

PROSPECTS FOR PALM OIL INDUSTRY

wal Mazewin¹

FACTS AND CONSIDERATIONS

Background

Papua New Guinea's oil palm industry began from very humble beginnings since its observation in plantings in the 1920s. Following World Bank's 1964 recommendation for diversifying the economy, the first commercial plantings of oil palm in Hoskins commenced in 1967. The industry comprises of two distinct but adjacent components, the estate and smallholder subsectors.

The approach adopted was that of nucleus estate-smallholder (NES) development. The plantation companies were to supply 50% of the output, and provide full milling, marketing, technical services and management for the estate and associated smallholders. Smallholder scheme was managed by the Government's Department of Agriculture and Livestock (DAL) to supply fruit to the nucleus estate operated mills.

There are now five projects in Papua New Guinea. The first of these was in Hoskins area of West New Britain Province. Plantation development commenced in 1967.

First smallholder settlers were brought from other provinces to settle on a 6.5 hectare block each of government land, 4 hectares for oil palm planting and 2.5 hectares for food gardens, given on a 99-year lease. The Village Oil Palm (VOP) planting was also developed under the Clan and Use Agreements (CLUA) to facilitate the borrow credit from the Rural Development Bank, with initial financing from the World Bank.

The industry has grown from strength to strength, with three major projects in Hoskins, Bialla, Popondetta and the two smaller projects in New Ireland and Milne Bay provinces.

All big projects operate NES schemes with Land Settlement Schemes (LSS) and Village Oil Palm (VOP) outgrowers, while the smaller projects mainly involve estates with VOPs.

2. Area

Industry covers over 80,000 hectares comprising of about 33,000 hectares by smallholders and the balance under the estates. Developments are still continuing in both sectors through new developments and replanting.

Oil Palm Hectareage in 1998

Project	Estate	Smallholder	Total
Hoskins	18,688	11,180	29,868
Bialla	6,144	9,279	15,523
Popondetta	7,718	9,931	17,649
Milne Bay	6,588	1,060	7,648
New Ireland	4,582	975	5,557
Total	43,720	32,425	76,145

The interest for the expansion of oil palm growing in other parts of the country is fairly high, especially developing village land. Total hectares under crop would increase from the medium to long term.

3. Production

The 1999 Estates production accounts for about 70% of output with the rest by smallholders (30%). Palm products are steadily increasing,

¹Chairman, Oil Palm Industry Corporation, Kavieng.

with crude palm oil exports rising from about 110,200 tonnes in 1988 to over 200,900 tonnes in 1999 (BPNG Sept. Qtr. Report). Palm kernel exports rose from 18,000 tonnes to over 30,000 tonnes in the same period.

Oil Palm FFB Production in 1999 (tonnes)

Project	Estate	Smallholder	Total
Hoskins	410,946	201,006	611,955
Bialla	62,018	100,007	162,024
Popondetta	135,349	99,888	235,236
Milne Bay	138,074	9,295	147,369
New Ireland	83,025	5,190	88,215
Total	829,414	415,385	1,244,799

Smallholder production was declining with a peak of 285,000 fresh fruit bunches (FFB) in 1985/86 and remained low until about 1995/96. This was due mainly to the change of management from Department of Agriculture and Live-stock managed smallholder extension service to the Oil Palm Industry Corporation (OPIC). However FFB production has since increased to over 400,000 tonnes in 1999.

4. Exports/Earnings

Industry maintained consistent growth in exports of palm products in 1999 with most sales to Europe. Over 200,900 tonnes of Crude Palm Oil (CPO) was exported in that period (BPNG Sept. Qtr. Report). Earnings continued to rise from K39.3 million in 1988 to over K275.6 million in 1999 (BPNG Sept. Qtr. Report).

As a result, it now accounts for over 30% percent of total agricultural export earnings and boasts of being the second largest agricultural export earner after coffee.

5. Prices

After being in the slump from 1988 to 1993, fluctuating between K291 and K377 per tonne (c.i.f.), palm oil prices rose to K1,368 per tonne

in 1998 and slightly fell to K1,113 per tonne as at September 1999 (BPNG Sept. Qtr. Report). Price forecasts for the rest of this year and to the year 2003 remain favourable subjected to developments in the major palm oil producing countries and other vegetable oil substitutes.

Prices on the fresh fruit bunches (FFB) are determined by a formula which has been reviewed several times, the latest being in 1998. These reviews are vital to ensure both the farmers and milling companies receive equitable prices. The latest review has been forwarded to the government's Commodity Working Group (CWG) for adoption.

6. Employment

Significant employment is provided by the industry, both direct and indirect, for many Papua New Guineans in the project areas. An estimated 100,000 people benefit from the industry including those in the service sectors.

There is potential to create more employment opportunities in the industry as the interest is high in many other parts of the country to grow the crop.

7. Research

The PNG Oil Palm Research Association Inc. is a non-profit research association financed by levy and external sources. The crop levy is K2.07/tonne ffb from plantations and K0.56/tonne ffb from growers. Current external revenue sources are the World Bank, European Union and GoPNG.

The industry under its Oil Palm Research Association (OPRA) based in Dami, WNBP, runs very reputable research programs. Some of the outstanding achievements include the development of the pollinating weevil, a milestone in the industry. It has contributed in saving huge labour costs from hand pollination of the palms and significant increases in industry output.

Also, the function of OPRA in the industry is

very important as it serves the role of developing new technologies and coordinating with estate and OPIC (smallholder) to adopt new and proven technologies through its research efforts.

B. SMALLHOLDER SUB-SECTOR

Under the initial agreements between the Government and the foreign companies to develop the industry, smallholders would grow oil palm and supply mills operated by companies for conversion into palm products. As such the smallholder sector plays a very vital role in supplying palm fresh fruit bunches (FFB) to the estate operated mills.

1. Oil Palm Industry Corporation

The OPIC was formally established in 1992 under the OPIC Act, by Parliament as a Statutory Organisation. Its primary function being the provision of efficient oil palm extension services to the smallholders engaged in growing the crop in the five project areas throughout the country.

The Government's objective in corporatising the industry was to transfer industry management responsibilities to the respective industries. This policy was developed in direct response to its concern over the declining smallholder tree crop productivity in 1980s. It was also aimed at making the individual industry management accountable to the key stakeholders in their respective industries.

OPIC is presently financed by levy and external sources. A crop levy by smallholder of K3.50/tonne FFB is matched by kina to kina contribution from the milling companies.

External source fundings are from the World Bank and European Union. The GoPNG has not funded for 1999 and 2000.

1.1 Overview of OPIC's Situation

OPIC has a fairly difficult and complex task to perform and its operations are spread widely

throughout Papua New Guinea in areas which have poor infrastructural development. It operates within an industry set to become one of the highest export earners in PNG and in which there are many stakeholders, each with differing objectives and agendas, and within a socio-economic context, which is constantly changing and can present extreme difficulties.

Although it is a statutory body, OPIC is still a part of, and has to operate within the government bureaucracy, which in general is slow to respond to changes and is severely short of funds. It has a responsibility for the economic and social well-being of thousands of smallholder farmers and their dependents who are relatively uneducated, culturally diverse, lacking in self-reliance and who contribute minimally to the Corporation's operating expenses. It is now faced with no funding from the Government and a reduction in aid support.

1.2 Socio-Economic Context

Oil Palm production in Papua New Guinea is at a point where it is about to become the country's premier export crop, expected to outstrip the production and export of coffee by year 2001.

LSS smallholder production is higher than VOP due to socio-economic factors. However LSS production has been subject to interruption in some projects due to land disputes. Some areas have also experienced severe law and order problems due to factors associated with the resettlement of people from other regions of the country and the lack of alternative employment opportunities for settler youth.

The structure of the industry comprises the producing companies which have formed the Palm Oil Producers Association (POPA), the smallholders represented by the project area Growers Associations, a research body, the Oil Palm Research Association (OPRA) and OPIC.

All groups are represented within OPIC either by Board membership or through Local Planning Committees (LPC) established under the ACT

to assist the work of OPIC at project level. OPRA works independently of OPIC, although close relationships are maintained. This is in contrast to the Coffee Industry Corporation (CIC) in which coffee research and extension are combined under one body.

A small percentage of smallholders have diversified into other income-earning activities such as poultry and pig farming, tucker box operation, vehicle hire etc. However, there are relatively few other tree crops which can be grown in conjunction with oil palm.

Each project area experiences similar social and cultural problems which can seriously disrupt production and expansion. The West New Britain and Oro projects for example have suffered due to land disputes between settlers and the indigenous population, and also experience breakdowns in law and order due to the lack of alternative employment opportunities for settler youth. In Milne Bay and New Ireland, problems such as these do exist, albeit not on the same scale due to the absence of LSS smallholders in these areas.

In Oro Province, a major expansion of the area under smallholder production is funded by the World Bank, funds for which are under the control of OPIC. This US\$26 million project which was due to be completed at the end of 1999, however was extended for another two year term, includes the funding of OPIC infrastructure and staffing, the construction of roads, schools and aid posts, and the financing of loans to new smallholders.

1.3 Financial Performance

Given the general economic climate and cut backs to government expenditure, OPIC has fared well financially relative to line government departments. OPIC's stewardship of its resources has been conservative, partly because of uncertainties concerning future funding. Given the uncertain availability of future funding, the Secretariat is understandably cautious about where expenditure is to be committed.

OPIC expenditure (excluding capital expenditure) per tonne of smallholder FFB averaged over all projects in the years 1993 to 1999 remained fairly constant at between K11 and K12. The cost per tonne in mature projects reduced in this period due to higher levels of productivity, while that in development projects remains higher due to the immaturity of palm trees.

Employee remuneration costs, averaging 50% of total expenditure represent the major expense, while remuneration cost per tonne has increased, largely due to the low yields in developing projects.

C. CONSTRAINTS

The OPIC has developed its Five-Year Strategic and Business Plan, 1999-2003, to effectively implement its programs and realise its vision, mission, and functions.

However, the OPIC will only realise its goals provided it is equipped with adequate level of resources. The major salient constraints and issues affecting the industry development are:-

Road construction and maintenance in the oil palm project areas are lacking; some roads have deteriorated so badly due to years of neglect. The industry is poised to bring more benefits to the economy but good roads are an essential condition for industry's progress.

Future financial base of the OPIC is very uncertain as there was no Government Funding Support for 1999 and 2000, although it is providing the most essential farmer services to those in the industry.

An analysis of the internal and external environment affecting OPICs' operations and performance are:

Internal

- OPIC is still subject to Public Service restrictions
- Public Service mentality still prevails but is

changing

- Future funding is of serious concern
- Manpower levels are reasonable but there is a need for additional non-agricultural expertise
- Non-technical expertise needs bolstering
- Employee motivational levels are low
- OPIC offices are generally well-equipped
- Disciplinary standards are improving

External

- Good relationships with other stakeholders are critical
- LPCs' are not as effective as they should be
- Attitudes of milling companies and management vary
- The relationship with OPRA is crucial
- FFB transport is a major concern
- Poor road maintenance hampers productivity
- Law and order problems are extreme in some areas
- Lands issues are difficult to resolve
- The pricing formula and methods of payment need examination
- Welfare of smallholders has been neglected
- Smallholder credit facilities provided by the Rural Development Bank are poor.

D. FUTURE PROSPECTS

- Primary target - increasing smallholder productivity;
- Reduced high cost structure through increased efficiency;
- Expansions in progress in most areas;
- Investment in new projects, eg., Ramu Valley;
- Considerable emphasis on environmental responsibility;
- The only effective, stable and growing rural development in PNG?

E. WORLD PRODUCTION OF PALM OIL

Market

Over the past 50 years the market for vegetable oils has expanded at a very rapid rate.

As developing countries increase their level of disposable income one of the positive indicators is the increase in the consumption of vegetable oils.

Palm oil is re-imported back into PNG as a cooking oil or as a fat for frying and bakery use. All palm oil produced in PNG is exported in the crude oil form.

The long term future for vegetable oils and palm oil in particular is seen to be extremely good. Long term oil consumption forecasts show an ever increasing consumption per capita.

Papua New Guinea

Production of oil palm on a per hectare basis shows that PNG plantations produce oil palm equal to and often greater than the big producers Malaysia and Indonesia. PNG has a plant breeding program at Dami, WNB that produces the highest quality oil palm seedlings for the domestic and export markets.

Many areas of PNG have the potential to grow oil palm to the highest level of efficiency. Soil, rainfall, sunlight hours, terrain all falling well within the accepted criteria.

Smallholder oil palm grower: Oil palm is a good crop for the smallholder as it does not have the disciplined spraying programmes that coffee or cocoa need. The oil palm is relatively free of most insect pests and diseases when compared to coffee and cocoa.

All smallholder produced crop is processed by company owned oil palm mills. The grower has only to harvest at the proper time and in most instances the fruit is taken from the farm to oil palm mill by company owned transport.