HANDBOOKS PREPARED UNDER THE DIRECTION OF THE HISTORICAL SECTION OF THE FOREIGN OFFICE.—No. 144

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BRITISH POSSESSIONS IN OCEANIA

LONDON:
PUBLISHED BY H.M. STATIONERY OFFICE

1920

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Editorial Note.

In the spring of 1917 the Foreign Office, in connection with the preparation which they were making for the work of the Peace Conference, established a special section whose duty it should be to provide the British Delegates to the Peace Conference with information in the most convenient form—geographical, economic, historical, social, religious and political—respecting the different countries, districts, islands, &c., with which they might have to deal. In addition, volumes were prepared on certain general subjects, mostly of an historical nature, concerning which it appeared that a special study would be useful.

The historical information was compiled by trained writers on historical subjects, who (in most cases) gave their services without any remuneration. For the geographical sections valuable assistance was given by the Intelligence Division (Naval Staff) of the Admiralty; and for the economic sections, by the War Trade Intelligence Department, which had been established by the Foreign Office. Of the maps accompanying the series, some were prepared by the above-mentioned department of the Admiralty, but the bulk of them were the work of the Geographical Section of the General Staff (Military Intelligence Division) of the War Office.

Now that the Conference has nearly completed its task, the Foreign Office, in response to numerous enquiries and requests, has decided to issue the books for public use, believing that they will be useful to students of history, politics, economics and foreign affairs, to publicists generally and to business men and travellers. It is hardly necessary to say that some of the subjects dealt with in the series have not in fact come under discussion at the Peace Conference; but, as the books treating of them contain valuable information, it has been thought advisable to include them.

It must be understood that, although the series of volumes was prepared under the authority, and is now issued with the sanction, of the Foreign Office, that Office is not to be regarded as guaranteeing the accuracy of very statement which they contain or as identifying itself with all the opinions expressed in the several volumes; the books were not prepared in the Foreign Office itself, but are in the nature of information provided for the Foreign Office and the British Delegation.

The books are now published, with a few exceptions, substantially as they were issued for the use of the Delegates. No attempt has been made to bring them up to date, for, in the first place, such a process would have entailed a great loss of time and a prohibitive expense; and, in the second, the political and other conditions of a great part of Europe and of the Nearer and Middle East are still unsettled and in such a state of flux that any attempt to describe them would have been incorrect or misleading. The books are therefore to be taken as describing, in general, *ante-bellum* conditions, though in a few cases, where it seemed specially desirable, the account has been brought down to a later date.

G. W. PROTHERO,
General Editor and formerly
Director of the Historical Section.

January 1920.

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I. GEOGRAPHY, PHYSICAL AND POLITICAL

General Position and Extent

The British possessions in the Pacific Ocean lie mainly south of the Equator, there being only a few small islands between the Equator and 5° north latitude. From about 170° east longitude to 155° west longitude practically all the islands south of 5° north latitude are British, with the exception of Samoa, some islands belonging to the United States, and the Horne (Hoorn) and Wallis Islands, which are French. East of 155° west longitude most of the islands are French, but the most easterly islands of the central Pacific, beyond the French possessions, are British. West of 170° east longitude there are also a number of British islands.

The New Hebrides, administered jointly by Britain and France, and British New Guinea with its adjacent islands, are treated respectively in Nos. 147 and 88 of this series.

The following are the chief British groups of islands with their approximate areas:—

	Square miles.
Lord Howe Island	5
Norfolk Island	13
Chatham and Pitt Islands ...	58
Cook and adjacent islands ...	390
Solomon Islands	14,800
Santa Cruz Islands	380
Gilbert Islands	166
Ellice Islands	14

	Square miles.
Union or Tokelau Islands	7
Phœnix Islands	18
Fanning and Washington Islands	21
Fiji Islands and Rotumá	7,082
Tonga Islands, with Vavau ...	390
British Line Islands	20
Pitcairn and adjacent islands ...	10
Total	23,374

The Cook and Hervey Islands and the Kermadec Islands belong to New Zealand, Norfolk Island to the Commonwealth of Australia, and Lord Howe Island to New South Wales.

LORD HOWE ISLAND

Lord Howe Island, which forms part of the state of New South Wales, lies in 31° 30′ south latitude and 159° 5′ east longitude, 436 miles from Sydney. It is mountainous throughout, rising to an elevation of 2,840 ft. in Mount Gower. The coasts are steep, and landing is often difficult.

The climate is mild and healthy. Temperatures of 52° and 82° have been recorded, and the rainfall averages 79 inches a year. The prevailing winds are south-west in winter, and north-east in summer. The soil is fertile, but suffers a little from lack of water. Tanks for the storage of rainwater have been constructed.

The first settlers were three white men, who came, with their Maori wives and two lads, from New Zealand in 1833 or 1834; but they were subsequently bought out, and their place was taken later by Australian emigrants. The population in 1911 numbered 107.

NORFOLK ISLAND

(1) Position and Extent

Norfolk Island, a dependency of the Commonwealth

of Australia, lies in 29° 3′ south latitude and 167° 58′ east longitude, 930 miles from Sydney. Adjoining it are the islets of Nepean and Philip.

(2) Surface and Coasts

Norfolk Island has an undulating surface at a general elevation of about 400 ft., rising to 1,050 ft. in Mount Pitt. The soil is fertile. The coasts are cliff-bound, except on the south-west, and fringed with coral reefs.

(3) Climate and Sanitary Conditions

The climate is warm and equable, and the mean temperature ranges from 60° F. (15·5° C.) in July to 72° F. (22·2 C.) in February. The rainfall averages 54 in. (1,370 mm.) a year, and the degree of humidity is high. The winds are mainly westerly in winter and easterly in summer. The climate is healthy.

(4) Population

Norfolk Island was from 1826 to 1855 a New South Wales penal settlement. In 1856 the convicts were removed and their place was taken by 193 settlers brought from Pitcairn Island. In the course of a few years a number of them returned to Pitcairn Island and the remainder showed signs of deterioration. They have, however, since increased in numbers, and in 1915 the population was 721, including some missionaries. There were also 108 Melanesians being trained for mission work.

CHATHAM ISLANDS AND OTHERS ADJACENT TO NEW ZEALAND

The *Chatham Islands* are in 43° 50′ south latitude and 177° west longitude, 536 miles east of New Zealand. The area of Chatham Island is 35 square miles, and that of Pitt Island about 23 square miles.

In 1916 the population comprised 219 Europeans and 250 Maoris.

The *Auckland Islands* lie in 50° 31′ south latitude and 166° 19′ east longitude, 200 miles south of Stewart Island (N.Z.). The area of the largest is 330 square miles.

Campbell Island, situated in 52° 33′ south latitude and 169° 9′ east longitude, 180 miles south-east of the Auckland Islands, is a mountainous volcanic island 36 miles in circumference. It is uninhabited, as are also *Bounty Island*, situated in 47° 44′ south latitude and 179° 7′ east longitude, and the *Antipodes* group, situated in 49° 32′ south latitude and 178° 42′ east longitude.

The *Kermadec Islands*, a dependency of New Zealand, are situated between 29° 10′ and 31° 30′ south latitude, and between 177° 50′ and 179° west longitude. They consist of four small and widely separated islands—Raoul or Sunday, Macauley, Curtis, and L'Espérance or French Rock. Their total area is about 13 square miles, Raoul occupying about 11½ square miles and Macauley 1¼ square miles. Raoul Island is about 600 miles from Auckland (N.Z.).

The islands are entirely volcanic. The surface is rugged and broken, and the highest elevation is 1,723 ft., on Raoul Island. In most places steep cliffs face the sea, but there are a few coves where landing is possible. The soil is very fertile. Raoul Island has four crater-lakes, of which three are fresh, but they are difficult of access.

The climate is mild and equable, and slightly warmer than in the north of New Zealand. Rainfall is fairly plentiful. South-westerly and westerly winds prevail in winter, and north-easterly and easterly winds in summer.

There is no native population. In 1914 the inhabitants numbered four, and consisted of one family from New Zealand. In 1916 the islands were uninhabited.

Macquarie Island, which lies on meridian 159° east longitude, about 500 miles S.W. of Stewart Island (N.Z.) and 800 miles S.E. of Tasmania, has recently acquired some importance.

COOK AND HERVEY ISLANDS WITH NIUÉ OR SAVAGE ISLAND

(1) Position and Extent

The Cook and Hervey Islands (governed from New Zealand) lie west-south-west of the Society Islands, and extend from 18° 48′ to 22° south latitude, and from 157° 20′ to 160° west longitude. They comprise the scattered islands of Rarotonga, Mangaia, Mauke, Mitiero, Atiu, Takutea, Manuai, Te Au-o-Tu and Aitutaki. With these may conveniently be grouped several isolated islands scattered within the area claimed by New Zealand. These other islands include Palmerston, Suvarov, Manahiki, Rakahanga, Penrhyn or Tongareva, Pukapuka (Danger), Nassau, and Niué or Savage Island. The total land area of all these islands is about 390 square miles, of which Niué occupies about 100 square miles and Rarotonga about 16 square miles.

(2) Surface and Coasts

The larger islands of the Cook group are of volcanic formation, with a certain amount of coral rock, rising to heights of 100 to 600 ft., and in Rarotonga even to 4,000 ft. Mitiero, Atiu and Takutea, and the two Hervey Islands, Manuai and Te Au-o-Tu, are coral banks. The volcanic islands are well watered and fertile, meeting the sea in steep cliffs interrupted in places by sandy beaches. Each is surrounded by a reef. The other islands described in this section are either atolls enclosing lagoons, or low coral banks, with the exception of Niué Island, which rises to a height of about 220 ft.

The water supply of the volcanic islands is generally good, but that of the coral islets poor.

(3) Climate

The climate of Rarotonga may be taken as typical of these islands, about most of which no data are

available. The temperature from December to April averages 78° F. (25·5° C.), and from July to October 72° F. (22·2° C.). Light south-east trade-winds prevail throughout the year, but are liable to be interrupted by westerly winds, often blowing as gales, from November to April. At Palmerston Island heavy north-easterly and easterly gales occur in January and February. Rainfall averages 79 in. (2,000 mm.) and occurs in all months, but chiefly in the warm season.

(4) Sanitary Conditions

Most of the islands seem to be fairly healthy, but tubercular diseases are widespread. Venereal diseases are not common, but there are cases of elephantiasis, while leprosy exists on Penrhyn Island. In Niué Island there is much skin disease and ophthalmia. There is no malaria, but diarrhœa is common.

(5) Race and Language

The natives are Polynesians with a Melanesian strain. Their dialects differ a good deal, but all are allied to Samoan. English is taught, but the *bêche-de-mer* jargon is still the only *lingua franca*. Practically all the natives profess Christianity. The Cook Islanders and the Niué and other islanders are peaceful and civilized.

(6) Population

In 1911 the total population of the Cook and Hervey Islands was 6,964, of whom 2,759 were on Rarotonga, 1,471 on Mangaia and 1,237 on Aitutaki. The other islands had a total population of 5,634, including 3,943 on Niué and about 400 on Penrhyn Island. The total population in 1916 was 12,797. The white population numbers about 160, of whom over 100 are in Rarotonga. Avatu (population about 1,000), in Rarotonga, is the seat of administration. Niué Island

has a separate administration with headquarters at Alofi.

The birth-rate now slightly exceeds the death-rate, but until recent years brought improvement in sanitation, and a prohibition of the use of alcohol, the population was decreasing. The island suffered much in the early sixties from the raids of Peruvian labour snatchers. The Niué Islanders are said to be increasing in numbers.

SOLOMON ISLANDS

(1) Position and Extent

The Solomon Islands lie to the east of New Guinea and the Bismarck Archipelago in a chain running north-west and south-east. They extend from about 4° to 13° south latitude, and from 154° to 163° east longitude. The two most westerly islands, Buka and Bougainville, and a few outlying groups to the north, Sir Charles Hardy, Carteret, Mortlock, and Tasman, were German, as were also the islands of Rantan, Tauroto, Aiaisina, and a few islets off the coast of Bougainville. All the other Solomon Islands are British, the chief being Choiseul, Ysabel, New Georgia, Malaita or Mala, Florida, Guadalcanal, San Cristoval or Bauro, and the smaller islands of Shortland, Treasury, Gizo, Gower, Liueniua or Lord Howe's Island,[1] and Rennell or Mangana. The Santa Cruz Islands, under the Solomon administration, are considered in a separate section (p. 10).

The Solomon Islands are about 1,560 miles from Sydney, and 1,060 miles from Queensland. The total land area of the British Solomons, exclusive of the Santa Cruz group, is about 14,800 square miles, but many of the islands are as yet imperfectly surveyed. Guadalcanal covers 2,500 square miles, Malaita 2,000 square miles, Ysabel 1,800 square miles, and Choiseul 1,500 square miles.

[1] Formerly called Ongtong Java. Its native name is also spelt Lua-ngiua.

(2) Surface, Coasts, and Rivers

The larger islands are long and narrow, and traversed from end to end by mountain ranges. Guadalcanal rises to over 8,000 ft. in Mount Lammas, and the heights of the other islands range between 2,500 ft. and 5,000 ft. Lofty spurs, separated by deep valleys, run down to the coast, often terminating in bold headlands There is very little low-lying flat land, and probably the largest area of it is that which stretches along the north coast of San Cristoval. A few small islands such as Ugi, Stirling and Treasury are chiefly coral in formation, while Liueniua is a large atoll 40 miles long by 10 wide. Most of the volcanoes are extinct, but those on Narova, Savo, and Vella Lavella are only dormant.

The volcanic soils and those of the crystalline rocks are very fertile, and even the sand and limestone soils are fairly productive.

The coasts are in some places steep and in others low and sandy or fringed with mangroves. Coral reefs are general on the east coasts of most of the western islands, but less continuous among the eastern islands. Safe harbours are numerous in nearly all the large and many of the small islands, but few of them have been thoroughly explored.

The large islands have many streams, mostly mountain torrents. Water is plentiful on all the islands except the coral atolls and banks.

(3) Climate

There is practically no cool season, the temperature ranging from 81° to 84° F. (27° to 29° C.) throughout the year. The seasons are marked principally by the change in wind. Trade-winds blow from April or May to October or November. They are usually east-south-east, but sometimes they back to the north or even to the north-west, and are then accompanied by squalls and rain. The north-west monsoon blows from November to the end of March, and occasionally veers

to the west and south-west. Calms and variable winds are frequent at that season.

The rainfall is heavy, and in the lofty interior, for which there are no records, it must average well over 200 in. (5,000 mm.) a year. At sea-level it varies from 110 in. to 150 in. (2,750 mm. to 3,750 mm.). Some rain falls in every month, but from December to March is the wettest period, while June is the driest month.

(4) Sanitary Conditions

Malaria attacks all Europeans sooner or later, but generally, it is said, in a mild form. Dysentery is more serious, and has been a great scourge. On the whole, however, the natives have contracted few diseases except influenza, which sometimes causes heavy mortality. A skin disease known as Tokelau ringworm (*Tinea imbricata*) is common, while ulcers afflict both natives and whites. The European death-rate is about 27 per 1,000. The lofty islands might furnish admirable sites for hill stations when the natives are more under control.

(5) Race and Language

The natives are chiefly of Melanesian stock with some Papuan admixture in the eastern islands. In Liueniua the prevailing type is Polynesian, although there is some mixture of Melanesian blood, but the Stewart Islanders are pure Polynesians.

The languages spoken are various dialects of Melanesian, with the exception of the Polynesian tongue in use in Liueniua and Stewart Island. The *lingua franca* is *bêche-de-mer* English.

The natives are restless and warlike, addicted to head-hunting and cannibalism; and on many of the larger islands, especially Malaita and Choiseul, there is incessant warfare. Towards whites they have the reputation of being cruel, treacherous, and revengeful

(6) Population

The estimated native population in 1915 was 150,000. Malaita is said to be the most densely populated island. The white population in 1915 was over 660, and in 1913 it was 418, including 396 British, 33 French (all missionaries), 7 Germans, and 2 others. The capital of the Protectorate is Tulagi, near Florida.

The population seems everywhere to be decreasing, in some islands at a great rate. In Malaita, Choiseul, and other islands the decrease is attributed to the continual warfare between the tribes, while the prevalence of dysentery also accounts for many deaths.

SANTA CRUZ ISLANDS

(1) Position and Extent

The Santa Cruz Islands, or Queen Charlotte group, comprise about a dozen islands lying east by south of the British Solomon Islands. The group extends from about 9° 30′ to 12° south latitude, and from 165° 30′ to 167° 30′ east longitude. Santa Cruz or Ndeni, which occupies an area of about 200 square miles, is the largest island. Vanikolo, the next largest, is less than half this size. The other islands are quite small and include the Swallow or Matema Islands, the Duff or Wilson Islands, and Utupua. Tikopia, Anuda or Cherry, and Fataka or Mitre are three isolated islets lying 130 to 200 miles east of Vanikolo. The total land area of all the islands described in this section is about 380 square miles.

(2) Surface and Coasts

The islands are all volcanic and some of them are lofty. Vanikolo attains a height of 3,031 ft., Tinakula or Volcano Island about 2,200 ft., Tikopia 1,235 ft., and Disappointment Island 1,200 ft. The rest of the islands are only from 100 to 200 ft. in height. There

is little level ground except on Santa Cruz and Anuda, and coral reefs are rare.

All the larger islands have small streams which run throughout the year.

(3) Climate and Sanitary Conditions

The climate is hot and damp all the year round, and is reported to be unhealthy, malaria and other fevers being prevalent. Malignant ulcers are a common complaint. The smaller islands, including Tikopia and Anuda, are less unhealthy.

(4) Population

The natives are Melanesians, with a certain admixture of Polynesian blood, but in Tikopia, the Duff Islands, and Anuda they are almost pure Polynesians. The number of natives is estimated at about 5,000. Most of the inhabitants live near the coast, and there are several villages.

The natives are well built and vigorous, but their numbers seem to be decreasing. In character they appear of late to be friendly and anxious to trade. Cannibalism is probably not altogether extinct. *Bêche-de-mer* English is spoken on some of the islands.

The white population perhaps numbers 4 or 5; these are usually missionaries and traders.

GILBERT AND ELLICE ISLANDS

(1) Position and Extent

The Gilbert and Ellice Islands, with the Union Islands and Washington and Fanning Islands, are grouped together as one colony for administrative purposes.

The Gilbert or Kingsmill Islands consist of sixteen atolls or groups of islets lying between 3° 10′ north and 2° 40′ south latitude, and 172° 30′ and 177° east longitude. The principal ones are Butaritari or Makin, Maraki, Abaiang, Tarawa, Maiana, Abemama or Apamama, Kuria, Ananauka or Aranuka, Nonouti,

Tabeteuea, Beru or Peru, Nukunau, Onoatoa, Tamana, Arorai, and Ocean, Banaba or Panaopa. The last named lies some 200 miles to the west of the other islands of the group. The Ellice Islands are a chain of nine small islands or clusters of islets to the south-east of the Gilberts, extending north-west and south-east for about 360 miles. They lie between 5° 45′ and 10° 45′ south latitude and 176° 10′ and 179° 50′ east longitude. The chief islands of the group are Nanomea, Nanomago, Niutao, Niu, Vaitupu, Nukufetau, Funafuti, Nukulailai, and Niurukita. All of these islands, as well as those in the Gilbert group, have English names in addition to their native ones, but the former are now never used.

About 180 miles to the north of the Gilberts lie the Marshall Islands, a former German possession. Nauru or Pleasant Island, also formerly German, lies 160 miles west by north from Ocean Island.

The total land area of the Gilbert Islands is 166 square miles, and of the Ellice Islands 14 square miles.

(2) Surface and Coasts

Practically all these islands are low coral atolls enclosing large lagoons. There are no rivers, and water can be obtained only by collecting rainwater in tanks, as in Ocean Island, or by digging wells.

(3) Climate

The climate is warm and equable, the mean temperature for all months being 83° to 86° F. (28·3° C. to 30° C.). Easterly trade-winds prevail from April or May to October or November, and in Butaritari they blow throughout the year. Most of the islands experience variable north-westerly and westerly winds between November or December and March or April. In the Ellice Islands the rainfall varies from 100 in. to 140 in. (2,500 mm. to 3,500 mm.) in the year; but in the central and southern Gilberts and Ocean Island it may fall to as little as

15 in. (375 mm.) a year during one of the droughts which periodically occur. In years of abundant rainfall Ocean Island has a rainfall of 100 in. to 140 in. (2,500 mm. to 3,500 mm.). The northern Gilberts have a normal annual rainfall of over 100 in.; rain falls in all months.

(4) Sanitary Conditions

Tubercular diseases are common among the natives, and their increase is attributed to the adoption of European dress and habits. On the other hand, the climate is said to be beneficial to Europeans suffering from asthma. There is no malaria, but dengue fever occasionally occurs. Dysentery and yaws are common. There are many cases of elephantiasis in the Ellice Islands, but few in the Gilberts. Leprosy, on the other hand, is found chiefly in the Gilberts, where every island has a leper asylum. A skin disease known as Tokelau ringworm (*Tinea imbricata*) is common.

In recent years the Government has taken energetic measures to combat disease, and there is reason to hope that the state of health of the natives will gradually improve.

The health of the Europeans is satisfactory, and it is noteworthy that there is said to be no danger of sunstroke.

(5) Race and Language

The natives are Polynesians, but in the Gilbert Islands there is a mild Melanesian strain, the mixture of the two resulting in the race known as Micronesian. Polynesian is the language spoken, and *bêche-de-mer* English is also used. The natives are now quite peaceable, and carry no weapons.

(6) Population

Nearly all the islands are densely populated, and in some the population is so numerous that the entire

island appears like a huge village. In 1911 the total native population of the Gilberts, with Ocean Island (1,284), was 26,417, and of the Ellice Islands 3,084. The Asiatics in 1911 numbered 252, of whom 226 were Japanese labourers on Ocean Island and the remainder chiefly Chinese traders. The Europeans numbered 199, of whom 111 were on Ocean Island, 84 on the other Gilberts, and 4 in the Ellice Islands.

Trading stations are scattered about the islands, but the only considerable number of Europeans is found on Ocean Island, which is the seat of government for the whole colony.

It is generally believed that, at least until recent years, there was a steady decrease of population, which in the Gilberts was probably due to the continual fighting between the tribes. In both the Gilbert and the Ellice Islands a considerable loss of population may be attributed to the export of labour to various other Pacific Islands, and to the raids of Peruvian slavers. In both groups, taken together, the birth-rate is now slightly in excess of the death-rate, and in 1916 statistics showed the increase to be 200 in three years.

UNION OR TOKELAU ISLANDS

(1) Position and Extent

The Union or Tokelau group extends from 8° 38′ to 11° 3′ south latitude, and from 171° 5′ to 172° 28′ west longitude. It consists of four islands or groups of islets—Atafu or Duke of York, Nukunono or Duke of Clarence, Fakaofu or Bowditch, and Gente Hermosa or Swain's Island. The total land area is 7 square miles. The Ellice Islands, with which the group is administered, lie about 600 miles to the west.

(2) Surface and Coasts

All the islands are low coral atolls, enclosing lagoons. Fresh water is not plentiful, and is obtained by digging wells or collecting rainwater.

(3) Climate and Sanitary Conditions

The climate probably resembles that of the Phœnix Islands (see below, p. 17). It is reported to be healthy, but the natives suffer a good deal from tuberculosis and elephantiasis.

(4) Population

The population in 1911 consisted of about 900 Polynesians and 2 Europeans. The language is allied to that of Samoa, and *bêche-de-mer* English is also spoken. All the islands are inhabited, but the majority of the population live on Atafu and Fakaofu. The people are peaceful and good-natured.

FANNING AND WASHINGTON ISLANDS

(1) Position and Extent

These two coral atolls are the most northerly British islands in the South Pacific, and by reason of their administration it is convenient to treat them separately. Fanning Island lies in 3° 51′ north latitude and 159° 22′ west longitude, and Washington or New York Island in 4° 43′ north latitude, 160° 25′ west longitude. The area of Fanning Island is 15 square miles, and of Washington Island 6 square miles. Fanning Island is 1,880 nautical miles from Ocean Island, the administrative centre of the Gilbert and Ellice Islands, to which both these islands are attached.

(2) Surface and Coasts

Fanning Island is a low coral atoll, 2 ft. to 10 ft. above sea-level, enclosing a shallow lagoon. The coral belt nowhere exceeds 1,500 yards in width. The beach is steep-to, and landing is difficult on account of the surf, except at Whaler anchorage in the north-west, where the cable is landed.

Washington Island is also a low coral atoll, 10 ft.

above sea-level. The lagoon is small, and has no entrance. There is no harbour.

Well-water is good and plentiful on Fanning Island but Washington Island is not so abundantly supplied.

(3) Climate and Sanitary Conditions

The temperature varies little throughout the year it averages from 81° F. (27° C.) to 82° F. (27·5° C.) Easterly trade-winds blow in all months. The total annual rainfall averages 118 in. (3,000 mm.). It falls principally between January and June, but no month is without rain.

The islands appear to be healthy.

(4) Population

All the population has been introduced in recent years. Fanning Island has a population of about 150, including the white employees at the cable station. Washington Island in 1901 had a coloured population of about 130.

PHŒNIX ISLANDS[1]

(1) Position and Extent

The Phœnix group consists of eight small islands and several reefs scattered between 0° 50′ north latitude and 4° 40′ south latitude, and between 176° 40′ and 170° 43′ west longitude. The chief islands are Gardner or Kemins, Hull, Sydney, Phœnix, Birnie, Enderbury, Canton or Mary, with, farther to the north, Baker and Howland. The total land area of the group is about 18 square miles. The great circle tracks between Sydney and San Francisco and between Fiji and Hawaii pass through the group.

[1] It is difficult to know to what administrative area to assign these islands, as they were not mentioned in the Order in Council of 1892 annexing the Gilbert and Ellice Islands, with which it would seem natural to include them.

(2) Surface and Coasts

The group is entirely composed of low coral islands surrounded by fringing reefs.

(3) Climate

The climate is warm and equable, with an average temperature of about 80° F. (26·6° C.) throughout the year. Easterly winds blow in all months. There is very little rain, but light showers may fall in any month.

(4) Population

The only inhabitants are native labourers imported by the Samoan Shipping and Trading Co. to work the few coconut plantations. They number about 50.

FIJI ISLANDS AND ROTUMÁ

(1) Position and Extent

The Fiji Islands consist of an archipelago of some 200 islands, extending from 15° 40′ to 21° south latitude, and from 176° 50′ east to 178° west longitude. They may be divided into eight main groups:—(i) The Ono group, a cluster of six islets in the extreme south; (ii) the Lakemba group of about 33 islands, of which Lakemba itself is the largest; (iii) the Exploring Islands, comprising about 10 islets, of which Vanua Mbalavu is the largest; (iv) Lomai Viti or Inner Fiji, about 12 or more scattered islands in the Koro Sea; (v) Vanua Levu, Taveuni, and the Ringgold Islands; (vi) Viti Levu and the islands adjacent; (vii) Kandavu; and (viii) the Yasawa group. The last three are often called the Western or Leeward group, while the Lakemba and Exploring Islands are often grouped together as the Lau, Eastern, or Windward group. The isolated island of Rotumá, in 12° 30′ south latitude, 177° 5′ east longitude, 280 miles

north-west by north from the north-eastern end of Vanua Levu, is included in the Fiji administration.

The areas in square miles of the chief islands are as follows: Viti Levu, 4,112; Vanua Levu, 2,342; Taveuni, 217; Kandavu, 124; Koro, 58; Ngau, 45; Ovalau, 43; Vanua Mbalavu, 24; Lakemba, 12; and Rotumá, with adjacent islets, 14½. The total land area of the Fiji Islands, excluding Rotumá, is 7,068 square miles.

The town of Suva is 1,740 miles from Sydney, and 1,160 miles from Auckland, New Zealand.

(2) Surface, Coasts, and Rivers

Surface

With the exception of a few coral atolls, chiefly in the Ringgold, Exploring, and Lakemba groups, the islands are of volcanic formation, and, as a rule, mountainous and rugged. In form all the larger ones are characterized by a central mountain axis, lying roughly across the direction of the south-east trade-winds. Viti Levu has a central mass of mountains from which spurs separated by deep valleys radiate towards the coasts; the highest summit is Tomanaivi, or Mount Victoria (4,341 ft.). The valleys generally contain rivers of considerable size, and towards the sea open into wide plains. Except, however, for these river plains and the Rewa plain (the largest in Fiji) the island has little low-lying ground. Vanua Levu contains one long range, the central part of which is called Korotini; but there are plains in the north and south-west. The Ndreketi plain is the second largest in Fiji. The highest peaks are Soro Levu (3,387 ft.), Mbatini (a few feet lower), and Ndikeva or Mount Thurston (3,139 ft.). Taveuni rises to a height of 4,072 ft. in Ulu-i-ngalau; and the highest point of Kandavu is Mount Washington (Na Mbuke Levu), 2,750 ft. Ovalau has little level ground; its highest point is Na Ndelai Ovalau, or "the summit of Ovalau" (2,053 ft.). Rotumá is hilly, but has no elevation over 850 ft. A low narrow isthmus divides it into two unequal parts.

The volcanic soil, particularly on the windward side of the islands, is very fertile, and the alluvial plains and deltas are exceptionally rich. The water supply, except on a few atolls, is abundant. Hot springs occur in Vanua Levu, Ngau, and other islands.

Coasts

The coasts of the volcanic islands are generally rugged and steep, and bordered by coral reefs which are interrupted opposite the mouths of the rivers.

Rivers

The rivers of Vanua Levu and Viti Levu are by comparison large and numerous. The most important is the Rewa on Viti Levu, whose valley is very fertile. This river enters the sea by several channels. For 25 miles above the bar the river in many places is 200 yards wide. West of the Rewa is the Navua, and further west is the Singatoka, a large stream, and on the west coast is the Mba River. In Vanua Levu the rivers are chiefly on the north of the island, and several afford access to the plains through the coastal range. The largest is the Ndreketi. The streams on the smaller islands are of no importance except in providing a good supply of water.

(3) Climate

The climate is warm and humid. The coolest months are July and August, with a temperature of about 74° to 77° F. (23·3° to 25° C.) at sea-level, and 50° F. (10·0° C.) in the hills. January and February are the warmest months, with an average temperature of 81° F. (27° C.) at sea-level and about 60° F. (15·5° C.) in the hills.

Rainfall at Suva averages 108 in. (2,750 mm.), and varies from 148 in. (3,750 mm.) to 95 in. (2,400 mm.). At Levuka it averages 90 in. (2,300 mm.). It is always heavier on the eastern than on the western side of the

lofty islands, and at high altitudes the average is higher, and on low coral islands lower, than that given above. The rainfall in Rotumá averages 197 in. (5,000 mm.), and the heaviest rain occurs between November and May. The so-called dry season is from May to September, but heavy rains may occur in any month.

The prevailing winds are from the north-east and south. Hurricanes blow between December and March, on an average one every four years, and often do great damage.

(4) Sanitary Conditions

The Fiji Islands are on the whole healthy to Europeans, though the climate is enervating during the hot season. Endemic malaria is unknown.

The natives suffer a good deal from dysentery, yaws, filariasis, pneumonia, and leprosy; and tubercular diseases seem to be on the increase. Syphilis never attacks the Fijians.

The principal hospital is at Suva, but there is a branch hospital at Levuka. There are also eleven smaller hospitals in charge of natives; and a leper segregation station at Makongai. Sanitation in the Fijian villages has been improved in recent years.

(5) Race and Language

The natives are Melanesians with much Polynesian admixture, and the Rotumáns are pure Polynesians. Fiji also contains a large number of natives of India, some of whom are indentured labourers, although a larger number live as free settlers. The Fijian language has many dialects, but that of Mbau is generally accepted as the standard form. Both Fijian and Rotumán are mixed Melano-polynesian languages.

For some years cannibalism has been completely abandoned, and the Fijian is now peaceful and has adopted a certain degree of civilization.

(6) Population

Distribution and Density

The total population of Fiji, including Rotumá, was estimated in 1915 to be 159,321. This included 89,574 Fijians and 56,853 Indians. On December 31, 1917, the estimated population was 165,991, including 91,013 Fijians and 61,153 Indians. In 1914, the last year for which detailed figures are available, the total population was 155,167, and included 88,775 Fijians, 53,589 Indians, 2,567 half-castes, 2,525 so-called Polynesians, 1,958 Rotumáns, 511 Chinese, 4,453 Europeans (including 24 at Rotumá), and 789 not specified.

About 80 of the 200 islands are inhabited permanently. On the larger islands the population is densest on the lower ground near the coasts and in the river valleys. The Fijians live in small towns and villages, and the free Indians have settlements of their own. The two races do not intermarry.

The chief town is Suva, on the south-east of Viti Levu, which in 1914 had a population of 5,122, including 1,533 Europeans, 1,285 Indians, 800 Fijians and 111 Chinese. The second town is Levuka, the former capital, on the east of Ovalau, which consists of little more than one street stretching for about a mile along a narrow strip of beach. Lautoka, on the north-west of Viti Levu, is a growing place.

Movement

Long before the arrival of the white man the population of Fiji seems to have been decreasing. Fighting and cannibalism no doubt contributed to this decrease, but can scarcely account for it altogether. The decrease continued after European settlement, but eight or ten years ago it appears to have ceased, and since then the population has been slowly increasing. The figures given above show an increase of 2·6 per cent. between 1914 and 1915, and of 4·2 per cent

between 1915 and 1917. In 1916 among Fijians the births were 3,122, deaths (decreasing among children) 2,267; among Indians, births 2,150, deaths 518; among Europeans, births 79, deaths 37.

TONGA ISLANDS

(1) Position and Extent

The British Protectorate of Tonga or the Friendly Islands extends from 15° to 22° 20′ south latitude, and from 173° 50′ to 176° 15′ west longitude. The islands, about 100 in number, lie more or less in a chain extending north and south in four main groups, Vavau, Haabai, Namuka and Tongatabu. The third of these contains only a few small islands. The principal islands in the three main groups are Vavau and Hunga in the Vavau group; Haano, Foa, and Lifuka in the Haabai (Haapai) group; and Tongatabu and Eua in the Tongatabu group. Further to the west lies a chain of small isolated islands, including Ata in the far south, and Niuatobutabu, Tafahi, and Niuafou in the far north. The only large islands are Tongatabu (area about 125 square miles), Vavau and Eua. The total land area is about 390 square miles. Tongatabu is about 1,100 miles from Auckland, New Zealand.

(2) Surface and Coasts

Most of the islands are of coral formation, generally small low banks a few feet above sea-level. A few, however, principally the larger ones, rise to a height of several hundred feet, and have a gently undulating surface. The soil is fertile but shallow. The islands are surrounded by extensive coral reefs.

The westerly isolated islands, referred to above, and Eua in the Tongatabu group are mostly volcanic and lofty, but with the exception of Eua they are of small importance. Several of these islands have volcanoes which have been active during the last 20 or 30 years.

Submarine volcanic activity is more or less continuous in the waters of the archipelago, and Falcon Island (20° 19′ south latitude, 175° 25′ west longitude) has appeared and disappeared more than once since 1885. The volcanic islands have usually plenty of fresh water but the coral islands are poorly supplied, and most have concrete storage tanks for rainwater.

(3) Climate

From May to October the weather is fairly cool and dry; from November to April it is hot, moist, and unsettled. The coolest month is July, with a temperature of 71° to 74° F. (21·7° to 23·3° C.); the warmest January, with a temperature of about 80° F. (26·6° C.). The prevailing winds throughout the year are easterly and south-easterly, but from January to March or April there are often violent westerly and north-westerly winds.

The annual rainfall seems to be between 60 and 100 in. (1,500 mm. to 2,500 mm.). January to April are the wettest months and June, July and August the driest.

(4) Sanitary Conditions

The islands are fairly healthy to both natives and whites. There is no malaria, but dysentery and coughs are not uncommon. The chief native diseases are yaws, filariasis, tuberculosis, and whooping cough, the last of which is spreading at an alarming rate.

Hospitals have been established on Tongatabu, Haabai and Vavau, and there are dispensaries on several other islands.

(5) Race and Language

The natives are Polynesians, a peaceful, pleasure-loving people who have attained a considerable degree of civilization. Their language is allied to Samoan.

(6) Population

At the last census (1911), the population was 23,011; in 1917 it was estimated to be 23,786, principally on the large islands and Niuafou. Some of the volcanic islands are uninhabited.

In 1911 the white population was 380. In 1913 it had grown to 565, of whom 368 were British, 133 German, 45 French and 19 American. There were also 470 natives of other Pacific islands, chiefly Niué Islanders and Samoans.

The principal town and capital is Nukualofa, on the north of Tongatabu. Smaller towns are Neiafu in Vavau and Pangai in Lifuka, each the administrative centre of the group in which it lies.

The birth-rate and death-rate both fluctuate a good deal, but the former always exceeds the latter. In 1914 the birth-rate was 34·6 per 1,000, the death-rate 27·29 per 1,000.

BRITISH LINE ISLANDS

(1) Position and Extent

The name "Line Islands" is generally applied loosely to a number of small islands lying north of the Society Islands and widely scattered a few degrees north and south of the Equator. Of these Manahiki and other islands between the Society Islands and the Union group are considered with the Cook Islands (see above, p. 5). Palmyra Island is now claimed by the United States of America. Washington and Fanning Islands, now part of the Gilbert and Ellice Islands colony, also belong to the Line Islands, but are treated separately p. 15). In the restricted sense employed here the Line Islands include the islands between 11° 30′ south and 2° north latitude, and between 150° and 160° 3′ west longitude, with the exception of Penrhyn Island (see p. 5). These Islands are Malden and Christmas (the two largest), Flint,

Caroline, Vostok, Starbuck, and Jarvis. The existence of Victoria Island is doubtful. Their total land area is 20 to 30 square miles.

(2) Surface and Coasts

The islands are all low coral atolls or banks. Caroline Island is a group of 40 islets surrounding a huge lagoon.

The water supply is bad, and most islands have to rely on collected rainwater. Malden Island has capacious storage tanks.

(3) Climate and Sanitary Conditions

The mean temperature of Malden Island is 83° F. (28·3° C.) throughout the year, and the rainfall averages 24 in. (600 mm.) a year. The first six months of the year are the wettest and the last four the driest. The trade-winds blow steadily from the east and north-east The climate is healthy.

(4) Population

The only inhabitants, mostly on Malden and Flint Islands, are natives of Niué and Aitutaki, in the Cook Islands, imported by the companies leasing the islands for the phosphate trade and copra plantations. The population in 1913 was about 100 natives and six Europeans. Several islands, including Christmas Island, are uninhabited.

PITCAIRN AND ADJACENT ISLANDS

(1) Position and Extent

Four islands in the extreme south-east of the Tuamotu Archipelago are British possessions. The principal one is Pitcairn Island, in 25° 4′ south latitude and 130° 6′ west longitude. The other islands are Oeno, 65 miles north-west of Pitcairn; Henderson or Elizabeth, 100 miles east-north-east of Pitcairn; and Ducie,

190 miles east of Henderson. The total area of these islands is about 10 square miles, of which Pitcairn Island occupies a little over 2 square miles.

(2) Surface and Coasts

Ducie and Oeno Islands are low coral atolls, partly awash, with boat passages into the lagoons. Henderson Island is formed of coral limestone elevated to about 100 ft. Pitcairn Island is of volcanic origin, 1,000 ft. high, and almost entirely surrounded by steep cliffs. The soil is porous and fertile, particularly in the valleys. There are no streams, and Pitcairn Island is chiefly dependent on rain for its water supply.

(3) Climate and Sanitary Conditions

The climate is warm, moist, and fairly equable. From October to March the winds are from east-south-east to north; from April to September from east-south-east to south-west. Rainfall on Pitcairn Island is abundant, but on the other islands is scanty.

The natives enjoy good health.

(4) Population

Of these islands, Pitcairn alone is permanently inhabited. Its people are mostly descendants of nine British sailors, mutineers from H.M.S. *Bounty*, and six Tahitian men and twelve Tahitian women, who landed on the island in 1790. English is supplanting a kind of Tahitian-English jargon.

The whole community lives as one family in a village known as Adamstown. In 1856 the population had grown to 193, too great a number for the island to support, and the entire population was removed to Norfolk Island. Within the next eight years, however, a number returned to Pitcairn Island. The population was 125 in 1889, 146 in 1906, and 165 in 1915.

II. POLITICAL HISTORY

Chronological Summary

1567 First (Spanish) discovery of Solomon Islands.
1606 First (Spanish) discovery of New Hebrides.
1643 First (Dutch) discovery of Fiji and Tonga.
1767 First (English) discovery of Gilbert and Ellice Islands.
1797 Beginning of British missionary enterprise in the Pacific.
1838 Annexation of Pitcairn Island.
1874 Annexation of Fiji.
1886 First Anglo-German Convention.
1887 Beginning of Anglo-French Condominium in the New Hebrides.
1892 Gilbert and Ellice Islands Protectorate.
1893 British Solomon Islands Protectorate.
1899 Second Anglo-German Convention.
1900 Tonga Protectorate.

(1) General

The British colonies and protectorates in the Pacific, other than Australia, New Zealand, and their dependencies, are :—

(i) The Crown Colony of Fiji.
(ii) The Crown Colony of the Gilbert and Ellice Islands.
(iii) The Protectorate of the British Solomon Islands.
(iv) The Protectorate of Tonga or the Friendly Islands.
(v) Various outlying small island dependencies.
(vi) The joint Anglo-French Protectorate of the New Hebrides, separately treated in No. 147 of this series.

Early British Policy in the Pacific.—The British settlement in Australia in 1788 was the first permanent European foothold in the Pacific other than the Spanish possessions upon the western side of America. Australia, New Zealand, Norfolk Island, Pitcairn Island, and Lord Howe Island (always connected with New South Wales) seem to have been all that Great Britain possessed in the Pacific prior to the annexation of Fiji. The British Government, though giving promises of friendship and good offices, was at pains not to take responsibility for Pacific Islands. The Hawaiian Islands were annexed by a naval captain in 1843; but the act was at once disclaimed by the home Government. The wishes of the Queen of Tahiti for British protection, expressed in 1825 and 1836, were not complied with; and French protectorates or annexations in the Pacific took place before any similar action was taken by Great Britain, with the exceptions mentioned above.

Traders and Missionaries.—It may be said that prior to 1840 the Pacific Island groups were not definitively protected or controlled by any European Power, although individual Europeans in considerable numbers had intruded into most of them. These Europeans were, roughly speaking, of two classes. There were, on the one hand, traders and "beachcombers"[1] of various nationalities; and, on the other hand, missionaries—British and American Protestants and French Roman Catholics. The traders were British, French, American, and German. At a later date the German traders were absorbed in the great Hamburg firm of Godeffroy and Sons, who began to make their Pacific centre at Samoa about 1857; and in 1880 this firm, then in liquidation, was succeeded by the Deutsche Handels- und Plantagen-Gesellschaft der Südsee-Inseln zu Hamburg.

Protestant missionaries were earlier in the field than Roman Catholics; and the Pacific became

[1] Mostly derelict sailors or escaped convicts.

a notable theatre of evangelical activity. The first missionaries were sent out by the (London) Missionary Society in 1796; in 1797 they established themselves in Tahiti and (at first for a short time only) in Tonga. They then spread their work in various directions, and were followed by missionaries of particular denominations; Wesleyans being specially prominent in Tonga and Fiji, Presbyterians in the New Hebrides, the Melanesian mission of the Church of England in the New Hebrides and Solomon Islands. Roman Catholic missionaries did not begin work in the Pacific till about 1836. The Pacific Islands thus became the scene of much disorder, arising from the presence among the natives of miscellaneous traders—some of them of the worst type—and rival missions.

It was these disorders, and especially those connected with the (so-called) *kanaka*[1] labour traffic, that eventually forced unwilling British statesmen to adopt a forward policy in the South Seas. The scandalous kidnapping of natives in the Pacific islands first attracted the attention of the British Government in 1817; but, despite the regular despatch of vessels of war to patrol these waters, the cruel traffic, though checked, did not cease. At last, in 1872 and 1873, definite steps were taken in Parliament to bring it to an end. In 1874 the Fiji Islands, which had been one of its chief centres, were annexed.

Evolution of British Tenures.—Fiji is British in virtue of formal voluntary cession on October 10, 1874. It was constituted a Crown colony in 1875, and the island of Rotumá was added to the colony in May 1881. The Gilbert and Ellice Islands were placed under British protectorate in May and September 1892 respectively. By the Gilbert and Ellice Islands Order in Council of November 10, 1915, these islands were annexed to His Majesty's dominions and formed into the Gilbert and Ellice Islands colony. By an Order in Council of January 27, 1916, Ocean Island,

[1] A Hawaiian word signifying "man."

Fanning Island, and Washington Island (the first two annexed in 1900 and 1888 respectively, and the third placed under British protectorate in 1889) were included within the limits of this colony; and by an Order in Council of February 29, 1916, the Union Islands, three in number and placed under British protectorate in 1889, were also included. The Protectorate of the British Solomon Islands, following on arrangements with Germany, to which further reference will be made, dates from 1893 and 1900; the Protectorate of Tonga from 1900; and various dates must be assigned to the miscellaneous small islands which Great Britain owns or protects in the Pacific, the earliest being Pitcairn Island, settled by the mutineers of the *Bounty* in 1790, and formally placed under the British flag in 1838.

Anglo-German Pacific Agreements.—With regard to the island groups, other than the New Hebrides, Great Britain has been brought more into contact with Germany than with France. German commercial penetration in the Pacific was followed in 1884 by political action and the declaration of German protectorates;[1] the acquisition of German New Guinea, in particular, arousing intense resentment in Australia against what was regarded as the supineness of the Home Government.

The Convention of 1886.—On April 6, 1886, the British and German Governments made a joint declaration, "Relating to the Demarcation of the British and "German Spheres of Influence in the Western "Pacific."[2] The Western Pacific was defined as

> "that part of the Pacific Ocean lying between the 15th parallel of north latitude and the 30th parallel of south latitude, and between the 165th meridian of longitude west and the 130th meridian of longitude east of Greenwich."

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[1] See *Historical Geography of the British Colonies*, vol. vi, *Australasia*, by J. D. Rogers, 1907, pp. 262, etc., and *The New Pacific*, by C. Brunsdon Fletcher, 1917.

[2] P.P.C.-4656, May 1886, containing a map. See *Former German Possessions in Oceania*, No. 146 of this series, p. 89 *et seq.*

Within these limits a conventional line was drawn, the British sphere being to the east, south-east, and south of the line, and the German to the west, north-west, and north. Each Power bound itself not to acquire territory, accept protectorates, or interfere with the extension of the other's influence, and to give up any territory or protectorate already acquired within the sphere of influence thus assigned to the other. But there were exceptions, viz., Samoa, as being affected by treaties with Great Britain, Germany, and the United States; Tonga, as being affected by treaties with Great Britain and Germany; and the island of Niué (Savage Island). These islands were to remain neutral; and islands in the Western Pacific owned or protected by another civilized Power were also necessarily excepted. This Agreement was supplemented on April 10, 1886, by a Joint Declaration, providing for reciprocal freedom of trade in the British and German possessions and protectorates in the Western Pacific.[1]

The Convention of 1899.—In 1899[2] the arrangement arrived at in 1886 was modified. Samoa had been under the joint control of Great Britain, Germany, and the United States, with the result that, as was stated in the preamble to the Anglo-German Convention of November 14, 1899, representatives of the three Powers had reported that

> "it would be impossible effectually to remedy the troubles and difficulties under which the islands of Samoa are at present suffering as long as they are placed under the joint administration of the three Governments."

Samoa, in short, displayed all the drawbacks of a condominium. Accordingly, under the new Convention, Great Britain withdrew altogether from the Samoan group, in favour of Germany in some islands of the group, of the United States in others; while Ger-

[1] Also in C.-4656-86.

[2] *Cf. Former German Possessions in Oceania*, No. 146 of this series, pp. 20-23, and 93.

many withdrew altogether, in favour of Great Britain. from the Tonga group and Savage Island, and ceded to Great Britain those of the Solomon Islands east and south-east of the island of Bougainville, which, under the 1886 Agreement, had been in the German sphere. Reciprocal freedom of trade in the Western Pacific was continued as before.

(2) Fiji

Early History and Annexation.—Early in the nineteenth century Australian traders were attracted to Fiji by its sandalwood; and it gradually became the resort of a motley group of white men, as well as a field of mission work. Under pressure of certain American claims, the so-called King of Fiji, Thakombau, in October 1858 formally ceded the sovereignty of the islands to Queen Victoria. The offer reached England early in the following year; a Special Commissioner was sent to Fiji, who reported in 1861; and, guided by his advice, the British Government in 1862 declined the offer.[1] From this date onward confusion in Fiji became worse confounded. The number of white residents increased, partly owing to the stimulus given to cotton-growing by the American Civil War; and in 1871 they were estimated at about 2,000. In 1869 there was a petition, which came to nothing, for an American protectorate coupled with local self-government. In 1870 Thakombau granted a charter to the European community at Levuka to form a kind of self-governing corporation. In the same year an inter-colonial conference in Australia pressed for a British protectorate over the islands; but in March 1871 the British Government again declined. Later in the year, however, the Governor of New South Wales was informed that, if that colony would be responsible for providing for the government of Fiji, the Imperial Government would entertain a proposal for annexing the islands to New South Wales. This suggestion did

[1] Correspondence relating to the Fiji Islands, May 1862.

not accord with the views of the New South Wales Government.

About the same date a kind of limited monarchy had been established in Fiji, white men being constituted, or constituting themselves, Thakombau's Ministers, with not unchallenged authority; Mr. (afterwards Sir John) Thurston became Chief Secretary. Various considerations were by this time inclining the British Government to take action—pressure from Australia, danger of being forestalled by the United States or Germany, and the abuses of the Labour Traffic, which in June 1872 produced a special Act of Parliament: "*For the* "*Prevention and Punishment of Criminal Outrages* "*upon Natives of the Islands in the Pacific Ocean,*" with the short title of *The Kidnapping Act*, 1872.[1] Accordingly, when in January 1873 Thurston enquired whether a renewed offer of cession would be entertained, two Commissioners were sent to the islands again to enquire and to report. On April 1874 they reported strongly in favour of annexation. Thakombau's advisers attached certain conditions to the proposed cession; but Sir Hercules Robinson (afterwards Lord Rosmead), then Governor of New South Wales, was deputed to visit Fiji, with full discretion to act, provided only that the cession should be wholly unconditional. On these terms the formal cession took place, on October 10, 1874; and in 1875 Fiji was definitely constituted a Crown colony.

(3) The Gilbert and Ellice Islands Colony

The British protectorate of the Gilbert and Ellice Islands dates from 1892, subsequently to the first Anglo-German Agreement. Ocean Island, which lies apart, west of the Gilbert group, was included within the jurisdiction of the Resident Commissioner of the Gilbert and Ellice Islands by a High Commissioner's

[1] 35 and 36 Vict., cap. 19.

Proclamation of November 28, 1900. The history of the formation of the Gilbert and Ellice Islands colony, and of the annexation of the various islands composing it, will be found on pp. 29-30.

(4) The Tonga Islands Protectorate

The British protectorate over the Tonga group followed upon the second Anglo-German Agreement. Wesleyan mission influence became paramount in Tonga in the middle of the nineteenth century; and under missionary auspices a kind of Constitution was established, the Prime Minister prior to 1890 being Mr. Shirley Baker, an ex-Wesleyan missionary (the subject of Mr. (now Sir) Basil Thomson's book, *The Diversions of a Prime Minister*), who had to be removed by order of the High Commissioner. There had been a treaty of friendship between Great Britain and Tonga, dated November 29, 1879, which was ratified on November 8, 1881, and amended on June 2, 1891. After Germany had, by the 1899 Convention, abandoned all her rights or claims in or over Tonga, a new treaty of friendship was concluded between Great Britain and Tonga on May 18, 1900, which was ratified on February 16, 1901. This treaty formally established British protection, and provided for the appointment of a British Agent and Consul to reside in Tonga and to be "the authorised "medium of communication between His Majesty's "Government and the Government of Tonga."[1] The protectorate was proclaimed on May 19, 1900, the day following the execution of the treaty.

[1] These treaties will be found in *The Law of the Government of Tonga*, 1907.

III. SOCIAL AND POLITICAL CONDITIONS

(1) General

The Governor of Fiji has almost from the first acted, though with increasing difficulty as the amount of work increased, as High Commissioner for, or Governor of, the island groups in the Western Pacific (other than Fiji) which are under British protectorate or are British territory; he also controls certain outlying islands. The office of High Commissioner for the Western Pacific was created by the Western Pacific Order in Council of 1877, passed under the Pacific Islanders Protection Acts of 1872 and 1875 and the Foreign Jurisdiction Acts. There have been various amending Orders in Council, but the principal Order still in force is the Pacific Order in Council, 1893. The High Commissioner's powers with regard to the New Hebrides (which are dealt with in No. 147 of this series) are defined by an Order in Council of November 2, 1907, following upon the Anglo-French Convention of October 20, 1906.

(2) Fiji

Fiji, whose capital was moved in 1882 from Levuka, in the island of Ovalau, to Suva, in Viti Levu, the largest island in the group, is a Crown colony, but not of the strictest type. There are two nominated unofficial members in the Executive Council, at present chosen from among the elected members of the Legislative Council; and the Legislative Council includes seven elected and two native members, in addition to (at the present time) eleven official members, exclusive of the Governor, and one nominated unofficial member.

The revenue in normal times shows a steady increase, and the colony is fully self-supporting. In ordinary municipal and judicial features Fiji is in line with other Crown colonies; but special provision has from the first been made for native administration and the safeguarding of native rights, the services of the chiefs and headmen being extensively used.

Primary village schools are mainly in the hands of the missionary bodies. There are two Government schools for the higher education of selected native boys. Suva and Levuka have municipal schools and school boards. At the 1911 census the natives were all returned as Christians; 85 per cent. of them as Methodists.

(3) The Gilbert and Ellice Islands Colony

The colony is administered by a Resident Commissioner acting under the instructions of the High Commissioner for the Western Pacific; and the High Commissioner, by the Order in Council of November 10, 1915, which annexed the Gilbert and Ellice groups, is empowered to make ordinances for the colony.

The natives are reported to have the utmost confidence in British rule, and also to have considerable capacity for self-government, the integrity of their native Assemblies having been guaranteed when the British protectorate was first proclaimed. They are of Polynesian race, but the type varies in the different groups.

Education is in the hands of the missionary bodies—Protestant missions of London and Boston, and the Roman Catholic mission of the Sacred Heart.

(4) The British Solomon Islands

In size, population, and possibilities the British Solomon Islands are, next to Fiji, the most important of the British Pacific groups. They are still the least

developed, the natives being of a fiercer type than in most of the Pacific Islands, and having had good cause to be suspicious of white men from experience of kidnapping. But their development has recently been marked and rapid.

The islands are administered by a Resident Commissioner, acting under the authority and control of the High Commissioner for the Western Pacific; and the High Commissioner legislates for the islands in the form of regulations under the Pacific Order in Council.

While the number of white men is increasing, the native population is stated to be decreasing through disease and inter-tribal fighting. They are a Melanesian race, still largely in a state of barbarism. A report, written in August 1915, stated that " some years must " elapse before complete control of the natives can be " brought about ";[1] and missionary efforts—the missionaries being mainly of the Melanesian Mission of the Church of England and Roman Catholics—have not as yet made Christianity dominant in the islands.

The two northernmost islands, Bougainville (the largest of the group) and Buka, were under German rule.

(5) The Tonga Islands Protectorate

The Tonga Islands Protectorate is based upon a definitive treaty with a recognised native authority—the King of Tonga; and the British Agent and Consul, who acts under the instructions of the High Commissioner, but who is not styled, as in other island groups, Resident Commissioner, is bound not to " interfere in " any way with the internal affairs and administration " in matters where the interests of British subjects " or foreigners are not concerned." This exemption from British control in ordinary home matters has been the cause of no little friction and difficulty, and has not made for good government.

[1] Report for 1914-15, No. 869, November 1915, p. 7.

The Constitution of Tonga is a limited monarchy. There is a Legislative Assembly, which was reformed at the end of 1914, so as to consist of 21 members in all, including 7 nobles elected by their peers, 7 elective representatives of the people, and 7 Ministers of the Crown. It meets annually. The previous Assembly comprised about 70 members, and, as a rule, met only once in three years.

The Tongans are a branch of the Polynesian race, more advanced in civilisation than almost any other Pacific Islanders. They are all Christians; and nine-tenths are Wesleyans, mainly belonging to "The Free Church of Tonga." The non-Wesleyans are nearly all Roman Catholics.

They are almost all able to read and write. Elementary education is given in Government primary schools —at the end of 1914 fifty-seven in number; and there is a Tonga College for higher education, in which prominence is given to the teaching of English.

(6) Miscellaneous Dependencies

There is a large number of miscellaneous small islands in the Pacific, which have become British in various ways—by settlement, annexation, protectorate, or the issue of leases or licences for, e.g., the copra industry or the collection of guano. Some are, many are not, within the jurisdiction of the High Commissioner for the Western Pacific.

Of the islands not under the jurisdiction of the High Commissioner, Norfolk Island and the Bird and Cato Islands are administered by the Commonwealth of Australia; Lord Howe Island by the State of New South Wales; the Cook Islands, Palmerston, Penrhyn, Suvarov, and Chatham Islands by the Dominion of New Zealand. Christmas, Fanning, and Penrhyn Islands were annexed to form stations for the purpose of laying the cable between Australia and Canada, but only Fanning is in actual occupation as such.

GENERAL OBSERVATIONS

Apart from the worth of Fiji as a most flourishing, healthy, and contented tropical dependency of Great Britain, Suva has a constantly growing value as a central harbour in the Pacific, a coal depot, a port of call for the ships plying between Canada and Australasia, and a station for the all-British submarine Pacific cable. There is every indication that the islands must grow in importance as Pacific trade is more and more developed; and the loyalty and patriotism of both white men and natives under British rule have been illustrated by the fighting and labour contingents which have been sent to the war in Europe.

IV. ECONOMIC CONDITIONS

I. DEPENDENCY OF THE STATE OF NEW SOUTH WALES

LORD HOWE ISLAND

(A) MEANS OF COMMUNICATION

Anchorages and Shipping

There are fair anchorages in moderate depth, but on account of foul ground and violent shifting gales, it is necessary to anchor according to the wind.

A five-weekly steamship service is provided by Burns, Philp & Co., under Government contract.

(B) INDUSTRY

Products and Land Tenure

The soil is rich and suitable for any sub-tropical vegetation. Potatoes and onions are a staple export, but the area of cultivable land is so small (only about 300 acres out of a total area of 3,220) that the only trade worth pushing is that in the Kentia palm. This palm is indigenous to the island, and will not, it seems, mature elsewhere. The seeds are bought by horticulturists for decorative purposes; about 2,000 bushels, at 45 to 55 shillings a bushel, are exported annually.

The inhabitants breed a few pigs, milch cattle, and goats. Fish are plentiful in the neighbouring waters.

All land is the property of the State. The people occupy it on sufferance, the Government reserving the right of resumption when it thinks fit.

II. DEPENDENCY OF THE COMMONWEALTH OF AUSTRALIA

NORFOLK ISLAND

(A) MEANS OF COMMUNICATION

(1) *Roads*

There is a good road system throughout the island, maintained by the Government. In 1915 the length of roads was about 40 miles.

(2) *Ports*

There is no sheltered anchorage, and landing is so difficult that steamers have sometimes been compelled to leave without unloading their mails. The two recognised places of landing are at *Kingston*, in Sydney Bay, on the south coast, and at *Cascade Bay* on the north. In both these cases ships have to lie half a mile out. At Kingston there is an opening in the reef. There is a small boat harbour with a stone wharf, and a pier with a hand-power derrick crane, lifting 3 tons. The surf is very heavy in south and south-westerly winds. At Cascade Bay there is a new concrete pier, with a line of steel rails to carry a travelling crane. In northerly winds landing is impracticable. A third jetty is to be erected in Ball Bay on the east coast.

It would be possible to construct a breakwater between Nepean Island and the mainland east of Sydney Bay, but the outlay would be considerable and would not be justifiable unless it were certain that the island is necessary as a coaling station for the Commonwealth.

(3) *Shipping Lines*

A steamer of Burns, Philp & Co. brings the mails from Sydney once in five weeks on its way to the New Hebrides and touches again at Norfolk Island on its return voyage. The missionary steamer "Southern Cross" conveys mails to Auckland twice a year.

(4) *Telegraphic and Wireless Communications*

The Pacific Cable Board has a station at Anson Bay on the north-west coast, where the "all red" cable from Great Britain *via* Vancouver and Fiji bifurcates, one branch going to New Zealand, the other to the Queensland coast.

The erection of a wireless station is under the consideration of the Commonwealth Navy Board.

(B) INDUSTRY

(1) Agriculture

Nearly the whole population of Norfolk Island is engaged in some form of agriculture. It is estimated that there are in the island 8,528 acres, of which 443 were under cultivation in 1914. In 1916 the amount of arable land had diminished to 259 acres.

(*a*) *Products of Commercial Value*

Cereals.—Maize is the chief crop; wheat and oats come next. It is reported that the local demand for grain is not sufficient to make its cultivation remunerative and there is a tendency amongst the inhabitants to replace such crops by fruit trees. Thus the area under maize diminished from 99 acres in 1914 to 69 in 1916, that under wheat and oats from 36 acres in 1914 to 10 in 1915.

Other Foodstuffs.—The cultivation of *kumaras* (sweet potatoes), potatoes, and yams tends to increase; these products are chiefly for local consumption. Coffee

is grown, and is of good quality, but it suffers from primitive methods of cultivation. The same may be said of arrowroot.

Fruit.—The lemon industry is by far the most important and profitable in the island, and is being rapidly extended. In 1916 there were exported 901 casks of lemon juice and 1,121 casks of peel, and in the same year an additional factory for preserving lemon peel was erected. Oranges of exceptional size and quality, bananas, passion fruit, guavas, and pineapples also flourish.

Live-stock.—At the end of 1915 there were in the island 713 horses, 1,637 cattle, 817 sheep, and 116 pigs, besides a considerable number of turkeys and poultry. A certain amount of hides, horsehair, and wool is exported to the Commonwealth.

(*b*) *Methods of Cultivation*

The island suffers from drought and from the slackness and conservatism of the inhabitants. The Melanesian Mission estate stands almost alone in the matter of progress. The Agricultural Department of the Commonwealth is now interesting itself in the island; it sends seeds and fertilizers, establishes demonstration plots, and tries to inculcate scientific agricultural methods.

(*c*) *Forestry*

The chief timber is afforded by the Norfolk Island pine (*Araucaria excelsis*) and the ironwood tree (*Olea apetala*), the former being used for building, the latter for fencing, piles, &c. The white oak flourishes; the wattle and eucalyptus have been introduced. The Government has now taken in hand a system of reafforestation and has established forest reserves at Rocky Point.

(*d*) *Land Tenure*

Of the 8,528 acres in the island, 5,426 were returned in 1916 as "alienated," 967 as reserves, 974 as Crown

leases, 856 as available for Crown leases, the remainder as roads, &c. The alienated lands chiefly represent free grants to the original Pitcairners. Since 1896 the system adopted has been to grant leases up to 25 years of not more than 25 acres, with tenant right in improvements, at small rents, usually 2½ per cent. on the capital value of the land.

(2) Fisheries

The waters round Norfolk Island abound in fish, especially in the edible trumpeter and the schnapper. The Pacific Fisheries and Trading Company, a new concern, has recently erected a freezing chamber and is arranging for the export of frozen and smoked fish.

Schools of whales, chiefly humpback, but occasionally sperm, visit the island every year. The whaling industry has decayed of late, partly owing to the fall in the price of whale oil. The industry is capable of revival and could be made very profitable if up-to-date methods were pursued and a steam tug were provided.

(C) COMMERCE

(1) *Exports*

The values of the exports from 1913–14 to 1916–17 were as follows:—

	£
1913–14	1,193
1914–15	4,000
1915–16	6,171
1916–17	8,799

Of the chief exports in 1914-15, lemon juice amounted in value to £1,795, passion fruit and pulp to £810, lemon peel to £438, and hides to £256. Other articles exported were coffee, oranges, *kumaras* (sweet potatoes) and potatoes, onions, horsehair, wool, and a little arrowroot.

Almost the whole of the exports go to the Commonwealth, where they are admitted duty free. Only a very small quantity goes to New Zealand (value in 1912, £166, in 1913, £197). With better shipping facilities and better harbour accommodation, combined with improved methods of cultivation, the exports, especially of fruit, could be considerably increased.

(2) *Imports*

The values of the imports from 1913-14 to 1916-17 were as follows:—

	£
1913–14	9,167
1914–15	12,119
1915–16	14,462
1916–17	16,694

The imports are almost wholly articles for domestic use, but details are not available. Of the total value of the imports in 1914-15, New South Wales contributed £10,679, New Zealand £554, and the United Kingdom £886.

(D) FINANCE

The revenue is almost wholly derived from import duties on ale, wines and spirits, tobacco, oil, and confectionery.

The currency is that of the Commonwealth. There are no banking facilities, and owing to the deficiency of cash in the island a complicated system of barter is in operation.

III. DEPENDENCIES OF THE DOMINION OF NEW ZEALAND

The islands immediately adjacent to New Zealand, of which the chief are the Chatham Islands, deserve only a passing notice. Richer and more important are the Cook and Hervey Islands, which will be

described in detail. The list of dependencies of New Zealand is completed by Niué or Savage Island, which is administered separately from the Cook group.

CHATHAM ISLANDS AND OTHERS ADJACENT TO NEW ZEALAND

Chatham Islands

At Whangaroa, or Port Hutt, there is an excellent harbour, sheltered from all winds. The islands have steamship communications at fairly regular intervals.

There is a wireless station on Chatham Island.

About one-third of the area is covered with forests, and the greater part of the remainder with grass and fern. The main occupations of the inhabitants are sheep-grazing and fishing. Wheat is cultivated, also English fruit and vegetables.

Auckland Island

There are several good harbours, that of Port Ross having been described as "one of the best harbours of refuge in the known world."

Sheep-rearing has been started on this island.

Campbell Island, Bounty Island, and the Antipodes Group

Campbell Island has two good harbours, and is used as a whaling station. It is uninhabited, as are Bounty Island (on which the fur seal still exists) and the Antipodes group. On nearly all these islands Government depots are established.

Kermadec Islands

Of these four islands, lying about half-way between New Zealand and the Tonga Islands, Raoul or Sunday Island is the chief. There are no harbours in the group. It is possible, however, to anchor off Raoul

Island, the side chosen depending on the wind; the best landing is on the north.

Several attempts have been made to form a settlement, but they have all failed, and the islands are at present uninhabited. The soil is naturally fertile, but there is little water. Some years ago, orange and lemon plantations were formed and bananas planted, but the want of shipping facilities caused this industry to be abandoned. Cattle and sheep were also raised, and some of the forests cleared for sheep-runs.

COOK AND HERVEY ISLANDS WITH NIUE OR SAVAGE ISLAND

(A) MEANS OF COMMUNICATION

Cook and Hervey Islands

(1) *Roads*

The absence of a proper road system has long been a hindrance to the development of these islands, and has prevented the opening up of the interior, where there is rich land pre-eminently suitable for growing bananas. The roads were formerly constructed and maintained by the natives under the corvée system. Recently the administration has taken them over, and has already effected great improvements.

(2) *Telephones*

A telephone system has been inaugurated at Avarua and will be extended to the neighbouring villages.

(3) *Ports*

The only two islands which are favourably situated for trade are Rarotonga and Aitutaki, which alone have boat passages through the reefs; on the fertile islands of Mangaia, Mauke and Atiu it is almost impossible even to land, except under favourable circumstances.

The chief port of Rarotonga is at Avarua, on the north side, where there is safe anchorage in 10 to 15 fathoms outside the reefs. There is a good boat passage into the harbour, which has a pier with a tramway and storehouses. There are also a pier and moorings for small vessels in the safe but confined harbour of Avatiu. At Ngatangua, on the east side of the island, there is also a small harbour, where small vessels are built.

There is no good anchorage off the two Hervey Islands, Manuai and Te Au-o-Tu.

(4) *Shipping Lines*

Communication with the islands is maintained by the ships of the Union Steamship Company, of New Zealand, which touch at the Cook Islands monthly on their way between Auckland and San Francisco. Better and more frequent means of communication are, however, urgently needed if the fruit trade with New Zealand and elsewhere is to be properly developed. At present, it is almost impossible to ensure that the fruit shall arrive at its destination in good condition.

(5) *Telegraphic and Wireless Communications*

There is no cable connection. According to the report for 1917 a wireless station was to be erected at Avarua, with subsidiary stations on the fruit-exporting islands of Mangaia, Mauki and Atiu.

Penrhyn or Tongareva Island

There is a good road system on this island.

Hitherto ships have had to anchor outside the lagoon, but a passage is now being made which will give a depth of 3 fathoms at low tide, and will afford accommodation inside to large vessels. The strong currents are, however, dangerous. The existing wharf is being enlarged. There are large storage tanks.

Suvarov Island

This island, or rather group of islands round a lagoon, has one of the best harbours in the Pacific. There is a good entrance to the lagoon, with a depth of 4½ fathoms. On the west side of Anchorage Island there is a pier at which small boats can be loaded with copra and pearl shell. The southern part of the lagoon is reserved by the Admiralty, and it has been suggested by Lord Ranfurly that a coaling station should be created. The island has the additional advantage of being outside the hurricane track.

Palmerston Island

There is no harbour. There is a boat passage into the lagoon and fair anchorage outside.

Pukapuka or Danger Islands

These islands lie outside the hurricane track, but they have no anchorage, and landing on them is almost impossible.

Nassau Island

The anchorage off this island is bad, and landing is difficult.

Manahiki Island

There is no safe anchorage off this island at any time. It has communication with Tonga about five times a year by schooner or mission steamer.

Rakahanga Island

There is poor anchorage and bad landing.

Niué or Savage Island

The island has a good road system. All the villages are connected by roads, usually 16 ft. in width.

There is a fair anchorage in Alofi bay and a boat passage through the reef to Alofi, the seat of administration, where there is a wharf.

A subsidized schooner makes a voyage six times a year, starting from Auckland. But a far better steamship service is absolutely necessary for the development of the fruit trade in Niué, especially the trade in bananas. Better landing facilities are also necessary.

(B) INDUSTRY

Cook and Hervey Islands

(1) Labour

The labour problem has not hitherto been so acute as in other Pacific groups, though most of the islands could support a larger population than they possess. The number of Europeans in Rarotonga engaged in planting was in 1917 not more than 12, and it is reported that it is becoming increasingly difficult for settlers to obtain leases of land. The tendency of wages in Rarotonga is to increase, and this inducement, together with the fact that there is a picture-palace on the island, serves to attract natives to Rarotonga, to the detriment of the other islands.

(2) Agriculture

(*a*) *Products of Commercial Value*

Apart from the growing of foodstuffs such as *kumaras* and *taro* for home consumption, the sole occupations of the people are the preparation of copra and the growing of fruit and vegetables for the New Zealand market. The latter industry might be greatly developed.

Coffee of excellent quality is grown at Mangaia Island and elsewhere.

Copra.—The supply of copra and coconuts could be largely increased. In 1902 it was calculated that with proper care the production of copra in the dependencies of New Zealand could be raised from 2,000 to 10,000 tons per year. The islands of Manuai

and Te Au-o-Tu, which were leased for 25 years in 1898 to the Cook Islands Trading Company, supply a considerable amount of copra.

Fruit and Vegetables.—The soil is admirably suited for *bananas*, which form the crop next in importance to coconuts, but there is a tendency to abandon their cultivation in favour of the more profitable vegetable industry. The cultivation of *tomatoes* has greatly developed of recent years, and is at present the most promising industry. *Oranges* and *pineapples* are exported in considerable quantities. Almost all kinds of tropical and semi-tropical fruits could be grown, such as the lemon, the lime, the kumquat, the honey mango, the custard apple, and, if the swamps were drained, the papaw.

Vanilla, arrowroot and *candlenuts* flourish, though they do not yet figure in the list of exports.

A *live-stock* department was formed a few years ago, but the experiment proved a failure, and the stock was disposed of. There are a few horses and cattle at Rarotonga, and pigs and poultry on all of the islands.

There is plenty of *bêche-de-mer* in the lagoon of Aitutaki.

(*b*) *Methods of Cultivation*

In Rarotonga an ordinance has lately been passed requiring all native planters to clear and plant their own uncultivated lands.

A simple system of irrigation, which could be inaugurated at small expense, is much needed. Better methods of cultivation are necessary, especially in the plantations of lime-trees and coffee. The Government has at Pua-au on Rarotonga an experimental nursery in which specimen trees, &c., are grown, and demonstrations in pruning and the use of fertilizers are given. In view of the fact that 90 per cent. of the native boys are destined to become planters, an agricultural class has been opened, and scholarships are offered tenable at New Zealand schools.

(c) *Land Tenure*

All the land belongs to the natives, who may not alienate their holdings. No lease may be made for more than 60 years. The chief difficulty regarding leases has been insecurity of title, but a Native Land Court now deals with this question. An increase in the number of European settlers is urgently needed for the proper development of the islands, but, as has been said above, such settlers find it more and more difficult to lease land.

(3) Manufacture

An effort is being made to revive the hat-making industry. The Panama plant has been introduced, and it is hoped that this will be acclimatised.

Penrhyn or Tongareva Island

Coconuts and bananas are grown, and the export of copra amounts to some 100 tons a year.

The island is noted chiefly for its pearl shell. The export (as also that of copra) has lately fallen off, now amounting to under 30 tons per annum, the value being from £100 to £200 a ton.

Suvarov Island

This island is at present uninhabited, but its soil is fertile, and it should be able to support a small population, especially if adequate water storage were provided. "As a depot for the collection of trade from the various islands, it should in time be valuable."

At present its chief value arises from its pearl shell beds. It is estimated that one machine alone could obtain 40 to 45 tons a year. The island was originally leased to Lever Brothers, who were developing this industry. The New Zealand Government has now leased it to Captain Harries of Rarotonga.

Palmerston Island

The soil is fertile and a certain amount of copra is produced. There is no pearl shell at present, but it would be possible to introduce spawn.

Pukapuka or Danger Islands

A fair amount of copra and pearl shell is obtained.

Nassau Island

The island is fertile and could be developed. It produces coconuts, bananas, bread-fruit, *taro* and limes. It is leased to the Samoan Shipping and Trading Company.

Manahiki Island

The island produces a poor quality of copra (135 tons in 1902) and *bêche-de-mer*. Its chief value, however, lies in its pearl shell deposits, which are of vast extent.

Rakahanga Island

The export of copra in 1902 was 160 tons. There appears to be no pearl shell.

Niué or Savage Island

(1) Labour

Although there is plenty of undeveloped land in Niué Island itself, no difficulty is experienced in recruiting natives from it for work in Tonga and on Malden Island. " There is no hope," wrote the Resident Commissioner a few years ago, " of increasing the production of the island so long as it is the labour market for the Pacific." This emigration is ascribed by Sir Basil Thomson to travellers' stories. "The young men return with fascinating tales of the emancipation of foreign lands, where men get drunk and swear and break the Sabbath with impunity."

(2) Agriculture

(a) *Products of Commercial Value*

In 1904 it was calculated that only 20 per cent. of the land was under cultivation. A further 15 per cent. was too rocky, but the remaining waste was suitable for cultivation.

At present nearly all the cultivated land, apart from that under yams, *kumaras*, and *taro*, is under coconuts. The island is, however, capable of producing many other valuable crops. It would be possible to build up a fruit trade. Arrowroot, coffee, and vanilla grow well, and experiments in cotton-growing have proved successful.

(b) *Forestry*

There is a great deal of valuable timber, including some ebony and other hard woods, but the present difficulties of transit make it doubtful whether felling would be profitable.

(c) *Land Tenure*

The land is all the property of the natives, who are described as suspicious and avaricious. The progress of the island depends to a great extent on the initiation of a system of leases. The question of title appears to be unusually complicated, and leads to endless dispute and robbery.

(3) Manufacture

The natives are expert straw-plaiters, and the manufacture of hats, both for domestic use and for export, is the chief industry.

(C) COMMERCE

Cook and Hervey Islands

(1) *Exports*

The exports from the Cook and Hervey Islands consist almost wholly of fruit, copra, vegetables, and

pearl shell. The following table shows the values of the exports in the years 1911-14 :—

	1911.	1912.	1913.	1914.
	£	£	£	£
Bananas	24,907	33,200	35,700	28,939
Coconuts..	2,952	2,881	2,893	2,779
Coffee	430	1,950	970	877
Copra	31,151	26,276	33,679	14,630
Kumaras and *taro*.. ..	—	—	510	145
Oranges	19,922	16,060	16,852	18,790
Pearl shell ..	150	10,520	8,280	1,350
Pineapples	239	501	270	460
Tomatoes	—	—	—	600
Miscellaneous	11,325	10,320	10,772	8,942
Total	91,076	101,708	109,926	77,512

In 1913 the United Kingdom took the whole of the pearl shell and 66·6 per cent. of the copra; the United States took 33·3 per cent. of the copra and 83·3 per cent. of the coconuts. The remainder of the products, amounting to 60 per cent. of the whole, went to New Zealand. Since the annexation of the islands by New Zealand, their products have been admitted into the Dominion duty free.

(2) *Imports*

The imports consist mainly of foodstuffs and clothing. The following table shows their values in the years 1911-14:—

	1911.	1912.	1913.	1914.
	£	£	£	£
Apparel and drapery ..	3,816	4,174	3,395	2,422
Biscuits	3,832	4,313	4,967	5,133
Cotton piece-goods ..	7,535	6,142	8,388	7,213
Flour	3,748	3,441	4,247	4,036

	1911.	1912.	1913.	1914.
	£	£	£	£
Hardware	2,044	2,301	2,999	2,048
Meats	5,197	8,188	9,427	9,161
Provisions	1,927	2,614	4,968	2,423
Sugar	2,326	7,916	2,910	3,446
Miscellaneous	59,198	54,723	68,982	55,250
Total	89,623	93,812	110,283	91,132

The following return shows the sources from which the imports came:—

	1911.	1912.	1913.	1914.
	£	£	£	£
New Zealand	66,787	73,704	83,096	64,852
United Kingdom	8,244	7,526	9,888	10,994
United States of America ..	7,654	5,623	9,846	10,586
Tahiti	3,379	3,002	3,244	1,490
New South Wales.. ..	1,757	1,603	2,754	1,792
Germany	608	1,081	148	65
Japan	453	288	141	245
Victoria	224	281	185	184
France	238	24	33	43
Other countries	279	680	948	881

It will be noticed that in 1913 about 75 per cent. came from New Zealand. The United Kingdom and the United States came next, with about 10 per cent. each, the former supplying about 50 per cent. of the cotton piece-goods, the latter about 60 per cent. of the flour, oils, and rice. Germany's trade was still only small; it consisted of fancy goods, hardware, and matches.

Niué or Savage Island

(1) *Exports*

The exports in 1915 amounted to £8,130; in 1916 to £3,179. They consist chiefly of copra, which amounted

in value in 1915 to £4,774, and in 1916 to £1,196; edible fungus, whose value in 1916 was £1,297; and hats, which amounted in value to £2,957 in 1915, and to £600 in 1916.

All the exports went to New Zealand,[1] where they are admitted duty free.

(2) *Imports*

In 1915 the imports amounted in value to £9,678; in 1916 to £9,512. They include necessaries, such as axes, knives, umbrellas, looking-glasses, prints and sewing-machines, and luxuries, especially pipes, plug tobacco, and cheap scents. In 1916 New Zealand provided goods to the value of £8,934, and Australia goods to the value of £449. In 1913, out of a total of £13,761, the imports from German Samoa were worth £844, and those from Germany itself £196, consisting chiefly of drapery, silks, and matches.

(D) FINANCE

Cook and Hervey Islands

(1) *Public Finance*

The revenue and expenditure of the Cook and Hervey Islands from 1913 to 1917 were as follows:—

Year.	Revenue.	Expenditure.
	£	£
1912–13	9,420	11,508
1913–14	11,723	10,194
1914–15 . ..	10,118	10,617
1915–16	7,673	9,081
1916–17 .. .	9,710	8,586

[1] Where reference is made to dates subsequent to 1914, German Samoa is reckoned as part of New Zealand. It formerly took about one-third of the exports of Niué.

In 1916–17 the chief heads of revenue were Customs duties, value £5,716; fruit export tax, value £932; and postage stamps, value £711. The people may be said to live practically tax free, except for Customs duties, and even from those produce intended for New Zealand is exempt.

(2) *Currency and Banking*

The currency is that of the Dominion. There is a Government Savings Bank. The deposits made in 1916 amounted to £2,081, and the withdrawals to £760.

Niué or Savage Island

The revenue of Niué in 1916 amounted to £2,067, and the expenditure to £1,747. The revenue was derived from Customs (£1,247), licences, and fees.

IV. THE SOLOMON ISLANDS PROTECTORATE

SOLOMON ISLANDS

(A) MEANS OF COMMUNICATION

(1) *Roads*

The road system of the Protectorate is undeveloped. Except in the immediate vicinity of the administrative headquarters, internal communications consist chiefly of native tracks. The Germans ran a road right round the island of Bougainville, with branches inland where necessary. It is probable that a similar system will one day be possible in most of the British Solomon Islands.

(2) *Rivers*

The large islands have many streams, most of which have navigable stretches, especially those on the north of Guadalcanal.

(3) *Ports*

There are three ports of entry in the Protectorate, namely. Tulagi, on the south coast of Florida; Gizo, in

the New Georgia group; and Shortland Harbour, on the small island of that name in the straits which separate Choiseul from Bougainville.

Tulagi is the most important of these. It is the seat of the Resident Commissioner, and the chief port of call. There is secure anchorage in 19 to 21 fathoms, a landing pier, and a slip capable of taking small vessels up to 100 ft. in length.

Gizo is one of the best harbours in the Protectorate, and the island is one of the healthiest of the group. It has a Government station, residency, &c.

Shortland Harbour has a residency and a pier.

Besides the ports of entry, the Protectorate has a large number of good harbours, many of which have not yet been adequately surveyed. The more important are *Star Harbour*, in San Cristoval, which gives excellent shelter in all seasons; *Makira Bay*, in Maoraha Island, described as one of the best and safest harbours in the group; *Royalist Harbour* on the west and *Port Diamond* on the east coast of Malaita; *Gavuta*, on the coast of Florida, south-east of Tulagi, with a pier; *Danae Bay*, on the east coast of Guadalcanal, with a small stone jetty; a good landing place with a pier at *Crawford Island*; *Vulava*, on the south coast of Ysabel, an island which has numerous good harbours; and *Choiseul Bay*, at the west end of Choiseul.

Of the outlying islands, Liueniua has several ship passages into the lagoon, of which the deepest is reported to have 6 fathoms of water. The Stewart Islands, Rennell and Bellona Islands have no anchorages.

(4) *Shipping Lines*

A direct service between Sydney and Tulagi is maintained by the steamers of Burns, Philp & Co., aided by a subsidy from the Commonwealth Government. A steamer leaves Sydney every six weeks, and takes about 8 days to reach Tulagi. The Gilbert Islands steamers.

belonging to the same firm, make about six trips a year, calling at Tulagi going and coming with mails but not with cargo. A steamer belonging to Lever Brothers leaves Sydney every 11 weeks direct for the Solomon Islands, and the same firm has two small steamers working among the islands. Thus a service amounting, roughly, to one vessel every three weeks is provided with Sydney, while connection with the various islands and others outlying is maintained by small steamers and auxiliary vessels. The whole trade of the Protectorate before the war was, therefore, with Sydney; but there was a probability that the Norddeutscher Lloyd would extend its operations to the British Solomons, and, by offering low freight charges, divert much of the trade to Rabaul and Singapore (see also p. 102). It might be desirable to extend the existing services to China, especially for the sake of the rice trade, for rice is the chief exotic food of labourers in the Solomons.

The following table shows the shipping which entered the ports of the Solomon Islands in the years 1910-11 to 1915-16[1]:—

Year.	British.		Foreign.	
	Number	Tonnage.	Number.	Tonnage.
1910–11 ..	36	26,509	8	236
1911–12 ..	66	25,588	17	236
1912–13 ..	55	27,500	13	239
1913–14 ..	66	28,812	22	409
1914–15 ..	38	30,407	1	87
1915–16 ..	54	25,847	3	194

(5) *Telegraphic and Wireless Communications*

There is no cable connection.

A Government wireless station was erected at Tulagi in 1914.

[1] Each year ending on March 31.

(B) INDUSTRY

(1) Labour

The problem of labour supply is more serious in the Solomon Islands than in any other of the Pacific groups. The native population, always insufficient in numbers, is decreasing, and no method of replacing it has yet been devised. The islands were for many years a favourite recruiting-ground both for Queensland and Fiji, but recruiting for the former has ceased since 1903, and for the latter since 1910. At present, the only source of labour supply is the Protectorate itself. The Indian Government rejected the proposal of Lever Brothers, the largest employers in the islands, to procure labourers from India, and attempts to introduce Chinese and Javanese have proved unsuccessful. One Australian authority considers that the Bismarck Archipelago might furnish a sufficient supply, but this appears to be doubtful. The islands are wholly unsuitable for white labour.

The natives work on the plantations on the indenture system. The term of employment is for two years for males over 16 years of age, the minimum wage being £6 a year for unskilled, £12 for more experienced, and £24 to £36 for really skilled men, housing, food, and clothing being provided. The supply of labour is hopelessly inadequate. At present, the number of these indentured labourers is something under 4,000, and this is apparently considered as the maximum available locally, apart from an uncertain supply of monthly labourers who are able to leave at will. This number is barely sufficient to cultivate the existing coconut plantations, much less to allow of their extension or of the development of other industries. Rubber requires one "boy" to two acres, and tobacco needs skilled labour, and neither of these industries can be undertaken in existing circumstances. It must be added that the inhabitants, having enough, or more than

enough, for their needs, on the whole find little inducement to engage in any industrial work.

(2) Agriculture

(a) *Products of Commercial Value*

Cereals.—Maize is grown on the rich alluvial flats on the north coast of Guadalcanal, and figures to a small extent in the list of exports, but in view of the demands of the copra industry it is doubtful whether it will ever be extensively cultivated. Rice has been grown successfully, and should prove profitable for local use, in view of the increasing scarcity and cost of native food.

Cocoa.—The islands are suitable for the growth of cocoa. Just before the war, the Germans were beginning to ship excellent cocoa from Bougainville.

Copra.—The fertility of the soil and the fact that hurricanes and droughts are unknown bid fair to make the Solomon Islands in time the largest producers of copra in the whole of the South Pacific. Moreover, coconuts do not require the same amount of skilled labour as, for instance, rubber or cotton, and therefore the labour difficulty is less serious. There is no sign of increase in the production of copra by the natives from their own trees; the future of the industry depends, therefore, on European plantations, the number of which is increasing year by year. More than 20 companies, of which Lever Brothers are by far the most important, are engaged in the industry, and in 1913 over 25,000 acres were planted, a figure which has since been considerably increased. The export of copra 10 years ago was only about 3,000 tons, but has now risen to over 6,000, and it is estimated that, given an adequate labour supply, this amount ought to be trebled in the course of the next 10 years. If this forecast were realized it would be profitable to have oil-crushing plant in the islands themselves. Although the heavy rainfall prevents the production in the

islands of copra of the very highest quality (copra dried by smoke or hot air being inferior to that dried in the sun), the product is said to be nearly as good as that of Ceylon.

Cotton.—Plantations of cotton were formed some years ago on the north coast of Guadalcanal, where it was grown partly in connection with coconuts. Samples described as of a good useful character but rather coarse sold at Manchester in 1910 for 1*s.* to 1*s.* 2*d.* per lb. But scarcity of labour has caused cotton cultivation to be practically abandoned for the present.

Fibres.—The climate seems to be too damp for the successful production of sisal hemp, but specimens of the *Musa textilis* have grown well, and a market for this might be found in Australia.

Fruit.—As the islands are not subject to hurricanes, they are admirably suited for the growing of fruit, especially bananas. Bananas from the Solomons fetch the highest price in the Sydney market. They can be grown separately or among the young coconuts. At present, however, the industry is in its infancy, and difficulties of shipment confine it to a few places in the neighbourhood of Tulagi. Many other tropical fruits flourish, such as bread-fruit, jack-fruit, papaws, mangoes, and the Solomon Island almond or Kanary nut.

Ivory nuts.—These nuts of the sago palm (*Sagus amicarum* or *metroxylon*) are used extensively in Germany as a substitute for bone or ivory in button-making, but their value for this purpose was almost wholly overlooked by British manufacturers. There is an almost inexhaustible supply in the islands of these palms, which grow wild in swampy land unsuited to other products. As the trees take 20 years to bear and fashion may change in the meantime, they are not worth planting for the sake of the nuts alone, but the pith might prove a valuable source of starch.

Oil-producing Plants.—The climate and soil are favourable to the growth of soya beans and ground-nuts. Lever Brothers have imported palm seeds from

Africa, and started a nursery, with the object of producing palm kernels. If successful, they will form plantations and set up machinery to extract palm oil.

Resin.—Specimens of copal resin have been sent to the Imperial Institute for examination.

Rubber.—Many thousands of acres of forest land are available for rubber, and the climate is favourable. Lever Brothers planted a few acres as an experiment, and in 1913 rubber appeared in the list of exports for the first time. Owing to the labour difficulty, the industry is now at a standstill.

Sugar.—A large amount of land is suitable for this crop if capital and labour were available.

Tobacco.—Experiments in growing tobacco gave very good results, but cultivation was abandoned on account of the difficulty of obtaining labour.

Vanilla would grow well, but it is a risky crop in an unhealthy climate, because skilled white labour is necessary.

Live-stock.—The islands are reported to be well suited for the raising of cattle. Many planters keep herds grazing among the coconuts, thus saving labour in clearing the undergrowth. Lever Brothers keep 3,300 head of cattle for this purpose. The cattle industry could be extended, as there are good grazing grounds in most of the islands. Whether sheep would do equally well appears doubtful. On the one hand it has been asserted that they have been a failure; on the other, that they would flourish on the uplands, and that specimens of wool from the islands have astonished wool experts. Pigs are very profitable.

(*b*) *Forestry*

There is a great deal of valuable timber in the Protectorate, but so far only spasmodic attempts have been made to put it on the Sydney market. Arrangements had been made to export the timber of the *dilo* (*Calophyllum inophyllum*) for furniture-making, but the Sydney buyers subsequently cancelled the order.

There is an inexhaustible supply of this tree, as also of one allied to the New Zealand *kauri* and of the *Afzelia bijuga;* the latter is very valuable for sleepers and wharf piles, since it is impervious to white ants. If saw-mills were established on the islands, the timber could be used locally and heavy freight charges saved. One small saw-mill exists already on Guadalcanal.

(*c*) *Land Tenure*

It is estimated that there are about 9,500,000 acres on the islands. Before the Protectorate was established many abuses were prevalent, because white men obtained large tracts of land from natives for a nominal sum without proper enquiry into questions of title. Adjudication is still being made upon claims connected with such purchases. The next stage was to allow land to be purchased from natives in fee simple, after due investigation and with the sanction of the High Commissioner. About 170,000 acres appear to have been disposed of in this way.

Since the year 1912, the High Commissioner has withheld his sanction from any private purchase of land, but leases are granted by the Government, which either purchases land from the natives or leases it on their behalf, retaining 10 per cent. of the rent as commission. Land for agricultural purposes is granted on the basis of a 99 years' lease, at a rent of 3*d*. per acre for the first five years, 6*d*. for the second five, and so on, with the condition that one-tenth must be cultivated within five years, on pain of forfeiture. In 1912 about 240,000 acres of waste or vacant land were held on occupation licence, 18,110 acres had been purchased by the Government and leased to Europeans, and 980 acres had been leased by natives to Europeans.

The effect of these regulations is to make the Government the real owner of the land, the native being allowed ownership only when he can establish a right to land which he effectively occupies.

The leasehold system at present prevailing would appear to be unpopular with the planters, who urge that it discourages settlement and the investment of capital, and that they would prefer the freehold system which obtains in the late German colonies in the Pacific.

(3) Fisheries

There is abundance of fish in the waters round the islands. Sponges of an inferior quality are found around Santa Ana and San Cristoval.

A fair amount of trepang (*bêche-de-mer* or *Holothuria edulis*) is bought by the traders and exported exclusively to China. That of the Rubiana lagoon is of good quality, but better methods of curing are necessary.

There is a considerable quantity of pearl shell round the islands, both of the more valuable gold-lip variety, in the deeper waters, and of the cheaper black-edged type. The best comes from the Manning Straits, between the islands of Choiseul and Ysabel. Turtle shell is obtained chiefly from the New Georgia group and from Ysabel, where turtles swarm. Green snail shell, which is used for button-making, is found in large quantities, and a regular market is forming. *Trochus* and other shells used for similar purposes abound. A market might be found for them in France, and one exists already in Japan.

(4) Minerals

The accounts of the mineral products of the Protectorate are conflicting.

A small seam of *coal* has been reported in Guadalcanal. Reports of rich deposits of *copper* on Rendova Island have been shown to be false. Traces of *gold* and *silver* have been found in San Cristoval and in Ysabel, but it is very doubtful whether paying quantities exist. *Stream tin*, *hæmatite*, and *arsenical*, *iron* and *copper pyrites* have been found in San Cristoval.

A Melbourne syndicate was granted a concession a few years ago to collect *sulphur* in the island of Vella Lavella.

(C) COMMERCE

(1) *Foreign Interests*

Trade before the war was mostly in British hands, the foreign-made goods required being cheap articles for native trade, imported for the most part through Sydney. The chief German goods imported were cotton goods, cheap clothing, rugs and blankets, glass-ware, hollow and enamel ware, beads, perfumery and musical instruments. Of German firms settled in the Protectorate, the chief was that of Hernsheim & Co., which had its headquarters at Hamburg and possessed many plantations in the German colonies. This firm had established a depot at Guadalcanal and had two auxiliary schooners trading in coconuts, ivory nuts and pearl shell. The intention seems to have been to develop German interests until it was worth while for the Norddeutscher Lloyd to extend its operations to the Protectorate. The Bismarck Archipel Gesellschaft, which had plantations on Bougainville, would also, had it not been for the war, have extended its activities to the British Solomons. The German firm of Justus Scharff & Co., Sydney, did considerable business with the islands. It dealt largely in German goods, and acted as agent for all the big firms on the German islands except the Neu-Guinea Kompagnie.

Since the outbreak of war, small parties of Japanese and Japanese vessels have visited the islands. It is reported that one company obtained a lease of land at Tulagi, but found the competition too severe. As yet the Japanese have not secured a permanent footing in the islands.

(2) *Exports*

The exports, by reason of the shortage of labour, consist almost wholly of copra, ivory nuts, and shell of

various kinds. The following table shows the values of the exports in the years 1910-11 to 1912-13[1]:—

	1910–11	1911–12	1912–13
	£	£	£
Bananas	583	1,310	925
Coconuts	185	614	1,083
Copra	68,999	55,953	73,637
Cotton and cotton seed	737	847	491
General merchandise	928	1,486	2,382
Hardware and drapery	300	947	701
Ivory nuts	13,137	20,553	20,119
Maize	450	129	21
Pearl shell	207	1,574	5,081
Timber	41	1,658	1,751
Trochus and green snail shell	2,522	2,577	2,656
Turtle shell	725	1,416	1,006
Miscellaneous	77	170	68
Total	88,891	89,234	109,921

The destination of practically all these goods is Australia, with the exception of ivory nuts, which used to be collected for the German market (see p. 63). New Zealand receives only a negligible quantity of the products of the Protectorate.

(3) *Imports*

The imports consist chiefly of clothing, foodstuffs and tobacco. They have quadrupled in value in the last 10 years. The following table shows the values of the imports in the years 1910-11 to 1912-13[1]:—

	1910–11	1911–12	1912–13
	£	£	£
Boats, &c.	6,499	5,295	4,921
Drapery	15,089	14,267	13,360
Foodstuffs	17,693	25,392	24,568
Hardware	4,455	8,350	11,521
Timber	2,953	4,343	5,405
Miscellaneous	56,458	72,372	71,986
Total	103,147	130,019	131,761

[1] Each year ending on March 31.

Practically all come from Australia. In 1914-15, out of a total value of £133,062, no less than £107,762 was sent from Australia, of which £43,412 represented Australian produce, and the remainder represented European goods trans-shipped.

(4) *Customs and Tariffs*

The latest tariff is defined by the proclamation of January 19, 1916, in the Western Pacific High Commissioner's Gazette. It consists of import duties on beer, spirits, &c., tobacco, cartridges, rifles, &c., and jewellery. Animals, meats, biscuits, drugs, machinery, manures, &c., are admitted duty free. There are complaints on the part of the traders that this new tariff discourages pioneering work. The tariff is, however, to a great extent a war measure, and is intended *inter alia* to check the native passion for jewellery.

(D) FINANCE

(1) *Public Finance*

The revenue and expenditure of the Protectorate for the years 1910-11 to 1915-16 were as follows:—

Year.	Revenue.	Expenditure.
	£	£
1910–1911	14,130	9,493
1911–1912	16,040	22,639
1912–1913	15,432	16,503
1913–1914	24,520	18,565
1914–1915	22,646	23,146
1915–1916	22,006	26,426

The expenditure for 1911-12 included £9,026 spent on the purchase of a Government steamer, and the totals for 1914-15 and 1915-16 included part of the cost of a wireless station.

The budget details for 1912-13, which are the latest available, were as follows:—

Revenue.	£	Expenditure.	£
Customs	10,415	High Commissioner's Dept.	226
Licences, &c.	1,691	Resident Commissioner's Dept...	2,288
Fees, &c.	328	Postal Dept.	108
Post Office	1,107	Treasury and Customs..	665
Rent of Government Property	885	Audit Dept.	42
Land Sales	17	Port and Marine Dept.	93
Miscellaneous ..	989	Native Labour.. ..	364
		District Administration	1,634
		Police	1,676
		Prisons	40
		Medical Dept.	569
		Government Steamer ..	4,340
		Transport Dept. (extraordinary)	461
		Survey	262
		Public Works (recurrent)	302
		Public Works (extraordinary)	2,100
		Purchase of Land ..	1,306
		Miscellaneous	27
Total ..	£15,432	Total ..	£16,503

(2) *Currency and Banking*

The currency is that of the Commonwealth.

There are no banking facilities at present, but the great commercial firms, such as Lever Brothers, are very anxious that such facilities should be established.

SANTA CRUZ ISLANDS

(A) MEANS OF COMMUNICATION

Ports and Shipping

Graciosa Bay, on the north-west of Santa Cruz or Ndeni Island, is one of the best harbours in the

Pacific. It is about 3½ miles long and 1½ broad, well protected, and with good holding ground. There is a good but small harbour at *Manevai Bay*, in Vanikolo Island. It is possible that further surveys will prove that *Basilisk Harbour* in Utupua is a good harbour. There are several anchorages for small vessels, but landing on the open coast is usually difficult. The anchorages at *Tikopia* and at *Anuda* are poor. Shipping communications are infrequent and uncertain.

(B) INDUSTRY

The islands are at present almost wholly undeveloped. The natives grow their own foodstuffs, such as yams and *taro*, and cultivate a fair number of coconut palms. Bananas, bread-fruit, and tropical fruits generally would do well. There is plenty of fish. *Bêche-de-mer* is found and turtles exist in considerable numbers. The natives display great skill in the building of canoes and the manufacture of fine mats on a simple form of loom.

A peculiar feature of these islands is the use of feather money, "the fine breast feathers of a small bird, stuck together to form plates, which are fastened to a strip of sinnet, so that a long ribbon of scarlet feathers is obtained." These rolls are very valuable because so few feathers can be obtained from each bird. It is stated that a single roll will buy a woman.

V. THE GILBERT AND ELLICE ISLANDS COLONY

GILBERT AND ELLICE ISLANDS

(A) MEANS OF COMMUNICATION

(1) *Roads*

There is a good road system throughout the groups. In 1915 it was reported that the colony contained 200 miles of good roads, varying in breadth from 12 to 14

feet, constructed of *riburibu* or reef mud, and fit for motor bicycle traffic. These roads run the whole length of the islands on the lagoon side, or, where there are no lagoons, above the western beaches. The upkeep of the roads costs nothing, for they are made and mended by natives during the 78 days per annum which all male natives over the age of sixteen have to devote to communal work.

(2) *Posts, Telegraphs, and Telephones*

The postal centre is at Ocean Island, with local centres at Tarawa, Abemama, and Beru in the Gilberts and Funafuti in the Ellice group. A money order system has been established for some years, and a postal order system was inaugurated in 1916. It is reported that the natives eagerly avail themselves of the facilities thus afforded. There is no telegraphic system, but in 1915 there were four miles of telephone wires.

(3) *Ports*

The conditions of landing in the different islands vary greatly. "Some islands have lagoons containing anchorages, while others have neither lagoons nor anchorages and are surf-bound." Landing on many of the islands is almost impossible in a west wind, and in any case it is a lengthy operation; at some islands the ship anchors 6 or 7 miles off the land, and it takes 4½ hours to get ashore.

In the Gilberts the two ports of entry are Tarawa and Butaritari. The best anchorage is at *Tarawa*, where there is a good passage through the reef, 4½ fathoms in depth, and secure anchorage in the lagoon. *Nonouti* has a ship entrance into the lagoon, but the channel is very intricate. *Abaiang*, *Abemama*, and *Butaritari* have also good passages for ships drawing 15 feet or less. The remainder of the islands have bad anchorages or none at all.

In the Ellice group there is only one good harbour, at *Funafuti*. This has secure anchorage up to 29

fathoms inside the lagoon and several entrances, of which the best has a depth of 4½ fathoms. *Niurakita*, *Nukulailai*, and *Vaitupu* have fair anchorages outside the reef, but landing is in all cases difficult. *Nukufetau*, the administrative headquarters, has an anchorage inside the lagoon.

At *Ocean Island*, the administrative headquarters for both groups, there is no anchorage for large vessels, but moorings are laid down in Howes Bay.

(4) *Shipping Lines*

The only important shipping firm which trades with these islands is that of Burns, Philp & Co. This firm provides a subsidized mail service twice a month to Sydney. The trunk steamer calls at Ocean Island for mails and passengers and connects at Tarawa or Butaritari with the local steamer of the same firm, which conveys mails once in two months throughout the Gilbert and Ellice groups.

Australian mails are also carried by chartered steamers of the Pacific Phosphate Company. Direct communication between Ocean Island and London *via* the Siberian Railway was possible at irregular intervals by steamers of the same company trading with Japan. The Houlder Line of Sydney used to run a steamer every three weeks to Danzig, carrying phosphate.

The Samoa Shipping and Trading Company (a Sydney firm, whose headquarters have recently been transferred from Samoa to Funafuti) have a small steamer which runs five or six times a year between the Union and Ellice groups. On Chong & Co., a Chinese firm at Sydney, also have a small steamer which visits the groups to collect copra and other produce.

Before the war the German Jaluit Gesellschaft had a motor schooner connecting its headquarters at Jaluit, in the Marshall Islands, with the Gilberts.

(5) *Cable and Wireless Communications*

There is no cable communication.

A high-power wireless station was opened on Ocean Island in May, 1916. The rates are reported to be rather high, as traffic is charged on the international scale, the installation being outside the Commonwealth wireless extension system.

(B) INDUSTRY

(1) Labour

The labour supply in this colony may be regarded as adequate, at any rate, in comparison with other Pacific groups. Most of the islands are fully populated, one or two of the central Gilberts forming the only exceptions.

From about 1865 to 1885 the group was a favourite recruiting area, but the greater part of such recruiting has now been stopped. The Pacific Phosphate Company is allowed, under the control of the Resident Commissioner, to recruit 200-300 natives yearly to work its deposits on Ocean and Nauru Islands. The indentures are for a period of from 12 to 18 months, with a possible extension of another 18 months; the hours, wages, &c., are provided for by King's Regulations No. 1 of 1915. Further, a limited number of Gilbert Islanders are recruited for plantation work on Fanning Island and Washington Island. The people are, on the whole, too well off to desire to emigrate. There are no openings for white labour, except in the employment of the Pacific Phosphate Company at Ocean Island.

It is to be hoped the missionaries, who have entire control of education, will introduce industrial training, especially blacksmiths' work, boat-repairing, &c., and instruction in agriculture. The London Missionary Society conducts a central training school on advanced lines in Beru Island (Southern Gilberts).

(2) Agriculture

(a) *Products of Commercial Value*

Copra.—"The financial future," wrote the Resident Commissioner in 1914, "is wholly dependent on the fluctuations of the copra market." The copra made in the Gilberts is reported to be of a superior kind, for the absence of continuous rains enables it to be dried in the sun, which is the best method. On the other hand, the islands suffer from terrible droughts, which reduce the export of copra very considerably, and often necessitate a total or partial remission of taxes (which are paid in copra) and the distribution of free rice and coconuts. Again, the irregular shipping communications of the islands do much harm to the industry. The natives who make copra have to wait so long to dispose of it that, finding that they have to bear the losses attributed to shrinkage in weight and to deterioration, they make only enough to meet their immediate requirements when a vessel is expected. It is reported that both groups could produce much more if the rainfall were normal, and if the natives received more encouragement to trade by being offered better prices and supplied with goods of better quality. The Government has started reserves on all the islands of both groups; further, it purchases fertilizers and instructs the natives in their use. The yield of coconuts in the Ellice islands is smaller than in the others.

Other products.—Next in importance to copra is the *pandanus*, of which many varieties are found, the fruit of the greater number being edible. Its stems provide beams and posts, its root a red dye, and its leaves, which are more durable than those of the coconut palm, furnish material for thatching and for the manufacture of mats and hats. The *babai* (a species of *taro*), and bread-fruit, are grown in yearly increasing quantities. The sterility of the soil and the periodic droughts make it doubtful whether it is profitable to grow fruit,

such as bananas, oranges, and pineapples. The Government is trying to encourage the planting of these and of tropical vegetables with a view to making the islands less dependent on the coconut.

Ocean Island has papaws, almonds, mangoes, pineapples, limes, jack-fruit, bananas, pumpkins, and sweet potatoes, but the inhabitants are said to be too well off to trouble to cultivate them.

(*b*) *Irrigation*

The water supply of the islands might be improved. The cement cistern at Ocean Island should be extended, and, as fairly good water is to be found in the other islands a few feet below the surface, reservoirs should be constructed.

(*c*) *Land Tenure*

There are said to be about 115,000 acres in the two groups. All the land belongs to the natives; there is no alienation in fee simple; and, owing to the existence of a fairly numerous population on the islands, there is not much spare land. The only exception is in the central Gilberts, where the landowners "leave to waste a vast quantity of valuable produce." The Resident Commissioner suggests that here it would be satisfactory to see such surplus lands under the control of some commercial enterprise, which, through organization, employment and example, would be an advantage to the whole community.

The land system of the groups is one of great complexity, owing to subdivisions and cross divisions. Land is held in common by a family, and alienation is difficult. The system of *tibun* (adoption) complicates matters still further and is the source of endless quarrels. A Native Lands Commission was proposed in 1917 to investigate the question of title and bring the land registers into order. Although, as mentioned above, the sale of land outright is prohibited, the Resi-

dent Commissioner may consider the advisability of granting leases in parcels of not more than 5 acres in extent for a period not exceeding 99 years. A larger amount may not be granted, except with the sanction of the High Commissioner or Secretary of State.

(3) Fisheries

There is plenty of fish in the lagoons, but some species are poisonous at times. The waters round the islands teem with sharks, and until 1900 the export of sharks' fins was second only to that of copra. The industry has now fallen off, but might be revived.

The *bêche-de-mer* industry might be considerably developed; although the slug exists in fair quantities in both groups, it is stated that the natives will not take the trouble of searching for and curing it, when copra will give them all the wealth they want. The pearl shell industry is probably also capable of development, though the supply of shell is not very great.

(4) Minerals

The only mineral is the phosphate on Ocean Island. The deposits cover an area of only 1,500 acres, but they are of great depth, and the phosphate is said to be of excellent quality. There is a great demand for this fertilizer in Australia and Japan. Before the war much of it went to Germany, where it was converted into superphosphates, chiefly for sale to Russia. The Pacific Phosphate Company possesses the sole mining rights for Ocean Island, and also for the island, lately German, of Nauru.[1] The company pays a fixed sum per acre for its rights to the natives, who also receive compensation for the removal of coconuts, &c., while a tonnage royalty on the phosphate shipped is paid into a trust fund for their use.

[1] A full account of the phosphate deposits in the Pacific Islands will be found in *Former German Possessions in Oceania*, No. 146 of this series, p 65.

(C) COMMERCE

(1) *Foreign Interests*

Before the war the Jaluit Gesellschaft, with its headquarters at Jaluit, in the Marshall Islands, was established at Butaritari, in the Northern Gilberts. It had a preponderant, but not exclusive, part in the importation of German and Austrian goods. British firms also acted as distributors of these goods, which "appealed by their cheapness to the trader or by some carefully designed appropriateness to the native." Cheap prints, sewing-machines, enamelled ware, cheap perfumery and cheap jewellery were thus imported; the Resident Commissioner stated that he had never seen British-made matches in that part of the Pacific.

The Pacific Phosphate Company (see p. 77) is a British firm; but, in order to secure a share of the phosphate deposits in Nauru, it gave the Jaluit Company 25,000 shares, while one German managing director and two other German directors were put on its board.

The activities of the Deutsche Südseephosphat A/G., though nominally confined to the Palau (Pelew) Islands, would probably, had it not been for the war, have proved dangerous, whether by way of competition or of amalgamation, especially as it is practically a subsidiary business of the Norddeutscher Lloyd.

Since the outbreak of war, which involved the occupation of the Caroline and Marshall Islands by the Japanese, the latter have taken the place of the Germans as trade competitors. Many Japanese traders have settled in the Gilberts, and two Japanese companies, the Nanyo Boyeki Kaisha (South Sea Trading Company) and the Nanyo Koygo Kaisha, have established head stations at Butaritari. Numerous steamers and schooners visit the islands from the Carolines and Marshalls, and, owing to the low cost of running these vessels and the cheap quality of the supplies carried it is stated that Australian-manned vessels cannot compete against them.

Two Chinese companies, On Chong & Co. and Peter Yee Wing & Co., have numerous stations in the islands.

(2) *Exports*

The exports consist almost wholly of copra and phosphate of lime, the latter from Ocean Island alone. In both cases they show a fairly steady rise, though the copra supply is liable, as in 1910, to drop suddenly in consequence of a serious drought. Trade statistics are not available for the years previous to 1912-1913. The following table shows the values of the exports from 1912-1913 to 1916-1917[1]:—

—	1912–13	1913–14	1914–15	1915–16	1916–17
	£	£	£	£	£
Copra	35,000	45,000	50,000	54,386	81,004
Phosphate	283,000	305,000	229,000	128,440	95,688
Sharks' fins	—	—	—	422	225
Total ..	318,000	350,000	279,000	183,248	176,917

Four-fifths of the exports go to Australia and a very small amount to New Zealand.

(3) *Imports*

The imports consist almost wholly of clothing and foodstuffs. They are steadily increasing in value, having risen from £21,407 in 1901 to £122,396 in 1916. Mr. Mahaffy[2] notes that the advance of civilization among the natives is shown by the scorn with which they look on their former diet of coconuts, *pandanus* and fish; by their demand for rice, meat, sugar and biscuits, and for clothes of shocking shape and atrocious colour; by the replacing of the mat sail of canoes by a canvas substitute made on sewing-machines, and generally by the rapid decline of the simple native arts and crafts. The following table

[1] Each year ending on March 31.
[2] Cd. 4992. 1910.

shows the values of the imports in 1915-1916 and 1916-1917[1] :—

—	1915–16.	1916–17.
	£	£
Benzene	50	940
Building material	9,754	12,822
Drapery	20,835	16,042
Explosives	198	305
Hardware	10,012	20,344
Jewellery	165	204
Kerosene	480	1,585
Methylated spirits	41	—
Oils	733	2,928
Perfumery	345	690
Provisions	37,294	47,738
Spirits, wines, fermented liquors ..	1,509	1,586
Tobacco	3,517	5,512
Miscellaneous	23,850	11,700
Total ..	108,783	122,396

Most of the trade is done with Australia, a small amount only with New Zealand. In 1914 the value of goods imported from Australia was £64,062, of which £34,573 represented goods of Australian origin.

(D) FINANCE

(1) *Public Finance*

The revenue and expenditure of the colony in the years 1911 to 1915-1916[2] were as follows :—

Year.	Revenue.	Expenditure.
	£	£
1911	21,331	17,965
1912–13	30,272	17,952
1913–14	42,791	21,615
1914–15	16,120	23,522
1915–16	23,117	32,867

[1] Each year ending on March 31.
[2] Each year ending on June 30.

The details of the budget for 1915-16 were as follows:—

Revenue.	£	s.	d.	Expenditure.	£	s.	d.
Customs	7,197	9	1	Pensions	302	10	0
Taxes, &c... ..	5,929	17	10	High Commissioner's Department ..	732	11	9
Licences, &c. ..	3,843	11	0	Resident Commissioner's Department	2,642	8	1
Fees of Court, &c...	226	19	6	District Administration	2,490	15	4
Post Office.. ..	439	12	2	Island Administration	4,130	0	10
Royalty on phosphate	2,994	3	2	Police and Prisons..	3,836	6	8
Interest	1,128	18	5	Ocean Island Volunteer Reserve ..	137	7	1
Miscellaneous ..	1,356	13	9	Medical Department	4,504	0	7
				Transport Department	821	4	6
				Postal Department	1,064	10	5
				Erection of Wireless Station, &c. ..	6,765	9	2
				Wireless Telegraphy Department ..	722	7	11
				Audit Department..	217	11	7
				Part cost new vessel	126	5	0
				Public Works (recurrent)	684	19	3
				Public Works (extraordinary) ..	2,350	13	5
				Miscellaneous ..	1,338	13	6
Total	£23,117	4	11	Total	£32,867	15	1

The revenue from taxation is chiefly raised from import duties on beer, spirits, wine, tobacco, and perfumery, to which has recently been added a tax of 12½ per cent. *ad valorem* on clothing imported from Europe and the materials for its local manufacture; also from licences for trading stations, vessels and boats, dogs, and firearms. The ports of entry are Ocean Island, Tarawa, Butaritari, and Funafuti.

The native taxes are assessed on the native landowners in accordance with the number of the native population and the productiveness of each island; they are paid in copra. After deducting the King's tax and the actual cost of the native administration, the balance is paid into the Island Fund, which is intended for use in the emergencies arising from droughts, hurricanes, &c.

(2) *Currency and Banking*

The currency is that of the Commonwealth. There are no banking facilities at present.

UNION OR TOKELAU ISLANDS

(A) MEANS OF COMMUNICATION

(1) *Ports*

There are no harbours in this group and not even a boat passage into any of the lagoons. Landing is generally difficult. At Gente Hermosa Island a passage has been blasted through the reef. This island has a good road system.

(2) *Shipping Lines*

The group is visited four times a year by steamers from Sydney, and by vessels from the Ellice Islands at intervals of about two months. The service is provided by the Samoa Shipping and Trading Company (see p. 73).

(B) INDUSTRY

Beyond a few bananas and bread-fruit, the only product of economic value is the coconut palm. On Gente Hermosa Island about 800 acres are planted with these trees. The other islands of the group export about 200 tons of copra annually. Fakaofu is the only island with a fresh water supply.

FANNING AND WASHINGTON ISLANDS

(A) MEANS OF COMMUNICATION

Fanning Island

(1) *Ports*

There is a ship entrance into the lagoon at *English Harbour* on the west coast. The channel through the reef is 200 to 300 yards wide and 4 to 6 fathoms deep. Vessels drawing less than 15 feet have plenty of room. The harbour could be much improved by dredging and blasting, but most of the lagoon is too shallow to be of any use. There is a concrete jetty with a tramway, and vessels of 18 feet draught can load alongside.

(2) *Shipping Lines*

A steamer of the Canadian-Australian line (run by the Union Steamship Company of New Zealand) calls occasionally, and the island is visited regularly by the Pacific Cable Board's repairing steamer, and also by schooners collecting copra.

(3) *Telegraphic Communication*

The Pacific Cable Board has a landing station opposite Whaler Anchorage on the north-west coast for its cable between Vancouver Island and Suva.

Washington Island

There is good but exposed anchorage off the west coast. There is no boat passage into the lagoon, and landing is bad. "During the bad weather, and for some time afterwards, communication is absolutely out of the question."

(B) INDUSTRY

Fanning Island

The coconut and the *pandanus* are indigenous to the island and a large amount of copra is produced.

The soil is fertile, and wild bananas, bread-fruit, figs, pineapples, and arrowroot of the finest quality are produced. Fish and turtles abound, and there are small pearl oysters in the lagoon. The guano beds, which were formerly a source of profit, appear to have been worked out.

The water supply of the island has been much improved by the construction of a rainwater storage tank, with a capacity of 8,000 gallons.

Washington Island

Labour is supplied by the Gilbert Islanders under indenture of three years, and is subject to the strict supervision of the Deputy Commissioner.

The island produces a considerable amount of copra (about 400 tons in 1910), and it could supply fruit. The soil is fertile, but the water supply is poor. Guano exists, but the deposits are not now worked.

(C) COMMERCE

The imports from New Zealand to Fanning Island amounted in 1912 to £353 and in 1913 to £1,215.

V*a*. *PHŒNIX ISLANDS*[1]

(A) MEANS OF COMMUNICATION

(1) *Ports*

There are no harbours in this group, and only a few of the islands afford even temporary anchorage. Landing on the outer side of the reef is generally difficult, but Hull Island and Canton Island have boat passages into the lagoons.

(2) *Shipping Lines*

Occasional voyages are made to the islands by the steamers of the Samoa Shipping and Trading Co.

[1] See footnote, p. 16.

They are also visited periodically by a Government steamer from the Gilberts.

(B) INDUSTRY

These islands are now leased to the Samoa Shipping and Trading Company (see p. 73), to whom Lever Brothers transferred their rights. The company is planting coconut palms, and states that in the course of a year from 700 to 1,000 tons of copra are handled. Turtles and fish are found in fair numbers. Formerly phosphate deposits were worked on Baker Island, but in 1910 these were reported to be abandoned, as the supply was apparently exhausted.

Few of the islands have any water supply.

VI. FIJI ISLANDS AND ROTUMÁ

(A) MEANS OF COMMUNICATION

(1) *Roads*

The development of agriculture and of tourist traffic in Fiji was long hindered by the absence of a proper road system. Lately there has been a considerable improvement. Road boards have been formed in each province to disburse the funds provided by the Government for road construction. The cost is borne by the General Revenue, except in the municipal areas of Suva and Levuka and in the case of native tracks. In 1916 there were about 800 miles of roads, varying in width from 12 to 24 feet, and 1,200 miles of bridle tracks.

(2) *Rivers*

In Viti Levu, the Rewa river is navigable by steam vessels of 50 tons as far as the Colonial Sugar Refining Company's estate, 11 miles from Lauthala Harbour, and by boats and shallow-draught steamers

to a distance of nearly 60 miles from its mouth. The Navua, the Singatoka, the Mba and the Nandi rivers are also navigable for short distances by boats and shallow-draught steamers. In Vanua Levu, the Ndreketi river is navigable for some 20 miles.

(3) *Railways*

There are no public railways in the colony. A line, however, is projected in the Rewa valley in order to bring about a development of the green-fruit trade. The scheme which has been adopted by the Legislative Council provides for a line 50 miles long, at a cost of £200,000.

The Colonial Sugar Refining Company owns a system of light railways or tramways of some 100 miles in length, connecting their various estates in the western parts of Viti Levu, between Navua Bay on the north coast and Singatoka on the south-west; and in addition a light railway in Vanua Levu, connecting the sugar estates with Lambasa. The relations of this system to the Government are regulated by Ordinance No. 24 of 1912, under which the company is to allow the use of the lines to the public on certain days of the week.

(4) *Posts, Telegraphs, and Telephones*

In 1916 there were in the islands 67 post offices and 9 telegraph offices, which dealt with 1,283,284 letters, 761,425 newspapers, books, &c., and 27,574 parcels. The British and foreign mails are conveyed by steamers of the Canadian-Australian Royal Mail in consideration of a subsidy of £5,000 per annum, and by other lines (see under Shipping). The owners of the s.s. "Amra" receive a subsidy of £4,500 for the interinsular service provided.

The latest official returns give the length of telegraph line as 54 miles: the line runs from Suva to Levuka and includes 11½ miles of submarine cable.

The telephone lines, which are controlled by the Government, extended in 1916 over 198¾ miles.

(5) *Ports*

There are three ports of entry in the islands: Suva, the capital, on the south coast of Viti Levu; Levuka, the old capital, on the small island of Ovalau, off the east coast of Viti Levu; and Lautoka, on the west coast of Viti Levu.

Suva has one of the best harbours in the Pacific. It is 2 miles long by 1½ to 2 miles broad, almost perfectly protected, with anchorage in from 5 to 18 fathoms available for all classes of vessels. Harbour works are being completed at a cost of £200,000; the Queen's Wharf, 330 yards in length, is being extended, a slip capable of taking vessels up to 500 tons burden has been constructed, and 17 acres of land are being reclaimed. When this work is completed all vessels will be able to berth at the wharves.

Suva is one of the chief ports for shipping copra and bananas. Its trade in 1913 and 1917 was as follows:—

Year.	Imports.	Exports.
	£	£
1913	600,390	601,242
1917	592,368	611,504

The following table shows the nationality, number and tonnage of the ships which entered Suva harbour during 1913:—

Flag.	Number.	Tonnage.
British	101	279,614
American	4	2,222
French	1	93
German	1	907
Norwegian .. .	2	3,323
Total.. ..	109	286,159

Levuka harbour has a good anchorage and is safe except during strong easterly winds. It has a depth of 16 fathoms. There is a wharf with an extension

alongside which vessels drawing 18 feet can lie, and parallel to this is a pier 400 feet long. Levuka has an extensive trade with the islands of the Eastern group, which use it as their local market for copra, &c. In 1917 the value of its imports and exports amounted to £424,529, the value of the imports being £164,639, and of the exports £259,890.

In 1913 22 vessels of 25,514 tons entered and 23 vessels of 24,007 tons cleared. These were British, except that two American vessels of 1,082 tons entered and one of 482 tons cleared.

Lautoka port is one of the most important centres of the sugar industry. In 1917 the value of its trade was £1,432,869, its imports amounting to £235,862, and its exports to £1,197,007. In 1913 17 vessels of 43,143 tons entered and 18 of 40,058 tons cleared.

There is also a good harbour at *Lauthala*, at the mouth of the Rewa river.

In Vanua Levu the most important anchorage is at *Malau*, near Lambasa, on the north coast. Lambasa is the centre of an important cane-growing district; it possesses a mill, tram-lines and a wireless station. There are numerous anchorages on the south coast: the best is at Savu-Savu; but there are also others fit for steamers at Mbua Bay and Mbutha Bay. Of the many anchorages for small craft in Vanua Levu and Taveuni, Wairiki is one of the worst; Somosomo Strait is dangerous by reason of the squalls and currents.

Of the other islands, Taveuni, known as the "Garden of Fiji," has a roadstead at *Waiyevo*, on the north side, with a wireless station; Vanua Mbalavu has a port at *Loma Loma* with a small well-protected harbour. There are harbours at *Ngaloa*, in Kandavu, and at *Totoya*, *Matuku*, *Moala*, and *Ngau*. Rotumá has anchorages on the north, but no harbour.

(6) *Shipping Lines*

Communications with Fiji are maintained by the following British-owned shipping lines:—

The Canadian-Australian Royal Mail Line runs a

steamer once a month from Vancouver to Sydney and *vice versa*, calling at Honolulu, Suva and Wellington. This line is worked by the Union Steamship Company of New Zealand, which, together with the Australian United Steam Navigation Company, runs numerous steamers to the islands from Sydney, Auckland, and Melbourne; there is at least one steamer a week.

The two latter companies, together with Burns, Philp & Co., Lever Bros., and the Colonial Sugar Refining Company, also run frequent services of steamers and other craft between the islands to collect sugar, copra, bananas, &c. Further, the planters own schooners and an increasing flotilla of motor-boats. (For German and American competition, see pp. 102-3.)

The shipping entered and cleared at the ports of Fiji during the years 1911 to 1915, exclusive of the coasting trade, is shown in the following table:—

Year.	British Tonnage.	Foreign Tonnage.	Total.
1911	577,731	7,204	584,935
1912	597,890	15,453	613,343
1913	694,575	17,121	711,696
1914	620,913	43,337	664,250
1915	803,371	18,195	821,566

The following analysis of the returns for 1913 shows how the inward shipping was divided among the various flags:—

Flag.	Number.	Tonnage.
British	138	347,188
French	1	93
German	1	907
American	6	3,305
Norwegian	2	3,323

(7) *Cable and Wireless Communications*

The Pacific Cable Board has a station at Suva, which is connected by cable with Vancouver Island *via* Fanning Island, and with Southport (Queensland) and Auckland (N.Z.) *via* Norfolk Island.

In 1916 there were four wireless stations, at Suva, Lambasa, Savu-Savu and Taveuni, all under Government control. Although considerable use is made of this system, there is a complaint that the charges are excessive and much higher than the cable rates.

(B) INDUSTRY

(1) Labour

It is impossible to do more than indicate the chief points of the complicated and perplexing problems concerning the labour conditions of Fiji. The general position is well summed up by the High Commissioner in his report for 1914: "Generally speaking, the natives, being the landlords of the colony, are so well off that there is little inducement for them to take a direct active interest in agricultural pursuits. For instance, in the Mba province, which is now the chief sugar centre, the people are rapidly ceasing to be agriculturists owing to the fact that they derive a considerable income from the rents of their lands."

Although the latest returns show a slightly increasing native Fijian population, the numbers having risen from 88,775 in 1914 to 90,429 in 1916, the original difficulty arose from the alarming decrease of the native population. Epidemics, inbreeding, the abolition of polygamy, the wearing of European clothes (which was responsible for pneumonia), "the narcotic influence of a communal system which has outlived its usefulness, and made it useless to save and produced inherent fatalism," and laziness, the result of the *pax Britannica*, had all contributed to reduce the numbers

and the energy of the native workers, at the very time when the vast economic possibilities of the islands were first realised.

The consequence was the introduction of coolie labour from India. After a long correspondence between the Indian and Fijian Governments, ending in the Indian Government's consent to a scheme of emigration under indenture, the first Indian coolies arrived in 1879. Since that date they have been coming in at the rate of some 2,000 a year, and at the end of 1916 they numbered 59,565 souls, so that the native Fijians outnumbered them by only one-third. It has been well said that they have built up the prosperity of the country and that their departure would spell ruin to the planting industry and the colony generally. The greatest care is taken of their interests. The recruiting is "done by accredited agents of the Fijian Government, regulated and supervised by European and native officials of the Indian Government. Their housing and general treatment are carefully watched by the Agent-General of Immigration and resident inspectors in all the large centres of employment. The cost of housing, sanitation and medical attendance is borne by the employers." The Indians come to Fiji for ten years, for five of which they work under indentures for approved employers, while for the remainder they are independent, and after the tenth year are entitled to a free passage to India at the expense of the general revenue of the colony. Many, however, remain in Fiji. They take small holdings at a nominal rent and cultivate rice, maize, tobacco, &c. The Colonial Sugar Refining Company has initiated a scheme for their settlement on ready-made farms at the end of the first five years of their indenture and for their occupation when the indenture is expired. The consequence is that the greater part elect to remain. Thus, in 1914, there were in the colony 15,602 Indians serving under indenture and 27,754 time-expired.

Unless, then, the native Fijian can be induced to work —and already, as the result of better education, he is

capable of hard, if spasmodic, labour—Fiji seems destined to become little more than a prosperous Indian colony. More outside labour is a necessity, and it is agreed that Indians are preferable to Chinese or Javanese. The chief causes of discontent among the Indians appear to be caste difficulties, the restrictions as to the number of women, who are only about 30 per cent. of the whole, and the comparatively low rate of wages (men, 1*s.* a day: women, 9*d.* for three-quarters of a day), which, though higher than in India, is counterbalanced by the higher cost of living in Fiji. But healthy and industrious Indians are able to add considerably to their wages by doing piece work. It is, however, urged against the immigrants that they are responsible for the greater part of the crime of the colony.

(2) Agriculture

(*a*) *Products of Commercial Value*

Vegetable Products.—Practically the whole population is engaged in agricultural pursuits, especially in the production of sugar, copra, and green fruit. These three products make up about 97 per cent. of the total export trade, and occupy about 77 per cent. of the total cultivated area. The total area under cultivation in 1913 was 112,089 acres; in 1914, 134,954 acres; in 1915, 140,323 acres; and in 1916, 119,690 acres.

Almost any tropical product such as tea, coffee, cocoa, spices and cotton can be grown. The only question is whether, in view of labour difficulties and the comparatively poor shipping facilities, their cultivation would be profitable.

Beans were produced to the extent of 11,111 bushels in 1913, the acreage occupied being 3,274; 7,110 bushels in 1914, the acreage being 2,108; 4,252 bushels from 1,778 acres in 1915, and 7,197 bushels from 2,534 acres in 1916.

Cocoa equal in quality to high-class Ceylon cocoa, and superior to the cocoa of Trinidad, has been grown

at Levuka. There is every hope that cocoa will eventually prove a profitable crop. The amounts produced and the area under cultivation in the years 1913-16 were as follows:—

—	1913.	1914.	1915.	1916.
Tons produced	3	3	3	4
Acres under cultivation ..	53	50	50	50

Coffee grows well, but is liable to leaf disease.

Copra is chiefly produced in the islands of Taveuni and Rotumá, the Lau and Yasawa groups and parts of Vanua Levu and Ovalau. It is a paying industry, especially if cattle are kept in the plantations, for the profit derived from the cattle pays almost the entire cost of the production of the copra. The expense of clearing the land is estimated to be £1–£4 per acre. The trees will yield a small crop in five or six years and bear fully in twelve. Hurricanes and the coconut leaf moth are the chief enemies of this industry. The area planted with coconut palms and the amounts of copra and coconuts produced in the years 1913-16 were as follows:—

—	1913.	1914.	1915.	1916.
Tons of copra produced ..	4,193	3,402	4,759	5,479
Number of coconuts produced..	167,668	33,800	18,800	15,800
Acres under cultivation ..	32,915	42,492	45,102	32,864

Cotton.—About the year 1865 considerable quantities of Fijian cotton were imported into the United Kingdom, where, "on account of its silky gloss, whiteness and length of staple, it sold regularly." Owing to the cessation of the U.S. Civil War and the drawback of a wet climate, the export declined, but it is well worth reviving. The

area under cultivation rose from 24 acres in 1913 to 530 in 1914, and remained as high as 525 in 1915. It sank, however, to 5 in 1916. The Indians are now growing cotton, and in 1914 about 10,000 lb., all grown from seed distributed from the Government station at Lautoka, was bought by the Agricultural Department and stored ready for sale to the British Cotton-Growing Association.

Fibres.—A considerable number of the more valuable fibre-producing plants can be grown in the islands. Sisal hemp, in particular, bids fair to provide an important industry. The Government offered a bonus of £500 to the person or firm producing the first ten tons of marketable sisal fibre, and this was gained by the Veisare Sisal Hemp Company. A sample submitted to the Imperial Institute was favourably reported on as "valuable for rope-making and worth £34 to £35 a ton." Mauritius hemp (from the *Furcraea gigantea*) and bowstring hemp (from *Sansevieria guineënsis*) are also excellent, and "would be readily saleable in large quantities." Samples of *ramie* fibre of the variety *Boehmeria nivea*, which is being increasingly used, in combination with wool, for tablecloths, carpets, &c., were found to be worth £25-£30 a ton, and American aloe (agave) fibre, of excellent quality and length, was worth £30 a ton.

Fruit.—The growth of Fiji's trade in fruit, especially in bananas, has been enormous. The chief fruit-growing districts are in the Rewa valley and around Suva in Viti Levu, and at Savu-Savu in Vanua Levu. Under favourable circumstances, bananas are a very profitable crop, as the fruit is obtainable all the year round; the trees bear in 12 to 18 months after planting, and one labourer to six acres is sufficient for their whole cultivation. On the other hand, they suffer terribly from hurricanes and disease, and they tend to exhaust the soil. In consequence of these disadvantages, the latest returns show that the cultivation of bananas has ceased over a considerable area of land in Fiji, and this process

will continue unless suitable fertilizers are found. Pineapples are produced for export, and most of the citrous fruits grow well. A trade in lime fruit and juice is growing up with Canada, where it is hoped to find an increasing market for fruit. The amounts of bananas and pineapples grown and the area under cultivation in the years 1913-16 were as follows :—

—	1913.	1914.	1915.	1916.
BANANAS—				
Bunches produced	668,095	690,646	527,658	132,826
Acres under cultivation ..	6,608	6,668	5,782	3,676
PINEAPPLES—				
Cases	500	2,393	3,636	3,645
Acres under cultivation ..	99	115	343	335

Maize figures to a small extent in the list of exports. The following table shows the amount of production and the area under cultivation in the years 1913-16 :—

—	1913.	1914.	1915.	1916.
Tons produced	2,788	1,068	1,602	2,051
Acres under cultivation ..	3,397	3,199	6,315	2,946

Maize grows well in the drier parts of the group, especially in the districts of Mba and Nandronga ; but as it is not a staple food of the people of Fiji, it is doubtful whether its cultivation will progress.

Oil-producing Plants.—Both candlenuts and groundnuts flourish, and a sample of ground-nut oil from Fiji was sold in England at the rate of £30 a ton. Groundnuts in 1913 occupied 49 acres, and 282 tons were produced ; but only 8 tons were produced in 1914, though 61 acres were under cultivation. Castor-oil seed was found to give the good average of 50 per cent. of oil. Other oils which can be produced are vetiver oil (from *Veteveria zizanoides*), and the oil of *Cymbopogon*

coloratus, which has the qualities of citronella and lemon-grass oil. These are suitable for perfuming soaps and similar purposes, and "would find a ready market in Europe if they could be produced on a large scale."

Resins.—A varnish resin from the *Dammara vitiensis* was found to equal Manila copal and to be worth 35*s.* per cwt.

Rice is extensively cultivated by the Indians, and with more modern methods a great deal might be produced for local use. The amount produced and the area under cultivation in the years 1913-16 were as follows:—

—	1913.	1914.	1915.	1916.
Tons produced	29,287	14,171	18,157	23,726
Acres under cultivation ..	13,508	12,243	14,195	17,190

Rubber grows best in the districts of Namosi and Suva, and conditions are favourable for the cultivation of both the Para and the Ceara species. In 1913 there were 1,760 acres under rubber. In 1914 1,849 acres were planted, and many of the plantations had reached the tapping stage; while in 1915 the acreage rose to 1,906 and the amount produced was 28,669 lb. The industry should prove successful, especially in view of the fact that rubber suffers less from hurricanes than other crops.

Spices.—Almost all the chief spices, ginger, pepper, nutmeg, cloves, cinnamon, vanilla, pimento (allspice) and turmeric, have given good crops, and their cultivation is increasing.

Starch-producing Plants.—Samples of starch from cassava and arrowroot have been highly commended.

Sugar.—This crop holds easily the first place among the exports. It is grown on alluvial flats and on the banks of the larger rivers, the chief centres being on the Rewa and Mba rivers in Viti Levu and around

Lambasa in Vanua Levu. In fact, the whole west coast of the former island is devoted to it. The amount produced and the area under cultivation in the years 1913-16 are shown by the following table:—

—	1913.	1914.	1915.	1916.
Tons produced	736,992	874,164	883,883	830,377
Acres under cultivation.. ..	48,208	62,852	62,308	55,570

The chief interest is held by the Colonial Sugar Refining Company, of Sydney. This firm is said to have put no less than £30,000,000 into the industry. It has control of the greater part of western Viti Levu and possesses four mills, each capable of turning out between 15,000 and 25,000 tons of sugar a year. Gradually it is leasing out its plantations, especially to its ex-employees, so as to induce selected planters to settle in the colony, while independent planters contract to grow cane for its mills. The number of Indians taking to cane cultivation after the completion of their term of indenture is steadily increasing. The Vancouver-Fiji Sugar Company and the Melbourne Trust Company also have large estates and a mill each.

Tanning Materials.—Samples of mangrove extract were reported to be too dark for tanning leather, but the extract could be used for dyeing fishing-nets, sails, &c., and was said to be worth £14 per ton (c.i.f. Liverpool).

Tea.—The Wainunu tea estate in Vanua Levu was planted in or about 1889. The tea it produces is described as resembling Indian teas in its richness in extractive matter, and China tea in being rather low in caffeine. The amount of tea produced each year from 1913 to 1916 was about 50,000 lb., the area under cultivation being 200 acres.

Tobacco.—A considerable amount of tobacco is grown for local use, Nandronga being the district most suitable to it. A fine Sumatra leaf has been produced for the outer wrapping of cigars, and a few years ago

a New Zealand firm set up a branch establishment at Suva with a view to export, but the experiment was unsuccessful and operations were suspended. The amount produced and the area under cultivation in the years 1913-16 were as follows:—

—	1913.	1914.	1915.	1916.
Tons produced	37	27	60	129
Acres under cultivation ..	114	103	121	138

Yams are grown for domestic use. The amount produced and the area under cultivation in the years 1913-16 were as follows:—

—	1913.	1914.	1915.	1916.
Tons produced	252	334	292	239
Acres under cultivation ..	313	275	255	245

Live-stock.—Cattle, horses, and goats thrive in the islands; there are many excellent grazing districts, and disease is rare. The following table shows the numbers of stock in the colony in the years 1913-16:—

—	1913.	1914.	1915.	1916.
Horses and mules ..	6,726	7,032	7,434	7,343
Horned cattle	49,413	52,585	58,773	50,309
Sheep	3,219	2,662	1,982	1,468
Goats	14,393	15,659	12,130	11,452

(*b*) *Methods of Cultivation*

The Agricultural Department has a station at Nasinu, 9 miles from Suva, in the wet district; that at Lautoka has been abandoned. Plants are supplied to planters free of cost; experiments in the cultivation of rubber, coffee, &c., are carried on; and a cotton gin, a fibre machine, &c., have been established.

(c) *Forestry*

There is a large amount of valuable timber in the islands,[1] but hitherto, so far from there being an export trade, it has been necessary to import a great part of the timber required. The Government has now taken the matter in hand. Recent ordinances provide for the constitution of village forests, the issue of licences to cut timber in such forests, the appointment of forest officials, and so forth. Moreover, a sawmill has been set up by the Pacific Lumber Company of Canada on the Ndreketi river in Vanua Levu for the purpose of dressing timber for export, and there are in the islands three other sawmills, two of which are at Suva. Fiji should therefore soon be independent of outside supplies of timber.

(d) *Land Tenure*

The total area of the colony, including Rotumá, is estimated at 4,532,800 acres, of which 504,280 were reported to be granted out in 1916 and 119,691 to be under cultivation.

The problems relating to land tenure in Fiji are very difficult, and have excited controversies of the fiercest kind. There is no need to do more here than to refer to them very briefly. The main problem from the point of view of the economic future of Fiji is to ascertain how far the existing land system is responsible for the fact that the cultivated area of the colony is only an infinitesimal proportion of what it might be. After the cession of the islands in 1874, the land remained in the possession of the natives on the old communal basis. Although the land passes generally "direct from father to son, or brother to brother, the actual heir is only the representative of a group of agnates, who are heirs with him and can deprive him if he misbehaves." Holdings are registered by the Native Lands Commission not according to individuals, but according to *matangali* or clans.

[1] A complete list of specimens of Fijian timber will be found in the *Handbook of Fiji*, Appendix V (1908).

Thus the sale or lease of land was beset by almost insuperable difficulties, at a time when the native population was progressively decreasing, when the communal system was itself becoming obsolete, the authority of the chiefs decreasing, and the *lala* or service tenure being less and less willingly performed, and when the conditions of society were being still further complicated by the advent of the Indians.

The remedy was found by Sir Everard im Thurn, who by the Native Lands Ordinance, approved by the Legislative Council in 1904, consolidated and amended the law relating to native land tenure. The effect of this ordinance was to allow the natives, under proper restrictions, to sell or lease their waste or unused lands. Since that date an increasing amount of land has, with the consent of the natives concerned, passed into the hands of the Crown, to be leased out on behalf of the owners. The rent is at the rate of 3*d.* an acre for the first five years, 6*d.* for the second five, 9*d.* for the third, and 1*s.* thereafter; the lease is for 99 years. The policy has been most successful, and, as mentioned above, the lands at present granted out amount to more than 500,000 acres. It is, however, necessary to observe that the system is generally unpopular with the European settlers, who would prefer to obtain the land freehold. Moreover, the difficulties arising out of the complications of title have been by no means solved, and enquiries are still being made by the Native Lands Commission.

(3) Fisheries

Both sea and fresh-water fish are abundant. Turtles are found round all the islands.

Bêche-de-mer is exported in fair quantities for the Chinese market.

A certain amount of pearl shell and turtle shell figures among the exports, but the most lucrative shell is the *trochus* or *sithi*, which is abundant on the reefs. There is a large market for this in France and Japan, where it is used for button-making.

(4) Minerals

It is improbable that Fiji will ever be a mineral-producing area, and though many traces have been found of gold, silver, copper, iron, coal, antimony, malachite and graphite, it does not appear that these minerals exist in paying quantities. A mining adviser reported in 1909 that there was no remunerative alluvial ground in the islands, though the gravel in certain rivers was auriferous in places. In the same year the Imperial Institute reported that a specimen of copper ore submitted to it contained over 40 per cent. of copper, yielded 2 oz. 16 dwt. of gold and 3 oz. 11 dwt. of silver per ton, and was valued approximately at £30 per ton. The Institute also examined some marls (colloquially described as soapstone) and reported that they would be useful either as pozzuolana for the production of hydraulic cement, or for marling and claying sandy soils.

The mining regulations of Fiji are based on Ordinance 13 of 1908, which makes provision for licensing prospectors and enacts that prospecting licences shall be limited to two years from the date of issue, and extend over not more than 10,000 acres. A considerable number of such licences have been applied for and granted, but, as has been already said, the results have been negligible.

(5) Manufactures

Apart from the production of sugar and copra the sole manufacture of importance is boat-building. There are 6 sugar mills with a normal daily output of 667 tons in all; 4 fibre mills, including a desiccated coconut factory at Levuka, and 22 boat-building yards. At Ndavetu (Wainunu) there is a tea factory, where the normal daily output of dried tea is 400 lb. There are 2 rice mills, one at Suva, the other at Nandronga, 2 soap works, and 4 sawmills.

The manufacture of colonial distilled spirit, which used to be one of the chief industries, has disappeared,

as the result of the imposition of heavy duties in the Commonwealth, and the large distilleries at the Nausori Mills have been closed. Recently the manufacture of bricks has been undertaken at Suva, but has not proved a success.

(C) COMMERCE

(1) Foreign Interests

Although before the war more than 90 per cent. of the trade of Fiji was in British hands, it cannot be said that there was no fear of rivalry. Competition was threatened from both German and American quarters. It is difficult to obtain a true estimate of German interests in the colony, since to a great extent the Germans worked indirectly. A proportion of the imports from British possessions, especially from Sydney, were German goods trans-shipped. Not only did German-Australian firms, such as Justus Scharff & Co., forward these goods, but it is even reported that some British shipowners carried German cargoes at a lower rate than British, and that 25 per cent. of the goods shipped by Australian merchants to Fiji were of German origin. There were also many German firms or their agencies in the islands themselves, and the Germans were said to have a monopoly of trade in hollow-ware, lampware, enamelware, scents, and cashmeres, and a large share of that in cutlery. The trade was pushed by the usual German methods—a supply of cheap and outwardly attractive articles to customers who preferred cheapness to quality, the institution of through shipping and railway rates, of bills of lading, and prodigiously long credit. The development had, in fact, reached the point when the Norddeutscher Lloyd judged the time ripe to extend to Fiji their line from Singapore to Rabaul, and the arrangements were stopped only by the outbreak of war.

Before the war the Germans were said to take 60–70 per cent. of the copra produced in the Pacific. It

appears likely that in this respect the Americans will take their place. An American line of steamships to run between Sydney and San Francisco had already been projected with special reference to this traffic; and, since the outbreak of war, new mills have been erected and plant extended in America, and the imports of copra have enormously increased. In 1915–16, one firm alone employed in this trade 15 American schooners of 600 tons each. These vessels bring American goods, especially canned fruit and biscuits, and these, owing to heavy war freights, are cheaper than goods shipped from Australia. The Vacuum Oil Company, an American firm, has a warehouse at Suva and trade connections with all the islands of the Western Pacific as far as Papua, its head Australian office being at Melbourne. No Japanese firm has so far been established in Fiji.

(2) Foreign Trade

The following table shows the share taken by various countries in the foreign trade of Fiji in 1917:—

Country.	Percentage of Total Trade.	
United Kingdom..	—	4·34
British Possessions—		
New Zealand	38·5	
New South Wales	29·59	
Canada	6·84	80·84
Victoria	4·66	
Others	1·25	
Foreign Countries—		
United States	12·59	
Japan	1·2	14·22
Others	0·43	
		99·4

The remaining 0·6 per cent. consists of imports entering by parcels post.

(*a*) *Exports*

The total value of the exports, including bullion and specie, in the years 1911-14 was as follows :—

Year	£
1911	1,276,208
1912	1,058,960
1913	1,425,940
1914	1,390,979

The values of the principal articles exported during the same years were as follows :—

——	1911.	1912.	1913.	1914.
	£	£	£	£
Bêche-de-mer	569	1,173	1,766	2,831
Coconuts	769	641	540	960
Copra	294,245	242,073	176,741	148,372
Fruit (fresh) ..	151,668	120,510	168,249	201,938
Hides and skins ..	1,539	1,480	1,007	1,848
Maize	2	145	1,730	1,375
Molasses	9,821	7,259	10,477	7,323
Pearl shell	61	305	1,256	683
Sugar	79,274	671,713	1,041,927	1,005,643
Timber ..	—	1,170	1,070	260
Trochus shell or *sithi*..	14,252	7,573	13,792	13,244
Turtle shell.. ..	1,934	2,087	2,927	128

The three chief products of Fiji—sugar, copra and green fruit—contributed in 1917 no less than 97 per cent. of the total exports.

Before the war practically the whole of the exports went to British possessions, principally to Australia and New Zealand. The exports between 1911 and 1914 were divided as follows among the various countries :—

——	1911.	1912.	1913.	1914.
	£	£	£	£
United Kingdom ..	—	45,700	41,048	24,235
British Possessions ..	1,274,581	1,010,925	1,375,371	1,310,236
Foreign Countries .	1,627	2,335	9,521	56,508
Total	1,276,208	1,058,960	1,425,940	1,390,979

Since the outbreak of war there has been an increase in the exports to Canada, and a tremendous rise in the exports to the United States. The value of the latter has risen from £2,625 in 1913 to £318,731 in 1917.

(*b*) *Imports*

The chief articles of import are foodstuffs and drapery. Before the war the value of the imports was steadily rising, owing to the greater purchasing power possessed by the natives, in consequence of the high prices obtained for copra and the increased output of green fruit. The fact that the imports of machinery have more than doubled in the last ten years also witnesses to the economic progress of Fiji. The following table shows the values of the imports in the years 1911-14 :--

—	1911.	1912.	1913.	1914.
	£	£	£	£
Bags and sacks ..	25,968	26,871	37,966	49,527
Beer, wine and spirits	20,956	23,267	21,238	24,273
Books and stationery..	9,616	9,724	8,749	10,131
Clothing	156,309	156,747	113,290	146,848
Coal	28,684	25,891	25,940	27,359
Foodstuffs	146,755	185,595	163,565	145,314
Glass, hardware, cutlery	66,915	66,371	74,200	66,772
Iron and galvanised iron goods ..	45,659	42,387	42,511	34,157
Live-stock ..	14,681	13,219	9,890	14,390
Machinery	49,323	36,081	54,615	54,249
Manure	7,221	11,628	14,379	22,209
Oils	20,470	33,268	29,026	28,821
Timber	47,535	45,106	57,640	50,681
Tobacco, cigars, &c. ..	13,569	14,454	12,716	14,508
Bullion and specie ..	102,886	37,250	61,230	33,782
Miscellaneous ..	200,532	212,185	177,013	204,217
Total	957,079	940,044	903,968	927,238

In the year 1912 the Receiver-General reported that "speaking generally, the proportion of British manufactured goods to the total imports was exceedingly high in Fiji," there being few, if any, direct means of communication with non-British countries. He stated, further, that most of the trade was in the hands of British subjects, and that, owing to considerations of convenience, foodstuffs would always come from Australia or from New Zealand, the only possible competitor being India. As regards manufactured goods, he reported that there was a growing tendency to buy in the cheapest markets, from Germany, Belgium, the United States, Sweden, and Japan. The United States provided agricultural implements, oil engines, boots, wooden ware, oars, lamps, paper bags, petroleum products, &c. Germany sent sewing machines, cheap jewellery, perfumery, buttons, toys, pianos, beer, wire nails, fencing wire, lamps, wooden pipes, fancy goods, and common tools. Japan sent cheap undershirts, hosiery, camphor, brushware, and silk manufactures. Matches came from Sweden. The United Kingdom provided about 25 per cent. of the boots, 40 per cent. of the cutlery, 50 per cent. of the drapery, 20 per cent. of the furniture, 15 per cent. of the galvanised iron, 35 per cent. of the glassware, 20 per cent. of the hardware, 30 per cent. of the jewellery, 40 per cent. of the agricultural machinery, and 50 per cent. of the paints.

The following table shows the sources of the imports in the years 1911-14 :—

Country of Origin.	1911.	1912.	1913.	1914.
	£	£	£	£
United Kingdom ..	164,636	184,862	152,998	185,711
British Possessions ..	699,878	663,497	671,774	633,271
Foreign Countries ..	92,565	91,685	79,196	92,292
By Parcels Post ..	—	—	—	15,964
Total	957,079	940,044	903,968	927,238

(D) FINANCE.

(1) *Public Finance*

The following figures show the amounts of the revenue and expenditure of Fiji for the years 1911-16 :—

Year.	Revenue	Expenditure.
	£	£
1911	240,395	265,347
1912	283,947	251,744
1913	266,031	258,793
1914	279,845	301,351
1915	273,635	282,831
1916	317,446	292,905

The total amount of public debt outstanding in Fiji in 1916 was £37,415.

The following table shows the budget for 1916:—

Revenue.		Expenditure.	
	£		£
Customs	182,638	Charges on account of Public Debt ..	22,323
Port and Wharfage Dues	13,202	Pensions	9,924
Native Taxes ..	15,797	Governor and Legislature	4,225
Licences, &c. ..	40,351	Colonial Secretary ..	4,248
Fees	36,796	Native Department ..	8,428
Post Office	16,037	Treasury Department ..	4,961
Rent of Government Property	5,473	Customs Department ..	5,763
Interest	4,786	Audit Department ..	2,110
Land Sales	281	Port and Marine Dept.	4,416
Miscellaneous ..	2,085	Lands	4,602
		Legal Department ..	19,233
		Constabulary Dept. ..	13,445
		Prisons Department ..	7,024
		Medical Department ..	20,376
		Hospital and Asylums..	11,265

Revenue.		Expenditure.	£
		Education	3,731
		Transport	5,436
		Defence Forces ..	1,507
		Post and Telegraph Department ..	25,558
		Agricultural Department	4,464
		Immigration . ..	5,351
		Government Printing Office	4,027
		Works Department Establishment ..	16,111
		Public Works (recurrent)	21,207
		Public Works (extraordinary)	16,495
		Expenditure against Loan Account ..	21,138
		Miscellaneous ..	25,537
Total ..	.. £317,446	Total .	.. £292,905

The taxes include duties on imported goods, licences, wharfage dues, and a building tax on all buildings rated on an annual value of 2*s*. or over, in addition to a native tax, assessed annually, of 10*s*. to £1 per male adult, varying by district and paid in copra or cash according to arrangement.

The customs duties are defined by Ordinances 17 of 1912 and 7 of 1916. They are based partly on an *ad valorem*, partly on a specific scale. There is a 12½ per cent. *ad valorem* duty on sugar, fish, preserved fruits, drugs, arrowroot, motor-cars, bicycles, firearms, cartridges, drapery, boots, stationery, perfumery, furniture, enamelled ware, leather goods, lamps, asbestos, and rope; and of 5-7½ per cent. on machinery. There is a specific duty of 2*s*. 6*d*. per dozen pints on ale, beer, &c., 2*s*. 6*d*. per gallon on wine, 9*d*. per gallon on oil, 4*d*. per lb. on tea, and £1 per ton on pig iron. There is also a war export tax of 5*s*. per ton on sugar. Certain articles are exempt.

(2) *Currency*

The legal tender and the only coin in circulation is the English sterling. There are no returns as to the number of coins in circulation. In 1916 there was in circulation £61,993 of paper money issued by the Colonial Government and £18,776 issued by private banks. The Government Currency Notes Ordinance of 1913 provides for the issue of Government currency notes; the Commission of Currency fixed the value of the notes issued at £20,000.

(3) *Banking*

There are two private banks in the Colony :—

The Bank of New Zealand, with branches at Suva and at Levuka. Its deposits in the colony in 1916 amounted to £208,440. The Bank of New South Wales, with branches at Suva, Levuka and Lautoka. Its deposits in 1916 amounted to £504,641. Both of these banks have private note issues, which, however, are not officially recognized.

There are now nine Government savings banks in the colony. The head office is at Suva, and there are branch offices at Lautoka, Levuka, Loma Loma, Lambasa, Makongai, Nandronga, Nausori, and Savu-Savu. In 1916 the depositors numbered 1,073.

VII. THE TONGA ISLANDS PROTECTORATE

(A) MEANS OF COMMUNICATION

(1) *Roads*

The road system of the Tonga Islands is still very primitive. Most of the main roads are unmetalled and become all but impassable in the rainy season. This state of things has greatly retarded the development of the islands, and a beginning has now been made, especially in Tongatabu, with attempts to remedy it.

(2) *Posts*

The Tonga Islands are not in the Postal Union and the Government is reported to pay no subsidies to the

shipping lines providing mail services and to expend a negligible amount on the local conveyance of mails. There is a money order system with a convention with Australia, New Zealand, and Fiji, but with no other countries. In 1911 the revenue of the Post Office amounted to £909 and the value of money orders issued to £12,373. Telegraphs and telephones do not exist.

(3) *Ports*

There are not many really good harbours in these islands, though there are many possible anchorages off all except the volcanic islands.

The best harbour is that of *Nukualofa* in Tongatabu, which has two passages through the reef and secure anchorage. It has a ferro-concrete jetty with 23 feet of water alongside, and a tramway. The average value of the imports of this port for the years 1909-13 was £74,965, and of the exports £68,025.

During 1913 twenty-one British vessels, with a total tonnage of 36,129, entered the port, and seventeen, with a total tonnage of 29,772, cleared. One American sailing ship of 693 tons entered.

In the Haabai group there is a poor harbour at *Pangai*, on Lifuka Island, which is the residence of the Governor of the group and a port of call for mail steamers. The harbour is reported to be buoyed. The average value of the imports of Pangai for the years 1909-13 was £35,708, and of its exports £63,641. During 1912 one American sailing ship of 683 tons entered and cleared, one German sailing ship of 37 tons entered, and one Norwegian sailing ship of 799 tons cleared.

In the Vavau group the chief port is at *Neiafu*, where the mail steamers call. The harbour is landlocked, but small and deep (25-29 fathoms); there is a wharf with 3 fathoms of water alongside. The average value of the imports of Neiafu for the years 1909-13 was £38,537, and of its exports £68,741. Fifteen steamers of 28,316 tons entered in 1913 and fourteen of 27,616 tons cleared. All these vessels were British.

(4) *Shipping*

There is a regular monthly mail service with Australia and New Zealand by the steamers of the Union Steamship Company of New Zealand, which call every fortnight at the three chief ports. This company also provides practically all the local services. It receives no subsidy from the Tongan Government beyond remission of pilotage and shipping dues. The outlying islands, such as Niuatobutabu (Keppel Island), are served intermittently by trading schooners from Auckland and small steamers from Samoa *via* Vavau.

The following table shows the shipping which entered the ports of the Tonga Islands during the years 1911 to 1915:—

—	British.		Foreign.	
	No.	Tonnage.	No.	Tonnage.
1911	52	103,045	4	2,278
1912	40	66,171	5	1,075
1913 ..	31	58,009	1	683
1914	31	56,742	2	732
1915	17	23,640	—	—

(5) *Cable and Wireless Communications*

There are no cable or wireless communications at present. In 1914 the Government was projecting a wireless station at Tongatabu, to be worked in connection with the wireless system of Fiji and possibly of New Zealand.

(B) INDUSTRY

(1) Labour

Labour is scarce, unskilled and expensive. The cost of living and the rate of wages are both high, four shillings a day being demanded for unskilled labour. An adequate supply of labour from without is,

however, an urgent necessity if the islands are to be developed to anything like their proper capacity.

(2) Agriculture

The Tonga Islands are essentially agricultural, but their resources are far from being properly developed. There is reported to be no opening for the investment of capital, and large areas of land for plantation purposes are not available. "With the exception of a few small plantations leased to foreigners," wrote the Resident Agent in 1909, "agriculture is confined to the cultivation of food crops, *i.e.*, yams and *taro* and sweet potatoes. The cultivation of coconuts and fruit, the principal articles of export, is not systematically followed by the natives. The increased exports for 1909 are due to the favourable season rather than to the assiduity of native cultivation."

The Government is awakening to the necessity of providing technical education; and a Government college has been founded, where agriculture is taught on a scientific basis. In 1913 it had 157 students. An agricultural station has been formed at Vaikeli, four miles from Nukualofa, and an agricultural department inaugurated.

(*a*) *Products of Commercial Value*

Candlenuts.—The seeds of the candlenut tree (*Aleurites triloba* or *moluccana*) provide an excellent oil used for soap-making in England and on the Continent.

Copra.—This is the only article exported in any quantity. Before the war about 25 per cent. of the total export went to Europe, a small quantity to New Zealand, and the remainder to Australia. The coconut has been called "the mainstay of local prosperity." Its importance is at last being recognised by the Tongan Government, and by an ordinance of 1913 every male Tongan subject is required to plant at least 200 coconuts on his tax allotment within one year of the date of registration. Coconuts in Tonga cost

about £9 per acre to plant and they bear in six or more years. The frequency and the violence of hurricanes are a great hindrance to the prosperity of the industry. In 1913, for example, owing to a disastrous hurricane in the early part of the year, the export of copra dropped to 3,427 tons, whereas in 1912 the export had been 11,120 tons.

Cotton.—The climate and soil of the islands are reported to be well adapted to the establishment of a successful cotton industry, but little has been done so far.

Fruit.—In order that the islands should be less dependent on the coconut industry, it is important that the fruit trade, which at present is but small, should be increased. Bananas and oranges flourish, and pineapples are now being grown. The cost of planting bananas is estimated to be about £11 an acre and the plants will bear in about fifteen months. The grape was not a success.

Fungus.—A certain amount of the edible fungus dear to Chinese mandarins is collected for export.

Tobacco.—Tobacco is grown for local consumption. It is made into *sulukas*, or cigarettes of leaf tobacco wrapped in plantain leaves.

(*b*) *Land Tenure*

All land belongs to the King, who may at pleasure grant one or more hereditary estates to the nobles and titular chiefs or *matabules*, who in their turn assign portions to their followers. The latter are entitled to two holdings, a town site and an allotment of about 8½ acres for foodstuffs. The sale of land is forbidden, but foreigners may obtain leaseholds in blocks of 100-200 acres up to 50 years, at a rental of 4-6 shillings an acre. The average cost of clearing land is estimated at about £15 per acre.

(3) Fisheries

The waters of Tonga abound in fish, which could easily "be caught, dried, pressed, salted, and perhaps exported by any community less favoured by nature

and possessing a fair amount of energy and enterprise." As it is, a large amount of fish is imported.

The whaling industry could also be developed. A small amount of whale oil is now exported, but much more could be secured.

(C) COMMERCE

(1) *Foreign Interests*

Before the war trade was in either British or German hands. The German share was large and growing, especially in drapery, through German firms in Samoa and Fiji. "This is easily accounted for, since German merchants and their travellers take more interest locally in the requirements of their customers, as regards price, quality, and pattern." The Deutsche Handels- und Plantagen-Gesellschaft had a sub-agency in Tonga.

Since the war American competition has taken the place of German; the conditions are the same as in Fiji (see p. 102).

(2) *Exports*

The principal exports from the Tonga Islands are copra, fruit, live-stock, fungus, whale oil, and candlenuts. The following table shows the values of the exports in the years 1911-14:—

—	1911.	1912.	1913.	1914.
	£	£	£	£
Candlenuts	—	172	3,324	—
Copra	231,479	209,067	72,480	67,304
Fruit	5,545	1,379	2,008	443
Fungus	356	268	1,093	957
Live-stock	730	1,469	920	701
Whale oil	203	125	400	—
Specie	—	—	600	—
Miscellaneous ..	1,791	4,032	1,495	3,631
Total	240,104	216,512	82,320	73,036

The bulk of the exports go to Australia, which took goods in 1912 to the value of £134,636, and in 1913 to the value of £47,402. Germany was before the war the most important European purchaser, taking in 1912 goods to the value of £57,199, and in 1913 to the value of £23,494.

The following table shows the value of exports which went to British possessions[1] and to foreign countries in the years 1911-14 :—

Destination.	1911.	1912.	1913.	1914.
	£	£	£	£
British Possessions ..	184,209	154,891	55,482	63,477
Foreign Countries ..	55,895	61,621	26,838	9,559
Total	240,104	216,512	82,320	73,036

(3) *Imports*

The principal imports to the Tonga Islands are foodstuffs and clothing. The following table shows the values of the imports, including specie, in the years 1911-14 :—

—	1911.	1912.	1913.	1914.
	£	£	£	£
Beer and spirits ..	2,927	3,762	1,611	1,960
Clothing	45,743	32,478	14,433	24,160
Foods ..	50,175	53,686	28,951	27,188
Iron goods and hardware	14,897	15,881	7,270	5,440
Timber	13,702	11,898	4,657	4,124
Specie	40,979	23,540	1,700	4,870
Miscellaneous ..	54,678	51,768	24,122	29,700
Total	223,101	193,013	82,744	97,442

[1] Exports to the United Kingdom (if any) are included under Foreign Countries.

New Zealand was the chief source of supply, sending in 1911 goods to the value of £85,635, in 1912 to the value of £82,826, and in 1913 to the value of £41,718. In corresponding years the value of goods imported from Australia was £52,870, £50,045, and £20,443. The imports from Germany in 1911 amounted to £17,466, in 1912 to £14,743, and in 1913 to £9,586. The total value of imports from British possessions and from foreign countries in the years 1911-14, excluding bullion and specie, was as follows :—

Origin.	1911.	1912.	1913.	1914.
	£	£	£	£
British Possessions ..	151,112	140,999	65,220	78,833
Foreign Countries ..	31,010	28,474	15,824	13,739
Total	182,122	169,473	81,044	92,572

(D) FINANCE

(1) *Public Finance*

Although the finances no longer present the *opéra bouffe* spectacle which Sir Basil Thomson described in his *Diversions of a Prime Minister*, they do not yet rest on a wholly sound basis. "Failure to adhere to the programme laid down when the estimates were framed, the absence of proper supervision and the employment of unskilled labour at high wages have resulted in votes for Government buildings being considerably exceeded." Such is the report for 1910 on one important item of expenditure, and, though matters have improved since then, there is still room for amendment.

The following table shows the revenue and expenditure for the years 1911–12—1915–16.

Year.[1]	Revenue.	Expenditure.
	£	£
1911–12	51,050	50,011
1912–13	43,938	38,497
1913–14	32,489	39,103
1914–15	36,114	36,414
1915–16	30,037	43,086

The excess of assets over liabilities on March 31, 1915, was £17,180.

The details of the budget for 1912-13 were as follows:—

Revenue.		Expenditure.	
	£		£
Customs	20,809	King	2,694
Taxes	11,192	Legislative	1,968
Port and Wharfage Dues	1,844	Premier	1,630
Licences and Internal Revenue	3,300	Governors	481
Fees, &c.	3,351	Audit Department ..	824
Post Office	721	Treasury	841
Rents and Interest ..	2,058	Customs and Post Office	3,117
Miscellaneous ..	663	Lands	5,134
		Justice	1,644
		Police	4,784
		Education	3,441
		Medical Department ..	3,484
		Works Department	333
		Public Works (recurrent)	1,101
		Public Works (extraordinary) ..	4,436
		Miscellaneous ..	2,585
Total ..	£43,938	Total ..	£38,497

[1] Ending on March 31.

(2) *Currency and Banking*

British coin is the only legal tender. Lever Brothers are endeavouring to secure banking facilities, which do not as yet exist.

VIII. BRITISH LINE ISLANDS

MALDEN ISLAND

Anchorage and landing are bad. There are a small pier and a tramway for the phosphate traffic.

The labour is provided by natives of Aitutaki, in the Cook Islands, and of Niué.

The water supply is precarious, but there are large storage tanks for rain.

In 1912 phosphate to the value of £4,644 was exported to Australia. The export to New Zealand for that year amounted to £13,311, and the imports from New Zealand to £419.

CHRISTMAS ISLAND

There is fair anchorage on the west side, but landing is difficult. Small craft can enter the lagoon.

The island was leased in 1902 for 99 years to the Pacific Plantations Company, who have replanted it with coconuts.

FLINT ISLAND, CAROLINE ISLAND, AND VOSTOK ISLAND

There are indifferent anchorages on the lee side of the islands. Landing is difficult.

The islands are leased to the firm of S. R. Maxwell & Co., of Tahiti, who are planting them with coconuts.

STARBUCK ISLAND

Landing is very difficult. The island has deposits of phosphate, which have been worked at intervals.

JARVIS ISLAND

There is no anchorage, and landing is made through a gap in the reef. The island has large deposits of phosphate.

IX. PITCAIRN AND ADJACENT ISLANDS

PITCAIRN ISLAND

(A) MEANS OF COMMUNICATION

(1) *Ports*

There is uncomfortable anchorage in Bounty Bay on the east side of the island, but during east winds it is necessary to lie off or anchor on the west side. In both cases landing is difficult and dangerous.

(2) *Shipping*

The communications are uncertain. Between 30 and 40 vessels visit the island in the course of a year. A report to the High Commissioner in 1904 suggested that if the inhabitants owned a vessel they could export their products to Tahiti. In 1908 they did so.

(B) INDUSTRY

The soil is fertile, and the island could grow much more than it now does, especially if the water supply were improved. Coconuts are produced which are suitable for the manufacture of copra. The chief product of economic value is arrowroot, which is stated to be of excellent quality. It is thought that with proper machinery and appliances 250 tons a year could be produced. Coffee also grows luxuriantly, and could easily be made a source of profit. The fruit trade in bananas, oranges, and pineapples could also be developed, if regular transport were available.

Wild goats and fowls exist. At one time there were many pigs, but it appears that the inhabitants, who are Seventh Day Adventists, have disposed of these animals on religious grounds.

The people are described as narrow-minded and lacking in energy and intelligence. Their methods of cultivation are very primitive.

OENO ISLAND, HENDERSON ISLAND, AND DUCIE ISLAND

There are no anchorages, and landing is dangerous.

Oeno and Henderson Islands grow coconuts and a few oranges and lemons. Ducie Island is quite barren.

GENERAL REMARKS

The various groups of islands comprising British Oceania differ so widely that it is difficult to make any statements applicable to them all. It is impossible, for instance, to group together for consideration the Tonga and the Solomon Islands, the former inhabited by a highly advanced native race who have accepted Christianity and the latter by naked savages scarcely beyond the head-hunting stage of development. In strictly economic matters the divergency is equally plain. The trade of the various groups seems destined to be diverted into wholly different channels. That of the Solomons will probably continue to be directed by the Commonwealth; that of the Gilbert and Ellice Colony is likely to turn towards Japan or Singapore; that of Fiji and Tonga, at any rate in part, to the United States and Canada. Some groups—for example, the Gilbert and Ellice Islands—are capable of producing little else than copra: others, such as the Solomons, could, with a proper labour supply, furnish almost any tropical product—cotton, rubber, sugar, tobacco, and the most valuable of the fibre and oil-bearing plants. In some, minerals are found; in others, the timber or the fisheries are of value. Even the smallest outlying islands vary

in their uses. Some have harbours, others possess pearl shell or phosphate beds. They are for the most part alike in producing copra and *bêche-de-mer*.

In view of these differences, all that can be done is to summarize here the information which has already been given separately for each island or group. The first noteworthy point is that the internal communications in most of the groups are still backward, and in the Solomons are non-existent. A good road system, and in Fiji a railway system, is important for the development of the fruit trade generally, and especially the banana trade. Of all the groups the Solomons alone have good harbours, but these are at present almost unused. In the islands with reefs, almost without exception, harbour accommodation is bad or non-existent. It would be possible, in some cases, to blast boat passages through the reef, as has been done at Niué. Through lack of such passages the fruit-bearing islands of the Cook group, which are among the most fertile in the Pacific, are hopelessly backward. On the other hand Suvarov, with one of the finest harbours in the Pacific and admirably suited for a coaling station, is neglected and uninhabited.

The shipping facilities vary enormously. Some islands, such as Fiji, have frequent communications not only with Australasia but also with America. Others see a vessel only four or five times a year. In most of the groups the inter-insular services are fairly adequate; but, if the natives are expected to prepare an amount of copra proportionate to the available supply, and if the fruit grown is to be exported in the best condition, more frequent services are necessary. It is probable that in the near future the exigencies of the copra trade with the United States and of the fruit trade with Canada will bring about a great improvement in distant communications. The western groups are probably destined to see a considerable development of their trade with China and Japan, and also with India, either through Singapore or through Rabaul.

In none of the groups is there a wholly adequate

supply of labour, though the exact nature of the labour problems varies from group to group. The deficiency is least serious in the Cook Islands and in the Gilbert and Ellice Colony. In Fiji the problem has been partially solved by the introduction of coolie labour from India. In the Solomons it has not been solved at all, and this group, though perhaps the richest of all, is practically undeveloped.

The most profitable article of commerce in all the groups is the coconut. The copra trade could almost everywhere attain far greater dimensions; in the Cook Islands it might increase to five times its present volume, and in the Solomons it could be trebled. A new and perhaps almost an exclusive market for this product is promised by the great advance in the American demand. The fruit trade of all the groups except the Gilberts is developing rapidly, not only with Australia and New Zealand, but also with Canada. The problem here is chiefly the inadequacy of communications and of labour supply. It has been noted of late, both in Fiji and in the Cook Islands, that as the banana exhausts the soil and is liable to be damaged by hurricanes, there has been a tendency to abandon its cultivation in favour of citrous fruits and vegetables, especially tomatoes. Sugar is confined to Fiji, but it could equally well be produced in the Solomons. Cotton and rubber of excellent quality can be produced in many of the groups, also tea, coffee, cocoa, spices, fibres, especially sisal hemp, and the products of oil-bearing plants, such as candlenuts, ground-nuts, and soya beans.

The timber supply of Fiji and of the Solomons is almost inexhaustible; but little has been done to develop it, and the erection of sawmills is urgently needed. The fisheries could in many parts be made more profitable if canning and preserving plant, such as has been established in Norfolk Island, were made more general. In Norfolk Island and Tonga the whaling industry has been neglected. Minerals are not found except in Fiji and the Solomons, and even there it is doubtful whether

they exist in paying quantities. In the whole of British Oceania the only mineral product which is regularly worked is the phosphate of Ocean Island and, since the war, Nauru. Excepting the production of sugar and copra, the sole manufactures of the islands are the making of hats and the building of boats.

Foreign trade before the war was almost entirely in British hands, and by far the greater part was absorbed by Australia and New Zealand. German trade was pushed by German merchants in Fiji or from Sydney, or in the German possessions, especially Samoa, and by great German firms such as Hernsheim & Co., while the Norddeutscher Lloyd was preparing to extend its activities both to Fiji and to the Solomon Islands. Since the outbreak of war the Americans and the Japanese have been trying to take the place of the Germans, the former in copra traffic, especially in the Eastern groups, the latter in the Western groups, and especially in the Gilberts.

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MAPS

The British Possessions in the Pacific before the war are shown on Stanford's map of "The Pacific Islands" (London Atlas Series), 23 by 18 inches.

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