

# History and Importance of Cocoa Growing in Papua New Guinea

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## A short history of cocoa growing in Papua New Guinea

Cocoa production in the Pacific evolved from the English settlers in Samoa, Fiji, and the New Hebrides experimenting with cotton in the 1870s. Cotton prices soared in England following the interruptions to supply that followed the American Civil War. When American cotton production resumed in the 1870s, cotton prices plummeted. Consequently, the settlers looked to other high-priced crops such as cocoa, coffee, rubber and sisal. Cocoa was favoured because as long as it was processed and stored correctly it would not deteriorate. Further, by this stage cocoa and chocolate were very popular in Europe. By the 1870s, Cadbury, Rowntree and Fry in England, Droste and van Houten in the Netherlands, and Peter, Lindt and Nestle in Switzerland were household names. With cocoa having a ready market, English settlers in the New Hebrides, Fiji and Samoa turned from cotton to cocoa. Through their empire-wide connections, the English settlers in Samoa brought in planting material from Ceylon (now Sri Lanka). Material was also brought in from Java. This may have been the original Criollo type (Java Red) that was the most common type in Java at the time or it may have been the product of hybridisation between Java Red and an introduced Trinitario plant whose progeny became available in Java after 1892. At that stage cocoa from Ceylon and Java were considered by the chocolate companies to be the best in the world. The cocoa that was brought to Samoa from Ceylon and Java was Trinitario, which is generally regarded as a 'fine flavour' cocoa (Appendix 1). German traders and planters in Samoa are likely to have brought in cocoa planting material from Cameroon which was a German colony at the time, and this would also have been Trinitario.

The early English settlers in Samoa found getting labour to work their plantations to be a challenge. English law at that stage restricted their recruitment techniques. Gradually they abandoned their plantations. German settlers, not limited by such restrictions, pursued cocoa production with energy and innovation. For example, by 1884, Kurt Hufnagel was using his copra driers to dry his cocoa, a practice certainly not recommended now. Seeking new territory to pursue new opportunities, settlers moved from Samoa to New Guinea following its annexation by Germany. Richard Parkinson, the brother-in-law of the remarkable Emma Coe, popularly known as Queen Emma, introduced cocoa from Samoa to Gorima in the Madang District in 1889. He was responsible for establishing Emma's coconut plantations in what is now the Kokopo area of the Gazelle Peninsulain East New Britain and there is a mention in his book ('Thirty Years in the South Seas') that he introduced cocoa, although he clearly did not promote it. The early planters were mainly interested in coconuts. Cocoa spread through New Guinea through two routes. One was through the activities of the New Guinea Kompagnie in its chartered domains of Kaiser Wilhemsland, the Bismark Archipelago, and the Northern Solomons. The other route was through labourers recruited to work the different plantations. An intricate patchwork emerged – there were Fijians working in New Guinea, and Solomon Islanders, New Guineans and ni-Vanuatu working in Samoa. It was the movement of repatriated plantation workers back to Solomon Islands and Bougainville that helped the introduction of cocoa into their regions. Direct introduction of cocoa from Venezuela occurred until 1907 and this was again likely to have been Trinitario

Development was slow. Only in 1905 was it considered that cocoa production had reached a level of significance. By 1911 production reached 40 tonnes of dry cocoa beans. Between 1913 and 1923, exports varied between 112 and 186 tonnes. Some trees were lost during the First World War (1914-18). It was during this period that Australia took over from Germany as the administrator of New Guinea. Production slumped after the war and by 1923 it was just 34 tonnes. To encourage production, the Australian Government enacted the Papua and New Guinea Bounties Act of 1926 and the Customs Tariff (Papua and New Guinea Preference) Act of 1926 to provide a subsidy that covered all expenses associated with picking, fermenting, curing, and bagging cocoa for export.

Many coconut plantations survived the war relatively intact (some of these tall slender palms are still seen today), and interplanting cocoa under coconuts became widespread in the 1920s and 1930s; 1200 hectares of cocoa under coconuts had been established by the end of the 1930s. This was a feature unique to New Guinea cocoa production and has been of world-wide significance, followed in Malaysia and Indonesia and now being adopted in the Philippines. Research and experience in Papua New Guinea have shown that coconuts provide ideal shade for cocoa and also benefit pest control in the cocoa.

In 1913 the Germans planned a research station at Keravat. In 1928, the Australian administration formalised these plans when it developed the 'Native Agricultural School and Demonstration Plantation' or 'Government Demonstration Plantation'. Two years later the site was renamed the Lowlands Agricultural Experiment Station (LAES). Cocoa was one of the prime crops of interest. A section at the Botanic Gardens in Rabaul was dedicated to the continuation of some plantings of Criollo cocoa. The research station selected superior types of cocoa from the Trinitario types existing on plantations and provided to growers advice and seed from these selected trees. Some of the plantations were very large – by the outbreak of the Second World War, Kabaira Plantation had expanded to nearly 250 ha. Even so, very few of the plantations were sole cocoa producers. New material from Java, again presumably Trinitario was imported in 1932. Little research work was published before the beginning of the Second World War (1939-45), although In 1938, E.C.D. Green, who was then the Superintendent of LAES, published a booklet 'Cacao Cultivation and its Application to the Mandated Territory of New Guinea', reprinted from the New Guinea Agricultural Gazette, Vol.4(4). This booklet includes some of the earliest documentation of cocoa cultivation in Papua New Guinea, and in it Green describes the introduction of cocoa to the former German New Guinea from Ceylon and Java, via Samoa, citing C.J.J. van Hall ('Cacao' 2<sup>nd</sup> Edn, 1933) who stated that Criollo cocoa was imported into Samoa from Java and Ceylon in 1883 and Forastero hybrids (=Trinitario) from Ceylon in 1889. Green considered it highly likely that the German trading companies that were getting labour for their plantations from New Guinea would have brought this cocoa into New Guinea. The first recorded exports of cocoa from Samoa and New Guinea occurred at about the same time, in 1905. Green cites Australian chocolate manufacturers who considered New Guinea cocoa to be very similar to that from Java, Ceylon and the West Indies, all known for their fine flavour Trinitario cocoa at the time.

During the Second World War most of the cocoa plantings as well as most of the notes of research done to date were destroyed. The Keravat research station was a centre of Japanese occupation during the war and many of the experimental cocoa plantings were destroyed for food gardens and the area was heavily bombed.

Many writers up to ten years after the war saluted the efforts of F.C. Henderson in preserving then developing the 10 mother trees that survived the war and became the Keravat (K clones) that, along with some selections from Asalingi Plantation in the Bainings (KA clones), became the foundation of the future work in cocoa improvement at LAES.

Exports of cocoa from Papua and New Guinea in the 1936-40 period averaged about 200 tonnes per year, but immediately after the war in 1946-47 only 48 tonnes of dry beans were exported. During the 1940s Australia was the market of choice: "it is obvious that there is a substantial market for cocoa in Australia" (Bureau of Agriculture Economics 1947). Optimism for the industry in Papua New Guinea was substantial - "On present indications it does appear that expansion of cocoa production in the Territories can be justified and it is considered that field investigations into the suitability of areas for cocoa production should be given a high priority in the planning procedures by the Resources Survey Sub-Committee". Exports sent "abroad" at the time (sadly, Urquhart did not specify where! Urquhart DH and Dwyer REP 1951 Report on the prospects of extending the growing of cocoa in the Territory of New Guinea) obtained prices "very much higher" than West African beans. It is evident that from its earliest development, Papua New Guinea cocoa had an excellent reputation for high quality.

Exports increased gradually to 730 tonnes in 1953-54. However rapid expansion occurred after that. Within five years exports were 2,577 tonnes. Large-scale plantings, mainly in East New Britain, Bougainville, Northern District (now Oro Province) and Madang then followed, with the result that exports increased to 10,000 tonnes in 1961-62 and to 20,000 tonnes in 1964-65. A peak export year was 1989, when 48,000 tonnes of dry beans were exported; this would have been exceeded in 1990 had not the Bougainville crisis destroyed production there (**Figure A2.2**). Production began increasing again from the late 1990s and reached more than 50,000 tonnes in 2006-7.

Prior to the Second World War, virtually all cocoa was grown on larger company or expatriate family-owned plantations (averaging 50 ha or more), but from the early 1950s it developed as a smallholder crop as well.

Cocoa-based smallholder land settlement schemes were established at Vudal in East New Britain and Popondetta. In contrast, village plantings were officially discouraged by the Cocoa Ordinance of 1951. The rationale behind the Ordinance was to prevent random and scattered production as a means of controlling pests and diseases, and to encourage the development of central processing facilities as a means of ensuring better quality beans.

The Tolai of East New Britain actively planted cocoa, and the Administration developed a marketing organisation, backed by the Department of Primary Industries and working through the Local Government Council system. This became known as the Tolai Cocoa Project, later to become the New Guinea Islands Produce Company (NGIP). This company has now developed into NGIP-Agmark, a publically owned company listed on the Port Moresby Stock Exchange and the largest cocoa buying company in Papua New Guinea.

In the mid-1970s, the Papua New Guinea Cocoa Board started to regulate the expanding industry and administer a price stabilisation scheme.

A peak export of 59,400 t was achieved in 2010 (Figure A2.1). Cocoa production by Province over the period 2000 to 2007 is shown in Table A2.1.

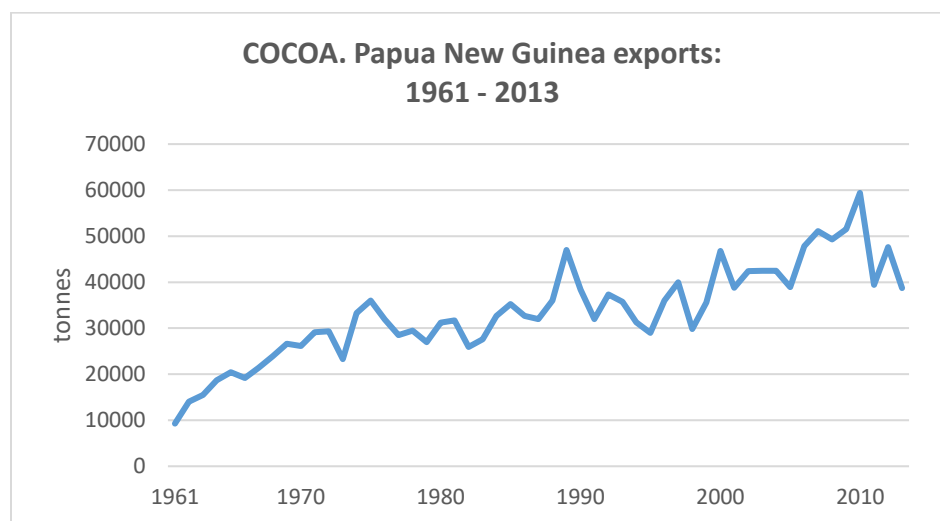


Figure A2.1. Cocoa exports from Papua New Guinea 1961 – 2013

Source: FAO

Table A2.1 - Cocoa Production by Province; 2000 – 2007; tonne dry bean

Source: Cocoa Board of PNG, Papua New Guinea Cocoa Coconut Institute Ltd. Strategic Plan 2010-2020  
Fourth Draft July 2009

<i>Province</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>
East New Britain	20,522	15,003	23,882	16,920	18,241	20,626	19,027	16,930
New Ireland	1,295	1,,105	1,512	1,191	1,380	984	1,185	710
West New Britain	722	435	769	783	763	698	803	708
Bougainville	4,073	5,447	9,995	11,525	6,881	11,559	13,071	16,305
Manus	13	13	21	10	7	3	1	0
Milne Bay	0	1	3	5	10	3	5	0
Oro	109	215	361	1,019	331	177	22	44
Madang	1,731	2,801	2,045	4,443	3,826	3,877	3,181	3,884
Morobe	203	539	840	1,157	831	1,141	779	530
East Sepik	1,176	1,468	4,125	3,291	1,426	3,676	3,438	3,936
<b>TOTAL</b>	<b>30,156</b>	<b>26,796</b>	<b>43,707</b>	<b>40,943</b>	<b>34,241</b>	<b>43,500</b>	<b>42,404</b>	<b>44,240</b>