

The Demise of the Plantation Sector in the Coffee Industry: An overview and alternative

Wilson Thompson Orlegge

Abstract

This article explores the historical development of locally owned coffee plantations and smallholdings in Papua New Guinea with descriptions of boom times some twenty years ago and the gradual demise of the plantation sector in recent times. Graphic descriptions are provided of contributing factors such as deteriorating law and order, tribal conflicts, fiscal mis-management, faulting on loan repayments, land mis-use, inadequate rehabilitation of existing trees, poor roads, and inadequate communication infrastructure, business management expertise, working capital and dissemination of research findings. While all stakeholders need to accept responsibility for the state of the plantation sector, the author argues for the coffee government agencies to take a leading role to revitalise the industry, particularly in the areas of extension, management training and advisory services.

Key words: coffee, Coffee Industry Corporation, plantations, smallholder farmers, extension, management training, advisory services

Introduction

The coffee industry is a major and if not the most important economic sector in the Highlands region of Papua New Guinea that caters for the income earning opportunities for the local people. According to the Coffee Industry Corporation (CIC), coffee is the lifeline of eighty percent of the highlands population and contributes to the livelihood of over two million people in the country. From 1970 to 1990, the coffee industry was the major export earner from the agriculture sector for the country. It has now been overtaken by the oil palm industry with its high world prices, large scale cultivation and production, and absence of land compensation and law and order issues that have plagued the coffee industry in the highland provinces.

As with the oil palm industry, the major driver for the coffee industry has been the plantation sector, which guided and provided support to smallholder farmers. For example, when Angco Ltd was present in the Okapa area with its Purosa Plantation, the smallholder farmers were able to sell their coffee to them. Since the collapse of the company, the people are faced with transportation and marketing problems as the alternative infrastructure has deteriorated.

This article is focused on the quality of management of coffee plantations, which is one of the factors that has contributed to the decline in the cultivation, production and processing of coffee and the demise of plantations themselves.

A case study is made of locally owned and managed coffee plantations in the Eastern Highlands Province and the Coffee Industry Corporation Ltd (and its predecessors). Three questions underpin the article: Is the government and its agencies taking active an interest in serving the plantations in terms of extension, advisory and training services? Are the plantations being managed by competent and skilled personnel? Are plantations helping themselves?

Background

The coffee industry has been plagued by many problems caused by both internal and external influences. Internal factors affecting the plantation sector are poor management and accountability by the coffee farmers and plantation managers. External factors affecting the plantation sector include poor infrastructure, law and order problems, land compensation claims, loans and coffee prices which are affected by market forces. A brief description of the history of the plantations and the responsible government agency will assist to provide the reader with the context of the issues.

In the early 1950s, coffee was grown on a large scale by colonial expatriates in the Eastern Highlands Province. In 1953 the Highlands Farmers and Settlers Association was established to represent their interests in coffee, peanuts, tobacco, cattle and trading, with a formal charter in 1956. As coffee production increased, the planters realized that they were restricted to the world market by being a colony of Australia; hence they called for a tariff review. In 1961, the Enquiry in Tariff was instituted, which resulted in representations for direct export and marketing support for the industry. The outcome was the establishment of the Coffee Marketing Board in 1964 and subsequent changes in objectives and the name to Coffee Industry Board in the 1980s.

The Board was tasked with regulating, monitoring and developing the industry including price support through the collection of a levy and extension, research, training and advisory support, mostly geared towards the plantation sector. In 1986, there was an outbreak of coffee leaf rust disease that saw the government injecting substantial funds into establishing a specialist Coffee Development Agency tasked to fight the disease and to undertake smallholder farmer extension and training.

In 1991, the Coffee Industry Corporation Ltd (CIC) was established which has three divisions namely: Research, Industry Affairs and Extension Services. The CIC encompasses the Coffee Research Institute for research, the Coffee Industry Board for industrial affairs and the Coffee Development Agency for extension activities. Funding for the corporation is obtained from a levy imposed on exported green bean, supplemented by variable government grants and other income sources.

The Coffee Industry Corporation Ltd was incorporated as a company but is actually a commodity board vested with powers and functions under the *Coffee Industry Corporation (Statutory Powers and Functions) Act* to control, regulate and provide essential services to the coffee industry. The Department of

Agriculture and Livestock through the Minister provides policy support and directives including coordination with other commodity boards.

Since the coffee industry commenced in the early 1950s, Papua New Guineans were generally smallholder farmers, with the exception of some farmers such as Sinake Giregire, Akunai Rovelie and Apo Yeharigie, who were encouraged by the expatriate dominated Highlands Farmers and Settlers Association. Eventually, Giregire and Rovelie developed plantations through the *Land Tenure Conversion Act* by converting large areas of customary land to freehold land.

Though cooperative and rural progress societies were established in the highlands, these were engaged in cattle raising and cultivation of peanuts, kaukau and vegetable industries. In coffee, they were involved in purchasing parchment but not in production. However, the expatriate dominated plantation system was widespread throughout the highlands, particularly in Eastern and Western highland provinces. With the advent of independence in 1975, the government began taking a closer interest in the role of nationals in business and economic development and the utilization of land.

The government facilitated the enactment of the *Land Group Incorporation Act*, *Business Group Incorporation Act*, Cooperative Companies and Division 4 Status companies, the establishment of the *National Plantation Redistribution Scheme* and provided certain exemptions to companies owned by locals in terms of statutory reporting requirements. The coffee, cocoa and copra plantations were sold to locals (former customary land owners) within the vicinity of plantations with government assistance and finance. In the years from 1974-1980, plantations and national enterprise were booming. The PNG coffee sector further bloomed with the 1976 Brazil frost disaster and most PNG plantation owners had repaid their loans and were expanding into other businesses.

Many plantations taken over by locals in the 1970s were done through pooling of resources of fellow clansmen and landowner groups with government guarantees and bank loans. However, there were two problems with this arrangement. First, the status of leaders grew enormously and they acquired private interests, vehicles, fine house, overseas education for children and lavish lifestyles. Secondly, due to lack of business knowledge by ordinary shareholders, they had high expectations of their '*bisnis*' to assist with school fees and customary obligations. The impact of wealth was evident in leaders' lifestyles so ordinary shareholders expected tangible benefits that included regular dividends.

In the 1980s when the expectations were not realized, shareholders and their families resorted to violence to change the management with selected persons who appeared capable of managing the plantation business. Then by the 1990's with worsening economic conditions, dividends became non-existent and plantation businesses were faced with huge loans and on the verge of collapse.

Conflicts occurred between shareholders, factions emerged in supporters of management, and threats by those whose land was acquired by the State if the management and major shareholders were from other non-land owning clans. Properties were vandalized. Land was being seized with no regard to legal issues such as State Lease or existing loan obligations. This ultimately resulted in shareholders and families taking sides (tribal rivalry) that led to full scale inter-tribal fights.

The shareholders, 'land owners' and self appointed managers of plantations and associated businesses were oblivious to the world market factors, government economic policies and the after-shocks of Bougainville crises. The coffee plantations, including the block sector, were affected by debts in the vicinity of K10 million, high cost of production through fluctuating world coffee prices and a downturn in economic conditions in PNG. Another problem was the difficulty in obtaining labour due to low wages and living conditions and the fact that labourers were often not from the local area. Also, there were difficulties in expanding plantations due to the land tenure system or where uncultivated plantation land was occupied by people of nearby villages who would demand compensation for their caretaker roles even though the land was State Lease land. Added to this were the increases in prices of goods and services and the deteriorating conditions of roads and communications which added to the high costs of operations. This was compounded by huge loan obligations and poor management.

Thus almost all plantations by 1995 were plagued by inadequate working capital and most were heavily indebted to financial institutions. The most affected were the plantation businesses that were locally owned and managed by nationals.

While the National Government had played a major role in enabling the creation of a coffee industry for PNG nationals, it had lost track of the industry's expansion and diversification over the years and its role in providing state assistance. Police were needed to ensure that illegal settlers or compensation seeking individuals were arrested. Government authority was needed to explain its role in acquiring the plantations from expatriates and to provide awareness that the plantation land was State Lease and no longer customary land. The problems of the situation were compounded by market factors, inadequate transport, poor communication infrastructure and inadequate provision of extension, advisory and training services.

It can be summarized by Satish Chand (2003), a Pacific economics expert, when he said that corruption, tribal violence and crime issues that fall within the responsibility of the State were major impediments to investment. Chand further stated that performance of primary commodities was based on international price movements and beyond domestic policy makers, general investor climate in terms of domestic interest rates, real exchange rates, access to land and competitively priced transportation.

Let us now consider what some experts have said about plantations. In 1981, the Institute of Applied Economic and Social Research (now the National Research Institute) organized a seminar titled, 'What Do we do about plantations?' This was attended by experts, practitioners, academics and policy makers. Subramanian (in Walter 1991), commenting on cocoa plantations, stated that effective management was vital but organizational hierarchy may be a hindrance as it had a Board of Directors, a manager, and then *bosbois* (boss-boys) followed by labourers. In many cases, the manager did clerical, field and technical tasks on top of his paramount duty as manager, which left little time for creative thinking and implementation of strategies. Subramanian noted that those engaged in managerial positions may have agriculture experience and good or poor levels of education but that they had no background in business.

As early as 1980, most of the coffee plantations had a majority of PNG shareholders or were owned and managed by locals. Ricky Mitio (in Walter 1981), then Chief Executive Officer of PNG Coffee Industry Board, noted that although most plantations were managed by nationals, the Managing Directors in charge of the plantations lacked education, experience and training. Mitio stated that relevant groups (plantation owners) require experienced management to keep up with developments in the plantation industry. Management of plantations requires professionals and persons who are committed and keen to develop the industry. The Government sponsored Plantation Redistribution Scheme was introduced in 1974 and such an observation some six years later should have alerted the government to the need for educated management.

A coffee industry review by PNG and Australian governments (QDPI, DAL, Coffee Board) in 1987 conducted a survey of 50 out of 102 plantations in the Eastern and Western highland provinces. It was found that from the overall 20 managers, two had attended a university and another two had attended agricultural colleges whilst the rest had qualifications below Grade 12. This confirmed that the findings of low educational levels and the impact on management of plantations in 1980 were still evident in 1987.

In 1976 the Department of Commerce developed the Plantation Management Training Program in response to requests from managers of newly acquired plantations. The course operated in four regional centres and included theory and practical management and operational skills for on-the-job application. Field training was conducted on the plantations focusing on the plantations' work programs. New methods and research results were disseminated and demonstrated for further application. However, by 1986, the Plantation Management Training Program was discontinued and replaced by individual courses offered at various times at the Highlands Agricultural College in Mount Hagen. A situation facing the coffee industry in the 1980s was insufficient qualified management personnel. Plantations became operated by technical personnel with support from semi educated and illiterate support staff.

The McGowan Report (1989) stated that the objectives of research programs at that time were to identify and address problems of coffee farming but did not deal with business management and operations. It was obvious in a later report by Fleming and Anthony (1993), that there was an inadequate flow of information about research results from plantations to smallholders. The thrust in coffee research work until 1987 was towards plantations with expectations that benefits would flow down to smallholders but the question is whether results get disseminated to people who would benefit from them. Prior to 1987, coffee extension and farmer training focusing on the smallholders was carried out by the Department of Agriculture and Livestock and the provincial Department of Primary Industry. With the outbreak of coffee leaf rust disease, the Coffee Development Authority was established which, with the Coffee Industry Corporation, still serves the smallholder with an emphasis on individual farmers.

A 1995 survey of plantations in the Eastern Highlands Province

In 1995, I conducted a survey of 23 coffee plantations in the Eastern Highlands Province. Most were related through ownership or management. My choice of plantations was restricted to those that were locally owned with diverse business forms such as individuals, business groups, proprietary company and development corporations. Most of those included were located along the Okuk Highway and various provincial roads in all eight districts of the province.

It was evident that plant growth, field management, buildings and machinery as well as the type of ownership have little or no correlation to road access. For example, coffee trees, general field appearance at Furiki and Kesa located away from the Okuk Highway and 50 kilometres from Goroka, were excellent whilst those within 10 kilometres of Goroka had poor appearance.

I was interested in exploring whether plantations were being managed by competent and skilled personnel with reasonable levels of education and training. I found that nearly all managing directors, owners and chairmen of business groups had education below high school level. Of those in management, only a few had tertiary education or other training. Seven owners or bosses had little or no primary education but had experience as coffee buyers. Only four owners or bosses had gone beyond primary school and had a background in agriculture and management of plantations.

It was found that problems of the physical state of a plantation including the coffee plant, buildings and machinery were mainly due to inadequate expertise, qualified management and support personnel. Some operating under proprietary form were under receivership, had disputes and inadequate working capital. Many were indebted to commercial banks and the Rural Development Bank. Some had land compensation issues and law and order problems.

I was interested in exploring the extent to which plantations were pro-active in helping themselves run profitable businesses. Personnel on nine plantations were asked questions regarding availability of extension, advisory services and

training provided by government agencies and their knowledge on training opportunities available. It was obvious that none of the plantations were subscribing to industry magazines and journals and did not approach government agencies and organizations voluntarily for assistance. All of them said that adequate training suited to the industry was vital but had little or no knowledge of opportunities available. Further, there appears to be little or no communication by plantation personnel with relevant government agencies tasked with technical and policy matters or the Coffee Industry Corporation.

I found that my sample plantations from all districts and all forms of ownership and locality experienced huge problems. The results showed that the locally owned and managed plantations lacked adequately trained management personnel. Also, there was little provision for extension, advisory services and training provided by relevant government and statutory agencies to the sector. Poor physical conditions were evident on many plantations. By 2006, some of the plantations had not contributed to the coffee production statistics in PNG. According to the Coffee Industry Corporation there were 102 plantations in 1993. I am left to wonder how many are now under cultivation, good husbandry and production, and without financial, management or local problems.

Education and training for plantation management personnel

In addition to infrastructure, law and order, land disputes and other factors, a major issue facing the coffee industry was the lack of qualified management personnel with support of people with technical expertise. This was highlighted by Subramanian in relation to the cocoa industry and reinforced by Mitio in the coffee industry. This was also confirmed by the Australian Government funded review of the industry in 1987 but as we approached the 1990's, there were a host of other factors such as a decline in the economy, variable price movements, land issues and a lack of transport and communication infrastructure that hindered the industry.

From the literature and own observations, the personnel structure on plantations is comprised of the Board Director or Managing Director, the manager and a host of clerical and supervisory staff lacking adequate education and training. The managers seem to be the jack-of-all-trades, running the plantation, factory, processing plant and the office with little time for anything apart from daily operations. The Managing Director was typically a person with little or no education who had been a coffee buyer and had worked with expatriates. A Manager was normally a graduate in Agriculture (Certificate or Diploma) with no business background. Most managers would have been in their first employment at the plantation or would have had been promoted from an Assistant Manager position and thus had little experience and exposure to other management practices.

Thus this leads us to consider the type of education and training that was being provided and whether they were best suited to the needs of the industry.

Education and training in agricultural science for plantations

Reforms and developments in the higher education sector have seen the establishment of a number of institutions of higher education and a variety of academic programs. Universities have increased from two (UPNG, Unitech) to six (Vudal, University of Goroka, Pacific Adventist University, Divine Word University). The entry level has been increased from Grade 10 to Grade 12 and certificate programs no longer exist. There is a need for those with certificate level qualifications to upgrade to a higher qualification. The Highlands Agriculture College has been earmarked for improvement and expansion but actual work has yet to take place.

Programs are a combination of theory, practical and industrial experience with no particular emphasis on management of tree crops such as coffee. Moreover, those doing industrial training at Unitech and Vudal are drawn to the oil palm industry due to the involvement of foreign corporations and the growing demand of the industry. Opportunities in the coffee industry are less attractive to graduates.

Education and training in business and management for plantations

There are education and training programs in business and management. However, the course content of the such programs provides a general coverage of topics and is not geared to any particular business or industry. For example, persons graduating with a degree in business or accounting would have little knowledge of the actual accounting process in a plantation sector, or business and management issues involved in plantation operations, crop cultivation, factory management or coffee processing.

Block courses and programs offered by the Department of Education at various colleges favour public servants who get time off work more easily than others. Those from the private sector may attend evening and weekend programs. For workers on plantations, programs need to be tailored outside peak months.

Further, the PNG Institute of Public Administration (PNGIPA) has placed restrictions on applicants from the private sector for the next five years for government funded refresher and qualification upgrading programs in accounting and business management. Its focus is on public servants accountability and government accounting rather than the business or plantation sector. Various programs are geared towards school leavers rather than plantation workers.

A need exists for specific plantation management training programs. A plantation management training program existed 1990-200, but it has not been fully revived. The Highlands Agricultural College faced difficulties with resources and expertise to offer individual modules of the program

General extension, training and advisory services in coffee industry

Many reports such as those by Walter (1981), McGowan (1989), Fleming and Antony (1993) and Australian and PNG government funded reviews indicate the dilemma of dealing with plantations and smallholders. There is confusion in the responsibility of providing extension, training and advisory services to all sectors including the provision of research results to both smallholders and plantations. The Coffee Industry Corporation is engaged mostly with individual farmers and its research and output in terms of production and dissemination of research news and results has been poor and has not reached farmers at all levels.

It is evident that there are inadequacies in dealing with plantations and smallholders in terms of research and information dissemination, extension and training and advisory services. The Coffee Industry Corporation research focussed on technical issues such as farming systems and not operations and management. While their research was geared towards plantations, there were problems with dissemination of research results and findings to both smallholders and plantations. Thus, the issue of extension and advisory services comes into play as research outcomes are disseminated through practical training and relevant application and follow-up with farmers.

Coffee extension and farmer training are meant to be conducted through the Department of Agriculture and Livestock (DAL) and the provincial Department of Primary Industries (DPI). This is especially important in cases, such as the coffee leaf rust outbreak, where the officials have access to research findings and information on remedial action. Plantation and smallholding farmers have limited education and rely on extension and advisory services from DAL/DPI staff. It is a dilemma for both smallholders and plantations when inadequate extension, training and advisory services are provided.

The Coffee Industry Corporation (CIC) does not have an accredited training program and even its 'Certificate in Coffee Factory Management' announced in 1995 has not been conducted since 1997. The smallholders have lost touch with the CIC and are reverting to the provincial DPI which is closer and more reliable than the CIC. Coffee extension and farmer training has deteriorated.

Conclusion

This article has described some of the issues and challenges that are currently facing the coffee plantation and smallholder sectors particularly in regard to the provision of extension, training and advisory services. Deterioration in law and order, tribal conflicts, fiscal management, loan repayments, usage of the land, rehabilitation of existing trees, fruit picking, roads, communications, business management expertise, inadequate working capital and dissemination of research findings all contribute to the current demise of the coffee industry.

It requires a concerted effort by all stakeholders to address the issues. It is argued that the government agencies of relevance to the coffee industry must

take the lead. The government agencies and statutory organizations must not become white elephants but be assisted to implement their plans and programs for the sector and attain their objectives. The government played a leading role to assist nationals to acquire or set up plantations 31 years ago. It is time for coffee government agencies to take a leading role again in revitalising the industry and meeting the needs of its people.

References

- Chand S (2003), Economic Trends in the Pacific Island countries, pp1-15, *Pacific Economic Bulletin*, Vol 18 No 1, Australian National University, Canberra.
- Fleming, E, & Anthony, G. (1993), The coffee economy in PNG, *Analysis and Prospects*, Vol. 2. Institute of National Affairs, Discussion paper 55.
- McGowan International (1989), *Five Year Strategy Development Plan for the Coffee Industry of PNG*, Vol. 2. McGowan, Albury.
- Mitio, R. (1981), Management of coffee plantations, in A.H.S. Walter (Ed.) (1981), *What do we do about plantations?* Institute of Applied Social and Economic Research (IASER), Monograph 15.
- The National*, newspaper, Coffee Digest, in August 1995, Port Moresby.
- Orlegge, W. T. (2009), The ups and downs of cooperatives in PNG, *Journal of Contemporary Studies* Vol. 10 May 2009, Divine Word University, Madang.
- Orlegge, W. T. (2008), Dilemma of state failure: alienated or customary land for economic development, *Catalyst*, Vol 32. No 1, Melanesian Institute, Goroka.
- Orlegge, W. T. (1995), Demise of Locally Owned Business: Goroka Experience', typescript, 1995, New Guinea Collection, University of PNG, Waigani.
- Orlegge, W. T. (1995), Need for extension, advisory and training services in coffee plantations, typescript, 1995, New Guinea Collection, University of PNG, Waigani.
- Orlegge, W. T. (1995), Government input in production and marketing, typescript, New Guinea Collection, University of PNG, Waigani.
- Pacific Adventist College. (n.d). *Thinking agriculture?* PAC, Port Moresby.
- Pondikou, P. (1981), Training the plantation managers, in A.H.S. Walter (Ed.) (1981), *What do we do about plantations?* Institute of Applied Social and Economic Research (IASER), Monograph 15.
- Post Courier*, newspaper, Man on the land, 23 August 1993, Port Moresby, pp.30-31.
- Queensland DPI, PNGDAL, & ADB (1992), Proceedings of the seminar on agriculture development in PNG: Policies and issues. PNG Department of Agriculture and Livestock, Port Moresby.
- Queensland DPI, PNGCIB, & PNGDAL (1987). *PNG Export Tree Crop Study*, Vol. 1, Large holder survey, ACIAR, Canberra.
- Subramanian, A. (1981), Management in the cocoa sector, in A.H.S Walter (Ed.), *What do we do about plantations?* Institute of Applied Social and Economic Research (IASER), Monograph 15.

Author

Mr Wilson Thompson Orlegge is a graduate of University of PNG in the disciplines of Commerce, Economics, Politics and Public Administration. Since 1996 he has been the Secretary of the Highlands Farmers and Settlers Association Incorporated which was established in 1953 as the main coffee and agriculture sector body for the Highlands and other coffee growing provinces. The Highlands Farmers & Settlers Association Inc. has been communicating its concerns on the coffee industry, particularly the plantation sector, to the Coffee Industry Corporation Ltd since 2000, but the issues remain unresolved.