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## CHAPTER XV.

## THE TERRITORIES OF THE COMMONWEALTH.

## A. GENERAL.

1. **Classification.**—The Territories of, or under the control of, the Commonwealth, are of three classes—

- (a) Territories originally parts of the States which have been surrendered by the States to the Commonwealth. These are the Northern Territory (formerly part of the State of South Australia) and the Federal Capital Territory (formerly part of the State of New South Wales).
- (b) Territories, not parts of States, which have been placed under the authority of the Commonwealth by Order in Council under section 122 of the Constitution. These are Papua and Norfolk Island.
- (c) Territories which have been placed under the administration of the Commonwealth by Mandate issued by the League of Nations. These are the Territory of New Guinea and (administered in conjunction with the British and New Zealand Governments) Nauru.

Only the Territories in class (a) are parts of the Commonwealth.

2. **Forms of Executive Government.**—The Territories differ in their forms of Government. Papua is administered by a Lieutenant-Governor and a nominated Executive Council, who, except in matters of high policy and in certain matters prescribed by law, are not controlled by the Commonwealth Government; the Northern Territory, Norfolk Island, and the Territory of New Guinea are each under an Administrator who is controlled by the Commonwealth Government; in the Federal Capital Territory, such local institutions as existed under the law of New South Wales continue, and no other provision for Executive Government has yet been necessary; in Nauru the Executive Government is vested in an Administrator who is subject only to the general control of the Government controlling the Administration.

3. **Legislative Power.**—The laws of the Parliament of the Commonwealth are in force in the Territories which are parts of the Commonwealth, but are not applicable to the Territories not parts of the Commonwealth unless expressly extended thereto.

In Papua, there is a nominated Legislative Council, which has full power of legislation, subject to the assent of the Governor-General. In New Guinea, the Northern Territory,\* Norfolk Island and the Federal Capital Territory, there are no Councils, and Ordinances are made for these Territories by the Governor-General, subject to such Acts of the Parliament of the Commonwealth as are in force there; but most of the Ordinances of the Northern Territory, Norfolk Island, and New Guinea give power to the Administrators to make any regulations necessary for giving effect to them.

In Nauru the legislative power is vested in the Administrator, subject to instructions from the Government controlling the Administration.

4. **Laws.**—In the Northern Territory, Papua and Norfolk Island, the laws existing at the date these territories came under the control of the Commonwealth have remained in force, subject to later legislation by or under the authority of the Commonwealth Parliament; in the Federal Capital Territory there remain in force most of the laws of the State of New South Wales; in New Guinea, the former German law was repealed at the date of the establishment of civil government.

\* In the Northern Territory there is an Advisory Council.

Three volumes containing the "Statute Law of the Territory of Papua" in force on 31st December, 1916, were published by the Government Printer, Port Moresby, in 1918 and 1919; subsequent Ordinances and the regulations under Acts and Ordinances are published in the *Government Gazette* of Papua and in annual volumes. The South Australian statutes in force in the Northern Territory will be found in the collected editions and annual volumes of the State of South Australia; Ordinances made by the Governor-General in the *Commonwealth of Australia Gazette*, and regulations under Ordinances in the *Northern Territory Gazette*. The laws in force in Norfolk Island at the time of its coming under the control of the Commonwealth were collected in the *New South Wales Government Gazette* of 24th December, 1913, and printed separately as "The Consolidated Laws of Norfolk Island"; Ordinances made by the Governor-General, and regulations made by the Administrator, are published in the *Commonwealth of Australia Gazette*. Ordinances made by the Governor-General for the Federal Capital Territory are published in the *Commonwealth of Australia Gazette*. Ordinances made by the Governor-General for the Territory of New Guinea are published in the *Commonwealth of Australia Gazette*, and Regulations made by the Administrator in the *New Guinea Gazette*; the statute law in force in New Guinea on 31st December, 1922, has been published as Vols. I.—III. of "Laws of the Territory of New Guinea," and subsequent Ordinances and regulations will be collected in annual volumes. Ordinances made by the Administrator of Nauru are promulgated locally and are printed in the annual report to the League of Nations on the Administration of Nauru.

5. **Finances.**—Papua is autonomous in its finances, but receives an annual grant from the Commonwealth Government. The Administration of the Northern Territory is maintained by the Commonwealth Government; a grant is made towards the expenses of administration of Norfolk Island, but taxes are raised locally which meet part of the expenditure; expenditure in the Federal Capital Territory is defrayed by the Commonwealth; New Guinea has its own budget, and the local revenues have hitherto been sufficient to maintain the Administration; Nauru is self-supporting.

The sum appropriated by the Commonwealth Parliament in 1921–22 for the Territories outside the Commonwealth was £87,563, exclusive of £49,167 for mail services to these Territories and to other islands in the Pacific.

## B. THE NORTHERN TERRITORY.

### § 1. Area and Population.

1. **Introductory.**—Upon the extension of New South Wales westward to the 129th meridian in 1827, the Northern Territory was incorporated in that colony (see Chapter I.), and in 1863 was annexed by Royal Letters Patent to the province of South Australia. With the adjacent islands, it was transferred to the Commonwealth on 1st January, 1911.

2. **Area and Boundaries.**—The total area of the Territory is 523,620 square miles, or 335,116,800 acres. Its length from north to south is about 900 miles, while its breadth from east to west is 560 miles. Its eastern boundary, dividing it from Queensland, is the 138th meridian of east longitude; and its western boundary, separating it from Western Australia, is the 129th meridian. Its southern boundary is the 26th parallel of south latitude, dividing it from South Australia. The northern boundary is the coast line of those parts of the Indian Ocean known as the Timor and Arafura Seas. Near the mouth of the Wentworth River, in the Gulf of Carpentaria, the coast line is met by the eastern boundary; at Cape Domett, near Cambridge Gulf, the western boundary cuts the northern coast line. The length of coast line is about 1,040 miles, or 503 square miles of area to one mile of coast line; an exact survey has, however, not yet been made.

3. **Population.**—(i) *Nationality.* In 1881 there were 670 Europeans in the Territory, and at the end of 1913 the number was estimated at 2,143. The Chinese population, at its maximum during the years of railway construction, 1887 and 1888, has gradually dwindled, the number recorded at the census of 1921 being only 475. Japanese, first

recorded in 1884, increased up to the year 1898, falling again after five years, the number at the census of 1921 being 34. The highest recorded population, excluding aborigines, was 7,533 in 1888; in 1922 it was 3,554. The estimated population for the last five years is given in the following table :—

**NORTHERN TERRITORY.—POPULATION (EXCLUSIVE OF ABORIGINES),  
1918 TO 1922.**

Year ended 31st December.	Male.	Female.	Total.
1918 .. ..	3,499	1,141	4,640
1919 .. ..	3,376	1,171	4,547
1920 .. ..	2,911	1,081	3,992
1921 .. ..	2,718	1,019	3,737
1922 .. ..	2,540	1,014	3,554

The Census population (4th April, 1921) was 2,821 males, 1,046 females, total, 3,867.

(ii) *Movement of Population.* The following is a summary of movement of population in 1922 (excluding overland migration) :—

**NORTHERN TERRITORY.—MOVEMENT OF POPULATION, 1922.**

Inwards .. ..	406	Outwards .. ..	599	Excess of immigration over emigration .. ..	—193
Births .. ..	70	Deaths .. ..	60	Excess of births over deaths .. ..	+10
Increase .. ..	476	Decrease .. ..	659	Net result .. ..	—183

NOTE.—(—) signifies decrease.

The immigration and emigration of the Territory for the five years ending in 1922 are shown in the following table :—

**NORTHERN TERRITORY.—MIGRATION, 1918 TO 1922.**

Year.	Immigration.	Emigration.
1918 .. ..	1,259	1,450
1919 .. ..	1,159	1,273
1920 .. ..	606	1,161
1921 .. ..	516	770
1922 .. ..	406	599

(iii) *The Aborigines.* An account of the Australian aborigines, by Dr. W. Ramsay-Smith, was given in Year Book No. 3 (pp. 158–176). It is believed that they are rapidly dying out. In these regions, remote from contact with other races, the native has maintained his primitive simplicity, and furnishes an interesting subject of study to the anthropologist and ethnologist. At the Census of 1921, full-blood aborigines in the employ of whites and those who were living in a civilized or semi-civilized condition in the vicinity of European settlements were enumerated—the males being 1,184, females 866; total 2,050. The aggregate of the estimates supplied by officers of the Police Department who acted as Census collectors, and are in close contact with the aboriginal population, was 17,349. The interests of the natives are looked after by a Protector of Aborigines, with head-quarters in Darwin. On 30th June, 1921, aboriginal reserves and mission stations in existence, or proposed, covered an area of over 34,000 square miles. The

greatest difficulty which confronts the Administration in dealing with the natives is due to the circumstance that they are nomads without fixed abode, merely wandering about hunting for native food within the limits of their tribal boundaries, and making no attempt at cultivation or other settled industry. In their natural state, compared with those of other tropical countries the natives are very healthy, but in contact with new settlers, white or Chinese, they rapidly fall victims to disease, and to degradation from drink or opium.

## § 2. Legislation and Administration.

1. **Transfer to Commonwealth.**—(i) *The Northern Territory Acceptance Act*. A short historical sketch is given in Year Book No. 6, pp. 1113–4. On 1st January, 1911, the Territory was transferred by South Australia to the Commonwealth, upon terms previously agreed upon by the respective Cabinets, and ratified by the Commonwealth *Northern Territory Acceptance Act* (No. 20 of 1910). The terms were outlined in Official Year Book No. 15, page 940.

(ii) *The South Australian Surrender Act*. The State Act approved and ratified the agreement surrendering the Territory.

(iii) *The Northern Territory (Administration) Act 1910*. The Act provides for Government authorizing the appointment of an Administrator and officials. South Australian laws are declared to continue in force as laws of the Territory, and certain Commonwealth Acts to apply. Power is given to the Governor-General to make Ordinances having the force of law.

2. **Administration.**—A Resident Administrator, vested with supreme authority in internal affairs, was appointed in the Department of the Minister for External Affairs in February, 1912. Many other important administrative offices have also been filled.

3. **Northern Territory Ordinances.**—(i) *General*. The main provisions of the Ordinances passed are as follows:—The powers and duties of the Administrator vested in the appointee, include custody of the public seal, appointment and suspension of officials, and execution of leases of Crown lands. A Supreme Court with original and appellate jurisdiction is instituted, the method of appointment of the Judge is prescribed, and provision is made for trial by jury, and for the registration and summoning of jurors. A Sheriff, a Registrar-General, and a Health Officer are provided for, also the registration of births, marriages and deaths, and of deeds and documents. Custody and control of aborigines, with extensive powers of supervision, are vested in the Chief Protector. Provision is made for the control of fisheries. Birds protected during the whole or part of the year are scheduled. Crown lands are classified, and their mode of acquisition, entry and holding defined. The prevention and eradication of diseases in plants have been provided for. Under the Stock Diseases Ordinance the Chief Inspector of Stock has wide powers in regard to the movements of stock, prevention and control of diseases, etc. Shop assistants are to have a weekly half-holiday, and the establishments must be closed at a certain time. A town council has been constituted for Darwin, and provision made for assessments, rates, etc. Mining is encouraged by the provision of rewards for the invention of new processes and the discovery of valuable deposits and of new mineral fields; subsidization of the industry and the issue of prospecting licences are also provided for. Licences to search for mineral oil, and leases for working, are available. Provision has been made for the granting of leases for oyster culture. A Board is constituted for the purpose of making advances to settlers who intend to improve and stock their holdings, to purchase farm implements, plant, etc., or to pay off mortgages, the rate of interest and terms of repayment being set out. Advances in aid of the erection of workmen's dwellings have also been provided for. A Council of Advice has been appointed, consisting of a chairman and seven members—four being non-official—the object of the Council being to advise the Minister on matters affecting the welfare of the Territory. Provision has been made for the compensation of injured workers, for controlling the sale, etc., of necessary commodities, for the appointment of a public trustee, and for amendment of the "Taxation Act 1884" of South Australia in its application to the Territory. A new

Land Ordinance was passed in May, 1923, which repealed the then existing Ordinances. Reference to this Ordinance is made in Chapter V.—Land Tenure and Settlement. Reference to the Liquor Ordinance will be found hereunder

(ii) *Liquor Traffic*. By the Liquor Ordinance of 1915–21 the Commonwealth Government controls the importation of liquor into that part of the Territory which is situated to the north of the 15th parallel south latitude. The hotels situated there are owned by the Government; but have been leased to private persons. There is a liquor store at Darwin also three hotels, and hotels at Pine Creek and the Katherine. The Department directs its energies to the minimizing of excessive drinking and the prevention of illicit trading in intoxicants.

4. *Representation in Commonwealth Parliament*.—Section 122 of the Commonwealth Constitution provides that “the Parliament may make laws for the government of any territory . . . and may allow the representation of such territory in either House of the Parliament to the extent and on the terms which it thinks fit.” In pursuance of this provision an Act has recently been passed whereby the Northern Territory elects a member to the House of Representatives. As this member will represent a very small number of electors, he is not entitled to vote, but may take part in any debate in the House.

### § 3. Physiography.

1. *Tropical Nature of the Country*.—The Territory is within the torrid zone, with the exception of a strip 2½ degrees wide, which lies south of the Tropic of Capricorn.

2. *Contour and Physical Characteristics*.—The low flat coast line seldom reaches a height of 100 feet. Sandy beaches and mud flats, thickly fringed with mangroves, prevail. Sandstone, marl, and ironstone form the occasional cliffy headlands. The sea frontage of more than 1,000 miles is indented by bays and inlets, and intersected by numerous rivers, many of which are navigable for considerable distances from their estuaries.

The principal features of the coast line are enumerated in Year Book No. 1, p. 66; the rivers in Year Book No. 2, p. 76; the mountains in Year Book No. 3, p. 67; the lakes in Year Book No. 4, p. 77; the islands in Year Book No. 5, pp. 71, 72, and the mineral springs in Year Book No. 6, p. 65.

Inland, the country generally is destitute of conspicuous landmarks. From the coast there is a general rise southwards to the vicinity of the 17th or 18th parallel of south latitude, where the higher lands form the watershed between the rivers that flow northwards to the sea, and those that form the scanty supply of the interior systems. Towards the centre of the continent, the land over a wide area is of considerable elevation, and there are several mountain ranges, generally with an east and west trend.

### § 4. Climate, Fauna and Flora.

1. *The Seasons*.—There are two main climatic divisions—the wet season, November to April, and the dry season, May to October, with uniform and regular changes of weather. Nearly the whole of the rainfall occurs in the summer months. Fuller particulars will be found in Year Book No. 6, p. 1116.

2. *Fauna*.—The ordinary types of native Australian fauna inhabit the Territory. As elsewhere on the continent, the higher *Theria* are rare, but marsupials, birds, crocodiles, fresh-water tortoises, snakes (mostly non-venomous), and frogs abound. There are many varieties of freshwater fish and littoral mollusca. Butterflies and beetles are strongly represented. The white ant is a pest, anthills in the Territory sometimes attaining great dimensions. Mosquitoes and sandflies are very troublesome, particularly in the wet season. Native fauna are in some cases protected. The domesticated animals have been introduced, and buffalo formerly existed in large herds, but their numbers have been greatly depleted by indiscriminate shooting in recent years.

3. **Flora.**—The vegetation is North Australian in type, but a number of the forms belong to the Malayan and Oceanic regions. The timber trees are not of great commercial value, but in the coastal regions tropical vegetation grows luxuriantly to the water's edge. On the wide expanses of plain country in the interior there is little vegetation. The principal orders represented in the Territory are:—*Euphorbiaceæ*, *Compositæ*, *Convulvulaceæ*, *Rubiaceæ*, *Goodeniaceæ*, *Leguminosæ*, *Urticæ*.

Fuller particulars regarding fauna and flora are given in Year Book No. 6, pp. 1116–7.

## § 5. Production.

1. **Agriculture.**—Up to the present, agriculture has made little progress in the Territory, although it has been demonstrated that rice may be grown as an ordinary crop suitable for chaff as fodder, and in certain situations for milling; while maize, cowpeas, sorghum, amercane, millets of various kinds, and sugar-cane can also be cultivated. The drawbacks to success at the present are lack of suitable labour, deficient means of communication, and periodicity of the rainfall. Purely tropical products such as cotton, tea, coffee, sisal hemp, and cigar tobacco can flourish, but their profitable cultivation depends on a supply of cheap labour, which is unobtainable. The Commonwealth Government established demonstration farms at Daly River and Batchelor, but these have been converted into aboriginal compounds. During the dry season considerable trouble is caused by the depredations of white ants.

2. **Live Stock.**—(i) *Distribution.* The spacious, well-grassed “runs” of the Territory are, with adequate water supply, suitable for horse and cattle breeding. According to the Report of the Acting Administrator, the area under pastoral lease on the 30th June, 1922, was 186,086 square miles. Large numbers of cattle are overlanded to neighbouring States, which also take considerable quantities of horse hides. Five gazetted stock routes aggregate a distance of 2,121 miles, and with the completion of the present contract for bores there will be a good supply of permanent water thereon. There are Government cattle stations at Oenpelli (2,000 square miles), and Mataranka (864 square miles), carrying altogether about 2,300 cattle and 275 horses, these figures representing only about one-fifth of the present estimated capacity of the stations.

An experiment with sheep on Mataranka station was not very successful owing to unsatisfactory lambing and the dingo and hawk pests, and the flock was disposed of to a private purchaser. The estimated number of stock in the Territory on the 31st December, 1921, is given in the appended statement:—

### NORTHERN TERRITORY.—LIVE STOCK, 31st DECEMBER, 1921.

Horses.		Cattle.		Sheep.		Pigs.
39,565	..	568,031	..	6,349	..	452

In 1921 there were also 19,385 goats, and small numbers of camels, mules, and donkeys.

The dairying industry has not been developed, although it has been shown that it is possible to make butter of good quality. A sample from Oenpelli has been very favourably reported on by the Chief Dairy Produce Expert. It is found that the rank indigenous grasses in some localities are greatly improved by constant stocking, and become largely replaced by shorter and sweeter varieties.

Herd of wild buffaloes are found on the main land and on Melville Island, and are descendants of swamp buffaloes, introduced in the early part of last century. The numbers have, however, been greatly depleted by buffalo shooters. During the 25 years ending in 1911 about 4,000 hides per annum were exported. It is stated that the number of buffaloes left in the Territory is now only about 20,000. The flesh of the animal is said to be remarkably free from disease and to equal beef in food value, while buffalo milk is twice as rich in butter fat as ordinary cow's milk.

(ii) *Meat Preserving Works.* By agreement with the Government an extensive meatworks under private ownership was established in the vicinity of Darwin, and commenced operations in April, 1917. During fourteen weeks of that year the number

of cattle treated was 19,000. In 1918 and 1919 operations again started in April and lasted for sixteen weeks in each year, the "kill" in the former year being 29,000, and in the latter 22,000. Owing to difficulties occasioned chiefly by the dearth of shipping the works were forced to close down in 1920.

3. *Mining.*—(i) *General.* Small quantities of the precious and commercial metals are mined. The discovery of gold and tin in various localities, and the measure of success that has attended their working, indicate scope for development. An important discovery of tin at Maranboy Springs was made in 1913, and this field is now the most productive in the Territory. It is stated that better results could be obtained by amalgamating the smaller properties, and working on a larger scale, with more modern methods. The collapse of the mining industry in the Northern Territory, as shown by the figures below, may be accounted for partly by the serious fall in the metal markets, tin and wolfram in particular, partly by the exhaustion of the easily extracted and richer surface deposits; principally, however, by the utter failure of all efforts to introduce outside capital for development and prospecting purposes.

(ii) *Mineral Production.* Both alluvial and reef gold are found, and other minerals are also raised. The following table shows the total mineral production for the last five years:—

**NORTHERN TERRITORY.—VALUE OF MINERAL PRODUCTION, 1917-18 TO 1921-22.**

Year.	Gold.	Tin Ore.	Wolfram.	Silver-Lead Ore.	Copper Ore.	Mica.	Total Value all Minerals.
	£	£	£	£	£	£	£
1917-18 .. ..	2,229	41,432	38,788	200	9,648	..	92,730
1918-19 .. ..	4,234	30,021	34,805	132	2,349	150	71,697
1919-20 .. ..	5,282	27,610	45,648	299	780	482	80,101
1920-21 .. ..	1,299	7,793	9,752	..	..	159	19,003
1921-22 .. ..	488	5,892	560	..	798	2,170	9,908

(iii) *Miners Employed, 1917-18 to 1921-22.* The following table shows the average number employed in mining during the last five years, distinguishing Chinese:—

**NORTHERN TERRITORY.—MINERS EMPLOYED, 1917-18 TO 1921-22.**

Year.	Europeans.	Chinese.	Aboriginals.	Total.
1917-18 .. ..	194	282	68	544
1918-19 .. ..	194	260	16	470
1919-20 .. ..	195	250	12	457
1920-21 .. ..	155	180	8	343
1921-22 .. ..	89	100	13	202

(iv) *Mining Accidents, 1911 to 1920-22.* In 1911 five mining accidents were recorded, four resulting in death. There were no serious accidents in 1910, 1912, and 1913, and only one, resulting in death, in 1914, and one in each of the years 1915, 1916, and 1917-18. No mining accidents have been recorded since 1918-19. During the nine years preceding (1901-1909), nine fatal accidents and seven cases of serious injury were recorded. The majority of the victims were Chinese.

4. *Pearl, Trepanng, and Other Fisheries.*—In 1884 mother-of-pearl shell was discovered in the harbour of Port Darwin. Difficulty in working, principally through heavy tides and muddy water, retarded the development of the industry for many years. Subsequently, however, the opening up of new patches led to a revival, but the outbreak of war gave the industry a setback, owing to the limited demand in the home markets.



During 1921-22, operations have been languishing owing to the low prices of shell and small takes by the boats. The number of boats engaged was only 6, as against 8 the previous year, employing 23 men in all. Seven tons of pearl shell were exported. Trepanng fishing has also received a setback owing to a slump in the market.

It may be mentioned that the territorial waters abound in marketable fish, and, given transport facilities, it would be possible to establish a trade in fish dried or otherwise preserved. During 1921-22, 21 persons were licensed, principally Greek.

### § 6. Land Tenure.

A description of the system of land tenure in force in the Territory will be found in Chapter V.—Land Tenure and Settlement.

### § 7. Commerce and Shipping.

1. **Trade.**—No record is kept of the direction of trade between the Commonwealth States and Territories. The value of the direct oversea trade for 1901 and for each of the years 1917-18 to 1921-22 is given hereunder :—

#### NORTHERN TERRITORY.—VALUE OF DIRECT OVERSEA TRADE, 1901 AND 1917-18 TO 1921-22.

Items.	1901.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
	£	£	£	£	£	£
Imports .. ..	37,539	32,287	25,140	29,056	19,857	12,115
Exports .. ..	29,191	268,419	377,258	277,627	14,752	5,036
Total .. ..	66,730	300,706	402,398	306,683	34,609	17,151

The principal items of oversea export in 1921-22 were cattle, £2,037; sandalwood, £305; fish, smoked or dried, £2,209; and scrap metals, £235. The large increase in 1917-18 and 1918-19 as compared with previous years is due to the operations of the meat preserving works at Darwin. Owing to the closing down of these works in 1920 the figures for the last two years show a considerable decline as compared with those for the years 1917 to 1920.

2. **Shipping.**—The Territory is dependent for its shipping facilities chiefly on the services of vessels trading between Sydney and Singapore. Other vessels make occasional visits, while a quarterly service between Fremantle and Darwin is carried out by the "Bambra," belonging to the West Australian State Shipping Service.

#### NORTHERN TERRITORY.—SHIPPING, 1917-18 TO 1921-22.

Period.	Arrivals.		Departures.	
	No. of Vessels.	Tonnage.	No. of Vessels.	Tonnage.
1917-18 .. ..	51	115,288	50	107,497
1918-19 .. ..	43	88,928	42	88,806
1919-20 .. ..	41	83,086	43	83,264
1920-21 .. ..	30	65,301	30	65,398
1921-22 .. ..	32	93,421	30	84,835

The foregoing figures are exclusive of particulars of coastwise shipping. During 1921-22, 44 vessels of 759 tons net were entered as coastwise.

The Government owns a small vessel, the "John Alce," 33 tons.

### § 8. Internal Communication.

1. **Railways.**—Under the agreement ratified by the Act, the Commonwealth is to construct the Northern Territory portion of the transcontinental railway line (connecting Adelaide and Darwin, via Port Augusta).

The Northern line from Adelaide terminates at Oodnadatta, about 100 miles south of the southern boundary of the Territory. The only line at present in the Territory is one from Darwin to Emungalan, Katherine River, a length of 198.68 miles, of 3 ft. 6 in. gauge. The line to connect Katherine River with Oodnadatta (about 1,012 miles) has been surveyed, the greater part of the survey being exploratory in character. The completion of the gap would permit of the development of the broad belts of pastoral and mineral country towards the centre of Australia. The Commonwealth also acquired on 1st January, 1911, the property in the line from Port Augusta to Oodnadatta (478 miles).

2. **Posts.**—Postal communication is maintained by vessels belonging to Burns, Philp and Co., which maintain a monthly service between the Territory and the Eastern States. In addition, the vessels belonging to the State Steamship Service of Western Australia give a service once every 60 days between Fremantle and Darwin. Inland, the northern part of the Territory receives its mail via Darwin, while the southern districts are served via Adelaide.

3. **Telegraphs.**—The transcontinental telegraph line, covering a length of 2,230 miles, was completed on the 22nd August, 1872, at a cost of nearly half-a-million sterling. The line runs in a northerly direction from Adelaide to Darwin, whence telegraphic communication is provided with Asia and Europe, via Banjoewangie (Java), Singapore, and Madras.

Between Darwin and Banjoewangie the submarine cable is duplicated.

### § 9. Finance.

1. **Revenue and Expenditure, 1921-22.**—In the Commonwealth finance statements separate accounts are given for Northern Territory administration. The following shows the receipts and expenditure for the financial year :—

#### REVENUE AND EXPENDITURE.—NORTHERN TERRITORY, 1921-22.

REVENUE.	£	EXPENDITURE.	£
Customs and Excise ..	4,526	Salaries and Contingencies ..	119,497
Postal, Telegraph, and Telephone ..	7,605	Darwin-Katherine Railway—Working Expenses ..	24,440
Darwin-Katherine River Railway ..	14,370	Melbourne Administrative Services ..	3,822
Territorial ..	20,076	Royal Commission ..	399
Land and Income Tax ..	9,719	Interest and Sinking Fund, Commonwealth Stock, issued for Redemption of Loans, Railway Construction, etc.	5,380
Quarantine ..	50	Interest on Treasury Bills, issued for Redemption of Loans, Railway Construction, etc.	9,461
Lighthouses and Light Dues ..	738	Interest and Sinking Fund, Northern Territory Loans ..	90,784
Stamp Duties ..	4,983	New Works, Artesian Bores, Roads, etc. ..	17,859
Miscellaneous ..	9,172	Miscellaneous ..	17,420
Deficiency on year's transactions ..	217,823		
<b>Total ..</b>	<b>289,062</b>	<b>Total ..</b>	<b>289,062</b>

2. **Northern Territory Debt.**—The items making up the total debt of the Territory as at 30th June, 1922, are as follows:—

	£	£
Debt at date of transfer to the Commonwealth, 1st January, 1911 .. .. .		3,931,086
Redeemed under Commonwealth Loan Acts ..	1,261,167	1,721,792
Redeemed from Consolidated Revenue ..	460,625	
Balance, 30th June, 1922 .. .. .		2,209,294

In addition, the balance of the Port Augusta—Oodnadatta Railway Loans taken over from South Australia amounted at the same date to £1,742,452, making a total of £3,951,746. Under the provisions of the "Northern Territory Acceptance Act 1910" a sinking fund has been established in connexion with the transferred loans.

### C. THE FEDERAL CAPITAL TERRITORY.

1. **Introductory.**—In Year Books Nos. 4 and 5, information was given in Section XXXI. as to the events leading to the selection of the Federal Capital Territory, and as to the necessary legislation and the progress of operations in connexion with the establishment of the capital city. The physiography of the Territory was dealt with *in extenso*, and topographical and contour maps accompanied the letterpress, as well as reproductions of the premiated designs for the laying out of the city. Considerations of space, however, preclude the repetition of this information. On the 12th March, 1913, the official ceremony to mark the initiation of operations in connexion with the establishment of the Seat of Government was carried out. At this ceremony the selection of "Canberra" as the name of the capital city was announced.

2. **Progress of Work.**—After an International Competition, a design for the lay-out of the capital city was approved, and steps were taken to commence the construction in accordance therewith.

The survey of the main axial lines was completed, and areas for initial development were subdivided. A scheme for water supply by impounding water on the Cotter River was completed. The construction of an outfall sewer was undertaken, as well as the formation of the principal avenues. An Afforestation Branch was established which made exhaustive experiments in regard to the varieties of trees that would be suitable for street, park and forest planting. These activities were greatly curtailed in 1916, and practically suspended until the year 1920.

In the early part of 1921, "with a view to enabling the Federal Parliament to meet, and the Central Administration of the Commonwealth Government to be carried on as early as practicable at Canberra," the Governor-General in Council approved of the appointment of a Committee of five, consisting of architectural and engineering experts, to inquire into and advise upon the works already executed and the data available, and to submit a scheme for progressive construction of the city. The Committee submitted a scheme of construction involving an expenditure of approximately £2,000,000, the main principles of which—that owing to the necessity for economy, buildings and works of a monumental character be deferred, and that Parliament House and other Governmental buildings be of a provisional character—were adopted by the Government and work has since proceeded in accordance with this scheme.

The construction of main avenues and roads according to the approved plan has been resumed, and many miles have been formed, and a considerable portion metalled or gravelled.

Certain portions of the residential areas for initial settlement have been developed, and engineering services such as roads, sewerage, drainage and water supply from the Cotter scheme are being provided. The water supply and sewerage have been so

arranged as to connect up with the main city services when completed. These services are being actively undertaken. A water supply service reservoir is being provided on Mt. Russell, and mains through the city are being laid. The construction of the main outfall sewer is well advanced, and a commencement has been made with the intercepting sewers within the city boundary; a large storm-water channel has been constructed along the foot of Mt. Ainslie to protect the northern residential area; and electric lighting and power services have been extended to serve the residential areas and those areas where various construction works are proceeding, many miles of transmission line having been erected.

Fire services have also been provided for the protection of buildings and depots. The construction of several new bridges, to restore communication broken by floods of unusual magnitude in 1922, has been undertaken. Of these, the largest is one of 300 feet span over the main stream of the Molonglo River.

Power is supplied from a Power House with a capacity of 1,350 kilowatts, which was one of the first structures provided, and the manufacture of bricks, tiles, joinery, cement products, and other requirements, is being actively carried on.

The erection of a hostel for visitors, with immediate accommodation for 100 persons is proceeding on a site adjoining the Governmental Area, and schemes for a provisional Parliament House and Administrative Offices and other buildings in the Governmental Area, as well as hostels for the accommodation of officials and certain public buildings have been prepared and are awaiting Parliamentary sanction.

The provision of cottages in the various residential localities is being proceeded with, and fifty are complete or approaching completion. A contract has been let for a further twenty houses, and an architectural competition is being held for the lay-out and for designs for a large residential area.

A primary school to accommodate 200 children has been erected at Telopea Park, and many other buildings of a minor character for the accommodation of workmen and for administrative purposes have been provided.

A quarry to supply road-making material has been established; considerable quantities of plant have been purchased for the manufacture of materials, road and sewer construction, transport, etc.; and a light railway has been laid to facilitate the transport of material and plant from stores depot and brickworks to the various localities.

A considerable amount of survey work involved in laying out areas, roads, sites for buildings and various engineering works has been carried out and is still in active progress.

Extensive tree-planting has been undertaken. Belts of trees for shelter and various city parks have been planted, and the formation of avenues and streets and other ornamental features has been carried out, as well as a large amount of afforestation work on the outskirts of the city proper. This department of activity is still proceeding concurrently with the formation of roads and the development of the various areas.

Provision has been made for the constant maintenance of roads, buildings and other services in the Territory.

**3. Lands in the Territory.**—As a considerable portion of the Commonwealth lands within the Territory is not required in connexion with the establishment of the city, such areas are being made available for leasing under certain conditions. A large number of leases has been disposed of under conditions requiring the extermination of rabbits, noxious animals and weeds. Varying numbers of stock are on agistment on land that may be required for departmental use at a later date. Reference has already been made in Chapter V. to the area of alienated, acquired and leased land within the Territory. All areas are classified into three classes of agricultural and three classes of grazing lands, and about 24,000 acres of these lands are at present leased to returned soldiers for periods varying from five to twenty-five years. The whole of the acquired lands in the Territory are now being classified and the roads reggraded in order that leases of a permanent character may be granted.

4. **Lands at Jervis Bay.**—Sovereign rights over a certain area comprising about 28 square miles of land and water at Jervis Bay, to be used as a port in connexion with the Federal Capital, have been granted by the New South Wales Government, and accepted by the Commonwealth. The Royal Australian Naval College has been established in this area on a site known as Captain's Point.

5. **Railways.**—The line from Queanbeyan to Canberra, 4 miles 75 chains long, was opened for goods traffic on 25th May, 1914, and is being worked by the New South Wales Railways Commissioners. This line has been extended on to the Power House and also a further 2½ miles across the Molonglo River to the Civic Centre towards Yass. These extensions are at present only used for Departmental purposes. The total length is approximately 8 miles. At present trains are not run farther than the Power House and do not cross the Molonglo River in consequence of the destruction of the bridge during a heavy flood. A trial survey of the Canberra-Jervis Bay line has been completed, and plans have been prepared sufficiently to enable an approximate estimate of the cost of the line to be arrived at. The permanent survey from Canberra to the boundary of the Federal Territory towards Yass—a distance of 11 miles—has now been effected, and the New South Wales Government has completed the permanent survey from Yass to the Territory boundary—about 32 miles.

6. **Population and Live Stock.**—The estimated population on the 31st December, 1922, was 2,796. The live stock, according to the latest return, comprises:—Horses 1,264; cattle, 9,900; sheep, 203,300.

7. **Educational Facilities.**—Arrangements have been made for the New South Wales Education Department to continue, for the time being, the administration of education in the Territory, the expenditure involved to be refunded annually by the Commonwealth to the State. Including the school at Jervis Bay, there are 15 schools in operation.

8. **Expenditure.**—The capital expenditure on the Seat of Government during the period 1901–11 and in each year thereafter up to the 30th June, 1923, is set out in detail in the appended table:—

**FEDERAL CAPITAL TERRITORY.—CAPITAL EXPENDITURE TO 30th JUNE, 1923.**

Period.	Expenditure.						Total.
	Choosing Site.	Land Acquisition within Territory.	Land Acquisition outside Territory.	Queanbeyan to Canberra Railway.	Extension of Railway from Power House to Civic Centre.	Construction of Capital.	
	£	£	£	£	£	£	£
1901–11 ..	22,915	..	..	..	..	16,413	39,328
1911–12 ..	...	..	..	..	..	68,026	68,026
1912–13 ..	..	179,525	..	12,575	..	124,718	316,818
1913–14 ..	..	180,488	..	30,605	..	221,028	432,121
1914–15 ..	..	36,770	2,850	2,926	..	210,607	253,153
1915–16 ..	..	127,537	295	995	..	167,384	296,211
1916–17 ..	..	112,120	8,865	17	15,134	101,533	237,669
1917–18 ..	..	90,419	285	763	3,497	4,233	99,197
1918–19 ..	..	1,323	72	241	919	936	3,491
1919–20 ..	..	11,968	..	20	Cr. 72	3,575	15,491
1920–21 ..	..	1,816	..	..	4,189	78,489	84,494
1921–22 ..	..	8,861	..	..	Cr. 20	140,075	148,916
1922–23 ..	..	1,475	..	200	956	332,694	335,325
<b>Total ..</b>	<b>22,915</b>	<b>752,302</b>	<b>12,367</b>	<b>48,342</b>	<b>24,603</b>	<b>1,469,711</b>	<b>2,330,240</b>

Details of expenditure in connexion with the building of the Federal Capital are given hereunder for the latest three years available :—

## FEDERAL CAPITAL.—EXPENDITURE ON CONSTRUCTION, 1921 TO 1923.

Particulars.	1920-21.		1921-22.		1922-23.	
	£	£	£	£	£	£
<b>Buildings—</b>						
Parliament House ..	..		..		8	
Parliamentary Hostel ..	..		215		13,620	
Cottages ..	9,109		34,741		16,488	
Primary Schools ..	..		..		6,447	
		9,109		34,956		36,563
<b>Water Supply and Sewerage—</b>						
Water Supply ..	..		4,810		46,724	
Sewerage ..	..		21,164		64,729	
Intercepting Channels ..	..		2,989		7,023	
				28,963		118,476
<b>Roads and Bridges—</b>						
Roads ..	5,850		21,059		75,993	
Bridges ..	..		11		4,207	
		5,850		21,070		80,200
<b>Railways ..</b>	..			395		837
<b>Electric Light and Power (Power House and Mains) ..</b>	..		..	4,354		6,205
<b>Tree Planting ..</b>	..	1,992		2,447		4,832
<b>Miscellaneous Minor Works ..</b>	..		..	1,445		4,181
<b>Miscellaneous—</b>						
Manufacturing and Trading Accounts ..	9,458		28,338		11,259 <i>Cr.</i>	
Suspense Account ..	14,884		1,543 <i>Cr.</i>		54,710	
Plant ..	36,139		11,644		32,099	
Miscellaneous ..	1,051		7,514		5,850	
Incidental Works ..	6		492		..	
		61,538		46,445		81,400
<b>Total ..</b>		78,489		140,075		332,694

9. **Revenue.**—The revenue of the Federal Territory for the year ended 30th June, 1922, was £34,245.

10. **Military College.**—In June, 1911, a Military College was opened at Duntroon for occupation by the cadets and staff. Particulars regarding the establishment of this College may be found in Year Book No. 4 (p. 1159). Previous reference has been made to it in Chapter XIV. dealing with Defence.

11. **Naval College at Jervis Bay.**—See chapter XIV. dealing with Defence.

## D. NORFOLK ISLAND.

1. **Area, Location, etc.**—Norfolk Island, discovered by Captain Cook in 1774, is situated in latitude 29° 3' 45" south, longitude 167° 58' 6" east. Its total area is 8,528 acres, the island being about 5 miles long and 3 miles wide. From Sydney it is distant 930 miles, and from New Zealand 400 miles. The coast line is 20 miles, and its form that of an irregular ellipse. Except on the south-west, inaccessible cliffs rise from the water's edge. The climate is equable, the temperature ranging between 56° and 82°

with a mean of 68°. The average annual rainfall is 55 inches. It has been said that the salubrious climate coupled with the beauty of its land and sea scapes should combine to render Norfolk Island "the Madeira of the Pacific."

2. **Settlement.**—The first colonization, in 1788, was by Lieutenant King, who in H.M.S. *Sirius* established a small penal station as a branch settlement of that at Port Jackson. The settlement was abandoned in 1806, and thence for 20 years its chief use was as a whaling station and place of call for British warships.

From 1826 to 1855 it was again made a penal station. In 1844 it was annexed to Van Diemen's Land (Tasmania).

The descendants of the *Bounty* mutineers, having become too numerous to subsist on Pitcairn Island, were removed thence to Norfolk Island in 1856. The new community numbered 193—94 males and 99 females—and were the descendants of British sailors and Tahitian women.

In 1856 the island was severed from Tasmania, and created a distinct and separate settlement under the jurisdiction of New South Wales. In 1897 it was made a dependency under the Governor of that Colony, and was administered by the Chief Secretary's Department through a resident Chief Magistrate, in whom was vested the executive government of the settlement, and the penal supervision of its affairs. In 1913, however, a Bill was passed by the Federal Parliament providing for the taking over of the island as a territory of the Commonwealth. The Act came into force on 1st July, 1914, and the island is now administered by the Department of Home and Territories, Melbourne, through an Administrator and Chief Magistrate.

3. **Population and Live Stock.**—The population on 4th April, 1921, was 339 males, and 378 females, a total of 717. The latest returns of live stock show that there are on the island 1,775 cattle, 634 horses, 296 sheep, and 188 pigs. In addition there are 6,354 head of poultry.

4. **Production, Trade, etc.**—The soil throughout is rich, and is specially suitable for the cultivation of citrus fruits, bananas, and (in parts) coffee. Various other sub-tropical fruits thrive well. During 1921–22 the production of oranges was 39,095 bushels; bananas, 252,450 dozen; passion fruit, 7,565 bushels; coffee, 27,555 lb.; and pineapples, 597 dozen. There are many thousands of lemon trees and guavas growing wild throughout the island.

Hundreds of whales pass the island throughout the season, but owing to old-fashioned methods very few are captured. The whaling industry, if brought up to date, would be of great importance. The preserved fish industry also offers a great field for commercial energy; such fish as trevalla, kingfish, schnapper, and many others, are plentiful. A company already is in operation, but it has greatly to confine its output, owing to inadequate shipping facilities. In order to improve conditions of marketing, and in other ways to promote the economic interests of the island, a Farmers' Association has been formed. In 1921–22 the imports were valued at £14,312. The exports were valued at £4,305, a large decline from the previous year owing to the diminished export of lemon juice and peel. Small quantities of fruit and fruit pulp, passion fruit juice, seeds, fish, whale oil, wool, and timber were also exported. Nearly all the export trade was with Australia, only small amounts going to New Zealand and the South Sea Islands. The Administrator in his annual report points out the necessity of improved shipping facilities, if Norfolk Island is to progress. At present the island is visited once only every second month, by one of Burns, Philp and Co.'s island steamers. To make matters worse, the cargo space is so limited that cargo is often left behind, while even passengers frequently fail in securing berths to and from the island. The Farmers' Association is now endeavouring to accelerate trade with New Zealand. The "all red" cable from Great Britain via Vancouver, Fanning Island and Fiji bifurcates at Norfolk Island, one line connecting with New Zealand, the other with Brisbane.

5. **Social Condition.**—Education is free and compulsory up to the age of fifteen years. The school is under the New South Wales Department of Public Instruction, with standards corresponding to the State public schools, but the salaries and allowances of the teachers are paid by the Norfolk Island Administration. The number of scholars enrolled on the 30th June, 1922, was 136.

The Magistrates' Court has criminal jurisdiction in all crimes except capital offences, civil jurisdiction in all matters, and authority to grant probate and letters of administration.

## E. NEW GUINEA.

### 1. THE ISLAND OF NEW GUINEA.

1. **Geographical Situation of New Guinea.**—New Guinea, frequently described as the largest island in the world, lies to the north of Australia, between 0° 25' and 10° 40' S. latitudes, and between 130° 50' and 150° 35' E. longitudes. Its estimated area exceeds 300,000 square miles, the greatest length being 1,490 miles, and the greatest breadth 430 miles.

2. **Discovery.**—The island was probably sighted by Abreu in A.D. 1511. The first visit by Europeans was apparently either that by the Portuguese Don Jorge de Meneses on his way from Goa to Ternate in 1526, or that by the Spaniard Alvaro de Saavedra in 1528. In 1606 Torres, having parted company with De Quiros at the New Hebrides, sailed, on his way to the Philippines, through the strait which separates the island from Australia, and which now bears his name.

3. **Colonization.**—Little progress was made for many years in exploration and settlement. First the Portuguese, and afterwards the Dutch, who to a great extent replaced them as the principal European traders in the East, seem to have jealously excluded other traders and adventurers, and to have kept the knowledge of their discoveries to themselves. The coasts were visited by Roda, Schouten, Lemaire, Tasman, Dampier, Torres, Bougainville, and Cook; but the difficulties of navigation, the savagery of the islanders, and the tempting fields for enterprise in the more temperate regions further south, diverted the energy of traders and voyagers. Forrest describes a voyage by himself in 1774. In 1793, New Guinea was annexed by two commanders in the East India Company's service. Since that date the Dutch have made extensive surveys of the western portion, and the British and Germans have occupied and colonized the eastern. In September, 1914, German New Guinea was seized and occupied by Great Britain by means of a force raised and despatched by the Australian Government.

4. **Partition.**—The three colonizing powers agreed to the partition of New Guinea, each having suzerainty over islands adjoining its own territory. The whole of the portion west of the 141st degree of longitude, comprising about 150,000 square miles, or nearly half the island, belongs to the Dutch. The eastern half was divided in almost equal portions between Great Britain and Germany, the area possessed by each (with adjacent islands,) being about 90,000 square miles. An Anglo-German boundary commission appointed for the purpose of defining the boundary between the territories of the two nations, started operations on 26th December, 1908, and completed the field-work on 27th October, 1909. The total length of boundary delimited was 66½ miles. The work was both important and difficult. For a considerable portion of the survey, the country was exceedingly rough and mountainous, and the natives hostile. In one instance, the line was carried over a range at an elevation of 11,110 feet. The Dutch colony forms part of the residency of Ternate in the Moluccas, and has not been extensively developed. The German protectorate, where considerable commercial development had taken place, included the northern part of the eastern half of the mainland, known as Kaiser Wilhelm Land, and the large islands of the Bismarck Archipelago and the Solomon Group, as well as nearly 200 smaller islands. The south-eastern portion of New Guinea, nearest Australia, is a dependency of the Commonwealth of Australia. The German Pacific protectorate was terminated in 1914.



## 2. PAPUA.\*

## § 1. General Description of Papua.

1. **Australian Dependency of Papua.**—Surveys of the east coast of New Guinea by Stanley, Yule, Blackwood, Moresby, and others, brought home to Queensland, and to Australia generally, the danger to her commerce which would result from foreign possession of the islands and coasts opposite to Cape York, and from the holding by a hostile power of the entrance to the splendid waterway inside the Barrier Reef. The mainland opposite the shores of Queensland east of the 141st meridian was therefore annexed by that colony in 1883, but the action was disallowed by the British Government. In 1884, however, a British protectorate was authoritatively proclaimed by Commodore Erskine over the region lying east of the 141st meridian as far as East Cape, with the adjacent islands as far as Kosman island. In the year following, an agreement with Germany fixed the boundaries between the possessions of the two countries, and to Great Britain was assigned the portion now known as Papua, lying between the extreme limits of 5° and 12° S., and 141° and 155° E. The British protectorate was subsidized by Queensland, New South Wales, and Victoria, and lasted until 30th September, 1898, when it was proclaimed a possession of the Empire. Its constitution was then that of a Crown colony, in association, however, with Queensland. Administration was in the hands of a Lieutenant-Governor, aided by an Executive and a Legislative Council, and advised by a Native Regulation Board. Port Moresby, on the south coast, was made the head-quarters of the official establishment; a supreme court was established there, and magisterial courts in the districts; and an armed native constabulary force, under a European officer, was instituted for the maintenance of order. There were also, on the 30th June, 1922, 895 native village constables, as well as native interpreters, warders, boats' crews, etc., employed by the Crown.

2. **Annexation by Commonwealth.**—The Territory was placed under the authority of the Commonwealth on 1st September, 1906, by proclamation issued in pursuance of Letters Patent of the 18th March, 1902, and was accepted by the Commonwealth by the Papua Act 1905, which came into force by virtue of the proclamation aforesaid. The transfer was made under the authority of section 122 of the Constitution (see p. 35 hereinbefore). The Territory is now under the administration of the Commonwealth, but not included within it, and is divided into eleven magisterial districts.

3. **Physical Characteristics.**—Papua lies wholly within the tropics. The northernmost point touches 5° S. latitude: its southernmost portion, comprising Sudest and Rossel Islands, lies between 11° S. and 12° S. latitude. It is separated from Australia by Torres Strait. The length of Papua from east to west is upwards of 800 miles; towards either end the breadth from north to south is about 200 miles, but about the centre it is considerably narrower. The Territory comprises also the islands of the Trobriand, Woodlark, D'Entrecasteaux, and Louisiade groups. The length of coast-line is estimated at 3,664 miles—1,728 on the mainland, and 1,936 on the islands. The total area is about 90,540 square miles, of which 87,786 are on the mainland, and 2,754 on the islands. From the eastern end of the territory rises a chain of mountains, which forms a great central ridge and attains its greatest altitude, as it extends westwards, in the Owen Stanley Range, the highest points of which are Mount Victoria (13,200 feet), Mount Scratchley, the Wharton Range, and Mount Albert Edward. The western end of the possession is for nearly 300 miles generally low and swampy for some distance along the coast. The whole territory is well watered. The great mountains and a large portion of the lower country are covered with forest. The islands are mountainous, and, with the exception of the low coral islands of the Trobriand Group, part of Murua, and a few others of small dimensions, principally of volcanic formation. The highest is Goodenough Island, 8,000 feet. The largest rivers of the mainland flow into the Gulf of Papua. The Fly River, with its tributaries, drains an extensive area of the territory of the Netherlands, as well as of the British. Its length in British territory is about 620 miles, and it is navigable by a steam launch for over 500 miles. Other important rivers are the Turama and the Purari. There are many excellent harbours.

\* See also Map on p. 665.

## § 2. Population.

The white population of Papua on 4th April, 1921, was 1,343, made up of 961 males and 382 females. Included in these figures were 79 persons, who were passengers and crew of the s.s. *Marsina*, which was at Samarai at the taking of the Census. The following table gives the white population of Papua for the last five years:—

### WHITE POPULATION OF PAPUA, 1918 TO 1922.

YEAR ENDED 30TH JUNE.				
1918.	1919.	1920.	1921.(a)	1922.
962	971	1,096	1,343	1,104

(a) The figure for 1921 is the Census return.

The chief occupations of the non-indigenous population at the taking of the Census were:—Government officials and employees, 132; commercial pursuits, 150; shipping, 124; tropical agriculture, 266; missionary work, 144; mining, 159.

It is not possible to make a reliable estimate of the number of natives, owing to the fact that much of the interior country is unexplored. The official estimate is 250,000. These speak many languages and dialects. The coloured population, other than Papuans, numbered on 4th April, 1921, 577. These included many mission teachers from Samoa, Fiji, and other Pacific Islands. On the same date, half-castes, with one of the parents a European, totalled 158. An Immigration Restriction Ordinance prohibits the immigration into the Territory of persons who fail to pass the dictation test, or who are persons of bad character, or likely to become a charge upon the public. Exemptions may, however, be granted by the Lieutenant-Governor to persons of special skill whom it is desired to employ as overseers or foremen.

## § 3. Native Labour, Taxation, etc.

1. **Native Labour.**—The rights of both employer and labourer are conserved by the Native Labour Ordinances. Service on the part of the native is voluntary, and he must be justly treated, and properly housed and fed. Employers may recruit personally, or obtain their natives through a licensed recruiter. Contracts of service must be in writing entered into before a magistrate or other qualified officer, and the natives must be returned to their homes on completion of engagement. The labour question is complicated by the communistic system which prevails in the villages. Native custom demands that the friends or fellow-clansmen of the returned labourer receive a share in whatever he gets. The result is that the stimulus of individual interest is largely absent. During the period of service the recruiter or employer is personally responsible for the native's welfare. Refusal to work after an engagement, or desertion from service, renders the labourer liable to imprisonment. On the other hand, a magistrate may terminate an engagement where unjust or harsh treatment by the employer is proved. The term of indenture must never exceed three years, and in the case of miners and carriers eighteen months is the limit, but re-engagements may be made. The magistrate must satisfy himself that the remuneration is fair, that the native is willing to undertake the service, and that there is no probability of unfair treatment or detention. Wages must be paid in the presence of an officer. A medicine-chest, stocked with necessary drugs and first-aid instruments, must be kept by all employers.

Just treatment, good food, and satisfactory remuneration for his labour have made the Papuan savage an excellent servant. With considerable natural aptitude and intelligence, he is able to understand readily what is required by his employer; consequently native labour is very largely engaged by the Administration for the construction of roads and public works, and by the private employer for the clearing and upkeep of plantations. While in some districts the natives manifest a marked unwillingness to work, in other cases, inland villagers have offered themselves as labourers without suggestion from recruiters or other officers. Actual ill-treatment of native employees may be said to be non-existent.

The number engaged under contract of service during the year ended 30th June, 1922, was 4,590, as compared with 7,495 in the preceding year. The decline in labour supply in 1919–20 created considerable anxiety amongst employers, and, while an increase in 1920–21 seemed to indicate that the decline was only temporary, a serious fall again occurred in 1921–22.

**2. Native Taxes Ordinance.**—Under the Native Taxes Ordinance, passed in 1918, a tax not exceeding £1 may be imposed on natives, excepting native constables, mission teachers, natives unfit for work, and those who have not less than four living children. The proceeds of the tax are to be expended on education, or for such purposes having for their object the direct benefit of the natives as may be prescribed.

The taxes collected in 1921–22 totalled £18,003. The expenditure for the year has again been low because, though the various missions accepted the offer of substantial annual subsidies for additional educational facilities for natives, they had not yet completed the necessary arrangements for commencing work. The principal items of expenditure were:—Native education, £191; native plantations, £722; anthropology, £1,099; bonus paid to mothers at rate of 5s. per annum for four living children under sixteen, with an additional 1s. for each child above four, £902. The credit balance of the Native Taxation Account on 30th June, 1922, was £30,126.

#### § 4. Land Tenure.

**1. Method of Obtaining Land.**—(i) *The Land Laws.* The broad principles upon which the land laws of Papua are based are:—(a) No land can be alienated in fee simple; (b) the rental of the land leased is assessed on the unimproved value of the land, and is subject to reassessment at fixed periods.

A detailed account of the method of obtaining land was given in Official Year Book No. 6, pp. 1083–4.

(ii) *The Leasehold System.* With a view of attracting pioneer settlers, an ordinance was passed in 1906 under which leases were granted on very liberal terms. No rent was payable for the first ten years, the heavy expense of survey was borne by the Government, and no charge was made for the preparation and registration of the leases, that is to say, no payments whatever had to be made to the Government for 10 years. Under this system, the area under lease increased in four years from 2,089 acres to 363,425 acres; about 140 plantations were started, and nearly 1,000 acres planted during that period.

After allowing free survey for three years, it was decided that all future applicants for agricultural leases exceeding in area 100 acres should be required to pay the cost of survey. It was also found desirable to check a tendency amongst a proportion of land applicants to obtain areas so great that the improvement conditions could not be carried out. It was therefore enacted that no leases should be granted after 1st June, 1910, exceeding 5,000 acres in extent, and that rent at the rate of 3d. per acre must be paid from the commencement of all leases exceeding 1,000 acres in area. As a result of these enactments, several leases have been forfeited. On the other hand, a stricter enforcement of improvement conditions has resulted in a substantial raising of the standard.

**2. Holdings.**—(i) *General.* On 30th June, 1922, the lands of the Territory were held as follows:—

#### PAPUA.—HOLDINGS, 1922.

Description.	Area.
Land held by the natives ..	56,938.923
Crown land .. ..	764,411
Freehold land .. ..	23,085
Leasehold land .. ..	219,181
Area of Territory ..	57,945,600

Private sales of land in the Territory have now practically ceased. The Government buys from the natives, and then leases to planters, who are forbidden to have direct dealings in land with Papuans.

(ii) *Leaseholds.* The position as regards leasehold tenures may be seen from the following table :—

PAPUA.—LEASEHOLDS, 1917-18 TO 1921-22.

Year ended 30th June.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
Land held under lease .. acres (as recorded)	224,010	218,951	230,002	229,283	219,181

Of the total area of 219,181 acres shown above, agricultural leases accounted for 205,457, and pastoral leases for 11,837 acres.

The area of land acquired by the Crown in 1921-22 was 16,395 acres.

The total area surveyed in the Territory is 23,085 acres of freehold, and 281,468 acres of leasehold.

## § 5. Production.

1. *General.*—The products of the Territory are obtained from its agricultural, forestal fishing, mining, and manufacturing industries. There is a Papuan Court at the Imperial Institute, London, where, beside maps, handbooks and reports, a representative collection of products is shown, additions being made to the exhibits from time to time. Displays of Papuan produce are also made at exhibitions held in Australia. The industries of Papua are not numerous, but they are becoming more diversified. In many cases, some years must elapse before the raw material is available for commerce.

2. *Agriculture.*—(i) *Soil and Rainfall.* The physical features of Papua are favourable to agriculture. Rich soils at varying elevations, and heavy and evenly-distributed rainfall, have ensured success in cultivating almost every tropical product of value. The Territory comprises immense areas of rich alluvial and volcanic soils along the coast, and equally fertile land at elevations up to 6,000 feet. Splendid rainfalls are recorded except over a belt of country which runs back from the coast to the hills, and which has its dry season from May to November. This "dry" area is admirably suited for the production of tobacco, fibres, cotton, etc. There are 16 meteorological stations throughout the Territory. An economic museum and agricultural library have been established.

(ii) *Plantations.* On 31st December, 1921, there were 259 plantations. Agricultural settlement has been mostly in the Central and Eastern Divisions, though plantations are spreading in other districts. The area planted was 60,314 acres, or an average of 233 acres for each plantation. The principal plantation industries entered upon up to the present are coconuts, rubber, and sisal hemp. Secondary agricultural industries are the cultivation of bowstring hemp, kapok, coffee, tobacco, vanilla, cocoa, tapioca, cinnamon, tea, rice, and maize. The natives are compelled by an ordinance to plant coconuts for food supply. In the Kokoda district, which is not suitable for coconut planting, 8,000 rubber seeds and plants were distributed amongst the native villages in 1918. In addition to the coconuts in these plantations many more are planted over small and

widely scattered areas by the older natives in accordance with custom. The following table shows the areas under the different cultures at the end of December, 1921 :—

## PAPUA.—AREA OF PLANTATIONS, 1921.

Description.					Area.
					Acres.
Coconuts .. .. .	..	..	..	..	46,515
Rubber .. .. .	..	..	..	..	7,465
Hemp .. .. .	..	..	..	..	5,822
Coffee .. .. .	..	..	..	..	11
Rice .. .. .	..	..	..	..	32
Other cultures (including fruit trees) .. .. .	..	..	..	..	469
Total .. .. .					60,314

The quantity and value of the various products for the year ended 30th June, 1922, were as follows :—

## PAPUA.—PRODUCTION FROM PLANTATIONS, 1921-22.

Product.				Quantity.	Value.
				Tons.	£
Copra .. .. .	..	..	..	5,063	87,377
Hemp .. .. .	..	..	..	145	4,630
Rubber .. .. .	..	..	..	85	5,826
Total .. .. .				..	97,833

It was estimated in 1917 that over £1,000,000 had been expended in plantations, and, with the exception of two large British companies, practically the whole of the capital was subscribed in Australia and locally.

(iii) *Government Plantations and Experimental Stations.* At Orangerie Bay the Government coconut plantation covers an area of 1,100 acres, some of the trees being in bearing. Copra-making has been commenced, the production in 1922 being nearly 170 tons, realizing £3,046. The Government rubber plantation on the Kemp-Welch River has an area of 230 acres, and contains over 4,000 trees large enough for tapping, but no action has, as yet, been taken in this direction owing to the low price of rubber.

(iv) *Indigenous Products.* There are many indigenous plants of great economic value. These comprise sandalwood and other timber trees, sugar-cane, cotton plants, rubber-both vine, nutmegs, ginger, bamboos, palms, bananas, bread-fruit, edible nuts, sago-palms, fruits, and vegetables. About 92,000 acres are held under timber licences, but little development has so far been undertaken. There are large areas of valuable timbers, but some of them are situated in mountainous country difficult of access.

3. *Live Stock.*—On 31st December, 1921, the live stock in the Territory consisted of 368 horses, 2,344 head of cattle, 123 mules, 3 donkeys, 1,407 goats, and 557 pigs. A Government stud-farm has been established for the breeding of horses. The introduction of rabbits, foxes, hares, and monkeys is prohibited.

4. *Forest Products.*—There is a large diversity of useful timbers in Papua. Of 120 varieties that have been catalogued, 16 are adapted to resisting heavy strains, and are suitable for girders, railway wagons, etc.; 10 for railway carriage and coach building; 15 for joinery, lining, flooring, etc.; 14 for butter boxes; 5 for boat building; 4 for piles,

and 15 for cabinet work. Sandalwood is indigenous. It is largely used for cabinet work, and santal oil is distilled from its roots. Ebony is also produced for export. Rubber is a promising industry. There are considerable areas of native rubber (*Ficus Rigo*); but the planters generally prefer the imported Para rubber. Guttapercha is obtained from a species of *puliquium*, which grows on the hills. Drugs, dyewoods, and spices are also obtained from indigenous plants. The mountain firs offer possibilities in the shape of turpentine oils and timbers, while the conifer *Agathis alba* yields a valuable resin. Saw-mills have been established, but the output has not been sufficient to supply the local demand for building and other timber. The Papua Co. Ltd. operates at Manu Manu and supplies timber to various parts of the Territory.

5. Fisheries.—Pearl-shell fishing occupies an important place in the industries of Papua. A considerable number of luggers is licensed, but the returns are mostly credited to Queensland, whose boundary approaches to within a few miles of the Papuan coast. The species of tortoise which supplies the commercial tortoise-shell is also a native of the Territory. Bêche-de-mer and trochus are found along the shores and reefs. There is a dugong fishery on the coast of the Western Division. The value of fisheries exports in 1921–22 was £24,338, of which bêche-de-mer accounted for £15,045, pearls £5,250, trochus shell and pearl shell £1,043.

6. Mining.—(i) *Variety of Minerals.* Minerals have been discovered in many places, and over an extremely wide range. Those discovered so far are—gold, copper, tin, lead, zinc, cinnabar, iron, osmiridium, gypsum, manganese, sulphur, graphite, chromite, brown coal, lignite, and petroleum. Indications of the existence of petroleum have been found at scattered intervals over an area of country covering about 1,500 square miles between Yule Island and the Purari Delta, in the Gulf Division of Papua. Quantities of oil and inflammable gas have been met with in the test bores put down, but not in sufficient bulk as yet for commercial purposes. Indications have also been noted in Dutch New Guinea, and in the portion of the Territory formerly under German control. According to one observer, the whole of the East Indian Archipelago forms one “petroliferous province,” the statement being supported by the fact that the nature of the oil so far obtained in Papua is more comparable with Dutch East Indian oil than with any other.

Exploitation of the Papuan oil-fields by private companies is not permitted.

Of precious stones, only the topaz and beryl have been obtained. Large beds of apparently good coal also exist. A geologist was added to the Government service at the beginning of the year 1911.

(ii) *Gold.* In 1888 the first gold was discovered. The search has now spread over every division, and finds have been recorded wherever the explorers have gone. Prospecting parties are subsidized by the Government. There are 72 white miners and 662 indentured and casual labourers, of whom 63 whites and 512 indentured labourers were working on the Louisiade field. This field was the chief producer in 1921–22. The Yodda field returned 360 ozs., and the Gira 100 ozs. The total quantity, in fine ounces, and the value as returned of the gold yield for five years are given below:—

PAPUA.—GOLD YIELD, 1917–18 TO 1921–22.

1917–18.		1918–19.		1919–20.		1920–21.		1921–22.	
Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
fine ozs. 6,732	£ 28,594	fine ozs. 5,303	£ 27,084	fine ozs. 3,866	£ 21,747	fine ozs. 2,047	£ 11,159	fine ozs. (a)	£ 60,091

(a) Not available.

Most of the rivers, with the exception of those flowing into the Gulf of Papua, have been declared open to gold-dredging, and good yields have been obtained. The total value of gold won to 30th June, 1922, was £1,633,240.

(iii) *Copper*. The export of copper ore in 1921-22 amounted to 2,700 tons, valued at £13,514. There has been very little activity in actual mining during the year. Preparations for extensive mining were made at the Astrolabe field, but these have slackened considerably. The total amount shipped to the end of June, 1922, was 12,132 tons, valued at £164,328.

(iv) *Osmiridium*. During 1921-22 it is estimated that about 100 ozs. of this metal were obtained, chiefly on the Gira goldfield. The existence of osmiridium had been known for some years, but no serious attempt was made to collect it, the alluvial gold miner even picking out the larger slugs of the metal from his gold parcel and throwing them away.

(v) *Other Minerals*. Some good samples of galena (sulphide of lead) have been obtained. Cinnabar (sulphide of mercury), graphite (or plumbago), zinc-blende, native sulphur, and other minerals are known to exist.

A mineral laboratory and museum have been fitted up, and are available to prospectors and others interested.

7. *Water Power*.—Most of the rivers in Papua carry a large volume of water from a great height over a relatively short distance, and in consequence the Territory is admirably situated for the introduction of hydro-electric schemes. It is estimated that there are at least 10,000,000 h.p. available for this purpose.

## § 6. Finance, Trade, Postal and Shipping.

1. *Finance*.—The revenue and expenditure for 1921-22, under principal heads, are given below; also a summary covering a period of five years. In addition to the revenue collected during the year, amounting to £73,288, a sum of £50,000 was granted by the Commonwealth Government.

### PAPUA.—REVENUE AND EXPENDITURE, 1921-22.

REVENUE.		£	EXPENDITURE.		£
Customs and Excise .. ..	..	44,019	Lieutenant-Governor and Civil list .. ..	..	4,272
Post Office .. ..	..	3,530	Government Secretary .. ..	..	47,496
Licences .. ..	..	1,062	Treasury .. ..	..	36,660
Fees, Fines, etc. .. ..	..	5,493	Lands, Mines, and Agriculture .. ..	..	9,241
Mining receipts .. ..	..	961	Public Works .. ..	..	9,255
Land revenue .. ..	..	4,704	Medical .. ..	..	13,672
Harbour dues .. ..	..	1,346	Native Affairs .. ..	..	2,453
Miscellaneous receipts .. ..	..	4,985	Central Court .. ..	..	1,753
Stamp duties .. ..	..	208	Legislative Council .. ..	..	110
Appropriation of former years, etc.	..	6,980			
<b>Total .. ..</b>		<b>£73,288</b>	<b>Total .. ..</b>		<b>124,912</b>

Returns of revenue and expenditure for the last five years are given hereunder :—

### PAPUA.—REVENUE AND EXPENDITURE, 1917-18 TO 1921-22.

Item.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
	£	£	£	£	£
Revenue .. ..	72,594	73,121	85,537	98,175	73,288
Expenditure .. ..	103,176	102,962	118,436	146,827	124,912

The loans due to the Commonwealth by the Territory of Papua amount to £94,601

2. Trade.—The value of imports and exports for the last five years is shown in the table below :—

## PAPUA.—VALUE OF IMPORTS AND EXPORTS, 1917-18 TO 1921-22.

Particulars.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
	£	£	£	£	£
Imports .. .. .	285,792	258,112	422,741	484,770	305,705
Exports .. .. .	220,599	176,247	270,481	172,672	220,236
Total Trade ..	506,391	434,359	693,222	657,442	525,941

As in all new countries, the imports consist chiefly of articles necessary for the primal needs of the community. Thus in 1921-22 the imports of agricultural products and groceries came to £84,000; drapery, £27,000; metals and machinery, £26,000; tobacco, £27,000; oils, paints, etc., £12,000; beverages, £11,000; wood, wicker, and cane, £4,000; drugs, £7,000. Government stores to the value of £83,000 were also imported. The chief items of export during the last five years are as follows :—

## PAPUA.—PRINCIPAL EXPORTS, 1917-18 TO 1921-22.

Article.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
	£	£	£	£	£
Gold .. .. .	32,931	27,084	21,757	11,159	68,726
Copra .. .. .	68,225	53,264	124,035	68,578	87,377
Rubber .. .. .	37,020	33,010	41,542	28,966	5,826
Hemp .. .. .	17,682	12,532	12,284	7,723	4,630
Copper Ore .. .. .	11,572	1,613	..	1,830	13,514
Pearl Shell and Trochus Shell ..	6,625	9,375	24,255	4,464	4,043
Pearls .. .. .	19,250	21,550	25,577	14,950	5,250
Bêche-de-Mer .. .. .	3,551	2,240	612	7,922	15,045
Bark .. .. .	7,228	4,847	2,686	1,408	752

Rubber has been so low in price that it has proved unprofitable, and some planters have decided to cease tapping. Sisal hemp also cannot be profitably grown at the present price for that product.

3. Postal.—(i) *Posts*. No great development in means of communication has taken place during latter years. Postal returns for the last five years are given hereunder :—

## PAPUA.—POSTAL STATISTICS, 1917-18 TO 1921-22.

Year.	Letters.		Packets.		Newspapers.		Parcels.	
	Received.	Des-patched.	Received.	Des-patched.	Received.	Des-patched.	Received.	Des-patched.
1917-18 ..	137,850	124,656	20,214	5,850	91,866	45,738	3,606	882
1918-19 ..	159,702	114,540	10,272	5,832	125,118	42,354	4,266	1,008
1919-20 ..	174,138	135,234	15,072	8,214	141,906	46,686	5,208	1,182
1920-21 ..	116,208	144,930	9,376	6,510	72,168	45,402	3,072	1,362
1921-22 ..	124,646	156,054	11,554	8,172	100,038	51,846	4,824	2,260

(ii) *Money Orders*. The value of money orders issued in 1917-18 was £5,986; of those paid, £1,310. In 1921-22, the respective values were £7,601 and £1,527.



4. **Shipping.**—The following table shows the number, tonnage, and nationality of oversea vessels entered and cleared at ports during the years 1917–18 to 1921–22 :—

**PAPUA.—OVERSEA SHIPPING, 1917–18 TO 1921–22.**

Nationality.	Vessels.									
	Number.					Tonnage.				
	1917–18	1918–19	1919–20	1920–21	1921–22	1917–18	1918–19	1919–20	1920–21	1921–22
British .. ..	117	98	86	108	127	57,955	60,108	59,189	67,624	74,206
Foreign .. ..	20	..	..	..	..	63,772	..	..	..	..
Total .. ..	137	98	86	108	127	121,727	60,108	59,189	67,624	74,206

Throughout, the figures are exclusive of ships of war and Government vessels.

### § 7. Progress of Papua.

1. **Statistical View of Fourteen Years' Progress.**—As already stated (§ 2, *supra*) the Territory was placed under the Commonwealth control on 1st September, 1906. The following table indicates the progress that has been made since that date :—

**PAPUA.—STATISTICAL SUMMARY, 1907 TO 1922.**

Items.	Year ended 30th June.	
	1907.	1922.
White population .. ..	690	1,104
Native labourers employed (exclusive of Crown servants) ..	2,000	(a)
Number of white civil servants .. ..	65	(a)
Armed constabulary .. ..	185	(a)
Village constables .. ..	401	895
Territorial revenue .. ..	£ 21,813	73,288
Territorial expenditure .. ..	£ 45,335	124,912
Value of imports .. ..	£ 87,776	305,705
Value of exports .. ..	£ 63,756	220,236
Area under lease .. .. acres	70,512	219,181
Area of plantations .. .. acres	1,467	60,314
Meteorological stations established .. ..	3	16
Gold yield .. .. fine ounces	12,439	(a)
Copper ore shipped .. .. tons	137	2,700
Live stock in Territory—		
Horses .. ..	173	368
Cattle .. ..	648	2,344
Mules .. ..	40	123

(a) Not available.

### 3. THE TERRITORY OF NEW GUINEA.

#### § 1. General Description.\*

1. **Area and Geographical Position.**—The present Territory of New Guinea comprises that portion of the German New Guinea Protectorate which lay south of the equator (excepting only the island of Nauru, see F hereinafter), and which was known in German

\* See also Map on page 665.

times as the "Old Protectorate." The principal islands (with their German names if these differ from those now in use) and their approximate areas are as follows:—

#### AREA OF TERRITORY OF NEW GUINEA.

Particulars.	Approximate Area.
	Square miles.
North-East New Guinea (Kaiser Wilhelm Land) .. ..	70,000
Bismarck Archipelago—	
New Britain (Neu Pommern) .. ..	13,000
New Ireland (Neu Mecklenburg) .. ..	3,000
Lavongai (New Hanover or Neu Hannover) .. ..	600
Admiralty Islands and North Western Islands .. ..	1,000
Solomon Islands—	
Bougainville .. ..	3,200
Buka .. ..	200
Total ..	91,000

The most northerly of the islands (Sae) lies in about lat.  $1^{\circ}$  S.; the most southerly point of the Territory (the eastern part of its boundary with Papua) is in lat.  $8^{\circ}$  S.; its western boundary (with Dutch New Guinea) is the meridian of  $141^{\circ}$  E.; and its most easterly island (Nukumanu) lies in longitude  $159^{\circ}$  E. From north to south its greatest extent is nearly 500 miles; from east to west over 1,000 miles. Rabaul, the capital, occupies a central position: its distances from some of the principal outstations are—from Madang, 415 miles; Aitape, 610 miles; Kieta, 270 miles.

2. **North-East New Guinea.**—(i) *General.* North-East New Guinea (Kaiser Wilhelm Land) is the north-eastern part of the island of New Guinea. Its interior is rugged and mountainous, with heights reaching to over 13,000 feet, and not less than 15,000 square miles is still unexplored. The mountain ranges approach the coast, leaving comparatively little flat land near sea level, but this narrow strip is very fertile. All trade and communications are by sea along the coast, and the interior is left almost wholly to the native population.

(ii) *Coast-line.* The coast-line, which is over 900 miles long, is in parts fringed with coral reefs, and there are many small, lofty islands along its course. Except for Huon Gulf in the little-developed east of the country there are no deep inlets. Langemak Bay has commodious anchorage in deep water, and Finsch Harbour has landlocked anchorage for small vessels. In Astrolabe Bay are two or three sheltered harbours, including Melanua, Madang (Friedrich Wilhelm Harbour) and Sek, which are the best on the coast. There are many other anchorages fit for schooners and small steamers in certain winds.

(iii) *Rivers.* There are many rivers, of which the most important are the Sepik (Kaiserin Augusta) and the Ramu (Ottilien). The Sepik rises near the junction of the boundaries of Dutch New Guinea and Papua, and flowing easterly reaches the coast in latitude  $4^{\circ}$  S. It is navigable for 60 nautical miles by large ocean steamers, and for 300 nautical miles by steamers drawing from 10 to 13 feet. In 1914 a vessel of 50 tons ascended the river for 450 miles; it was then in flood and 7 fathoms deep at this distance, while at low water the depth was said to be 4 fathoms.

The Ramu rises in about  $6^{\circ}$  S. latitude and, flowing northwards, enters the sea near the mouth of the Sepik. It has been navigated, though with great difficulty, by flat-bottomed steamers for nearly 200 miles from its mouth.

3. **Bismarck Archipelago and Solomon Islands.**—(i) *General.* The islands of the Bismarck Archipelago and the Solomons are generally mountainous, with level ground near the coasts alone. The only low-lying islands are some in the Duke of York and Admiralty Group. The islands of Bougainville and Buka (Solomons) are equally rugged;

Bougainville contains mountains reaching 10,000 feet. The soil is usually fertile, except on the low coral islands, where fresh water is scarce.

(ii) *Coast Line.* The coasts of the large islands generally rise fairly steeply from the water, with bold headlands; but as a rule there is a beach, often overgrown with mangroves. Sunken rocks and coral reefs fringe many of the coasts, especially of the low islands. There are many good harbours, the chief being Blanche Bay, in New Britain, containing the good anchorages of Matupi Harbour and Simpson Harbour; Kavieng Harbour in New Ireland; Mioko in the Duke of York Islands; Peter Harbour in the Vitu Islands; Nares Harbour in Manus Island; and Queen Carola Harbour in Buka Island.

(iii) *Rivers.* Most of the streams in these islands are too shallow and too rapid for navigation.

4. *Revision of Geographical Names.*—A revision of geographical names, based on a list of names prepared by the Permanent Committee on Geographical Names for British Official Use, is in progress. A provisional list of names in the Territory is published in the Report for 1921–22. Among the changes already made are the use of North-East New Guinea for Kaiser Wilhelm Land, and Lavongai for New Hanover.

5. *Maps.*—A geological map, and maps showing the areas in which the native population has been counted or estimated, the areas of land alienated in freehold or leasehold, roads and Government stations, are published in the Report for 1921–22. Admiralty Chart No. 2766 (North-East Coast of New Guinea, with Bougainville, New Britain, New Ireland, Admiralty Islands and adjoining reefs) is a useful general map of the Territory.

## § 2. Climate and Health.

1. *General.*—The Territory has a moist tropical climate, with small differences between daily and seasonal extremes of temperature. There is no cool season, rain falls in all months, and the humidity is high. The Territory is outside the area of typhoons, but strong winds are not uncommon, and damage is occasionally done to plantations.

2. *Temperature.*—The mean annual temperature on the coast is about 26° to 27.5° C. (79° to 81° F.)—a moderate temperature for the latitude—and the difference between the means of the coldest and warmest months is not more than 2° F.

3. *Rainfall.*—There is no dry season. At Rabaul the period of the north-west monsoon, November to April, is wetter than that of the south-east trade from May to September or October; but in some other places, especially the south coast of New Britain and in the vicinity of Finsch Harbour, the south-east trade brings the principal rains. The position of the coasts in regard to the direction of the prevailing winds is the decisive factor for the annual rain period. The annual rainfall amounts, at nearly all the stations at which observations have been made, to over 80 inches. In Bougainville, southern New Britain, and the island of New Guinea, the yearly average is from 100 to over 250 inches; but amounts as low as 66 inches have been reported from some stations on the coast of the island of New Guinea. The average rainfall at stations in the Gazelle Peninsula is about 95 inches. A region of high rainfall, reaching over 250 inches, is in the vicinity of Finsch Harbour. There are large variations in the rainfall from year to year, and some districts of the Territory are subject to unusually dry periods. Thus in 1894 Kokopo (on Blanche Bay, north-east of New Britain) had only 65.6 inches, while in 1891 there were 133.3 inches; the average over a period of years was 74.4 inches. There is reason to believe that a severe drought which prevailed in New Ireland in the years 1914 and 1915 was in part responsible for the large decrease in the population of that island which took place during the period of the military occupation.

4. *Humidity.*—The humidity is very high. Observations taken at Rabaul during the years 1916 to 1921 showed an average humidity of 75 per cent., and the variation in the monthly means was only from 69 per cent. (October) to 80 per cent. (April). At Madang, during the same period, the yearly average was 80 per cent., the lowest monthly mean 77 per cent. (August), the highest 83 per cent. (April). During the same period at Kieta (Bougainville) the mean was 78 per cent., the minimum 74 per cent. (August and October), and the maximum 80 per cent. (June).

5. **Influence on Health.**—The climate in North East New Guinea and at many places in the Bismarck Archipelago and the Solomon Islands is enervating for Europeans. At some places, however, and notably at Rabaul, the heat and humidity are tempered by the constant breezes, and it is possible for Europeans, with careful attention to diet and exercise, and precautions against diseases, to maintain good health. When the measures taken against malaria and other diseases have produced their full effect, and use has been made of places in the mountains suitable for healthy sanatoria, it may be hoped that a satisfactory average of health will be maintained.

### § 3. Government.

1. **The Military Occupation.**—On the 17th September, 1914, the Acting Governor of German New Guinea signed terms of capitulation with the officer commanding a Naval and Military Expedition sent from Australia, and thereafter the Territory was under military administration until the establishment of Civil Government in May, 1921.

2. **Mandate.**—In 1919 it was decided by the principal Allied and Associated Powers that the Territory of New Guinea, which Germany gave up as one of the terms of peace, should be entrusted under Mandate from the League of Nations to the Government of the Commonwealth. The issuing of the Mandate was, however, delayed; and it was not until 17th December, 1920, that its terms were settled, and the Mandate itself did not reach Australia until April, 1921.

The terms of the Mandate are given hereunder :—

THE COUNCIL OF THE LEAGUE OF NATIONS :—

*Whereas* by Article 119 of the Treaty of Peace with Germany signed at Versailles on June 28th, 1919, Germany renounced in favour of the Principal Allied and Associated Powers all her rights over her oversea possessions, including therein German New Guinea and the groups of islands in the Pacific Ocean lying south of the Equator other than German Samoa and Nauru; and

*Whereas* the Principal Allied and Associated Powers agreed that in accordance with Article 22, Part I. (Covenant of the League of Nations), of the said Treaty, a Mandate should be conferred upon His Britannic Majesty to be exercised on his behalf by the Government of the Commonwealth of Australia to administer New Guinea and the said islands, and have proposed that the Mandate should be formulated in the following terms; and

*Whereas* His Britannic Majesty, for and on behalf of the Government of the Commonwealth of Australia, has agreed to accept the Mandate in respect of the said territory and has undertaken to exercise it on behalf of the League of Nations in accordance with the following provisions; and

*Whereas*, by the afore-mentioned Article 22, paragraph 8, it is provided that the degree of authority, control or administration to be exercised by the Mandatory not having been previously agreed upon by the Members of the League, shall be explicitly defined by the Council of the League of Nations,

Confirming the said Mandate, defines its terms as follows :—

#### ARTICLE 1.

The territory over which a mandate is conferred upon His Britannic Majesty for and on behalf of the Government of the Commonwealth of Australia (hereinafter called the Mandatory) comprises the former German Colony of New Guinea and the former German islands situated in the Pacific Ocean and lying south of the Equator, other than the islands of the Samoan group and the island of Nauru.

#### ARTICLE 2.

The Mandatory shall have full power of administration and legislation over the territory subject to the present mandate as an integral portion of the Commonwealth of Australia, and may apply the laws of the Commonwealth of Australia to the territory, subject to such local modifications as circumstances may require.

The Mandatory shall promote to the utmost the material and moral well-being and the social progress of the inhabitants of the territory subject to the present mandate.

#### ARTICLE 3.

The Mandatory shall see that the slave trade is prohibited, and that no forced labour is permitted, except for essential public works and services, and then only for adequate remuneration.

The Mandatory shall also see that the traffic in arms and ammunition is controlled in accordance with principles analogous to those laid down in the Convention relating to the control of the arms traffic, signed on September 10th, 1919, or in any convention amending the same.

The supply of intoxicating spirits and beverages to the natives shall be prohibited.

#### ARTICLE 4.

The military training of the natives, otherwise than for purposes of internal police and the local defence of the territory, shall be prohibited. Furthermore, no military or naval bases shall be established or fortifications erected in the territory.

#### ARTICLE 5.

Subject to the provisions of any local law for the maintenance of public order and public morals, the Mandatory shall ensure in the territory freedom of conscience and the free exercise of all forms of worship, and shall allow all missionaries, nationals of any State Member of the League of Nations, to enter into, travel and reside in the territory for the purpose of prosecuting their calling.

#### ARTICLE 6.

The Mandatory shall make to the Council of the League of Nations an annual report to the satisfaction of the Council, containing full information with regard to the territory, and indicating the measures taken to carry out the obligations assumed under Articles 2, 3, 4, and 5.

#### ARTICLE 7.

The consent of the Council of the League of Nations is required for any modification of the terms of the present Mandate.

The Mandatory agrees that if any dispute whatever should arise between the Mandatory and another Member of the League of Nations relating to the interpretation or the application of the provisions of the Mandate, such dispute, if it cannot be settled by negotiation, shall be submitted to the Permanent Court of International Justice provided for by Article 14 of the Covenant of the League of Nations.

The present Declaration shall be deposited in the archives of the League of Nations. Certified copies shall be forwarded by the Secretary-General of the League of Nations to all Powers Signatories of the Treaty of Peace with Germany.

*Made at Geneva the 17th day of December, 1920.*

**3. New Guinea Act.**—In anticipation of the issuing of the Mandate, the Commonwealth Parliament had already, in September, 1920, passed the New Guinea Act 1920, by which the Governor-General was authorized to accept the Mandate when issued. The Territory was, by the Act, declared to be a Territory under the authority of the Commonwealth, by the name of the Territory of New Guinea.

The Act provided that there should be an Administrator, who should be charged with the administration of the Territory. The power to legislate for the Territory was to be exercised by the Governor-General; and no Council—legislative, executive, or advisory—was provided for.

The Act also provided for the observance of the safeguards in the interests of the natives set out in the Mandate, and by it forced labour was absolutely forbidden.

**4. Expropriation.**—The Treaty of Peace provided that German nationals resident in her former colonies might be repatriated; and that the property rights and interests of German nationals in former colonies might be retained and liquidated by the Allies, the proceeds being credited to Germany in part payment of the reparation payable by her under the Treaty.

In pursuance of these powers, in September, 1920, the property of the principal German companies in the Territory, and in March, 1921, that of a large number of German planters, was vested in the Public Trustee; and the management of their businesses and plantations was entrusted (pending the sale or other disposal of the properties) to the Expropriation Board. The total value of the properties expropriated was estimated in 1920 at about £4,000,000; owing to the decline in the price of copra, the present value is probably much less. The sum realized on the disposal of the properties will be treated as part payment of the moneys due by Germany to the Allied Governments for reparation and will be apportioned according to the Agreements relating to reparation. Less than 50 of the German subjects who were in business or engaged in planting now remain in the Territory.

**5. Establishment of Civil Government.**—On receipt of the Mandate, arrangements were made by the Prime Minister, under whose control the administration of the Territory was placed,\* for the establishment of Civil Government, and on the 9th May, 1921, a proclamation was issued in Rabaul that the military occupation had that day terminated. On the same day the first Ordinances made by the Governor-General under the New Guinea Act 1920 came into force. The most important of these was the *Law Repeal and Adopting Ordinance* 1921, which provided that German laws should cease to apply to the Territory, and substituted other statute laws (see 7. Statute Law, below), together with the principles and rules of common law and equity in force in England, as the basis of the law of the Territory, subject to modification by Ordinance made by the Governor-General.

The Ordinance also preserved the rights of natives in land, and the existing rights, privileges and customs of the natives in regard to cultivation, barter, hunting, and fishing; and it provided that tribal institutions, customs, and usages should continue, so far as they were not repugnant to the general principles of humanity.

Other Ordinances which came into force on the same day provided for the establishment of courts of law, and for the prohibition of the supply to natives of firearms, ammunition, intoxicating liquor, and opium.

**6. Departments and Districts.**—The Administration is organized in seven Departments—Government Secretary; Treasury; Native Affairs; Public Health; Customs and Shipping; Lands, Mines, Surveys, and Forestry; and Agriculture.

For administrative purposes, the Territory is divided into ten Districts, named after the principal stations in them, as follows:—In New Britain—Rabaul, Talasea, and Gasmata; on the Mainland—Morobe, Madang, and Aitape; in New Ireland and Lavongai (New Hanover)—Kavieng and Namatanai; in Admiralty Islands and adjoining islands—Manus; in Solomon Islands—Kieta. Each District is under a District Officer, assisted by a small staff.

There are about 210 persons in the service of the Administration, and their salaries aggregate about £93,000 per annum. There is as yet no system of training for the service; applicants are chosen from persons who apply on advertisement, and in practice only returned soldiers are selected, except for special posts. Besides those in the service of the Administration, about 320 persons are employed by the Expropriation Board (see § 5.)

**7. Statute Law.**—The Acts of the Commonwealth Parliament do not (unless expressly so stated) extend to the Territory. The *Law Repeal and Adopting Ordinance* 1921 provided that certain Acts and Ordinances should be applied to the Territory. The state of the statute law in force in the Territory on 30th June, 1923, may be summarized as follows:—

(a) Eleven Acts of the Commonwealth Parliament (the New Guinea Act, the Acts to enforce the Treaties of Peace, the Air Navigation Act, the Patents and Trade Marks Acts, the Service and Execution of Process Act, and other Acts) extend to the Territory of their own force. Portion of the Navigation Act also extends to the Territory, but no provision has been made for its enforcement.

\* Control of the administration was transferred in July, 1923, to the Department of Home and Territories.



(b) Twenty-six Acts of the Commonwealth Parliament apply to the Territory by virtue of Ordinances made by the Governor-General.

(c) Four Acts of the Queensland Parliament, as well as the Acts and Statutes of England in force in Queensland on 9th May, 1921, apply to the Territory by virtue of Ordinances made by the Governor-General.

(d) Nineteen Ordinances of the Territory of Papua apply to the Territory by virtue of Ordinances made by the Governor-General.

(e) Fifty-five Ordinances, Orders, and Proclamations of the Military Administration remain in force.

(f) Ordinances have been made by the Governor-General under the New Guinea Act 1920, subsequently to the establishment of civil government.

The Acts of the Commonwealth and Queensland Parliaments, the Ordinances of Papua and of the Territory, and the regulations under them, in force on 31st December, 1922, have been published as Vols. I.—III. of Laws of the Territory of New Guinea.

8. **Economic Equality in the Territory.**—The Mandate does not require, as do the Mandates for the former Turkish and for the Central African possessions, that the Government shall provide equal opportunities for the trade and commerce of other countries. Nevertheless, nationals of foreign powers enjoy substantially the same privileges and opportunities as British subjects. In the laws applying to residents of the Territory, there is no distinction between British subjects and foreigners, except that foreigners cannot be appointed to the public service, are subject to the Aliens Registration Act, and cannot purchase properties which are sold under the provisions of the Treaties of Peace, while foreign companies cannot hold land in the Territory. In oversea trade, the tariff applies equally to all countries, and shipping is subject to the same conditions whatever the country of registration. Trade between the Territory and Australia is open to foreign ships on compliance with the coastal trade of provisions of the Navigation Act, and there is no discrimination against foreign ships in regard to trade within the Territory.

9. **Reports to the League of Nations.**—Two Reports have been rendered to the League of Nations in compliance with Article 6 of the Mandate. The first was for the period from 1914 to the 30th June, 1921 (Parliamentary Paper No. 3 of 1922), and the second for the year 1921–22 (Parliamentary Paper No. 18 of 1923).

#### § 4. Population.

1. **White Population.**—The increase in the white population at various intervals since 1885 is shown in the appended tabulation. On 4th April, 1921, it was 1,288, of whom about 250 were missionaries, and 262 were troops engaged in administration; 715 were British subjects, and nearly all the remainder were nationals of former enemy countries. At the present time the number of persons employed by the Administration and the Expropriation Board is about 500, and the number of ex-enemy subjects in the Territory is about 280, of whom about 230 are missionaries.

##### TERRITORY OF NEW GUINEA.—WHITE POPULATION, 1885 TO 1921.

Year.	Number.
1885 .. .. .	64
1895 .. .. .	203
1910 .. .. .	687
1914 .. .. .	1,027
1917 .. .. .	818 (a)
1921 .. .. .	1,288 (b)

(a) Does not include troops. (b) Including 262 troops (engaged in Administration at date of Census, 4th April, 1921).

2. **Asiatic Population.**—Malays seem to have been the first Asiatics brought by the Germans to German New Guinea; 37 of them are recorded on the mainland in 1885. About 1889 the New Guinea Company began to bring Chinese, Malays, and



Javanese in growing numbers from Singapore and Java to work on its plantations; by 1892 there were about 1,800 on the mainland. By 1898 the number had decreased to 300 or 400.

About ten years later, Chinese from China were brought to the Protectorate; in 1911 there were 555, in 1914, 1,377, in 1921, 1,424, and in June, 1922, about 1,400. The number of Malays and Javanese in 1914 was 163, and in 1921, 221.

In 1895 there were 2 Japanese in the Protectorate, in 1911 there were 25, in 1914, 103, in 1921, 87, and in June, 1922, about 74 residents. The total Asiatic population was 1,681 in 1914, and 1,778 in 1921. There were also, in 1921, 28 Polynesians and 69 half-castes.

The number of Asiatics has largely decreased. In 1921-22 the births of Chinese exceeded the deaths by 34, but departures exceeded arrivals by 57, so that the population decreased by 23. The number of Japanese decreased by 13.

Under the German administration, Chinese, Malays, and other Asiatic labourers had a status somewhat superior to that of the natives. Japanese, although they had no rights under Treaty (for the German-Japanese Treaty of Commerce and Navigation of 1911 did not apply to German New Guinea, as it was only a "Schutzgebiet"), had a status equal in many respects to that of Europeans. They could not, however, acquire land in freehold; but both they and Chinese (if able to read and write a European language) could obtain leases up to 30 years. Ordinances provided safeguards in the interests of Chinese and other non-indigenous natives brought to the Protectorate, and the German Government welcomed Chinese labourers, whose numbers were increasing rapidly before the war. The Government did not look so kindly on the immigration of large numbers of Japanese or on their acquisition of important interests in the Protectorate, but no obstacle seems to have been placed in the way of their entering the Protectorate.

The Chinese provide the skilled artisans and domestic servants of the Territory, and many of them are small traders. There is only one Japanese firm of any size, but it is not a serious competitor with European firms; most of the Japanese residents are employed in the plantations, shipyards, and stores.

The Immigration Act 1901-1920 of the Commonwealth is in force in New Guinea.

**3. Native Population.**—As a large part of the Territory is not under Government influence, and as even in the districts under Government influence it is difficult to make a complete count of the natives, it has not been possible to attempt any reliable estimate of the population. The results of partial counts made by the German Government in 1914, and by the Commonwealth Government in 1921, are shown in the table below. In 1914 there were counted 152,075 natives; in 1920, 187,517; the area covered in each case being less than one-quarter of the Territory. In 1921, 118,326 were counted in the Bismarck Archipelago and an estimate made of 13,000 others—a total of 131,326; in the Solomon Islands 26,823 were counted, and 20,000 others estimated—a total of 46,823. The total population, apart from North-East New Guinea, was, therefore, estimated at about 180,000. In North-East New Guinea 42,368 were counted in a narrow strip along the coast. There is no reliable means of estimating the population in the interior. The area of North-East New Guinea is about three-quarters of that of Papua, the population of which has been estimated at about 275,000. Such information as can be gathered from reports of the few explorers of the interior raises a doubt whether the population is as dense as in Papua; and, considered as a source of labourers, it must be remembered that the population of the mountainous parts of the interior will probably not be suitable for work on coastal plantations.\*

The population is known to have declined very seriously in New Ireland and in other parts of the Territory since the white man came to the islands. In other parts it is stationary; and there are occasional reports of slight increases. The causes are in part endemic diseases, in part diseases due to the white man, in part (according to some of the German reports) the influence of recruiting both on the social life of the villages and in encouraging the habit already prevalent among native women of refusing to bear children, and in part perhaps what has been described in Papua as the "feeling of rather hopeless uncertainty" produced in the native by the impact of white civilization.

\* In the last annual report, published by the German Government, the population of the Territory was estimated at 600,000. It cannot be said that the Australian Administration is yet in possession of information to confirm the estimate.

## TERRITORY OF NEW GUINEA.—NATIVE POPULATION 1914 AND 1921.

Islands.	1914.			1921.(a)		
	Counted.	Estimated, not Counted.	Total.	Counted.	Estimated, not Counted.(b)	Total.
Bismarck Archipelago—						
New Britain, Duke of York, and Vitu Islands—						
Gazelle Peninsula and ad- jacent Islands ..	27,853	15,000	85,626	64,619	..	64,619
Remainder of New Britain ..	15,073	27,700	..	..	..	..
Duke of York Group ..	3,049	..	3,049	2,685	..	2,685
Vitu Islands ..	2,523	..	2,523	(d)	..	(d)
Total New Britain, etc. ..	48,498	42,700	91,198	67,304	13,000(b)	80,304
New Ireland and Lavongai (New Hanover)—						
New Ireland (District of Namatanai) ..	11,739	2,500	23,988	8,215	..	8,215
New Ireland (District of Kavieng) ..	14,749	..	..	13,289	..	13,289
Islands between New Ireland and Lavongai ..	811	..	811	682	..	682
Lavongai ..	6,539	..	9,539	6,876	..	6,876
Mussau, Emirau and Tench Islands ..	2,160	800	2,960	2,170(e)	..	2,170(e)
Tabar and Simberi Islands ..	3,483	..	3,483	2,769	..	2,769
Lihir Islands ..	2,818	..	..	2,875	..	2,875
Tonga Islands ..	1,241	1,000	5,692	1,040	..	1,040
Anir Islands ..	633	..	..	704	..	704
Total New Ireland and Lavongai, etc. ..	44,173	4,300	48,473	38,620	..	38,620
Admiralty and North Western Islands—						
Admiralty Islands ..	4,736	7,500	12,236	11,622	..	11,622
North Western Islands ..	992	..	992	780	..	780
Total Admiralty and North Western Islands ..	5,728	7,500	13,228	12,402	..	12,402
Total Bismarck Archipelago ..	98,399	54,500	152,899	118,326	13,000(b)	131,326
Solomon Islands—						
Bougainville ..	9,160	23,500	32,660	17,976	..	17,976
Buka and adjoining islands ..	6,810	..	6,810	7,576	..	7,576
Nissan Islands ..	1,562	..	1,562	1,091	..	1,091
Kilinaian Islands ..	391	..	391	(f)	..	(f)
Nuguria, Tauu and Nukumanu Islands ..	218	..	218	180(g)	..	180(g)
Total Solomon Islands ..	18,141	23,500	41,641	26,823	20,000(b)	46,823
North-East New Guinea—						
District of Morobe ..	5,409	} No esti- mate made {	5,409	13,736	} 30,500(c)	..
District of Aitape ..	5,724		5,724	12,441		
District of Madang ..	24,402		24,402	16,191		
Total North-East New Guinea ..	35,535	..	35,535	42,368	30,500(b)	72,868
Grand Total for the Territory ..	152,075	78,000(c)	230,075(c)	187,517	63,500(c)	251,017(c)

(a) For areas in which count and estimate made, see map published with Report for 1921-22. The areas are, in most of the islands, not the same as for the count and estimate of 1914, and accordingly no direct comparison can be made between the totals for the two years. (b) These are rough estimates only. (c) Not including any estimate of the population of North-East New Guinea not under Government influence. (d) Included in remainder of New Britain. (e) Not including Tench Island. (f) Included with Buka. (g) Nuguria Islands included with Buka.

## § 5. The Natives.

1. **Description.**—The natives\* of North-East New Guinea are for the most part mixed Papuans and Melanesians, the former prevailing inland, and the latter along the coast. They are split up into many tribes, between whom, where Government influence has not been established, there is continual strife.

The natives of the Bismarck Archipelago and the Solomon Islands are chiefly Melanesians, but there are many racial elements which differ from one another in appearance, manners, customs and speech. The Admiralty Islanders show a Papuan and perhaps Polynesian admixture, and the natives in the extreme west of the Archipelago have Malay or even Chinese affinities. The natives of the Baining District in the north-east of New Britain speak a Papuan language. The small islands to the east of New Ireland, and the eastern coast of Bougainville show Polynesian influence. (See map in Meyer's "Das Deutsche Kolonialreich," Vol. 2.)

Most of the islanders are energetic, and of good physique, with the exception of those on some of the smaller western islands, and the inhabitants of the Gazelle Peninsula (New Britain), who are weak and much diseased.

In colour the natives vary from a light brown to an intense black. As a rule they live in permanent habitations constructed of light wooden frames with grass thatch. Especially in the Bismarck Archipelago and the Solomons they are assiduous cultivators, and raise in their fenced gardens large quantities of taro, yams, bananas, sugar-cane, and coconuts. In some parts there are extensive sago swamps from which much food is obtained. On the sea coast fish are caught in ingeniously contrived traps. Pigs and wallaby furnish occasional supplies of meat.

Many languages are used in the Territory. The Germans made some attempt to encourage the use of German, but with little success. At the native school at Namanula, the dialect of the Blanche Bay natives was taught, with the idea of spreading it throughout the Protectorate, but this plan had made little progress when the school was closed in 1914. The "lingua franca" throughout the Territory was "bêche-de-mer" or "pidgin" English.

2. **Treatment under German Rule.**—In their treatment of the natives, the Germans allowed practices which are distasteful to public opinion. Abuses occurred in connexion with the recruiting of labourers for the plantations; and employers were allowed to flog their labourers for offences in relation to their employment. Nevertheless, the German policy has been described by a well-informed missionary as being, on the whole, just and progressive.

The control of the natives by the German Government was carried out by District Officers, who were stationed at head-quarters in the various Districts into which the Protectorate was divided. These District Officers dispensed minor justice, and organized patrols throughout their districts for the purpose of collecting taxes in places where that was practicable, and of securing order amongst the native tribes, who were prone to wage war on each other.

It was the practice to ascertain the man of greatest influence in each community and appoint him "Luluai," or chief; a second native was chosen as "Tultul," or interpreter, through whom Government instructions were conveyed to the "Luluai," who was held responsible for their execution and for the general welfare of the people. There were very large areas, chiefly on the mainland, which were not under Government influence, and of which little was known. Although Government influence was much extended during the military occupation, there are still large areas in the islands which have never been visited by white men, and nearly a quarter of the mainland is unexplored.

The education of the natives was left by the German Government to the missionaries, but they were able to reach only a small proportion of the population. In 1907 the Government opened a school at Namanula, near Rabaul, to give elementary education and to train the natives in handicrafts. Pupils came from all parts of the Protectorate, and in 1914 they had increased to 121. By 1913 it had become possible to employ ex-pupils in the offices and works of the Government. Before the outbreak of war, plans were in preparation to establish a workshop at Rabaul for industrial training, and to open schools at out-stations. The results of the schools were of good promise, and

\* An account of the natives of North-East New Britain will be found on pp. 25-40 of the Report for 1921-22.

encourage the hope that a considerable number of the natives may prove fit for training as clerks, artisans, motor drivers, and the like, if not for the lower grades of the professions.

**3. Treatment during Australian Military Occupation.**—When the Australian Forces occupied the Territory, a draft was found of an amending Native Labour Ordinance which the German Government was about to bring into force; and this formed the basis of the Native Labour Regulations enacted by the Military Administrator in 1915. An important amendment in the German draft was, however, made by prohibiting the corporal chastisement of any labourer by any plantation owner or any person other than a Government official duly appointed in that behalf in pursuance of a Judge's order or the sentence of a Court. In 1919 the flogging of natives, under any circumstances whatsoever, was forbidden. Other changes in regard to native labourers made during the Military Administration included the provision of additional safeguards in regard to recruiting; and attention was also given to the housing, food, clothing, medical attendance, and general comfort and well-being of natives working on plantations. Despite the abolition of methods of force in compelling native labourers to work, the number of indentured labourers largely increased during the Military Occupation. In 1914, according to the German returns, there were 17,529 labourers on plantations; on 30th June, 1921, there were 27,728.

**4. Native Policy of Present Administration.**—(i) *Objects.* Among the principal objects of the native policy of the Civil Administration are—

- (a) to stop the evils which in the past have been connected with recruiting;
- (b) to induce recruits to bring their wives with them;
- (c) to introduce more moral and cleaner surroundings and habits in village life;
- (d) to assemble isolated families into village communities;
- (e) by the institution of model villages to create in the native new and legitimate wants;
- (f) to introduce healthy amusements;
- (g) to extend the influence of the Administration into the interior;
- (h) to educate the natives in handicrafts and other callings;
- (i) by a campaign against hookworm and other diseases, and by attention to sanitation, to improve the health of the natives;
- and (j) to encourage the development of native-owned plantations.

(ii) *Native Labour.* The Commonwealth has two principal obligations in its government of the Territory. Under the Mandate it must "promote to the utmost the material and moral well-being and the social progress" of the natives; and it must see that the Territory makes its contribution of tropical products for the use of the world. With the performance of each of these obligations, the problem of the best method of making use of the labour of the natives is intimately connected.

Various views are held on this question. Some consider that the native should be encouraged to make plantations for himself, others that he should work as a labourer on plantations owned by white settlers. The latter method means, in the circumstances of New Guinea, that for the most part native labourers must be engaged under contract or indenture, breach of which is punishable by a Court, to serve for a term of years at a distance from their homes. Those who favour the encouragement of native agriculture point to the evils of life on plantations, and the damage to the maintenance of the population and the disintegration of village life caused by the absence from villages of a large proportion of the young men. They claim that the system of indenture is discredited and abandoned throughout the world, except in the Western Pacific, and that the experience of British Tropical Africa shows that the encouragement of native agriculture is likely to be more favourable to the welfare of the native and to result in a larger production. Those who favour the plantation system claim that the natives have as yet so few needs that it is idle to expect that they will produce more than they can consume, that life on a plantation is, in the circumstances of the Territory, the best means of introducing the native to civilization, and that the natives who work on plantations are, by better feeding and by medical attention, made physically stronger and kept in better health than those who remain in the villages. They also point out that the natives formerly led a strenuous life of fighting, cultivation, and hunting, and that the peace of European government and the use of European tools have done away with the need for strenuous action. Some new activity must be substituted unless the native is to perish; and this can best be found in labour on plantations.

The German Government favoured the plantation system, but there was also an active native agriculture. It was estimated in 1913, and again in 1920, that the output of native-produced copra reached 7,000 tons. In 1921-22, with a lower price, the production was about 6,000 tons. It is only when the price is high that the product of the native plantations is brought readily to market; and steps have had to be taken by the Administration to compel natives to keep their plantations free from fallen coconuts, which attract pests.

The recruiting and employment of natives as labourers by Europeans is now regulated by the Native Labour Ordinance 1922, which consolidated with some amendments the Native Labour Ordinances of the Military Occupation. The Ordinance applies to all employment of natives by Europeans, except of local natives living within 20 miles of the place of employment and working as day labourers for not more than three months. The recruiting of natives is allowed only for employment in the Territory or in Nauru; and there are strict safeguards in regard to the removal of natives from the Territory. Natives may be recruited only if in good health, or full physical development, and if not under the age of twelve, or if not decrepit from age. Girls and women may not be recruited, except in the case of married women with the consent of and for work at the same place as their husbands; if unmarried, except for domestic service and with the special consent of the Administrator. Natives must be examined by a medical officer or medical assistant, and attend before a District Officer for approval and registration of their contracts before they commence work. The ordinary period for a contract of service is three years; if employed by the Administrator, five years. No punishment of employees by the employer is permitted, except the withholding of the weekly ration of tobacco, and this is to be reported to the District Officer. Any person in authority over a labourer who assaults or maltreats him is liable to a fine of £50 or imprisonment for six months.

Wages are fixed at a minimum of 5s. a month for male labourers, 4s. for females, and 3s. for boys under sixteen; the maximum is 10s., unless the native has special qualifications; wages are to be paid wholly in cash. Not more than one-third of the amount earned may be paid at the end of each month; the balance is to be paid at the expiration of the period of service. Any overcharging of a native for goods bought by him is an offence.

All employers are required to provide medical attendance and medicines, and the Expropriation Board has hospitals at Rabaul, Kokopo, Kavieng, Kieta, Manus, Maron, and Vitu, besides hospitals on plantations. At the expiration of the contract of service, the native must be medically examined, his account examined and checked by the District Officer, payment of the amount due to him made in the presence of the District Officer, and the native returned at the employer's expense to his home.

During the year 1921-22, 11,171 natives were recruited. The total number under contract on 30th June, 1922, was 26,619. The number of these working on plantations was 20,155, of whom about 15,000 were employed by the Expropriation Board. Where the conditions are suitable the Administration encourages the natives to work as casual labourers. Among the Micronesian natives of the North Western Island a contract system has lately been introduced, under which the natives contract to cut and dry the copra on a plantation and to keep it free of weeds.

(iii) *Education of Natives.* The Administration opened in 1922 an elementary school at Kokopo, and a technical school and school of domestic economy at Rabaul. At the elementary school natives are trained as teachers for schools to be established in other parts of the Territory, for employment in the lower grades of the Administration service, and for entrance to the technical school. At the technical school, carpentry, rattan work, machine work, motor engineering, and plumbing are taught. The students at the various schools are showing great promise. (For the Mission schools, see sub-section 6, below.)

5. *Health of Natives.*—The natives suffer from many diseases—malaria, tuberculosis, leprosy, filariasis, ankylostomiasis (hookworm), dysentery, many skin diseases, syphilis, yaws, and others. Their diseased conditions gave great anxiety to the German Government, which obtained many careful reports and had formed plans immediately before the war for the establishment of a pathological institute at Rabaul, and for an increase in the medical services. The health of the natives has had close attention from the Civil Administration, and an interesting account of the measures taken is contained in the reports sent to the League of Nations. White medical assistants are being trained in

the hospitals for work on plantations, and native orderlies for service in the villages are being trained at Rabaul in the treatment of hookworm and the dressing of wounds. A campaign against hookworm has been carried on with the assistance of the International Health Board of the Rockefeller Foundation. There are Government hospitals for natives at Rabaul (150 patients), Kavieng (120), Kieta (100), Madang (70), Morobe (25), Aitape (60), Manus (50), Namatanai (80), Vanimo, Gasmata and Talasea.

6. Missions.—There are a number of mission societies working in the Territory. The Society of the Sacred Heart of Jesus works in the Bismarck Archipelago, the Society of the Holy Ghost along the coast of North-East New Guinea from Sek to the Dutch border, the Marists in Buka and Bougainville. These are Roman Catholic Missions. The Protestant Missions are the Australian Methodist Mission in New Britain and New Ireland, the Liebenzell Mission in the Admiralty Group, and the Rheinische Mission and the Neuendettelsauer Mission (now supported and staffed by the Lutheran Churches in Australia and America) which work along the coast of North-East New Guinea from Sek to the Papuan border. All these societies combine teaching and planting with their missionary work. They conduct native schools, (which in 1922 had altogether about 22,000 pupils) and own extensive plantations. Between them they possess 80,705 acres of land, of which about 15,000 acres are planted with coconuts. The number of Europeans engaged in mission work is about 250, of whom more than half belong to the Holy Ghost and Sacred Heart Missions. Some of the societies also have industrial schools in which intelligent natives and half-castes receive technical training, and three of the mission societies have small printing plants by which reading matter in one or other of the native languages is produced.

## § 6. Land Policy.

1. Land Policy of the German Government.—The policy of the German Government regarding tenure of land showed a preference for freehold tenure, in contrast to that in British possessions in the Pacific, in which settlers can usually obtain land from the Crown on lease only. In North-East New Guinea and in the larger islands of the Bismarck Archipelago land could easily be obtained by settlers of any nationality.

The authorities readily gave information as to available land, and assisted newcomers in obtaining labour. Good land was offered at from 5d. to 8s. per acre, and payment could be spread over several years.

A colony of small planters with 250 acres each was established in the Baining District of New Britain and, although some success was achieved, many of the settlers lacked the capital necessary to support the heavy initial expenses of cultivation.

The area sold by the German Government amounted to nearly 700,000 acres. The area in cultivation on 1st January, 1914, was 84,941 acres, of which 16,555 acres were on the mainland; and the area in bearing 27,995 acres, of which 5,236 acres were on the mainland.

The alienated land was held principally by large German companies and by Missions. The following particulars are taken from the Report of the Royal Commission on late German New Guinea (1919):—

### LAND ALIENATED, 1919.

Particulars.	Area Held.	Approximate No. of Plantations.	Area Planted (in 1919).
	Acres.		Acres.
Neu Guinea Compagnie .. .. .	368,118	31	21,962
Hamburgische Südsee Aktien Gesellschaft .. .. .	62,271	24	9,985
Hernsheim and Company .. .. .	8,549	31	6,698
H. R. Wahlen and Company .. .. .	14,129	..	8,648
Missions .. .. .	80,705	..	16,571
Smaller planters and companies numbering about 150, of whom about 120 were Germans	163,407	..	81,115
	697,179	..	144,979

Under the military administration the sale of land was suspended.

2. **Land Policy of the Present Administration.**—The Land Ordinance 1922 provides for sale as well as leasing of land belonging to the Crown. In permitting the sale of land, its policy is a departure from that usual in British possessions in the Pacific (including Papua), where leasing only of agricultural lands is permitted, but is a continuation of the German policy. The Government, however, has not yet announced whether sale or leasing is to be the usual practice; and the greater part of the Lands Ordinance is devoted to provisions for the leasing of lands. All Crown grants or leases are to contain a reservation to the Crown of all minerals, and of coal, shale and mineral oil. Leases are to be for a term not exceeding 99 years, except where a shorter period is provided. Crown lands, except in towns, are to be classified by a Land Board into land suitable for agriculture (Class A) and land not so suitable (Class B), and the unimproved value of the land is to be assessed. In the case of agricultural leases for more than 30 years, the rent is to be 5 per cent. of the unimproved value, with power to remit during the first ten years, and subject to re-appraisal every twenty years. The maximum area of land which may be held by any person under agricultural lease is not to exceed 5,000 acres, and the unimproved value is not to exceed £5,000. Pastoral leases of lands of Class B may be granted for terms not exceeding 30 years, at a rental of 2½ per cent. of the unimproved value, subject to re-appraisal every ten years. Agricultural leases are to be subject to improvement conditions, and pastoral leases to stocking conditions. Leases of town allotments may be granted for terms not exceeding 99 years, at a rent to be fixed at such percentage of the unimproved value as is prescribed. Leases may be granted to Missions rent free.

3. **Registration of Titles.**—Under German law there was a system of registration of titles in a "Ground Book," but registration did not confer an indefeasible title. It is intended to replace this by a system of registration closely modelled on the Torrens system.

## § 7. Production.

1. **General.**—The Territory possesses great natural resources. The development of these has barely commenced; and a limit to economic progress is much more likely to be found in the scarcity of labour than in the exhaustion of resources.

There are no manufactures in the Territory, except of articles for native use.

2. **Agriculture.**—(i) *General.* No estimate has yet been made of the area of land suitable for agriculture; but it is certain that the area already alienated, if planted to its full capacity, would be far greater than the present native population could cultivate. The earliest traders contented themselves with the collection of native products (including copra), for which they exchanged "trade" goods. It was not until 1883 that the first plantation was laid out, at Ralum on Blanche Bay; the first plantation on the mainland was that of the New Guinea Company at Finsch Harbour, where the first settlement was placed in 1885.

The natives have been described as a people of peasant proprietors, and everywhere they practice a low form of agriculture. Their gardens afforded but a small amount of produce for oversea trade, and the exports of the Protectorate grew only as European plantations were made. Plantations extended slowly, for the Protectorate is almost everywhere covered with forest, and the clearing and planting of the land, even if labour can be had, necessarily occupies considerable time.

In the early years of the Protectorate, the demand for copra was much smaller than recently, and it was not foreseen that it would become the chief export. Experiments were accordingly made—principally by the New Guinea Company, which spent a large part of its capital in this work—with a number of tropical crops.

(a) *Tobacco.* This crop has been cultivated with success at Astrolabe Bay in North-East New Guinea, and in the Bismarck Archipelago. Plantation managers were brought from Sumatra, but the Dutch Government, fearing competition, forbade the New Guinea Company to take skilled native labourers to their new plantations. Labourers were ultimately obtained from China and the Straits Settlements, and by 1892 there were over 1,800 Malay and Chinese coolies on the mainland; but, owing to

the heavy mortality, the number soon dropped to less than 1,000. By 1893 there were 500 acres under tobacco, and the export reached 77 tons. Tobacco of high quality, rivalling the best Sumatra leaf, is said to have been produced. Later, the growing of tobacco on European plantations was abandoned, partly, it is said, for want of intelligent labour, although it continued to be grown by the natives for their own use.

(b) *Cotton*. The New Guinea Company also experimented in the growing of cotton, and it is said that a product of high quality was obtained. In 1896 the export amounted to 60 tons. In recent years this crop seems to have been almost abandoned; in 1921–22 exports of cotton to the value of only £253 were recorded.

(c) *Sisal Hemp*. There was a steady although small export of sisal hemp in German times. The quantity exported in 1913 was 10 tons, but none seems to have been exported since 1914. The principal plantation was at Melanua (Konstantinhafen) on Astrolabe Bay.

(d) *Cocoa*. Cocoa has been successfully grown, principally at Vitu (French Islands); in 1913, 137 tons were exported, in 1921–22, 152 tons.

(e) *Coffee*. Coffee has been grown with success, but there has been little production.

(f) *Rubber*. Several kinds of rubber-yielding plants are indigenous on the mainland, and rubber (mostly of the *ficus* and *hevea* varieties) was cultivated in a few European plantations. Most of these were planted with *ficus elastica* before it was realized that *hevea brasiliensis*, which yields Para rubber, would give a more valuable product. The general opinion among the planters seems to have been that the cultivation of the coconut is a safer and better investment than rubber, because the coconut offered a less fluctuating margin between profit and loss, and did not necessitate the employment of as many labourers as were required on a rubber plantation. It was also thought that the New Guinea native was not well suited for the work of tapping, and the close and careful attention that rubber trees demand. In 1913, 17 tons, valued at £6,000, were exported; in 1920–21, the export was 29 tons, valued at £2,900.

(g) *Copra*. The mainstay of the Territory has been the coconut palm. Indigenous in most of the islands, the coconut palm yielded copra to the traders from the beginning of European trade, and the plantations, commenced in 1882, have steadily extended in area and product, until 95 per cent. in value of the total exports of the Protectorate now consists of copra. The quantity exported in 1913 was 14,000 tons; in 1918, it was over 20,000 tons; and during the three years ending June, 1922, it has averaged 24,000 tons. The area under coconuts increased during the Military Occupation from 76,845 acres in 1914 to 133,980 acres at the end of 1918, and it is now 168,000 acres. The coconut takes about eight years to come into bearing, so that this increase in area is only now commencing to affect the output. The price of copra at Sydney, which is the principal market for the output of the Territory, declined from the very high figure of £32 per ton in 1920 (average) to an average of about £17 in the last six months of 1921. Although there has since been a slight increase in price, the production both of plantation and native copra, which in 1920 promised to increase very rapidly, has been somewhat checked.

(h) *Other Crops*. The climate and soil of the Territory are also suitable for the cultivation of rice, Manila hemp, cinchona, nutmeg, vanilla and maize. It has been proved that nearly all these can be grown successfully, but hitherto their cultivation has either not advanced beyond the experimental stage or has been attempted only on a small scale. Sugar-cane of many varieties flourishes, and the natives cultivate extensive areas for their own use; other indigenous food-producing plants include the sago palm, and the cassava plant (which yields arrowroot and tapioca and is used in the making of glucose).

(i) *Plants Yielding Power Alcohol*. It seems probable that alcohol for power purposes will be obtainable economically from the Territory. The sago palm and nipa palm yield as much as 60 gallons a ton, and in places are very abundant.

(ii) *Area of Plantations*. The areas of European plantations in the various islands in 1922 are shown in the table hereunder, from which it will be seen that the principal areas are in the north east of New Britain (Gazelle Peninsula), New Ireland and the vicinity of Astrolabe Bay in North-East New Guinea.



**TERRITORY OF NEW GUINEA.—EUROPEAN-OWNED PLANTATIONS,  
30th JUNE, 1922.**

Island and District.	Coconuts.			Coffee.	Cocoa.	Rubber.	Other Crops.	Total Area Cultivated.
	Bearing.	Not Bearing.	Total.					
	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.
New Britain, Duke of York, and Vitu Islands—								
District of Rabaul ..	23,407	15,140	38,547	17	310	749	202	39,825
District of Talasea ..	3,625	1,435	5,060	25	660	..	23	5,768
District of Gasmata ..	1,005	2,876	3,881	..	..	..	45	3,926
Total .. ..	28,037	19,451	47,488	42	970	749	270	49,519
New Ireland, Lavongai and Offlying Islands—								
District of Kavieng ..	15,052	18,340	33,392	..	..	..	17	33,409
District of Namatanai ..	6,390	7,188	13,578	..	2	..	35	13,615
Total .. ..	21,442	25,528	46,970	..	2	..	52	47,024
Admiralty and North Western Islands—								
District of Manus ..	9,950	8,570	18,520	..	..	..	..	18,520
Solomon Islands—								
District of Kieta ..	6,669	14,700	21,369	26	..	458	258	22,111
North-East New Guinea—								
District of Aitape ..	1,899	4,729	6,628	..	..	..	..	6,628
District of Madang ..	9,220	14,061	23,281	..	2	1,794	441	25,518
District of Morobe ..	995	2,809	3,804	..	..	..	148	3,952
Total .. ..	12,114	21,599	33,713	..	2	1,794	589	36,098
Total for Territory ..	78,212	89,848	168,060	68	974	3,001	1,169	173,272

The area of European plantations at various periods from 1885 to 1922 is shown hereunder :—

**TERRITORY OF NEW GUINEA.—AREA OF EUROPEAN PLANTATIONS,  
1885 TO 1922.**

Year.	Total Area.	Area in Coconuts (including Area not in Bearing).
	Acres.	Acres.
1885 .. ..	148	(a)
1895 .. ..	2,152	(a)
1911 .. ..	58,837	51,510
1912 .. ..	63,300	56,133
1913 .. ..	72,473	64,822
1914 .. ..	84,941	76,845(b)
1918 (December) ..	..	133,960(c)
1922 .. ..	173,272	168,060

(a) Not recorded.  
in bearing.

(b) Of which 23,522 acres were in bearing.

(c) Of which 44,169 acres were

3. **Live Stock.**—There is little natural pasture in the Territory, but the coconut plantations are now of a sufficient area to maintain numerous live stock. In 1922 there were 727 horses, 6,972 cattle, 3,404 sheep, 3,955 goats, and 5,397 pigs (exclusive of the large number of pigs kept by the natives). The horses were either of Australian origin, and more or less thoroughbred, or else they came from the Dutch Indies. From this parent stock horses were bred locally. A cross between the Australian horses and the "Macassars" has given a satisfactory result. The cattle represented a variety of breeds, such as Bali, Indian Zebu, Australian Jersey and Guernsey, and the small Javanese breed. They are principally used for keeping down the grass in the plantations, and for supplying native labourers with meat. Sheep are also kept principally for the sake of the meat. They are mostly of the Dutch-Indian breed, but Australian sheep have been introduced as an experiment, and the wool has, so far, retained its high quality. Pigs seem to thrive better than any other animal. In and near European settlements the Yorkshire and Berkshire breeds are now fairly common. The native pig is an inferior animal, but it is hardy, frugal, and fast growing. Crossed with the Yorkshire and Berkshire excellent results have been obtained.

4. **Timber.**—The timber resources of the Territory are not yet fully known. Both hardwood and softwood are found in several varieties, some of which are of excellent quality. In Bismarck Archipelago the areas of serviceable timber in sufficient quantities to be of commercial value do not appear to be extensive. The timber required for house and ship-building and for other purposes is mostly obtained locally. In North-East New Guinea the Neuendettelsauer Mission and the Holy Ghost Mission both possess up-to-date saw-milling plants, while most of the timber required in the Archipelago is supplied by the Sacred Heart Mission's sawmill at the eastern end of New Britain.

The Timber Ordinance 1922 provides for the issue of permits and licences to cut timber. Timber growing on native lands cannot be acquired by private purchasers directly from the natives, but only through the Administration. A royalty (the amount to be fixed by regulation) is to be paid on all timber exported.

5. **Fisheries.**—The wealth of the waters of the Territory has so far been little exploited. Fish are caught at many places along the coast, but only to supply the small local demand of the natives and of the few Europeans living there. Pearl-shell is exported in fair quantities, while trepang, shark fins, trochus-shell, and tortoise-shell are also articles of export. The value of the marine products exported during the three years ended 30th June, 1922, averaged £26,800.

6. **Mining.\***—There has been little mining in the Territory, and knowledge of the minerals is as yet but scanty.

Gold has been discovered in the Upper Ramu River, on the Waria River, which enters the sea near the Papuan boundary, and on the Francisco and Markham Rivers, both of which flow into the Huon Gulf. These deposits are in river alluvium and in small quartz reefs. Osmiridium is found in Papua in streams draining the main range, and it will probably be found also in the Territory. It is reported to have been found on the upper tributaries of the Ramu. Platinum has been reported from the Kabenau River flowing into Astrolabe Bay, but its occurrence is disputed. Copper has been discovered in the form of chalcocite and malachite in the Baining District.

Iron occurs as magnetite and haematite in the Baining District, apparently in large quantities.

Sulphur occurs in several localities in the volcanic regions of the Territory. The deposits are not extensive so far as surface indications go, but are fairly pure and crystalline.

Phosphates suitable for use in the making of manures are found in the Purdy Islands (District of Manus).

\* Fuller details of the deposits of minerals in the Territory will be found in E. R. Stanley's Report on Salient Geological Features and Natural Resources of the Territory (printed as Appendix B. to the Report for 1921-22).

Brown coal has been found on the mainland in the vicinity of Astrolabe Bay, and in the southern portion of New Ireland.

**Petroleum.**—It has been known for some years past that there were indications of mineral oil on the mainland; but it was not till 1921 that a thorough geological examination was made by a party of geologists under the joint control of the Anglo-Persian Oil Company and the Commonwealth Government. This party surveyed or determined prospects over an area of 2,000 square miles in the Aitape and Madang Districts. One of the areas examined in detail was about 50 miles along the coast of the Aitape District, including the outfall of the Wakip River, which enters the sea about 150 miles easterly from the Dutch frontier and on which oil seepages were previously known to exist. A small scale map of this area was made, and its geological structure was studied in detail. As a result of their examination, the geologists reported that, while small quantities of oil could probably be obtained in the immediate vicinity of the main seepages, they believed that such operations could not repay outlay and working costs, and they could not recommend a test well.

Further inland, in the basin of the Sepik River, although throughout a great thickness of beds no oil shows were found, geological conditions were more favourable. This region is traversed by a general strike line which passes also through the Wakde District in Dutch New Guinea, about 80 miles over the border, where oil was known to occur. The geologist therefore felt justified in submitting a plan for a further geological survey of the middle Sepik basin. The Commonwealth Government has announced in June, 1923, that the Territory would now be opened for prospecting for oil.

**7. Water Power.**—No survey has been made of the water power available in the Territory. It has been estimated that 10,000,000 horse-power are readily available in Papua, and as the mountainous portion of the main island included in the Mandate is similar in rainfall, height of catchment, and steepness of slope to the corresponding area in Papua, it seems certain that a very large quantity of power can be developed. Rivers suitable for developing power are found also in parts of New Britain and other islands.

## § 8. Trade.

**1. Total Trade.**—The value of the imports, exports, and total trade at various periods since 1897, and during each of the last five years, is given in the table hereunder:—

TERRITORY OF NEW GUINEA.—TRADE, 1887 TO 1922.

Year.	Imports.	Exports.	Total.
	£	£	£
1887 .. .. .	17,133	19,580	36,713
1897 .. .. .	36,713	31,352	68,065
1907 .. .. .	166,585	97,563	264,148
1917-18 .. .. .	258,040	404,504	662,544
1918-19 .. .. .	271,861	269,666	541,527
1919-20 .. .. .	506,767	849,422	1,356,189
1920-21 .. .. .	661,441	673,992	1,335,433
1921-22 .. .. .	468,711	499,197	967,908

The import values for the last five years are exclusive of money and Government stores, excepting those for the last year in which the value of stores is included.

2. **Principal Items of Import.**—The principal items of import during each of the last five years are given in the following table :—

**TERRITORY OF NEW GUINEA.—IMPORTS, VALUE OF ITEMS, 1917-18 TO 1921-22.**

Commodities.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
	£	£	£	£	£
Foodstuffs .. ..	83,771	67,410	190,442	241,280	113,238
Beverages (non-alcoholic) ..	(a)	(a)	(a)	2,429	1,360
Alcoholic Liquors .. ..	16,079	16,021	31,744	39,841	29,703
Tobacco .. ..	20,450	20,618	44,936	53,446	41,392
Live animals .. ..	246	294	1,429	845	4,276
Copra Sacks .. ..	(a)	(a)	(a)	20,555	23,152
Apparel .. ..	52,263	74,806	76,935	125,177	37,842
Oils .. ..	16,199	14,033	23,835	39,048	26,506
Hardware and Machinery ..	34,949	48,942	64,912	69,386	27,949
Motor Cars and Accessories	(a)	(a)	(a)	20,141	11,953
Firearms, Ammunition, and Explosives .. ..	(a)	(a)	(a)	3,678	1,704
Timber and Building Materials .. ..	(a)	(a)	(a)	21,471	7,200
Paper and Stationery .. ..	1,748	1,634	1,225	4,366	4,459
Medicines and Drugs .. ..	5,587	3,435	5,414	10,300	10,290
Miscellaneous .. ..	26,748	24,668	65,895	9,478	17,687
Coal .. ..	(b)	(b)	(b)	(b)	(c)
Money .. ..	(b)	(b)	(b)	(b)	(b)
Government Stores .. ..	(b)	(a)	(b)	(b)	110,000
Total .. ..	258,040(d)	271,861(d)	506,767(d)	661,441(d)	468,711(e)

(a) Not separately recorded. (b) Not recorded. (c) Not separately recorded, included in Government Stores. (d) Not including money or Government Stores. (e) Not including money.

3. **Imports from Various Countries.**—The countries of origin of the articles imported during each of the last five years were as follows :—

**TERRITORY OF NEW GUINEA.—IMPORTS FROM VARIOUS COUNTRIES,  
1917-18 TO 1921-22.**

Year.	Australia. (a)	Japan.	Total.
	£	£	£
1917-1918 .. ..	244,701	13,339	258,040
1918-1919 .. ..	231,175	40,686	271,861
1919-1920 .. ..	506,767	..	506,767
1920-1921 .. ..	661,441	..	661,441
1921-1922 .. ..	468,711	..	468,711

(a) According to the statistics collected in Australia, about 40 per cent. of the exports from Australia to New Guinea during the five years ended 30th June, 1922, were of Australian origin.

4. **Principal Items of Export.**—Values of the principal items of export for the last five years are shown hereunder :—

**TERRITORY OF NEW GUINEA.—EXPORTS, VALUE OF ITEMS, 1917-18 TO 1921-22.**

Commodity.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
	£	£	£	£	£
Copra .. .. .	369,837	244,314	745,057	641,045	474,110
Cocoa .. .. .	11,159	8,464	15,530	9,105	9,465
Stone and Ivory Nuts .. .. .	180	333	271	531	..
Rubber .. .. .	1,673	1,196	1,104	2,900	..
Sisal Hemp .. .. .	..	..	..	..	..
Other Agricultural Products .. .. .	1,222	683	2	20	..
Birds of Paradise and other Feathers .. .. .	..	100	34,133	5,812	2,027
Mother of Pearl and other Marine Products .. .. .	20,433	14,576	53,285	14,579	13,595
Miscellaneous .. .. .	..	..	40	..	..
Total .. .. .	404,504	269,666	849,422	673,992	499,197

5. **Exports of Copra, Cocoa, and Rubber.**—The next table shows the quantities, where available, of the exports of these items during the last five years :—

**TERRITORY OF NEW GUINEA.—EXPORTS OF COPRA, COCOA, AND RUBBER, 1917-18 TO 1921-22.**

Commodity.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
	Tons.	Tons.	Tons.	Tons.	Tons.
Copra .. .. .	19,708	14,886	22,708	23,735	25,894
Cocoa .. .. .	144	112	140	133	152
Rubber .. .. .	(a)	(a)	(a)	29	..

(a) Not recorded

6. **Destination of Exports.**—The value of the exports consigned to various countries during the last five years is shown in the appended table :—

**TERRITORY OF NEW GUINEA.—DESTINATION OF EXPORTS, 1917-18 TO 1921-22.**

Year.	Australia.	United States.	Japan.	Other Countries.	Total.
	£	£	£	£	£
1917-1918 .. .. .	348,404	42,800	12,300	..	404,504
1918-1919 .. .. .	265,266	..	4,400	..	239,666
1919-1920 .. .. .	660,422	..	..	189,000(a)	849,422
1920-1921 .. .. .	673,912	..	..	..	673,992
1921-1922 .. .. .	493,197	..	..	..	499,197

(a) Inclusive of 5,113 tons Copra to the United Kingdom.

### § 9. Shipping and Communication.

1. **General.**—A subsidized mail service between the Territory and Australia is maintained by Burns, Philp and Co. Ltd. Occasional cargo steamers take shipments of copra direct to European and American markets.

2. **Oversea Tonnage in 1921-22.**—The number and net tonnage of oversea vessels which entered and cleared the Territory during the year 1921-22 are shown hereunder :—

#### TERRITORY OF NEW GUINEA.—STATISTICS OF SHIPPING, 1921-22.

Nationality.	Entered.		Cleared.		Total.	
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.
British .. .. .	39	50,175	37	48,917	76	99,092
Finnish .. .. .	1	1,295	..	..	1	1,295
United States .. .. .	1	64	1	64	2	128
Total .. .. .	41	51,534	38	48,981	79	100,515

Country from which Entered or for which Cleared.	Entered.		Cleared.		Total.	
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.
Australia .. .. .	39	49,706	35	47,089	74	96,795
Nauru .. .. .	2	1,828	2	1,828	4	3,656
Dutch New Guinea .. .. .	..	..	1	64	1	64
Total .. .. .	41	51,534	38	48,981	79	100,515

3. **Local Shipping.**—The Administration maintains a service of small steamers which bring cargo from outports to the ports of call of the oversea vessels, while there are also privately owned schooners and launches.

4. **Land Communication.**—Means of communication on land are scanty. There are no railways. Roads lead from Rabaul to places within 30 or 40 miles, and there is a road 170 miles long in New Ireland. Elsewhere there are few roads outside plantations and the stations of the District Officers. The large rivers of the mainland are as yet but little used.

There is a high power wireless station at Bita Paka near Rabaul, and low power stations at Kieta, Manus, Madang, Aitape, and Morobe; since 1st July, 1921, all these have been placed under the control of Amalgamated Wireless (Australasia) Limited.

## § 10. Revenue and Expenditure.

1. Revenue.—Details of the revenue collected from various sources during each of the last five years are given hereunder:—

## TERRITORY OF NEW GUINEA.—REVENUE, 1917-18 TO 1921-22.

Heading.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
Trade and Customs—	£	£	£	£	£
Imports .. .. .	41,597	35,161	} 98,658	{ 59,865	49,031
Exports .. .. .	24,085	18,596			
Total .. .. .	65,682	53,757	98,658	92,900	87,453
Taxes and Fees—					
Licences .. .. .	4,307	6,838	7,587	7,977	5,588
Business Tax .. .. .	4,264	6,019	8,134	8,860	20,989
Law Department .. .. .	1,151	1,157	2,282	1,416	1,942
Lands Department .. .. .	5,897	3,738	11,382	4,438	6,858
Stamp Duties .. .. .	..	..	..	..	1,000
Native Affairs—					
Head Tax .. .. .	10,686	20,970	11,210	15,522	20,546
Indenture Fees .. .. .	2,509	3,787	} 3,856	{ 2,580	1,689
Fees and Fines .. .. .	256	319			
Income Tax .. .. .	..	..	..	..	209
Total .. .. .	29,070	42,828	44,451	41,033	58,821
Miscellaneous—					
Trade and Customs .. .. .	2,715	2,003	2,438	4,284	6,470
Post Office .. .. .	1,911	3,084	4,061	3,852	6,348
Wireless Service .. .. .	1,724	3,137	4,781	4,181	5,839
Receipts from Administration					
Shipping Services .. .. .	19,633	20,700	28,061	23,921	36,599
Plantations .. .. .	3,511	1,934	5,637	4,036	8,824
Hospital Receipts .. .. .	1,948	3,050	3,027	4,845	2,884
Interest .. .. .	358	218	81	164	..
Miscellaneous .. .. .	13,369	12,925	10,965	14,741	(a)44,268
Total .. .. .	45,169	47,051	59,051	60,024	111,232
GRAND TOTAL .. .. .	139,921	143,636	202,160	193,957	257,506

(a) Including sale of stores, £18,762.

2. Expenditure.—The expenditure for the financial year 1921-22 was distributed as follows:—

## TERRITORY OF NEW GUINEA.—EXPENDITURE, 1921-22.

Administrator .. .. .	£3,031	Trade and Customs .. .. .	5,826
Government Secretary .. .. .	15,919	Agriculture .. .. .	6,719
Justice .. .. .	4,578	Public Health .. .. .	22,526
Treasury .. .. .	27,522	District Services .. .. .	60,093
Audit .. .. .	2,200	Administration Shipping Service	37,777
Lands and Surveys .. .. .	8,771	Wireless Service .. .. .	17,031
Native Affairs .. .. .	15,413		
Public Works and Wharves .. .. .	34,160	Total .. .. .	£261,566

## F. NAURU.\*

1. **General.**—Nauru is a circular atoll having an area of 5,400 acres, of which about four-fifths is phosphate bearing. The climate is healthy and equable; the lowest temperature recorded in the five years, 1916 to 1920, was 68 degrees, the highest 99.5 degrees. The rainfall is irregular; in 1916, 18.33 inches fell, in 1919, 167.64 inches. Malaria is unknown, but tuberculosis and leprosy are prevalent among the natives, and in 1921 an epidemic of influenza carried off 230 Nauruans.

2. **History.**—The island, which is situated in longitude 166° east and is only 26 miles south of the equator, was, prior to 1914, part of the protectorate of German New Guinea.

In November, 1914, Nauru was occupied by a detachment from the Australian Expedition at Rabaul; and it was included in the cession of colonies made by Germany in 1919 to the Allied and Associated Powers, whose representatives agreed that a mandate over it should be given to His Majesty the King. On 2nd July, 1919, the British, Commonwealth, and New Zealand Governments agreed that the administration of the island (which, since 1915, had been in charge of an official appointed by the British Colonial Office) should be vested in an Administrator; the first Administrator was to be appointed for a term of five years by the Australian Government, and thereafter the Administrator was to be appointed in such manner as the three Governments decided. This Agreement was approved by the Commonwealth Parliament in the Nauru Island Agreement Act 1919, and is printed in the Schedule to that Act.

The first Administrator appointed by the Commonwealth Government assumed duty in June, 1921.

The Mandate for Nauru, which was issued by the Council of the League of Nations in December, 1920, is in terms similar to that for the Territory of New Guinea (see § 3 of the section devoted to that Territory).

3. **Administration.**—The Administrator has all the powers of government—administrative, legislative, and judicial—in the island. All expenses of administration are met from local revenue.

4. **Population.**—Figures for population from 1918 to 1922 are given hereunder:—

## NAURU.—POPULATION, 1918 TO 1922.

Population.	1918.	1919.	1920.	Census of 24th April, 1921.	31st Decem- ber, 1922.
Europeans .. ..	88	88	91	119	128
Chinese .. ..	136	134	599	597	582
Nauruans .. ..	1,273	1,279	1,068	1,084	1,156
Other South Sea Islanders ..	241	275	227	266	290(a)

(a) Including 141 natives of New Guinea employed by the British Phosphate Commission.

During 1922, the native population increased by 72. The birth rate among the Nauruans was 53 per 1,000, the death rate 14 per 1,000, and the rate of infantile mortality 102 per 1,000.

5. **Phosphate Deposits.**—(i) *General.* The deposits were discovered in 1900, and, were worked by the Pacific Phosphate Company, which also worked the deposits on Ocean Island (about 165 miles east of Nauru and part of the Gilbert and Ellice Islands Colony administered by the Colonial office). The quantity on the two islands has been estimated at not less than 100,000,000 tons, and the rock phosphate, as shipped, averages 85 per cent. to 88 per cent. of tribasic phosphate of lime. About 3,750,000 tons have already been removed; the area so far worked is only about 50 acres.

\* See Map published with the Report for 1922. See also *Report on Administration of Nauru to 17th December, 1920* (P.P. No. 5 of 1922), *ditto, 17th December, 1920 to 31st December, 1921* (P.P. No. 4 of 1922), *ditto, 1922* (P.P. No. 20 of 1923), *Report and Accounts of British Phosphate Commission for year ended 30th June, 1921* (P.P. No. 23 of 1922), and *Nauru and Ocean Islands: Their Phosphate Deposits and Working*, by H. B. Pope (P.P. No. 148 of 1921).



The interests of the Pacific Phosphate Company in the two islands (though not in other islands in the Pacific in which it has workings) were bought by the British, Commonwealth, and New Zealand Governments in 1919 for £3,500,000, the purchase money being contributed in the proportions of 42, 42, and 16 per cent. respectively. The Agreement of 2nd July, 1919, provides for the working of the deposits by the British Phosphate Commission of three members, one appointed by each Government; and the three countries are to receive the output in the same proportions of 42, 42, and 16 per cent.

(ii) *Output.* The output from the two islands in 1913, the last year before the war, was 350,000 tons. During the first two years of the Commission's management it was as follows:—

#### NAURU AND OCEAN ISLAND.—OUTPUT OF PHOSPHATES, 1921, 1922.

Year.	To Australia.	To New Zealand.	To United Kingdom.	To other Countries.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.
1920-21 .. ..	265,750 (72.96%)	17,100 (4.69%)	16,700 (4.59%)	64,701 (17.76%)	364,251
1921-22 .. ..	170,489 (47.20%)	38,432 (10.64%)	16,074 (4.45%)	136,210 (37.71%)	361,205

From Nauru alone, during the calendar year 1922, the export was 182,170 tons, of which 143,920 tons went to Australia, and 38,250 tons to New Zealand.

(iii) *Accounts of Commission.* The trading accounts of the Commission may be summarized as follows:—

#### BRITISH PHOSPHATE COMMISSION.—TRADING ACCOUNTS.

Particulars.	1920-21.	1921-22.
	£	£
Receipts from sales and other credits, less freights and insurance .. ..	691,643	823,045
F.o.b. cost of phosphate, including interest on capital, contribution to a sinking fund for the redemption of capital (a) and other charges .. ..	688,958	732,407
Balance .. ..	2,685(b)	90,638(c)
F.o.b. cost per ton .. ..	37s. 10d.	40s. 7d.

(a) Amount contributed to sinking fund was £222,521 in 1920-21, and £229,658 in 1921-22.  
(b) Appropriated to Reserve Account. (c) Shown as "Government Appropriation Account."

The amount due by the Commission to the partner Governments for purchase money and other capital sums was £3,666,457 on 30th June, 1921; by 30th June, 1922, this was reduced to £3,607,495. The contribution to sinking fund paid by the Commission provides for interest at 6 per cent. and extinction of the capital sum in 50 years from 1st July, 1920.

(iv) *Charges for Phosphate.* Up to 30th June, 1922, the Commission's charges for phosphate landed in Australia was from 75s. to 80s. per ton; the price was reduced from 1st July, 1922, to 49s. 3d. in the Eastern States and 52s. 3d. in Western Australia. On 1st July, 1923, it was further reduced to 46s. in all States.

(v) *Employees.* The employees of the Commission at Nauru consist of 60 Europeans, about 580 Chinese, and about 260 natives of New Guinea and islands in the Pacific south of the equator. Only a very few Nauruans are employed.

6. *Trade.*—Information regarding imports and exports for years 1918 to 1922 is appended herewith.

NAURU.—IMPORTS AND EXPORTS, 1918 TO 1922.

Heading.	1918.	1919.	1920.	1921.	1922.
	£	£	£	£	£
Imports .. ..	55,840	45,977	109,119	106,486	78,320
Exports—	tons.	tons.	tons.	tons.	tons.
Phosphate .. ..	76,440	69,336	149,609	187,680	182,170
Copra .. ..	10	124	189	..	93

7. *Revenue and Expenditure.*—The revenue and expenditure of the Administration during the years 1918 to 1922 were as follows:—

NAURU.—REVENUE AND EXPENDITURE, 1918 TO 1922.

Heading.	1918.	1919.	1920.	1921.	1922.
	£	£	£	£	£
Revenue .. ..	8,556	6,761	10,611	10,192	11,182
Expenditure .. ..	5,042	4,727	4,818	12,712	11,424

Of the revenue in 1922, £3,880 was royalty on phosphate paid by the British Phosphate Commission, and a large part of the remainder was derived directly or indirectly from the Commission.

[NOTE.]—Although of greater extent than those in other Pacific Islands and of higher quality than any large deposits elsewhere, the deposits in Nauru and Ocean Islands are not comparable, in extent or output with those of Northern Africa and the United States. Of the world's output of 6,500,000 tons of phosphate rock in 1920, Tunis, Algeria and Egypt produced nearly 2,000,000 tons, and Florida and other fields in the United States over 4,000,000 tons. The price of the United States product varied from about \$14 for 78 per cent. phosphate to \$4 for lower grades (*Mineral Industry*, 1920).