



The Coconut
IN MICRONESIA

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HISTORY

The coconut palm is the most important tree crop for the people of Micronesia and provides the major cash export - copra. It not only provides the money to buy sugar, salt, and clothes but also provides daily subsistence. If the palm were not present, most of the atolls would today be uninhabited. The coconut palm is life and life is the coconut palm.

In some coconut producing countries the coconut palm is looked upon as "Tree of Heaven", "Tree of Life", "Tree of Abundance", "Tree of Plenty; however, this reverence in most parts of Micronesia is reserved for the breadfruit and taro. The coconut palm is really the most universal plant that nature has ever provided. There is hardly any other plant in the tropics or the temperate areas that has so many uses, and of which every part of the plant, from the roots to the very tip of the leaves, can be used to make life more pleasant. For centuries the coconut palm has given life to thousands of people on atolls in the Pacific and Indian Oceans. These people have utilized the palm and its by-products to the fullest extent that they know how.

At present, historians and scientists are uncertain as to the specific origin of the coconut palm. They generalize and say it originated somewhere between the West Indian Ocean and the Eastern Melanesian Islands. Fossil remains of coconut have been unearthed in Auckland, New Zealand and India dating back millions of years. (According to D. R. A. Eden, "The Quest for the Home of the Coconut", SPC Bulletin, July, 1963.) One thing is certain: There are no wild forms of coconut palms and the coconut palm has been domesticated for a long long time.

The history of the coconut in Micronesia is the history of its people. It is assumed that the coconut was probably carried along with the eastward migrations from Malaysia. The dispersal of the coconut to distant and scattered islands of the Pacific was nearly always aided by man. However, it is quite possible for coconuts to have been dispersed by wind and ocean current to nearby islands, so long as the time and distance was not too great. The actual method of coconut dispersal throughout the Pacific areas is still being debated.

As mentioned previously, the breadfruit and taro seem to be the food most revered in legends of the people of Micronesia, whereas, the coconut has this position of reverence in India, Indonesia, and Ceylon. Therefore, it can be thought that in Micronesia the coconut may have been taken for granted; yet life cannot be imagined to have existed on atolls without it. Perhaps coconut palms already existed on atolls prior to man's arrival; or possibly the coconut palm is of such recent introduction in the islands that legends have not evolved. The Marshalls, however, do have a legend on the origin of the first coconut. It tells that a strange child matured and asked to be buried and then, grew up as a coconut tree. It would be interesting to record all the legends of food crops of Micronesia; this might stimulate thinking of when and how the coconut may have arrived in the various Pacific Islands.

Whether the coconut palm was already in the islands, or whether it was brought along with the first migrations, or whether it came in subsequent migrations remains controversial. However, we can assume that coconuts were planted and cared for by the early islanders and used for daily living and subsistence. The coconut palm is a poor competitor and will not survive in a natural jungle habitat; it must be tended by man to produce fruit. Many people may disagree with the above statement because they see coconuts growing on the various islands and atolls where no one lived, where the coconuts have been growing as long as anyone can remember. This is a subject for further discussion and thought.

Previous to European exploration and trading among the islands, the islanders planted only enough coconuts for their own use for food, drink, and thatch. After the first traders learned the value of coconut dried into copra they urged the islanders to harvest their coconuts and make copra, and also to plant more coconut seedlings.

BEGINNING OF THE COCONUT INDUSTRY

In 1864 a German firm from Hawaii opened a branch office at Ebon, Marshall Islands, under the management of Adolf Capelle, for the export of copra. This was the first business enterprise to be inaugurated in the islands. Later Capelle established himself independently on Jaluit. He trained the islanders in the proper methods of extracting and drying the coconut meat and engaged them to plant new groves. He became the pioneer of commercial coconut cultivation in the islands. In 1877 Capelle and his

new partner, deBrum, bought Likiep Atoll for copra production and later extended their industry to Ujelang and Arno Atolls. Godeffroy and Sons and the Henssler Company, both German companies, sent their trading agents to set up branch stores in the various islands in the Marshalls, Ponape, Yap, and Palau in the 1870s. About 1887, Capelle, Godeffroy and Sons, and Henssler Company consolidated their interests and formed the Jaluit Company. At the end of the nineteenth century the Marshalls were producing between 3,000 and 4,000 tons of copra annually.

In 1872, "His Majesty" O'Keefe set up a trading station in Yap. He agreed to assist the Yapese in quarrying and transporting stone money from Palau to Yap and in return the Yapese provided him with large amounts of copra and the sea slug ('trepang') which O'Keefe sold to buyers in Hong Kong. The production of copra in the Western Caroline Islands reached 1,000 tons in 1892. Due to introduction of a scale insect from the Philippines, severe typhoons, and droughts, copra production fell to such a low level that in 1900 the Germans prohibited the export of copra as only enough coconuts were produced for home use.

The first organized planting of coconuts came about during the German administration. Before the actual German take-over in 1885 the Marshallese people were planting their islands with coconuts with the insistence and coercion of the German traders. The German administrative policy was to exploit the economic possibilities of these islands and other islands in the Pacific, such as Samoa, New Guinea, and New Britain.

The German firms mentioned had obtained from the German government the special right of making contracts with the islanders of the East Caroline Islands for coconut cultivation over a period of 30 years, beginning in 1901. According to the terms of the contract, the company was to provide the islanders with tools, nuts for seed, and daily rations, if necessary, and in return the islanders bound themselves to sell to the companies all the copra that was produced.

In Palau the German government encouraged the islanders to increase coconut plantings by adopting severe measures. Everyone had to be home for three days at the time of the full moon and take care of and plant coconuts. If the required number of coconuts were not planted, or seedlings cared for, the individuals in charge of the plantations were punished. This restriction on the islanders during full moon was to prevent them from indulging in excessive dancing and carousing on nights when the

moon was full rendering them useless for work in coconut plantations during the day. In 1904 at a meeting called by the German Administrator the Palau chieftains reported that 32,000 coconut palms had been added to existing plantations since 1902.

Also on Ponape severe laws were enforced by the German government, making it imperative, under threat of punishment, for each adult male to plant ten coconuts a month. In 1905 in Truk the German government forced the islanders to increase coconut plantations to such an extent that 3/5 of the coconut palms standing in 1920 were planted after 1905.

At the turn of the century, the German government instituted for the first time individual ownership of land to encourage and more easily enforce controlled coconut planting. In April 1913 the government issued a set of rules relating to coconut cultivation, giving specific instructions to be followed in management of coconut plants, in selection of seeds, digging holes for planting seedlings, spacing between trees, weeding and transplanting; it declared that the breaking of these rules was an offense punishable by a jail sentence of three days every month until the Governor decided that the sentence had been served.

COCONUT INDUSTRY DURING JAPANESE PERIOD

Under the Japanese administration, added stimulus in the form of subsidies was used to expand further the planting of coconut palms and to improve the quality of copra.

The Laws and Regulations (which was the Japanese Mandate Code) had a special section on coconut improvement. The section was titled, "Rules for Encouragement of the Cultivation of Coconut Palms." This rule was put into effect in 1922 and amended in 1931. Cases under which subsidies were given, and limits of the subsidies, are as follows:

1. Up to 20 yen was paid for planting 100 to 200 coconut palms on plots of land larger than one hectare in size.
2. Up to 10 yen was paid for thinning, complimentary planting, and weeding in groves of more than one hectare containing from 100 to 200 coconut palms.
3. Subsidy of one-fourth of the cost of erecting a new copra drier was put into effect in 1931.

The regulations specified that the coconut farmers who received subsidies must weed their plantings twice a year for two

years and if a subsidy was received for a copra drier it must not be destroyed for the next three years. If individual farmers did not carry out the program as stated, they were required to repay to the government the subsidy that had been received by them. Strict regulations were set up for the examination of copra for export and only licensed examiners were authorized to examine copra for export.

Copra production in 1938 as recorded by Japanese administration officials was as follows:

	Tons
Marshall Islands	6,389
Ponape District	3,578
Truk District.	3,200
W. Carolines (Yap and Palau) .	1,153
Marianas District.	<u>300</u>
Total	14,620

According to old Japanese records, in 1937 there were 13,000 acres of coconuts in the Western Caroline Islands; of this, 4,875 acres were in Palau District.

In the Marianas at the end of the Spanish administration 660 tons of copra was produced annually; during Japanese administration, it decreased to about 300 tons annually. Three-fourths of the copra in the Marianas was produced on government owned lands whereas in the rest of Micronesia three-fourths was produced on privately owned land.

Large copra plantations were established in the Eastern Caroline Islands. The Etscheit plantation of about 500 acres near Kolonia, Ponape, was all cut down during the war and made into sweet potato gardens. They also owned the island of Ulul in Truk which was entirely planted to coconut palms. Herman copra plantation at Kusaie had about 500 acres. King John Sigrah of Kusaie had large holdings; the acreage is unknown. There is also the Nampei copra plantation, which includes the entire atoll of Ant with about 450 acres, and several thousand acres on Ponape Island in Kiri Municipality.

In addition, the South Seas Government leased land to Nanyo Boeki Kaisha (South Seas Trading Co.) for the cultivation of coconuts. This company began its operation in Micronesia in 1906 and in 1914 it fell heir to the extensive interests of the Jaluit Co.

It continued to be the major trading company during the Japanese period. About 1930 it leased 2,500 acres of land in Metalanim, Ponape and the entire atoll of Pakin and became directly engaged in copra production. Approximately 125,000 coconut palms were planted at Metalanim.

RECENT COCONUT DEVELOPMENT

From 1942 to 1947 very little copra was produced for export because of war action and, following the war, disruption of normal shipping and trade channels. During this period many of the copra plantings were neglected. Weeds and under brush grew up, thus reducing the amount of nuts produced by the palms.

The United States Commercial Company was the organization that was set up to revive the copra industry after the war. Small amounts of copra were collected in the Marshalls in October 1945. The producers at that time were paid \$40 per ton, a very small price compared with the selling price than being obtained on the world markets (\$250 per ton). This low price was set to lessen inflation during periods of extreme shortages of consumer goods. At the end of 1946 copra price was increased to \$80 a ton for grade one delivered in bags to U. S. C. C. warehouses at outlying stations.

In 1948 the Island Trading Company took over the copra buying and marketing operations of the U. S. C. C. in the entire Trust Territory. I. T. C. continued to operate until privately owned trading companies were able to take over the buying of copra on November 21, 1945, at which time I. T. C. was liquidated.

The administration of copra marketing was placed in the hands of the Copra Stabilization Board in October 1950. This Board was established by the High Commissioner to advise him concerning control of funds that had accumulated from sales of copra. Tables showing copra production follow.

TONS OF COPRA PRODUCED, FY '63: BY DISTRICTS

	Tons
Marshalls	4,978
Ponape.	3,295
Truk	2,703
Yap	829
Palau	732
Marianas	280

PERCENT OF COPRA PRODUCED, FY '63: BY DISTRICTS

	Percent
Marshalls	38.84
Ponape.	25.71
Truk	21.09
Yap	6.47
Palau	5.71
Marianas	2.18

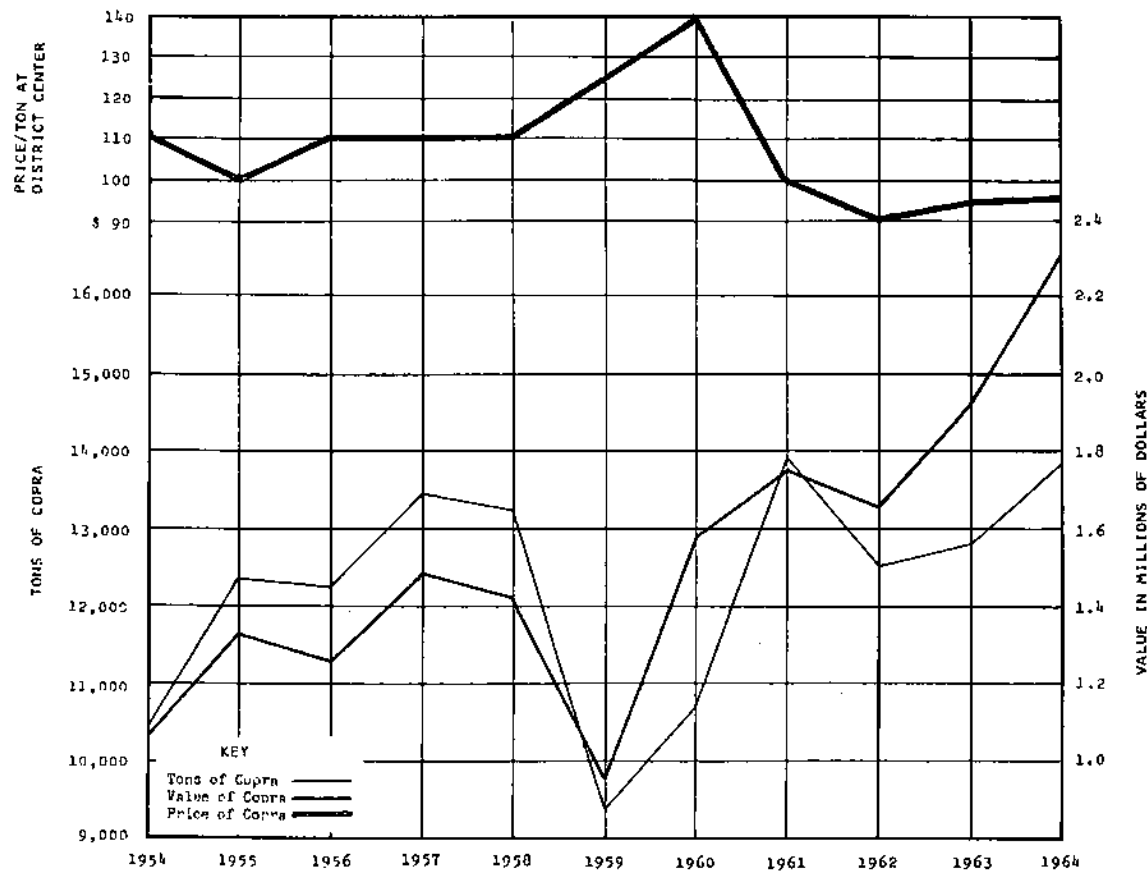
COPRA PRODUCTION FIGURES: WHOLE TERRITORY

Year	Tons Exported	Export Value	Ave. Price/ton to Producers
1964	13,828	\$2,295,448	\$ 95
1963	12,817	1,922,400	90
1962	12,521	1,661,732	90
1961	13,949	1,779,866	100
1960	10,717	1,587,767	100
1959	9,345	967,771	140
1958	13,259	1,423,252	125
1957	13,588	1,487,847	110
1956	12,287	1,258,909	110
1955	12,372	1,334,414	100
1954	10,475	1,070,718	110
1953	10,680	1,054,763	100
1952	11,159	1,173,606	74
1951	11,606	1,269,462	--
1950	9,720	782,043	--
1949	8,002	747,428	--
1900	5,150	--	--

FUTURE OF COCONUTS

The coconut will be the life line of Micronesian economy for the foreseeable future. The atolls are well suited to coconut cultivation, and thus far no economic plant has been discovered or developed which can readily take its place. On the high islands cacao, black pepper, ramie, pineapple, sugar cane, and vegetables will be strong competition for the coconut. It is good that many Micronesians will not, in the future, have to depend on the coconut alone as a source of cash income. However, the atoll inhabitants are destined to depend on coconuts for their livelihood.

Copra Production, Value and Price



Coconut production on the atolls can be increased by from 30 to 60 percent. This increase will be necessary to provide an adequate standard of living for their expanding population. There are certain obvious conditions that must be corrected to get this increased production. They are as follows:

1. Thinning of over-crowded groves.
2. Cutting down jungle growth to reduce competition.
3. Removal of senile palms.
4. Replanting only where necessary.
5. Establishment of Co-op stores on each atoll which will carry the staple trade goods in conjunction with a copra warehouse.
6. Sufficient boats for transporting copra to central warehouses. Also, there must be a field trip vessel every six to eight weeks to pick up copra and bring in trade goods.
7. Provision of superior coconut planting material.
8. An expanded extension services to conduct adequate programs.
9. Provision of an incentive scheme which will give the farmers encouragement in adopting improved coconut cultural methods.

On the high islands, land owners will have a greater choice as to whether they want to plant only coconuts or to try some of the new cash crops that have been proven to be successful. Generally it can be expected that coconut planting will take precedence over other crops because the farmers are already familiar with its culture. Many areas of the high islands are suitable for mixed cropping of coconuts, cacao, and bananas. Income per acre from the coconut is quite small (\$60.00) compared with coconut-cacao cultivation where one can get \$160.00.

If one chooses to plant black pepper or ramie, its return per acre is two to three times greater as to that of cacao or coconuts; however, there is three to four times as much labor required for its production. Therefore, as population pressures become greater and desire for a higher standard of living becomes a reality the choice of crops that will be planted will be determined by the income capability per acre of that crop.

Agricultural Extension Circulars - Coconut Series

Coconut Series No. 1

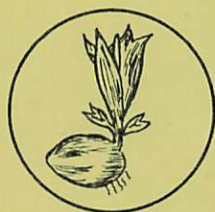
The Coconut in Micronesia (*Ag. Ext. Circ. No. 3*)

Coconut Series No. 2

Coconut Varieties in Micronesia (*Ag. Ext. Circ. No. 4*)

Coconut Series No. 3

How to Thin Coconut Groves (*Ag. Ext. Circ. No. 6*)



COCONUT SERIES NO. 1