expatriate Chinese corporations considered investments in PNG and Kulim actually did invest.⁹

A key competitive advantage of PNG explaining part of this foreign attention is the fact that the country is among the so-called ACP-countries, which have a preferential trade agreement with the European Union. This means that CPO-exports from PNG to the EU are exempt from the import tax of 6% which the EU raises on CPO-imports from other countries, including Indonesia and Malaysia.¹⁰

The foreign interest to invest in the PNG oil palm sector was temporarily suspended however when the Asian financial crisis broke out at the end of 1997 and the CPO-prices on the world market plummeted shortly afterwards. Many oil palm companies throughout the region ran into financial trouble and had to halt all new investments. The past four years not many new investments in establishing new oil palm plantations have been made throughout the Southeast Asian region.



In the mean time the global demand for palm oil is invariably growing, however. Because of declining investments, global supply will gradually lag behind. As a consequence, CPO-and PKO-prices will go up again, a process which seems to have started already. Higher prices will make investments in new plantations more profitable.

Domestic interest in investing in the PNG oil palm sector has clearly revived already (see § 1.5). As both in Malaysia and Indonesia a further expansion of the oil palm sector is not without problems, increasing foreign interest to invest in PNG's oil palm plantation sector can also be expected in the coming years.

1.4 Key figures for the PNG oil palm sector

At this moment the oil palm industry in PNG still lags far behind both Malaysia and Indonesia in terms of output and planted area. With an annual production of 330,000 tonnes in 2001, Papua New Guinea accounts for 1.4% of the global CPO production. Production increased by 48% in the past six years, which is only slightly behind the expansion rate of the world market in that same period (55%).¹¹

The mature area of the PNG oil palm plantations totals 73,000 hectares, which is 1.0% of the global total. But because PNG is a relative new-comer in this industry, its oil palm plantations are planted mostly with high-productive seedlings from Malaysian nurseries. On a country-level, Papua New Guinea therefore records the highest CPO production level per hectare (4.2 tons) of all production countries.¹²

The following table provides figures on planted acreage as well as CPO output of the three oil palm plantation groups in PNG.

Oil palm plantations in PNG: acreage and output		
Company	Planted acreage (hectares)	CPO production (tonnes)
New Britain Palm Oil Development	24,196	180,955
Hargy Oil Palm	8,500	46,600
Pacific Rim Plantations	26,000	105,000
Smallholders	40,000 (est.)	
Total	98,696	332,555

Sources: Various, see chapter 2.

Different from all other palm oil producing countries, the PNG oil palm industry is almost completely export-oriented. Therefore PNG ranks as the third largest exporter of palm oil in the world, although far behind Malaysia and Indonesia. Although the country has 3.5 million inhabitants, PNG does not even have a domestic palm oil refinery to date. But this situation is now changing: NBPO is building a refinery with an annual capacity of 100,000 tonnes, which will be commissioned in October 2002.¹³

Domestic consumption of CPO accounted for 35% of production in Indonesia in 2001 and 12% in Malaysia. But in PNG, domestic CPO consumption was only 9,700 tonnes, which equals 3% of total production (330,000 tonnes). Because there also was a slight amount of imports, exports reached 326,000 tonnes in 2001.¹⁴

More or less the same applies to the palm kernel oil (PKO) which is produced in PNG. All palm kernels are crushed domestically, but domestic PKO consumption was only 2,300 tonnes. Of the total PKO production of 33,000 tonnes in 2001, 30,000 tonnes were exported (91%).

However, of the total palm kernel meal (PKM) production in PNG (36,700 tonnes in 2000), a larger percentage (25%) is consumed domestically. PKM exports reached 27,500 tonnes.¹⁵

Another striking difference between Malaysia and Indonesia on the one hand and PNG on the other hand, is that CPO exports from Indonesia and Malaysia are to a large extent oriented on Asian markets (especially India, China and Pakistan). The CPO export from PNG however, is for 100% directed at the European Union. (For Indonesia and Malaysia, this figure is 30% and 12% respectively.) Within the EU, the United Kingdom, Italy and the Netherlands are the main markets.

Production and exports of oil palm products in PNG in 2000 (in tonnes)			
Export to:	CPO	PKO	PKM
United Kingdom	157,900	8,600	n.a.
Italy	99,100	8,400	n.a.
The Netherlands	40,700	2,800	n.a.
Germany	21,100	3,200	n.a.
Other EU-countries	7,200	1,600	n.a.
Australia	0	n.a.	18,800
Unknown	0	5,400	8,700
Total export	326,000	30,000	27,500
Total production	330,000	33,000	36,700

Sources: Oil World Annual 2001, ISTA Mielke, Hamburg, May 2001; Oil World Statistics Update, ISTA Mielke, Hamburg, 28 June 2002.

The PKO export of PNG is also direct predominantly to the European Union, with the United Kingdom, Italy and Germany as the main markets.

For PKM however, the picture is different. PNG does not seem to export PKM to the EU, and **Australia** is the main export market with a share of 68% of total PNG exports of PKM. PNG is the sole supplier of PKM to Australia, which means that all PKM consumed in Australia is originating from PNG.¹⁶

The export of oil palm products is getting increasingly important for the PNG economy. The CPO export value increased from 32.7 million kina in 1990 to 290.5 million kina (US\$ 78.5 million) in 2001. CPO now is the most important agricultural export product of PNG, before coffee and cocoa. CPO exports account for 4.8% of total merchandise exports of PNG, which amounted to 6,105 million kina (US\$ 1,650 million) in 2001. (Including PKO and PKM exports this percentage would probably be around 6%).¹⁷

1.5 New investments in the PNG oil palm sector

During the past two years, a number of new expansion plans for the PNG oil palm sector has been launched. New investments announced by the existing producers will be described in the next chapter. In this paragraph other plans to invest in this sector are shortly described:

- In March 2001 Ramu Sugar, a PNG company active in sugar production and cattle raising, has submitted a proposal to the PNG Government to set up an 8,000 hectare oil palm plantation in Usino-Bundi in Madang province. About 6,500 hectares would be operated by Ramu Sugar and the other 1,500 hectares by smallholders. The project received government endorsement in October 2001.¹⁸
- In April 2001 the PNG Agriculture and Livestock Minister, Muki Taranupi, announced plans for tax incentives in the oil palm sector designed to encourage growth and boost production.¹⁹
- In August 2001 the governor of the East New Britain province, which currently has no oil palm plantations, announced that the province would start to encourage the establishment of oil palm plantations. The provincial government plans to convert a large area of land in the Open Bay area of North Baining for this purpose.²⁰
- In August 2001 the governor of Morobe province presented a pre-feasibility study on a 30,000-hectare oil palm project on the border of the Morobe and Gulf provinces. The project would cost some 200 million kina (US\$ 58 million) to develop. However, project viability will depend heavily on the development of road infrastructure to the area, as it is very remote and services such as health, education and economic activity are almost non-existent. To improve accessibility, it may be decided to choose a route near the plantation area for the planned Trans-Island Highway section connecting Lae with Kerema and Port Moresby.²¹
- In August 2001 the OPIC announced that the World Bank is planning a nationwide oil palm project funding in 2004. At that moment the World Bank was conducting feasibility studies in oil palm growing provinces to ascertain the viability of the project.²²
- In June 2002 the OPIC announced that a large number of new oil palm projects could be developed in PNG within the next five to ten years if current feasibility studies on proposed projects are completed and approved by the national government. The studies cover at least ten new projects under the PNG Agro-Industry Development Program in Sandaun, East Sepik, East New Britain, Madang, Gulf, Central and Morobe provinces where oil palm is yet to be introduced.²³

Chapter 2 Oil palm plantation companies in PNG

2.1 CDC Group

2.1.1 Description of the CDC Group

The CDC Group Plc. is a British investment group, investing mainly in small and medium-sized enterprises in Asia, Africa and Latin America. It was established under the name Commonwealth Development Corporation (CDC) by the government of the United Kingdom in 1948, as part of the British foreign aid programme. CDC served as an organisation that extended low-interest loans and some venture capital to businesses in developing countries, mostly within the British Commonwealth. Its aim was to provide financing to ventures which could not attract capital on the private market.

In 1999, CDC became a public limited company under the name CDC Group Plc. At this moment, the UK government (the Department for International Development, DFID) still holds 100% of the shares of CDC Group. But at a later date, around 60 per cent of the company will be made available to private investors so that it can more easily access private capital. As the British government is aiming for a *Public Private Partnership*, it will retain a minority stake that allows it to veto any developments in the governance of the CDC with which it disagrees.²⁴

2.1.2 Overview of the oil palm holdings of the CDC Group

- CDC Group has been involved in the palm oil sector in Asia for more than 40 years. CDC Group is managing 26,000 hectares of oil palm in Papua New Guinea and on the Solomon Islands. The company also provides management services to another 7,000 hectares in Thailand. Together these plantations produced 172,000 tonnes of crude palm oil in 1998. They are managed by CDC-subsidiary Pacific Rim Plantation Services in Singapore, which also is operating as an international palm oil trading company.²⁵
- In 1999, CDC Group announced it was planning to develop a Southeast-Asian regional palm oil business that would triple its 1998 production capacity to 500,000 tonnes CPO per annum. This expansion plans were aimed at Indonesia in particular. In 1999 and 2000, CDC acquired majority stakes in a number of plantations in Jambi and West Kalimantan with a combined area of 52,400 hectares. CDC also holds a small shareholding in a 17,500 hectares oil palm plantation in Central Kalimantan.²⁶

2.1.3 Pacific Rim Plantations

In Papua New Guinea, CDC is active in the oil palm sector since 1972. At present, CDC holds 76% of the shares of Pacific Rim Plantations Ltd., which is engaged in oil palm and cocoa cultivation and processing. The government of PNG owns 20% of the shares, but it is planning to privatise its shareholding. Kula Fund (Papua New Guinea) also holds a shareholding. CDC has also issued a loan of £ 11.6 million (US\$ 17.7 million) to Pacific Rim Plantations.²⁷

Pacific Rim Plantations owns and manages three oil palm estates with a total acreage of 26,000 hectares:

- Poliamba Ltd. Kavieng, New Ireland province
- Higaturu Oil Palms Ltd. Popondetta, Oro province
- Milne Bay Estates Ltd. Alotau, Milne Bay province

Pacific Rim Plantations has about 3,000 employees, and produced about 105,000 tonnes of palm oil in 1999.²⁸

2.2 Johor Group

2.2.1 Description of the Johor Group

The Johor Group is a large Malaysian conglomerate, headed by the Johor Corporation (JCorp). This is the investment arm of Johor State, one of the thirteen states within the Malaysian federation. The Johor Group is engaged in plantations, chemicals, healthcare and property development.²⁹

2.2.2 Overview of the oil palm holdings of the Johor Group

- The central holding company for the oil palm interests of the Johor Group is Kulim (Malaysia) Bhd. This company owns oil palm plantations in Malaysia, Papua New Guinea and Indonesia, with a total acreage of 69,175 hectares:
 - In Malaysia, Kulim (Malaysia) owns oil palm plantations with a total planted acreage of 28,208 hectares. CPO production reached 126,341 tons in 2000.
 - In Papua New Guinea, Kulim (Malaysia) owns an 80% share of the oil palm plantation company New Britain Palm Oil (NBPO).
 - In Indonesia, Kulim (Malaysia) owns a 60% share in three Indonesian palm oil plantation companies with a total acreage of 18,563. These plantations are not yet mature. In these plantations, Kulim is collaborating with the Indonesian Risjadson Group.³⁰
- Kulim (Malaysia) also holds minority shares in two British companies belonging to the Rowe Evans Group (United Kingdom), which themselves own oil palm plantations in Indonesia and Malaysia :
 - Bertam Holdings Plc (4.40%)
 - Rowe Evans Investments Plc (1.51%)³¹
- Apart from Kulim, Johor Corporation does own a number of other oil palm plantations in Malaysia. The company claims to own interests in oil palm plantations with a total acreage of 150,000 hectares in Malaysia, Papua New Guinea and Indonesia.³²

2.2.3 New Britain Palm Oil

In October 1996, Kulim (Malaysia) acquired a 80% share in New Britain Palm Oil (NBPO), which is the largest oil palm plantation company in Papua New Guinea. NBPO is based near Kimbe on the north coast of the island of New Britain. It was established in 1967 by the British company Harrisons & Crosfield Plc., which until 1996 owned 54% of the shares. The other 46% was owned by the government of Papua New Guinea.

Kulim (Malaysia) acquired its 80% stake in NBPO from Harrisons & Crosfield and the PNG government for US\$ 104.2 million. The other shareholders now are the West New Britain Provincial Government of PNG (15%) and New Britain Nominees Ltd., which is owned by the NBPO-employees (5%). NBPO has 6,000 employees.³³

- **Key figures**

NBPO and its subsidiaries manage a total concession area of 36,770 hectares, of which 24,196 hectares are planted with oil palms. At the end of 2000, a total acreage of 20,848 hectares was mature. From these plantations NBPO produced 120,648 tons of CPO in 2000, which equals a very high yield of 5.8 tonnes/hectare.

NBPO owns four CPO mills with a total milling capacity of 1 million tonnes of FFB per year. The company is also processing FFB from around 5,000 smallholders, which own a total acreage of 20,000 hectares. The CPO production from FFB produced by these smallholders was 60,307 tonnes, bringing the total CPO output of NBPO in 2000 at 180,955 tonnes.

PKO production reached 20,078 tonnes and PKM production equalled 26,583 tonnes in 2000.³⁴

- **Subsidiaries**

At the end of 2000, NBPO owned the following subsidiaries (all 100% owned):³⁵

• Capital Stock Brokers	PNG	Stockbroking
• Dami Australia	PNG	Research and production of oil palm seeds
• Kapiura Plantations	PNG	Oil palm plantation
• Mosa Oil Mill	PNG	Palm oil milling and palm kernel crushing
• Mosa Plantations	PNG	Oil palm plantation
• New Britain Nominees	PNG	Nominee for NBPO employees
• Numundo	PNG	Oil palm / coconut plantation / cattle rearing

Dami Australia is an internationally renowned oil palm seed breeding company, located in Kimbe (West New Britain province). We were not able to identify if Dami is linked to Australia, what the official company name seems to suggest.

In an intensive plant breeding programme, Dami is cooperating with the Department of Genetics of the University of Cambridge (United Kingdom). By applying genetic markers, the researchers aim to select high-yielding varieties faster and more accurately.³⁶

Apart from NBPO, Asian Agri in Indonesia (part of the Raja Garuda Mas group) is also using seedlings from Dami.³⁷

- **Customers**

Virtually all palm oil production of NBPO is sold to Europe. The oil is marketed through the Singapore-based Pacific Rim Plantation Services agency, which is a subsidiary of the CDC Group (see § 2.1)

As customers of NBPO are mentioned:³⁸

- Central Edible Oils Ltd.: a British edible oil trading subsidiary of the British food ingredient company Pura Plc., which is 42.5% owned by the large American commodity trader ADM. Central Edible Oils is known as a major worldwide supplier of vegetable shortening to the American fast-food chain McDonald's;
- Bibby Oils Ltd.: a British subsidiary of Cargill (United States);
- Unilever (Netherlands/United Kingdom);
- An unknown Italian company.

- **Stock listing**

In May 1999, Kulim (Malaysia) announced that it would list NBPO on the Australian Stock Exchange and the Port Moresby Stock Exchange in July 1999. Kulim would sell its entire 80% stake, because it needed the money to pay off its debts. Another reason given was that Kulim had promised in the purchase agreement with the PNG government in October 1996 to float NBPO at a stock exchange within five years. The float would be managed globally by **Macquarie Equities Capital Markets** (Australia). Rabobank (The Netherlands) would act as the adviser to the selling party, and would also be marketing the stock in Europe.³⁹

In July 1999, Kulim (Malaysia) had to withdraw the proposed IPO of NBPO, because of reduced interest of foreign investors in the stock. This was caused by the political turmoil in Papua New Guinea after the forced resignation of prime minister Bill Skate in July 1999. By flying to Taipei and offering to ditch China and extend diplomatic recognition to Taiwan in return for loans ostensibly to prop up the Papua New Guinea economy, Skate had succeeded in upsetting both China and Australia, and spooking international investors.⁴⁰

With a renewed effort in December 2001, Kulim (Malaysia) succeeded in listing NBPO on the Port Moresby Stock Exchange (but not on the ASX). This time, the listing was managed by Affin Merchant Bank (Malaysia). Kulim reduced its shareholding in NBPO from 80% to 60%, selling 20% to PNG investors.⁴¹

- **Expansion programme**

In the past two years, Kulim has been investing RM 191.8 million (US\$ 50 million) in NBPO. The new investments include:

- Planting an additional 10,000 hectares and replanting 6,600 hectares, costing about US\$ 40 million.
- A fourth CPO mill at Numundo, bringing total processing capacity to 1 million tonnes FFB per year. The new US\$ 3.5 million mill was commissioned in July 2001.
- PNG's first palm oil refinery, which is being built in Kumbango. The refinery will have an initial annual capacity of 100,000 tonnes and is designed for expansion to 125,000 tonnes. Construction started in 2001 and the commissioning date of the refinery is expected to be October 2002. Total investment in the refinery amounts to 25 million kina (US\$ 7.2 million), financed by a loan from **ANZ Bank** (Australia). A small part of the refined palm oil will be sold on the domestic market, and 90% will be exported to Europe as well as to Australia.⁴²

2.3 Sipef Group

2.3.1 Description of the Sipef Group

The Sipef Group is a Belgian investment group, operating oil palm, rubber, tea, bananas and other plantations in various countries in Asia, Africa, and South America. The Group is headed by the Belgian company S.A. Sipef N.V.

2.3.2 Overview of the oil palm holdings of the Sipef Group

- The Sipef Group owns interests in a number of oil palm plantation companies in Sumatra (Indonesia) with a total acreage of 53,000 hectares. The planted area was 29,241 hectares at the end of 2000, of which 20,946 hectares were mature. The Sipef group also owns several CPO-mills. CPO production reached 122,764 tons in 2000, and palm kernel production reached 33,020 tons.⁴³
- The Sipef Group also owns oil palm plantations in Papua New Guinea (5,670 hectares) and Ivory Coast (12,839 hectares).⁴⁴

2.3.3 Hargy Oil Palms

In Papua New Guinea Sipef owns a 50% share in the joint-venture Hargy Oil Palms Pty. Ltd. The government of Papua New Guinea owns the other 50%, but is planning to privatise its shareholding. The plantation is located in West New Britain province, between the towns of Kimbe and Rabaul. It comprises of two estates, Hargy and Navo. The company has 2,000 employees.

Sipef is currently extending the area planted at Navo to reach a total of more than 6,000 hectares on that estate, thus increasing the total area cultivated by Hargy Oil Palms from 5,670 hectares to more than 8,500 hectares in 2004.⁴⁵

Hargy Oil Palms produced 46,600 tonnes of CPO in 2001, including FFB supplies from smallholders in the Bialla area. Hargy owns a CPO mill with a capacity of 40 tons per hour and a palm kernel crushing plant.

Because of depressed CPO prices and the depreciation of the Kina in 2001, Hargy suffered a loss of PGK 8.1 million (US\$ 2.2 million). Nevertheless, a second CPO mill with a capacity of 30 tons per hour is currently being constructed. It was planned the mill would enter service in June 2002.

The CPO mill is being financed by two loans with a total amount of € 6.3 million (US\$ 5.5 million) from the investment banks SBI (Belgium) and DEG (Germany).⁴⁶

Chapter 3 Australian institutions and companies

3.1 ANZ Bank

ANZ Bank has issued a loan to New Britain Palm Oil for the construction of PNG's first palm oil refinery, which is being built in Kumbango. The refinery will have an initial annual capacity of 100,000 tonnes and is designed for expansion to 125,000 tonnes. Construction started early 2001 and the commissioning date of the refinery was expected to be August 2002. Total investment in the refinery amounts to 25 million kina (US\$ 7.2 million). A small part of the refined palm oil will be sold on the domestic market, and the largest part will be exported to Europe as well as to Australia.⁴⁷

3.2 Australian College of Tropical Agriculture

The International Centre for Plantation Studies of the Cranfield University (United Kingdom) and the Australian College of Tropical Agriculture (located in Ayr) have been assisting Pacific Rim Plantations in 2001 to further develop a sustainable managerial performance programme in its three oil palm companies in Papua Guinea.⁴⁸

3.3 Fisher Stewart

In 2001 the Australian consultancy firm Fisher Stewart (located in Brisbane), which is the Australian arm of the American engineering firm Earth Tech, provided some services to New Britain Palm Oil.⁴⁹

3.4 Institute for International Development

Between 1997 and 1999, the Centre for Systemic Development of the Institute for International Development (located in Adelaide) provided a A\$ 350,000 'Learning and Leadership Development Program' to the Oil Palm Industry Corporation (OPIC).⁵⁰

3.5 Macquarie Equities Capital Markets

Macquarie Equities Capital Markets was appointed by Kulim (Malaysia) in April 1999 to manage the IPO of New Britain Palm Oil on the Australian Stock Exchange and the Port Moresby Stock Exchange in July 1999. Because of political turbulence in PNG the float was postponed in July 1999. In a second effort in December 2001 NBPO was listed at the Port Moresby Stock Exchange, but Macquarie was not involved this time.⁵¹

3.6 Meridian GIS

Meridian GIS (located in West Perth) is an independent Geographic Information Systems (GIS) company consulting throughout Australia, South East Asia and the Pacific, offering a range of GIS services to the resource, utilities and agriculture industries. Recently, Meridian GIS was involved in the implementation of GIS for plantation management by Pacific Rim Plantations.⁵²

3.7 Southedge Seeds

Southedge Seeds (located in Mareeba) has supplied seed, pasture establishment, pasture management and general herd management advice to the cattle-raising activities of New Britain Palm Oil at its Numundo estate.⁵³

Annex 1 Notes

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