

An Evaluation of Japanese Agricultural and Fishery Developments in Micronesia, During the Japanese Mandate, 1914 to 1941

Midori NISHI

*Department of Geography, California State College,
Los Angeles, California*

In retrospect, Japanese agricultural and fishery developments in Micronesia during the first half of the twentieth century are seen to have extended corollary benefits to the economic well being of its native peoples, which they no longer enjoy. It is still an academic question whether the stable native self-sufficient economy which has been restored to these islands under the American aegis is best satisfying native needs. Although a slow return of a cash economy has been permitted in the American Trust Territory of the Pacific, it shows little of the vigor and potential of the former Imperial economy.¹

¹ The writer gratefully acknowledges the assistance received and the resource materials available at the National Diet Library in Tokyo, Japan. The following references are in Japanese:

Anon. 1930. Manchuria and South Sea Islands. *Nihon Chiri Taikei*, Outline Geography of Japan. Tokyo: Kaizosha. Volume 13, pp. 301-357.

Anon. 1934. South Sea Islands. *Chiri Koza*. Tokyo: Kaizosha. Volume 5, Section on Japan, pp. 281-395.

Anon. 1931. South Sea Islands. *Nihon Chiri Fuzoku Taikei*, Outline of Japanese Geography and Customs. Tokyo: Seibundo Shinkosha. Volume I, Kanto Section, pp. 304-403.

Domoto, T. 1941. The Promotion of Emigration to the South Seas. Palau: Nanyo Gunto Bunka Kyokai, South Sea Islands Cultural Association.

Hanai, S. 1941. On the Present Condition of the Agriculture Development Village in the South Seas; Population, Races, Territory. *Jinko Mondai Shiryo Yonjusan Shu no Ichi*, Data on Population Problems, Collection 43, Report number 1. Tokyo: Department of Social Welfare, Institute for the Research of Population Problems, pp. 235-241.

Hirano, Y. 1941. South Sea Islands as the Base of Southward Expansion. *Pacific*, Numbers 4/8.

Iozaki, S. and Furuyama, T. 1915. A Panorama of the New South Sea Islands. Tokyo: Nanyo Kenkyu, South Sea Research Association.

Kawasaki, H. 1941. Survey of the South Sea Islands as a Possible Site for Colonization. *Colonial Progress*, Numbers 20/2.

Kiyono, K. 1941. Southward Expansion of Japan and Its Potentiality for Colonization. *Pacific*, Numbers 4/8.

Matsue, H. 1932. *Nanyo Kaitaku Junenshi*, Ten Years of Development in the South South Seas. N.p.: South Seas Development Company.

Matsuno, Yasuko. 1933. The South Sea Islands Under the Japanese Mandate. *Journal of Geography*, August, Number 534, pp. 371-384.

Nakayama, H. 1942. The Adaptability of the Japanese to the Tropics. *Nanyo Gunto*

(continued story)

¹ *Micronesica* 4 (1); 1-18. 1968 (June).

Among Micronesians who express a desire for the return of the dynamic Japanese style commercial economy, their frustration is in the loss of a kind of worldly advancement. Some Palauans who feel they still lack the skills and talents needed for successfully engaging in commercial enterprises express the wish

“that Japanese be permitted to return temporarily to Palau to start up some of the former activities, such as pearl culture, tuna fishing, the drying of bonito and bauxite mining. But Palauans are sharp enough to want a conditional return of Japanese to the islands. They suggest a twenty or thirty year contract basis or a partnership of Japanese with Palauans. When the latter have learned how to operate these enterprises themselves, they would send the Japanese back to Japan.”²

Palauans “enjoyed a kind of prosperity economically under the Japanese that perhaps can not be matched again.”³ Many of the natives on Saipan, Tinian and Rota worked for wages for the Japanese or received rent and income from land leased to the “Nanyo Cho” (South Seas Government) for development.⁴ Americans by leaving the islanders to fend for themselves on their slim island resources have been blamed for forcing the natives to turn to their one alternative, that is to return to their traditional subsistence agriculture and fishing economies. Scattered vestiges of the former commercial Japanese agriculture, fisheries, and manufacturing enterprises still remain but no Micronesian has succeeded in perpetuating these operations, except for a few who engaged in farming around the Guam market district. Micronesians also look to the return of Japanese trade and the Japanese businessmen as a solution to their economic plight. “In the

(continued)

Genchi Chosa Hokoku, Report of the Observation Investigation of the South Seas. Pacific, Numbers 5/3.

Nakayama, H. 1942. Study on Tropical Livelihood. South Sea Economic Research, Numbers 1/8, pp. 47-54.

Nippon Gyoseikai. 1934. Dai Nippon Taku Shokushi, History of Japanese Colonization, Issue on South Seas. N.p. 78 pp.

Ono, Sakujiro. 1939. Towns of Our South Sea Islands, Especially Garapan, Tinian and Koror. Journal of Geography, December, Number 610, pp. 551-560.

Pacific Association. 1941. Dai Nanyo-Bunka to Nogyo, The Great South Seas-Culture and Agriculture. Tokyo: Kawade Shobo.

Shima, Y. 1934. House Types in Caroline Islands. Chiri Ronso, Number 4.

South Sea Association. N.d. Nanyo Kyokai Nijunenshi, History of Twenty Years of Activities of the South Sea Association. Tokyo. 378 pp.

Uyehara, C. H. compiler. 1954. Nanyo Takushoku Kabushiki Kaisha, The South Seas Colonization Company, Limited. A Checklist of Archives in the Japanese Ministry of Foreign Affairs, 1868-1945. Tokyo.

Yamamoto, M. 1915. Administrative Plans for the Newly Occupied South Seas Territory. Diplomatic Review, Numbers 22/20, pp. 462-471.

Yokoyama, Matajiro. 1936. The Future of the Aborigines of Our South Sea Islands. Journal of Geography, December, Number 574, pp. 547-551.

² Management Survey of the Government of the Trust Territory of the Pacific Islands. 1951. A Report to the Department of Interior, July 1, p. 60.

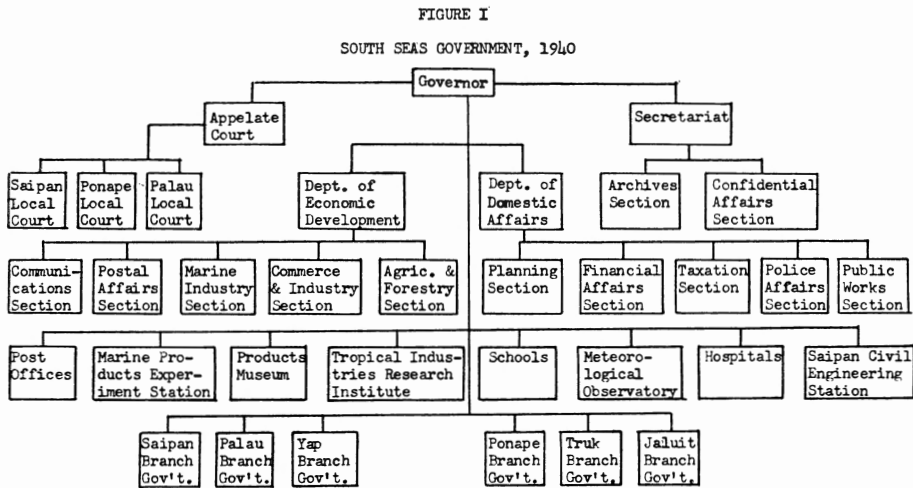
³ *Ibid*, p. 59.

⁴ The South Seas Bureau of Government, a civil administration, replaced the military occupation and administration of the Mandated Islands in 1922.

reestablishment of trade links with Japan the people of Saipan see a market for some of their products and a source of less expensive merchandise.”⁵

Japanese Governmental Structure for Economic Development in Micronesia

Japanese economic advancements in their overseas territories were aided by a remarkably well organized colonial administration. The Economic Development Department of the “Nanyo Cho” or South Seas Government (see Figure 1)



Source: United States Office of Naval Operations, “Administrative Organization and Personnel of the Japanese Mandated Islands”, *Civil Affairs Handbook*, (January, 1944), p. 6.

was staffed with high ranking and qualified men to assure realization of economic objectives. The Economic Development Department had seventeen men of “Sonin” rank which meant more qualified personnel than in any other department or office in the “Nanyo Cho”.⁶

In the Japanese civil service system there are four major classes of officials, namely, Shinnin, Chokunin, Sonin, and Hannin in order of rank. Officials, of Sonin rank are appointed by the Cabinet from among graduates of the imperial universities who possess the Ph. D. degree”.⁷

“Shinnin” officials were installed by the Emperor and were few in number; there were no “Shinnin” officials in the “Nanyo Cho.” “Chokunin” officials were appointed by Imperial edict, and there was one “Chokunin” official. Altogether there were eighty-one “Sonin” officials in the “Nanyo Cho.” In related departments, there were six “Sonin” officials in the Tropical Industries Institute, one

⁵ Management Survey of the Government of the Trust Territory of the Pacific Islands, *op. cit.*, p. 61.

⁶ United States Office of Naval Operations. 1944. Administrative Organization and Personnel of the Japanese Mandated Islands, *Civil Affairs Handbook*, January, p. 5.

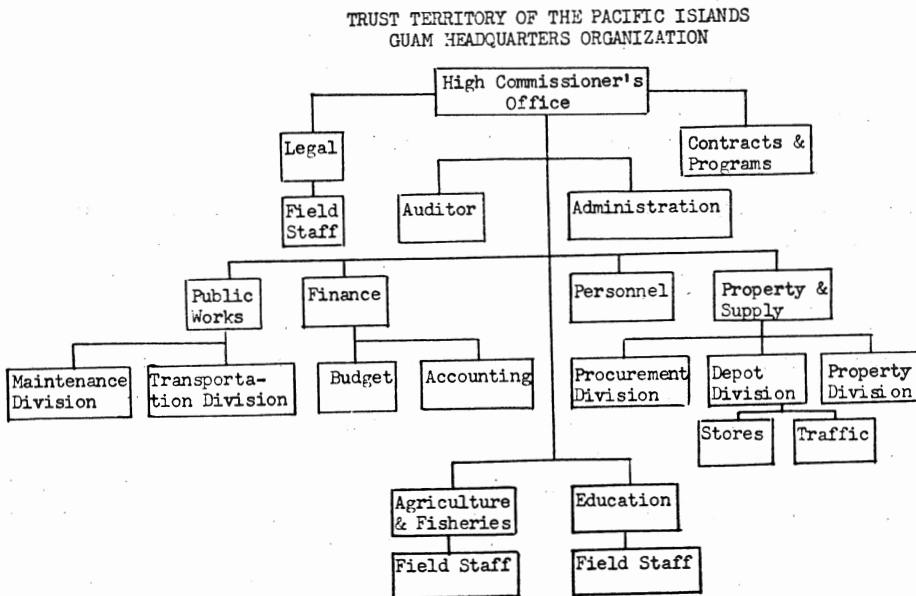
⁷ *Ibid.*

“Sonin” in the Products Museum, two “Sonin” in the Marine Experiment Station. The Economic Development Department had five subdivisions as follows:

1. Agriculture and Forestry Section
2. Commerce and Industry Section
3. Marine Industry Section
4. Postal Affairs Section
5. Communications Section

The number of Japanese officials in service for the “Nanyo Cho” in 1939 was 1,433, of these men 129 were in the Economic Development Department. Since some of the men, particularly those of high rank, occupied more than one official position, the actual number of persons in service was less. Wherever possible, Micronesian village chiefs were encouraged to participate in local administrations as village officials or spokesmen for the Japanese. Some Micronesians were employed as policemen, assistant teachers, laborers in mining or in the sugar industry, and as workers on some engineering projects. In the United States Civil Service Personnel of June, 1960 for the Trust Territory of the Pacific Islands there were 236 Americans and 1,832 Micronesians, of these persons twenty-one Americans and 129 Micronesians were in the Economic and Political Department.⁸ The American field staff in Agriculture and Fisheries comprised a staff entomologist in Palau, a cacao specialist in Ponape, and a fishery specialist in Palau (see Figure 2).

FIGURE 2



Source: The High Commissioner of the Trust Territory of the Pacific Islands, 1960 *Annual Report* (Washington, D. C.: Government Printing Office, n. d.), p. 4.

⁸ The High Commissioner of the Trust Territory of the Pacific Islands. N.d. 1960 Annual Report. Washington, D.C.: Government Printing Office, pp. 13-14.

Organization and Big Enterprises

Economic developments not only commenced quickly and efficiently soon after Japanese occupation of the Islands but were assured immediate success because of the certain capital and government support. Sound organization and the employment of qualified personnel characterized these colonial enterprises. Foremost among these organizations was the "Nanyo Kohatsu Kabushiki Kaisha" (South Seas Development Company) which was established in November, 1921, with capital amounting to 3,000,000 yen for the purpose of cultivating sugar cane on Saipan.⁹ This monolithic company enjoyed government protection and in reciprocity provided the South Seas Government with close to fifty-five per cent of its total revenue.¹⁰ This interdependent relation of private enterprise and government permeated the Imperial economic structure. "Nanyo Kohatsu Kabushiki" Company extended operations into fishing and the production of alcohol, starch, phosphate, damar (a kind of gum) and ice. Another powerful business organization was the "Nanyo Boeki Kaisha" (South Seas Trading Company) which engaged in trade, commerce, marine transportation, contract work, coconut cultivation, and fishing.

Economic Progress Through Research and Experimentation

The Industrial Experimental Station established in Korrer, Palau Archipelago in April, 1922, was a government institute which engaged in experiments, research, and instruction on agriculture, forestry and animal husbandry. The Station included four departments: Miscellaneous Affairs, Dendrological, Livestock, and Agriculture. The Institute undertook experiments and investigations in agricultural crops suitable for tropical islands and concentrated their attention on the development of plant varieties and cultivation methods for rice, sweet potato, pineapple, millet, beans, peanuts, taro, tobacco, cotton, cacao, coffee, vanilla, tapioca, fruits, mahogany, etc. A total of 238 fruits, vegetables, grasses, shrubs, and trees not previously found in the Islands were experimentally attempted for their agricultural promise. Another one of their primary concerns was the elimination and control of diseases and insects affecting agricultural crops. Soil improvement and fertilizer utilization were still other endeavors. Some of the soil development practices undertaken by the Government were the importation of richer soils, use of phosphates from Angaur, introduction of trace elements, planting of lemon hibiscus whose roots perforate and lighten the soils and a long term project involving the planting of certain trees which would contribute to better soil formation in the many years to come. It was soon discovered that the Berkshire breed of pigs, White Leghorns and Nagoya breed of poultry, Holstein breed for milk, and the native Saipan breed for work were particularly suitable. The Industrial Experimental Station, in addition, supervised the settlement of four Japanese farm families in 1927 in Airai Village on Babeldaob (Babelthaup) Island, Palau Group.¹¹

⁹ Yanaihara, Tadao. 1940. *Pacific Islands Under Japanese Mandate*. London: Oxford University Press, p. 55.

¹⁰ *Ibid*, p. 56.

¹¹ Japanese Government. N.d. *Annual Report to the Council of the League of Nations on the Administration of the South Seas Under Japanese Mandate for the Year 1932*, p. 93.

The Tropic Industry Institute replaced the former Industrial Experimental Station in 1936 in order to provide larger and more fully equipped facilities for continuing the agricultural development program. The new Institute established a branch at Saipan which specialized on sugar cane research and one at Ponape which specialized on rice and medicinal plants research. This agricultural experiment station had been restored to use by subsequent American Government agriculturalists. Additional district agricultural development stations and demonstration centers were later established in the American Trust Territory.

The Experimental Station for Marine Products was established in July, 1937, in Palau Island Group. Its purpose was to undertake investigations into fishing in general, artificial breeding of fish, oceanographical conditions of the Islands, and the processing of marine products. Investigations for large scale fishing enterprises undergirded by large capitalization as well as small scale fishing by individual resident fishermen were to be promoted. The Station planned and designed Palau Fish Harbour and other harbour facilities with a complete line of equipment.

The South Seas Bureau established a Products Museum at Korror in 1929. The Museum exhibited marine and plant specimens and economic products collected from various areas in the Islands of geographic, historic, and scientific interests. The Museum aimed to create markets for locally produced goods and to stimulate local economic development. Except for copra and trochus shell, the output of agricultural and fish products have suffered a decline because of a limited market under the American Administration. Despite this loss, a permanent market building devoted to the sale of agricultural and fish products was under construction in 1960 at the site of the former Japanese Agricultural Station on Truk Island.¹² It was expected that the new building would hold an annual agricultural fair some what akin to agricultural fairs held in the United States.

Availability of Financial Assistance

The "Nanyo Takusyoku Kabushiki Kaisha" (South Seas Industrial Development Company Limited) was established in 1935 for the purpose of carrying on industrial enterprises and also for supplying capital for such enterprises. The company took over the Government operated phosphate mining industry in Angaur.

Subsidies, grants-in-aid, and the training of natives were other measures by which Japanese economic developments were fostered. To encourage the marine products industry to attain export capacities, subsidies amounting to several 1,000 yen annually were granted towards the purchase of fishing nets and boats.

"In 1922, the 'Rules for the Encouragement of the Marine Products Industry' were promulgated. By virtue of these Rules the Director of the South Seas Bureau is empowered to grant subsidies to persons considered suitable, to meet the undermentioned items of expenditure and also to grant bounties designated by him, who have caught fish or taken shells or exported manufactured marine products for more than the specified quantity.

¹² Management Survey of the Government of the Trust Territory of the Pacific Islands, *op. cit.*, p. 57.

¹³ The High Commissioner of the Trust Territory of the Pacific Islands, *op. cit.*, p. 23.

1. Expenses necessary for the purchase of fishing implements and boats.
2. Expenses necessary for engaging technical experts.
3. Expenses necessary for equipment for the manufacture of marine products."¹⁴

Subsidies granted from 1928 to 1931 were as follows:¹⁵

	Number of Japanese	Amount in Yen	Number of Natives	Amount in Yen	Total No. of Persons	Total Amount
1928	4	4,112	—	—	4	4,112
1929	7	3,844	3	600	10	4,444
1930	10	4,245	3	900	13	5,145
1931	18	4,064	2	300	20	4,364

Promotion of sugar production was emphasized by the South Seas Government with compensations or assistance provided for the following reasons:

- “1. When seedlings of sugar canes are imported for the purpose of improving varieties, the total amount of money needed for importation.
2. When sugar canes of the variety and number specified by the Director of the South Seas Bureau are newly planted in land of above 1 hectare in area, an amount not exceeding 30 yen per hectare.
3. When more than 1 hectare of land is opened in a year with the object of raising sugar canes thereon, an amount not exceeding 30 yen per hectare.
4. When sugar of the variety and quantity specified by the Director of the South Seas Bureau is manufactured and exported to places other than the South Seas Islands, an amount not exceeding one yen per 100 pounds.”¹⁶

To encourage the development of new plantations and the reclamation of land for cultivating sugar cane, the following subsidies were granted during the 1923 fiscal year and to December, 1924:¹⁷

	Number of Japanese	Amount in Yen	Number of Natives	Amount in Yen	Amount Total
1923	420	47,953	3	103	48,056
April to Dec. 1924	423	46,384	53	2,632	49,016

Pineapple production was stimulated by the farmer receiving a sum of ten yen for every hectare planted to pineapples and cared for two years. Twenty-five yen per hectare was granted for each hectare planted to coconuts and cared for three years. Such grants-in-aid were extended to coffee and vegetable producers.

In order to improve native agricultural production, grants-in-aid or seedlings and tools were given to farmers and competitive shows were frequently held awarding prizes for those exhibiting superior specimens. The Government lent

¹⁴ Japanese Government, *op. cit.*, p. 99.

¹⁵ *Ibid.*, p. 100.

¹⁶ Japanese Government. N.d. Annual Report to the Council of the League of Nations on the Administration of the South Seas Under Japanese Mandate for the Year 1924, p. 33.

¹⁷ *Ibid.*

pigs for breeding purposes and rewarded farmers with six yen for every pig born.¹⁸ This was done with goats, cows, and chickens. If two or more cows were kept for breeding purposes, an amount not exceeding forty-five yen per head was allowed.¹⁹

Training Programs

Short term instruction courses were arranged ranging from three months to one year on cultivation of vegetables, techniques for stock farming and forestry. Natives and Japanese colonists did not pay tuition; they were given board or allowances while taking the course and provided with free tools and materials. An industrial school offered an extended three year educational program on agricultural and business subjects. Every school had a farm and agriculture was the chief subject in the curriculum. Selected graduates were sent for post graduate work on trial farms, free of cost, and were sent back to their village with a supply of seeds, tools and imbued with inspiration and enthusiasm. The chief instructor of agriculture was often a part-time Japanese police man, who lived in the village and had his own model garden. His main task was to teach agriculture rather than to maintain law and order. He also instructed the treatment of simple diseases, concepts of sanitation, construction of improved houses, building of roads, and Shinto principles of morality. As Willard Price observed, the primary objective in improving the status and productivity of the natives was to increase the economic potential of the Islands and not for purely altruistic reasons.²⁰

Development of Agricultural Land

Land development for agricultural use progressed rapidly under the Japanese program but had little impact on native land tenure patterns because of the Government restriction on sale, transfer, and exchange of native owned lands. Government owned lands were proportionately high with the exception of Yap where as much as 99.2 per cent of the land was owned by the natives (see Table 1). Demarcation, classification, and measurement of land owned by the Government and natives were commenced in 1923 by the South Seas Government and completed by 1932 in the principal islands of Saipan, Palau, Ponape, Rota, Yap, Truk, Jaluit, and Kusaie. The total area of land in the Japanese Mandated Islands amounted to 220,000 hectares²¹ (543,400 acres) of which approximately one-third or 70,000 hectares was classed as arable or potentially fit for cultivation.²² When the Japanese first obtained control of the Islands, approximately 1,200 hectares were under cultivation, of which 500 hectares were classed as government lands and the rest as private lands.²³ From 1925 to 1937, arable land had

¹⁸ Price, Willard. 1936. *Pacific Adventure*. New York: John Day, p. 246.

¹⁹ Japanese Government. N.d. Annual Report to the Council of the League of Nations on the Administration of the South Seas Under Japanese Mandate for the Year 1924, p. 36.

²⁰ Price, Willard, *op. cit.*, p. 252.

²¹ One hectare is equivalent to 2.47 acres.

²² Japanese Government. N.d. Annual Report to the Council of the League of Nations on the Administration of the South Seas Under Japanese Mandate for the Year 1932, p. 94.

²³ Yanaiharu, Tadao, *op. cit.*, p. 121.

Table 1. Land Tenure Pattern in 1933

Islands	(in 1,000 sq. yards)			Total	Government Land	Percentage Private Land	
	Government Land	Islanders	Foreigners			Islanders	Foreigners
Saipan	111,156	30,060	684	141,900	78.3%	21.2%	0.5%
Rota	90,156	11,772	316	102,244	88.1	11.5	0.3
Palau	330,568	51,912	10,392	392,872	84.1	13.2	2.6
Ponape	231,764	115,404	7,556	354,724	65.3	32.5	2.1
Yap *	1,584	survey in-complete	464	—	—	—	—
**	520	86,436	130	87,092	0.6	99.2	0.1

* Results of land survey.

** An estimate from a report of the Yap Branch Office for 1933.

Source: South Seas Government, "Ten Years of the Administration of the South Seas Islands, 1932," p. 396 (in Japanese) as quoted by Tadao Yanaihara, *op. cit.*, p. 156.

Table 2. Land Area for Agriculture From 1925 to 1937

Year	Existing Arable Land	Reclaimed Palm Groves	Potential Reclaimed Land
1937	22,000 hectares	32,000 hectares	16,000 hectares
1936	21,000	34,000	17,000
1935	19,000	34,000	19,000
1934	15,000	32,000	23,000
1933	14,000	32,000	24,000
1932	13,000	29,000	28,000
1931	13,000	29,000	28,000
1930	13,000	28,000	29,000
1929	14,000	28,000	28,000
1928	12,000	27,000	31,000
1927	10,000	27,000	33,000
1926	10,418	26,400	33,000
1925	9,600	25,500	34,000

Source: Compiled from reports of the Japanese Government, *Annual Report to the Council of the League of Nations on the Administration of the South Seas Under Japanese Mandate*.

Table 3. Area of Arable Land in Cultivation as of June, 1932

Island	Land Area
Saipan	10,876 hectares
Yap	1,504
Palau	439
Jaluit	335
Truk	264
Ponape	95
Total	13,513

Source: Japanese Government, *Annual Report to the Council of the League of Nations on the Administration of the South Seas Under Japanese Mandate for the Year 1932*, p. 94.

more than doubled, from 9,600 hectares to 22,000 hectares, and reclaimed palm groves expanded (see Table 2). The distribution of arable land was inequitably disbalanced with Saipan possessing eighty per cent of the total for the Mandated Islands (see Table 3).

A farmer could get land rent free for three years and, thereafter, rent land at one yen per hectare. A native had the option to purchase land at twenty yen a hectare after the three years rent free period. State land was sometimes given to a village on the stipulation that it would be cultivated. The local headman was then put in charge of the work who was in turn under the authority of a local Japanese policeman. Such land became village land and was cooperatively operated by the village. Many of the crops were new to the natives. Proceeds from the sale of crops grown from this land became village money which could be used to expand agriculture, build roads, construct piers, acquire a new community fishing boat or building, or improve on some kind of public works.

With sugar cane production receiving the most attention by the Japanese, sugar cane land increased from twenty hectares in 1916, to 459 hectares in 1919, to 6,586 hectares in 1932, and to 11,465 hectares in 1937.²⁵ Saipan was the chief producing island which was followed by Tinian and Rota. The interest in sugar cane production goes back to an earlier era when Spanish missionaries introduced the crop to the Islands. The Germans established an experimental farm for sugar cane production in Ponape but their occupation was too short-lived to realize any appreciable results. Sugar production was almost entirely a Japanese enterprise with the South Seas Development Company the principal organization. This company in September, 1937 operated 3,947 hectares in Saipan, Tinian, and Rota and employed or directly managed 1,708 households.²⁶ Government land was leased to the company which in turn was leased to tenant farmers who sold their crops to the company. The rent varied according to the productivity of the land but was generally twenty per cent of the crop raised.²⁷ There were independent cultivators who grew a variety of crops but were bound by contract to sell their sugar cane to the company. Among the 2,691 households of tenant or independent sugar cultivators, only forty-one were native households in 1936-1937.²⁸ Labor was primarily Japanese accounting for the influx of 5,500 laborers (3,800 from Ryukyu Islands and 1,700 from Japan Proper) between 1920 to 1927.²⁹ With profits ten times greater than that for copra, commercial sugar cane production, which no longer exists in the present Trust Territory economy, was a

²⁴ Price, Willard, *op. cit.*, p. 247.

²⁵ Compiled from reports of the Japanese Government, Annual Report to the Council of the League of Nations on the Administration of the South Seas Under Japanese Mandate, 1932 and 1937.

²⁶ Japanese Government. N.d. Annual Report to the Council of the League of Nations on the Administration of the South Seas Under Japanese Mandate for the Year 1937, p. 50.

²⁷ *Ibid*, p. 82.

²⁸ Japanese Government. N.d. Annual Report to the Council of the League of Nations on the Administration of the South Seas Under Japanese Mandate for the Year 1937, p. 82.

²⁹ Yamasaki, Naomasa. 1927. *Micronesia and Micronesians*. Honolulu: Institute of Pacific Relations, p. 9.

boom to the native economy.³⁰ Its importance was also noted as the leading export commodity in value amounting to 18,133,000 yen per annum from 1932 to 1936 (see Table 4).

Table 4. Leading Exports From 1932 to 1936

Exports	Value per Annum
Sugar	18,133,000 yen
Dried Bonito	2,215,000
Phosphate	2,166,000
Copra	1,745,000

Source: Tadao Yanaihara, *op. cit.*, p. 50.

Coconut plantations had been previously established during the German Period and their production and expansion, with the introduction of improved varieties, effectively continued under Japanese management. A government inducement to copra farmers was a free iron roof to replace the thatched roof of drying sheds in order to reduce the drying time in half.³¹ The value of coconut exports tripled from 1921 to 1925 (see Table 5). In 1937, the estimated copra production

Table 5. Value of Copra Exports From 1921 to 1925

Year	Value
1921	555,938 yen
1922	562,495
1923	767,333
1924	1,037,330
1925	1,677,354

Source: Naomasa Yamasaki, *op. cit.*, p. 9.

was 17,000 tons whereas in 1949, under American rule, the tonnage production was only 8,028.³² Because of favorable prices during the fiscal year 1960, copra production increased to 10,470 short tons.³³

Modern tapioca plantations and factories were established at Ponape and Metalanin; the one at Metalanin employed approximately 500 Japanese immigrants in 1935.³⁴ A large tapioca production company would help natives clear the land with large machinery, furnish seedlings, lend money for which they would be paid back in tapioca or by later company purchases of the product. The production of pineapple, coffee, and the newly introduced cotton crop were other important commercial enterprises. The wide variety of agricultural products, newly introduced or greatly improved; the expansion of farm lands; the technological changes in agricultural procedures practiced during Japanese rule amounted to a virtual economic revolution experienced on these Islands.

³⁰ Price, Willard, *op. cit.*, p. 244.

³¹ *Ibid.*

³² Management Survey of the Government of the Trust Territory of the Pacific Islands, *op. cit.*, p. 63.

³³ The High Commissioner of the Trust Territory of the Pacific Islands, *op. cit.*, p. 2.

³⁴ Price, Willard, *op. cit.*, p. 242.

Commercial Fisheries

The development of commercial fisheries was among the outstanding achievements in the new economy. As if motivated by Governor-General Hayashi's statement "The possibilities of the islands are limited: of the sea, unlimited,"³⁵ the fish catch increased at phenomenal rates from one year to the next. Leading fish caught were bonito and tunny followed by nilotic-top shell, mackerel, sea-slug, tortoise shell, and pearl oyster culture. Bonito and tunny amounted to ninety-five per cent of the value of all marine products caught in 1936³⁶ (see Table 6).

Table 6. Value and Quantity of Fish Catch, 1936

Fish	Value	Quantity
Bonito	1,468,996 yen	14,265,772 kgr
Tunny	110,160	587,116
Mackeral	19,950	62,690
Nilotic-top Shell	57,734	58,282
Sea-slug	4,044	171,404
Tortoise Shell	1,840	250

Source: Japanese Government, *Annual Report to the Council of the League of Nations on the Administration of the South Seas Under Japanese Mandate for the Year 1937*, p. 83.

There were no restrictions on fishing rights in the Micronesian waters for natives, Japanese, or foreigners; however, Japanese and foreigners had to obtain permission from the South Seas Government to engage in fishing. By the end of June, 1937, there were 484 persons authorized to fish in Micronesian waters.³⁷ A large number of Japanese fishermen were attracted to the Islands, who first engaged in small individual enterprises requiring little equipment—a boat and a simple factory for bonito and tunny fishing. The trend however was for large companies such as "Nanyo Kohatsu" Company and "Nanyo Boeki" Company to supplant the small operations and monopolize commercial fisheries.

More recently the American Government has been encouraging increased fisheries production through the formation of cooperatives for obtaining fuel and equipment, for improving fishing techniques and for marketing. The Palau Fishermen's Cooperative was organized in 1960 and sells frozen fish to the market in Guam. The Ponape Fishermen's Cooperative Association began in May, 1959.³⁸ A fisheries development project was operating in 1959 and a fisheries school anticipated to open in 1961 on Palau Island.³⁹ One of the objectives in the fisheries project was to cut down on imports of canned fish by improving local fisheries and planning for future canning operations. Commercial fisheries were Japanese enterprises whereas the American aim is to train Micronesians to develop their own commercial fisheries.

³⁵ *Ibid.*, p. 253.

³⁶ Japanese Government. N.d. *Annual Report to the Council of the League of Nations on the Administration of the South Seas Under Japanese Mandate for the Year 1937*, p. 83.

³⁷ *Ibid.*

³⁸ The High Commissioner of the Trust Territory of the Pacific Islands, *op. cit.*, p. 22.

³⁹ *Ibid.*, p. 73.

Japanese Colonization

Successful economic development for the Japanese was contingent on immigration of these people to the Islands. During the German Period, the foreign population was too small to provide adequate personnel and there was reliance on unsuitable native labor with compulsory migration of native labor to areas such as Angaur. With the end of the Japanese military occupation in 1922, the civil administration known as the South Seas Bureau was established. Japanese labor was sought immediately because of the difficulty of obtaining suitable native labor. Colonization was rapid with government encouragement and inducements for the immigrants. The immigrant population increased nearly twelve-fold in the thirteen year period from 1924 to 1937 and by 1935, the population was larger than the native population (see Table 7). In Chosen (Korea), Taiwan (Formosa),

Table 7. Population in Mandated Islands From 1924 to 1937

Year	Total	Japanese	Foreigners	Natives
1937	113,277	62,305	123	50,849
1936	107,137	54,496	117	50,524
1935	102,238	51,606	92	50,540
1934	90,651	40,215	100	50,330
1933	82,252	32,214	103	49,935
1932	78,457	28,291	97	50,069
1931	73,027	22,889	100	50,038
1930	69,626	19,835	96	49,695
1929	64,921	16,202	102	48,617
1928	61,086	12,460	81	48,545
1927	57,555	8,667	83	48,805
1926	56,780	7,808	68	48,904
1925	56,293	7,430	66	48,797
1924	54,425	5,338	59	49,328

Source: Compiled from reports of the Japanese Government, *Annual Report to the Council of the League of Nations on the Administration of the South Seas Under Japanese Mandate*.

and Manchoukuo (Manchuria), the Japanese population did not exceed the native population and represented only three per cent, five per cent, and less than one per cent respectively of the total population in 1935.⁴⁰

Colonization procedures were favorable to large group migrations rather than for individual, independent migrants who would suffer greatly in the struggle to clear vegetation, prepare land for use, and to bear the expected hardships of frontier life. The South Seas Development Company was government subsidized to procure, transport, and assist the settlement of migrants who, however, were expected to pay their own transportation expenses from the home islands. The Company received rent free lands, monopoly rights, government tax exemptions and in typical Japanese paternalistic traditions, the Company provided free housing, limited medical service, some accident protection, wages, and use of land on a share or tenant basis to the colonists. The South Seas Development Company alone engaged 7,114 Japanese as clerks and laborers who with their families

⁴⁰ Japan-Manchoukuo Year Book, 1938, pp. 492, 515, and 659.

numbered approximately 15,000 in 1933.⁴¹ Besides plantation workers or employees of large companies, independent immigrants, primarily as farmers, came in response to the government's colonization projects. Competitively the small farmer with a small operation had less chances of success than the large capitalized enterprises with a large operation when confronted with the same poor soils, low production levels, and the small market.

Main source areas for migrants were in the following order: Ryukyu Islands, Okinawa, retarded areas of northeast Japan, and isolated areas of Kyushu. In the home islands, there were systematic programs for selection and enlistment, and special training to prepare the colonists both economically and psychologically for South Seas life. A bride's school prepared prospective wives for bachelor immigrants who were already in the Islands. "Kaigai Shokumin Gakko" or Overseas Colonial School, located in a suburb of Tokyo, was established in 1918.⁴² Leading universities such as Tokyo, Kyoto, Waseda, Keio, Chuo, and Doshisha offered special courses dealing primarily with colonial economics and colonial government. The "Nanyo Kyokai" (South Sea Association) with a membership of 901 in 1919 and an office located in Tokyo promoted public interest in the Islands and published the "Association News."⁴³

One clue to the prospects for settlement in Micronesia was the estimate made by an agricultural director named Awano that the Islands had room for 100,000 Japanese farmers and as many more fishermen and tradesmen.⁴⁴ In 1936, a five-year plan for immigration had started.⁴⁵

"It may, therefore, be said that the South Sea Islands under Japanese mandate not only afford a field for operation of Japanese capital but also provide room for Japanese immigration. The combination of Japanese capital and labour has raised the productive capacity and trade of the islands from the narrow sphere in which they were confined as long as they depended upon native production and consumption and has brought them to their present advanced level."⁴⁶

There were four localities for colonial settlements, three on Palau and one in Ponape with an aggregate area of 4,563 acres which could support 393 households.⁴⁷ In 1928 approximately seventy-five per cent of the Japanese were in Saipan, another fourteen per cent in the Palau group with unmarried men predominating. By 1937, sixty-eight per cent were in Saipan, eighteen per cent in the Palau group with family units representing an important component of the population. Truk and Ponape each shared approximately six per cent, while Yap and Jaluit barely accommodated one per cent each of the immigrant group (see Table 8).

The occupational distribution for the Japanese population in 1935 was as follows:⁴⁸

⁴¹ Yanaihara, Tadao, *op. cit.*, p. 59.

⁴² Asami, Noboru. 1924. Japanese Colonial Government. New York: n.p., p. 28.

⁴³ *Ibid.*, p. 27.

⁴⁴ Price, Willard, *op. cit.*, p. 154.

⁴⁵ *Ibid.*, p. 170.

⁴⁶ Yanaihara, Tadao, *op. cit.*, p. 60.

⁴⁷ *Ibid.*, p. 59.

⁴⁸ *Ibid.*, p. 60.

Table 8. Population Distribution in 1937

	Japanese	Chamorros	Kanakas	Total	Foreigners	Total
Saipan	42,547	3,148	997	4,145	16	46,708
Yap	572	240	5,617	5,857	9	6,438
Palau	11,391	214	6,235	6,449	30	17,870
Truk	3,612	—	14,930	14,930	23	18,565
Ponape	3,659	103	9,266	9,369	23	13,061
Jaluit	524	—	10,099	10,099	12	10,635
Total	62,305	3,705	47,144	50,849	123	113,277

Source: Japanese Government, *Annual Report to the Council of the League of Nations on the of the administration South Seas Under Japanese Mandate for the Year 1937*, p. 88.

43.9% farmers
 14.1 industrial workers
 8.0 fishermen
 7.9 merchants
 3.9 officials and professional men
 22.2 all others

With the majority engaged in farming and the proportionately high percentage engaged in fishing, the economic and colonization bases for the Mandated Islands were emphatically oriented to agricultural and fishery developments. In contrast, the occupational distribution for the Japanese in Chosen and Manchoukuo in the same year was as follows:⁴⁹

Chosen	Manchoukuo	
8.2%	4.2%	agriculture, forestry, fishery, etc.
13.8	13.7	industry
30.0	32.6	commerce, communications, and transportation
40.4	22.4	civil services and professional occupations
3.9	15.9	others
3.6	11.2	without occupations

Only 8.2 per cent and 4.2 per cent respectively of this settlement were in agriculture, forestry, fishery, etc.

Conclusion

Japanese achievements in commercial agricultural and fishery developments were impressive for it appears that the Mandate area was conceived as an economically viable component of the Empire. Organization and planning, capital and equipment, leadership and qualified personnel, and above all the driving, pioneer spirit of the colonists for economic betterment for himself and his nation were the responsible factors. The proximity of Micronesia benefited Japan whereas other foreign administrations had not this advantage. Although the primary objective of commercial agricultural and fishery enterprises was to benefit the Japanese, natives were encouraged to participate in the Imperial economy by the monetary, material, and technical assistance offered them. Furthermore, the

⁴⁹ Japan-Manchoukuo Year Book, 1938, pp. 492 and 662.

economic gains derived by the natives were supplanted with an affluence of social improvements such as: additional schools, public health care programs, new clinics and hospitals, improved sanitation facilities, and a variety of other public works which directly contributed to the social welfare and well being of the natives. The rapport achieved between native and Japanese had been attributed to a sense of mutual kinsmen-like relationship which was less likely to develop between the natives and their other nonnative rulers past or present. The Japanese administration and personnel were serious and earnest in their efforts at economic improvement for the Mandated Islands. A positive appraisal of economic achievement, distinct from strategic-political considerations, has been revealed in the Japanese colonial record.

References

- Anon.* 1930. Manchuria and South Sea Island. *Nihon Chiri Taikei*, Outline Geography of Japan. Tokyo: Kaizosha. Volume 13, pp. 301-357.
- Anon.* 1934. South Sea Islands. *Chiri Koza*. Tokyo: Kaizosha. Volume 5, Section on Japan, pp. 281-395.
- Anon.* 1931. South Sea Islands. *Nihon Chiri Fuzoku Taikei*. Outline of Japanese Geography and Customs. Tokyo: Seibundo Shinkosha. Volume I, Kanto Section, pp. 304-403.
- ASAMI, NOBORU.** 1924. Japanese Colonial Government. New York: n.p.
- AZIZ, M. A.** 1955. Japan's Colonialism and Indonesia. The Hague: Martinus Nijhoff.
- BODLEY, R. V. C.** 1934. Drama of the Pacific. Tokyo: Hokuseido Press.
- CAMPBELL, E. G.** 1942. Japan's Mandate in the Southwestern Pacific. United States Naval Institute Proceedings (June) 68 (472): 829-834.
- CHAPMAN, W. M.** 1946. Tuna in the Mandated Islands. *Far Eastern Survey* (October 9) 15: 317-319.
- CLYDE, P. H.** 1939. Germany's Former Colonies-The Mariana, Caroline and Marshall Islands. *The Geographical Magazine* (January) 8 (3): 213-224.
- 1935. *Japan's Pacific Mandate*. New York: MacMillan Company.
- DOMOTO, T.** 1941. The Promotion of Emigration to the South Seas. Palau: Nanyo Gunto Bunka Kyokai, South Sea Islands Cultural Association.
- HANAI, S.** 1941. On the Present Condition of the Agriculture Development Village in the South Seas; Population, Races, Territory. *Jinko Mondai Shiryo Yonjusan Shu no Ichi*, Data on Population Problems, Collection 43, Report number 1. Tokyo: Department of Social Welfare, Institute for the Research of Population Problems, pp. 235-241.
- HARRIS, W. B.** 1932. The South Sea Islands Under Japanese Mandate. *Foreign Affairs* (July) 10: 691-697.
- HENEMAN, H. J.** 1931. The Administration of Japan's Pacific Mandate. *The American Political Science Review* (November) 25 (4): 1029-1044.
- The High Commissioner of the Trust Territory of the Pacific Islands. N.d. 1960 Annual Report. Washington, D.C.: Government Printing Office, pp. 13-14.
- HIRANO, Y.** 1941. South Sea Islands as the Base of Southward Expansion. *Pacific*, Numbers 4/8.
- INUI, K. S.** 1933. Japan and the Mandate. *International Gleaning From Japan*, published by the League of Nations Association of Japan, January, 15, Volume 9, Number 1.
- IOZAKI, S. and FURUYAMA, T.** 1915. *A Panorama of the New South Sea Islands*. Tokyo: Nanyo Kenkyu, South Sea Research Association.
- Japan Chronicle. 1936-1941. Weekly edition published in Kobe, Japan.
- Japan-Manchoukuo Year Book. 1938.

- Japanese Government. N.d. Annual Report to the Council of the League of Nations on the Administration of the South Sea Islands Under Japanese Mandate. Annual Reports for the Years 1921-1937.
- KAWAKAMI, K. K.** 1922. Japan's Pacific Policy. New York: E. P. Dutton.
- KAWASAKI, H.** 1941. Survey of the South Sea Islands as a Possible Site for Colonization. Colonial Progress, Numbers 20/2.
- KIYONO, K.** 1941. Southward Expansion of Japan and Its Potentiality for Colonization. Pacific, Numbers 4/8.
- League of Nations. 1927. Islands Under Japanese Mandate, Letter dated July 21st, 1927 from the Japanese Government forwarding information on various questions put by the permanent mandates commission with regard to the administration of the islands under Japanese Mandate. Geneva: Publication of the League of Nations.
- MAHON, T. J.** 1920. The Marshall Islands-A New Japan. Trans-Pacific, September, 3 (3): 63-68.
- Management Survey of the Government of the Trust Territory of the Pacific Islands. 1951. A Report to the Department of Interior, July 1, p. 60.
- MATSUE, H.** 1932. Nanyo Kaitaku Junenshi, Ten Years of Development in the South Seas. N.p.: South Seas Development Company.
- MATSUNO, YASUKO.** 1933. The South Sea Islands Under the Japanese Mandate. Journal of Geography (August) Number 534, pp. 371-384.
- MATSUSHITA, M.** 1929. Japan in the League of Nations. New York: Columbia University Press.
- NAKAYAMA, H.** 1942. The Adaptability of the Japanese to the Tropics. Nanyo Gunto Genchi Chosa Hokoku, Report of the Observation Investigation of the South Seas. Pacific, Numbers 5/3.
- 1942. Study on Tropical Livelihood. South Sea Economic Research, Numbers 1/8, pp. 47-54.
- NIPPON GYOSEIKAI.** 1934. Dai Nippon Taku Shokushi, History of Japanese Colonization, Issue on South Seas. N.p. 78 pp.
- ONO, SAKUJIRO.** 1939. Towns of Our South Sea Islands, Especially Garapan, Tinian and Koror. Journal of Geography (December) Number 610, pp. 551-560.
- PACIFIC ASSOCIATION.** 1941. Dai Nanyo-Bunka to Nogyo, The Great South Seas-Culture and Agriculture. Tokyo: Kawade Shobo.
- PRICE, WILLARD.** 1936. Japan's New Outposts. The Contemporary Review (August) 150 (848): 207-215.
- 1936. Pacific Adventure. New York: John Day.
- SHIMA, Y.** 1934. House Types in Caroline Islands. Chiri Ronso, Number 4.
- SOUTH SEA ASSOCIATION.** N.d. Nanyo Kyokai Nijunenshi, History of Twenty Years of Activities of the South Sea Association. Tokyo. 378 pp.
- TAEUBER, IRENE B. AND HAN, CHUNGNIM C.** 1950. Micronesian Islands Under United States Trusteeship: Demographic Paradox. Population Index, April, Volume 16, Number 2, pp. 93-115.
- TAEUBER, IRENE B. AND BEAL, E. G. Jr.** 1946. Guide to the Official Demographic Statistics of Japan, Part I, Japan Proper, 1868-1945. Population Index, Supplement, October, Volume 12, Number 4, pp. 1-36.
- TRANS-PACIFIC.** 1919-1940. Magazine published in Tokyo, Japan, September, 1919-November, 1940, Volumes 1-28.
- UNITED STATES NAVY DEPARTMENT, OFFICE OF THE CHIEF OF NAVAL OPERATION.** 1944. Administrative Organization and Personnel of the Japanese Mandated Islands, OPNAV 50E-4.
- 1944. Agriculture in the Japanese Mandated Islands, September 1.

- 1944. East Caroline Islands, OPNAV P22-5, formerly OPNAV 50E-5 February.
- 1944. The Fishing Industry of the Japanese Mandated Islands, OPNAV, P22-20, August.
- 1944. The Languages of the Japanese Mandated Islands, OPNAV 50E-15.
- 1944. Mandated Marianas Islands, OPNAV P22-8.
- 1943. Marshall Islands, Military Government Handbook, OPNAV P22-1, formerly OPNAV 50E-1.
- 1944. Marshall Islands Statistical Supplement, OPNAV P22-101.
- 1944. The Sugar Industry of the Japanese Mandated Islands, May 18.
- 1944. West Caroline Islands, OPNAV 50E-7, April.
- UNITED STATES NAVY DEPARTMENT, TRUST TERRITORY OF THE PACIFIC ISLANDS.** 1948. Information on the Trust Territory of the Pacific Islands, OPNAV P22-100E. Washington D. C.: United States Government Printing Office.
- UNITED STATES OFFICE OF NAVAL OPERATIONS.** 1944. Administrative Organization and Personnel of the Japanese Mandated Islands, Civil Affairs Handbook, January.
- UTINOMI, HUZIO, COMPILER, AND BUSHNELL, O. A., EDITOR.** 1950. Bibliography of Micronesia. Honolulu: University of Hawaii Press.
- UYEHARA, C. H., COMPILER.** 1954. Nanyo Takushoku Kabushiki Kaisha, The South Seas Colonization Company, Limited. A Checklist of Archives in the Japanese Ministry of Foreign Affairs, 1868-1945. Tokyo.
- YAMAMOTO, M.** 1915. Administrative Plans for the Newly Occupied South Seas Territory. Diplomatic Review, Numbers 22/20, pp. 462-271.
- YAMASAKI, K.** 1931. The Japanese Mandate in the South Pacific. Pacific Affairs (February) 4 (2): 95-112.
- YAMASAKI, NAOMASA.** 1927. Micronesia and Micronesians. Honolulu: Institute of Pacific Relations.
- YANAIHARA, TADAO.** 1940. Pacific Islands Under Japanese Mandate. London: Oxford University Press.
- YOKOYAMA, MATAJIRO.** 1936. The Future of the Aborigines of Our South Sea Islands. Journal of Geography (December) Number 574, pp. 547-551.