

CHAPTER ONE

BACKGROUND TO OIL PALM IN PAPUA NEW GUINEA

1.0 Introduction

Oil Palm is grown in five project areas in Papua New Guinea: Hoskins and Bialla in West New Britain (WNB), Popondetta, Milne Bay and New Ireland (Figure 1.1). All project areas operate on a nucleus estate-smallholder model whereby smallholders supply oil palm fruit to mills operated by the nucleus estate company. In WNB and Popondetta smallholder production is located on Land Settlement Schemes (LSS) (State leased land) and on Village Oil Palm schemes (VOPs), (village-based production on customary land). VOPs were introduced after the LSS schemes and were established to encourage more involvement in the industry by local villagers. Milne Bay and New Ireland do not have LSSs, only VOPs. Presently, there are over 100,000 hectares of oil palm, of which 43,000 ha are smallholder plantings (ADS (PNG) 2001).

1.1 Brief History Of Oil Palm Development In Papua New Guinea

Germans were the first to plant oil palm in 1894-95 on the Rai Coast of Papua New Guinea (Sack and Clark 1979, quoted in Grieve 1986). The Germans also established additional experimental plantings in the early 1920s near Popondetta in Northern (Oro) Province (Landell Mills 1991). Commercial plantings were established in 1967 following a World Bank recommendation that oil palm on a nucleus estate-smallholder system be introduced to New Britain or Bougainville to diversify the agricultural economy and increase the export income of Papua New Guinea (IBRD 1965; Grieve 1986).

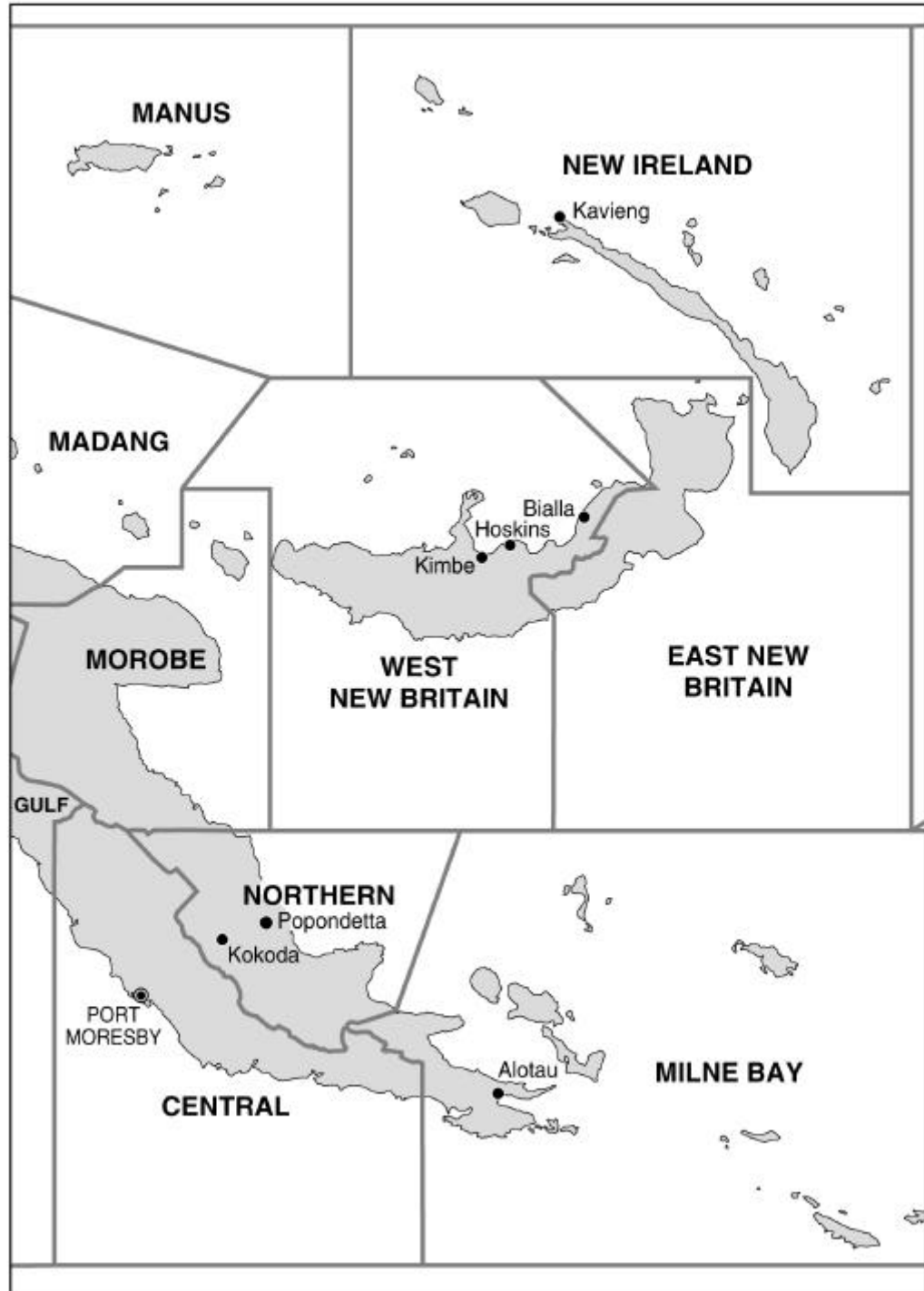


FIGURE 1.1. Oil palm areas in Papua New Guinea

The World Bank recommendation accorded at the time with the colonial administration's land settlement programme to open up alienated land for the voluntary resettlement of rural people from over-populated areas to "under-populated" regions of Papua New Guinea. Alienated land was subdivided into smallholdings for the primary purpose of cash crop production. The settlement schemes were viewed as a major vehicle to increase agricultural export production, improve rural incomes, integrate Papua New Guineans into cash crop production, relieve population pressure in some rural areas and to bring into production "unused" or under-exploited land (Hulme 1984, 81). The Australian colonial administration also considered that by establishing individualised holdings on land settlement schemes, Papua New Guineans would experience the benefits of an individualised land tenure system which, it hoped, would eventually replace customary land tenure (Hulme 1984, 86). Customary land tenure was considered inimical to the development of large-scale cash crop production.

The colonially administered land settlement schemes in the late 1950s and mid 1960s (based on crops other than oil palm) were small schemes and suffered from ad hoc planning, few services and minimal government supervision and guidance. Hence, the World Bank recommendation that oil palm be developed using a nucleus estate-smallholder model was enthusiastically accepted because it had the advantage of the smallholder settlement located around and supported by a central nucleus estate jointly owned by the government and a private company. The company would be responsible for managing the estate, establishing its own processing mill, marketing, and providing smallholders with planting material, technical advice and processing facilities (Christensen 1986).

As part of the settlement scheme policies of the 1950s and 1960s the Australian administration had obtained large tracts of land along the north coast of New Britain, and later viewed these as suitable for the development of an oil palm nucleus estate-smallholder scheme (Hulme 1984, 237). In 1966 the British

plantation company, Harrisons and Crosfield applied to the administration to develop an oil palm nucleus estate-smallholder project and the following year the first nucleus estate-smallholder scheme based on oil palm was established at Hoskins, a joint venture between the government and Harrisons and Crosfield (Longayroux 1972). The two parties registered New Britain Palm Oil Development Pty Ltd (NBPOD) as a joint venture company and in 1967 work began at Nahavio to develop oil palm production in the province.

Under the agreement NBPOD developed an oil palm estate and a processing mill and the Administration opened government land adjacent to the estate for 500 smallholders to settle and plant oil palm for processing by the company. Oil palm planting on customary land by the local indigenous population was also encouraged. The Hoskins scheme was considered by both parties as a pilot project (Longayroux 1972, 5), and it later became a model for other oil palm nucleus estate-smallholder schemes in Papua New Guinea (Hulme 1984).

1.2 Smallholder Schemes

1.2.1 Hoskins, LSS

The smallholder land settlement scheme developed by the administration at Hoskins was based on land holdings of approximately 66.5 hectares. It was expected that 4 hectares would be planted to oil palm, and the remaining area reserved for food gardens. Groupings of approximately 130-320 blocks became subdivisions, each with a central community centre containing a primary school, health centre, agricultural extension office, designated market area, stores and recreational facilities. Blockholders acquired 99 year agricultural leases over their blocks and were provided with loans from the Papua New Guinea Development Bank (PNGDB) for house building, oil palm seedlings, tools, land rent and to cover living expenses while waiting for the first harvest (Jonas 1972; Hulme 1984).

People from other provinces of Papua New Guinea acquired smallholder leases and the first settlers moved onto their blocks in July 1968. Whilst the

agricultural leases were publicly advertised and open to all Papua New Guinea residents, preference was given to applicants from land-short areas, such as the Chimbu, Maprik and Wabag areas, and the Gazelle peninsula of East New Britain. Hulme reports (1984, 242) that special government publicity committees were set up in these land-short areas to encourage people to resettle on the oil palm blocks. Many labourers involved with pre-settlement development were also allocated blocks and later Morobe Province was targeted as a recruitment area for settlers (Ploeg 1972; Hulme 1984). By independence in 1975, 1,536 LSS blocks had been planted to oil palm and the project's target of 1,560 blocks was achieved in 1975/76 (Hulme 1984, 241). The majority of settlers at that time were from East and West Sepik (42%), followed by Chimbu (22%), East New Britain (15%), Morobe (11%) and West New Britain (4%) (Hulme 1984, 242 – based on 1976 figures). Additional leasehold blocks were released in the 1970s and currently the Hoskins scheme has 1,634 LSS blocks (Table 1.1).

1.2.2 Hoskins, VOP

Following the initial development and establishment of the LSS scheme, attention was turned to indigenous landowners in the Hoskins area. The VOP project initially encouraged local villagers to plant 2 or 4 hectare blocks of oil palm on customary land, but most have planted only 2 hectares. Villagers were provided with PNGDB loans to develop their blocks and between 1970 and 1975, 182 VOP blocks were established (Leach and Benjamin 1984, 17). By the end of 1980 there were 418 blocks. VOP blocks were slow to develop at Hoskins, although further expansion was stimulated in 1986 following assistance from the Asian Development Bank (Christensen 1986). Presently, there are 3,021 VOP blocks in the Hoskins Scheme (Table 1.1). A feature of the VOP blocks is their lower productivity compared with LSS blocks.

1.2.3 Biella

The government and company viewed the Hoskins scheme as a success because it surpassed many of its early production and earning goals (Hulme 1984, 253)

and provided an impetus to regional growth and development in the province. Its perceived success led the government to set up similar oil palm nucleus estate-smallholder schemes at Bialla and Popondetta.

The Bialla scheme was established in 1972 following a joint agreement between the government and a Japanese company. However, a dispute between the government and the company delayed the commencement of the project and in 1977 a new agreement was signed with SIPEF (Belgium) and Warrens (United Kingdom) (Christensen 1986). A joint government and SIPEF-Warrens venture company, Hargy Oil Palms was formed. The basic operation and structure of

Table 1.1. Estate and smallholder production details for each oil palm scheme in Papua New Guinea.

	HOSKINS	BIALLA	POPONDETTA	MILNE BAY (Alotau)	NEW IRELAND (Lakuramau)
Company	New Britain Palm Oil Limited	Hargy Oil Palms Ltd	Higaturu Oil Palms Ptd Ltd	Milne Bay Estates Ltd	Poliamba Ltd
Ownership foreign/national	80% Kulim, Malaysia/15% WNBP Gov, 5% other	50% SIPEF, Belgium/50% PNG Gov.	54% PACRIM, British/46% PNG Gov.	60% PACRIM, British/40% PNG Gov.	79% PACRIM, British/19% NIDC/2% other.
Total estate area (ha)	23,927	5,600	7,785	6,990	6,000
2000 estate production (tonnes FFB)*	555,680.97	82,374.58	147,141.52	197,885.0	103,739.1
Estate yields (t/ha)**	23.2	14.7	18.9	28.3	17.3
LSS blocks	3,021	2,161	1,045	nil	nil
VOP blocks	1,634	1,067	4,448	536	648
Total smallholder area (ha)	16,148	11,250	13,000	1,338	1,285
2000 smallholder production (tonnes FFB)*	277,642.7	119,730.01***	113,665.12	9,609.0	10,616.8
Smallholder yields (t/ha)**	17.2	10.6	8.7	7.2	8.3
% smallholder production to total production (2000)	33.3%	59.2%	43.5%	4.6%	9.3%
Total mini-estate area (ha)	7,128	nil	2,051	1,975	309
2000 production* (tonnes FFB)	833,323.6	202,104.59	260,806.64	207,494	114,355.9

Source: PNGOPRA data, ADS (PNG) 2001

* 2000 production figures derived from PNGOPRA data.

** yields calculated on 2000 production figures and total area (hectares).

*** production total also includes some smallholder crop in the Hoskins scheme.

the Bialla scheme mirrored that of the Hoskins scheme whereby the company partners agreed to develop a nucleus estate of oil palm and a processing mill and the government opened alienated land adjacent to the estate for smallholder leasehold settlement.

Settler selection for the Bialla land settlement scheme followed that of the Hoskins scheme with blocks publicly advertised and priority given to applicants from land-short areas of Papua New Guinea. A VOP programme was also established. By the mid 1980s, 900 LSS blocks and 110 VOP blocks had been established at Bialla (Christensen 1986, 139). The number of smallholder blocks has increased substantially over the last two decades and there are now 1,067 VOP and 2,161 LSS blocks (Table 1.1).

1.2.4 Popondetta

The Popondetta Oil Palm scheme was initiated in 1976 following a recommendation that the failed Popondetta cocoa scheme¹ be redeveloped as a nucleus estate-smallholder oil palm project (Harrison Fleming Advisory Services 1973 quoted in Hulme 1984, 216).

In 1976 the government entered into a joint venture agreement with the British Commonwealth Development Corporation (CDC) to redevelop the 16,000 hectare cocoa scheme into an oil palm nucleus estate-smallholder project (Grieve 1986). The two parties formed Higaturu Oil Palm Plantation Ltd (HOPPL²). In 1976 work began on developing a 4,500 hectare estate and processing facilities. The government, with World Bank funding, agreed to establish smallholder oil palm plantings which included a land settlement scheme for leasehold blocks similar to that operating in Hoskins and Bialla.

The resulting LSS scheme was a mix of the existing cocoa settlers (251 blocks), who were assisted to replant oil palm, and new settlers (544 blocks) from other provinces in Papua New Guinea (Hulme 1986, 298). By 2000, 1,045 LSS blocks had been established (Table 1.1).

VOP development at Popondetta was on customary land and on Land Tenure Conversion (LTC) blocks. Most of the latter were previously planted with cocoa and were incorporated into the oil palm project with the help of a 'comprehensive package of resources' for the planting and maintenance of oil palm (Fingleton 1972, 166). Like the growers at Hoskins and Bialla, VOP/LTC growers and LSS settlers were provided with Rural Development Bank credit to cover living costs, planting materials and housing loans.

Although the initial smallholder planting targets were not achieved in the early stages of the Popondetta project (Hulme 1984, 297), smallholder oil palm development grew steadily throughout the 1980s from 3,395 hectares in 1980 to 6,285 hectares by the close of the decade (OPIC file, n.d.). VOP smallholder holdings then expanded significantly from 1993 under the present World Bank funded "Oro Smallholder Oil Palm Expansion Project". The project's original objective was to plant an additional 6,000 hectares of smallholder oil palm by 1999. The enthusiastic planting of oil palm on VOPs has seen this target exceeded. By 2000 an additional 7,840 hectares had been planted, bringing the total area of smallholder plantings to approximately 13,000 hectares (ADS (PNG) 2001, 17).

1.2.5 Milne Bay

Milne Bay started in 1985 following government approval for the development of a K60 million oil palm and cocoa scheme (Grieve 1986). The government in a joint venture with Commonwealth Development Corporation planned to establish 4,000 hectares of oil palm and 750 hectares of cocoa (Christensen 1986, 139), and Milne Bay Estates Ltd was formed (now a subsidiary of Pacific Rim Plantations Ltd). The project, with World Bank funding, was seen as a major vehicle for bringing sustainable economic development to the province.

One thousand hectares of smallholder village oil palm on customary land was also planned, but unlike previous oil palm nucleus estate-smallholder projects, no State land settlement scheme with leasehold blocks was established. By the mid 1980s, policies of land settlement had fallen out of favour with government and were no longer viewed as a major strategy in rural development (see Jones & McGavin 2001).

Milne Bay Estates began planting in 1986, and over the next five years 4,661 hectares of estate plantations and 383 hectares of VOP blocks were under cultivation (Konimor 1991). World Bank funds provided credit to growers to establish oil palm blocks. Although cocoa was planted on one of the company estates (Sagarai) in 1993 it was converted to oil palm due to disease problems. Now, estate planting has increased to 6,990 hectares with plans for further expansion (ADS (PNG) 2001, 20). The development of estate plantations is being hampered by land disputes with customary landowners (OPIC 1998, 23).

Village oil palm has been established on customary land under Clan Land Usage Agreements (CLUA) to facilitate loan requirements (OPIC 1998, 20). Presently, 1,338 hectares of village oil palm are planted, numbering 356 smallholder farmers (ADS (PNG), 2001), with expectations that numbers will continue to grow over the short term. Unlike other oil palm schemes in Papua New Guinea, smallholders' contribution to total production is only around 5%, considerably lower than that of other schemes (Table 1.1).

1.2.6 New Ireland

New Ireland is the most recent and smallest oil palm scheme in Papua New Guinea. The company, Poliamba Pty Limited (subsidiary of Pacific Rim Plantations Ltd), operates the estate and mill process and was formed in 1998 following the restructuring of a group of cocoa and copra plantations in that province (Papua New Guinea Oil Palm Association 1998). The company completed most of its planting in 1992 and plantings total around 5,200 hectares (ADS (PNG) 2001).

Village oil palm plantings were established in 1991 with financial support from the Rural Development Bank of Papua New Guinea. The area planted to oil palm remains limited with less than 1,300 hectares planted on customary land (Table 1.1).

Details of company ownership, estate and smallholder hectareage and production for each oil palm scheme is provided in Table 1.1. The Oil Palm Industry Corporation's (OPIC) strategic priorities (1999-2003) for each scheme are listed in Appendix 1.1.

1.3 Government and Private Support in the Establishment of the Oil Palm Industry in Papua New Guinea

The establishment of the industry based on the nucleus estate-smallholder model facilitated private investment in Papua New Guinea. Substantial private investment was required to establish the estates and associated processing and marketing facilities. Large-scale private investment continues as the industry expands in the five project areas. For example, New Britain Palm Oil Limited had estimated capital expenditure of K47.4 million for 1999 and K59.2 million for 2000. Much of this is for developing estate lands and processing facilities at Numondo and Kulu-Dagi and Inland Kove (NBPOL 1999). Hargy Oil Palm Ltd is also investing over K20 million in the construction of a new mill at Navo. Presently, private investors are examining the feasibility of expanding oil palm to other provinces, namely Gulf, East New Britain, Madang and East Sepik.

The establishment of the oil palm industry in Papua New Guinea also received considerable financial support from government and international donors, though this varied between the different schemes. The government was joint owner in the early nucleus estate schemes in West New Britain and Popondetta, and remains a major shareholder in Bialla, Popondetta and Milne Bay. Also, the World Bank and the Asian Development Bank have played a substantial funding role in establishing the industry in Papua New Guinea. The World Bank provided funding support for much of the development of the smallholder sector at Hoskins, Popondetta and Milne Bay.

The government and overseas donors continue to provide substantial support to the industry, although government support is in decline. The government provides smallholder extension services (though increasingly funded by a levy on growers), industry subsidies, credit for smallholders and is responsible for the provision of services and infrastructure. Currently, the largest overseas funded project, the World Bank Oro Expansion Project which began in 1993 has received in excess of US\$27 million in funds.

1.4 Structure of the Oil Palm Industry in Papua New Guinea

The estate companies own and operate the processing mills and their own plantation estates. Some also take responsibility for transporting smallholder fruit to their processing mills and providing seedlings, technical services and advice to smallholders.

In most of the project areas, smallholder oil palm fruit is harvested fortnightly and stacked at the roadside edge of the block for collection by the company for processing. A harvest can take up to 3-4 days work depending on the area planted to oil palm, age of palms and the number of people assisting with harvesting. The fruit is cut, transported to the road in wheelbarrows and stacked for weighing and collection. When fruit is harvested, or over-ripe, oil palm fruitlets become dislodged from the main bunch. This loose fruit is separately collected by women and weighed, and can account for up to 14% of the harvest. A long-term concern for the oil palm industry has been the high rate of loose fruit wastage. The recent introduction in several schemes – Hoskins, Popondetta and Bialla - of a separate payment card for women to collect loose fruit has led to large increases in loose fruit collection (Chapter 8).

Smallholders sell their fruit to the company, and depending on the project area, are paid either fortnightly or monthly. The price paid for the fruit is determined by the world price of palm oil and is based on an agreed formula developed by the Papua New Guinea Government, the companies and the growers' associations. There is some variation in the price paid to smallholders by the

different companies, largely as a result of varying transport costs between project areas.

Despite the rise in land disputes (Chapter 6), the nucleus estate-smallholder model has worked well. Not only do smallholders generally have good access to transport and processing facilities, technical support and a regular income, but the presence of a large plantation estate also provides additional employment opportunities for smallholders. This is especially beneficial for the growing population on the LSS. Also, for the milling company the nucleus estate-smallholder model provides the company with access to a larger area of land planted to oil palm.

With the restrictions and difficulties of alienating land for project developments, the industry, since the late 1990s, has been developing mini-estate schemes. Presently, approximately 11,500 hectares are under mini-estate production, with planned expansion of over 30,000 hectares in the near future. Bialla is the only scheme that has not established mini-estates. Mini-estates allow companies access to customary land for oil palm through a lease, lease-back arrangement with an Incorporated Landowning Group (ILG) – a legally-constituted landowning corporate body. The customary land is leased to the National government which then sub-leases it back to the ILG. The ILG in turn leases the land to the company for development. Leases are usually for a 20 or 40 year period during which time the company takes responsibility for the management of the mini-estate, and the landowning group receives an annual rental fee as well as annual royalty payments on the production. In the case of NBPOL, landowners are also issued company shares – the number depending on the hectares leased and the lease period. The lease, lease-back system is not new to Papua New Guinea and is operating in several resource development projects.

1.5 Structure of Governance in the Oil Palm Industry

The industry consists of several institutions namely, the Oil Palm Industry Corporation, Papua New Guinea Oil Palm Research Association, Oil Palm

Growers Associations, and the Papua New Guinea Palm Oil Producers Association. Each is discussed below.

1.5.1 Oil Palm Industry Corporation (OPIC)

Agricultural extension services to smallholders were initially under the management of the Department of Agriculture and Livestock (DAL). In 1992, as part of the government's corporatisation and agricultural reform policies, the Oil Palm Industry Corporation (OPIC) was established as a quasi government agency. OPIC is financed by a smallholder crop levy of K3.50/tonne which is matched by the oil palm companies. International aid funding also provides significant financial support for the organisation.

The central role of OPIC is to provide extension services to smallholders and to:

- increase smallholder productivity;
- promote improved farm management techniques;
- provide advice and education regarding oil palm production methods;
- enhance the well-being of smallholders.

OPIC is also responsible for liaising with the government, oil palm companies and other organisations involved in the industry. To facilitate OPIC's role, Local Planning Committees have been established in each of the five project areas. These committees consist of the OPIC project manager and a representative from the local growers association, provincial government, plantation company and the Oil Palm Research Association. The Committee meets regularly to discuss, plan and monitor the work of OPIC and to act as a forum for various stakeholders to raise various issues of interest or concern. OPIC's mission statement and five year strategic plan for 1999-2003 are presented in Appendix 1.2.

1.5.2 Papua New Guinea Oil Palm Research Association

Oil palm research began in 1967 when the Dami Oil Palm Research Station in WNB was established by Harrisons and Crosfields. As the industry expanded,

a single research organisation that serviced all project areas was considered necessary for the industry. In 1980 the Papua New Guinea Oil Palm Research Association (OPRA) was formed between the government, the plantation companies and the smallholder sector. OPRA is financed by a smallholder and plantation crop levy, some government funding and many of its research projects are funded by external (largely overseas) research grants.

OPRA's main areas of research include agronomy (in particular soil chemistry and plant nutrition), entomology, smallholder studies, and plant pathology. The research underpins OPRA's major role in developing new technologies and farm management techniques to improve oil palm production. The association also provides technical support and training to smallholders, extension officers and plantation company officers. OPRA's research output is in the form of academic and conference papers, technical reports and information bulletins for disseminating information throughout the industry.

1.5.3 Papua New Guinea Palm Oil Producers Association (POPA)

The Palm Oil Producers Association represents the interests of the milling companies. It liaises and negotiates with governments for positive support for the oil palm companies and the industry as a whole.

1.5.4 Oil Palm Growers Associations

Each project area has a smallholder Oil Palm Growers Association which represents the interests of smallholders to the industry bodies such as the companies, OPIC and OPRA and to National/provincial governments. The Chair of each growers' association sits on the board of OPIC and represents smallholders at Local Planning Committee meetings. Smallholder membership is voluntary and an annual subscription fee helps fund the associations.

The extent of smallholder involvement in the associations varies between project areas and over time. At various times the associations have experienced problems with financial mismanagement resulting in members losing

confidence in their organisations. For example, in 2000 the membership of the Hoskins growers association numbered 89 growers, representing a substantial fall in membership from 500-600 members in the mid 1990s. The massive loss of members resulted from misappropriation of the growers' association funds. In Popondetta the Growers Association membership has been limited due in part to the perception amongst settlers that the organisation is dominated by local landowner interests.

1.6 Current State of Oil Palm Industry in Papua New Guinea

Most of the development of the oil palm industry occurred in the decade 1975-1985. Since the first commercial plantings in 1968 at Nahavio, West New Britain over 50,000 hectares are now under estate cultivation and over 43,000 hectares have been planted by smallholders. Since 1997 approximately, 11,463 hectares have been planted to mini-estates. Growth of the industry has benefited enormously by the introduction in the early eighties of a pollinating weevil³ (*Elaeidobius kamerunicus*) and more recently by higher yielding and disease resistant strains of oil palm.

In terms of total exports the oil palm industry is emerging as the most important agricultural export industry in Papua New Guinea. Over the last few years oil palm has been one of the fastest growing agricultural exports in the country and has performed remarkably well, especially compared to other tree crop exports (Tables 1.2 and 1.3). Last year the value of oil palm exports exceeded coffee for the first time (DAL data, 2001). In 2000 oil palm exports accounted for 32% of the total value of Papua New Guinea's agricultural exports, and 5% of total Papua New Guinea exports (data held by DAL, 2001). The total value of palm oil exports for 2000 was K302.5 million, a substantial increase from K142.2 million in 1995. In the same period the volume of palm oil exports increased by 77.5% (Table 1.3).

Table 1.2. Values and quantities of Papua New Guinea agricultural exports 1990-2000.

	1990 Value (Kmillions) Amount (‘000 tonnes)	1991 Value (Kmillions) Amount (‘000 tonnes)	1992 Value (Kmillions) Amount (‘000 tonnes)	1993 Value (Kmillions) Amount (‘000 tonnes)	1994 Value (Kmillions) Amount (‘000 tonnes)	1995 Value (Kmillions) Amount (‘000 tonnes)	1996 Value (Kmillions) Amount (‘000 tonnes)	1997 Value (Kmillions) Amount (‘000 tonnes)	1998 Value (Kmillions) Amount (‘000 tonnes)	1999 Value (Kmillions) Amount (‘000 tonnes)	2000 Value (Kmillions) Amount (‘000 tonnes)
Palm Oil	33 143	53 200	64 206	79 246	78 231	142 187	182 267	207 275	272 213	338 254	303 331
Coffee	103 63	80 47	68 53	101 63	205 65	215 55	190 62	326 59	476 84	417 79	291 65
Cocoa	30 34	34 36	34 39	33 38	29 26	48 31	66 41	73 39	82 26	85 29	83 37
Copra	9 55	5 44	12 48	14 59	15 50	27 64	49 99	47 90	39 58	66 63	60 66
Copra Oil	12 35	13 33	24 35	20 46	20 35	30 33	51 50	51 49	70 53	96 50	66 48
Rubber	2 2	2 3	2 3	3 4	3 3	4 3	4 3	7 4	7 5	5 4	6 4
Tea	7 5	5 5	7 6	7 6	4 3	5 4	13 9	10 7	19 7	19 8	20 8

Source: Bank of Papua New Guinea and DAL statistics

Table 1.3. Percentage changes in the quantities of Papua New Guinea agricultural exports.

AGRICULTURAL EXPORT CROP	PERCENTAGE CHANGE IN QUANTITY 1991-1995	PERCENTAGE CHANGE IN QUANTITY 1995-2000	PERCENTAGE CHANGE IN QUANTITY 1991-2000
Palm Oil	-6.5	77.5	65.9
Coffee	18.2	18.8	40.5
Cocoa	-14.5	22.5	4.7
Copra	45.9	3.6	51.1
Copra Oil	-0.30	45.0	44.5
Rubber	94.6	-17.8	59.8
Tea	-10.6	102.3	80.8

Source: Bank of Papua New Guinea and DAL statistics

Currently, there are over 14,500 smallholder oil palm blocks. In 2000, smallholders produced 531,264 tonnes of FFB and earned approximately K36.5 million from oil palm (ADS (PNG) 2001, 1). At Hoskins alone, approximately, K1-1.5 million enters the economy every month (ADS (PNG) 2001, ii). In 2000, smallholders accounted for 43% of the area under oil palm and 33% of total production.

Whilst there have been large increases in production and the area planted by smallholders (Table 1.4), improving smallholder productivity (production per unit area) remains the industry's major challenge. Smallholder productivity continues to be much lower than the estate plantations (Table 1.1), and VOP productivity is consistently lower than the LSS (except for Popondetta). A priority of the industry is to increase smallholder production as a proportion of total production to at least 50% by 2003 (OPIC 1998, ii). This is to be achieved through expanding the area under cultivation and by increasing the productivity of existing blocks.

Table 1.4. Smallholdings of oil palm in 1998 and 2000.

PROJECT	1998	2000
	SMALLHOLDER OIL PALM (HECTARES)	SMALLHOLDER OIL PALM (HECTARES)
HOSKINS	11,180	16,148
BIALLA	9,279	11,250
POPONDETTA	9,931	13,000
MILNE BAY	1,060	1,338
NEW IRELAND	975	1,285
TOTAL	32,425	43,021

Source: OPRA data and ADS (PNG), 2001

Oil palm appears to have several attributes that make it suitable for smallholder production:

- It has few pest and disease problems.
- It grows on a wide range of soils and requires little maintenance.
- Oil palms can tolerate a lot of neglect and can be quickly brought back into production. If oil palm prices collapse, harvesting can be abandoned until prices rise again.
- Although yields vary seasonally, palms produce all year, providing smallholders with a regular income (unlike coffee which has a very short harvest season).
- Because of the nucleus estate model smallholders generally have good access to processing and marketing facilities.
- Better world prices.

Endnotes

1. The Popondetta cocoa scheme established in the 1950s allocated leasehold blocks to Australian ex-servicemen. A smaller area of leasehold blocks was opened up for Papua New Guineans: most being from Popondetta and a small minority from other provinces in Papua New Guinea. The average block size was approximately 10 hectares (Hulme 1984, 216).

2. In 1995 HOPPL was renamed Higaturu Oil Palms – a member of the Pacific Rim Plantation Pty Ltd Group. In 1995 Pacific Rim Plantations Ltd was formed following a restructuring of CDC. It was a joint venture between the PNG government and CDC.

3. The pollinating weevil eliminated the need for hand pollination of the palms every few days, and this vastly improved pollination rates and lowered labour costs on the plantations and reduced the demands on labour in the smallholder sector.