

1949  
NEW ZEALAND

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**DEPARTMENT OF ISLAND TERRITORIES**

**COOK ISLANDS**

ANNUAL REPORT FOR THE YEAR ENDED 31st MARCH, 1949

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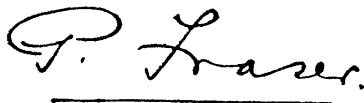
*Presented to Both Houses of the General Assembly by Command of His Excellency*

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The Right Hon. the MINISTER FOR ISLAND TERRITORIES to HIS EXCELLENCY THE  
GOVERNOR-GENERAL

Wellington, 2nd August, 1949.

I HAVE the honour to submit to Your Excellency the report on the Administration of  
the Cook Islands for the year ended 31st March, 1949.



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Minister of Island Territories.

His Excellency the Governor-General of New Zealand.

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# REPORT

## COOK ISLANDS (EXCEPT NIUE)

### PART I—GENERAL INFORMATION

#### A. GEOGRAPHY

##### *Location*

THE Cook Group (excluding Niue) comprises fifteen islands. These are generally small and are widely scattered throughout an area of some 850,000 square miles of ocean extending from 9 degrees south to almost 23 degrees south and from 156 degrees west to 167 degrees west, the total land area being approximately 100 square miles.

Niue, although usually considered geographically part of the Group, is so remote that it has been administered separately since 1903.

The remaining islands fall naturally into two distinct areas—the Southern or Lower Group, and the Northern Group. The Lower Group consists of eight islands, of which Rarotonga, Aitutaki, Atiu, Mitiaro, Mauke, and Mangaia are permanently settled. Of the two remaining islands, Takutea is visited by parties from Atiu who make copra there, and Manuae is privately leased and is worked as a copra plantation. The Northern Group consists of seven islands, of which five—Penrhyn, Manihiki, Rakahanga, Pukapuka, and Palmerston—are continuously inhabited, and Suvarrow and Nassau, which are normally uninhabited except for a weather station on the former.

Rarotonga, the seat of the Administration, is 1,633 nautical miles from Auckland. Some idea of the dispersion of the Group can be derived from the following table:—

Island.	Miles From Rarotonga.	General Direction From Rarotonga.	Island.	Miles From Rarotonga.	General Direction From Rarotonga.
Mangaia ..	110	E.S.E.	Palmerston	270	N.W.
Atiu ..	116	N.E.	Suvarrow	513	N.N.W.
Takutea ..	118	N.E.	Manihiki	650	N.
Manuae ..	124	N.N.E.	Nassau ..	673	N.N.W.
Aitutaki ..	140	N.	Rakahanga	674	N.
Mitiaro ..	142	N.E.	Pukapuka	715	N.N.W.
Mauke ..	150	E.N.E.	Penrhyn ..	737	N.

### Area and Population

Area and estimated population of the various islands as at 31st March, 1949, are as follows :—

Island.	Area.	Population.				Total.
		Males.		Females.		
		Non-indigenous.	Indigenous.	Non-indigenous.	Indigenous.	
	Acres.					
Rarotonga .. .. .	16,500	170	2,681	90	2,596	5,537
Mangaia .. .. .	17,500	8	916	2	973	1,899
Mauke .. .. .	4,600	3	351	..	451	805
Mitiaro .. .. .	2,500	1	96	..	130	227
Atiu .. .. .	6,950	4	678	2	609	1,293
Aitutaki .. .. .	3,900	7	1,314	4	1,265	2,590
Palmerston .. .. .	1,000	..	34	..	33	67
Pukapuka .. .. .	1,250	4	345	1	338	688
Manihiki .. .. .	1,250	2	227	..	244	473
Rakahanga .. .. .	1,000	1	174	..	157	332
Penrhyn .. .. .	4,000	2	374	..	335	711
Manuae .. .. .	1,524	..	18	..	10	28
Takutea .. .. .	302	..	..	..	..	..
Nassau .. .. .	300	..	..	..	..	..
Suwarrow .. .. .	600	..	..	..	..	..
Totals .. .. .	63,176	202      7,208		99      7,141		14,650
		7,410		7,240		

*Population Density.*—In the absence of exact information regarding the area of arable land, statistics of this nature are apt to be misleading. Overpopulation is known to exist in some islands, notably Pukapuka, and the lease of Nassau Island, situated some forty-five miles from Pukapuka, was purchased to enable the Administration to resettle some of the surplus population of that island. It is worthy of note that formerly Nassau Island was used by the inhabitants of Pukapuka as an additional source of food-supply.

### Topography

*Lower Group.*—These islands are of volcanic origin, having a hilly or mountainous interior surrounded by fertile lowlands. The height of the interior varies up to an elevation of 2,140 ft. The Island of Manuae is a normal coral atoll. All the islands in this area are surrounded by a coral reef. In addition, most islands have an elevated coral reef—known locally as the makatea—which encircles the islands almost immediately behind the coast-line. The soil of the Lower Group is very fertile and is suitable for the cultivation of the usual tropical and sub-tropical products.

*The Northern Group.*—The islands of the Northern Group are typical coral atolls. The soil of the majority of these islands is poor, being largely coral sand. Coconut palms thrive, but there is some shortage of other native food crops.

### Climate

The whole Group lies within the hurricane belt and destructive storms have been experienced during the hurricane season, which extends from January to March. Considerable damage was caused by such storms in 1935, 1943, and 1946. The area is now covered by the meteorological service, with headquarters in Fiji, and hurricane warnings are issued by this service.

The climate in the Lower Group, apart from the summer months, is mild and equable. The average temperature in Rarotonga for the last thirty-eight years is 74·67 degrees, and the average rainfall for the same period 82·3 in. In the Lower Group the water-supply is adequate and there is little danger of serious droughts; in the Northern Group, however, the problem of water-supply is acute and droughts of varying intensity are experienced after a relatively short dry period. The problem is not one of supply, since the rainfall is adequate, but one of collection and storage. The Administration is attempting to improve the position by the provision of further water-tanks and catchment areas.

## B. HISTORY

Some of the islands of the Lower Group were discovered in 1773 by Captain Cook, who first touched at Manuae. There are no European records of Rarotonga, Mauke, and Mitiaro until 1823, when the Rev. John Williams, of the London Missionary Society, visited them. The Cook Islands became a British Protectorate in 1888, and in 1901 were annexed to the British Empire and proclaimed part of New Zealand.

## C. PEOPLE

The Cook Island Maori is a Polynesian and is closely allied to the New Zealand Maori. There is a strong resemblance between these people in tradition, language, and custom. Many of the tribes in both places are able to trace their descent back to a common ancestor. The language shows only slight differences from New Zealand Maori. A census of the area is held in conjunction with the New Zealand census, and the following figures are quoted to illustrate the population growth:—

1906	..	..	..	..	8,518
1926	..	..	..	..	10,081
1945	..	..	..	..	14,519*

\*Includes 231 Europeans.

It should be emphasized that these figures refer only to resident population and do not take into account those who migrate to New Zealand.

The Maoris are all professed Christians. The London Missionary Society, the Roman Catholic Mission, the Seventh Day Adventist Mission, and the Church of Latter Day Saints are represented in the Group. Maori is still the spoken language of the area, and official publications are published in both English and Maori. The Census of 1945 revealed that fewer than 6 per cent. of the population over ten years of age were unable to read and write Maori.

## D. GOVERNMENT

The Cook Islands are within the boundaries of the Dominion of New Zealand and provision for their government is made in the Cook Islands Act, 1915. Under this Act a Resident Commissioner is charged with the administration of the Cook Islands. The Resident Commissioner is resident in Rarotonga, and is represented on the other islands by Resident Agents. The Maoris are British subjects and the provisions of the British Nationality and New Zealand Citizenship Act, 1948, apply.

In each of the ten main islands there are Island Councils consisting of *ex-officio* and elected members, who are elected triennially. The *ex-officio* members comprise the Resident Commissioner, Resident Agents, at the outer islands, together with the Arikis or leading chiefs at the islands. The franchise extends to all Maoris over eighteen years of age. The Councils are presided over by the Resident Commissioner or the Resident Agents. Europeans in the Cook Group are represented by one elected member of the Island Council of Rarotonga.

The Cook Islands Amendment Act, 1946, under which these Island Councils were reconstituted, also provided for a Legislative Council of the Cook Islands. This body is comprised of ten unofficial members elected by the Island Councils and ten official members selected from the Cook Islands Public Service and appointed by the Governor-General. The Council is presided over by the Resident Commissioner, who has a casting but not a deliberative vote.

Following the prescribed elections and official appointments, the second session of the Legislative Council commenced on the 4th November, 1948. Mr. A. G. Osborne, M.P., Parliamentary Under-Secretary to the Right Hon. the Prime Minister, accompanied by the Secretary of Island Territories, attended the session as the representative of the New Zealand Government. The session, which continued until the 30th November, was very successful, and many useful and constructive recommendations were made. A notable feature was the active part taken by the unofficial members both in general debate and in submitting proposals for the general welfare of their islands. Two Ordinances, the Manufacture and Sale of Food Ordinance 1948 and the Building Ordinance 1948, were passed. The establishment of the Council is universally regarded as marking an important stage in the political development of the islands.

Laws affecting the Cook Islands are made by Act of New Zealand Parliament or by Orders in Council and regulations issued thereunder.

Ordinances applicable to the whole of the Cook Islands may be made by the Legislative Council of the Cook Islands, subject to certain statutory restrictions. These Ordinances require the assent of the Resident Commissioner, and may be disallowed in whole or part by the Governor-General within one year from the date of assent of the Resident Commissioner. Ordinances restricted to particular islands may be passed by the Island Councils concerned, and these require the assent of the Resident Commissioner, or they may be reserved for the signification of the Governor-General's pleasure.

The following legislation affecting the Cook Islands has been enacted since the date of the last report :—

*In New Zealand :—*

- The Cook Islands Maintenance Enforcement Regulations 1948.
- The Cook Islands Exchange Control Regulations 1948.
- The Cook Islands Amendment Act, 1948.
- The Cook Islands Amendment Act (No. 2), 1948.
- The Cook Islands Council Regulations 1946, Amendment No. 1.
- The Cook Islands Legislative Council Regulations 1947, Amendment No. 1.
- The British Nationality and New Zealand Citizenship Act, 1948.
- The Civil Aviation Act, 1948.

*In the Cook Islands :—*

- Ordinances enacted by the Legislative Council.
- The Manufacture and Sale of Food Ordinance 1948.
- The Building Ordinance 1948.

Atiu Ordinance No. 7 : The Planting of Land Ordinance 1949.

*South Pacific Commission*

Members of the Research Council of the South Pacific Commission made a short visit to Rarotonga in March to meet the Administration officers and the residents of Rarotonga. The research requirements for the area were discussed for submission to the Commission at its meeting in May, 1949.

### *Judicial Organization*

The Judiciary comprises a High Court, a Native Land Court, and a Native Appellate Court. The High Court exercises civil and criminal jurisdiction throughout the Cook Islands, and the Native Land Court is concerned largely with litigation on lands and titles. The High Court consists of a Judge and two Commissioners in Rarotonga and the Resident Agents in their capacity of Commissioners in the outer Islands. There are two Judges of the Native Land Court (the senior Judge being also the Judge of the High Court), but there are no Commissioners at the present time.

The Native Appellate Court was established by the Cook Islands Amendment Act, 1946. This Court sits in the Cook Islands and hears appeals and applications for rehearings. Previously, appeals were required to be heard by the Supreme Court of New Zealand, and in practice Natives were usually unable to exercise their right of appeal on account of the expense involved. Rules of the Appellate Court were made in 1947, and the first Appellate Court sat in Rarotonga from the 8th September to the 21st October, 1948. The Native Appellate Court has jurisdiction to hear and determine appeals from any final order of the Native Land Court. By leave of the Native Land Court, an appeal shall lie to the Native Appellate Court from any provision or preliminary determination of the Native Land Court made in the course of any proceedings for the ascertainment of the title to customary land or partition.

Within twelve months of the commencement of the Cook Islands Amendment Act, 1946, the Native Appellate Court had jurisdiction to grant or direct a rehearing, before either the Native Appellate Court or the Native Land Court, where any person alleged he had been prejudicially affected by any order made before the commencement of the Cook Islands Amendment Act, 1946.

Chief Judge McCarthy and Judge Morgan, of the Native Land Court of the Cook Islands, and Chief Judge Morison and Judge Harvey, of the New Zealand Maori Land Court, comprised the Native Appellate Court of the Cook Islands in 1948.

Of 9 appeals lodged in respect of inhabitants of Rarotonga, 1 order was varied, 3 were heard and adjourned, 2 were heard and dismissed, and three still have to be heard.

Of a total of 102 rehearings, orders were made in 14 cases, 15 cases were dismissed, and 73 remain to be heard. There are also 36 applications for rehearing in respect of the outer islands still to be heard.

Chief Judge Morison and Judge Harvey returned to New Zealand on the 21st October, 1948, and the Native Land Court at Rarotonga commenced on the 10th January, 1949, to rehear cases directed by the Native Appellate Court.

High Court actions during the last five years are summarized as follows :—

—	1944-45.	1945-46.	1946-47.	1947-48.	1948-49.
Civil judgments : Rarotonga	60	35	51	42	52
Divorces granted : Whole Group	15	13	20	9	10
Criminal convictions: Rarotonga	1,401	1,195	1,179	1,762	1,436

A summary of Native Land Court proceedings for the last five years is as follows :—

—	1944-45.	1945-46.	1946-47.	1947-48.	1948-49.
Applications heard .. ..	124	169	123	244	381
Orders made .. ..	115	159	99	192	298
Applications outstanding—					
Rarotonga .. ..	401	454	502	589	518
Outer Islands .. ..	738	838	858	988	1,053

*The Public Service*

At present the majority of the senior positions are filled by officers recruited in New Zealand for service with the Cook Islands Administration. Local Maoris and Europeans are also employed, the majority of the employees being Maori. It is hoped that in the future more of the higher positions will be filled by Cook Islanders at present being educated in New Zealand under a Government scholarship scheme.

*Penal Administration*

As at the 31st March, 1949, the Police Force in the Group consisted of the following officers:—

Island.	Chief Officer.	Senior Sergeant.	Sergeant.	Constables.	Totals.
Rarotonga .. ..	1	1	1	8	11
Aitutaki .. ..	..	..	1	6	7
Mangaia .. ..	..	..	1	5	6
Atiu .. ..	..	..	1	5	6
Mauke .. ..	..	..	1	3	4
Mitiaro .. ..	..	..	1	2	3
Manihiki .. ..	..	..	..	3	3
Rakahanga .. ..	..	1	..	2	3
Penrhyn .. ..	..	..	..	3	3
Pukapuka .. ..	..	..	..	3	3
Totals .. ..	1	2	6	40	49

The Force is recruited in the Group, the only European being the Chief Officer.

The conduct of the Force has been good, but it was necessary to dismiss one constable at Rarotonga.

There has been no serious crime in the area during the last twelve months—the number of prosecutions brought by the police in the period was 1,475. The party of New Zealand police brought to Rarotonga during 1947 to assist in dealing with the industrial disputes has returned to New Zealand with the exception of one Sergeant and one constable.

The Police Force is responsible for the censoring of films, and during the year 167 films were censored and 8 were rejected as unsuitable for exhibition and several others were cut.

A total of 261 dogs were registered during the period, the fees collected totalling £130 10s.

Licence fees for motor-vehicles amounting to £212 10s. were collected during the year:—

Annual licences—46 motor-trucks, 20 motor-cars, and 26 motor-cycles)	£	s.	d.
13 passenger licences	..	..	..
8 changes of ownership	..	..	..
118 motor-driver's licences	..	..	..
23 registrations	..	..	..
	£212	10	0

**E. HUMAN RIGHTS**

Where statutory law does not provide, the common law of England as at 1840 applies. Statutory law gives the people the protection of certiorari, habeas corpus, and also affords peculiar protection of land and contractual relationship.



Briefly, the land is inalienable by way of sale save to the Crown for public purposes, and Maori customs are recognized by the Court in all matters pertaining to land. In practice, land required for public purposes is now acquired by lease in perpetuity, thus avoiding alienation. Land may not be taken in execution of debt, and no contract entered into by a Maori is enforceable without the consent of the High Court.

Generally speaking, the laws of the Cook Islands are the same as the laws of New Zealand. There is no difference made between indigenous and non-indigenous residents. Enactments of the Parliament of New Zealand do not automatically come into force in the Cook Islands unless specifically applied.

No distinction is made between the rights of men and women in the area.

## PART II—SOCIAL CONDITIONS

### A. LABOUR AND EMPLOYMENT

Conditions relating to labour and employment vary widely in the Cook Islands. The reason for this is to be found largely in the differing quality of the arable land. In the Northern Group, which are mainly coral islands, the typical Polynesian subsistence economy prevails, the Maoris making sufficient copra to earn some income. In certain of the islands—namely, Penrhyn and Manihiki—pearl-shell is found, and this is utilized as an additional source of income. The output of copra is determined largely by the number of nuts that have to be used for drinking purposes, and it therefore fluctuates in quantity between wide limits. Land is held throughout the Cook Islands on a communal basis. The Southern Group present, however, a different picture. These islands are more fertile and have an adequate rainfall in most cases. These factors enable export crops such as citrus fruits and arrowroot to be grown. In addition, the presence of an export industry creates a number of tertiary industries which employ some of the population. These industries include stevedoring and handling of fruit for export.

Wage standards are fixed for all types of work following the sitting of a special Wages Tribunal in 1946. Particulars of this body were given in the annual report for 1947. Further progress on questions of industrial relations was made with the passing of the Cook Islands Industrial Union Regulations in 1947. These regulations enabled the registration on the 12th July, 1947, of the Cook Islands (except Niue) Industrial Union of Workers. This union includes all classes of workers and is affiliated to the New Zealand Federation of Labour. Membership is not compulsory, and there are at present no provisions for preference being given to unionists in respect of any work offering.

Provision was also made in the regulations for the settlement of disputes by conciliation or, failing a voluntary settlement, by decision of an Industrial Relations Officer appointed from the Cook Islands Administration. Appeal from such decisions is to an Industrial Magistrate appointed by the Minister of Island Territories for the purpose.

Basic wage-rates range from 7s. to 9s. per day; and for more responsible work, up to 18s. per day.

There has been no industrial dispute this year.

#### *Migratory Labour*

The only labour recruited in the territory is that employed by the French Phosphate Co. of Oceania, who work the phosphate deposits at Makatea, in the Society Islands. This work is popular, as it provides a relatively high scale of wages, and many workers seek re-employment. The labour is recruited on an individual basis and is for a period of one year. Workers are medically examined both before and after their term, and a compulsory allotment is paid either to their dependants or to their Savings-bank account.

The Cook Islanders have proved themselves good workers and they have contributed materially to the much-needed supply of phosphates for both Australia and New Zealand. The following table shows the numbers and source of the workers employed as at the 31st March, 1949 :—

Rarotonga .. .. .	157
Mangaia .. .. .	81
Mauke .. .. .	52
Mitiaro .. .. .	25
Atiu .. .. .	30
Total .. .. .	345

Apart from these workers, there is some population movement from the less fertile Northern Group to Rarotonga and other more fortunately placed southern islands.

Quite a number of Cook Islands Maoris, principally females, go to New Zealand to domestic service or to learn trades. This migration is under supervision, and persons desiring to leave the islands are subject to examinations for health and character.

### B. PUBLIC HEALTH AND SANITATION

Although the Cook Islands are tropical, they are fortunately relatively free from the majority of common tropical diseases. Malaria is absent, but filariasis is the major medical problem. Other common diseases include tuberculosis, acute pulmonary infections, and chronic skin-diseases.

Under the provisions of the Cook Islands Act, 1915, all Natives receive free medical and surgical treatment as required. In addition, all school-children, and patients admitted to hospital, receive free dental treatment.

The health services are headed by a Chief Medical Officer, and include another European Medical Officer, seven Cook Islands medical practitioners, and fourteen Mosquito Inspectors. The hospital and sanatorium staff include two European Matrons, three European Sisters, and two trained Maori nurses. The staff is distributed throughout the Group as under :—

Rarotonga .. .. .	European Medical Officers .. .. .	2
	Certificated European nurses—	
	Hospital .. .. .	2
	Sanatorium .. .. .	1
	District .. .. .	1
		— 4
	Cook Islands medical practitioners .. .. .	2
	Cook Islands Nurse—New Zealand maternity qualification .. .. .	1
	Cook Islands trained nurse .. .. .	1
	Cook Islands nurse trainees .. .. .	22
	Dressers—Cook Islands trainees .. .. .	3
	Dispenser and laboratory x-ray technicians .. .. .	2
	Dentist—New Zealand qualified .. .. .	1
	Dental nurses—Cook Islands trained .. .. .	2
	Dental trainees—Cook Islanders .. .. .	5
	Mosquito Inspectors .. .. .	7
Aitutaki .. .. .	Cook Islands medical practitioner .. .. .	1
	Mosquito Inspectors .. .. .	2
Mangaia .. .. .	Cook Islands medical practitioner .. .. .	1
	Certificated European nurse .. .. .	1
	Mosquito Inspectors .. .. .	2
Atiu .. .. .	Cook Islands medical practitioner .. .. .	1
	Mosquito Inspector .. .. .	1
Mauke .. .. .	Cook Islands nurse—assisted by the Roman Catholic father .. .. .	1
	Mosquito Inspector .. .. .	1
Manihiki/Rakahanga	Cook Islands medical practitioner .. .. .	1
Penrhyn .. .. .	Cook Islands medical practitioner .. .. .	1
Pukapuka .. .. .	Wife of the Resident Agent—untrained .. .. .	1
	Mosquito Inspector .. .. .	1

The limited number of trained medical personnel available in the Group remains one of the foremost problems in maintaining an adequate health service. Sufficient Cook Islands medical practitioners will not be available until 1955. Endeavours are being made to increase the number of trained Maori nurses, who, it is anticipated, will be available to serve as District Nurses in the outer islands. The European staff is in the main recruited from New Zealand. Training of Cook Islands nurses and Mosquito Inspectors is being conducted on the lines suggested by the South Pacific Health Service. Dental nurses are being trained locally for a period of three years and their course is designed to enable them to do preventative and operative dentistry. A Maori youth is being trained as a dispenser and another as a laboratory and x-ray technician at the Rarotongan Hospital.

Most midwifery in the Cook Islands is performed by untrained midwives in the villages. All nurse trainees are receiving instruction in obstetrics, and it is hoped that they will eventually attend to the majority of the routine maternity work. Male dressers are being trained at the hospital at Rarotonga for one year. The training includes elementary nursing, dentistry, and mosquito control. These dressers are designed to assist in filling the gap until such time as there are sufficient Cook Islands medical practitioners, at which time they will then become Mosquito Inspectors. Administratively the responsibility for the medical service is vested in the Chief Medical Officer, who shares with his assistant direct control over public health and mosquito control. The European medical officers also pay frequent and regular visits to the outer islands.

#### *Public Health*

During the year an Ordinance relating to the manufacture and sale of food was passed, and the Medical Department have carried out the necessary inspections of the premises concerned. Adequate steps have been taken for improvements where these were considered necessary. Routine inspections of shipping and aircraft entering the Group were made; 20 major vessels and 7 smaller vessels and 36 aircraft were inspected during the year.

During the year it was considered necessary to establish a quarantine station, due to epidemics of measles, paratyphoid in the Group, and infantile paralysis in New Zealand. For the whole year a ten-day period of surveillance on all people coming from New Zealand was enforced.

The child-welfare scheme also continued its activity. In Rarotonga and Mangaia, European District Nurses are responsible for this work. Village committees, co-operating with the District Nurses, attend to all phases of maternity and child-welfare work. In the outer islands these duties are undertaken by the medical practitioners.

#### *Medical Facilities*

At Rarotonga there is a general hospital with a maximum of thirty-six beds. This hospital deals with all the general medical cases from Rarotonga and other cases transferred from the outer islands. It is equipped with an operating-theatre and x-ray facilities. The building is old, and during the year a new site was chosen, and plans for a modern hospital are in process of preparation. The sanatorium at Rarotonga is a new building and is well equipped. Sixteen beds are available, and steps are being taken to increase the bed space to thirty-six beds. Mangaia has a single room in use as a dispensary. A new hospital and cottage for the medical practitioner has been included in the 1949-50 estimates. Mauke has a one-room dispensary, but a new hospital and cottage is under construction. A hospital dispensary with accommodation for four patients is available and considered adequate for the needs at Atiu. Mitiaro has no medical facilities. A new hospital is planned for Aitutaki, where at present a one-room dispensary and Native-style hospital of three beds is used. At Manihiki there is a Native-style one-room dispensary, but a hospital and cottage for the medical practitioner are planned. At Rakahanga a dispensary is to be erected shortly. A combined hospital

and dispensary building at Penrhyn with accommodation for six beds will require replacement within the next two or three years. Pukapuka has no medical facilities, but is scheduled to receive a cottage and hospital similar to that being provided for Mangaia and other islands. Palmerston Island has no medical facilities.

### *Medical Problems*

Tuberculosis is prevalent throughout the Group, pulmonary tuberculosis, tubercular peritonitis, and tubercular adenitis being the commonest manifestations. Tuberculosis of the bone is relatively uncommon.

In Rarotonga, out of a population of 5,537, 104 deaths occurred during the last twelve months; of these, 29—32·7 per cent of the total deaths—were due to tuberculosis. This figure may be taken as representative of the whole Group. To date no organized attack has been made on the disease, but individual cases are being treated as they are discovered. The reluctance of the local population to enter the sanatorium appears to be diminishing, and a stage has now been reached where the number of available beds is inadequate.

Several educational films have been shown throughout Rarotonga during the year, but unfortunately they were not made available long enough to allow them to be shown throughout the Group. These appear to have stimulated local interest in the disease, although the type of film available was not wholly suitable for Maori audiences, and it is hoped that in future they will be made available for sufficient time to enable them to be shown throughout the Group.

At the last meeting of the Legislative Council a Building Ordinance was passed which gives power to order repairs or demolition of buildings if required. This lays the foundation for a future campaign in the Cook Islands, where tuberculosis is undoubtedly related to bad housing and overcrowding.

### *Helminthiasis*

Filiariasis is endemic in the Cook Islands, and the problem of its control has been carried out under the scheme recommended by Mr. Amos, of Fiji. Mosquito Inspectors have been trained and are now stationed throughout the Group. Control measures have been operating for some time in Rarotonga and Aitutaki. The principle of controlling the carrier of the disease, *Aedes pseudo scutillaris*, appears to be effective, and a marked reduction in the number of filarial mosquitoes is evident where the scheme is in operation.

The progress being made with anti-filarial drugs is being watched, and orders have been placed for suitable drugs.

Lectures and demonstrations of mosquito control have been given throughout the Group and a limited survey of selected groups for micro-filarial infestations have been made.

### *Ascariasis*

The predominant intestinal infestation in the Group is *Ascaris lumbricoides*, and supplies of suitable drugs have been obtained to enable mass treatment of school-children.

### *Hookworm*

There is now only an occasional case of hookworm reported, and the conditions of soil sanitation are such that it is unlikely that this disease will re-establish itself.

### *Leprosy*

Leprosy is endemic in part of the Group, notably Penrhyn and Aitutaki. A large number of cases have been removed from Penrhyn in the past. During 1948, 10 leper suspects were sent from Aitutaki to Makogai, no case being found in the remainder of the Group.

*Yaws*

Yaws is endemic in the Group, although active cases are now seldom seen. A few cases occurred during the year in Atiu, and there is an untreated field in Pukapuka, but it has not been possible to arrange for an inspection of that island this year.

*Hospitalization*

The following table gives a summary of treatments given in the hospital at Rarotonga during the last five years:—

—		1944-45.	1945-46.	1946-47.	1947-48.	1948-49.
In-patients	.. ..	446	469	638	664	654
Out-patients	.. ..	8,603	6,895	9,029	8,812	10,679
Visits	.. ..	1,374	1,145	2,016	2,241	2,884
<i>Anæsthetics—</i>						
General	.. ..	52	30	99	73	53
Local	.. ..	336	377	53	*	*
Spinal	.. ..	..	..	..	..	10
<i>Operations—</i>						
Major	.. ..	101	26	43	43	47
Minor	.. ..	467	440	109	119	344†
Confinements	.. ..	63	43	29	30	51
X-rays	.. ..	39	77	248	*	787

\*Not available.

†Estimate.

The daily average number of patients at the hospital was 33·5 and the average length of stay 17·4 days. There were 36 admissions to the sanatorium and the daily average of patients was 13·8.

*Water-supply*

Increasing attention is being given to this serious problem, reference to which has already been made in the section dealing with the topography of the area. There are two aspects to be considered—in the case of the volcanic Lower Group islands the problem is one of ensuring that the adequate supply is hygienically distributed, and in the case of the coral atolls of the Northern Group that such rain as falls is not allowed to escape, but is stored in suitable bulk containers for use during the drier periods.

In Rarotonga there is a piped water-supply gathered from five different sources. Further reticulation is required, and it is intended to obtain the services of a qualified engineer with a view to improving the catchment areas, which are at present somewhat liable to pollution. In the outer islands there is a need to improve and extend both the storage available and the catchment areas.

In the year under review, water-tanks were constructed as under:—

Mauke: one 10,000-gallon tank in the district of Areora-Makatea; one 4,000-gallon tank at the wireless station.

Mangaia: Seven 3,500-gallon tanks.

This work has been restricted in the past owing to a shortage of materials, but strenuous efforts are being made to overcome this problem. It is also proposed to investigate artesian sources of supply.

*Sewage and Disposal Systems*

In the Lower Group, pit latrines with a concrete slab and pedestal are used in a fair percentage of cases; shortage of cement has been a factor in preventing a greater number from being constructed. In the Northern Group, the high surface-water level has necessitated the use of deep sea latrines, though in some cases the other type are used. A rubbish-collection scheme has been established in Atiu.

## Vital Statistics

TABLE 1—DEATHS (MAORIS) AT DIFFERENT AGES, YEAR ENDED 31ST MARCH, 1949

	Number of Deaths.	Percentage of Total Deaths.
Under 1 week .. .. .	19	7.57
1 week to 1 month .. .. .	7	2.79
1 month to 3 months .. .. .	6	2.39
3 months to 6 months .. .. .	14	5.58
6 months to 12 months .. .. .	20	7.97
1 year to 2 years .. .. .	10	3.98
2 years to 3 years .. .. .	4	1.60
3 years to 4 years .. .. .	5	1.99
4 years to 5 years .. .. .	5	1.99
5 years to 10 years .. .. .	6	2.39
Over 10 years .. .. .	155	61.75
Totals .. .. .	215	100.00

TABLE 2—DEATHS OF CHILDREN (CAUSES): ALL ISLANDS

	Year.						
	First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Sixth to Tenth.
Pulmonary T.B. .. .. .	2	1	2	..	..	..	..
T.B. peritonitis .. .. .	..	1	..	..	1	..	1
Gastro-enteritis .. .. .	4	..	..	..	..	..	..
Pneumonia .. .. .	5	..	1	..	..	..	..
Accidental .. .. .	1	..	..	..	..	..	..
Tetanus .. .. .	1	1	..	1	..	..	..
Prematurity .. .. .	8	..	..	..	..	..	..
Convulsions .. .. .	6	2	..	1	..	..	..
Still-born .. .. .	11	..	..	..	..	..	..
Bantia disease .. .. .	..	..	..	..	..	..	1
Broncho-pneumonia .. .. .	8	1	1	..	..	..	1
Influenza .. .. .	1	..	..	..	..	..	..
Birth injuries .. .. .	1	..	..	..	..	..	..
Marasmus .. .. .	1	..	..	..	..	..	..
Debility .. .. .	1	..	..	..	..	..	..
Hydrocephalus .. .. .	2	..	..	1	..	..	..
Malnutrition .. .. .	1	..	..	..	..	..	..
No cause given .. .. .	6	..	..	..	1	1	1
Tetanus neonatorum .. .. .	3	..	..	..	..	..	..
Chronic gastro-enteritis .. .. .	1	..	..	..	..	..	..
Exhaustion .. .. .	3	..	..	..	..	..	..
Shock .. .. .	1	..	..	..	..	..	..
Intersusception .. .. .	1	..	..	..	..	..	..
Meningitis .. .. .	1	..	..	..	..	..	..
Default labour .. .. .	1	..	..	..	..	..	..
Etelectosis pulmonum .. .. .	1	..	..	..	..	..	..
Congenital eteectosis .. .. .	1	..	..	..	..	..	..
Ascariasis labor .. .. .	..	1	..	..	..	..	..
Fever .. .. .	..	1	..	..	..	..	..
Severe gastro-enteritis .. .. .	1	..	..	..	..	..	..
Congenital bowel obstruction .. .. .	1	..	..	..	..	..	..
Totals .. .. .	74	8	4	3	2	1	4

TABLE 3—INFANT MORTALITY (COMPARATIVE TABLE)

Year.	Total Number of Deaths under One Year.	Total Number of Births.	Death-rate per 1,000 Births.
1939-40 .. ..	50	504	99.12
1940-41 .. ..	40	541	73.92
1941-42 .. ..	74	553	123.27
1942-43 .. ..	78	599	130.18
1943-44 .. ..	68	525	129.45
1944-45 .. ..	63	564	111.7
1945-46 .. ..	65	567	114.59
1946-47 .. ..	81	574	141.1
1947-48 .. ..	171	635	269.29
1948-49 .. ..	66	648	101.85

TABLE 4

Annual number of deaths, 514 ; 35.08 per 1,000 population.

Annual number of births, 648 ; 44.23 per 1,000 population.

Annual number of deaths under one year of age, 66 ; 101.85 per 1,000 live births.

Table showing cause of admission to the Rarotonga Hospital :—

—	Number.	Percentage of Total Admissions.
Filariasis .. ..	84	12.8
Pneumonia .. ..	74	11.2
Tuberculosis .. ..	80	12.2
Broncho-pneumonia .. ..	43	6.6
Typhoid and para-typhoid .. ..	25	3.8
Hydrocele .. ..	24	3.7
Hernia .. ..	18	2.7
	348	53.0
Other causes .. ..	209	47.0
Totals .. ..	657	100.0

The following is an approximate morbidity table for the most common diseases in the Group. In the absence of complete details from some outer islands, it has been necessary to estimate :—

Disease.	Morbidity Per 1,000 Population.	Disease.	Morbidity Per 1,000 Population.
Filaria .. ..	206.8	Yaws .. ..	78.8
Broncho-pneumonia .. ..	122.4	Gonorrhœa .. ..	77.8
Tuberculosis .. ..	111.3	Hydrocele .. ..	44.9
Lumbar pneumonia .. ..	92.6		

## COST OF HEALTH SERVICE

—	1944-45.	1945-46.	1946-47.	1947-48.	1948-49.
Amount expended .. ..	£16,202	£31,429	£25,176	£29,398	£44,672
Population .. ..	14,506	15,005	14,821	14,456	14,650
Amount per head .. ..	£1 2s. 4d.	£2 1s. 11d.	£1 14s. 0d.	£2 0s. 8d.	£3 0s. 11d.

*Dental Services*

The dental service is directed by a European Dental Officer and two Maori dental nurses. Further expansion has taken place during the year under review, and a record of 10,134 operations were carried out. During the last quarter of the year an increased amount of conservation work has been done, and the number of fillings has exceeded the number of extractions for the first time in five years. All of the schools on Rarotonga, Aitutaki, Mauke, Atiu, and Mangaia were visited during the year. Pre-school children and adolescents continued to receive urgent treatment, and admissions to hospital were also examined before discharge. The dental clinic was moved to more suitable accommodation during the year, and establishment of a clinic at Aitutaki is being completed. Equipment was increased during the year. Cadets were selected from Aitutaki and Mauke for training at Rarotonga, where there are at present five cadets. The training period covers three years, the first two being spent at Rarotonga, and the third at one of the outer islands, where the cadet gains practical experience. A final revision course at Rarotonga completes the training period, after which the cadet is returned to his home island, from which he will be brought to Rarotonga at intervals for a three months' refresher course. Training is directed towards conservative and preventative dentistry, and it is hoped that this will control the increasing incidence of dental caries. In addition, extraction technique is taught.

The dental health education programme which commenced in 1947 has been continued, films, posters, and pamphlets, both in Maori and English, being displayed and distributed. Comparative statistics for the last five years are as follows:—

—	1944-45.	1945-46.	1946-47.	1947-48.	1948-49.
Extractions .. .. .	1,533	1,713	828	2,482	2,335
Fillings .. .. .	1,382	915	489	1,893	2,743
Miscellaneous : Prophylactic and other treatments, cleaning, scaling, &c.	38	239	1,622	2,266	5,056
Total operations ..	2,953	2,867	2,939	6,641	10,134

*Nutritional*

The Cook Islands can be divided into two nutritional areas:—

- (a) *The Northern Group.*—Here the diet is predominantly based on fish, sea foods, and coconut products, supplemented by imported carbohydrates such as flour and rice and limited amounts of locally grown carbohydrates such as breadfruit, banana, and coarse taro. By means of composting and the use of fish manure, a certain quantity of vegetables is being grown at one or two islands in the Group.
- (b) *The Lower Group.*—Here the diet is predominantly carbohydrate, being based on locally grown taro, kumara, and banana and imported flour and rice. A limited quantity of fish, pork, and poultry is available for special occasions. The chief source of animal protein is imported tinned beef. Citrus fruits, tomatoes, and pawpaws are available during most of the year and are extensively consumed.

There is evidence of malnutrition amongst the poorer section of the community in the Lower Group, especially amongst those outer-island people who have migrated to Rarotonga and have no arable land. There is also an increasing tendency to rely on imported bread, sugar, and tinned beef.

Talks and films regarding diet have been given throughout the Group, and some interest in diet is being aroused. A comprehensive system of training in growing new types of food and in preparing them has been commenced by the Education Department, and this example is being reflected by a marked increase in the cultivation of



such vegetables as cabbages, beans, lettuce, carrots, and parsnips throughout the Lower Group. The milk-in-schools scheme has been extended to Rarotonga and some other islands of the Lower Group.

### C. HOUSING CONDITIONS AND PROGRAMMES

Apart from some areas in Rarotonga, noticeably in Avarua, the standard of housing throughout the Group is good, houses being constructed out of native material and thatched with the leaves of the pandanus tree or coconut palm. The Native type of construction, although in some ways less hygienic than an imported style, is considered the more suitable type of accommodation. Some use is also made of building in limestone blocks, but this construction is not favoured for dwellings due to the poorer ventilation and the dampness sometimes associated with it. In Rarotonga the poorest housing is that occupied by a few migrants from the outer islands who, having no land from which to draw supplies of native materials, have tended to use substitute materials of unsuitable type and quality. The recent legislation by which the owners of insanitary houses can be required to demolish them will assist in dealing with this problem. There is also some lack of pandanus trees, due to their being attacked by a parasite; alternative materials are, however, available, and efforts have been made to re-establish this source of building-material. There is some indication that increasing reliance will be placed on imported building-materials.

Construction of European houses for private and official use is proceeding under difficulties through scarcity of materials.

### D. WELFARE AND RELIEF

This problem is not an important one in the Group, the method in which land is held communally and the fact that no families are without land enabling all Maoris to live comfortably. There is an active child-welfare organization which is supervised by the District Nurse or the Assistant Medical Practitioner. An organization exists for the relief of ex-servicemen. Youth organizations such as the Boys' Brigade, the Boy Scouts, and Girl Guides are established and are very popular.

### E. CRIMINAL STATISTICS FOR THE YEAR ENDED 31ST MARCH, 1949

These are based on the records held at Rarotonga, but may be taken as typical of the group:—

Liquor offences	..	..	1,277	Wilful mischief to property	..	11
Traffic offences	..	..	39	Disorderly conduct	..	29
Theft, burglary, &c.	..	..	105	Conversion of bicycles	..	3
Adultery (by married persons)	..	..	14	Keeping of pigs in settlement	..	42
Common assault, &c.	..	..	79	Failure to send children to school	..	54
Trespass	..	..	59	Failure to clear noxious weeds	..	11
Animal trespass	..	..	195	Failure to register dogs	..	32
Failure to tether animals	..	..	94	Obstructing police	..	14
Tethering to citrus trees	..	..	9	Curfew—loitering or remaining in a public place after 10 p.m. without reasonable excuse	..	124
Arson	..	..	2			
Gambling	..	..	15			
Indecent assault	..	..	2			

### F. PENAL ADMINISTRATION

There is a gaol in Rarotonga, but none in the outer islands, though the question of providing them is under consideration. At present all prisoners serve their sentences in Rarotonga, except that serious cases are sent to a New Zealand prison.

On conviction and the imposition of a fine, the accused is permitted to work out the fine on public works if he is unable to pay. In practice, female delinquents are not imprisoned, the majority of crimes committed by women having been found to be of a trivial nature.

Generally speaking, there is little crime of a serious nature committed in the Cook Islands. The table of crimes in Rarotonga indicates the petty nature of most of the cases.

#### G. INFORMATION ON DEVELOPMENT PROGRAMMES

Particulars of these programmes will be found under the relevant sections of the report.

#### PART III—EDUCATION

The general policy of education in the Group as outlined in the report for 1947 is being continued. Attempts are being made to preserve the material culture of the islands and incorporate them within the educational system. The desirability of utilizing the Maori language, particularly in the more elementary stages of a child's education, is realized, especially as in some cases the Maori teacher's restricted command of English makes his task more difficult. To assist in this, the efforts to complete a standard grammar and dictionary are being proceeded with and the draft is being revised by a special committee of local inhabitants. Despite this, it is, however, realized that there may never be an extensive literature available in Maori, and the expressed desire of the Maori that he be taught English is not being overlooked. The Maoris are beginning to realize the advantages of elementary education being given in their language and are co-operating in this matter. The fact that Maori is used in conversation is an additional reason why instruction should be given in its correct use. At the present time it is probable that the standard of English of the Maori is not excelled by any other race in the Pacific, and the use of Maori as the teaching medium in the lower classes will enable more attention to be given to other subjects.

During the year the syllabus of instruction has been closely examined and a comprehensive scheme for the inclusion of the material culture of the Maori has been drawn up. The teaching of hygiene, stressing the importance of the care of infants, has also been dealt with adequately. A syllabus of needlework for girls will incorporate instruction in the preparation of layettes for expectant mothers, and throughout the curriculum much more emphasis will be placed on the practical problems of the Maori than on an unrelated academic education, which has been the trend in the past.

Education in the Group is provided by the Administration, the London Missionary Society, and the Roman Catholic Mission, these bodies supporting twelve, seven, and seven schools respectively. In the Northern Group, with the exception of Pukapuka, where there is an Administration school, and Omoka, Penrhyn, where there is a Roman Catholic Mission school, all the schools are provided by the London Missionary Society, which receives a subsidy from the Administration. Most of the Administration schools are controlled by European headmasters assisted by a trained Maori staff, and this, coupled with the fact that consolidation has taken place, has resulted in conditions which compare favourably with other areas in the Pacific. During the year the European staff was increased from 13 to 15, and the Maori locally trained staff from 133 to 256. Eleven teachers left the service as a result of transfer, resignation, ill health, and death. In order to place teacher training on a proper footing pending the construction of Tereora Training College, plans for the establishment of a secondary-school class at Avarua are under way. Two Maori teachers were sent to New Zealand for a period of observation, and two others returned from a similar course. These latter teachers, who returned in August, have amply demonstrated the value of this training by their application of improved class-teaching methods and by the lectures they have given to their fellow-teachers.

Regular classes for all Maori teachers are held in Rarotonga in an effort to raise the general standard of the teaching service.

In September a week's refresher course in physical education and music was held, the instructors being members of the European teaching staff.

The temporary plan for manual training, pending the completion of Tereora Training College, is almost complete, and the domestic-science courses at Aorangi have commenced. This latter course provides instruction in cooking, laundry, and housecraft for 132 girls in Grades 7 and 8 from five Rarotongan village schools and 16 female student teachers. The scheme will be extended to other schools as soon as transport arrangements can be made.

The tools necessary for the woodwork scheme have arrived, and preparations for this instruction are being made. It is anticipated that a start will be made in June, 1949.

The statistics of enrolments show an increase in the school population of 277 and are given below:—

Island.	School.	Roll Numbers.				
		1944.	1945.	1946.	1947.	1948.
(a) GOVERNMENT SCHOOLS						
Rarotonga .. ..	Avarua (including European class)	432	437	502	503	558
	Arorangi .. ..	280	281	269	276	323
	Ngatangia .. ..	216	205	230	230	266
	Titikaveka .. ..	188	190	199	212	217
Aitutaki .. ..	Araura .. ..	562	593	604	641	679
Atiu .. ..	Atiu .. ..	204	198	221	221	255
Mangaia .. ..	Oneroa .. ..	218	238	270	276	288
	Ivirua .. ..	106	138	146	160	172
	Tamarua .. ..	68	77	79	75	95
Mauke .. ..	Mauke .. ..	172	189	177	185	218
Pukapuka .. ..	Pukapuka .. ..	143	118	127	179	166
Totals .. ..		2,589	2,664	2,824	2,958	3,237
(b) LONDON MISSIONARY SOCIETY SCHOOLS						
Mitiaro .. ..	Mitiaro .. ..	38	64	22	42	56
Manihiki .. ..	Tukao .. ..	22	18	19	20	31
	Tauhunu .. ..	52	44	45	77	65
Rakahanga .. ..	Rakahanga .. ..	64	64	114	102	62
Penrhyn .. ..	Omoka .. ..	89	122	115	81	48
	Tetautua .. ..	18	45	36	48	55
Palmerston .. ..	Palmerston .. ..	21	17	20	17	14
Totals .. ..		304	374	371	387	331
(c) ROMAN CATHOLIC MISSION SCHOOLS						
Rarotonga .. ..	St. Joseph's Convent .. ..	169	165	165	193	222
Atiu .. ..	Atiu Catholic .. ..	58	59	71	68	71
Mauke .. ..	Mauke Catholic .. ..	43	37	41	46	41
Manihiki .. ..	Tukao Catholic .. ..	20	20	22	20	17
	Tauhunu Catholic .. ..	8	8	8	8	18
Rakahanga .. ..	Rakahanga Catholic .. ..	8	8	12	20	20
Penrhyn .. ..	Omoka Catholic .. ..	..	..	..	..	20
Totals .. ..		306	297	319	355	409
Grand totals .. ..		3,199	3,335	3,514	3,700	3,977

Throughout the year attendances have been excellent, very high percentages being obtained in most schools. This is the result of the enthusiasm of the teachers and the generally good standard of health of the pupils. An influenza epidemic in September resulted in schools being shut for a period of from one to two weeks. Active steps are being taken to make the children more conscious of the principles of hygiene. Liaison with the Medical Department has been strengthened, and through their co-operation regular daily health inspections are carried out, schools being fairly well supplied with medical equipment. As has already been stated, the pupils receive dental treatment at regular intervals. The milk scheme continued to function during the year, and the results have had a marked effect on the children.

Three scholarships tenable in New Zealand secondary schools were awarded during the year, increasing the number of studentships to a total of fifteen since the scheme commenced in 1946.

The general shortage of building-supplies has limited the erection and improvement of school buildings that would normally have taken place, but the standard of school buildings in the Group compares more than favourably with that of most other Pacific islands. During the year two additional Native-style class-rooms were erected at Avarua, and two more authorized. At Mauke two further Native-style classrooms are being built to an improved design, which utilizes lime for walls, sawn timber for shutter and door frames, and pandanus leaf for the roof. Though this style of building is more expensive, it is felt that this is more than compensated for by improved lighting-conditions, the better protection from bad weather, safety from intruders, and the permanency which the construction offers. There is still need, however, for a more permanent design of building, and consideration is being given to a type which would obviate the heavy upkeep costs involved in both the old and the improved Native-style school. A school was erected by the Roman Catholic Mission at Omaka, Penrhyn Island.

In addition to teacher's tables, chairs, and cupboards, six hundred pupil tables and chairs were distributed throughout the Lower Group islands. Requirements have not yet been fully met, and further supplies will be necessary.

The Officer for Islands Education, Mr. F. R. J. Davies, visited Rarotonga in November, but his work was restricted owing to quarantine requirements. During the year, Mr. T. A. Fletcher, Senior Inspector of Maori Schools, inspected the five Rarotongau schools.

## PART IV—ECONOMIC CONDITIONS

### A. NATURAL RESOURCES

The natural resources of the Cook Islands vary within the Group. The Southern Group islands possess suitable soils for the cultivation of tropical products for export, but the Northern Group agricultural activities are mainly confined to subsistence farming and the production of some copra. There are no forestry resources in the area, but planting of trees to prevent soil erosion and provide timber for fruit-cases has commenced. No minerals are known to exist and no sources of power are available. It would appear that the economic future of the Group is limited to the production of tropical products and the possible derived processing industries.

### B. AGRICULTURE

The agricultural administrative organization in the area is headed by a Director of Agriculture, who is to be assisted by a Crop Development Officer, and two Orchard Instructors who are to be appointed shortly. The amount of specialization which the arrangement permits is not as great as would be desirable, but represents the most

satisfactory compromise. The Agriculture Department operates citrus nurseries, banana nurseries, a fruit-inspection scheme, and a citrus-replanting scheme. It is also responsible for the proper control and oversight of the export of fruit from the Group.

The arable land is used for the raising of domestic crops as well as citrus fruits, tomatoes, and other export products. The following are the estimated areas planted in the principal crops :—

	Area, in Acres.
Coconuts .. .. .	18,000
Citrus fruits .. .. .	650
Tomatoes .. .. .	300
Manioc (cassava) .. .. .	550

The quantities and value of the principal exports for 1948 are as under :—

	Cases.	£
Citrus fruit .. .. .	38,827	36,864
Bananas .. .. .	38	19
Pineapples .. .. .	600	433
	Boxes.	
Tomatoes .. .. .	61,290	23,469
	Tons.	
Copra .. .. .	1,168	57,933
Arrowroot .. .. .	76	4,665
Candle-nut .. .. .	171	2,562
Pearl-shell .. .. .	114	13,941
Handicrafts .. .. .	*	654
Manufactured goods .. .. .	*	11,328

\*No satisfactory unit of quantity.

#### Prices for Products

Copra—	Per Pound
	d.
Rarotonga .. .. .	3 $\frac{3}{4}$
Lower Group .. .. .	2 $\frac{3}{4}$
Northern Group .. .. .	2 $\frac{1}{2}$

Tomatoes: These returned 4s. 8d. to 22s. 6d. per 20 lb. box. The variation in price is influenced by the quantities shipped and the period of the year in which shipments arrive in New Zealand. At certain seasons considerable competition from New Zealand-grown hothouse and open-air tomatoes is experienced.

Arrowroot (cassava or manioc): 5d. per pound for finished product.

Citrus Fruits:—

Oranges: 19s. 3d. f.o.b. in bushel and a half cases. Return to producer is 11s. per packed case delivered at the packing-shed door.

Mandarines and Tangerines: 17s. f.o.b. in bushel cases. Return is 12s. 5d. per case.

Lemons: January to June, 20s. 6d. per bushel case f.o.b.; July to December, 14s. 6d. per bushel case f.o.b. Return to the grower varies between 15s. 10d. and 9s. 11d.

#### Live-stock

The following is the live-stock population of Rarotonga :—

Horses: 145 stallions; 974 mares; 426 geldings; 172 foals.

Cattle: 31 bulls; 192 cows; 15 steers; 76 calves.

Goats: 131 male; 557 does; 211 kids.

Pigs: 197 boars; 1047 sows; 198 barrows; 1,296 piglets.

Due to the limited area of land and the system of land tenure, live-stock production is a haphazard undertaking and is not seriously considered by the Maoris. Animal husbandry is being introduced as circumstances permit. A small consignment of pigs and poultry from New Zealand has been imported into Aitutaki by the Administration.

There are no forestry resources in Rarotonga or in any of the outer islands, the original growth having been cut out for casemaking over forty years ago, with no steps taken to replant at the time. There is now a lack of adequate shelter on the coastal area, and soil erosion is in evidence on the hills after heavy rains. This problem is being attacked by the Administration.

#### *Fisheries*

With the exception of the bonito and allied types of fish, the Group, apart from the large lagoon at Penrhyn, is not well supplied with deep-sea fish. Most of the other islands have fair fish-supplies, and shell-fish are found on the reefs. Those islands which possess large lagoons or are not continuously occupied are better provided with these resources.

Pearl-shell is dived for at Penrhyn and Manihiki. Regulations are made restricting this occupation to Polynesians and forbidding the gathering of shell with diving equipment down to a specified depth of water. These regulations also determine which of the areas shall be fished.

Apart from the restrictions on the taking of pearl-shell, there are no conservation practices in force in the area.

#### *Land-utilization*

The soils of Rarotonga are red volcanic, and though no complete survey has been undertaken the analysis of two samples is included as Appendix III.

The amount of agricultural equipment in the area is small. The Administration has the undermentioned equipment which it makes available to orchardists and other farmers:—

- Rarotonga: one 22 h.p. rotary hoe; one tractor, plough, and heavy disks; two power spraying plants of 100 gallons capacity.
- Aitutaki: one 22 h.p. rotary hoe.
- Mauke: one 22 h.p. tractor; one set of light disks; one light plough.

The following equipment has been ordered to assist the citrus-replanting scheme: five tractors; six spray pumps; two tractor ploughs; eight sets massive disk harrows. This equipment will be distributed throughout those islands where the scheme is in operation.

At Rarotonga it has been the practice to encourage growers to use fertilizer. To this end a scheme was introduced whereby a levy was made on all fruit exported. A deduction of 3d. per case was made on each case of citrus fruits shipped and 2d. per case for tomatoes. These deductions are kept as credits in the name of the individual shipper, and each year fertilizer to the total amount of the credits is purchased and the individual issues made on this basis. Many growers do not use the fertilizer themselves, but most of it is eventually applied to the soil, the apparent loss being the personal loss of the owner.

There is no system of plant breeding or selection at present, though with the establishment of the new experimental farm a scheme for crop-development will be pursued.

The Agriculture Department maintains a service for the control of the pests and diseases of plants, stocks of suitable sprays being kept and sold to the growers as required. The Department works in close collaboration with the New Zealand Department of Scientific and Industrial Research, who identify the pests and diseases as discovered and advise as to treatment.

There are no facilities for agricultural research in the Group, though agriculture is taught in schools, and with the appointment of a Crop Development Officer in charge of the new experimental farm it is intended to give intensive and advanced instruction in agriculture. At present, five Maori youths are being brought from the outer islands for training in citrus production.

The former experimental farm was abandoned three years ago due to its liability to flooding. While it was in operation demonstrations were given; this work is now carried out at the citrus plots established in each district. A more suitable experimental-farm site is being acquired and will be the responsibility of the Crop Development Officer.

There are seven district packing-sheds situated at suitable points around Rarotonga. These sheds are run by local committees, who also arrange for the discussion of agricultural problems at frequent intervals. There is a Fruit Advisory Committee elected by the growers in the four main centres, and this Committee is in close contact with the latest developments in production and shipping of citrus fruits.

There is no veterinary service in the Group.

### *Land Tenure*

The laws relating to land tenure are contained in the Cook Islands Act, 1915, and its amendments. Practically all land is either Native customary land or Native freehold land as defined in the Act. Alienation of land is prohibited by law, and the land therefore remains in the possession of the family group in perpetuity. Few sections of land are vested in single owners. Section 50 of the Cook Islands Amendment Act, 1946, contains a provision by which security of tenure may be guaranteed to an individual desiring to plant long-term crops. Considerable use is being made of this section of the Act which is in accordance with slowly changing custom.

Tenure may be divided into the following five categories:—

- (i) Native Customary: Land held under Maori custom wherein the individual owners or families have not yet been determined.
- (ii) Native Freehold: Land held as above but where ownership has been determined by the Native Land Court.
- (iii) Leasehold: Land leased by the owners to individuals—European or Maori. It includes areas leased by the Crown for public purposes either on a short-term lease or lease with perpetual right of renewal.
- (iv) Crown Land: Land taken by the Crown by Order in Council or transferred by conveyance for public purposes.
- (v) Land vested in religious bodies.

Land held by non-indigenous inhabitants:—

	Area.								
	Rarotonga.			Outer Islands.			Total		
	A.	R.	P.	A.	R.	P.	A.	R.	P.
(i) Leased by Europeans .. ..	1,601	1	21	1,593	1	30*	3,194	4	11
(ii) Land leased by the Crown .. ..	123	2	33	202	0	29	325	3	22
(iii) Land owned by the Crown .. ..	167	1	17	978	3	9†	1,146	0	26
(iv) Land vested in religious bodies .. ..	83	3	19	58	2	29	142	2	7
	1,976	1	10	2,833	0	16	4,809	1	26

\*Includes the lease of Manuac and Te Au-o-Tu Islands, 528 and 996 acres respectively.  
 †Includes the Islands of Nassau and Suwarro, 300 and 600 acres respectively. Both these islands are uninhabited.

*Citrus Replanting*

The Agriculture Department has charge of the citrus replanting scheme. The scheme at present being developed provides for the planting of 100 acres in orange-trees. It is anticipated that these will commence bearing in the fifth year and will be in full bearing in the eleventh year, when the production from these plantings will be 45,000 cases. Preference is given to the following types of land tenure: (1) Maori family land; (2) Individually owned land; (3) Leased properties.

Each plot of land is treated separately and made to bear its own establishment and maintenance charges. The scheme is financed by the New Zealand Treasury, and interest is charged half-yearly at the rate of 5 per cent. No charge is made for the general supervision by the officers of the Agriculture Department, but work performed by the foreman or casually employed labour is debited to the plot.

It is anticipated that oranges from these plots will be available for export in the fifth year after the planting, and the proceeds will be used to reduce the costs debited against the plot. In the sixth and subsequent years a larger quantity of fruit will be exported, and after deducting the maintenance charges the proceeds will be divided equally between the owner and the reduction of the debt outstanding. To ensure that all persons entitled to a share of the proceeds receive their share, the Fruit Control Scheme will pay these moneys into the Native Land Court Trust Account for distribution.

Estimated yields are as follows: Fifth year, 1 case per tree; sixth year, two cases per tree; seventh year, two and a half cases per tree; eighth year, three cases per tree; ninth year, three and a half cases per tree; tenth year, four cases per tree; eleventh year, five cases per tree.

When an individual expresses a wish to enter the scheme, a meeting of all available owners is called by the Registrar of the Native Land Court. At a meeting attended by the Registrar and the Surveyor a free and open discussion takes place, and the Registrar is responsible to see that proceedings are adequately and correctly recorded. The Surveyor marks out the area and records its position. A note is taken of all dissents, and the completed record is deposited in the Native Land Court records. If the Court is satisfied that the allocation is a proper one under Maori custom—or if the owner or family is already known—it may confirm the arrangement and record it in the Court minutes. Upon confirmation the owner of the area should be able to pledge the freehold to the Administration as security for the advances necessary. Any advances made in the development of the plot are automatically a charge on the freehold of the land.

Previously the organization of the industry was not good. The Maori would pledge his crop in return for advances from the merchants, who did not always receive the crop. The result was that the Maori was assisted to fall into debt. The institution of the present method of purchasing crops has led to an improvement of these conditions.

*Marketing of Produce*

*Copra*.—Production from the Cook Islands is shipped to New Zealand in accordance with an arrangement made with the United Kingdom Ministry of Food. The Director of Agriculture issues certificates of quality and weight. Rarotonga is used as the assembly point for shipping, supplies being purchased in the outer islands by merchants and transported to Rarotonga in inter-island vessels.



*Tomatoes.*—The marketing of tomatoes is either by direct sale by the growers to local merchants or by the consignment to auctioneers in New Zealand either directly or through trading firms. The system of picking, packing, and inspection is well organized, the Director of Agriculture advising growers when to pick their crops, having regard to the availability of shipping. The fruit is graded to a rigidly enforced standard at the packing-shed. During the last year one shipment of 20,500 boxes was handled by twenty-nine local agents at Rarotonga.

*Citrus Fruits.*—Since 1937 the purchase and export of oranges and bananas has been in the hands of the Cook Islands Administration. All fruit exported is sold to the Internal Marketing Department of New Zealand at a price fixed on a f.o.b. basis. Standards are rigidly enforced and the fruit is graded on the American and Australian pattern. An up-to-date cool store and packing-shed is proposed.

*Pineapples.*—Plantings of this crop have increased at Atiu and Mangaia. In the latter island the crop was very good and the "Maui Pomare" uplifted a shipment. A roading programme is under way to open up further suitable land.

*Coffee.*—This crop is grown, but has not been exploited in recent years, though locally produced coffee is consumed in the Group and local merchants are seeking increased supplies.

*Arrowroot.*—The climate and soil of most of the lower islands, particularly Aitutaki, has been found suitable for the growing of this crop, and 83 tons were shipped during the year. Competition from the Australian product was experienced during the latter portion of the year.

*Cotton* is also able to be grown successfully, and the establishment of a textile industry in New Zealand has led to inquiries being made as to the quantity and quality of this product which is likely to be required.

#### *Development Programme*

The major developmental scheme is the citrus-replanting scheme. During the year 20 acres have been planted at Rarotonga, mainly late Valencia; the 100 acres in the replanting scheme have been satisfactorily maintained. The aim has been to keep the plants circle weeded and to grow cover-crops of crotalaria for turning in at intervals. The plots have been sprayed and pruned as necessary. The citrus nurseries contain 95,000 plants in various stages between almost ready for budding and ready for transplanting. Banana shoots are available, but their supply does not exceed 10,000. In Aitutaki 15 acres have been planted under the replanting scheme and 60 other plots have been maintained. In Mauke the replanting scheme was instituted during the year and the first 20 plots were planted. Sufficient plants have been "heeled in" at a nursery in readiness for an extension of the scheme.

A road-building programme is in operation in Mangaia and this will open up the fertile country of the interior. Four new roads were built in Atiu.

#### C. SECONDARY INDUSTRIES

The only secondary industries in the area are an orange-juice factory and a clothing and footwear factory, all in Rarotonga.

#### D. STANDARD OF LIVING

No accurate information as to the national income of the Group is available and it is difficult to arrive at a suitable method for its compilation. Attention is being given to experiments in this field in other similarly placed territories.

A list of retail prices of some staple commodities is included as Appendix II.

## E. COMMUNICATIONS AND SHIPPING

In the Cook Islands there is a major radio station at Rarotonga and eleven sub-stations in the outer islands. There is a regular air service through Rarotonga, Aitutaki, Samoa, Tonga, and Fiji to New Zealand, a regular shipping service, and occasional calls are made by trans-Pacific vessels. Post and telegraph facilities are available at all islands and there is a telephone service in Avarua, Rarotonga.

There are no good harbours in the Group, ships having to anchor outside the reefs at most islands.

The N.Z.G.M.V. "Maui Pomare," specially built for the islands trade, continues to be of the greatest importance to the Group, although it is apparent that a larger and faster vessel would be desirable. With the increase of production estimated to result from the replanting scheme, the provision of a large refrigerated vessel will be most important.

The air service to New Zealand was maintained regularly throughout the year, operating at fortnightly intervals. A French air service from New Caledonia to Papeete passes through Aitutaki and occasionally Rarotonga.

Communications within the Group itself were maintained by two trading schooners for the greater part of the year. The position in this regard has not been entirely satisfactory, but will be improved shortly when a small vessel purchased for Administration purposes comes into operation.

*Postal and Radio*

The postal and radio services are controlled by the Administration, who draw technical officers from the New Zealand Post and Telegraph Department, and from trained Maori personnel. Throughout the year the services functioned very well.

On the 1st January, 1949, the money-order-telegram service was extended to the Group. There has been little interruption in the radio service in the Group during the year under review. Due to greatly increased demands resulting largely from the air traffic, meteorological, and medical services, the existing equipment was found to be inadequate, and during the last three years plans were drawn up to modernize the station, and reconstruction commenced in 1948. On completion the receivers will be housed in a building near the aerodrome and the present accommodation will be used for transmitting purposes only, the two stations being linked by a 100-pair control cable. The stations are connected to the island power-station and a standby equipment consisting of two 20 kw Diesel engines housed in the transmitting-building. It is anticipated that the work will be completed by September or October of 1949.

There is a telephone service in Avarua.

During the year a total of 966,272 words were handled, of which 361,425 were paid traffic. Comparative figures for last year were 931,524 and 322,318.

Comparative statistics for Departments for the last five years are as follows:—

	1944-45.	1945-46.	1946-47.	1947-48.	1948-49.
Money-orders issued .. ..	£86,230	£98,483	£99,012	£146,404	£172,938
Money-orders paid .. ..	£23,024	£13,640	£32,800	£42,003	£50,478
Post Office Savings-bank deposits ..	£44,949	£45,929	£60,778	£63,910	£58,984
Post Office Savings-bank withdrawals	£26,470	£38,150	£57,105	£65,846	£63,593
Number of depositors as at 31st March	3,676	4,145	4,489	4,914	5,285
Amount held to their credit .. ..	£77,408	£87,020	£92,714	£92,946	£90,398
Number of Maori depositors .. ..	3,553	4,026	4,352	4,581	4,742
Amount held to their credit .. ..	£44,780	£60,670	£59,368	£58,533	60,143
Number of radio messages handled	9,170	12,125	14,309	15,565	16,908

## F. PUBLIC FINANCE

Revenue is derived from the following principal sources: import duty, income-tax, and stamp sales. The New Zealand Customs Tariffs apply, with the addition of two local duties. Income-tax is levied at the same rate as in New Zealand and the same exemptions apply. Apart from those individuals liable for income-tax, there is no direct taxation of the Maori community. Subsidies and grants are made by the New Zealand Government for general and special purposes.

Apart from the Money-order and Savings-bank Branch of the Post Office, there are no banking facilities in the territory.

The following table shows the revenue, expenditure, and grants for the last five years:—

Year.	Revenue.	Expenditure.	Deficit.	Subsidies and Grants.	Final Surplus or Deficit.
	£	£	£	£	£
1944-45 .. .. .	40,228	120,239	80,011	79,469*	= -542
1945-46 .. .. .	49,337	93,017	43,680	43,669*	= -11
1946-47 .. .. .	73,999	107,530	35,531	18,313*	= -15,218
1947-48 .. .. .	78,773	147,106	68,333	70,991*	= +2,658
1948-49† .. .. .	86,121	207,490	121,369	100,249	= -21,120

\* Details available in previous reports.

† Figures subject to alteration.

## Details of Subsidies and Grants from New Zealand, 1948-49\* :—

General .. .. .	£ 72,560	Fairmile launch .. .. .	£ 1,255
New works .. .. .	1,773	Radio reconstruction .. .. .	13,220
School milk scheme .. .. .	1,651	Water tanks .. .. .	425
Scholarships .. .. .	2,352	Pensions .. .. .	407
New vehicles .. .. .	700		
Telephone system .. .. .	2,470	Total .. .. .	£100,249
Native Appellate Court .. .. .	436		
Police party .. .. .	3,000		

\* Figures subject to alteration.

The following are the details of revenue and expenditure for the last twenty years:—

Year.	Subsidies and Grants from New Zealand	Revenue Obtained in the Territory.	Expenditure of the Territory.	Amount spent on		
				Education.	Health.	Public Works.
	£	£	£	£	£	£
1929-30 .. .. .	16,919	19,107	34,739	8,613	7,331	4,368
1930-31 .. .. .	17,483	22,888	37,852	9,499	4,658	4,905
1931-32 .. .. .	17,464	25,430	40,582	7,730	5,534	5,217
1932-33 .. .. .	13,850	27,458	40,896	7,891	8,482	2,724
1933-34 .. .. .	11,013	25,518	38,744	8,800	8,155	2,742
1934-35 .. .. .	11,343	26,468	41,430	8,115	8,965	2,163
1935-36 .. .. .	15,568	24,989	40,692	8,786	6,548	2,093
1936-37 .. .. .	13,816	30,268	42,713	9,318	9,179	3,307
1937-38 .. .. .	11,000	45,599	47,207	9,046	8,326	3,827
1938-39 .. .. .	22,112	27,967	58,016	9,306	12,380	5,995
1939-40 .. .. .	24,000	24,943	53,204	8,993	10,069	4,937
1940-41 .. .. .	24,000	26,889	48,345	9,332	10,940	3,709
1941-42 .. .. .	24,000	25,395	46,951	9,513	10,795	4,975
1942-43 .. .. .	19,000	29,748	47,857	8,989	10,370	2,967
1943-44 .. .. .	27,000	40,818	59,798	9,846	10,116	5,504
1944-45 .. .. .	79,469	40,228	120,239	10,707	16,202	10,153*
1945-46 .. .. .	43,669	49,337	93,017	15,035	31,429	8,230
1946-47 .. .. .	18,313	73,999	107,530	19,796	25,176	18,874
1947-48 .. .. .	70,991	78,773	147,106	25,644	29,398	33,147
1948-49† .. .. .	100,249	86,121	207,490	35,332	44,672	36,614

\* Excludes expenditure on airfield £48,992.

† Figures subject to alteration.

## G. TRADE

In the 1948 calendar year the value of both imports and exports maintained the high level of the previous year. For the year the import values were £299,849 and export values £155,098, giving a total trade figure of £454,947.

Foodstuffs comprised 32·5 per cent. of the imports and piece-goods and apparel 18·2 per cent. In the previous year the figures were 33 per cent. and 14·3 per cent.

Citrus fruits, tomatoes, and copra continue to be the main exports, with pearl-shell and manufactured goods next in importance. During the year citrus-fruit exports were below average and were restricted by lack of shipping space. Tomato exports were high, but could have been increased had adequate shipping been available.

Comparative trade statistics for the last five years are set out below :—

—	1944.	1945.	1946.	1947.	1948.
IMPORTS VALUES					
	£	£	£	£	£
New Zealand .. .. .	124,161	123,245	157,870	201,769	226,427
Australia .. .. .	7,008	3,713	5,652	5,301	8,208
United Kingdom .. .. .	17,768	11,693	18,504	23,647	48,814
Canada .. .. .	622	135	1,191	2,743	2,872
United States of America .. .. .	4,541	2,876	8,037	16,501	7,353
Other .. .. .	1,130	2,408	4,342	3,282	6,175
Totals .. .. .	155,230	144,070	195,596	253,243	299,849
EXPORTS VALUES					
	£	£	£	£	£
New Zealand .. .. .	115,768	100,629	93,817	149,323	154,584
Australia .. .. .	1,290	1,172	1,254	6,951	..
United States of America .. .. .	2,868	2,883	12,565	245	514
Other .. .. .	6,904	1,562	626	2,006	..
Totals .. .. .	126,830	106,246	108,262	158,525	155,098

## QUANTITIES AND VALUES OF PRINCIPAL EXPORTS

—	1944.		1945.		1946.	
	Cases.	£	Cases.	£	Cases.	£
Citrus fruit .. .. .	45,220	26,152	74,334	45,411	24,833	19,246
Bananas .. .. .	2,298	1,154	3,136	1,574	54	27
Tomatoes .. .. .	Boxes. 37,751	35,978	Boxes. 35,375	27,320	Boxes. 69,550	47,274
Copra .. .. .	Tons. 747	15,269	Tons. 563	12,936	Tons. 617	16,107
Orange-juice .. .. .	Gallons. 4,365	1,624	Gallons. 2,728	978	Gallons. ..	..
Pearl-shell .. .. .	Tons. ..	..	Tons. 14	711	Tons. 48	12,140
Arrowroot .. .. .	..	579	32	1,636	81	4,380
Candlenut .. .. .	..	..	..	..	..	..
Pineapples .. .. .	Cases. ..	..	Cases. ..	..	Cases. ..	..
Handicrafts, glassware, &c. .. .. .	..	41,756	..	10,881	..	4,060
Manufactured goods .. .. .	..	422	..	1,049	..	3,058

QUANTITIES AND VALUES OF PRINCIPAL EXPORTS—*continued*

	1947.		1948.	
	Cases.	£	Cases.	£
Citrus fruit .. ..	56,973	48,515	38,827	36,864
Bananas .. ..	18	18	38	19
	Boxes.		Boxes.	
Tomatoes .. ..	22,048	21,049	61,290	23,469
	Tons.		Tons.	
Copra .. ..	793	35,727	1,168	57,933
	Gallons.		Gallons.	
Orange-juice .. ..	1,975	774	..	..
	Tons.		Tons.	
Pearl-shell .. ..	131	24,842	114	13,941
Arrowroot .. ..	91	4,362	76	4,665
Candlenut .. ..	277	4,076	171	2,562
	Cases.		Cases.	
Pineapples .. ..	808	465	600	433
Handicrafts, glassware, &c. .. ..	..	2,911	..	654
Manufactured goods .. ..	..	12,264	..	11,328

## VISITS

His Excellency the Governor-General, Sir Bernard Freyberg, V.C., G.C.M.G., K.C.B., K.B.E., D.S.O., LL.D., and Lady Freyberg, accompanied by their staff, paid an official visit to the Cook Islands this year. Their Excellencies arrived at Rarotonga in H.M.N.Z.S. "Bellona" on the 6th July, 1948, and then paid visits to Mangaia, Mauke, Atiu, and Aitutaki. All sections of the community were deeply appreciative of the honour conferred upon them and they expressed their loyalty to the Crown. Their Excellencies left a deep, human impression and quickened the loyalty of the Maoris, already noted for their loyalty to the Commonwealth.

Mr. A. G. Osborne, M.P., Parliamentary Under-Secretary to the Right Hon. the Prime Minister, accompanied by Mr. R. T. G. Patrick, Secretary of the Island Territories Department, visited Rarotonga in November to represent the Government at the second session of the Legislative Council of the Cook Islands. They also spent a day at Aitutaki meeting the people and obtaining first-hand information on some of their particular problems.

His Excellency the United States Minister in New Zealand, the Hon. R. M. Scotten, and Mrs. Scotten, accompanied by the American Military Air Attache, Lieutenant-Colonel O. F. Rigley, jun., A.C., and American Military Attache, Colonel F. E. Cookson, and Mrs. Cookson, visited Rarotonga.

Some of the full-time officers of the South Pacific Commission also visited Rarotonga, arriving on the 10th March. Unfortunately, the regular aircraft service had been delayed and they were forced to leave on the 11th March. The officers who visited the territory were Mr. H. E. Maude, Professor L. G. M. Baas-Becking, Major E. Massal, and Dr. H. G. MacMillan. A delegation from the New Zealand Federation of Labour visited Rarotonga from the 12th to the 15th August to confer with officers of the Cook Islands Industrial Union of Workers and to study labour problems. The delegation consisted of Mr. K. Baxter and Mr. W. B. Richards, and was appointed by the New Zealand Federation of Labour to investigate economic and industrial relations in the Cook Islands and to endeavour to arrange an amicable settlement of current labour disputes. All interested organizations were invited to meet the delegation and discuss their problems. Other visitors were Professor K. B. Cumberland, M.A., D.Sc., Professor of Geography, Auckland University College, and Professor Ernest Beaglehole, M.A., Ph.D., D.Litt., Professor of Philosophy, Victoria University College.

## APPENDIX I—INFORMATION RELATING TO INDIVIDUAL ISLANDS

	1944-45.	1945-46.	1946-47.	1947-48.	1948-49.
<b>RAROTONGA</b>					
Shipping calls—					
Vessels handling cargo .. ..	13	15	14	18	17
Other .. ..	11	9	8	8	10
Aircraft calls .. ..	..	..	..	37	37
Exports—					
Oranges (cases) .. ..	9,706	12,981	4,790	21,893	8,711
Other citrus fruits (cases) .. ..	1,904	4,528	1,464	6,530	2,997
Bananas (cases) .. ..	2,298	3,136	54	..	38
Tomatoes (boxes) .. ..	37,751	35,096	78,761	21,233	78,385
High Court cases .. ..	1,461	1,230	1,270	1,782	1,475
<b>AITUTAKI</b>					
Shipping calls .. ..	12	19	21	26	13
Aircraft calls .. ..	..	..	..	61	65
Oranges (cases) .. ..	8,997	12,684	1,000	..	..
High Court cases .. ..	358	320	366	207	232
<b>ATIU</b>					
Shipping calls .. ..	12	12	11	12	10
Oranges (cases) .. ..	11,801	12,916	3,979	8,077	3,326
High Court cases .. ..	448	528	442	505	470
<b>MAUKE</b>					
Shipping calls .. ..	10	11	11	7	12
Oranges (cases) .. ..	9,097	6,530	1,502	5,609	3,030
High Court cases .. ..	80	65	102	161	205
<b>MITIARO</b>					
Shipping calls .. ..	6	4	5	9	3
High Court cases .. ..	..	..	..	51	..
<b>MANGAIA</b>					
Shipping calls .. ..	6	10	13	13	13
Oranges (cases) .. ..	3,707	22,630	11,018	14,426	20,671
High Court cases .. ..	572	667	517	827	505
<b>PENRHYN</b>					
Shipping calls .. ..	3	3	6	13	4
High Court cases .. ..	58	101	142	50	193
<b>MANIHIKI</b>					
Shipping calls .. ..	4	4	13	13	9*
Copra (tons) .. ..	144	143	93	138	167
High Court cases .. ..	48	49	133	87	192
<b>RAKAHANGA</b>					
Shipping calls .. ..	4	4	10	11	7
Copra (tons) .. ..	86	74	163	115	176
High Court cases .. ..	39	..	9	33	18
<b>PUKAPUKA</b>					
Shipping calls .. ..	1	1	2	3	2†
Copra (tons) .. ..	70	60	80	85	20
High Court cases .. ..	33	..	..	139	..

## PALMERSTON

No figures available. Calls are made for copra and occasionally for dried fish which the inhabitants supply to Makogai Leper Hospital.

\*Includes special call of s.s. "Leicester" in response to a marine distress call for aid for Roman Catholic father. Vessel took patient to Suva.  
 †Includes call of the pleasure yacht "Seabird."

## APPENDIX II—RETAIL PRICES OF STAPLE COMMODITIES

Benzine .. .. .	4s. 9d. per gallon.	Kerosene .. .. .	3s. 3d. per gallon.
Bread .. .. .	6d. per pound.	Matches .. .. .	1s. per dozen boxes.
Biscuits (cabin) .. .. .	1s. 6d. per pound.	Meat (tinned) .. .. .	1s. 10d. per pound.
Butter (tinned) .. .. .	2s. 8d. per pound.	Milk (dehydrated) .. .. .	2s. 6d. per pound.
Butter (fresh) .. .. .	2s. per pound.	Rice .. .. .	6½d. per pound.
Cigarettes .. .. .	1s. for 10.	Salt .. .. .	3d. per pound.
Herrings in sauce .. .. .	2s. 2d. per pound.	Soap (washing) .. .. .	7½d. per pound.
Herrings in oil .. .. .	1s. 10d. per 14 oz.	Soap (toilet) .. .. .	6d. per cake.
Salmon, pink .. .. .	3s. 4d. per pound.	Sugar .. .. .	9d. per pound.
Sardines, round .. .. .	1s. 4d. per ½ lb.	Tea .. .. .	5s. 6d. per pound.
Sardines, round .. .. .	1s. 1d. per ¼ lb.	Tobacco .. .. .	3s. 2d. per 2 oz.
Flaked rock cod .. .. .	1s. 11d. per 6½ oz.	Drill, white .. .. .	5s. 4d. per yard.
Sardines in sauce .. .. .	2s. per ½ lb.	Shirting-material .. .. .	14s. 6d. per yard.
Fish (fresh) .. .. .	1s. per pound.	Sandals .. .. .	£1 per pair.
Flour .. .. .	3½d. per pound.		

## APPENDIX III—ANALYSIS OF RAROTONGA SOILS

	Locality.			
	Arorangi.		Nikao.	
Laboratory No. .. .. .	1272A	1272B	1728A	1728B
Depth .. .. .	0-6 in.	6-12 in.	0-6 in.	6-12 in.
Phosphate .. .. .	0.020	0.006	0.005	0.007
pH .. .. .	8.6	7.9	8.3	8.0
Carbon .. .. .	2.5	..	2.7	..
Nitrogen .. .. .	0.35	..	0.36	..
Carbon/nitrogen .. .. .	7.5	..	8.0	..
Base-exchange capacity .. .. .	41.7	20.8	31.0	21.4
Total exchangeable base .. .. .	(75)	19.5	23.4	14.5
Percentage base saturation .. .. .	(180)	94	76	68
Lime, exchangeable .. .. .	..	14.0	17.4	9.8
Magnesium, exchangeable .. .. .	8.0	5.0	5.6	4.0
Potash, exchangeable .. .. .	0.47	0.19	0.10	0.13

Sample No. 1727A contains 2.5 per cent. lime carbonate and sample 1727B 0.35 per cent. lime carbonate.

For a normal soil the Arorangi samples contain a fair supply of phosphate and potash. In the Nikao soils both these constituents are very low. There is a good supply of nitrogen in both topsoils. The carbon-nitrogen ratio gives an indication of the extreme breakdown of organic matter. The figures of 7.5 and 8.0 are very low. In normal soils they run around about 11.0. In Trinidad it has been found that low yields are obtained on heavy soils in which the carbon-nitrogen ratio is between 7.5 and 9.5. Whether this low figure has any significance in Rarotonga could only be determined by a wider survey of the soils. The percentage base saturation figures of all soils show that there is an abundant supply of lime in them. The topsoils are unusual in that they are alkaline. An alkalinity figure of 8.6 is fairly high, but not sufficiently high in itself to impede growth of plants. The alkalinity is important, in that in the Arorangi soil it may render the phosphates and minor elements like iron and boron unavailable. If this were happening one would expect chlorosis or mottling of leaves.

In summary it may be said the soils do not require dressings of lime. Nikao soil seems to need phosphate and potash, and perhaps the Arorangi soils need phosphate, but responses may not be what would normally be expected, more especially on the Arorangi soil. Arorangi soil seems to have the better fertility, unless the alkalinity is a disturbing factor.

## APPENDIX IV—METEOROLOGICAL

Comparative statistics for the last five years are as follows:—

—	1944.	1945.	1946.	1947.	1948.
Total rainfall (inches) ..	64.76	90.02	84.2	93.11	63.76
Number of rainy days ..	116	233	207	219	144
Highest for any day (inches) ..	2.85	4.63	3.6	4.43	3.11
Date .. ..	22 Feb.	11 Aug.	10 Mar.	3 Feb.	3 Feb.
Highest temperature (F.) ..	87	88.5	90.2	88	91
Date .. ..	9 Mar.	15 Mar.	19 Jan.	13 Feb.	17 Mar.
Lowest temperature (F.) ..	57	58.5	58	55	53.3
Date .. ..	12 Aug.	8 June	10 July	5 Sept.	10 July
Mean of maximum thermometer (F.)	80	80.9	81	81	82.8
Mean of minimum thermometer (F.)	69	70.3	69.3	69.3	62.7
Average Temperature (F.) ..	..	..	..	75.2	73.6

The Group again escaped serious storms. Both average minimum temperature and the lowest temperature recorded were lower than the previous year. There were also approximately 30 in. of rain less than the previous year. The average maximum temperature for the year was higher by almost two degrees than the previous period and the highest temperature recorded by three degrees.

Prior to 1947 Rarotonga Radio was responsible for meteorological observations, but following the advent of regular air services a permanent trained meteorological Officer was appointed. Observations by trained Native observers are taken throughout the Group, and daily observations have recently been greatly increased. All weather reports are transmitted to a central meteorological office in Fiji which is responsible for their co-ordination and for the supplying of weather information as required for the whole of the South-east Pacific area.

## NIUE

## PART I—GENERAL INFORMATION

## A. GEOGRAPHY

Niue, or Savage, Island is situated in the South Pacific Ocean at 169° 46' west longitude and 19° 10' south latitude. It is approximately 300 miles east of Tonga, 350 miles south-east of Samoa, and 580 miles west of Rarotonga. The island, which is isolated and does not form part of any recognized group, has an area of approximately 100 square miles. It is approximately 13 miles long and 11 miles wide, and the main road which encircles the island is approximately 40 miles in length.

The last population census, taken in September, 1945, showed a total of 4,253 inhabitants, composed of 23 Europeans and 4,230 Niueans. The following table shows the estimated population at 31st March, 1949:—

—	Males.	Females.	Total.
Europeans ..	20	10	30
Niueans ..	2,065	2,238	4,303
Totals ..	2,085	2,248	4,333



The inhabitants are distributed amongst twelve villages, whose respective populations according to the September, 1945, figures were as follows:—

Alofi .. .. .	967	Liku .. .. .	434
Makefu .. .. .	212	Hakupu .. .. .	463
Tuapa .. .. .	349	Fatiau .. .. .	87
Namukulu .. .. .	92	Tamakautoga.. .. .	235
Hikutavake .. .. .	245	Avatele .. .. .	329
Mutalau .. .. .	635		
Lakepa .. .. .	305		
			4,253

Alofi, the largest village, is the Administrative centre and the port of entry for the island.

The island is an elevated coral outcrop with a coral reef fringing a precipitous and broken coast-line. In general formation it takes the shape of two terraces, the lower coastal terrace being about 90 ft. above sea-level; the upper terrace, which forms the bulk of the island, is about 220 ft. above sea-level. Apart from the rise from the lower to the upper terrace, there are no hills. Seven of the twelve villages are situated on the western lower terrace, and the remaining five are on the upper terrace on the north, east, and south sides. The soil of the island, though fertile, is not plentiful, and this fact, together with the rocky and broken nature of the terrain, makes cultivation difficult and prevents the grazing of stock. The island is heavily wooded in several places, but has no running streams or surface water. There are no good harbours, and the best anchorage, which is at Alofi, is in many ways unsatisfactory.

Niue is on the edge of the hurricane belt, but severe hurricanes are rare, although winds of high velocity are sometimes experienced during the months December until late March. The climate is mild and equable; the mean annual temperature over the last thirty years was 76.65 degrees and the annual rainfall for the same period averaged 76.04 in. Occasional droughts do occur, but the rainfall is generally well distributed over the whole year. December to March is the recognized "rainy" season, and these are also the hottest months of the year. From April to November, the cooler months, the temperature averages 74 degrees, with warm, sunny days and cool nights. The prevailing wind is from the east-south-east. Variable winds are experienced from the west, north, and north-west during the summer months.

## B. HISTORY

Niue is believed to have been inhabited for over a thousand years. One historian states that there appear to have been two distinct migrations of people to the island, the first probably from Tonga, the second from Samoa. The evidence of this fact remains to-day in the division of the people into Motu and Tafiti.

Captain James Cook rediscovered Niue in 1774, making three landings on the western side of the island on 20th June of that year. He met with a hostile reception from the inhabitants, and in consequence called the place Savage Island.

The Christian gospel was introduced to the island in 1846 by Peniamina, a Niuean, who had returned after a few years in Samoa. He was followed in 1849 by a Samoan teacher trained by the London Missionary Society. The first European missionary landed in 1861.

Niue in the late nineteenth century came under the jurisdiction of the British High Commissioner for the Western Pacific, and was subsequently annexed by New Zealand in 1901 as part of the Cook Islands.

## C. PEOPLE

The Niueans are of Polynesian stock. Owing to the isolation of the island, there has been little inter-marriage with Europeans, and the proportion of half-castes to the total population is very small. Although there have been no wars or civil disturbances during the past century, the population has shown only a small increase in numbers, and that increase has been during recent years. The limited natural resources of the island, and the earlier extensive use of Niueans as indentured labour in other Pacific groups, are largely responsible for the tendency of the population numbers to remain constant.

The following table shows the ages and sex of the Native population at the census of 25th September, 1945 :—

*Table Showing Sex and Age Groups of Native Population at 25th September, 1945*

		Males.		Females.				Males.		Females.	
Under 5 years	..	..	305	287	50 years and under	55 years	..	63	87		
5 years and under	10 years	..	317	291	55	60	..	68	98		
10	..	15	..	299	269	60	..	65	..	36	51
15	..	20	..	224	210	65	..	70	..	34	62
20	..	25	..	119	160	70 years and over	..	..	..	44	39
25	..	30	..	121	133						
30	..	35	..	111	127	Totals	..	..	2,041	2,189	
35	..	40	..	113	142						
40	..	45	..	96	113						
45	..	50	..	91	120						
								4,230			

The former pagan heritage of the people has been completely replaced by the Church of the London Missionary Society. Apart from a small Seventh Day Adventist congregation which participates in the activities of the London Missionary Society, there are no other denominations represented on the island.

The Church is of great importance in the lives of the Niueans, being now the sole social organization outside the family. The London Missionary Society has a European missionary stationed on the island, and has long maintained mission schools and chapels which, until the recent prosecution of a more vigorous policy of secular education, provided the island with its educational system.

The Niuean language is a Polynesian dialect, peculiar to the Island but closely related both to Samoan and Cook Islands Maori.

English is taught in all schools, though Niuean is used at Native functions. Hence the younger generation is bi-lingual.

Niuean customs associated with birth, marriage, and death closely resemble those of other Polynesian groups. Cannibalism was quite unknown, nor was tattooing practised. Speech-making is the principal accomplishment of the Niueans; their dancing is graceful, resembling the Samoan style rather than the modern "hula" of Rarotonga.

The Niueans, especially those living on the western shelf, are expert canoe men. For fishing they use a type of out-rigger canoe which is peculiar to the island. The women-folk are expert weavers of hats, baskets, and similar ware which, during recent years, have been a valuable item of export. The comparative lack of natural resources requires the Niuean to work hard to extract a living from the land.

The islanders are industrious and are of a hospitable and peaceful disposition. They have perhaps a slightly lower cultural standard than other Polynesian groups.

The traditional form of government is patriarchal, the ruling heads of families, the "patu," having authority in their own villages. In earlier times the "patu" met in conclave under their appointed King to control affairs relating to the island. The Kingship was restored in 1876, and was retained until the end of the century for the purpose of administering a written code of laws. It lapsed, however, with the introduction of the present administration.

## D. GOVERNMENT

Niue is constitutionally included in the Cook Islands, a British Protectorate annexed to New Zealand in 1901 under the provisions of the Colonial Boundaries Act, 1895 (Imperial). In 1903, Niue, while remaining within the boundaries of New Zealand, was placed under a separate Administration which is directly responsible to the New Zealand Government. The inhabitants of Niue are British subjects.

Provision for a Constitution for Niue is made by the Cook Islands Act, 1915, and the island is administered under the authority of this Act. The Resident Commissioner, who is directly responsible to the Minister of Island Territories, Wellington, is charged with the administration of the executive government of Niue. The majority of Administration employees are Niueans, with a few European officers from New Zealand in charge of the various Departments.

An Island Council meets once every quarter under the presidency of the Resident Commissioner. All villages are represented on the Council, which is composed of thirteen Niuean members appointed by the Governor-General on nominations submitted to him by the Minister of Island Territories. In practice the Councillors are selected by the villages they represent.

Laws are made by Act of the New Zealand Parliament, by regulations issued thereunder, or by Ordinances passed by the Island Council and assented to by the Resident Commissioner. The jurisdiction of Island Council Ordinances does not include the establishment of Courts of justice, the imposition of Customs duties, or the expenditure of the revenue of the island.

The following legislative measures with effect in Niue have been enacted since the last report was published :—

- Cook Islands Council Regulations 1946, Amendment No. 1.
- Cook Islands Customs Duties Order 1948.
- Cook Islands Exchange Control Regulations 1948.
- Cook Islands Maintenance Enforcement Regulations 1948.
- Cook Islands Trade Dispute Regulations 1948.
- British Nationality and New Zealand Citizenship Act, 1948.
- Cook Islands Amendment Act, 1948.
- Superannuation Act, 1948.
- British Nationality and New Zealand Citizenship Regulations 1949.

*Judiciary*

The judiciary comprises a High Court with one Judge, a Native Land Court consisting of one Judge and one Commissioner, and a Native Appellate Court of the Cook Islands which has already been established to hear appeals from decisions of the Native Land Court.

The Resident Commissioner, in his capacity as a Judge of the High Court of the Cook Islands, administers justice in Niue, and deals with all Civil and criminal cases. On the trial of any person for an offence punishable by death or by imprisonment for more than five years, the Judge is required to sit with assessors. Qualified persons are appointed as assessors by the Governor-General.

Provision is made for appeal to the Supreme Court of New Zealand from decisions of the High Court.

During 1948 there were two appeals against convictions by the Judge of the High Court. In one case a new trial was ordered, and in the other the conviction was quashed.

The following is a summary of Court proceedings for the years 1944-48 :—

—	1944.	1945.	1946.	1947.	1948.
Criminal convictions ..	566	629	400	599	506
Civil judgments .. ..	3	..	1	..	..
Divorces granted .. ..	7	8	14	13	10

Offences for which convictions were recorded during the year were mainly of a minor nature. There were two convictions on charges of causing actual bodily harm and five convictions for the offence of manufacturing intoxicating liquor.

The Native Land Court administers the land laws of the island. This Court's immediate duties are concerned particularly with the determination of individual claims for the ownership of Native lands. The Resident Commissioner is Judge of the Native Land Court, and there is, in addition, a Commissioner of this Court.

No sittings of the Native Land Court were held during the year under review.

#### *Penal Administration*

The police establishment at 31st March, 1949, comprised one Niuean sergeant in charge, and twelve Niuean constables. A European officer was in charge until December, 1948, but a replacement is not yet available.

There is a Niuean constable in each village of the island, with a sergeant and one constable in the main village of Alofi. The constables act as liaison officers between the Administration and the people.

The conduct of the Force has been good. Two Niuean policemen have qualified for long-service medals and have been granted long-service allowances. The standard of efficiency of the Niuean constabulary is showing improvement.

### E. HUMAN RIGHTS

Human rights are, as in other British countries, safeguarded by the laws of the territory. The islanders enjoy full Civil rights as subjects of His Majesty, without discrimination on grounds of creed or race in the administration of justice. The admission of immigrants is strictly controlled and no undesirable person is allowed to enter. Land is handed down from one generation to another according to custom, and the right to ownership and possession is safeguarded by the Native Land Court.

## PART II—SOCIAL CONDITIONS

### A. INTRODUCTORY

The life of the Niuean is extremely simple, and there are practically no social problems. Church laws and statute law together regulate the code of living of the Niuean. The London Missionary Society plays a predominant part in the organization of Niuean social life. On this account the authority of the heads of families is less accentuated than in other Polynesian societies. There is no ruling class or servant class of people.

The Cook Islands Act, 1915, applies equally to the indigenous and non-indigenous population, and makes no discrimination between male and female.

## B. LABOUR AND EMPLOYMENT

The only substantial employer of labour is the Administration, which employs Niueans in the Police, Public Works, Transport, and other Departments, and to load or discharge vessels making calls. Apart from this, labour is from time to time engaged by local firms to prepare copra for shipment. During the last two years the Administration has employed a large number of unskilled labourers on public works.

The basic wage-rates are 7s. per day for unskilled labour, 9s. per day for waterside work, and a varying scale for higher classes of labour, with provision for overtime and Sunday work when required.

The Cook Islands Industrial Union Regulations 1947 provide for the registration of an industrial workers' union and an employers' union, and for the machinery for settling labour disputes. In August, 1948, representatives of the New Zealand Federation of Labour visited Niue and discussed with the Administration and the Niuean wage-earners the desirability of forming an industrial union; to date no such organization has been formed. There have been no labour disputes over the last five years.

The bulk of the population is engaged in the cultivation of Native lands and the harvesting of crops for consumption and export. The price of produce purchased by the trading firms for export is regulated by the Administration to ensure that the growers receive full value at current prices.

There are no migratory labourers working on the island. Some fourteen Niueans are employed by the New Zealand Government on an annual contract basis at Raoul Island. A gang of forty Niueans is at present working on a two-year contract for the New Zealand Reparations Estates in Western Samoa. Such labour is employed under generous terms, and all contracting arrangements are made through the Niuean Administration. A number of Niueans proceed to New Zealand each year to seek employment in a wider field and to learn trades. The volume of departures is not great, and presents no problem to the Administration.

## C. PUBLIC HEALTH AND SANITATION

Although situated in the tropics, Niue is largely free from diseases prevalent in tropical countries. However, certain other infections, notably tuberculosis, have become established which, together with recent severe epidemics, have provided the main health problems.

The health of the people during the past twelve months has not been good. The endemic diseases of filariasis and yaws remain prevalent amongst the people, and tuberculosis, gonorrhoea, some cases of leprosy, and epidemics of mumps, measles, and whooping-cough have occurred. Resistance to these diseases was lowered in many cases by the effects of a previous epidemic; at the end of the year, however, the health of the island was slowly improving.

The main difficulty in combating these diseases is to secure the active interest of the Niueans, who have not yet acquired the habits of hygiene developed in more closely populated areas.

The administration endeavours, through the Medical, Education, and Police Departments, to create greater enthusiasm for measures concerning the public health. Strict surveillance of villages and enforcement of health regulations are, however, necessary, as the Niuean does not appreciate the gravity of his problem.

The Health Department, administered by a qualified European Medical Officer, provides the medical service for the island. The staff of this Department consisted at 31st March, 1949, of a relieving European Medical Officer, a European Matron, a European Nursing Sister, a Native medical practitioner, and two Native dental officers. During the measles epidemic the services of an additional Nursing Sister on loan from Rarotonga were acquired for two months. The locally engaged staff comprised five Niuean dispenser-orderlies and six Niuean nurses.

There are no local facilities for training medical or dental staff; however, two Niueans are at present being trained at the Central Medical School, Suva, whilst four Niuean girls are receiving nursing education at the Government Hospital, Apia, Western Samoa.

Niue was without the services of a European Medical Officer from June, 1947, until September, 1948, when the present Medical Officer commenced duty. During this time, his duties were carried out by three successive Native medical practitioners.

The Administration maintains a hospital at Alofi. This hospital contains sixteen beds, but averages many more patients during periods of epidemic or serious illness. There is also at Alofi an x-ray unit, a dispensary, an out-patient clinic, and a dental clinic. A regular weekly visiting service is maintained in all outer villages, and to assist in this work a mobile clinic is at present under construction. School, shipping, and public health inspections are held, and there is a child-welfare clinic in each village. The out-patients dispensary at Alofi is open each morning, and special calls are made by medical staff as required.

The aged people of the villages are under the protective surveillance of the police, with Church authorities, in some cases, assisting with supplies of food and clothing as relief.

The amounts expended on health services during the last five years are as follows :—

	1944-45.	1945-46.	1946-47.	1947-48.	1948-49.
Amount expended .. .. .	£3,656	£5,305	£8,211	£7,293	£8,019
Population .. .. .	4,200	4,271	4,328	4,318	4,333
Amount per head of population	17s. 5d.	£1 4s. 9d.	£1 17s. 11d.	£1 13s. 9d.	£1 17s. 0d.

All medical and dental treatment, including hospitalization, is provided free of charge to the Niueans. The money for this expenditure is provided by subsidy from the New Zealand Government.

### Vital Statistics

Births for the calendar year 1948 .. .. .	169
Deaths for the calendar year 1948 .. .. .	142
Births per 1,000 of population .. .. .	41·23
Deaths per 1,000 of population .. .. .	33·02

The number of deaths under one year of age for the calendar year 1948 was 47, the infant-mortality rate per thousand live births being 284: this high rate was due to the epidemic of whooping-cough.

Table 1 shows how the deaths were distributed according to age throughout the population :—

	Number of Deaths.	Percentage of Total Deaths.
Under one week .. .. .	4	2·8
1 week to 1 month .. .. .	7	4·9
1 month to 3 months .. .. .	8	5·6
3 months to 6 months .. .. .	12	8·4
6 months to 12 months .. .. .	16	11·2
1 year to 2 years .. .. .	16	11·2
2 years to 3 years .. .. .	5	3·6
3 years to 4 years .. .. .	4	2·8
4 years to 5 years .. .. .	2	1·4
5 years to 10 years .. .. .	2	1·4
Over 10 years .. .. .	66	46·7
Totals .. .. .	142	100·00

Table 2 shows the numbers of deaths brought about by disease and other causes, and the rate per thousand of population in each case:—

	Number.	Rate Per 1,000 Population.
<i>(a)</i> Infectious diseases—		
Tuberculosis .. .. .	22	5.1
Whooping-cough .. .. .	23	5.3
Measles and complications .. .. .	17	3.9
Broncho-pneumonia .. .. .	12	2.8
Infective jaundice .. .. .	8	1.8
Infantile gastro-enteritis .. .. .	4	0.9
Tetanus .. .. .	2	0.46
Influenza .. .. .	1	0.23
63 per cent. of total.		
<i>(b)</i> Other causes—		
Senility (over 70 years) .. .. .	18	4.2
Prematurity .. .. .	5	1.2
Malnutrition and neglect (infants) .. .. .	4	0.9
Malignant tumours (proven by biopsy) .. .. .	1	0.23
Malignant tumours (not proven by biopsy) .. .. .	1	0.23
Hemiplegia (cerebral thrombosis) .. .. .	2	0.46
Carbuncles and septicæmia .. .. .	1	0.23
Umbilical sepsis and septicæmia .. .. .	1	0.23
Uræmia—urethral obstruction .. .. .	1	0.23
Lysol poisoning .. .. .	1	0.23
Indefinite and undiagnosed complaints .. .. .	17	3.97
37 per cent. of total.		

Table 3: A summary of the work performed at the hospital and during weekly and other visits for the twelve months ended 31st December, 1948, is set out below:—

	Year Ending 31st December.				
	1944.	1945.	1946.	1947.	1948.
<i>(a)</i> Hospital and out-patients—					
In-patients .. .. .	76	71	139	699	403
Out-patients .. .. .	32,795	23,024	21,839	26,377	29,663
Special visits .. .. .	2,421	2,295	1,891	5,589	
Operations—					
Major .. .. .	75	369	137	260	13
Minor .. .. .					
Anæsthetics—					
General .. .. .	..	2	29	119	88
Local and regional .. .. .	149	315	134	100	114
Number of x-rays .. .. .	..	..	..	..	17*
Daily bed average .. .. .	8.13	4.55	6	16	16.3
Average number of days in hospital	28	11.29	10	8	15
<i>(b)</i> Dental—					
Total number of patients .. .. .	..	..	..	..	2,970
Number of operations performed .. .. .	..	..	..	..	5,149
Number of extractions .. .. .	130	221	950	1,317	1,237
Number of fillings .. .. .	..	..	..	..	1,345
Miscellaneous prophylactic, scaling, &c. .. .. .	..	..	..	..	2,567
<i>(c)</i> Child welfare and schools—					
Children and infants seen .. .. .	..	..	..	11,456	11,260
Visits to homes .. .. .	..	..	..	..	755
School-children examined .. .. .	..	..	..	..	540
<i>(d)</i> Public health, &c.—					
Shipping visits .. .. .	..	..	..	..	12
Ships quarantined .. .. .	..	..	..	..	9
Houses condemned .. .. .	..	..	..	..	8
Bakery inspections .. .. .	..	..	..	19	12

At the beginning of the year under review the inhabitants of Niue were suffering from a severe epidemic of whooping-cough, which did not subside until the end of March, 1948. The general health then improved slowly, but suffered a grave setback during the measles epidemic, which began in August and persisted until November, 1948. During this period 3,056 cases were seen, and it is probable that the total number greatly exceeded this figure. Hospital care and treatment was only possible with the severer complications. Since then there has been a slow but continual improvement in the health of the people, despite a minor epidemic of influenza which occurred in February, 1949.

Table 4: The number of cases of infectious diseases occurring over the period of the past five years are set out in the following table:—

Disease.	1944.	1945.	1946.	1947.	1948.
Yaws .. .. .	713	1,038	1,173	1,218	327
Tuberculosis—all forms .. .. .	11	26	13	27	65
Infective jaundice .. .. .	78	112	49	65	24
Gonorrhœa .. .. .	21	44	171	88	26
Typhoid fever .. .. .	15	13	12	7	..
Infantile gastro-enteritis .. .. .	..	..	..	..	72
Dysentery (unclassified) .. .. .	..	..	..	..	5
Leprosy .. .. .	1	1	2	2	..
Pneumonia and broncho-pneumonia .. .. .	25	29	41	427	83
Puerperal fever .. .. .	..	3	2	7	2
Varicella .. .. .	1	25	5	8	1
Whooping-cough .. .. .	..	..	..	606	237*
Measles .. .. .	..	..	..	..	3,056
Influenza .. .. .	..	..	..	197	112
Ringworm .. .. .	37	146	55	1,222	Widespread
Scabies .. .. .	..	166	163	33	..
Filaria .. .. .	207	181	120	132	Prevalent
Myositis tropica .. .. .	6	6	60	10	..
Tetanus .. .. .	..	..	..	..	2

\*Total for whole epidemic: 843 cases.

Though details of the state of nutrition of the whole population are not available, a rough survey of the children of the island was made in 1946, and revealed that a number were suffering from malnutrition. Cases of malnutrition occur particularly in infants from six to twelve months old. The principal causes were the incorrect feeding of infants, and the effect of such Native customs as early weaning. A scheme for providing daily supplies of milk to school-children has been in operation during the year under review and the beneficial results of thus improving the nutrition of Niuean children are already apparent.

Besides the necessity of impressing upon the Niueans the vital importance of correct hygiene, the special current problem for the Health Department lies in the recruiting of an adequate trained European and Niuean staff. With its isolation and lack of social amenities, Niue is not a popular station for long-term appointments. Owing to the great expansion of medical services throughout the world, the difficulty of obtaining adequate trained staff is likely to remain for some time. The Niuean staff will receive valuable additions when the two students at the Central Medical School, Suva, and the four student nurses at Apia Hospital, Western Samoa, become available for service on the island.



Child-welfare work on Niue is carried out by the European Nursing Sister, who makes a weekly visit to each village. Women's committees were formed in five villages during the year to assist in this work. Confinements take place almost totally in the home and are not usually attended by the hospital staff. Female teachers and senior school-girls are instructed in the elements of baby care. The Administration issues infant-food free of charge to mothers who are feeding their babies artificially.

The school medical service was reintroduced during the year. Lectures in elementary hygiene were given to Niuean school-teachers, and during the summer vacation a number of teachers have been attached to the out-patients' department as dressers. All children attending Administration schools were examined, and minor diseases such as scabies, sores, and ringworms were given routine treatment by school-teachers. Dental Officers also lectured in the schools and villages during the year.

Niue has no natural supply of fresh running water. The Administration assists the villages with tanks and catchment areas, which ensure a limited supply of water. With a view to augmenting this supply, the experiment was made last year of drilling a deep well. Water was struck at 175 ft., and samples are at present being analysed to discover whether it is free from pollution and may be used for drinking purposes.

There is no system for the mechanical disposal of sewage: this lack is not greatly felt, owing to the porous nature of the coral terrain.

#### D. HOUSING CONDITIONS AND PROGRAMMES

With the exception of residences occupied by Europeans, housing is in the Native style. The original Niuean house was exceedingly primitive and of poor construction. House-building changed with the arrival of the Samoan missionaries, and "*fales*" are now constructed of local coral stone, timber, and lime plaster, usually with corrugated-iron roofs (which act as important water-catchment areas) or coconut-leaf thatches. Sugar-cane was used for thatching until some ten years ago, but supplies of this material are not now available in any quantity.

The main defects in the present housing are the lack of ventilation at the top of the walls and the excessive heat in "*fales*" with roofs of corrugated iron. Lack of ventilation at night, when all the windows and doors of the houses are sealed up (apparently to prevent the ingress of evil spirits), together with overcrowding, are responsible for the spread and advance of epidemics and diseases, especially tuberculosis.

Houses are mainly used as family sleeping-quarters. Cooking is done outside in coconut-leaf-thatched outhouses.

An efficient type of ventilation is now being considered which will improve the present houses. Dwellings which are condemned by the medical authorities as unsuitable for habitation are ordered to be pulled down, and new and more sanitary types erected in their place. Plans are in progress for assisting the Fatiaua people to build a model village in which the new houses have improved ventilation.

Development programmes include the erection of three houses, a Residency, four schools, and new prison quarters, the improvement of the main highways, landing facilities, and water-supplies, and the provision of a mobile child-welfare clinic.

The Niueans are encouraged and assisted where possible by the Administration in the improvement of their housing and living conditions and recreational facilities such as village greens and playing areas.

## PART III--EDUCATION CONDITIONS

## A. EDUCATIONAL POLICY

The aim in Niue is to provide as high a standard of education as possible for all children between the ages of six and fourteen, and to extend the period of learning for the most promising children to enable them to train for the task of taking over the control of the affairs of their island and people. Since the population of Niue is too small to warrant the establishment of large secondary schools or training colleges, this policy is carried out by sending successful scholarship candidates to New Zealand secondary schools, and by the services of a small nucleus of European teachers whose principal task is to assist local teachers to improve their own standards of teaching. One of the greatest difficulties to be overcome is the keen desire of the Niueans themselves that school subjects should be taught solely in English, a language in which they are not proficient and one which is rarely used by them outside the schoolroom. An endeavour is being made to convince the Niueans of the importance of their own language in education and to assist them in the mastery of both languages.

The Administration maintains three schools, which are under the control of a European Education Officer. The London Missionary Society provides the education in those villages where there are no Administration schools, and during the year under review a subsidy of £800 was paid to the Society for its services. Four additional schools are expected to be built by the Administration during the current year to extend Government educational facilities to all parts of the island. When these are completed, the system of free Government education which at present obtains in the Administration schools will be provided to all children of school age. The Administration schools are in permanent buildings constructed of limestone, most of which are in good condition and are well suited to tropical climates, whilst the Missionary Society conducts its schools for the most part in Church or Sunday School buildings.

The curriculum for the schools was laid down by regulations in 1934, when special emphasis was placed on the teaching of the English language. The intention now, however, is to increase the amount of vernacular used in the schools until the people appreciate its value and the need for teaching younger children more through this medium. The indigenous culture of the island is being fostered in schools, and Native handicrafts are being increasingly encouraged as a part of school activities. Training in good habits of health, elementary hygiene, and sanitation is given, and physical education is taught in all classes. A 16 mm. sound-film projector has been made available to schools, and teaching aids, European text-books, and film-strip projectors are supplied by the New Zealand Government.

Six Niuean boys are at present being educated in New Zealand secondary schools under the New Zealand Government scholarship scheme referred to earlier. Two Niuean boys are also training as Native medical practitioners at the Central Medical School, Suva, and four girls are training as nurses at the Apia Hospital, Western Samoa. The London Missionary Society provides selected students with further education prior to calling them for duties as Native pastors in the villages.

Manual-training classes are maintained for the senior boys of Administration schools and it is planned to develop this work. Girls learn sewing and mending under a European teacher. There are no other facilities for technical training, and the only industry in which this is needed or can be given is the local Public Works Department.

Teachers are trained by a pupil-teacher system supplemented by two afternoon lectures per week, and demonstration lessons given by the European Education Officer and the infant-mistress. Local teachers are required to pass examinations to advance in

their profession. Approximately two teachers are sent to New Zealand each year for six months to take observational courses in primary and Maori schools. This scheme is proving a useful means of stimulating interest in the teaching profession.

Roll numbers of Administration and mission schools during the last five years are set out in the following table :—

	1944.	1945.	1946.	1947.	1948.
Administration schools ..	686	679	667	653	701
London Missionary Society schools	427	506	521	454	524
Totals .. ..	1,113	1,185	1,188	1,107	1,225

The approximate number of children of school age (between six years and fourteen years) as at 31st March, 1949, was 1,100. More than 100 children over school age attend the schools as pupils.

The rolls of Administration schools for 1948 average attendances, staff numbers, and pupil-teacher ratios are set out below :—

School.	Rolls.			Average Attendance.	Niuean Teachers (Including Teacher-trainees).			Teacher-Pupil Ratio.*
	Boys.	Girls.	Total.		Men.	Women.	Total.	
Tufukia ..	182	145	327	278·34	14	18	32	1 : 10·25
Kofekofe ..	102	86	188	157·78	11	9	20	1 : 9·40
Tuatea ..	94	92	186	167·64	12	6	18	1 : 10·33

\*The low teacher-pupil ratio is due to the large number of junior Niuean teachers under training against the time when the Administration takes over the schools at present being run by the London Missionary Society.

## PART IV—ECONOMIC CONDITIONS

### A. NATURAL RESOURCES

The natural resources of Niue lie exclusively in the products of the soil. The island is well wooded, and supplies of timber for housing and canoemaking are obtained by the people from the indigenous forest which grows luxuriantly on the decayed coral. Material for plaited ware such as mats, baskets, hats, and table-mats is obtained from the coconut-trees and the leaves of the pandanus palm. The coconut is to be found all over the island, though it grows only sparsely in the interior. The coconut grows to perfection on the lower terrace, where it forms a forest which almost rings the island.

Foodstuffs such as taro, yams, tapioca, maize, and other vegetables are cultivated on plantations, usually situated at a considerable distance away from the villages.

The banana, of which there are several varieties, grows almost everywhere, and flourishes even in the rockiest areas of the island. Limes and lemons grow well; no attempt, however, has been made to cultivate the orange extensively, though experimental plantings have been made. *Pia*, or native arrowroot, is not cultivated, but grows wild in the bush and on semi-barren areas. The extremely rocky nature of the island makes agriculture difficult, and practically all crops have to be grown in the small pockets of soil amongst the coral rocks. The only live-stock that can be kept under these conditions are pigs and poultry, the quality of which the Administration improves from time to time by importing new blood and varieties.

In comparison with other islands, Niue does not abound in fish, as these are neither plentiful nor easily caught on account of the absence of any natural harbour, beach, barrier reef, or other shallow water anywhere on the coast-line. Shell-fish are not abundant; land crabs are found and are used as food by the people.

## B. AGRICULTURAL PRODUCTION AND MARKETING

Copra, Native plaited ware, and bananas are the exports on which the economic life of the island depends. The copra is all Native grown and sun-dried. It is purchased by two trading stores on the island at prices fixed by the Administration on the basis of export realization, less a reasonable profit and handling margin for the traders. Native plaited ware is produced in almost every home on Niue. After a lapse of two years, the banana export trade was revived in December, 1948, with beneficial results to the economy of the island. Bananas are cultivated by the Niueans, and are purchased by the Internal Marketing Department of New Zealand at a fixed price per case.

Experimental plots of citrus trees imported from Rarotonga are being developed by the Administration.

### *Land Tenure*

By the Cook Islands Act, 1915, land is vested in the Crown, subject to Native rights gained and held under ancient custom and usage. Land acquired by the Administration for public purposes represents a negligible part of the whole, and areas in each village used for Church purposes are held on lease to revert to the Native title-holder when no longer employed for those purposes. The ownership and the boundaries of the first type of land, the so-called Native "customary" land, are now generally disputed, and the Native Land Court possesses exclusive jurisdiction to investigate the title to customary land and to determine the relative interests of the owners. The hearing of the claims was commenced before the war, which, however, interrupted proceedings.

As the Niuean depends for his livelihood upon his family lands, alienation is prohibited, so that there are no land-owners apart from the Administration and the island people. No lease of Native land is for a period exceeding sixty years. The passing of land by will is prohibited. On the death of either parent of a family, the land passes to the children; if there are no children, the land reverts to the family, and is thus passed from generation to generation by blood descent.

This policy of land tenure ensures the Niuean sufficient food and shelter, and money with which to purchase clothing and other necessities. There are differences in the wealth of the families, but under the influence of communal ownership, intermarriage, and the customary adoption of children, these differences lose any significance. Niue offers little encouragement to Europeans to settle.

## C. STANDARD OF LIVING

No details are available by which to measure a national income; current retail prices of the principal items of consumption are set out in Appendix II and will serve for any comparison of living-costs. It must, however, be borne in mind that these do not necessarily have a bearing on the circumstances of living of the indigenous inhabitants, who, for the most part, live off the food they produce for themselves on their land.

## D. COMMUNICATIONS

A radio station is maintained by the Administration for overseas communication, and a single-line telephone system connects the villages on the island.

Full postal services are provided at Alofi, and the following table gives a summary of the transactions over the past five years:—

	1944-45.	1945-46.	1946-47.	1947-48.	1948-49.
Money-orders issued .. ..	£1,932	£7,177	£9,531	£7,840	£19,668
Money-orders paid .. ..	£2,082	£3,781	£4,894	£3,364	£4,728
Post Office Savings-bank deposits ..	£3,097	£8,709	£4,501	£4,927	£6,865
Post Office Savings-bank withdrawals	£696	£1,359	£972	£464	£906
Number of radio messages handled ..	1,755	2,001	2,346	2,790	3,093

The Niue Post Office Savings-bank is a branch of the New Zealand Post Office Savings-bank. The figures given above relate only to local transactions in Niue, as it is not possible to give an accurate indication of the total transactions for the year.

Technical assistance in operation and maintenance of the Niue postal and radio system is given by the New Zealand Post and Telegraph Department, which supplies the European staff on secondment.

#### *Transport*

Niue has some seventy miles of main-highway roads. These roads are of improved earth construction and surfaced for about thirty miles with makatea or coral sand, which is obtained from deposits on the upper terrace. The coastal road, which is about forty miles long, passes through all twelve villages. In addition, there are three cross-island roads, from Alofi to Hakupu, Liku, and Lakepa villages, which are approximately seven, nine, and eight miles long respectively. These main roads are 12 ft. wide and are the all-weather type; there are no bridges or viaducts. As secondary highways, there are almost twenty-four miles of unimproved earth, non-surfaced road which have been made by the islanders to open up new areas for crop cultivation. The transport of goods and produce to and from the port of Alofi is carried out by Administration and privately owned motor-trucks. There are no passenger transport services.

At Alofi there is no harbour, and shipping is worked at a poor anchorage in deep water. Cargo is transhipped by launch-towed whaleboats plying between the ship's side and a concrete jetty erected alongside a narrow boat passage blasted years ago through fringing coral reef.

The transport section of the Administration, which is in the charge of a European mechanic, is responsible for the maintenance of fourteen motor-vehicles, the launch engine, two Diesel engines and one generating-engine at the radio station, and a generating plant which provides lighting and power for the x-ray plant and for the hospital buildings; a Diesel tractor, a Diesel air-compressor, and two small engines employed on public works are also serviced.

Two new 3-ton automatic tip trucks were purchased during the year, and the maintenance workshop was fitted with an oxy-acetylene welding plant. The difficulty in securing spare parts adds to the transport problems by slowing down servicing and repair work. Some of the vehicles, which were purchased second hand, can no longer be operated economically, but owing to the amount of transport required it has been found necessary to keep them running. New vehicles have been ordered.

#### *Public Works*

The Public Works Department is responsible for the construction and maintenance of roads, buildings, and other amenities. During the year under review a European carpenter, assisted by two other European tradesmen, has been responsible for the work of the Department. A camp has been built to provide accommodation for a

party of New Zealand tradesmen who are to erect the residences urgently required to house Administration personnel. A stone-quarry and makatea (coral sand) pit were opened up and stock-piles commenced to provide materials for the manufacture of bricks for residences. Building-sites have been cleared and levelled. A new cottage, constructed mainly from local materials, has been built adjacent to the hospital to accommodate the Assistant Medical Practitioner. Alterations and extensions have been made to the hospital and the nurses' home. Residences and Administration buildings, including the three schools, were kept in good repair throughout the year, and furniture and equipment maintained.

Minor repairs to catchments and village tanks were carried out. A deep-water well was sunk, and water struck at a depth of 175 ft.

The old derrick at the wharf was replaced by a larger and stronger one capable of lifting up to 8 tons. Urgent repairs were carried out to the wharf area in late December, following storm damage. Other wharf buildings were altered and improved during the year, and lighterage facilities maintained.

Twelve miles of road in the Makefu, Avatele, and Tamakautoga districts were resurfaced.

An electrician from the New Zealand Ministry of Works carried out the rewiring of the wharf, the wharf sheds, public works, and Administration Building. The lighting is provided by the Diesel generators at the radio station, from which an underground cable was laid to the Administration Building. The hospital, nurses' home, dispensary, and Assistant Medical Practitioner's residence were wired, and lighting is now provided to all these buildings by the Onan engine which operates the x-ray machine. The lighting in the x-ray room was also rewired.

A four-year development scheme embracing provision of new schools, improvement of port facilities, roads, and housing has been approved by the New Zealand Government and is under way. A sum of £69,000 has been set aside for these purposes.

More extensive reticulation of electricity throughout the Village of Alofi is also under consideration.

### E. PUBLIC FINANCE

There are no banking facilities on the island. New Zealand currency is in use. The New Zealand Post Office Savings-bank has a branch in Niue.

Exports of copra, plaited ware, and bananas are the main sources of income of Niue. Considering the limited revenue derived from these exports and from other sources and the continual expenditure on development programmes undertaken with the encouragement of the New Zealand Government, Niue at her present rate of production cannot be self-supporting. To meet the island's yearly deficit, due mainly to the increasing costs of labour and materials employed in maintaining and improving public services and to the introduction of facilities to increase the volume of trade, special and general subsidies are granted by the New Zealand Government. Revenue is raised within the island principally from the sale of stamps, radio telegrams, High Court fines, and import and export duties.

Direct taxation in the form of a poll-tax, known as an "Aid to Revenue," is levied on all Niuean males aged eighteen years and over at the rate of 10s. per head per annum.

Income-tax at New Zealand rates is payable by all inhabitants. The £200 personal exemption, however, leaves only a small number of taxable incomes, apart from those of officials and a few traders.

The New Zealand Customs Tariff is in force, and there is free trade between the territory and New Zealand. Local duties are, however, imposed on cotton piece-goods, sugar, and twist tobacco, irrespective of their countries of origin.

Estimated revenue for the year 1949-50 is £23,629, while estimated expenditure is £71,210, leaving a deficit to be covered by subsidy from New Zealand of £47,581. Large items of expenditure outside of salaries include residences, £8,050; purchase of new plant, including motor-vehicles, £6,260; water-supply, £750; maintenance of scholarship pupils in New Zealand, £1,500.

A comparative statement of revenue and expenditure over the last five years is as follows:—

Year.	Revenue.	Expenditure.	Deficit.	Subsidy.	Final Surplus or Deficit.
	£	£	£	£	£
1944-45 .. .. .	12,096	18,900	6,804	10,000	+3,196
1945-46 .. .. .	14,590	25,123	10,533	7,755	-2,778
1946-47 .. .. .	28,726	32,387	3,661	5,000	+1,339
1947-48 .. .. .	28,417	42,730	14,313	6,522	-7,791
1948-49 .. .. .	19,434	50,820	31,386	32,257	+ 871

Depreciation and other writings-off totalling £3,021 are included in the expenditure.

The main items of revenue for the year were:—

Stamp sales .. .. .	£3,823
Customs import duties .. .. .	£5,799
Income-tax .. .. .	£3,100

## F. TRADE AND SHIPPING

Niue is a port of call for two vessels in the shipping service between New Zealand, the Cook Islands, Tonga, Samoa, and Fiji. For this and for economic reasons practically all the trade of the island is directed to New Zealand, apart from normal inter-island trade on the shipping route. There were thirteen shipping calls during the year ended 31st December, 1948, including ten calls by the regular cargo and passenger vessels, the N.Z.G.M.V. "Maui Pomare," and the Union Steamship Co's. m.v. "Matua." There were two calls by the auxiliary schooner "New Golden Hind," operated by the New Zealand Works Department. Exclusive of parcel-mail, the inward cargo handled at the port amounted to 1,212 tons, and outward cargo 656 tons. In addition, 1,640 bags of parcel-mail, mostly containing Native plaited ware, were shipped during the year. Inward cargo almost reached the high figure set in 1947; the low outward cargo figure is largely accounted for by the few opportunities for shipping copra.

Eighty passengers disembarked and 93 embarked during the year, both figures being a decrease on those for the previous year.

Imports and exports both reached a record level in 1948. The present building and expansion programme being undertaken by the Administration accounts in part for the record import value, and the high price of copra is a factor contributing to the record value of exports.

Comparative statistics for the last five years are as follows :—

Country of Origin.	1944.	1945.	1946.	1947.	1948.
IMPORT VALUES					
	£	£	£	£	£
New Zealand .. .. .	25,140	23,620	37,984	52,290	57,962
Australia .. .. .	871	251	643	1,485	1,538
United Kingdom .. .. .	2,453	2,935	6,503	1,721	6,452
United States of America .. .. .	181	10	730	..	458
Western Samoa .. .. .	1,106	116	21	1,074	49
Other .. .. .	303	40	796*	2,226†	3,049‡
Totals .. .. .	30,054	26,972	46,677	58,796	69,508
EXPORT VALUES					
New Zealand .. .. .	21,909	27,674	29,721	42,266	45,046
Australia .. .. .	1,307	1,662	6,142	2,926	1,677
Western Samoa .. .. .	..	..	..	399	..
Other .. .. .	35	132	10	..	46
Totals .. .. .	23,251	29,468	35,873	45,591	46,769

\*Includes India, £585.

†Includes Rarotonga, £1,070.

‡Includes India, £1,082.

Imports from New Zealand reached a record level, and, as was the case during the previous year, they greatly exceeded in volume the imports from all other sources.

The following table sets out the quantities and values of the principal exports over the period of the last five years :—

Item.	1944.		1945.		1946.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Copra .. .. .	Tons. 617	£ 13,272	Tons. 415	£ 9,986	Tons. 352	£ 10,179
Bananas .. .. .	Cases. 1,200	626	Cases. 7,662	4,141	Cases. 9,346	5,335
Kumaras .. .. .	..	..	Tons. 10	141	Tons. 20	292
Native plaited ware	*	8,977	*	14,683	*	19,652

Item.	1947.		1948.	
	Quantity.	Value.	Quantity.	Value.
Copra .. .. .	Tons. 695	£ 28,505	Tons. 572	£ 29,571
Bananas .. .. .	..	..	Cases. 1,008	660
Kumaras .. .. .	..	..	..	..
Native plaited ware .. .. .	*	15,797	*	16,262

\*Signifies no satisfactory unit of measurement.

The full effect of the increase in the f.o.b. price for copra in 1948 is clearly shown in the above table by a comparison of the quantity and value for the last year with those of the preceding years.



The banana export industry, which had lapsed during the previous two years on account of the impossibility of inducing the Niueans to load or handle the fruit on the Sabbath, revived this year with a shipment of 1,008 cases in December. Arrangements have now been made to avoid Sunday work on the fruit in future, but a full revival of the trade cannot be expected for at least another twelve months, by which time the newly planted banana suckers will be bearing.

The value of the exports of plaited ware slightly exceeded that for the previous year, though the number of parcels shipped was considerably lower. Owing to the limited shipping space available, traders chose to ship hats to their markets rather than baskets, which, because of their bulkiness, are comparatively unprofitable. Importations of head-gear into New Zealand from other sources, however, have reduced the market for the Niue product.

#### VISITS

His Excellency the Governor-General, Lieutenant-General Sir Bernard Cyril Freyberg, V.C., G.C.M.G., K.C.B., K.B.E., D.S.O., LL.D., and Lady Freyberg, accompanied by their staff, paid an official visit to Niue on 12th July, 1948.

Two visits were paid to the island by Mr. F. R. J. Davies, Officer for Islands Education. Miss M. P. Dennehy, of the New Zealand Education Department, also paid a short visit to the island.

Messrs. K. McL. Baxter and W. B. Richards, of the New Zealand Federation of Labour, visited the island on 19th August, 1948, to discuss the formation of an industrial union.

Mr. F. L. Hunter, of the New Zealand Marketing Department, visited Niue on 27th March, 1949, in connection with the banana trade of the island.

The late Mr. Guy N. Morris, a retired Stipendiary Magistrate and a former Resident Commissioner, visited the island in November, 1948, to conduct a retrial of a Niuean convicted on a charge of attempted rape.

#### APPENDIX I—METEOROLOGICAL REPORT

A summary of the observations recorded at the radio station at Alofi for the year ended 31st December, 1948, and a comparison with the previous four years, is contained in the following table:—

—	1944.	1945.	1946.	1947.	1948.
Total rainfall (inches) ..	71·55	80·80	93·94	72·09	94·54
Number of rainy days ..	158	210	206	220	148
Highest for any day (inches) ..	5·15	3·60	4·50	2·34	9·99
Date of highest rainfall ..	29th Jan.	23rd Apr.	15th Dec.	29th Oct.	31st Oct.
Highest temperature (F.) ..	90·0	92·0	90·8	90·2	91·0
Date of highest temperature ..	13, 17, 19, 25, 28th Mar.	22nd Mar.	28th Mar.	20th Mar.	8th Oct.
Lowest temperature (F.) ..	58·5	57·0	60·2	57·5	58·4
Date of lowest temperature ..	28th Aug.	6th June	27th June	26th Aug.	19th Sept.
Mean of maximum thermometer (F.)	82·4	82·27	82·28	82·173	81·82
Mean of minimum thermometer (F.)	69·3	70·3	70·16	71·023	69·285

There were no periods of serious drought during the year, and there was no storm damage to plantations or food crops. Niue is included in the system by which islands receive hurricane warnings from the Fiji Meteorological Service, and maintains six weather schedules with that office daily.

## APPENDIX II

The following table shows the retail prices of the principal items of consumption :—

Preserved meat .. ..	1s. 10d. per pound.	Matches .. ..	10d. per packet.
Corned beef (kegs) .. ..	1s. per pound.	Kerosene .. ..	3s. per gallon.
Sugar .. ..	8d. per pound.	Cigarette-papers .. ..	2d. per packet.
Dripping .. ..	1s. 2d. per pound.	Cotton .. ..	6d. to 8d. per reel.
Canvas shoes .. ..	8s. to 10s. per pair.	Biscuits .. ..	1s. 2d. per pound.
Twist tobacco .. ..	8s. 8d. per pound.	Flour .. ..	3d. per pound.
Cotton textiles .. ..	2s. 3d. to 8s. per yard	Salt .. ..	3d. per pound.
Preserved milk .. ..	11d. per 14 oz. tin.	Jam .. ..	1s. 3d. per pound.
Tinned butter .. ..	2s. 9d. per pound.	Cigarette tobacco .. ..	3s. 6d. per 2 oz.
Rice .. ..	7d. per pound.		

*Approximate Cost of Paper.*—Preparation, not given printing (1,054 copies), £142.

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